

## 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

January 8, 2013

Pages 2385 to 2637



			2386
1		APPEARANCES	
2	Bob Peters	)Board Cou	nsel
3			
4	Patti Ramage	)Manitoba	Hydro
5	Odette Fernandes	)	
6			
7	Byron Williams	)CAC (Mani	toba)
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 Wi	nnipeg
17			
18			
19			
20			
21			
22			
23			
24			
25			

1	TABLE OF CONTENTS	2387
2		De see Me
		Page No.
3	List of Exhibits	2388
4	List of Undertakings	2389
5		
6	MANITOBA HYDRO PANEL 3 - RATE DESIGN, DIESEL,	AND DSM:
7	DAVID CORMIE, Resumed	
8	DARREN RAINKIE, Resumed	
9	WAYNE WITTMEIER, Sworn	
10	ROBIN WEINS, Sworn	
11		
12	Examination-in-chief by Ms. Patti Ramage	2391
13	Cross-examination by Mr. Bob Peters	2400
14	Cross-examination by Mr. William Gange	2557
15	Cross-examination by Mr. Byron Williams	2596
16		
17	Certificate of Transcript	2637
18		
19		
20		
21		
22		
23		
24		
25		

			2388
1			
2		LIST OF EXHIBITS	
3	Exhibit No.	Description	Page No.
4	GAC-4	Green Action Centre Documents	
5		Re: Rate Review	2564
6	CAC-8	CAC supporting materials	2596
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

			2389
1		LIST OF UNDERTAKINGS	
2	No.	Description Page	No.
3	51	Manitoba Hydro to provide	
4		information regarding the customer	
5		uptake on electronic billing	2422
6	52	Manitoba Hydro to source residentia	1
7		consumption date in various Canadia	n
8		jurisdictions	2439
9	53	Manitoba Hydro to file APEGM	
10		directive policy, or pronouncements	,
11		regarding appropriate use of	
12		engineer seal	2509
13	54	Manitoba Hydro to consider who or	
14		what position the Corporation	
15		believes is most appropriate to be	
16		the signatory on the information	
17		coming to the Public Utilities Boar	d
18		in respect of the surplus energy	
19		program rates that are being	
20		requested	2513
21	55	Manitoba Hydro to add the item	
22		related to Tadoule Lake generation	
23		that is not reflected on the	
24		current table	2610
25			

1 --- Upon commencing at 9:00 a.m.

- 3 THE CHAIRPERSON: Good morning.
- 4 Bonjour. I bel -- I wonder if we have any documents to
- 5 acknowledge this morning before we start? Nothing at
- 6 all?
- 7 MS. PATTI RAMAGE: We do not have any
- 8 documents. We do have some new witnesses --
- 9 THE CHAIRPERSON: Okay.
- 10 MS. PATTI RAMAGE: -- to be sworn,
- 11 so...
- 12 THE CHAIRPERSON: Okay. Would you like
- 13 to introduce them and we can swear them in? Thank you.
- 14 MS. PATTI RAMAGE: Perfect. Well, I
- 15 think you know Mr. Rainkie, who's to my immediate
- 16 right. You -- if I'm a little shaky this morning, I
- 17 don't think I've done a hearing without Mr. Warden in
- 18 twenty (20) years, so you might see me getting the
- 19 shakes at times.
- 20 To Mr. Rainkie's right is Mr. Robin
- 21 Weins. He's division manager of Rates and Regulatory
- 22 Affairs. Next to Mr. Weins is Mr. Wayne Wittmeier. He
- 23 is the division manager of Apparatus Maintenance, and
- 24 they are responsible for diesel. And then we have Mr.
- 25 Cormie to the far right. New faces in the back row are

- 1 Louella Harms and Chic Thomas. They both work with Mr.
- 2 Weins in the rates and regulatory area.
- 3 And with that, perhaps we could have the
- 4 witnesses -- the new witnesses sworn.

5

- 6 MANITOBA HYDRO PANEL 3 RATE DESIGN, DIESEL, AND DSM:
- 7 DAVID CORMIE, Resumed
- 8 DARREN RAINKIE, Resumed
- 9 WAYNE WITTMEIER, Sworn
- 10 ROBIN WEINS, Sworn

- 12 EXAMINATION-IN-CHIEF BY MS. PATTI RAMAGE:
- 13 MS. PATTI RAMAGE: There. And if I
- 14 could just lead these witnesses through their direct.
- 15 Mr. Rainkie is going to attempt to fill Mr. Warden's
- 16 shoes for the next couple of days, coming from the
- 17 finance area, should any of those questions arise in
- 18 this.
- 19 But dealing then first with Mr. Weins,
- 20 Mr. Weins could you state your name and
- 21 responsibilities at Manitoba Hydro?
- MR. ROBIN WEINS: Good afternoon, Mr.
- 23 Chairman and members of the Public Utilities Board,
- 24 Intervenors, and colleagues. My name is Kurt Robin
- 25 Weins. I've been employed with Manitoba Hydro since

- 1 January of 1989. From June of 1989 until December of
- 2 2002 I was manager at the Rates Department. I'm
- 3 currently division manager of Rates and Regulation.
- 4 And in that capacity I have responsibility for electric
- 5 and gas rates, cost of service analysis, load research,
- 6 and for electric service extension policy.
- 7 I have overall responsibility for
- 8 services and support of Manitoba Hydro's regulatory
- 9 compliance in proceedings.
- 10 MS. PATTI RAMAGE: Which aspects of
- 11 Manitoba Hydro's evidence in the current proceeding
- 12 fall within your area of responsibility?
- MR. ROBIN WEINS: In this proceeding,
- 14 I'm responsible for matters related to rate design,
- 15 other than those for which review has been deferred for
- 16 consideration until later this year.
- 17 Matters under consideration at this
- 18 proceeding include a rate structure within the classes
- 19 of service, such as relative emphasis on basic monthly
- 20 charges, energy charges, and demand charges;
- 21 curtailable rates; surplus energy rats; consolidation
- 22 of general service small and medium rate classes;
- 23 limited use of building demand rate subclass.
- 24 I'm also responsible for that part of
- 25 the Application which relates to rates and costs in the

- 1 four (4) remote communities served by diesel
- 2 generation.
- 3 As people here are aware, significant
- 4 matters have been deferred for consideration until
- 5 later this year, which includes Manitoba Hydro's cost
- 6 of service study for 2013, including proposed
- 7 methodology changes and the results of consult review
- 8 of the study methods.
- 9 They also include the consequential
- 10 matter of differentiated rate classes. Further, the
- 11 issue of time-of-use rates for general service
- 12 customers served at voltages in excess of 30 KV has
- 13 also been deferred for subsequent review.
- 14 MS. PATTI RAMAGE: Mr. Weins, can you
- 15 give a general description of the rate changes that
- 16 Manitoba Hydro is proposing with respect to each class
- 17 of service in the current application for April 1st,
- 18 2013?
- 19 MR. ROBIN WEINS: Yes, Manitoba Hydro
- 20 is proposing rate increases which are structured in a
- 21 manner similar to those proposed back for September the
- 22 1st of 2012 and which have been proposed generally,
- 23 approved as well for all rate changes going back to
- 24 about 2004. The emphasis continues to be on the energy
- 25 charges rather than the basic monthly charge or on

- 1 demand charges.
- 2 For the residential class, in order to
- 3 achieve 3 1/2 percent increase in class revenue is
- 4 proposed to increase the single energy charge by 3.78
- 5 percent and leave the basic monthly charge at its
- 6 current level.
- 7 For general service small and medium
- 8 classes, in order to achieve a 3 1/2 percent increase
- 9 in class revenue, it is proposed to increase the first
- 10 block energy rate; that is, energy under 11,000
- 11 kilowatt hours per month by 3 1/2 percent; the second
- 12 block, which includes energy usage from 11,001 to
- 13 19,500 kilowatt hours per month by 3.6 percent; and the
- 14 tail block, which is energy over 19,500 kilowatt hours
- 15 per month, by 5.9 percent. The basic monthly charge
- 16 would increase by 3.6 percent and there would be no
- 17 increase to the demand charge.
- 18 For the general service large classes,
- 19 the energy rate would increase by 5.4 percent for
- 20 customers served below 30 kV, 5 percent for customers
- 21 served between 30 and 100 kV, and 4.7 percent for
- 22 customers served above 100 kV. As there are no
- 23 proposed increases to demand charges for these classes,
- 24 the proposed increases to total class revenues are 3
- 25 1/2 percent in all cases.

- 1 MS. PATTI RAMAGE: What increases to
- 2 the rates charged in the four (4) diesel communities of
- 3 Brochet, Lac Brochet, Tadoule Lake, and Shamattawa have
- 4 been proposed in this Application?
- 5 MR. ROBIN WEINS: For most of the usage
- 6 that occurs in the diesel communities, the rates
- 7 proposed and implemented to date are the same as the
- 8 rates applying to other residential and general service
- 9 small customers in Manitoba.
- 10 Grid rates -- what we refer to as "grid
- 11 rates" apply to all residential usage and diesel
- 12 communities as well to the first 2,000 kilowatt hours
- 13 per month of general service usage.
- 14 For general service usage in access of
- 15 2,000 kilowatt hours per month and for government
- 16 customers, the September 1 increase applied for by
- 17 Manitoba Hydro and approved by this Board was 6 1/2
- 18 percent. That increase was not based on actual cost
- 19 increases, as has typically been the case in the past.
- 20 The increase of  $6 \frac{1}{2}$  percent was set to reflect and be
- 21 identical to the cumulative increased grid rates since
- 22 the last time the rates in diesel communities were
- 23 changed.
- 24 The current rate for usage in excess of
- 25 2,000 kilowatt hours by general service is thirty-seven

- 1 point three (37.3) cents per kilowatt hour, which
- 2 compares to the average variable cost in these
- 3 communities of fifty eight and a half  $(58 \ 1/2)$  cents
- 4 kilowatt hour.
- 5 The indicated rate for government
- 6 customers -- that is, the rate which would cover
- 7 variable cost plus a surcharge to support residential
- 8 and general service rates -- is two dollars and fifty-
- 9 four cents (\$2.54). But the rate now in effect is two
- 10 dollars and twenty-seven cents (\$2.27) per kilowatt
- 11 hour.
- 12 MS. PATTI RAMAGE: What impacts will
- 13 the proposed April 1st, 2013, rates have on the diesel
- 14 communities?
- MR. ROBIN WEINS: Manitoba Hydro has
- 16 not proposed and change in this Application to the rate
- 17 for general service usage greater than 2,000 kilowatt
- 18 hours per month nor to the government rate.
- 19 The portion of diesel rates which is
- 20 identical to the grid rates -- that is, rates applying
- 21 to all residential usage and to all general service
- 22 usage less than 2,000 kilowatt hours per month -- will
- 23 increase by the same percentages that apply to all
- 24 Manitoba customers in those classes.
- 25 MS. PATTI RAMAGE: In a previous answer

- 1 you referred to government customers in the diesel zone
- 2 who pay a rate of two dollars and twenty-seven cents
- 3 (\$2.27) per kilowatt hour.
- 4 Can you advise the Board, who are these
- 5 customers?
- 6 MR. ROBIN WEINS: There are seven (7)
- 7 government agencies; four (4) are agencies of the
- 8 federal government and three (3) are agencies of the
- 9 provincial government.
- 10 Then by agreement with the First Nations
- 11 and Aboriginal Affairs and Northern Development Canada,
- 12 there are accounts of First Nations which are funded to
- 13 100 percent according to the AANDC funding formula.
- 14 These are the First Nation education accounts, which
- 15 are treated the same as government accounts for the
- 16 purpose of this Rate Application. All other First
- 17 Nation accounts are treated as either general service
- 18 or residential accounts.
- 19 MS. PATTI RAMAGE: Mr. Weins, do you
- 20 have any update with respect to Directive B of PUB
- 21 Order 134/10, regarding the filing of a true copy of
- 22 the settlement agreement between Manitoba Hydro; Indian
- 23 and Northern Affairs Canada, as it was -- as AANDC was
- 24 known; MKO; and the four (4) diesel First Nations?
- 25 MR. ROBIN WEINS: Yes. Manitoba

- 1 Hydro's understanding is that the necessary documents
- 2 required to file two (2) copies of the settlement
- 3 agreement with PUB have now been completed. These
- 4 documents are in the possession of MKO.
- 5 Mr. Anderson indicated in his opening
- 6 comments, at transcript page 246 to 248, that there
- 7 remains some housekeeping matters between MKO and the
- 8 Department of Aboriginal Affairs and Northern
- 9 Development Canada. Manitoba Hydro is not a party to
- 10 those arrangements, nor is involved in those
- 11 outstanding matters or in the communications between
- 12 AANDC and MKO.
- Manitoba Hydro is not aware as to
- 14 precisely why we have not been provided the true copies
- 15 of the signed agreement. And unfortunately, we are not
- 16 in a position at this time to provide a timeline as to
- 17 when we will receive its copies from MKO.
- 18 MS. PATTI RAMAGE: Mr. Weins, does that
- 19 conclude your direct evidence?
- 20 MR. ROBIN WEINS: Yes, it does.
- 21 MS. PATTI RAMAGE: Okay. Then if I
- 22 could turn to Mr. Wittmeier. Mr. Wittmeier, could you
- 23 state your name and responsibilities at Manitoba Hydro?
- MR. WAYNE WITTMEIER: Good morning, Mr.
- 25 Chairman, members of the Public Utilities Board,

- 1 Intervenors, and colleagues. My name is Wayne Conrad
- 2 Rex Wittmeier. I have been employed at Manitoba Hydro
- 3 since October of 1975.
- 4 From 2000 until 2003 I was the manager
- 5 of the Selkirk Thermal Generating Station. From 2003
- 6 to 2009 I was the manager of the Dorsey Converter
- 7 Station. I am currently the division manager of
- 8 Apparatus Maintenance Division.
- 9 And in this capacity I have
- 10 responsibility for the operation and maintenance of
- 11 equipment associated with transmission and distribution
- 12 stations in Manitoba. This includes the operation of
- 13 the diesel generation in the four (4) remote diesel
- 14 communities.
- MS. PATTI RAMAGE: Mr. Wittmeier, could
- 16 you advise of the purpose of appearing as part of -- as
- 17 a witness as part of this panel?
- 18 MR. WAYNE WITTMEIER: Yes. In that I'm
- 19 responsible for the diesel generation in the four (4)
- 20 remote diesel communities, I am here in the event the
- 21 Board or parties have questions regarding the operation
- 22 of these facilities. Thank you.
- MS. PATTI RAMAGE: Thank you, Mr.
- 24 Wittmeier. That's the questions I have for you. And
- 25 finally, just so he's not feeling left out, Mr. Cormie,

- 1 could you advise the purpose of appearing as a witness
- 2 on this panel?
- 3 MR. DAVID CORMIE: Yes, I'm here to
- 4 respond to questions on the Curtailable Rate Program.
- 5 MS. PATTI RAMAGE: Thank you, Mr.
- 6 Cormie. That concludes Manitoba Hydro's direct
- 7 evidence of this panel, so we can turn it over to Board
- 8 counsel.
- 9 THE CHAIRPERSON: Thank you, Ms.
- 10 Ramage. Back to you, Mr. Peters.
- 11
- 12 CROSS-EXAMINATION BY MR. BOB PETERS:
- MR. BOB PETERS: Yes, thank you.
- 14 Welcome, Mr. Weins, Mr. Wittmeier. You colleagues have
- 15 been here a little longer than you at -- in this
- 16 Hearing, but my questions will be directed to the
- 17 panel. So whoever feels best equipped to provide the
- 18 corporate answer to the Board, I would appreciate you
- 19 providing the answer.
- 20 Mr. Weins, only because it was in your
- 21 direct evidence, perhaps I'll start with you, sir. The
- 22 -- the application request for April 1 of 2013 is now
- 23 an, across all rate classes, 3 1/2 percent of
- 24 additional revenue.
- Do you understand that to be correct?

2401 MR. ROBIN WEINS: 1 Yes. 2 MR. BOB PETERS: And, Mr. Weins, you went through a litany of rate classes and the impacts 3 that would result if Manitoba Hydro's application was approved as filed. 6 And in many of the instances, the 7 percent rate increase exceeded 3 1/2 percent, correct? 8 MR. ROBIN WEINS: Not on a class basis, Mr. Peters. But on individual components with the class rate schedules, that is correct. 10 11 MR. BOB PETERS: And that's where I want to focus with you, Mr. Weins, so that we have an understanding. And perhaps we'll start with the 13 14 residential class. 15 As I had understood your evidence, that 16 if your application as filed was approved, the energy 17 charge to residential customers would go up to 3.78 18 percent? 19 MR. ROBIN WEINS: That's correct. 20 MR. BOB PETERS: And the basic monthly charge would remain a constant, as it is currently? 21 22 MR. ROBIN WEINS: That's correct. 23 24 (BRIEF PAUSE) 25

2402

1 MR. BOB PETERS: In the -- in the

2 decision to seek increases in rates, Manitoba Hydro

3 quantifies it as an increase in average class revenue.

- 4 That is the preferred approach by Manitoba Hydro?
- 5 MR. ROBIN WEINS: Yes, Mr. Peters. We
- 6 -- we are looking for an overall increase in revenue of
- 7 3 1/2 percent. That translates, at a class level, to 3
- 8 1/2 percent increases being requested for each class of
- 9 service. And that descriptor applies to the total
- 10 revenue that we are asking from each class.
- MR. BOB PETERS: Mr. Weins, does it
- 12 mathematically follow that if each rate component went
- 13 up by 3.5 percent, it would have the same net result?
- 14 MR. ROBIN WEINS: Yes, it would.
- MR. BOB PETERS: And so Manitoba Hydro
- 16 has made a decision not to increase the basic monthly
- 17 charge, would that be correct, for the residential
- 18 customers?
- 19 MR. ROBIN WEINS: That's correct.
- 20 MR. BOB PETERS: Why is that, sir?
- MR. ROBIN WEINS: This is the approach
- 22 that Manitoba Hydro has taken, as I mentioned in my
- 23 direct, since about 2004, and perhaps even earlier than
- 24 that, the intent generally being that we are looking at
- 25 trying to approximate the marginal cost of energy --

- 1 the rate with the marginal cost of energy, recognizing
- 2 that it is the -- that for most classes of service the
- 3 energy rate has the most influence on the usage that
- 4 will be made by the customer.
- 5 So in the context where typically, over
- 6 a fairly long period of time, Manitoba Hydro's revenues
- 7 and its rates have been below its marginal cost, we
- 8 have been looking to take that element in the rate
- 9 structure which we believe is most amenable to
- 10 encouraging customers to make wise decisions about
- 11 usage closest to the marginal cost.
- In the case of residential, we only have
- 13 a basic monthly charge, which is a flat, fixed charge,
- 14 and the energy charge. So we have, over time, tended
- 15 to emphasize the energy charge in changes to the rate
- 16 structure.

17

18 (BRIEF PAUSE)

- 20 MR. BOB PETERS: Mr. Weins, the basic
- 21 monthly charge is designed to recover fixed costs that
- 22 the utility incurs?
- 23 MR. ROBIN WEINS: Yes, it's designed to
- 24 incur costs that generally do not vary with respect to
- 25 energy used.

- 1 MR. BOB PETERS: For the typical
- 2 residential customer, what are the fixed costs that do
- 3 not vary by energy use?
- 4 MR. ROBIN WEINS: Well, these would
- 5 include the service draw, the meter, and a portion of
- 6 the distribution facilities that are serving customers
- 7 at the distribution level.
- 8 MR. BOB PETERS: And on a monthly
- 9 basis, what would be the approximate cost for those
- 10 items for the typical residential customer?
- MR. ROBIN WEINS: We identify those
- 12 embedded costs in the costs of service study at
- 13 approximately nineteen (19) or twenty dollars (\$20) a
- 14 customer month.
- MR. BOB PETERS: And so what you're
- 16 telling the Board is that while full cost recovery from
- 17 a typical residential customer would be in the range of
- 18 \$20 a month, Manitoba Hydro's basic monthly charge is
- 19 closer to \$7 a month?
- MR. ROBIN WEINS: Yes.
- 21 MR. BOB PETERS: Why has Manitoba Hydro
- 22 not sought to increase the basic monthly charge to try
- 23 to recover more of the actual costs, fixed costs,
- 24 incurred to serve the typical residential customer?
- MR. ROBIN WEINS: Well, I believe, as I

- 1 discussed a few moments ago, tho -- these two (2)
- 2 charges are the charges we have and apply to
- 3 residential customers. Our belief is that customer
- 4 decisions to consume are more closely correlated with
- 5 the energy charge than with the basic monthly charge,
- 6 that that customer usage is relatively unaffected by
- 7 the basic monthly charge.
- 8 So if we are to depart from embedded
- 9 cost in order to more closely track marginal cost, we
- 10 really have -- the only choice we have is to depart
- 11 further away from embedded cost with respect to the --
- 12 with respect to the basic monthly charge.
- 13 MR. BOB PETERS: How does Manitoba
- 14 Hydro define the marginal cost of electricity for its
- 15 residential consumers?
- 16 MR. ROBIN WEINS: That would -- this
- 17 would be defined as -- typically, in the case of
- 18 energy, it would be defined as the generation-related
- 19 costs that are incurred to serve this customer class.
- Now, we also have transmission and
- 21 distribution-related costs that are -- tend to be more
- 22 related to demand or the maximum usage that customers
- 23 or customer classes place on the system.
- 24 Historically, at Manitoba Hydro, we have
- 25 recovered both the demand-related costs and the energy-

2406 related costs through the energy charged to residential customers because we do not apply demand charges to those customers. Sorry for that. 3 4 5 (BRIEF PAUSE) 6 MR. BOB PETERS: Thank you, Mr. Weins. The -- in calculating the marginal cost for the residential customers, what do you quantify that at for purposes of these proceedings? 10 11 What is the marginal cost to the 12 residential customer? 13 MR. ROBIN WEINS: I -- I believe that 14 answer was provided in one of the information requests. 15 I -- I don't have that handy, but I think it's in the order of eight (8) to eight and a half (8 1/2) cents a 17 kilowatt hour. 18 MR. BOB PETERS: Do you also have the -19 - the marginal cost for distribution as well as the marginal cost for transmission? 21 MR. ROBIN WEINS: I don't have that at 22 my fingertips. Most of the -- most of the marginal 23 cost in that eight (8) or eight and a half (8 1/2) 24 cents is related to generation facilities, smaller 25 amount to transmission and distribution.

```
2407
                  MR. BOB PETERS: I'm sorry. Are you
1
   saying the eight and a half (8 1/2) cents includes all
   three (3) components, or is it just the one (1)
3
   component?
5
                  MR. ROBIN WEINS: It includes all
6
   components.
7
                  MR. BOB PETERS: Okay.
9
                          (BRIEF PAUSE)
10
11
                  MR. BOB PETERS: Why is it, Mr. Weins,
   that Manitoba Hydro has not gone to a -- what sometimes
13
   is called a three (3) part rate for the residential
14 customer?
15
                  THE CHAIRPERSON: I'm sorry, could you
   explain what you mean by three (3) part rate?
17
18 CONTINUED BY MR. BOB PETERS:
19
                  MR. BOB PETERS: Mr. Weins, you had
   indicated that Manitoba Hydro has two (2) components to
21
   the charges of a residential customer, one (1) being
22
   the basic monthly charge and one (1) being the energy
23
   charge, correct?
24
                  MR. ROBIN WEINS: Yes.
25
                  MR. BOB PETERS: And included in the
```

- 1 energy charge is also transmission and distribution
- 2 costs. Would that correct?
- 3 MR. ROBIN WEINS: Most of the
- 4 transmission and distribution charges are collected
- 5 through the energy charge, yes.
- 6 MR. BOB PETERS: And the balance are --
- 7 the fixed costs are in basic monthly charge?
- 8 MR. ROBIN WEINS: Correct.
- 9 MR. BYRON WILLIAMS: So if we look at
- 10 it from a rate design perspective, there would be two
- 11 (2) parts or two (2) components to the residential
- 12 customer's bill.
- MR. ROBIN WEINS: Yes.
- 14 MR. BOB PETERS: When you compare that
- 15 to larger customers -- the general service customers,
- 16 for example -- their bills contain, typically, three
- 17 (3) parts, correct?
- 18 MR. ROBIN WEINS: That's -- that's
- 19 correct.
- 20 MR. BOB PETERS: And in those cases
- 21 those general service customers have, as well, a basic
- 22 monthly charge as one (1) of the parts?
- 23 MR. ROBIN WEINS: Most general service
- 24 customers face a basic monthly charge, not all.
- MR. BOB PETERS: Correct. And in

- 1 addition to the basic monthly charge, a second
- 2 component is the energy charge?
- 3 MR. ROBIN WEINS: Yes.
- 4 MR. BOB PETERS: And for those
- 5 customers, the energy charge is designed to recover the
- 6 generation-related costs of the energy?
- 7 MR. ROBIN WEINS: Yes.
- 8 MR. BOB PETERS: There's a third part -
- 9 a third component to general service customers, and
- 10 that is for the demand that they put on the system.
- 11 MR. ROBIN WEINS: That's correct. The
- 12 demand --
- MR. BOB PETERS: And --
- 14 MR. ROBIN WEINS: -- the demand charge
- 15 is applied to the highest monthly usage of the -- of
- 16 customers -- general service customers who are in the
- 17 general service small demand, general service medium,
- 18 and general service large classes.
- 19 MR. BOB PETERS: And the demand
- 20 component, the third component of the general service
- 21 rates, as you say, is to reflect the costs incurred by
- 22 Manitoba Hydro for that customer's maximum usage or
- 23 demand that they can put on Manitoba Hydro's system?
- 24 MR. ROBIN WEINS: Yes. Conceptually,
- 25 the demand charges are intended to recover those costs

- 1 which vary with maximum use, not with energy use.
- 2 MR. BOB PETERS: But for the
- 3 residential customers, you only have a two (2) part
- 4 rate?
- 5 MR. ROBIN WEINS: That's correct. And
- 6 as well there's a large number of general service small
- 7 customers. Those customers who have -- have demands
- 8 less than 50 kV.A that also only face a -- it may be a
- 9 multipart energy rate, but it is an energy rate. There
- 10 are no demand charges applied to those customers
- 11 either.
- 12 MR. BOB PETERS: And for residential
- 13 customers, Manitoba Hydro has chosen not to introduce a
- 14 demand component to the residential rate?
- MR. ROBIN WEINS: Well, for -- for
- 16 residential customers, and as well, as -- as I
- 17 mentioned, for general service customers who are serve
- 18 -- or -- or, pardon me, general service customers whose
- 19 demands are less than 50 kV.A, which constitute the
- 20 vast majority of general service customers as well. So
- 21 virtually all of Manitoba Hydro's customers are not
- 22 demand billed. They pay for a basic monthly charge,
- 23 and they pay energy charges.
- 24 MR. BOB PETERS: Is it Manitoba Hydro's
- 25 position that the demand put on the system by

- 1 residential customers is approximately the same as
- 2 their neighbours?
- MR. ROBIN WEINS: I'm not sure, Mr.
- 4 Peters, what is meant by "their neighbours".
- 5 MR. BOB PETERS: Their residential
- 6 neighbours.
- 7 MR. ROBIN WEINS: It is true that
- 8 residential usage tends to be more homogeneous across
- 9 customers than general service usage, because
- 10 residential customers tend to use electricity for the
- 11 same things; they tend to be household usages.
- 12 Households vary in size, but typically they use
- 13 electricity for lighting, cooking, and some use it for
- 14 heating. So you have some differentiation there. But
- 15 within a few broad categories, residential usage is --
- 16 is similar across all customers.
- MR. BOB PETERS: When we talk about
- 18 demand for the general service customers and you
- 19 indicate that the demand charge that is levied against
- 20 those customers is designed to recover the Utility's
- 21 costs for providing the capacity and the maximum
- 22 capabilities as requested by the general service
- 23 customer.
- 24 Manitoba Hydro has the ability to track
- 25 accurately the costs incurred for that capacity, do

2412 they not? 2 3 (BRIEF PAUSE) 5 MR. ROBIN WEINS: Manitoba Hydro tracks its actual embedded costs in a variety of functions 7 which are generally accepted to be related to certain aspects of customer usage so that the generation requirement tends to be related to energy usage with 10 variability across times of use. 11 Transmission and distribution tend to be 12 related to maximum capacity requirement. And some 13 parts of distribution, as well as the facilities that 14 serve customers, close to the customer, tend to be 15 related to the actual customer. 16 MR. BOB PETERS: Mr. Weins, do the 17 demand charges levied against the general service 18 customers who -- who face the demand charge, does -- do 19 those demand charges recover 100 percent of the embedded costs related to the demand? 21 MR. ROBIN WEINS: In some cases they 22 do, not in all cases. 23 MR. BOB PETERS: So again, rather than 24 -- is the Corporation's strategy to increase the demand 25 charges to a point where they do recover all of the

- 1 embedded costs?
- MR. ROBIN WEINS: No, not -- that --
- 3 that's not necessarily the -- the Corporation's
- 4 strategy. In -- in most cases, I believe they do
- 5 recover the demand-related embedded costs. The -- the
- 6 strategy of the Corporation is also to recognize
- 7 marginal costs in setting rates. We want to recognize
- 8 embedded costs at the class level, but marginal costs
- 9 within the elements of the rate structure.
- 10 MR. BOB PETERS: And just to loop back
- 11 on that, Mr. -- Mr. Weins, the recognition of the
- 12 marginal costs of providing the energy, that's the
- 13 Corporation's effort to provide a price signal to
- 14 customers as to what their energy is, in essence,
- 15 costing the Corporation?
- 16 MR. ROBIN WEINS: Correct.
- 17 MR. BOB PETERS: And what does Manitoba
- 18 Hydro expect the customer to do with that price signal
- 19 once they know what their -- what their energy cost is,
- 20 or their marginal cost of energy?
- MR. ROBIN WEINS: Well, I don't know
- 22 that we have a firm expectation of what they will do.
- 23 At a -- at a federal level, the expectation is that if
- 24 it is worth it to the customer to consume that extra
- 25 unit of energy, they will, and if it's not, that they

```
2414
   will conserve it instead.
2
3
                          (BRIEF PAUSE)
5
                   MR. BOB PETERS: How does Manitoba
   Hydro gauge the awareness of its customers as to the
7
   marginal costs that are being incurred with respect to
   their last unit of energy?
9
10
                          (BRIEF PAUSE)
11
12
                  MR. ROBIN WEINS: Broadly, it's gauged
13
   by the levels of consumption of customers, as -- as
   measured by our billing data.
14
15
                   MR. BOB PETERS:
                                     That's how Manitoba
   Hydro can gauge it, but how does -- how does the
17
   consumer gauge that?
18
                   MR. ROBIN WEINS: The consumer would
19
   gauge it by the impact of their bill.
20
                   MR. BOB PETERS: And turning to bill
21
    comparisons, Mr. Chairman, if the Board has Volume III
22
   of Board counsel's book of documents, it's still PUB
   Exhibit 14. It's the last in the trilogy.
24
                   And, Mr. Weins, the rates proposed for
   April 1 of 2013, the rates themselves aren't included
```

- 1 here, but there are some -- some bill comparisons
- 2 starting on page 420, which is the last tab.
- And I just wanted to, before we leave
- 4 this area, just to have you explain to the Board what
- 5 bill impacts can be expected and -- first of all, let's
- 6 confirm, Mr. Weins, that these bill comparisons are
- 7 dated November of 2012, and they relate to Manitoba
- 8 Hydro's request for an across-all-rate-classes average
- 9 revenue increases of 3 1/2 percent?
- 10 MR. ROBIN WEINS: That's correct.
- 11 MR. BOB PETERS: And so if we turn to
- 12 page 421 and we look at the top of the page,
- 13 residential customers have been divided into five (5) -
- 14 five (5) consumption blocks, as it were.
- But those consumption blocks are simply
- 16 a matter of presentation; they're not defined
- 17 subclasses.
- 18 MR. ROBIN WEINS: It -- they're merely
- 19 usage levels that are intended to benchmark some
- 20 typical residential customers.
- 21 MR. BOB PETERS: And so what you're
- 22 showing the Board is that if -- would you agree, first
- 23 of all, that approximately 1,000 kilowatt hours a month
- 24 would be the -- the typical residential customer that
- 25 does not use space heat?

2416 MR. ROBIN WEINS: You could look at 1 seven-fifty (750) or a thousand (1,000) as being within 3 that range of customer, yes. MR. BOB PETERS: And for those 4 customers, if Manitoba Hydro's application was approved as filed, the monthly bill impact would be 3.3 or 3.4 7 percent of an increase? 8 MR. ROBIN WEINS: That's correct. 9 MR. BOB PETERS: For those who -- for 10 those residential customers who consume a larger volume, their rate increase would be identical to those 11 of the lower consumption levels, but their bill impact 13 would -- would, for the highest level shown here, be 14 3.7 percent? 15 MR. ROBIN WEINS: That's correct. MR. BOB PETERS: The residential 16 seasonal customer --17 18 MR. RAYMOND LAFOND: Before we go --19 before we go there, the typical residential customer, what -- there has to be a difference between the 21 typical using electric heat versus not using electric 22 heat for heating purposes. 23 MR. ROBIN WEINS: Yes, there is. 24 you look at the bill comparisons that are in the book of documents at page 421, seven hundred and fifty (750)

- 1 or a thousand (1,000) would be a typical single-family
- 2 home that does not have electric heat. If you get up
- 3 to the two thousand (2,000) level, that could reference
- 4 a large single-family home with a lot of electricity
- 5 utilization, other than electric heat. The other thing
- 6 it could typify is the average -- over the course of a
- 7 year, the average usage of a home with electric heat.
- 8 The five thousand (5,000) would tend to be a peak month
- 9 usage of a home with electric heat.
- MR. RAYMOND LAFOND: Thank you.

- 12 CONTINUED BY MR. BOB PETERS:
- MR. BOB PETERS: So for a customer that
- 14 is using electric heat in a typical residential home,
- 15 Mr. Weins, the likely best comparison shown on page 421
- 16 of Board counsel's book of documents is the 2,000
- 17 kilowatt hour per month customer who would experience a
- 18 3.6 percent bill increase?
- 19 MR. ROBIN WEINS: Average -- averaged
- 20 over the course of a year, that -- that would be pretty
- 21 close.
- MR. BOB PETERS: Can you briefly
- 23 explain to the Board the residential seasonal customer,
- 24 what that encompasses?
- MR. ROBIN WEINS: Well, residential

- 1 seasonal customers are -- this -- this class is
- 2 actually -- faces the same rate as the rest of the
- 3 residential class. There -- there are differences --
- 4 there tend to be differences in how these customers are
- 5 billed, because these generally refer to second homes
- 6 or seasonal homes or cottages that would pay, as I say,
- 7 exactly the same rate as all other residential
- 8 customers, but they would be billed twice a year
- 9 typically.
- 10 And they would be billed once in the
- 11 spring. They would be billed the full slate of monthly
- 12 basic charges for the -- for the next twelve (12)
- 13 months. They would pay that in the spring, typically
- 14 receive the bill in the mid -- mid-April. And then in
- 15 the fall they would be billed for their energy usage,
- 16 which would most, if not all, would occur during the
- 17 summer months.
- 18 But the rates are absolutely the same as
- 19 the rest of the residential class. The bill
- 20 comparisons you see here are shown for usage on an
- 21 annual basis because these customers tend to have much
- 22 lower usage then other residential customers. Typical
- 23 usage would be in the 1,000 kilowatt hours to, say,
- 24 2,500 kilowatt hours a season. And so the bills shown
- 25 here are the total bill for the entire season.

PUB - MANITOBA HYDRO GRA 01-08-2013 2419 1 MR. BOB PETERS: Thank you, Mr. Weins. MR. RAYMOND LAFOND: How -- how can you 2 tell or -- or, like, there are some areas of cottage country where some people stay there year round, as opposed to others who are seasonal. So is it per district or per customer you define whether or not you 7 are seasonal? MR. ROBIN WEINS: Customers living year

- round in those communities would tend not to be
- 10 included in the seasonal class. Customers change all
- the time, and some -- some people who you -- who've for 11
- years used their second home as a summer cottage may at
- 13 some point decide that it's permanent. And typically
- 14 when that happens, they'll move to a monthly billing
- 15 and they will be treated the same as any other
- 16 customer. It will be identified in the billing system
- 17 that the usage has increased.
- 18 THE CHAIRPERSON: I guess the --
- 19 MR. RAYMOND LAFOND: But Manitoba Hydro
- decides that rather then the customer requesting that
- 21 that be changed, correct?
- 22 MR. ROBIN WEINS: Actually, it can be
- 23 both. The customer can request it too.
- 24 THE CHAIRPERSON: The rather obvious
- question for me is: Why are we getting such a dif --

2420 significant difference in percentage change between the residential -- typically residential and the residential seasonal? 3 MR. ROBIN WEINS: This relates to the emphasis on the energy rate in the rate structure change. We increase only the energy rate. Seasonal customers tend to use a lot less energy than regular customers. So their basic monthly charges are not going up, but for many of these customers the basic 10 monthly charge is a significant part of their bill. 11 For most regular residential customers, it's a relatively small part of the bill. 13 14 (BRIEF PAUSE) 15 16 MR. BOB PETERS: Just to be... 17 18 (BRIEF PAUSE) 19 20 THE CHAIRPERSON: Since we're on the 21 topic of monthly charges, you know, one of the things we do is we compare rates that residential customers 22 23 pay in Manitoba relative to other jurisdictions. And I 24 guess the question I have is: In comparing, say, Manitoba rates for 25

- 1 residential customer relative to a Quebec customer or
- 2 somebody from BC, in terms of how they are assessed
- 3 monthly charges and energy charges, is there a
- 4 significant difference when we're looking at those
- 5 comparisons that we need to consider?
- 6 MR. ROBIN WEINS: There is a range acc
- 7 -- if you look across Canada or across North America,
- 8 Manitoba Hydro has one of the -- tends to be at the low
- 9 end basic monthly charges. Within in Canada, of the
- 10 major utilities, I think the only one that's lower is
- 11 BC Hydro, for the basic monthly charge.
- 12 Ontario, for example, Toronto Hydro is
- 13 around twenty dollars (\$20) a month; Alberta, twenty-
- 14 two dollars (\$22) a month. So we tend to be at the low
- 15 end. We also tend to be at the low end for energy
- 16 charges. We tend to be at the low -- low end overall,
- 17 but probably more so in the case of basic charges.
- 18 THE CHAIRPERSON: I'm intrigued by how
- 19 many people have converted to electronic bills of your
- 20 existing customer base. Are we talking of a very high
- 21 percentage? I mean that would be an obvious saving for
- 22 Manitoba Hydro.
- 23 MR. ROBIN WEINS: I'm not able to
- 24 answer that question. We could -- we could take an
- 25 undertaking on it.

2422 THE CHAIRPERSON: Yeah, I think, just -1 - just from the standpoint of, you know, looking at it from a typical customer. When I made the conversion, I 3 recall that -- thinking, you know, I'm making this conversion, saving Manitoba Hydro lots of trouble and money and so on, and what am I getting for it, other 7 than perhaps -- perhaps a better record of -- of my usage and so on. 9 But it just strikes me that that would 10 be -- might be a way in which more people might convert 11 if there was an incentive to do it. Just an 12 observation. 13 MR. ROBIN WEINS: Thank you. 14 15 (BRIEF PAUSE) 16 17 MS. PATTI RAMAGE: The undertaking is 18 simply that Manitoba Hydro will provide information 19 regarding the customer uptake on electric -- electronic billing. Is that correct, Mr. Chair? 21 22 --- UNDERTAKING NO. 51: Manitoba Hydro to provide 23 information regarding the 24 customer uptake on 25 electronic billing

- 1 CONTINUED BY MR. BOB PETERS:
- 2 MR. BOB PETERS: Mr. Weins, back to the
- 3 residential seasonal customer. The values there, if --
- 4 if we look to the 250 kV customer, the -- the
- 5 indication is September 1, 2012, dollars per summer,
- 6 you're talking that as a seasonal value as opposed to a
- 7 monthly value, correct?
- MR. ROBIN WEINS: Yeah, that's the --
- 9 that's the total bill for -- for the year, which would
- 10 be billed in April and then again in October. But the
- 11 -- that's the total amount of those bills.
- 12 MR. BOB PETERS: Correct. And --
- MR. ROBIN WEINS: Or the two (2) bills.
- 14 MR. BOB PETERS: -- all you've done is
- 15 mathematically run them through your model to -- to
- 16 charge the -- increase the energy rate by 3.78 percent.
- MR. ROBIN WEINS: We've simply
- 18 calculated the bills at the current rates and at the
- 19 proposed rates.
- 20 MR. BOB PETERS: And the current rates
- 21 are the September 1 of 2012 column?
- MR. ROBIN WEINS: Correct.
- 23 MR. BOB PETERS: All right. Turning to
- 24 the diesel, you mentioned in your direct evidence to
- 25 Ms. Ramage that the diesel residential customers in the

- 1 four (4) diesel communities that Manitoba Hydro serves,
- 2 they will also experience their energy rate increasing
- 3 by 3.78 percent as well.
- 4 MR. ROBIN WEINS: Yes.
- 5 MR. BOB PETERS: That's a policy that
- 6 Manitoba Hydro has, is to charge its residential
- 7 customers in the diesel zones the same as grid rates?
- MR. ROBIN WEINS: That's correct.
- 9 MR. BOB PETERS: And the consumption
- 10 limit that used to be tiered after 2,000 kilowatt hours
- 11 a month is no longer applicable?
- 12 MR. ROBIN WEINS: That's correct. I
- 13 believe that was after November 2011, if I'm recalling
- 14 correctly.
- MR. BOB PETERS: Of the diesel
- 16 customers, only the residential customers will see an
- 17 increase if Manitoba Hydro's application is granted as
- 18 applied?
- 19 MR. ROBIN WEINS: No, general service
- 20 customers will see an increase as well on the first
- 21 2,000 kilowatt hours a month.
- MR. BOB PETERS: And then for the
- 23 government and the education accounts?
- 24 MR. ROBIN WEINS: There is no proposal
- 25 in this Application to affect the rate to general

2425 service over 2,000 kilowatt hours a month or to the government customers. 3 (BRIEF PAUSE) 5 6 MR. BOB PETERS: Mr. Weins, I just want to turn ahead to the bill comparisons for the general service large customers found on page 425. 9 And these customers would have the --10 the three (3) part bill, that being the basic monthly charge, the energy charge, and a demand charge? 11 12 MR. ROBIN WEINS: No, these customers 13 don't see a basic monthly charge. They see a demand 14 charge and an energy charge. 15 MR. BOB PETERS: And in this example, the -- the energy charge increase that you gave in your direct evidence for the general service large class was 17 18 not the same for each of the subclasses? 19 MR. ROBIN WEINS: That's correct. 20 MR. BOB PETERS: And how was that determined? 21 22 MR. ROBIN WEINS: You mean, why are 23 they different? Is --24 MR. BOB PETERS: Yeah, yes. 25 MR. ROBIN WEINS: -- is that your

- 1 question? To yield 3 1/2 percent overall increase in
- 2 class revenues without any increase to the demand
- 3 charge so, as you can see, that because the general
- 4 service large under 30 kV sees the largest energy
- 5 charge increase.
- 6 That is because the largest -- that is
- 7 the subclass which has the largest share of revenues
- 8 that is collected from the demand charge for which
- 9 there is no increase being proposed. And therefore,
- 10 the increase to the energy charge needs to be higher in
- 11 order to arrive at the 3 1/2 percent.
- MR. BOB PETERS: And the energy rate
- 13 increase for the general service large less than the 30
- 14 kV was 5.4 percent increase?
- MR. ROBIN WEINS: Yes.
- 16 MR. BOB PETERS: And then the 30 to 100
- 17 kV subclass was -- the rate increase was to increase 5
- 18 percent?
- MR. ROBIN WEINS: Yes.
- 20 MR. BOB PETERS: And if I recorded it
- 21 properly, the -- the greater than 100 kV was going to
- 22 face a 4.7 percent rate increase just on the energy
- 23 portion?
- MR. ROBIN WEINS: Yes.
- MR. BOB PETERS: Maybe lastly on this,

- 1 can you turn over to the limited use of billing demand
- 2 on the -- page 426?
- 3 Just explain briefly to the Board what
- 4 LUBD Program is.
- 5 MR. ROBIN WEINS: Limited use of
- 6 billing demand, this is an optional rate application
- 7 that is available to customers who select it. The
- 8 factors that would be promoting them or encouraging
- 9 them to accept it are that they use very little energy
- 10 relative to their peak load.
- So there are some customers that have --
- 12 that -- that use energy only certain times of the year
- 13 or that use energy only for very brief periods of time.
- 14 And -- so consequently, they may have what we refer to
- 15 as a load factor that is very low.
- 16 Typically a general service small or
- 17 medium customer operates at a load factor in the order
- 18 of 50 to 60 percent. What this means is that their
- 19 average use is 50 to 60 percent of their maximum use.
- 20 Their average use measured over a period of a month, or
- 21 -- or you can measure it over any period you choose,
- 22 but for billing purposes the month is what's -- what's
- 23 relevant. For general service large, typically it's
- 24 higher. It's in the 70 to 80 percent, sometimes
- 25 higher, load factor.

- 1 But there are customers, owing to the --
- 2 their particular requirements, that use energy for
- 3 limited amounts of time or that have high peak loads
- 4 but low use of energy. So a demand energy bill can
- 5 cause -- or results in their average cost per unit of
- 6 energy being high, in some cases extremely high.
- 7 Some of the examples of this type of
- 8 customer that -- that we've dealt with are irrigation
- 9 usage. Irrigation usage occurs at times when there's
- 10 inadequate rainfall, and it may be only fifty (50), a
- 11 hundred, two hundred (200) hours a year. But these are
- 12 -- can be large loads, so they tend to be demand
- 13 metered.
- 14 So Manitoba Hydro, because of the impact
- 15 on their unit cost, and also recognizing that because
- 16 of their sporadic usage that they may not inflict the
- 17 same capacity-related costs on the system -- they may
- 18 be using capacity in the summer rather than in the
- 19 winter or be -- simply because of their low load
- 20 factor, they would typically have a low coincidence
- 21 factor. So their capacity usage isn't as coincident
- 22 with the peak on the system.
- 23 So to recognize both the bill impacts
- 24 and the cost impacts, we've offered a rate which is set
- 25 in such a way that we increase the energy charge, we

- 1 reduce the demand charge. So for customers at very low
- 2 load factors, this can reduce their bill.
- And the way the rate has been set is
- 4 that we set a break-even load factor of 18 percent so
- 5 that a customer will be indifferent at 18 percent. So
- 6 what we did was we basically took the demand charge
- 7 down to 25 percent of the regular demand charge and
- 8 then calculated what energy charge would be required to
- 9 make the customer indifferent between the two (2) at an
- 10 18 percent load factor.
- 11 So customers were allowed to choose to
- 12 go on this rate. And we don't have a lot of customers
- 13 on it, but we have in the order of sixty (60) or
- 14 seventy (70) customers that use this rate. I'm advised
- 15 it's eighty-five (85).
- 16 MR. BOB PETERS: Does Manitoba Hydro
- 17 report annually on the LUBD program?
- MR. ROBIN WEINS: Yes, we do.
- 19 MR. BOB PETERS: And that's provided to
- 20 the Board?
- 21 MR. ROBIN WEINS: Yes, that's a report
- 22 that's filed with the Board on an annual basis. Yeah,
- 23 that report would be included in this Application
- 24 filing as Appendix 10.8, and it was filed on July the
- 25 6th of 2012.

2430 Yes, we -- we have it 1 MR. BOB PETERS: here in the -- in the filing, Mr. Weins, thank you. But that's an annual filing that's done in -- in 3 addition to any year in which there's a general rate application? 6 MR. ROBIN WEINS: Yeah, generally it's around the same time every year, and it reflects the -the experience over the previous fiscal year. 9 MR. BOB PETERS: Just one (1) part of 10 your answer to the Board that perhaps could be clarified is you mentioned coincident factor. Can you 11 12 explain what you meant by that to the Board? 13 MR. ROBIN WEINS: Coincidence factor is 14 the relationship between the load of an individual 15 customer, or the peak load of an individual customer, 16 or the peak load of a group of customers, or a class of 17 customers relative to the peak load of the entire 18 system. 19 So if a customer -- let's just say a customer has a -- a 100 kilowatt load. That's the 21 customer's individual peak. But at the time of the 22 system peak, at the time that the Manitoba Hydro system 23 overall is peaking, that customer has a -- a load of 20

24

kilowatts, they would be described as having a

- 1 And typically, customers with a lower
- 2 load factor -- in other words, that have low usage of
- 3 energy relative to their peak -- will also -- it's not
- 4 necessarily the case, but typically they will have a
- 5 lower coincidence factor. And as you broaden the group
- 6 of customers that you're dealing with in the class, as
- 7 you know, sta -- statistical experience tends to revert
- 8 to the mean so that one (1) individual customer may
- 9 have a zero coincidence factor or a 100 percent
- 10 coincidence factor. But when you take eight (8) or ten
- 11 (10) or fifteen (15) or twenty (20) similar customers,
- 12 it tends to -- it -- it tends to relate to the mean
- 13 experience, which is that they have a significantly
- 14 lower coincidence factor than customers overall.
- 15 MR. BOB PETERS: How does that
- 16 financially impact the customer?
- 17 MR. ROBIN WEINS: How does it
- 18 financially impact the customer? If the customer is
- 19 operating at a billing load factor, which a monthly
- 20 load factor, of less than 18 percent, they will pay
- 21 less on the LUBD rate than they pay on the regular
- 22 rate. If they go over 18 percent, then they are better
- 23 served and more economically on the regular rate.
- 24 MR. BOB PETERS: Thank you, Mr. Weins.
- 25 I want to turn to the Curtailable Rate Program. And,

- 1 Mr. Cormie, you volunteered for -- for that one (1)
- 2 today, I understand?
- 3 MR. RAYMOND LAFOND: Mr. Peters...?
- 4 MR. BOB PETERS: Yes.
- 5 MR. RAYMOND LAFOND: Before we go
- 6 there, for my own education, if I heard correctly,
- 7 there is no increase being requested for -- on the
- 8 demand rate portion. And the demand rate portion is in
- 9 terms of peak loads.
- 10 Is that not, in terms of behaviour, a
- 11 place where there should be an increase so that we
- 12 avoid having major peaks at cer time of year -- a
- 13 certain time of year, and therefore not tax the system
- 14 as much?
- MR. ROBIN WEINS: Arguably, yes.
- 16 Customers will respond to a price signal for their peak
- 17 usage just as they respond to a price signal for energy
- 18 usage. It varies among customers. Some customers will
- 19 not respond very well at all, because their usage is
- 20 pretty much directed by their -- the facilities that
- 21 they're using. A hospital or a personal-care home in
- 22 the rural part of the province is heated by
- 23 electricity. It's going to peak at the time of the
- 24 system peak. It's maybe not the best time to have them
- 25 peak, but that's when they need to peak in order to

- 1 serve their customers.
- 2 And they're not going to be terribly
- 3 responsive. Other customers will -- customers with
- 4 processes that can respond, say, to curtailable rate
- 5 incentives also have some capability to respond to
- 6 demand-related incentives, the price of the peak usage.
- 7 Manitoba Hydro has avoided, for the most
- 8 part, increasing or requesting increases to rates for
- 9 capacity usage or for demand usage to all its customers
- 10 for a couple of reasons. One (1), recognizing that
- 11 there are a lot of customers in the -- particularly in
- 12 the general service, small demand, medium, and even in
- 13 the general service large under 30 kV, who are not as
- 14 responsive as some of the larger customers might be,
- 15 and that we wanted to make sure that we had the energy
- 16 price signal moving in the right direction.
- 17 For the larger customers -- and I don't
- 18 want to get into this too much, because we have
- 19 deferred this discussion. But Manitoba Hydro was
- 20 looking at moving to what we believe is an approach
- 21 which will provide -- equally provide price signals to
- 22 large customers to modify their peak behaviour by
- 23 having a peak at an off-peak energy rate as well.
- 24 So we did not want to move the demand
- 25 charges in advance of that until we had that

- 1 established. So there was, in addition, a -- I don't
- 2 know if the right word is a concern but, you know,
- 3 certainly an observation of this Board at earlier times
- 4 that Manitoba Hydro's energy rate was pretty low
- 5 relative to virtually everybody in the country. And
- 6 the demand rate was not as low relative to everybody in
- 7 the country.
- 8 So for these reasons, we have tended, as
- 9 I say, since about 2004, to emphasize the energy rate.
- 10 MR. RAYMOND LAFOND: I -- I will
- 11 just add that my experience -- and that dates back
- 12 maybe thirty (30) years or so -- as financial
- 13 controller -- or just a peak demand in one evening,
- 14 because there was a power failure for something like
- 15 four (4) or five (5) hours, and the demand of course
- 16 from all the systems started in the middle of the
- 17 night, went really high and our billings for the
- 18 following year were cra -- a lot higher, like many tens
- 19 of thousands of dollars more.
- 20 And so we installed controllers so that
- 21 ever -- if ever this happened again, especially during
- 22 the night, the systems would not all start at the same
- 23 time and -- and the different buildings. And that's
- 24 really a change of behaviour to reduce our peak demand
- 25 when the Manitoba Hydro system is at peak.

2435 Is that -- does this still apply today? 1 2 MR. ROBIN WEINS: Well, I -- I quess I would have to have more familiarity with the particular 3 facility or facilities that you're discussing. Many of our customers do have such systems in place in order to avoid major peaks and in order to manage their peak 7 loads. And that -- this has been in response to Manitoba Hydro's demand-rate structure. 9 Not only the rate structure that, you 10 know, affects the -- affects the normal load, but this is -- this probably happened some time ago and it 11 12 probably happened during the winter. That rate 13 structure no longer exists. It -- today it would have affected one (1) month bill, but it would not have 14 15 affected anything beyond that. 16 MR. RAYMOND LAFOND: Okay. So today, 17 essentially, when you look at peak loads it's more on a 18 monthly basis than, like, on a period of a few hours. 19 Am I correct? 20 MR. ROBIN WEINS: No, you set your 21 monthly peak actually within a fifteen (15) minute interval. 22

- THE CHAIRPERSON: So to follow up on
- 24 your statement that most customers will respond to
- 25 pricing. Now I guess the -- just generally speaking, a

- 1 1 percent increase in rates causes what kind of a
- 2 decline in usage at the residential level?
- MR. ROBIN WEINS: I can't give you a
- 4 precise answer to that, but I can give you the answers
- 5 that other people have found, using various
- 6 methodologies, that a 10 percent change in rates would
- 7 result in somewhere between a half a percent and a
- 8 percent and a half change usage at the residential
- 9 level. We believe that large, energy-intense customers
- 10 are probably more responsive. But for residential
- 11 customers, that would tend to be the -- within that
- 12 range of rate increase, that would tend to be the
- 13 response.
- 14 And the response differs too, in terms
- 15 of time. If you have a permanent rate increase of 10
- 16 percent, initially you may not get much response
- 17 because the systems that people are using are still the
- 18 same systems. They can respond in the short term. If
- 19 it's a heating load, for example, they can lower the
- 20 thermostat. Or they can -- they may be able to put in
- 21 timers to reduce usage at certain critical times. They
- 22 may be able to undertake certain relatively easy
- 23 adjustments, energy efficient lighting,
- 24 for example, being one.
- Over time though, as -- as they --

- 1 there's enough time for the stock of appliances to
- 2 change, they can purchase more energy-efficient
- 3 appliances, or they can change their heating
- 4 methodology.
- 5 THE CHAIRPERSON: Keep -- I keep
- 6 reading in different reports and so on that because we
- 7 have low rates in Manitoba, energy consumption is
- 8 higher relative to other jurisdictions. Now, do we
- 9 have any evidence of that?
- I mean, do we -- do we have any hard
- 11 evidence that shows that a typical residential customer
- 12 in Manitoba consumes more energy than a typical
- 13 customer, say in Saskatchewan or -- or, well, perhaps
- 14 Saskatchewan is not the right -- well, Saskatchewan or
- 15 even Quebec?
- 16 MR. ROBIN WEINS: Well, to be
- 17 definitive, no. There are a lot of factors that affect
- 18 energy usage by residential customers, and some of
- 19 those factors vary by province.
- 20 Manitoba has a significant electric heat
- 21 load compared to virtually every other province.
- 22 Quebec may be similar. It's -- it's maybe the only
- 23 other one. But Quebec has different heating degree day
- 24 experience than Manitoba. Saskatchewan has similar
- 25 heating degree day experience, but the gas system is

- 1 much more widely distributed in Saskatchewan than it is
- 2 in Manitoba. BC has low rates like Manitoba, but BC
- 3 has a different climate.
- 4 So there are a number of factors that
- 5 will explain average residential customer usage. And
- 6 I'm not sure that there's been any definitive study
- 7 that says Manitoba Hydro or Manitoba customers use more
- 8 energy simply because they have lower rates. I think,
- 9 you know, economics would tend to say that, other
- 10 things being equal, the lower the rate the more they're
- 11 going to use. But other things are not always equal;
- 12 in fact, most of the time, they're not.
- 13 MR. RAYMOND LAFOND: A hundred-suite
- 14 apartment block, is that considered residential or
- 15 general service?
- 16 MR. ROBIN WEINS: It can be either. If
- 17 they're individually metered, they'll be consider
- 18 residential. If you don't have individual metering, if
- 19 it's bulk metering, then it's going to be general
- 20 service.
- 21
- 22 CONTINUED BY MR. BOB PETERS:
- 23 MR. BOB PETERS: Mr. Weins, to follow
- 24 up on that last question with -- with the Chairman,
- 25 does Manitoba Hydro have access to -- to consumption

2439 data for major cities for the non-electric-heated customer? 3 MR. ROBIN WEINS: Consumption data for major cities for non-electric. I -- I take it you're -- you're meaning maj -- when you say, "major cities," you mean outside the province? 7 MR. BOB PETERS: Yes, in comparison to other jurisdictions. 9 MR. ROBIN WEINS: I don't have that 10 immediately available. I'm not sure if it exists. I 11 would have to check. 12 MR. BOB PETERS: Well, then maybe I'll 13 ask you to accept an undertaking to check to see 14 whether Manitoba Hydro can source residential 15 consumption data in various Canadian jurisdictions, other than -- including a comparison to Mani -- to 17 Winnipeg for homes that are not electrically heated. 18 MR. ROBIN WEINS: We'll -- we'll 19 undertake to look for that. 20 MR. BOB PETERS: Appreciate the effort. 21 22 --- UNDERTAKING NO. 52: Manitoba Hydro to source 23 residential consumption 24 date in various Canadian 25 jurisdictions

- 1 THE CHAIRPERSON: I'm sorry. I have
- 2 some more questions, Mr. Weins. Just to understand the
- 3 choices that have been made here with respect to
- 4 residential customers in particular, and looking at --
- 5 looking at the page 421, again of the book of documents
- 6 number 3.
- 7 Looking at, for example -- you know, I
- 8 assume what's happening here is you're attempting to --
- 9 at your attempt to achieve 3.5 percent revenue
- 10 increase, I notice that, you know, there's one of the -
- 11 one of the groupings there that has a relatively
- 12 minor change of 2.5 -- 2.7 percent, and -- and the --
- 13 some of the customers with five thousand (5,000) are
- 14 paying -- are increased by 3.7 percent.
- Now, I take it that if you were to
- 16 increase the -- the top-level customer by 4 percent,
- 17 you then would be able to play around with some of the
- 18 lower-consumption customers?
- 19 Is that -- is that basically what's
- 20 going on here?
- 21 MR. ROBIN WEINS: It really falls out
- 22 of the rate design. It falls out of the rate design
- 23 where we're increasing the energy charge but we're not
- 24 increasing the basic charge. The less your
- 25 consumption, the more significant the basic charge is.

- 1 And at 250 kilowatt hours, which would be a -- probably
- 2 a small apartment without electric heat, this is --
- 3 this is what they're going to be seeing.
- 4 MR. RAYMOND LAFOND: Because the basic
- 5 charge is proportionately much more than -- than the
- 6 energy charge versus some other customers.
- 7 MR. ROBIN WEINS: In the bill of that
- 8 customer, 250 kilowatt hours a month to roughly seven
- 9 (7) cents a kilowatt hour, I mean, you can do the math
- 10 what that accounts -- what that amounts to. That
- 11 amounts to about eighteen dollars (\$18). The basic
- 12 charge is close to seven dollars (\$7) so the basic
- 13 charge is 35 percent of their bill. And when you get
- 14 up to the high-level customers, the basic charge is
- 15 probably 5 percent of the bill.

- 17 CONTINUED BY MR. BOB PETERS:
- 18 MR. BOB PETERS: Mr. Weins, I want to
- 19 make sure I'm clear. Looking at page 421 again and the
- 20 residential customer in the top chart, every
- 21 residential customer depicted of the four hundred and
- 22 sixty-one thousand, three hundred and fifty-three
- 23 (461,353) residential customers will pay seven point
- 24 zero-two (7.02) cents per kilowatt hour if Manitoba
- 25 Hydro's application is approved effective April 1 of

- 1 2013?
- 2 MR. ROBIN WEINS: It's seven point two-
- 3 o-two (7.202) cents a kilowatt hour. Sorry, Mr.
- 4 Peters, it's not what I heard, but that's what it is,
- 5 seven point two-o-two (7.202).
- 6 MR. BOB PETERS: No, I -- thank you for
- 7 that. And the basic monthly charge is six dollars and
- 8 eighty-five cents (\$6.85) for a 100 amp service, and
- 9 double that for a 200 amp service?
- 10 MR. ROBIN WEINS: It's -- it's -- it's
- 11 six eighty-five (6.85) for up to 200 amps and double
- 12 that for over 200 amps.
- MR. BOB PETERS: Thank you. If I can,
- 14 I will turn to the Curtailable Rates Program, Mr.
- 15 Cormie. I had understood through your direct evidence
- 16 that you were going to address questions on that.
- 17 In the -- the book of documents that is
- 18 before the Board, the Curtailable Rates Program, the
- 19 annual report is provided at Tab 38. And also at Tab
- 20 37 is the proposed terms and conditions, if that makes
- 21 it convenient for any referencing of any of your
- 22 answers, Mr. Cormie or Board members.
- 23 But let's start off, if we could, Mr.
- 24 Cormie, by a brief explanation to the Board as to what
- 25 is the rate design reasons for the Curtailable Rates

- 1 Program?
- MR. DAVID CORMIE: Many years ago,
- 3 Manitoba Hydro, in conjunction with the large
- 4 industrial customers, worked on alternate rate
- 5 strategies that provided -- that -- that made available
- 6 to Manitoba Hydro the flexibility that certain
- 7 customers had in reducing their demand and, in -- in
- 8 reducing their demand, providing value to Manitoba
- 9 Hydro.
- 10 And ultimately, we -- we developed, in
- 11 conjunction with these large customers, the Curtailable
- 12 Rate Program. So it's -- it's a program that reduces
- 13 demand. It's -- it's a capacity-reduction program, not
- 14 an energy-related program. And Manitoba Hydro pays
- 15 participants in their Curtailable Rate Program a
- 16 discount to their -- to their bill, recognizing that
- 17 they are providing value to Manitoba Hydro.
- 18 The curtailable load that customers
- 19 provide can be used by Manitoba Hydro to meet its
- 20 reserve obligations to help out during emergency
- 21 conditions and -- and, if the market is attractive, can
- 22 help Manitoba Hydro sell surplus capacity in the export
- 23 market. And so with -- for those reasons and in order
- 24 to provide some of that value to the customers, this
- 25 program was developed.

2444 1 MR. BOB PETERS: Mr. Cormie, is it -is it appropriate to use interchangeably the words "capacity" and "demand"? 3 MR. DAVID CORMIE: Yes, the -- the 4 effect on the Manitoba Hydro system is the same. Having a 100-megawatt generator start up is -- has the same effect as if demand goes down by 100 megawatts. 7 There's a change in the supply and demand balance by that 100 megawatts. 10 MR. BOB PETERS: And as you mentioned, 11 Manitoba Hydro can call on the resources it has under 12 the Curtailable Rates Program when it finds itself in 13 need of additional capacity. 14 MR. DAVID CORMIE: Yes. 15 MR. BOB PETERS: And Manitoba Hydro 16 pays approximately \$6 million a year on account of the 17 Curtailable Rates Program? 18 MR. DAVID CORMIE: Yes. 19 (BRIEF PAUSE) 20 21 22 MR. BOB PETERS: And I suppose, as we 23 will see, Manitoba Hydro currently has three (3) 24 customers enrolled in the Curtailable Rates Program? 25 MR. ROBIN WEINS: That's correct.

```
2445
                   MR. RAYMOND LAFOND: A few minutes...
1
3
                          (BRIEF PAUSE)
 5
                   MR. RAYMOND LAFOND: A few minutes ago,
   Mr. Cormie, you said that, if I heard correctly, you
   could also use the curtailment program to benefit from
7
   exports, higher-priced exports? For instance,
   yesterday at 5 o'clock you were exporting at two (2)
10
   point-some-odd cents per kilowatt hour -- kilowatt
11
   hour, but at 5:15 it was over fifteen (15) cents per
12
   kilowatt hour.
13
                   Would you then curtail these customers
14
   to be able to generate more income from the -- the
15
   exports?
16
                   MR. DAVID CORMIE: No, Mr. Lafond, we
17
   would use the capacity that's available under the
18
   Curtailable Rates Program to sell capacity on the
19
   seasonal basis. And we do not use the capacity that's
   available for economic dispatch. So it doesn't change
21
   the effect of how we dispatch the generators, but
22
   Manitoba Hydro can use it to help meet its capacity
23
   obligations.
24
                   MR. RAYMOND LAFOND: On a seasonal
25
   basis.
```

2446 1 MR. DAVID CORMIE: On a seasonal basis, 2 yes. 3 MR. RAYMOND LAFOND: Can you explain that to me, please? 5 MR. DAVID CORMIE: It's -- it's less relevant today because the capacity market is -- is 7 very long right now. But in -- in past years, when Manitoba Hydro was a member of the MAPP, the Mid-area Continent Power Pool (sic), we were able to sell forward summer capacity to utilities in the United 10 States that they could use to count -- they could count 11 12 on to serve their peak load demands. And Manitoba 13 Hydro had to be able to show that we had that capacity available after the fact. 14 15 So if Manitoba load got to the point --16 reached to the point in the summer where we were short 17 the generating capacity to serve our obligation, we 18 could curtail load to reduce -- or to -- to fulfill our 19 obligation. 20 So having 100 megawatts or 200 megawatts 21 of curtailable load, we could -- we reduce our Manitoba Therefore, that frees 22 demand at the time of the peak. 23 up that 200 megawatts of generating capacity to serve 24 the customer in the United States. And we were able to

achieve, you know, five thousand (5,000) -- four

- 1 thousand dollars (\$4,000) a megawatt month for -- for a
- 2 season with those kind of capacity sales.
- 3 So it -- it -- in years past, it has
- 4 been a -- was a significant source of short-term
- 5 revenue. But it was -- it was sold on a
- 6 forward basis for the season, and -- but it's -- but we
- 7 don't dispatch the -- the Curtailable Rate Program now
- 8 to -- for -- for economics.
- 9 So it's not -- it's not something that
- 10 our customers can cope with. It resul -- we -- we
- 11 tried it for a few years. Our customers came back and
- 12 said, You know, you're interrupting us way too many
- 13 times in order to chase the market price of
- 14 electricity.
- 15 And so we moved the Curtailable Rates
- 16 Program. We adjusted the terms and conditions so that
- 17 it was -- the capacity call would only be made under --
- 18 under a rare circumstance, either an emergency or to
- 19 reestablish our con -- our contingency reserves.
- 20 And so this is the kind of relationship
- 21 we've had with the customers. It -- we -- it has to
- 22 work for us, and it has to work for them. If -- if we
- 23 are dispatching every time -- calling on the Cur --
- 24 Curtailable Program every time the market price was
- 25 spiking, the -- the customers couldn't run their

- 1 businesses. But they're able to provide it on a -- on
- 2 a relatively infrequent basis without having major
- 3 disruptions. But after it becomes too frequent, it
- 4 becomes so disruptive that the value is no longer
- 5 there.

- 7 CONTINUED BY MR. BOB PETERS:
- MR. BOB PETERS: Mr. Cormie, perhaps to
- 9 assist further, if -- if the Board and you would turn
- 10 to page 363 of the book of documents. This is in the
- 11 proposed terms and conditions that Manitoba Hydro has
- 12 filed as Appendix 10.4 of their Application to the
- 13 Board.
- 14 But there are -- there are four (4)
- 15 options for a customer to elect under the Curtailable
- 16 Rates Program. Have I got that correct?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: And they're set out
- 19 here. Option A has the ability to cur -- the customer
- 20 has to have the ability to curtail within five (5)
- 21 minutes' notice from Manitoba Hydro for a maximum
- 22 period of four (4) hours and fifteen (15) minutes per
- 23 curtailment, correct?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: But the number of

2449 curtailments per year is not mandated as part of the program? 3 MR. DAVID CORMIE: Yes, it is limited. The limits for Option A are fifteen (15) curtailments per year and... And the maximum duration of the curtailment is, you know, four (4) hours and -- and --7 four (4) and a quarter hours, yes. 8 MR. BOB PETERS: And Option C is the customer would get more notice for a maximum of a four (4) hour curtailment again, correct? 10 11 MR. DAVID CORMIE: That's correct. 12 MR. BOB PETERS: And how many -- how 13 many curtailments could an Option C customer face in a calender year? 14 15 MR. DAVID CORMIE: Fifteen (15) 16 curtailments. 17 MR. BOB PETERS: What -- can you 18 explain to the Board the timing difference, the -- the five (5) minutes versus the one (1) hour? How does Manitoba Hydro use that? 21 22 (BRIEF PAUSE) 23 24 MR. DAVID CORMIE: There are two (2) types of emergencies that Manitoba Hydro faces: those

- 1 that are slow-developing and those are -- those that
- 2 can be predicted in advance predicted equipment
- 3 failure as an example. And then those are the
- 4 immediate emergencies; equipment has failed and we need
- 5 to respond.
- 6 We rarely use Option C curtailments
- 7 because we find that there are better -- other options
- 8 available to deal with slow-developing emergencies.
- 9 But we do use Option A curtailments quite often to help
- 10 assist in reestablishing our contingency reserves.
- MR. BOB PETERS: And Option R is
- 12 another option available for Manitoba Hydro for the
- 13 reestablishment of reserves?
- 14 MR. DAVID CORMIE: Yes, Option R
- 15 curtailable load can be used for meeting Manitoba
- 16 Hydro's supplemental reserve obligation. We have a --
- 17 an agreement with MISO, where we share contingency
- 18 reserves. So this is capacity and generating capacity
- 19 we have on the system that is used to deal with
- 20 contingencies: generators going out of service,
- 21 transmission line interruptions.
- 22 And under the -- under the reserve
- 23 sharing arrangement we have with -- with MISO, Manitoba
- 24 Hydro is obligated to have 150 megawatts of generating
- 25 capacity available to meet its share of the 2,000-

- 1 megawatt obligation that's covered by the contingency
- 2 reserve sharing agreement.
- Of that 150 megawatts, 90 megawatts --
- 4 or 60 megawatts has to be spinning -- connected to pick
- 5 up the load following the failure of -- of a piece of
- 6 equipment that creates the contingency.
- 7 And it's very similar to when you're
- 8 driving your car. You -- you're driving along at 60
- 9 miles an hour, and -- and if you immediately have to
- 10 speed up in order to pass somebody, that -- you imagine
- 11 that as your -- your spare capacity. You know, you've
- 12 got some -- you've got the capacity of your engine; you
- 13 can use that spare capacity to pass.
- 14 MR. BOB PETERS: In that 300-horsepower
- 15 car that you dream of.
- 16 MR. DAVID CORMIE: Yes. Yes. So
- 17 Manitoba Hydro has to have, at all times, 60 megawatts
- 18 of this spare capacity available to deal with those --
- 19 those immediate contingencies. The other 90 megawatts
- 20 of the 150-megawatt obligation is supplemental. And
- 21 this is generating capacity that we can have shut down
- 22 and that we can -- but we have to have -- have to have
- 23 online within fifteen (15) minutes.
- 24 And of that 90 megawatts, we can use
- 25 curtailable load, Option R curtailable load, to -- so

- 1 instead of starting a generator, we can call on the
- 2 customer. In fifteen (15) minutes -- you know, because
- 3 it has a five (5) minute notice, that customer can
- 4 curtail his load. And we can use that to help meet our
- 5 supplemental reserve obligations.
- 6 And so because -- because it's -- it's
- 7 not -- we don't have to have it available instantly,
- 8 there's some time available. The -- the control
- 9 operator in the control centre can all the customer,
- 10 ask for the curtailment. The company has time to
- 11 reduce their demand, and Manitoba Hydro can -- can use
- 12 that to meet its reserve obligation.
- MR. BOB PETERS: How long does it take
- 14 to fire up a genera -- I'm sorry.
- 15 MR. RAYMOND LAFOND: I was -- when I
- 16 look at Option A and Option R on page 363 -- 363 of the
- 17 book of documents, it's the exact same description.
- But from listening to you, am I to
- 19 conclude that Option A is in regards to emergencies due
- 20 to, for instance, equipment failure of the Manitoba
- 21 Hydro system as opposed to Option R, which is to
- 22 satisfy export constraints or terms?
- 23 MR. DAVID CORMIE: They -- they have
- 24 the same curtailment notices and the same limits on a
- 25 number of curtailments, but they -- but they get used

- 1 for different reasons. And Option R will be curtailed
- 2 more often than an Option A curtailment. And -- and we
- 3 pay a premium to the cus -- Option R customer because
- 4 there is more frequent use.
- 5 So Option R is used -- it's used in a
- 6 manner that will be dispatched more often, whereas
- 7 Option A, you have to actually wait for something to go
- 8 wrong before you -- you exercise the -- the call. So
- 9 they -- they have different -- different uses. You
- 10 can't -- you -- you can't have an Option R customer and
- 11 an Option A customer at the same time. They have to be
- 12 independent. But the effect on the customer is Option
- 13 R customers potentially get called on more often Option
- 14 A customers.

- 16 CONTINUED BY MR. BOB PETERS:
- MR. BOB PETERS: I'll come back and
- 18 revisit that for the benefit of the Board.
- 19 Mr. Cormie, just to tidy up on Option R,
- 20 I had understood the contingency reserve that Manitoba
- 21 Hydro had was -- was 200 megawatts. Is that on a
- 22 shared basis?
- 23 MR. DAVID CORMIE: No, our obligation
- 24 is -- is 150 megawatts. And the contingency reserve
- 25 sharing arrangement we have is -- covers off a 200-

- 1 megawatt contingency. MISO will provide us with 1,850
- 2 megawatts, and Manitoba Hydro will kick in 150
- 3 megawatts, to bring the total up to two thousand
- 4 (2,000).
- 5 MR. BOB PETERS: Thank you. Just to
- 6 finish off on page 363, the Option E has, again, a
- 7 different notice period. And this time the maximum
- 8 curtailment is -- is longer, up to ten (10) days per --
- 9 per period.
- 10 MR. DAVID CORMIE: Yeah, the -- the
- 11 notice period for Option E is forty-eight (48) hours,
- 12 and the maximum duration of the curtailment is ten (10)
- 13 days. And we're limited to three (3) curtailments in a
- 14 year.
- 15 And when we designed this option, this
- 16 was to deal with a severe winter weather event where
- 17 exceedingly cold weather arrives, the demand spikes for
- 18 a period of time, and we were -- we're also in the
- 19 middle of a drought. And not only do we need the
- 20 capacity, but we need emergency energy. And so an opt
- 21 -- an Option E customer would be able -- would -- is
- 22 prepared to curtail for up to ten (10) days.
- 23 That situation would -- would be very
- 24 rare. Like, we only go into energy emergencies like
- 25 this in a drought. The frequency of drought is -- you

2455 know, the -- the worst drought is, you know, like a one (1) in a hundred year event. So the probability of having to -- to exercise this call is very low. But we -- we did realize that there was some value, and some customers were willing to accept that. And -- and so we -- we have that as an option. 7 MR. BOB PETERS: Mr. Cormie, just on Option R, there's a penalty if you don't maintain a reserve in satisfaction of your MISO commitments? 10 MR. DAVID CORMIE: There's a NERC 11 standard. The North American Electrical Reliability 12 Council has -- has reliability standards that each 13 balancing authority has to comply with. And there are 14 penalties for not meeting your reserve obligations. 15 And so if we -- we -- if we call on the -- an Option R customer, an Option R customer is not 16 17 able to provide the capacity that they've contracted 18 for and that Manitoba Hydro has indicated, then 19 Manitoba Hydro would be liable for -- for penalties for failing to have the appropriate megawatts of reserves available. 21 22 MR. BOB PETERS: Do you recall Manitoba 23 Hydro ever having to pay such a penalty? 24 25

2456 1 (BRIEF PAUSE) 2 3 MR. DAVID CORMIE: We've never had to pay a penalty, Mr. Peters, but we've -- but -- but we've had to carry additional reserves because at times we did fail in meeting our obligation. 7 MR. BOB PETERS: Can you explain those circumstances briefly? 9 10 (BRIEF PAUSE) 11 12 MR. DAVID CORMIE: I'm advised, Mr. 13 Peters, that it wasn't a failure of curtailable load. 14 It was because of operator error, didn't call on enough 15 reserves when the requirement was that we should have had more available. 16 17 MR. BOB PETERS: And so the sanction 18 there was you had to make larger reserves available for 19 a period of time? 20 MR. DAVID CORMIE: Yes. Every megawatt 21 that's held in reserve to deal with contingency is a megawatt that's not available for commercial service. 22 23 And so the -- in effect, the financial penalty is 24 imposed on Manitoba Hydro because we're no longer able 25 to use our generators in -- to -- for commercial

- 1 reasons.
- 2 MR. BOB PETERS: Let's address Board
- 3 member Lafond's question by turning to page 379 of the
- 4 book of documents. That's found under tab 38.
- 5 And Tab 38, Mr. Cormie, is a report that
- 6 Manitoba Hydro files with the Public Utilities Board,
- 7 this one filed in July of 2012, to reflect the
- 8 experience Manitoba Hydro had with the Curtailable
- 9 Rates Program between April 1 of 2011 and March 31 of
- 10 2012.
- MR. DAVID CORMIE: Yes, I see that.
- 12 MR. BOB PETERS: This is -- this is
- 13 factually what happened in that fiscal year?
- MR. DAVID CORMIE: Yes.
- 15 MR. BOB PETERS: And when we turn to
- 16 page 379, it appears that there were ten (10)
- 17 curtailments during the 2012 fiscal year for Manitoba
- 18 Hydro, and those are set out on a table by the various
- 19 months in which they occurred?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: You'd indicated that
- 22 option -- if I understood you correctly to be saying,
- 23 an Option A customer could not be curtailed -- could
- 24 not also be recorded as an Option R customer in your
- 25 system, if I -- if I understand that correctly?

2458 1 MR. DAVID CORMIE: They have to -- they -- they can be the same customer; they have to be different loads. 3 MR. BOB PETERS: Does that suggest, Mr. Cormie, that there's separate meters for those separate 6 loads? 7 MR. DAVID CORMIE: I'm advised, no. MR. BOB PETERS: Manitoba Hydro verifies those -- those loads? 10 MR. ROBIN WEINS: If the customer has 11 to have sufficient load available in the event of an 12 Option R curtailment request, that we -- that they 13 actually have to go down for the amount of that 14 request. If they can meet a con -- if they can meet a 15 request for an Option A interruption and still have 16 load available in case an Option R interruption is called then it's not the same load. 17 18 MR. BOB PETERS: And we see from the 19 chart on page 379 that the Option A interruption occurred once in the fiscal year, and the Option R interruption was nine (9) times that year? 21 22 MR. DAVID CORMIE: Yes, maybe in this 23 way I can just explain a little bit better. Our

contingencies. So, if something goes wrong, we have

Serving Clients Across Canada

obligation to carry reserves is to deal with

24

- 1 this reserve capacity that we use to serve the load
- 2 during the period of the contingency. We also have the
- 3 obligation to re-establish those reserves within a
- 4 certain time period.
- 5 So, Option R is used -- can be used to
- 6 deal with a contingency. Option A is used to re-
- 7 establish, so it's kind of the second tier of capacity.
- 8 It's not used to deal with contin -- but it's used to
- 9 re-establish and that's why Option A is used much less
- 10 frequently then Option R.
- 11 Option R is actually dispatchable; we
- 12 call on it. Option A is dispatchable, but it's only
- 13 used to -- to re-establish. And there may be other me
- 14 -- other means of re-establishing a -- a -- but Option
- 15 R -- but Option A is a re-establishment rather then
- 16 actually carrying the reserves and -- and being
- 17 dispatched to deal with the contingencies.
- 18 MR. BOB PETERS: If we turn the page to
- 19 page 381, Mr. Cormie, we see the -- we see a table that
- 20 contains the three (3) customers that participated in
- 21 the Curtailable Rates Program and the approximate --
- 22 well, I guess, the actual dollar amounts paid to those
- 23 customers in Manitoba Hydro's fiscal 2012?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: And in this particular

- 1 case, Manitoba Hydro has one (1) customer that has made
- 2 available capacity under Options A -- says, "AE, R, and
- 3 A."
- 4 Is that simply because of the size of
- 5 the load or the way the load is handled by the -- by
- 6 the customer?
- 7 MR. DAVID CORMIE: You know, that's
- 8 because the customer has sufficient load that it can
- 9 participate in Option A and R. And 'A' and 'E' are
- 10 allowed in combination and 'R' and 'E' are allowed in
- 11 combination but this customer has chosen the AE
- 12 combination, as well.
- 13 MR. BOB PETERS: And the other
- 14 customers are -- their elections were only for Option A
- 15 or in a case of Customer 2, an Option C for Customer 3?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: In the case of
- 18 Customer 1, where the interruptions occur under
- 19 different options, the payment made to the customer
- 20 would be calculated differently depending on the option
- 21 used to interrupt that client?
- MR. ROBIN WEINS: That's correct, Mr.
- 23 Peters. Option R, the customer is required to shed the
- 24 designated load to provide that level of backup to
- 25 Manitoba Hydro's reserves. Under Option A, the

- 1 customer is not required to shed a specific amount of
- 2 load, rather the amount of load that's shed is going to
- 3 depend on how much load the customer has on the system
- 4 at the time, and then they will be required to shed to
- 5 a designated level.
- In other words, it's based on: This is
- 7 the firm load we have to maintain; we'll shed our load
- 8 down to that level and not below. So it will -- it
- 9 will be different from time to time, depending on how
- 10 much load the customer's actually got on the system.
- In the case of this particular customer,
- 12 it's not likely to differ very much because they have a
- 13 fairly steady load. But the calculation of the amount
- 14 of curtailable load is different. In one (1) case it's
- 15 -- it's absolutely -- if you go back to -- if you go
- 16 back to page 379 you'll see that its cost fift -- 50
- 17 megawatts under Option R. They shed 50 megawatts under
- 18 Option R.
- 19 Under Option A, the amount that's listed
- 20 is a hundred and eighteen (118). That's existing load
- 21 brought down to a firm level and it could vary,
- 22 depending. There's only one (1) Option A curtailment
- 23 in that year, but if there had been others you would
- 24 have seen some slight variation.
- MR. RAYMOND LAFOND: So under Option R,

2462 for instance, the shedding of 50 megawatts would be a small portion of their total load actually? 3 MR. ROBIN WEINS: Relatively small compared to Option A, yes. 5 CONTINUED BY MR. BOB PETERS: 7 MR. BOB PETERS: Does the table on page 381 suggest that Customers number 2 and Customers number 3 are not sufficiently large enough to -- to provide Option R relief? They can't shed 50 megawatts? 10 11 12 (BRIEF PAUSE) 13 14 MR. ROBIN WEINS: No, the -- these 15 customers, for their own reasons, have elected to --16 not to participate in Option R. Certainly the loads -if they wanted to participate, if they had the 17 18 capability other than load, the loads would not be a 19 barrier to them participating. 20 MR. BOB PETERS: I want to turn to the 21 request being made of the Board back on page -- let's 22 go to 386 of the book of documents. 23 24 (BRIEF PAUSE) 25

2463 MR. BOB PETERS: If I understand the 1 history -- and I might not have it correct here, Mr. Cormie, or Mr. Weins -- back in 2008, Manitoba Hydro 3 allowed and agreed with its customers, that for Option A and E there would be just under 200 megawatts -- I had 199 megawatts in my notes of -- of program limit 7 for -- for those options -- and Option C was limited to 31 megawatts, for a total of 230 megawatts. 9 Do you recall that being accurate? 10 MR. DAVID CORMIE: Which page are you 11 referring to? 12 MR. BOB PETERS: I don't have it in --13 MR. DAVID CORMIE: Oh. 14 MR. BOB PETERS: -- in the book of 15 documents. I had researched it from some other 16 location, but --17 MR. DAVID CORMIE: Yes. We were at 230 18 megawatts, yes. 19 MR. BOB PETERS: And -- and that was -the 230 megawatts was the -- was the overall maximum 21 amount that the Corporation wanted under this 22 Curtailable Rates Program? 23 24 (BRIEF PAUSE) 25

2464 1 MR. DAVID CORMIE: Yes, that's the amount that we -- that we were work -- working with at the time. Yes. 3 MR. BOB PETERS: All right. So let's walk the Board through what the request is being made at this time; is that for the amount of curtailable load that the Corporation wants under Option A is -has been -- has been set at 180 megawatts, and that assumes that the customer that's currently under Option 10 C will convert to either -- to Option A participation. 11 And I'm on page 368. 12 13 (BRIEF PAUSE) 14 15 MR. BOB PETERS: My apologies if I 16 misspoke, Ms. Ramage. 17 18 (BRIEF PAUSE) 19 20 MR. BOB PETERS: So let's discuss, Mr. 21 Weins and Mr. Cormie, what is the current maximum 22 amount of curtailable load that Manitoba Hydro has 23 available, or -- or is prepared to -- to have under 24 Option A? 25

2465 1 (BRIEF PAUSE) 2 3 MR. ROBIN WEINS: One (1) -- 150 megawatts. 5 MR. RAYMOND LAFOND: Per customer, or 6 in total? MR. ROBIN WEINS: In total. It's the 7 maximum total subscription. 9 10 CONTINUED BY MR. BOB PETERS: 11 MR. BOB PETERS: That's the proposed subscription is it, Mr. -- Mr. Weins, if -- if the 13 customer currently under Option C becomes a firm 14 customer? 15 MR. ROBIN WEINS: That's correct. 16 MR. BOB PETERS: If that -- if that customer that is providing Option C decides to convert 17 18 to Option A then the subscription maximum would be 19 capped at 180 megawatts? 20 MR. ROBIN WEINS: Correct. 21 MR. BOB PETERS: And is that 180 megawatts, is that -- is that down from -- does 22 23 Manitoba Hydro consider that down from 230 megawatts, 24 or does Manitoba Hydro consider that to be down from 25 200 megawatts?

2466 MR. ROBIN WEINS: Two-thirty (230) is 1 the total of everything. 3 MR. BOB PETERS: All right. So can you explain to the Board why Manitoba Hydro has concluded that the amount of curtailable load needed under Option A should be capped as proposed? 7 MR. DAVID CORMIE: We -- for -- for several reasons we -- we no longer need as much Option A load. The -- the first reason is that we've entered 10 into this contingency reserve sharing group rese -reserve sharing arrangement with MISO that started on 11 12 January the 1st, 2010, that reduces our requirement for 13 contingency reserves. 14 And -- and the second reason is that the 15 market for capacity is no longer there, and so the -there -- there's no value in having additional 17 curtailable load from a -- from a market perspective. 18 And so we want to preserve the existing customer loads 19 that we have, but we're -- we're not interested at this time in having that gap between the one-eighty (180) and the two-thirty (230) filled. And it just doesn't 21 22 make economic sense for Manitoba Hydro to have 23 additional Option A load at this time. 24 25 (BRIEF PAUSE)

- 1 MR. BOB PETERS: Except, Mr. Cormie,
- 2 that if the customer that we saw -- and I'm using the
- 3 customer on page 381 as just the mathematical example -
- 4 if that customer that is currently using Option C
- 5 converts to firm load, Manitoba Hydro would then ask
- 6 the maximum curtailable load under the program be
- 7 reduced further, down from 180 megawatts down to 150
- 8 megawatts.
- 9 MR. ROBIN WEINS: Yes, that's correct.
- 10 MR. BOB PETERS: And why is it
- 11 dependent on what customer currently using Option C
- 12 does?
- 13 MR. ROBIN WEINS: Well, Mr. Peters, the
- 14 rate program is, as most rate programs are, trading off
- 15 between a number of objectives. And one (1) of the
- 16 objectives in this rate program is to at least offer
- 17 that current Option C customer the choice of remaining
- 18 in the curtailable program.
- 19 So dependent upon that, Manitoba Hydro
- 20 would prefer to reduce the subscription peak for Option
- 21 A down to one-fifty (150), but Manitoba Hydro doesn't
- 22 want to tell that one (1) customer that they're only
- 23 choice is to go back on firm.
- 24 MR. BOB PETERS: All right. Thank you,
- 25 Mr. Weins. Mr. Chairman, recognizing the time this

2468 might be an appropriate time for a morning recess. 2 THE CHAIRPERSON: Thank you. Let's take ten (10) minutes. 3 --- Upon recessing at 10:49 a.m. --- Upon resuming at 11:02 a.m. 7 CONTINUED BY MR. BOB PETERS: 9 MR. BOB PETERS: Thank you, Mr. Chairman. Mr. Weins, Mr. Cormie, I just want to 10 11 continue on some of the thoughts that we had before the 12 -- the morning recess. 13 The decision by Manitoba Hydro as to the 14 cap level on the Curtailable Rates Program is -- hinges 15 on what Manitoba Hydro's Customer number 3 as -- as 16 that persons -- or, that customer has been identified 17 in the materials decides to do under the program. 18 Would that be true? 19 MR. ROBIN WEINS: Well, the -- the choice between the one-fifty (150) and the one-eighty 21 (180) is what hinges on that customer's decision. 22 23 (BRIEF PAUSE) 24 25 MR. BOB PETERS: And the reason it --

- 1 the reason that Manitoba Hydro's decision hinges on
- 2 that customer is simply customer relations?
- MR. ROBIN WEINS: It's -- yes, it's --
- 4 it's wanting to be able to offer. We're -- we're
- 5 telling that customer that within a year of notice, and
- 6 I think that notice has been provided, that that
- 7 program is not going to be available for them. So
- 8 rather than tell them they would have to revert to a
- 9 firm load situation, they were offered the choice
- 10 between reverting to firm load or accepting Option A
- 11 curtailment.
- 12 MR. BOB PETERS: That customer has
- 13 until what date to make that decision, Mr. Weins?
- 14 MR. ROBIN WEINS: A one (1) year from
- 15 the date of approval by this Board of this proposal.
- 16 MR. BOB PETERS: You have no indication
- 17 at this point in time of any firm decision by the
- 18 customer in that regard?
- 19 MR. ROBIN WEINS: I have not heard of
- 20 one, no.
- MR. BOB PETERS: No. Mr. Cormie, you
- 22 gave the Board two (2) reasons why the capacity, as
- 23 presently designed on the program, will no longer be
- 24 needed, or is not seen to be needed by Manitoba Hydro;
- 25 one (1) of them was because of the sharing of the -- of

PUB - MANITOBA HYDRO GRA 01-08-2013 2470 the reserve requirements on Manitoba Hydro? 2 MR. DAVID CORMIE: Yes, the number of megawatts that Manitoba Hydro has to carry under its 3 reserve sharing agreement with MISO is less than the -than the previous arrangement we had with -- with MAPP. 6 MR. BOB PETERS: And just remind the Board, under MAPP, how -- how large of a reserve 7 capacity did Manitoba Hydro have -- have a requirement 9 to keep? 10 11 (BRIEF PAUSE) 12 13 MR. DAVID CORMIE: Under the previous 14 arrangement with MAPP, the reserve obligation wasn't 15 fixed; it varied with time depending on the number of

- 16 participants in the reserve sharing pool. Each
- 17 participant was required to carry a reserve obligation
- 18 in proportion to their load share ratio of the
- 19 contingency.
- 20 And under the new arrangement, this
- 21 number no longer fluctuates and it's fixed. And in --
- 22 in Man -- so Manitoba Hydro now has a fixed obligation
- 23 of a hundred and fifty (150) compared to -- I think the
- 24 last number was around 190 megawatts, so its come down
- 25 about forty (40). But that -- that one ninety (190)

- 1 could have been -- could have been much higher then
- 2 that as participants came and went from the reserve
- 3 sharing group.
- 4 MR. BOB PETERS: And just help the
- 5 Board understand that the MISO sharing arrangement --
- 6 who picks up the balance of the 2,000 megawatt reserve
- 7 that you'd referenced earlier?
- 8 MR. DAVID CORMIE: That's per -- picked
- 9 up by the other market -- the other gen --
- 10 participants, the generation suppliers in the MISO --
- 11 or in the MISO region.
- MR. BOB PETERS: It's been divided up
- 13 by contractual agreement?
- 14 MR. DAVID CORMIE: Yes. MI -- MISO
- 15 when they -- when they do their generation dispatch for
- 16 the day ahead, co-optimizes the -- where the -- where
- 17 those reserves will be kept. So there will be 1,850
- 18 megawatts of generation reserves carried by the other
- 19 generators in -- in an economic way across the
- 20 footprint.
- 21 MR. BOB PETERS: Is it fixed for other
- 22 generators?
- 23 MR. DAVID CORMIE: No, MISO will
- 24 allocate that to the gen -- to the -- to the -- to the
- 25 other generators in the most economic manner on a -- on

- 1 a day by day, hour by hour basis. But Manitoba Hydro's
- 2 obligation is always a hundred and fifty (150).
- 3 MR. BOB PETERS: All right. Thank you
- 4 for that. The second reason you gave the Board, in
- 5 terms of wanting to reduce the cap on the curtailable
- 6 rates program quantities, was that the market for
- 7 capacity is no longer -- no longer exists for Manitoba
- 8 Hydro?
- 9 MR. DAVID CORMIE: No, there continues
- 10 to be a capacity market, it is just -- right now the --
- 11 there's such a larger surplus available that the value
- 12 is so -- is -- is very, very low relative to what we're
- 13 paying as a discount.
- 14 In previous years, you know, we could
- 15 almost cover the cost of the curtailments with the
- 16 revenues -- additional revenues that we -- that were
- 17 achieved by the sale of this capacity. Now we can't
- 18 cover, you know, 5 percent of it from those sales.
- 19 This is expected to be a short term
- 20 issue because of the retirements. You have coal
- 21 generation in the region. We're -- we believe that
- 22 we're going to go from a capacity long region to a
- 23 capacity short region and the -- and capacity prices
- 24 will increase. But until that happens and Manitoba
- 25 Hydro re-enters the capacity market, we don't believe

- 1 that we can afford to have any more curtailable load.
- So, we don't have certainty that, you
- $3\,$  know, if we were to tell this Customer  $3\,$  to  $--\,$  that we
- 4 no longer require them, it may be that in two (2) years
- 5 or three (3) years from now we want to come back and
- 6 say, You know, the market is now re-established, it
- 7 makes sense for Manitoba Hydro to have you back on
- 8 economically.
- 9 We don't want this customer to
- 10 disappear. We have a -- we made a commitment that we
- 11 will have them in the curtailable and we're giving them
- 12 an option to preserve -- because there -- we think that
- 13 there might be additional value in the future of having
- 14 them there.
- So, it's not -- it's not certain that --
- 16 that this customer will have no value; it's just that -
- 17 we just don't want any additional load at this time.
- 18 MR. BOB PETERS: Is the reason the
- 19 capacity market is not -- is not financial attractive
- 20 to Manitoba Hydro because of the development of the
- 21 ancillary services market where now there are, I
- 22 suppose, many other generators available to -- to
- 23 provide the capacity?
- 24 MR. DAVID CORMIE: Yes, that's also an
- 25 additional factor. The -- the dispatch -- or the

2474 allocation of reserves is now done on an economic efficient manner, rather than on a pro rata basis that didn't matter. And so generation is being -- or 3 reserves are being carried in a much more efficient manner, and there's lots of efficient surplus capacity available and those -- that surplus reduces the need for customers who -- who have expensive reserves to go to the market to buy down that obligation. 9 So the answer is "yes". 10 MR. BOB PETERS: Where is that additional reserve capacity coming from, in the most 11 12 part, Mr. Cormie? 13 14 (BRIEF PAUSE) 15 16 MR. DAVID CORMIE: You know, Mr. 17 Peters, I'm not sure I can answer that. I don't -- you 18 know, I'm not sure I understand the question. It's 19 coming from the surplus that's in the market and -- and 20 that surplus capacity... 21 MR. BOB PETERS: Is it predominantly 22 gas? 23 MR. DAVID CORMIE: Well, I -- I believe 24 so, because it's -- it's -- that -- gas is the marginal generation in the on-peak hours.

2475 THE CHAIRPERSON: Just to understand, 1 the one fifty (150) is -- got to be available at all times and you only get paid for it when it's drawn 3 4 upon. 5 Is that...?

6 MR. DAVID CORMIE: When the Option R --

7 the Option R is contributing to the one fifty (150), so

the Option R load provides fifty (50), Manitoba Hydro

provides the balance of the -- of the ninety (90). So

we provide forty (40), the Option R load provides the 10

11 fifty (50).

12 If we -- if we call on the fifty (50)

13 then they get a -- some additional money based on the

14 number of megawatt hours that are delivered.

THE CHAIRPERSON: 15 I was thinking more

16 from a perspective of Manitoba Hydro relative to MISO.

17 So if -- you must have the one fifty (150) at all

18 times, but you only get paid for it when you -- you put

19 the power into the MISO market.

20 Is that...?

21 MR. DAVID CORMIE: Yeah, for the energy

that we deliver when these reserves are -- are called 22

23 upon, Manitoba Hydro gets paid the market price at that

24 moment in time plus fifty dollars (\$50) a megawatt

25 hour.

- 1 THE CHAIRPERSON: The presence of an
- 2 expanded MISO foot -- footprint means what to the
- 3 reserves; in the fact that, you know, MISO is going to
- 4 have a fairly significant expansion to its footprint
- 5 because of the energy association?
- Now, what does that mean to your
- 7 reserves?
- 8 MR. DAVID CORMIE: The -- the
- 9 contingency reserve group is covering off the largest
- 10 single contingency in the region, which ends up being
- 11 the Manitoba Hydro-US interconnection. So the -- so
- 12 regardless of whether the footprint expands we will
- 13 still be the contingency for which MISO is carrying
- 14 reserves.
- MISO has chosen to provide 2,000
- 16 megawatts of contingency reserves. It's the fifteen
- 17 hundred (1,500) plus a cushion of five hundred (500).
- 18 So the -- the coordination -- the -- the agreement we
- 19 have with MISO is for 2,000 megawatts, and the 2,000
- 20 megawatts was based on the loss of our interconnection
- 21 plus an extra 500 megawatts.
- 22 And a -- and a good example of when we
- 23 used that was in 2008. That summer was very hot. We
- 24 had forest fires along the DC and Manitoba Hydro had to
- 25 call for a 2,000 megawatt contingency, and that

- 1 happened in -- in a matter of several minutes.
- 2 Forest fires -- the smoke from the
- 3 forest fires crossed the corridor. There was arcing on
- 4 the line. We had to reduce the voltage on the line,
- 5 and we had to reduce it by 1,850 megawatts.
- 6 So, immediately, MISO saw eighteen (18)
- 7 -- or 1,985 megawatts less supply coming into -- in --
- 8 being exported by Manitoba Hydro. And so that -- that
- 9 -- tho -- that power had to be made up, and it would be
- 10 made up by the -- by the contingency reserves that were
- 11 being carried by Manitoba Hydro and by the other market
- 12 participants.
- 13
- 14 CONTINUED BY MR. BOB PETERS:
- MR. BOB PETERS: Mr. Cormie, the Option
- 16 C discontinuation is as a result of it being virtually
- 17 a duplication of -- of Option A?
- 18 MR. DAVID CORMIE: No. It -- it -- the
- 19 reason Option C is being discontinued is because we
- 20 have rarely used it; because the notice time is too
- 21 long, and -- and with an hour notice time we can always
- 22 find other -- more -- better ways of dealing with the -
- 23 the contingency. So it -- it just -- we were -- we
- 24 were paying for something that we -- that we really
- 25 didn't find value in.

2478 MR. BOB PETERS: You were paying ten 1 thousand dollars (\$10,000) for that option last year? 3 MR. DAVID CORMIE: Yes, that's what that table indicates. 5 MR. BOB PETERS: And is that the historical approximate amount for that option? MR. ROBIN WEINS: I -- I'm not sure. 7 Ι don't have those numbers in front of me. But it is relatively small. 10 MR. BOB PETERS: And if you have other options available, why did you call on Option C as --11 12 as often or as often as indicated on page 381? 13 MR. ROBIN WEINS: No, page 381 does not 14 deal with the number of times we called on Option C. 15 That deals with the monthly discount that was provided 16 to the customer that was on Option C. 17 MR. BOB PETERS: Correct. Sorry, I... 18 MR. DAVID CORMIE: Yeah, the table on 19 page 379 shows the -- you know, that in that year Option C wasn't utilized at all, Mr. Peters. 21 MR. BOB PETERS: Just Options A and 22 Options R. 23 MR. ROBIN WEINS: Correct. 24 MR. BOB PETERS: Yeah. And... 25

2479 (BRIEF PAUSE) 1 2 MR. ROBIN WEINS: In fact, Option C has 3 not been used since the fiscal year 2006. 5 MR. BOB PETERS: So Manitoba Hydro's been paying for something that it -- it factually hasn't needed to use. 7 MR. ROBIN WEINS: That -- that has been rarely used during the past ten (10) years, and -- and not at all since 2006. 10 11 MR. DAVID CORMIE: Mr. Peters, we -- we 12 have an emergency operations procedure, and there's 13 about thirty-one (31) steps that we go through before 14 we actually curtail Manitoba load in response to 15 emergency. Step number 10 is curtail Option A load; 16 step number 11 is to curtail Option C load. 17 So it's part of the procedures. It's in 18 the stack. It's just that it's so infrequent we 19 actually ever get there. It's not that it has no value; it's just that it -- it -- we just haven't seen 21 a lot of use, like Mr. Weins said, since 2005. 22 MR. BOB PETERS: When the Board looks 23 at -- at page 381 and sees the three (3) customers that 24 were -- that were using the program last fiscal year, 25 Customer 1 and Customer 2 will be affected by the cap

2480 if it's reduced. 2 Is that correct? 3 MR. ROBIN WEINS: No, Mr. Peters. The subscription of both those customers would be retained under the new cap. 6 7 (BRIEF PAUSE) 9 MR. BOB PETERS: Let me just ensure I understand your -- your comment, Mr. Weins. You're 10 saying that for Customers 1 and 2, their participation 11 12 in the program will not be affected? 13 MR. ROBIN WEINS: That's correct. 14 MR. BOB PETERS: But it will preclude 15 other customers from coming into -- into exercise 16 Option A. 17 MR. ROBIN WEINS: That is correct. 18 19 (BRIEF PAUSE) 20 MR. BOB PETERS: Does the limitation on 21 22 the cap suggest that there will be fewer curt --23 curtailments, or is that something that can even be 24 planned or forecast? 25 MR. ROBIN WEINS: Well, I -- you know,

- 1 as Mr. Cormie explained, Option R is used in
- 2 contingency cases and the contingencies will continue
- 3 to happen, so I would expect that there will be -- the
- 4 experience will continue to be similar to what it's
- 5 been in the past.
- 6 For Option A, it may be called upon less
- 7 frequently. It was only called upon once in -- in the
- 8 current fiscal year to January the 4th, and only once
- 9 in the previous two (2) fiscal years. So it would --
- 10 we would continue to -- to utilize it, perhaps not very
- 11 frequently, but it would continue to be utilized.
- 12 MR. BOB PETERS: All right. Lastly, on
- 13 this topic, the -- page 373 provides a summary of the
- 14 options and the -- the combinations of options
- 15 available, and the percentage of reference discount
- 16 that would be -- be paid to the customer in light of
- 17 those options, correct?
- MR. DAVID CORMIE: Yes.
- 19 MR. BOB PETERS: When that -- when that
- 20 information, Mr. Cormie, is compared to page 381 to see
- 21 the factual payments that were made in the last fiscal
- 22 year, can you advise the Board as to -- for Customer
- 23 number 1 how much of the payments were related to
- 24 Option A, how much were related to the -- each of the
- 25 other options? Have you got that information

- 1 available?
- 2 MR. ROBIN WEINS: I'm sure we have it
- 3 available somewhere, Mr. Peters, but I don't have it in
- 4 front of me right now. It helps probably to know that
- 5 whether curtailment occurs or not most of the payments
- 6 to the customer are -- this is -- this is a re -- these
- 7 are reliability programs, so most of the payments the
- 8 customers are made for being ready to shed load. And
- 9 so, as you can see from the table on page 381, they're
- 10 fairly constant and they're based on the customer's
- 11 availability and the constant payment figure.
- MR. BOB PETERS: And --
- 13 MR. ROBIN WEINS: The amounts -- the
- 14 amounts that actually are credited to the customer in
- 15 respect of actual curtailments are the foregone energy
- 16 payments under Option R. And under the table you can
- 17 see that they're only about nineteen thousand dollars
- 18 (\$19,000), everything else is paid on a ongoing basis.
- 19 So it would be relatively proportionate
- 20 to the amount of load that the customer has in each of
- 21 those programs. So approximately 75 percent would be
- 22 Option A and 25 percent would be Option R.
- 23 MR. BOB PETERS: Right. And we can
- 24 compare that to the actual curtailments on page 379,
- 25 Mr. Weins, in terms of what actually curtailed and --

- 1 and under what option the curtailment occurred.
- MR. ROBIN WEINS: Yeah, I'm not sure
- 3 how you want to compare it, but yeah --
- 4 MR. BOB PETERS: Well, I -- I just
- 5 wanted to quantify for the Board how much of the
- 6 payments that are being made are related to the
- 7 customer signing up for Option A, Option E, Option R,
- 8 and even in combination.
- 9 MR. ROBIN WEINS: Well, if you wanted
- 10 to see that precisely, Mr. Peters, we would have to
- 11 undertake to produce it. I don't have it with me here
- 12 today.
- MR. BOB PETERS: Leave us with your
- 14 percentages that you put on the record already, in
- 15 terms of the relative amounts, Mr. Weins, and we'll --
- 16 we'll look at that and see if we need any further
- 17 information. We'll -- we'll let you know.
- MR. ROBIN WEINS: Thank you.
- 19 MR. BOB PETERS: Yeah. Please turn to
- 20 the Surplus Energy Program in Tab 39 of the book of
- 21 documents, page 386. This is a rate offering, Mr.
- 22 Weins, that's been approved by the Board back in 2000?
- 23 MR. ROBIN WEINS: Yes, the current
- 24 program -- when the name Surplus Energy Program has
- 25 been in existence since about some time in 2000. We

- 1 had a couple of other programs that had a similar
- 2 intent, which was to make available surplus energy on
- 3 approximately comparable terms and conditions to
- 4 domestic customers as to export customers that go back
- 5 perhaps, even to 1991 or 1992. But this particular
- 6 program has been in place since 2000.

7

8 (BRIEF PAUSE)

- 10 MR. BOB PETERS: You've indicated in
- 11 your answer, Mr. Weins, that the underlying premise of
- 12 the program was the make available for domestic
- 13 customers at the energy that would be otherwise
- 14 available on the export market?
- MR. ROBIN WEINS: Yes, typically
- 16 surplus energy in the past has been sold on the export
- 17 market. Opportunity energy sales have been made on the
- 18 export market. Some customers going back, as far back
- 19 as into the 1980s, were -- expressed an interest in
- 20 being able to access that type of energy at those types
- 21 of prices which were compared favourably to firm
- 22 prices.
- 23 And so we designed programs that were
- 24 intended, in as much as we could make them comparable,
- 25 to make energy available on similar terms.

2485 MR. BOB PETERS: And if the Board turns 1 to page 397 with you, Mr. Weins, the -- the amount that a customer signing up for the Surplus Energy Program 3 would pay would be determined on a weekly basis by where Manitoba Hydro would source the energy for that 6 sale? 7 MR. ROBIN WEINS: Yes, where Manitoba Hydro would source the energy and what the costs were associated with that particular source. 10 MR. BOB PETERS: And in the -- on page 11 397, it indicates that one (1) of the sources is to 12 displace export sales, another one (1) is Manitoba 13 Hydro has to purchase energy to meet that requirement? 14 MR. ROBIN WEINS: Yes. 15 MR. BOB PETERS: Has that happened? 16 MR. ROBIN WEINS: I believe so, yes. 17 MR. BOB PETERS: And the -- the third 18 one listed, or the third bullet was if the surplus 19 energy program energy is provided from Hydro's generation, there'll be a charge necessary to collect 21 the incremental cost of generation including transmission and the -- the reserves. How is that 22 23 different then -- then the first one, if it displaces 24 export energy? 25 MR. DAVID CORMIE: Mr. Peters, the

- 1 displacing export sales will be done at market price.
- 2 Where it's not displacing exports and it's coming from
- 3 additional Manitoba Hydro generation that can't reach
- 4 the market, then it reflects Manitoba Hydro's cost to
- 5 production.
- 6 MR. BOB PETERS: I'm not understanding
- 7 factually under what circumstance that would arise, Mr.
- 8 Cormie. Can you just give us an example?
- 9 MR. DAVID CORMIE: During high water
- 10 conditions, at night when the Manitoba load is down
- 11 because of lack of demand, Manitoba Hydro's generators
- 12 are spilling because we have insufficient transmission
- 13 capacity to market. So, additional demand in Manitoba
- 14 would result in less spillage because we can increase
- 15 the output from our generators.
- 16 So, into those circumstances, the price
- 17 that we offer to the surplus energy customer is the
- 18 incremental cost of hydro. And the market price at
- 19 that time may be multiples of that but Manitoba Hydro
- 20 can't reach that market price because it's transmission
- 21 lines are fully loaded. So in those circumstances, our
- 22 marginal cost to production varies from the market
- 23 price, because we're already fully engaged with the
- 24 market and we can't sell any -- any incremental
- 25 production to the market.

- 1 So, we pass on those costs to the SEP
- 2 load -- load at that time.
- 3 MR. BOB PETERS: Is the objective of
- 4 the program to be revenue neutral?
- 5 MR. DAVID CORMIE: Yes. When it comes
- 6 to the export market, we're indifferent. As long as
- 7 Manitoba Hydro achieves equivalent revenues and it's
- 8 providing benefit to domestic customers, we're glad to
- 9 be able to provide this service.
- 10 When it's coming from purchased power or
- 11 from marginal generation, we do add a 10 percent
- 12 contribution to reserves, because in our cost
- 13 accounting there are some factors that we can't
- 14 quantify. And so we add the 10 percent to ensure that
- 15 we've covered all our costs.
- 16 MR. RAYMOND LAFOND: So in this case,
- 17 what would your costs be if you can't export -- there's
- 18 not enough transmission capacity to export, your costs
- 19 would be, essentially, on surplus energy water rental
- 20 rates?
- 21 MR. DAVID CORMIE: Yes. It's -- it's
- 22 water rentals plus about twenty-five (25) cents a
- 23 megawatt hour for incremental operation and maintenance
- 24 at a -- for -- for hydro generation. And then we
- 25 adjust that for losses for northern generation to

- 1 southern load. It might -- it might be about five
- 2 dollars (\$5) a megawatt hour as our marginal cost of
- 3 producing hydro. And -- and that five dollars (\$5) is
- 4 better than spilling the water and -- and getting zero.

- 6 CONTINUED BY MR. BOB PETERS:
- 7 MR. BOB PETERS: What is the
- 8 relationship between the marginal cost of generation
- 9 and the export prices?
- 10 MR. DAVID CORMIE: For hydro, there's
- 11 very little relationship. As I indicated, cost of
- 12 hydro is around five dollars (\$5) at -- at the border.
- 13 Market price can range between -- you know, it can be -
- 14 it can be -- on average, it's around thirty dollars
- 15 (\$30) now, but it could be as high as a thousand
- 16 dollars.
- 17 So -- but if -- if we can reach the
- 18 market, we will offer the surplus energy to our
- 19 customers at that market price. So Manitoba Hydro is
- 20 indifferent. So whether the megawatt hours stayed in
- 21 the province or went to the export, we would get the
- 22 market price.
- 23 MR. BOB PETERS: If the Board notes on
- 24 page 400 with you, Mr. Cormie and Mr. Weins, tab 40 of
- 25 the book of documents, the bottom -- the last paragraph

- 1 on page 400 of PUB Exhibit 14. This -- this, by the
- 2 way, came out of an annual report on Surplus Energy
- 3 Program to the Board, filed as Appendix 10.7. But this
- 4 just quantifies what the -- what was paid during the
- 5 year for the -- for the surplus energy.
- And in this particular case, for the
- 7 most current report up until -- I believe it's October
- 8 31 of 2011, Manitoba Hydro made seventy thousand, three
- 9 hundred and nine dollars (\$70,309) on the program.
- 10 MR. DAVID CORMIE: Yes. And -- and the
- 11 reason we can't match it exactly is because each week
- 12 we're required to predict a week in advance what the
- 13 electricity prices are going to be. And -- and we have
- 14 limited abail -- ability to predict precisely what they
- 15 will be. So each week we do our best. And over the
- 16 year the puts and takes average out, and we can come in
- 17 very close to being revenue neutral.
- MR. BOB PETERS: And it appears on
- 19 pages 397, the last sentence on 397 is to the effect
- 20 that when you're forecasting these prices, Mr. Cormie,
- 21 Manitoba Hydro will -- will use adders in an attempt to
- 22 make it as revenue neutral as possible.
- MR. DAVID CORMIE: Yes. There's always
- 24 a possibility that there will be a price spike during
- 25 the week that we're predicting the price. And so we

2490 estimate what the probability of that price spike occurring, we estimate how big the price spike, and we -- there's a little adder added into the -- into the 3 weekly price so that at the end of the year, we're revenue neutral. 6 (BRIEF PAUSE) 9 MR. BOB PETERS: Why the request to 10 make the program officially permanent, as opposed to 11 just continuation of applications to the Board? 12 MR. ROBIN WEINS: It provides longer 13 term certainty for the customers that are 14 participating. And it reduces the requirement of time 15 and resources to file Applications under duress of 16 deadlines to extend the program another year, two (2) 17 years, five (5) years. 18 We know that, because of the nature of 19 Manitoba Hydro's system and the nature of the markets to which we're interconnected, that there will almost 21 always be surplus energy. There will almost always be 22 energy that's available for these customers. The terms 23 and conditions of the program allow us to interrupt if there is no energy available or to increase prices so 24

that customers can continue to use energy from other

- 1 sources.
- 2 We don't see a need to put a sunset on a
- 3 program like this when the conditions that give rise to
- 4 it are expected to be there permanently and in the long
- 5 term. So that's why we are asking to have it
- 6 permanent.
- 7 MR. BOB PETERS: Is that as a result of
- 8 any customer requests, Mr. Weins, or is that the
- 9 Corporation's initiative?
- 10 MR. ROBIN WEINS: Well, I would say
- 11 it's largely the Corporation's initiative. The issues
- 12 with customers arise when we begin to get close to the
- 13 deadline. We have customers in the queue who are --
- 14 who are thinking of taking on this program. We have
- 15 other customers who are continuous users.
- 16 We have a -- we have a requirement in
- 17 the -- in the program terms and conditions to provide
- 18 customers a year's notice if the program is not going
- 19 to be available. It's not always -- it doesn't always
- 20 work well with the regulatory schedule, coming back to
- 21 -- to apply for terms and conditions extension for --
- 22 typically, five (5) years is what we've asked for.
- We really have to start thinking about
- 24 that. If -- if we were going to have a timely
- 25 application and approval, we really have to start

- 1 thinking about that, you know, within a year or two (2)
- 2 of the last approval. So, we simply believe that it
- 3 would facilitate our administration of the program if
- 4 we were to make the program permanent. It doesn't
- 5 preclude ongoing review of the program; it simply
- 6 allows us to say that this program is without a sunset
- 7 date.
- 8 MR. BOB PETERS: Mr. Cormie, does this
- 9 program hamper you in any way, shape, or form when
- 10 attempting your export sales?
- MR. DAVID CORMIE: No.
- MR. BOB PETERS: Mr. Weins, on page 401
- 13 of the book of documents, Manitoba Hydro's Surplus
- 14 Energy Program has been broken down into three (3)
- 15 options. And I just want to run through those quickly
- 16 for the benefit of the Board. The first option is the
- 17 industrial load option. And it's available to -- to,
- 18 essentially, very large industrial loads.
- 19 And there's a maximum amount that can be
- 20 designated for surplus energy use, correct?
- MR. ROBIN WEINS: Twenty-five (25)
- 22 percent of total load, yes.
- 23 MR. BOB PETERS: And there are no
- 24 Option 1 customers currently?
- MR. ROBIN WEINS: There are none.

- 1 MR. BOB PETERS: Have there been?
- MR. ROBIN WEINS: No, there's never
- 3 been one.
- 4 MR. BOB PETERS: Why do we keep Option
- 5 1 as an option?
- 6 MR. ROBIN WEINS: I guess in the
- 7 expectation that we want -- that -- that there may be
- 8 someone whose load characteristics and interests
- 9 coincide with this program and that they may want to
- 10 ask for it, we would have it available.
- 11 You know, recalling also that this has
- 12 been in five (5) year increments, and sometimes less
- 13 than that when we've actually had to come to the Board
- 14 and ask for interim extensions of the program. So we
- 15 haven't really had to opportunity to fully reflect on
- 16 whether we would want to continue with Option 1.
- 17 So the -- the course with least
- 18 resistence is there may be a customer at some point, an
- 19 industrial customer, for whom this would have some
- 20 appeal, so let's leave it in there.
- MR. DAVID CORMIE: And I think, Mr.
- 22 Peters, in addition to that, we're indifferent. So
- 23 there's no cost to us having that option there, because
- 24 if the customer were to take service under that option,
- 25 it would be under the same pricing terms as the other

- 1 customers. And we would offer it at market prices or
- 2 at our cost plus 10 percent. So there's no loss to the
- 3 Corporation if a customer takes service.
- 4 MR. BOB PETERS: Well, this isn't the
- 5 proceeding to talk about it, but is the Time of Use
- 6 Program that Manitoba Hydro is developing impacted at
- 7 all by the Surplus Energy Program?
- MR. ROBIN WEINS: I don't believe so,
- 9 Mr. Peters.
- 10 MR. BOB PETERS: The second option
- 11 available under SEP is the heating load, which is
- 12 twenty-one (21) of your current twenty-six (26)
- 13 customers subscribe under Option 2?
- MR. ROBIN WEINS: Yes.
- MR. BOB PETERS: And these customers,
- 16 Manitoba Hydro ensures they have a back p energy source
- 17 capable of heating the entire load in the event that
- 18 they can not get surplus energy from Manitoba Hydro?
- 19 MR. ROBIN WEINS: That's correct.
- 20 MR. BOB PETERS: Has that happened, Mr.
- 21 Weins, where Manitoba Hydro's surplus energy has been
- 22 interrupted?
- 23 MR. DAVID CORMIE: We haven't
- 24 interrupted, Mr. Peters, but we have given notice.
- 25 During the drought of 2003/'04 we put our customers on

- 1 standby in saying that this could happen.
- 2 MR. BOB PETERS: They were in the stack
- 3 to be curtailed before firm load.
- 4 MR. DAVID CORMIE: Yes.
- 5 MR. BOB PETERS: And the heating load
- 6 customers, the general sense I got from reading the
- 7 materials, Mr. Weins, is these are often agricultural
- 8 related?
- 9 MR. ROBIN WEINS: Yes, they often are
- 10 agricultural related, space heating applications.
- MR. BOB PETERS: And with the -- the
- 12 various coal regulations that are coming, this tends to
- 13 be an option preferred by -- by some who are using coal
- 14 as an alternate heat method?
- MR. ROBIN WEINS: We've definitely had
- 16 inquiries from customers who have to move off coal.
- MR. BOB PETERS: And if they have to
- 18 move off coal though -- but to subscribe under this
- 19 program, Option 2, Mr. Weins, they'll need some
- 20 alternative heating source?
- 21 MR. ROBIN WEINS: Yes, they will.
- MR. BOB PETERS: And the surplus energy
- 23 program would be considered more economic, likely, than
- 24 -- than propane or some other heat source?
- MR. ROBIN WEINS: Under most

2496 circumstances and time periods, yes; not always. 2 MR. BOB PETERS: Can you tell the Board the characteristics of the Option 3 customers, of which 3 you have five (5)? And they are the self-generation displacement customers. 6 MR. ROBIN WEINS: Typically, these are loads that are intermittent: small industrial loads. believe most of them are aggregate, quarries, gravel pits, that have -- typically operate at low load 10 factor. If they were firm customers, they would operate at low load factor. And they found it cost 11 12 effective to use surplus energy. They would maintain a 13 diesel facility to back up their load in the event that 14 we had to interrupt them. 15 16 (BRIEF PAUSE) 17 18 MR. BOB PETERS: Do you have any self-19 generation displacement customers that would be capable of selling energy back to the Manitoba Hydro system? 21 MR. ROBIN WEINS: I can't say for sure 22 whether or not any of them would be capable of selling 23 energy back to the Manitoba Hydro system. But in most 24 cases, it would not be economic for them, even if they

25

had such capability.

- 1 MR. BOB PETERS: Has Manitoba Hydro
- 2 been approached by customers seeking to spin their
- 3 metres backwards, so to speak?
- 4 MR. ROBIN WEINS: I don't believe any
- 5 of this type of customer has approached --
- 6 MR. BOB PETERS: Other customer types,
- 7 though, have?
- 8 MR. ROBIN WEINS: I -- I don't know the
- 9 particulars, but that may have happened, yes.
- 10 MR. BOB PETERS: All right. Also on
- 11 page 402, Mr. Weins, is a chart that defines "peak",
- 12 "shoulder", and "off peak". And the reasons those
- 13 times are provided, and the Board sees this on a weekly
- 14 basis when the Board approves the Surplus Energy
- 15 Program rates, is those rates apply to these defined
- 16 time periods, correct?
- 17 MR. ROBIN WEINS: That's correct.
- 18 MR. BOB PETERS: And if we go back to
- 19 page 386, one of the requests that you're making of
- 20 this Board on page 386, under Tab 39 of PUB Exhibit 14,
- 21 is that the Option 1 customers be allowed to designate
- 22 different reference levels of demand for each pricing
- 23 period, if I've got that correct?
- 24 MR. ROBIN WEINS: Yes, that's correct.
- MR. BOB PETERS: And at this point

- 1 that's a hypothetical; that's not a reality?
- 2 MR. ROBIN WEINS: It is a hypothetical
- 3 in that I -- I believe that representatives of the
- 4 Corporation have been in discussion with one (1) or
- 5 more customers that may have the capability to use this
- 6 program if it were capable of that type of flexibility.
- 7 MR. BOB PETERS: Presently, the
- 8 customer would need to designate a reference demand
- 9 period for all three (3) time periods?
- 10 MR. ROBIN WEINS: They would designate
- 11 a single reference demand period, and it would apply
- 12 for all three (3) periods.
- MR. BOB PETERS: It would apply to all
- 14 three (3)?
- MR. ROBIN WEINS: It would apply to all
- 16 three (3) periods. It -- it would apply universally.
- MR. BOB PETERS: So what's the benefit
- 18 to the customer being able to -- to designate different
- 19 reference levels of demand for each of the pricing
- 20 periods?
- 21 MR. ROBIN WEINS: They would be able
- 22 to, in effect, access different amounts of firm energy
- 23 during different pricing periods. It would probably
- 24 not be economic for such a customer to use Option 1,
- 25 surplus energy, during peak periods, but it may be --

- 1 it may be economic for them to use this energy during
- 2 the shoulder and off-peak periods.
- MR. BOB PETERS: Does Manitoba Hydro
- 4 have potential customers in the queue that -- that are
- 5 -- that have indicated they would subscribe for surplus
- 6 energy Option 1 if they were able to designate
- 7 different reference levels of demand for each of the
- 8 pricing periods?
- 9 MR. ROBIN WEINS: I can't say that they
- 10 are potential or in the queue. I can only say that the
- 11 question has been raised and if those discussions were
- 12 to continue further that we wanted the program to be
- 13 able to facilitate them.
- MR. BOB PETERS: And for clarification,
- 15 maybe repetition, there would be no financial impact on
- 16 Manitoba Hydro by providing the customer in Option 1
- 17 with the ability to designate different reference
- 18 levels of demand for each of the pricing periods?
- 19 MR. ROBIN WEINS: Well, I hesitate to
- 20 say there would be no financial impact. Certainly in
- 21 terms of the surplus energy accessed that would be
- 22 accessed on a -- on a revenue neutral basis, so there
- 23 would be no financial implication.
- 24 Were the customer to reduce their firm
- 25 load, it is possible that there could be some short-

- 1 term financial impacts related to domestic revenues
- 2 that may or may not be offset by sale of surplus energy
- 3 or sale of energy on the export market. In the long
- 4 run, I would expect that the -- there would be no
- 5 financial impact because a reduction of firm load tends
- 6 to, you know, improve Manitoba Hydro's long-term prices
- 7 -- or long-term revenues that it's able to secure,
- 8 until such a time, of course, as domestic rates are in
- 9 the long-term equivalent to marginal costs related to
- 10 the value of firm energy in the markets.
- MR. BOB PETERS: What you're telling
- 12 the Board is that Manitoba Hydro's revenues may go down
- 13 if customers elect Option 1 and designate different
- 14 reference levels of demand for different pricing
- 15 periods that they would otherwise be paying Manitoba
- 16 Hydro's PUB-approved rates?
- 17 MR. ROBIN WEINS: Firm service. Yes,
- 18 this is -- this is not a -- this is a situation that
- 19 could possibly arise. I won't say that it definitely
- 20 would arise; it would depend on the value of making
- 21 firm sales at the time relative to the value obtained
- 22 from surplus energy sales.
- 23 MR. BOB PETERS: When you say it'll
- 24 come back to revenue neutrality or profitability in the
- 25 long-term, you're talking about when -- when and if

- 1 opportunity export prices increase?
- 2 MR. ROBIN WEINS: That -- that's one
- 3 (1) vehicle. Another vehicle is that it facilitates
- 4 more firm sales into the export market, which has a
- 5 more -- have a greater likelihood of -- of providing a
- 6 -- making this type of a situation profitable.
- 7 MR. BOB PETERS: But if a customer --
- 8 when you talk about firm sales -- maybe I'm not
- 9 thinking of it the right -- the right way, Mr. Weins,
- 10 but are you talking long-term firm sales?
- MR. ROBIN WEINS: Yes.
- MR. BOB PETERS: And so for what length
- 13 of time would a customer have to agree to use the
- 14 surplus energy program for their -- for their supply of
- 15 energy, as opposed to the firm service currently
- 16 connected to Manitoba Hydro's system?
- MR. ROBIN WEINS: Well, for it to be
- 18 absolutely firm it would have to be for a -- a
- 19 reasonable term. On the other hand, you know, assuming
- 20 that this is a -- this is a valuable change for the
- 21 customer, they would tend to keep on that for some
- 22 period of time.
- 23 If you had enough customers doing it, it
- 24 would tend to -- it would tend to allow for greater
- 25 confidence that you were going to be able to make firm

2502 sales. 2 MR. BOB PETERS: At this point in time it doesn't provide that confidence? 3 MR. ROBIN WEINS: At this point in time 4 discussions are just hypothetical. It -- it may not emerge at all. MR. BOB PETERS: And if it is 7 hypothetical and there are no new cust -- or no customers using the service and no -- nobody committed to use the service under Option 1, why not accept an 10 11 interim order as opposed to a final order for some of 12 the relief that's being requested. 13 14 (BRIEF PAUSE) 15 16 MR. ROBIN WEINS: Well, you know, I think we would definitely prefer to see a final order 17 18 in respect of Item number 1, that SEP be made a 19 permanent rate offering; and Item number 3, that the requirement for an engineer's seal on the weekly 21 application of SEP rates be removed. If there was some 22 concern about whether or not there was going to be 23 uptake on the part of industrial customers related to 24 the change in two (2), I suppose that could be

something that we would consider an interim order in

- 1 respect of.
- MR. BOB PETERS: Mr. Weins, when the
- 3 Board looks at page 404 of the book of documents under
- 4 Tab 40 and there's a breakdown of the program since its
- 5 inception, it appears noticeable that the general
- 6 service large greater than 30 KV customer is -- don't
- 7 appear part of the program, correct?
- MR. ROBIN WEINS: That's correct.
- 9 MR. BOB PETERS: Is that as a result of
- 10 the design of the program, or is that simply the
- 11 characteristics of the customer?
- MR. ROBIN WEINS: I think it's both. I
- 13 think the -- the customers that are potential users
- 14 over 30 kV prefer the certainty of having firm service
- 15 and would find it difficult to utilize surplus energy
- 16 with its price uncertainty and the potential, albeit
- 17 relatively infrequently, of interruption during one (1)
- 18 or more time periods. I think that's -- that's the
- 19 biggest barrier.
- 20 The design of the program, this one (1)
- 21 aspect that we've been discussing about the reference
- 22 demand level, may -- may have some impact. As I say
- 23 the -- the exploratory discussions with one (1)
- 24 customer suggested that that might be something that
- 25 could attract them to the program, but we don't -- we

2504 don't know that with certainty. 2 3 (BRIEF PAUSE) 5 MR. BOB PETERS: Mr. Weins, you raised the -- the third component for which you're asking this Board's approval, and that is the requirement for an engineer's seal on the weekly applications of SEP be -rates be removed? 10 MR. DAVID CORMIE: Yes. 11 MR. BOB PETERS: Let the engineer 12 answer that. 13 Can you explain to the Board why after 14 eleven (11) years Manitoba Hydro now have used the use 15 of a seal as inappropriate for this program? MR. DAVID CORMIE: 16 There -- there are two (2) reasons. The -- the forecast of prices that is 17 18 supplied to the PUB on a weekly basis is not made by an 19 engineer. So it's done by Manitoba Hydro's power 20 traders. 21 And secondly, in reviewing the permitted uses of engin -- of an engineering seal, we've come to 22 23 the conclusion that it's an inappropriate use of the 24 engineering seal and as a result our engineers are not allowed to stamp this document.

2505 MR. BOB PETERS: And that the 1 determination that the use of the seal was inappropriate, is that as a result of an edict by the 3 professional engineers? 5 6 (BRIEF PAUSE) MR. DAVID CORMIE: Yes, there was a corporate review of the appropriate use of engineer's seals at Manitoba Hydro and -- and through that review 10 11 it -- it became apparent to us that this was an 12 inappropriate use of the seal. 13 MR. BOB PETERS: Has that review been 14 filed with the Board? 15 MR. DAVID CORMIE: No. 16 MR. BOB PETERS: Can it be? 17 18 (BRIEF PAUSE) 19 20 MR. DAVID CORMIE: Mr. Peters, the work 21 that is done under the surplus -- in setting the prices, is work that is not done under the supervision 22 of an engineer, so an engineer can't take 24 responsibility for work that he has no responsibility 25 for. And the review that was done was a request from

- 1 the chief engineer of Manitoba Hydro reminding all
- 2 engineers in the Company that their use of the
- 3 engineering seal has be appropriate in accordance with
- 4 the regulations of the association.
- 5 And because there's no engineer
- 6 responsible for the preparation of the prices, they're
- 7 not done under the direct supervision of an engineer,
- 8 there are no engineers in the power trading department,
- 9 the manager is not an engineer, there is no appropriate
- 10 engineer who can stamp these -- stamp these estimates
- 11 and abide by the regulations established by the
- 12 association for the use of the engineering seal.
- So, you know, the requirement that it be
- 14 stamped is a requirement that Manitoba Hydro can not
- 15 fulfill anymore. We wont -- you wont -- we wont find
- 16 an engineer at Manitoba Hydro who -- who is prepared to
- 17 stamp these prices and remain in -- in accordance with
- 18 the requirements of the association for the appropriate
- 19 use of an engineering seal.
- 20 MR. BOB PETERS: I take that answer to
- 21 mean that Manitoba Hydro doesn't want to provide the
- 22 internal report that came to that conclusion?
- 23 MR. DAVID CORMIE: No, there's no --
- 24 there's no -- there's no report; there is a letter from
- 25 our chief engineer to all engineers at Manitoba Hydro

- 1 saying, Make sure that when you're using the seal, the
- 2 use of the seal is appropriate. So the engineers who
- 3 were -- who were -- who were reviewing and stamping the
- 4 estimates prepared by the power traders, in reviewing
- 5 his use of the seal, came to the conclusion that this
- 6 was an inappropriate use of the seal. And it's not a
- 7 matter of finding someone to -- this -- these prices
- 8 aren't being prepared under the direction of an
- 9 engineer, so they can't be -- they can't be sealed.
- 10 MR. BOB PETERS: Is the availability of
- 11 energy an engineering issue?
- MR. DAVID CORMIE: No.
- MR. BOB PETERS: It's a power traders'
- 14 issue?
- 15 MR. DAVID CORMIE: Yes. It's an
- 16 economic choice.
- MR. BOB PETERS: And if the -- you'd
- 18 mentioned the society ,or the association, and you
- 19 meant the APEGM, if I had --
- MR. DAVID CORMIE: Yes.
- 21 MR. BOB PETERS: -- that right? That's
- 22 the Association of Professional Engineers and Geo-
- 23 scientists of Manitoba?
- MR. DAVID CORMIE: Yes.
- MR. BOB PETERS: Have they issued a

- 1 standard in relation to the use of the seal?
- MR. DAVID CORMIE: Yes.
- 3 MR. BOB PETERS: And that can be
- 4 provided to the Board if -- I'm not sure that's in the
- 5 material. I don't think it is.
- 6 But can that be provided to the Board,
- 7 Mr. Cormie?
- MR. DAVID CORMIE: We'll provide that,
- 9 yes.
- 10 MR. BOB PETERS: And you're telling the
- 11 Board that it is Manitoba Hydro's chief engineers
- 12 interpretation of that standard that has lead to the
- 13 corporation deciding not to use an engineer's seal
- 14 further?
- MR. DAVID CORMIE: No, that's not what
- 16 I -- I said.
- 17 MR. BOB PETERS: I may have
- 18 misunderstood, so I apologize.
- 19 MR. DAVID CORMIE: What I -- what I
- 20 said was that the chief engineer reminded all engineers
- 21 at Manitoba Hydro that their use of their seals has to
- 22 be appropriate, and each engineer needs to judge the
- 23 use of his seal in accordance with the standards set by
- 24 the association.
- So, it's the -- it's the engineer's

2509 decision and responsibility that he is making appropriate use of the seal. 3 MR. BOB PETERS: The undertaking was a request to file the APEGM directive policy, or pronouncements, on the appropriate of an engineers seal. Is that acceptable Mr. Cormie? 7 MR. DAVID CORMIE: Yes. --- UNDERTAKING NO. 53: 9 Manitoba Hydro to file 10 APEGM directive policy, or 11 pronouncements, regarding 12 appropriate use of engineer 13 seal 14 15 MR. DAVID CORMIE: And -- and Mr. 16 Peters, the -- what the engineer was -- was sealing was the price. He wasn't sealing the availability. 17 18 availability can -- can be an engineering decision but we're not -- what we're doing is we're sealing that -that these are appropriate prices, and the engineer is 21 not going to take responsibility for the prices because it's not his forecast. 22 23 But the determination of whether we 24 offer surplus energy and whether -- whether we need to 25 make a cur -- a curtailment would be an engineering

2510 decision made by appropriate engineers in the Company under my supervision. 3 MR. BOB PETERS: In the absence of a seal, which division managers, or manager, should sign the Surplus Energy Program rate sheets? 6 (BRIEF PAUSE) 9 MS. PATTI RAMAGE: Mr. Peters, rather 10 than answering I think a little bit on the fly, if -if I could just interject here from certainly my 11 12 perspective as counsel for the Corporation. As long as 13 the person is authorized, it's the Corporation who is 14 making the -- the request for the rate approval, 15 similar to when we do these rate applications it's my 16 signature that typically goes on them, but it's not --17 that represents it's a Corporation request. 18 So I'm not sure what really comes of --19 of who signs it, if -- if that's of any assistance, as long as it's an authorized representative of the 21 Corporation. If that's of any help. 22 MR. BOB PETERS: Well, maybe Mr. Cormie 23 wants to undertake to answer my last question to him, 24 or consider it over the lunch break which would be --

which would be fine, as well.

2511 (BRIEF PAUSE) 1 2 3 MR. DAVID CORMIE: Yeah, Mr. Peters, we -- there's -- there's -- if necessary somebody from Manitoba Hydro can -- can sign. We -- we just haven't put our mind to who that person would be and -- and whether it's someone from law or form the rates 7 department, or it's my signature, or it's the manager of power trading, you know, we can -- we can work that 10 out but --11 MR. BOB PETERS: Is it an audit 12 function? To audit the -- the -- because you're now 13 saying that the -- the prices -- it's giving rise to 14 accounting issues. Is that something that an 15 accountant, or an accountant who's an auditor should --16 should verify? 17 18 (BRIEF PAUSE) 19 20 MR. DAVID CORMIE: I would be reluctant to bring the auditors into this process. 21 22 MR. BOB PETERS: I was thinking the 23 internal auditors, just for the record. 24 MR. DAVID CORMIE: You know, my -- my preference is that the person who prepares the estimate

- 1 signs the estimate, and -- but we'll have to review
- 2 that, or that person's supervisor, so that -- that
- 3 there is a review function taking place, and -- and
- 4 those -- those prices that are -- are being proposed
- 5 for approval have had some level of review and
- 6 oversight before being forwarded to the Public Utility
- 7 Board.
- 8 MR. BOB PETERS: All right. Well, then
- 9 please give it that thought, and you can respond back
- 10 by way of undertaking to the Board, if that's
- 11 acceptable.
- MR. DAVID CORMIE: Will do.
- MR. BOB PETERS: Mr. Chairman,
- 14 recognizing the time I'm prepared to stand down at this
- 15 time. I would indicate that I will be hard-pressed to
- 16 discuss with Mr. Wittmeier for half an hour this
- 17 afternoon diesel issues, but I will -- I will try to
- 18 use some of that time at one o'clock, and I expect to
- 19 be finished at 1:30.
- 20 Yes, the clarification requested from
- 21 Mr. Cormie and myself was for the Corporation to
- 22 consider who or what position the Corporation believes
- 23 is most appropriate to be the signatory on the
- 24 information coming to the Public Utilities Board in
- 25 respect of the surplus energy program rates that are

```
2513
   being requested.
 2
 3
   --- UNDERTAKING NO. 54: Manitoba Hydro to consider
                                who or what position the
 4
 5
                                Corporation believes is
 6
                                most appropriate to be the
 7
                                signatory on the
                                information coming to the
 9
                                Public Utilities Board in
10
                                respect of the surplus
11
                                energy program rates that
12
                                are being requested
13
14
                  MS. PATTI RAMAGE: That's fine.
15
                  MR. BOB PETERS: Thank you.
16
                   THE CHAIRPERSON: Let's recess now, and
17
   resume proceedings at one o'clock.
18
19
   --- Upon recessing at 12:05 p.m.
   --- Upon resuming at 1:01 p.m.
21
22
                  MR. BOB PETERS: Thank you, Mr.
23 Chairman.
24
25 CONTINUED BY MR. BOB PETERS:
```

- 1 MR. BOB PETERS: Before I turn to the
- 2 diesel questions, I had a little to clean up this
- 3 morning, Mr. Weins. You had explained to the Board on
- 4 page 427, which happens to be the last page in the
- 5 Board counsel's book of documents by the way, you
- 6 explained to the Board the Limited Use Billing Demand
- 7 Program.
- 8 Do you recall that from this morning,
- 9 sir?
- MR. ROBIN WEINS: Yes.
- MR. BOB PETERS: And in my
- 12 recollection, you explained to the Board that when a
- 13 customer's usage over their maximum potential usage was
- 14 18 percent or less as a ratio, the limited use billing
- 15 demand had financial benefit to the customer?
- 16 MR. ROBIN WEINS: Yes, that's correct.
- MR. BOB PETERS: And that 18 percent
- 18 was the load factor that -- number that you referred
- 19 to?
- 20 MR. ROBIN WEINS: Yes, monthly load
- 21 factor.
- MR. BOB PETERS: And can you explain,
- 23 Mr. Weins, at the time that that program was designed,
- 24 customers who are partaking of that Limited Use Billing
- 25 Demand Program faced a penalty in the form of a winter

- 1 ratchet on their demand rate, did they not?
- MR. ROBIN WEINS: We prefer to use a
- 3 more neutral term. But, yes, they were impacted by --
- 4 they were impacted by what was referred to as the
- 5 winter ratchet, which, you know, has been as much 100
- 6 percent in the past. But at the time of most of our
- 7 discussions, it was set at 70 percent of the -- of the
- 8 maximum demand that occurred on a customer account
- 9 during the months of December, January, and February.
- 10 And that set a lower limit on the amount of demand that
- 11 would be billed for the rest of the year.
- 12 And, yes, some of the customers who were
- 13 affected by LUBD, the effect was in part due to the
- 14 winter ratchet. But there are a large number of
- 15 customers who are on the LUBD now and previously were
- 16 paying regular rates. The winter ratchet was not
- 17 really the issue for them. The issue was that they had
- 18 very low usage.
- 19 MR. BOB PETERS: Yeah. Let's not stray
- 20 too far from this winter ratchet, and I -- I didn't
- 21 mean to be pejorative. It wasn't intended that way as
- 22 a penalty.
- 23 But I -- what you're telling the Board
- 24 is that the measured demand -- the highest measured
- 25 demand on a customer's meter in the months of December,

- 1 January, or February set the threshold for the demand
- 2 charges for the entire calendar year -- or the next
- 3 twelve (12) months.
- 4 MR. ROBIN WEINS: Yes, that's correct.
- 5 MR. BOB PETERS: So even -- so even if
- 6 their -- even if the customer's consumption and demand
- 7 in months other than December, January, and February
- 8 was low, they would still be charged a demand charge
- 9 based on the ratcheted-up amount that they consumed in
- 10 their highest consumption month of -- in December,
- 11 January, or February.
- MR. ROBIN WEINS: They would face a
- 13 minimum demand charge based on billing demand. And the
- 14 billing demand would be equal, assuming that the actual
- 15 demand for that month was lower, then the billing
- 16 demand would be equal to 70 percent of the highest
- 17 demand in December -- previous December, January, or
- 18 February.
- 19 MR. BOB PETERS: As you mentioned, the
- 20 billing -- the winter ratchet at one point was based on
- 21 100 percent of the highest of the -- of the highest
- 22 demand in those three (3) winter months.
- 23 MR. ROBIN WEINS: That would be going
- 24 back quite a long way; in fact, before my time. I'm
- 25 basing that on documents that I had seen that related

- 1 to periods a long time ago. During the time that I was
- 2 most familiar with it, we had a -- we had a ratchet
- 3 based on 80 percent of the December, January, February
- 4 maximum. And that was changed sometime in -- I would
- 5 say in around 2005 or so, to 70 percent.
- 6 MR. RAYMOND LAFOND: This December,
- 7 January, February maximum is at any particular moment
- 8 within these three (3) months?
- 9 MR. ROBIN WEINS: Well, it would -- it
- 10 would have had to have been their actual demand for
- 11 which they would billed during December, January, and
- 12 February.
- 13 MR. RAYMOND LAFOND: Peak demand or
- 14 total demand?
- MR. ROBIN WEINS: Peak demand,
- 16 typically based on a fifteen (15) minute interval.
- 17
- 18 CONTINUED BY MR. BOB PETERS:
- 19 MR. BOB PETERS: And there was a
- 20 movement afoot to reduce that winter ratchet. As you
- 21 mentioned, it went down from at least 100 to 80
- 22 percent, from 80 percent down to at least 70 percent.
- 23 And then it was discontinued?
- 24 MR. ROBIN WEINS: It was discontinued
- 25 in November of 2009.

- 1 MR. BOB PETERS: And -- and what --
- 2 remind the Board why it was discontinued.
- 3 MR. ROBIN WEINS: I'm going by memory
- 4 here, but there was a -- it wasn't a formal directive
- 5 in a Board order, but we interpreted it as having the
- 6 effect of a formal directive. It appeared in the body
- 7 of the order. It said, essentially, if we haven't come
- 8 to a point where we are billing time-of-use rates by
- 9 the winter season of 2009, then the winter ratchet will
- 10 cease to be billed. And so Manitoba Hydro ceased
- 11 billing it.
- MR. BOB PETERS: Now, tying it back to
- 13 --
- 14 MR. ROBIN WEINS: December 1st, 2009.
- MR. BOB PETERS: Thank you. Tying it
- 16 back to the limited use billing demand rate, Mr. -- Mr.
- 17 Weins, did the 18 percent load factor threshold change,
- 18 as -- as the point of being cost neutral, when the
- 19 winter ratchet was eliminated?
- 20 MR. ROBIN WEINS: No, because the
- 21 winter ratchet was never part of the calculation of
- 22 that 18 percent. The 18 percent was based on a monthly
- 23 number: monthly kV.A, monthly kilowatt hours. And if a
- 24 customer was -- the original energy rate was set at --
- 25 the original energy rate was set at such that it would

2519 make the customer indifferent at 18 percent. 2 MR. BOB PETERS: Mr. Cormie, just to tidy up from this morning. Page 405 of the Board 3 counsel's book of documents, PUB Exhibit 14, under Tab 5 40. 6 On page 405, Manitoba Hydro quantifies 7 the marginal cost of energy to Manitoba Hydro over the various years that the Surplus Energy Program was -was offered, correct? 10 MR. DAVID CORMIE: Yes. 11 MR. BOB PETERS: How did Manitoba Hydro 12 determine the marginal cost of energy in that -- in 13 that appendix? 14 MR. RAYMOND LAFOND: We're on page...? 15 CONTINUED BY MR. BOB PETERS: 16 17 MR. BOB PETERS: I'm sorry, sir. I'm 18 on page 405. And in the middle of the page is a -- is a listing of the marginal cost of energy to Manitoba Hydro for each of the years in which the Surplus Energy 21 Program has been offered. 22 And this is the quantification of that 23 amount, Mr. Cormie, correct?

calculation is based on after-the-fact analysis of the

MR. DAVID CORMIE: Mr. Peters, that

24

2520 -- of -- of prices. 2 MR. BOB PETERS: So you take the volume and you divide into the total price, and you'd come up 3 with your unit marginal cost? 5 MR. DAVID CORMIE: MR. BOB PETERS: There was no attempt 6 7 to proxy the last kilowatt hour generated, in terms of cost, to derive those numbers? MR. DAVID CORMIE: I think, Mr. Peters, 10 we -- we provide a table which shows the -- the SEP rates by time period and by hours: shoulder, peak, and 11 12 off-peak. And from those, you can calculate the 13 marginal cost. You can't calculate the marginal cost 14 per kilowatt hour based on the -- the total, because 15 the total includes many hundreds of hours of -- of 16 numbers. So you can calculate the average cost, but 17 you can't calculate the marginal cost per kilowatt 18 hour. 19 MR. BOB PETERS: Is the marginal cost used by Manitoba Hydro the same as it's used in other 21 components of its business? 22 23 (BRIEF PAUSE) 24 25 MR. DAVID CORMIE: This is a very

- 1 short-run marginal cost, meter -- Mr. Peters. They're
- 2 -- and it reflects the current actual experience of the
- 3 -- of the Company. Manitoba Hydro uses marginal costs
- 4 -- for --forecasts of marginal costs into the future.
- 5 And those may or may not be short run. I -- I presume
- 6 they are long-run marginal costs rather than short-run
- 7 marginal costs.
- 8 MR. BOB PETERS: But if I understood
- 9 your previous answers, Mr. Cormie, this doesn't come as
- 10 a result of a forecast marginal cost; it's a calculated
- 11 cost after the fact.
- 12 MR. DAVID CORMIE: Yes, this is after
- 13 the fact.
- 14 MR. BOB PETERS: All right. All right,
- 15 I -- I do want to turn to the diesel portion of the
- 16 Hearing and to Mr. Weins and, I suppose, to Mr.
- 17 Wittmeier.
- 18 And welcome again, Mr. Wittmeier. I
- 19 think this is your first time testifying before the
- 20 Board, if I've got that right.
- 21 MR. WAYNE WITTMEIER: Yes, that's
- 22 correct.
- 23 MR. BOB PETERS: Well, your challenge
- 24 will be to keep Mr. Weins off the microphone, so I'll
- 25 leave that to you, but...

- 1 As I understood Mr. Weins's direct
- 2 evidence when he was being questioned by Ms. Ramage,
- 3 way back in Tab 1 of Board counsel's book of documents,
- 4 which I'm not asking you to turn up, but you're -- the
- 5 hyd -- the Manitoba Hydro Application, Manitoba Hydro
- 6 was asking this Board to approval as final the interim
- 7 rates that accumulated since 2004.
- 8 MR. ROBIN WEINS: Yes, that's right.
- 9 MR. BOB PETERS: And I understood, Mr.
- 10 Weins, from your evidence that while that was Manitoba
- 11 Hydro's request, at this point in time -- and that
- 12 request has always been conditional on getting signed,
- 13 sealed, and delivered documents, correct?
- 14 MR. ROBIN WEINS: Yes, that's right.
- MR. BOB PETERS: And Manitoba Hydro
- 16 does not have the signed, sealed, and delivered
- 17 documents that it requires before it makes this as an
- 18 unconditional request?
- 19 MR. ROBIN WEINS: That's correct.
- 20 MR. BOB PETERS: So the Board can take
- 21 from those answers, Mr. Weins, that Manitoba Hydro, at
- 22 least at this point in time, is not asking for those
- 23 rates to be finalized, because it does not have the
- 24 documentation required by Manitoba Hydro?
- 25 MR. ROBIN WEINS: Manitoba Hydro would

- 1 certainly prefer to have this documentation to
- 2 demonstrate the finality of that agreement, which was
- 3 initialled way back in 2004, so that we could
- 4 confidently say those are the rates that we're charging
- 5 what -- that should have been charged.
- 6 So I guess we haven't discussed them
- 7 ourselves if we're formally withdrawing that part of
- 8 our Application, but it certainly would make it a lot
- 9 easier if we had the documentation.
- 10 MS. PATTI RAMAGE: I think -- if I
- 11 could jump in on this one just to help. I think the
- 12 preference of Manitoba Hydro would be -- is to -- and
- 13 it might not be the right way to say it, is cross our
- 14 fingers and hope Mr. Anderson provides those documents
- 15 and have all of our ducks in a row so that the minute
- 16 the Board has those documents, we've canvassed
- 17 everything we need to canvass and the Board can issue
- 18 and order. So to keep alive our request and only defer
- 19 it if those documents are not filed by the time the
- 20 Board order issues it.
- 21 MR. BOB PETERS: So Mr. Warden is away,
- 22 and now the lawyers are setting the policy. All right.
- 23 Ms. Ramage, no, I -- I appreciate your position. And
- 24 may I suggest that the position of Manitoba Hydro be
- 25 articulated in the closing submissions? And if you've

2524 crossed your fingers long enough and hard enough, before then you may have them by that time, or if not, you can make tha -- the request through the -- through 3 the closing submissions. 5 Would that be satisfactory? 6 MS. PATTI RAMAGE: Yes. MR. BOB PETERS: Yes, thank you. CONTINUED BY MR. BOB PETERS: 9 MR. BOB PETERS: Mr. Weins, Mr. Wittmeier, Ms. Ramage, at the risk of 10 prolonging this, on page 408 of Board counsel's book of 11 12 documents is some extracts from the PUB Order 134/10 13 that dealt with the diesel zone. And without putting -14 - reading it specifically into the record, on page 408, 15 the fourth directive from the PUB had to do with Hydro providing written consents, which I guess notionally 17 could dispense with the need for a hearing. 18 Are written consents -- if this matter 19 isn't delivered to Manitoba Hydro's satisfaction by the time closing arguments occur, are written consents still a possibility, or does Manitoba Hydro have a 21 22 position on that? 23 24 (BRIEF PAUSE) 25

- 1 MR. ROBIN WEINS: Mr. Peters, similar
- 2 to the question about the final documentation, Manitoba
- 3 Hydro would love to have the written consents of the
- 4 parties, and certainly within the framework of the
- 5 current proceeding.
- 6 However, we -- we do not have those
- 7 either, and they are likely not to happen until
- 8 following the production of the documentation. So
- 9 although I -- you know, how long a period of time they
- 10 may ensue following the production of the
- 11 documentation, I can't really say.
- 12 MS. PATTI RAMAGE: If -- if I could
- 13 jump in again, because it has been the lawyers who've
- 14 been pursuing -- dealing with consents, can -- there
- 15 have been discussions about consents. I'm not as
- 16 confident as Mr. Weins that we will ever see a consent
- 17 from parties, due to a -- just a general reluctance to
- 18 sign.
- 19 We have -- Canada has indic -- has shown
- 20 a general reluctance. It's not refused to sign. I --
- 21 if -- if Mr. Williams does not mind, CAC would like to
- 22 see the agreements first. MKO has not responded. So
- 23 those are the three (3) parties we were asked to
- 24 consent, so -- and not evidence, but it's Manitoba
- 25 Hydro's position the Board doesn't need anyone's

- 1 consent to -- to exercise its jurisdiction.
- 2 MR. BOB PETERS: Manitoba Hydro's
- 3 position is that this Hearing is the time for any party
- 4 to raise any objections or concerns; and failing that,
- 5 the Board will adjudicate on the issue?
- 6 MS. PATTI RAMAGE: That's correct.
- 7 MR. BOB PETERS: Okay. I think we have
- 8 your position. And thank you again, Ms. Ramage.

- 10 CONTINUED BY MR. BOB PETERS:
- MR. BOB PETERS: Mr. Weins, just so
- 12 we're clear on the request, the diesel residents, the
- 13 residential customers will get the same rate increase
- 14 as Manitoba Hydro's grid customers as a result of this
- 15 General Rate Application, whether that be as applied
- 16 for or zero?
- MR. ROBIN WEINS: Or anything in
- 18 between, yes.
- 19 MR. BOB PETERS: Or anything in
- 20 between.
- MR. ROBIN WEINS: Yes, that's correct.
- MR. BOB PETERS: The general service
- 23 customers, those typically tend to be commercial
- 24 customers in nature, perhaps meeting halls or offices.
- They will still face a rate increase on

2527 their first 2,000 kilowatt hours of -- sorry, their -yes, the first 2,000 kilowatt hours of their consumption per month? 3 4 MR. ROBIN WEINS: Yes, that's correct. 5 MR. BOB PETERS: And anything over and above the first 2,000 kilowatt hours for the general 7 service customers, that rate will not change? 8 MR. ROBIN WEINS: We're not applying for any change to that rate. 9 10 MR. BOB PETERS: And there's no -- no 3 11 1/2 percent increase if your Application was granted 12 for April 1st as applied -- it was approved as applied 13 -- sorry, was approved as Manitoba Hydro applied, there 14 would be no increase to the government and First 15 Nations education tariff either? 16 MR. ROBIN WEINS: That's correct. 17 18 (BRIEF PAUSE) 19 MR. BOB PETERS: Has there been a 2013 20 21 prospective cost of service study done on the diesel 22 zone? 23 MR. ROBIN WEINS: No, there has not. 24 MR. BOB PETERS: Appendix 11-1 in the 25 filing, some of which is extracted and included in

2528 Board counsel's book of documents, starting at page 409, has some prospective diesel cost of service 2012 information though, does it? 3 4 5 (BRIEF PAUSE) 6 7 MR. ROBIN WEINS: That's right. MR. BOB PETERS: And if we look to page 410 on this Schedule 1, you're telling the Board that the full-cost rate in the diesel zone is fifty-nine 10 point one-six (59.16) cents per kilowatt hour? 11 12 MR. ROBIN WEINS: Yes. And such --13 such full-cost rate includes the variable costs along with provisions for recovery of interest and 15 depreciation related to capital costs for which no contribution had been received. 16 17 MR. BOB PETERS: Okay. We'll -- we'll 18 come to that, Mr. Weins. I may have written down your 19 full-cost rate from your evidence this morning 20 incorrectly. 21 But is this fifty-nine point one-six (59.16) cents the current full-cost rate, or does 22 23 Manitoba Hydro have a different figure for that? 24 MR. ROBIN WEINS: The -- the relevant figures are, you know, either the fifty-nine point one-

2529 six (59.16) cents, which includes a provision for recovery of cost related to some capital, or else the fifty-three point five (53.5) which does not, depending 3 on the perspective one wants to take on the legitimacy of including it in the rate. 6 7 (BRIEF PAUSE) 9 MR. BOB PETERS: Maybe -- maybe we 10 should tackle that right now, Mr. Weins. Included on 11 Schedule 1 at page 410 of Board counsel's book of 12 documents is a line item, an additional provision for 13 unrecovered capital in the amount of seven hundred and 14 forty-seven thousand, six hundred and seven dollars 15 (\$747,607)? 16 MR. ROBIN WEINS: That's correct. 17 MR. BOB PETERS: Is that an annual 18 amount -- an annual amortized amount, Mr. Weins, or is 19 that a total amount? 20 21 (BRIEF PAUSE) 22 23 MR. ROBIN WEINS: It's an annualized 24 amount. 25 MR. BOB PETERS: This represents

- 1 Manitoba Hydro has spent money on capital for which it
- 2 has not been reimbursed?
- MR. ROBIN WEINS: That's correct.
- 4 MR. BOB PETERS: And from whom was
- 5 Manitoba Hydro expecting to be reimbursed?
- 6 MR. ROBIN WEINS: Well, principally it
- 7 was expecting to be reimbursed, through the First
- 8 Nations, from Aboriginal Affairs and Northern
- 9 Development Canada.
- 10 MR. BOB PETERS: And if we turn back to
- 11 page 408 and have the Board look at the directive at
- 12 the top of the page at 408, the Board was seeking
- 13 Manitoba Hydro to provide confirmation that payments or
- 14 adequate arrangements for capital costs incurred by
- 15 Hydro since 2004 had been addressed.
- 16 And what you're telling the Board now is
- 17 they haven't been addressed to Manitoba Hydro's
- 18 satisfaction?
- 19 MR. ROBIN WEINS: They have not been
- 20 fully addressed, no.
- 21 MR. BOB PETERS: They've been partially
- 22 addressed, but there still are some items which are
- 23 under dispute?
- 24 MR. ROBIN WEINS: I would have to -- I
- 25 would have to agree with your characterization, yes.

- 1 There are some items that are under dispute.
- 2 MR. BOB PETERS: And in terms of a
- 3 process for resolving that dispute, is there any
- 4 process that you can advise the Board on that's ongoing
- 5 at this point in time?
- 6 MR. ROBIN WEINS: Only that we do
- 7 continue to engage in discussion with the prime
- 8 contributor, which is AANDC. They're -- they have not
- 9 ever definitively said, no, they will never pay it.
- 10 But they have not -- to date, they have not consented
- 11 to pay those amounts.
- MR. BOB PETERS: Can you tell the Board
- 13 what the -- what the total capital amount in dispute
- 14 is, Mr. Weins?
- MR. ROBIN WEINS: We'll have -- we'll
- 16 have somebody dig that amount up for you. We can -- I
- 17 can tell you, Mr. Peters, it's in respect primarily of
- 18 two (2) items.
- 19 One (1) of them is Brochet soil
- 20 remediation cost, and the other is interest accrued on
- 21 the capital items between their in-service and the
- 22 current date.
- 23 MR. BOB PETERS: And not to get into --
- 24 into it too deeply here, Mr. Weins, but the -- the
- 25 Broch -- Brochet soil con -- remediation is as a result

- 1 of Manitoba Hydro having to environmentally remediate
- 2 contaminated soil?
- 3 MR. ROBIN WEINS: That's my
- 4 understanding, yes.
- 5 MR. BOB PETERS: And there's a dispute
- 6 between Manitoba Hydro and, I'll say, Canada, meaning
- 7 AANDC? There's dispute as to who has responsibility for
- 8 that?
- 9 MR. ROBIN WEINS: Yeah. Generally, I
- 10 would say that's a fair characterization.
- 11 MR. BOB PETERS: And it's not subject
- 12 to litigation that you are aware of?
- MR. ROBIN WEINS: Not that I'm aware
- 14 of.
- MR. BOB PETERS: Not that Manitoba
- 16 Hydro's aware of.
- 17 MR. ROBIN WEINS: Correct.
- 18 MR. BOB PETERS: And the interest
- 19 amount just represents the carrying cost to Manitoba
- 20 Hydro?
- MR. ROBIN WEINS: Yes. All of the
- 22 other capital items, I think with one (1) exception,
- 23 because the costs hadn't been finalized on it, but all
- 24 of the others. Ultimately, we had agreement from AANDC
- 25 that they would be responsible for their share of the

- 1 costs. And we received cheques from them on two (2)
- 2 occasions: March of 2011 and March of 2012.
- 3 They -- they -- these were in amounts
- 4 that would cover the original capital cost, but they
- 5 did not cover any carrying costs from the time of the
- 6 in-service of the facilities in which respect they were
- 7 made.
- 8 MR. BOB PETERS: And that has since
- 9 been requested from Canada, and it has not yet been
- 10 provided?
- MR. ROBIN WEINS: We've requested it on
- 12 a number of occasions. And typically the answer has
- 13 been, No, we -- we will not agree to recover those
- 14 costs. Although, as I stated a few moments ago, we
- 15 haven't received a final response formally that they
- 16 won't.
- MR. BOB PETERS: All right. If we can
- 18 just go back one (1) page with the Board, to page 407,
- 19 and look at the Directive 1A. Manitoba Hydro, when
- 20 they appeared before the Board in the hearing that gave
- 21 rise to Order 134/10, had sought to include in Manitoba
- 22 Hydro's revenue requirement an amount on account of
- 23 interest expense and an amount on account of
- 24 depreciation related to unrecovered capital costs since
- 25 2004?

2534 1 MR. ROBIN WEINS: Correct. 2 MR. BOB PETERS: That request was denied in its entirety? 3 MR. ROBIN WEINS: Yes. 4 5 MR. BOB PETERS: And since then, you have recovered some of the capital, but not all of the 7 capital, from what I'm gathering from your testimony? 8 MR. ROBIN WEINS: I think that's a fair 9 way of putting it, yes. 10 MR. BOB PETERS: Okay. Has Canada been made aware that Manitoba Hydro is seeking to add to the 11 12 full-cost rate the difference between fifty-three point 13 five (53.5) cents and fifty-nine point one-six (59.16) 14 cents? 15 MR. ROBIN WEINS: I -- I believe we 16 have provided to Canada -- although, they are not an 17 Intervenor, we have provided them with copies of our --18 of our materials filed in respect to the diesel 19 communities to date. 20 MR. BOB PETERS: But -- and -- and 21 thank you, sir. I suppose, in any event, Manitoba 22 Hydro is not before this Board asking that that rate 23 be, in fact, approved at this time? 24 MR. ROBIN WEINS: That -- that is

correct. I think if you'll refer to -- refer to the

- 1 material in the diesel portion of this Application and,
- 2 as well, I -- I believe I discussed it in my direct
- 3 this morning, Manitoba Hydro had requested and was
- 4 granted an increase to the government rate in the
- 5 diesel zone, effective September 1st, of 6.5 percent,
- 6 which was not cost based. It was based on -- on
- 7 equivalent percentage to what grid rates had increased
- 8 over the period of time since the last diesel increase.
- 9 And the government rate, currently two
- 10 twenty-seven (2.27) -- the total government rate that
- 11 we calculated when we filed back in December of 2011,
- 12 the indicative rate was two fifty-four (2.54). So
- 13 while conceptually we are showing the costs related to
- 14 interest and depreciation on unrecovered capital, in
- 15 fact, those amounts are not being recovered in the
- 16 current rate, and we're not asking for that rate to
- 17 increase.
- 18 MR. BOB PETERS: All right. I -- I'm -
- 19 I have your point. And thank you. The Order 148/11
- 20 of this Board approved Manitoba Hydro's interim request
- 21 for September 1 to increase the -- the government and
- 22 general service tail block rates by the 6.5 percent?
- MR. ROBIN WEINS: Yes.
- 24 MR. BOB PETERS: And because that was
- 25 on an interim basis, Manitoba Hydro would now like that

- 1 to be finalized through this process?
- 2 MR. ROBIN WEINS: Yes.
- 3 MR. BOB PETERS: If we turn to Schedule
- 4 2 -- sorry, Schedule 2 on page 411 of the book of
- 5 documents, we see a cost of -- a statement of
- 6 operations related to the diesel zone. This would be
- 7 the most current statement of operations, as I
- 8 understand your evidence, Mr. Weins?
- 9 MR. ROBIN WEINS: Yes.
- 10 MR. BOB PETERS: And it provided
- 11 actuals up until 2011 fiscal year of Manitoba Hydro.
- 12 This is based on the fiscal year?
- MR. ROBIN WEINS: Yes, to March 31st.
- 14 MR. BOB PETERS: And also a forecast
- 15 for 2013 --
- 16 MR. ROBIN WEINS: For 2012, actually.
- MR. BOB PETERS: I'm sorry, 2012, with
- 18 no forecast yet for 2013. We'll come to that. Let's
- 19 go to the bottom line, as they say, and look at the
- 20 surplus or deficit on the total costs.
- 21 And we see in 2010 there's a \$1.465
- 22 million deficit?
- MR. ROBIN WEINS: Yes.
- 24 MR. BOB PETERS: What happened to that
- 25 deficit?

2537 MR. ROBIN WEINS: You mean in an 1 accounting sense, what happened to it? 3 MR. BOB PETERS: Yes. MR. ROBIN WEINS: It was rolled into the results of Manitoba Hydro overall --MR. BOB PETERS: It went right into the 6 net income line? 7 8 MR. ROBIN WEINS: Yes. MR. BOB PETERS: All right. And 9 likewise for 2011? 10 11 MR. ROBIN WEINS: Yes. 12 MR. BOB PETERS: Put another way, Mr. 13 Weins -- and we'll see if -- if you agree that that 14 became a subsidy that the grid ratepayers would --15 would be contributing to the diesel zone? 16 MR. ROBIN WEINS: Yes. 17 18 (BRIEF PAUSE) 19 20 MR. BOB PETERS: Are you aware as to 21 which account Mr. Rainkie puts this in or whether its 22 blended throughout all of the -- the expense items? 23 MR. ROBIN WEINS: I'm not aware of it, 24 no. 25 MR. DARREN RAINKIE: Speaking of low-

2538 load factor, Mr. Peters, I've got a low-load factor this morning, or this afternoon. 3 MR. BOB PETERS: We'll -- we'll try to get you some airtime, Mr. Rainkie. 5 MR. DARREN RAINKIE: I don't believe this -- subject to check, I don't believe that this would be rolled in any particular account but just throughout the -- this is, as I understand it, a kind of a cost of service calculation, so it -- it wouldn't be in any particular GL account. It would be in all of 10 11 our -- all of our various accounts. 12 MR. BOB PETERS: All right. When we --13 when I look at 2012 forecast, Mr. Weins, it was seven 14 hundred and eighty-five thousand dollar (\$785,000) 15 deficit. 16 MR. ROBIN WEINS: Yes. 17 MR. BOB PETERS: Do you know the actual 18 number that came in for 2012? 19 (BRIEF PAUSE) 20 21 22 MR. ROBIN WEINS: We haven't compiled the actual results for 2012. That's part of the 24 process of preparing the prospective cost of service

study in the next year.

2539 MR. BOB PETERS: Okay. And if we quick 1 2 3 MR. ROBIN WEINS: It's -- it's in process now, but it has -- it -- it's a little ways yet from completion. 6 MR. BOB PETERS: All right. If we turn 7 to page 417 in the book of documents, and we look for that column that's missing, the 2013 column, the projected income or loss for the diesel zone in the current fiscal year of Manitoba Hydro, which is the 10 11 first test year before this Board, is shown at \$1.449 12 million? 13 MR. ROBIN WEINS: Yes. 14 MR. BOB PETERS: That number maintains 15 the most current forecast of Manitoba Hydro for the deficit in the diesel zone? 16 17 MR. ROBIN WEINS: It would be, yes. 18 MR. BOB PETERS: And that, too, would 19 be impacting Manitoba Hydro's net income line? 20 MR. ROBIN WEINS: Yes, it would. 21 MR. BOB PETERS: Mr. Weins, relying on 22 your historical memory, Manitoba Hydro was accumulating deficits on an annual basis and at some point sought to recover those from the diesel communities? 24 25 MR. ROBIN WEINS: There was a period

- 1 during which we would accumla -- accumulate those
- 2 deficits with the intent that we would, with -- with
- 3 each subsequent rate change, try to recover 20 percent
- 4 of the accumulated deficit. We -- I believe we ended
- 5 that practice prior to the last general rate
- 6 application and hearing.
- 7 MR. BOB PETERS: So the current
- 8 practice is to not seek recovery of the deficit from
- 9 the customers that incurred the deficit?
- 10 MR. ROBIN WEINS: That's correct.
- 11 There's no explicit attempt or policy-related attempt
- 12 to recover that deficit. As we progress with our
- 13 prospective cost of service studies for the diesel
- 14 zone, we do track it, but there's no explicit intent to
- 15 recover it.
- 16 MR. BOB PETERS: The current intent --
- 17 perhaps even a policy, then -- of Manitoba Hydro is to
- 18 allow the deficit from the diesel zone, on an annual
- 19 basis, to be subsidized by grid customers?
- 20 MR. ROBIN WEINS: I -- I would say
- 21 defacto that has been the case since that time; I'm not
- 22 aware of an explicit policy that it be so.
- 23 MR. BOB PETERS: Do you recall the --
- 24 the then balance of the accumulated deficit prior to
- 25 the last GRA, when Manitoba Hydro stopped seeking a

- 1 rolling 20 percent recovery?
- MR. ROBIN WEINS: We're trying to
- 3 locate that now. But my historical memory, as you call
- 4 it, is that it's somewhere in the order of \$8 million.
- 5 MR. BOB PETERS: And -- and does one
- 6 then assume that the \$8 million was charged through to
- 7 the net income in a particular year and it impacted
- 8 retained earnings that year?
- 9 MR. ROBIN WEINS: Well, it -- it would
- 10 have been. You know, Manitoba Hydro did -- even back
- 11 then, we tracked this through the prospective cost of
- 12 service study. We did not maintain a formal set of
- 13 accounts that said, Here, this is -- this is the bottom
- 14 line of the Corporation to which this is flowing. On a
- 15 -- on a -- when Mr. Rainkie would close the books on
- 16 the year, it would be closed to net earnings.
- 17 MR. BOB PETERS: All right. So you're
- 18 telling the Board that on a -- on an actual basis, the
- 19 deficit would -- would be reflected in the net income
- 20 of the Corporation on a fiscal year basis, regardless
- 21 of what it was?
- MR. ROBIN WEINS: That's correct.
- 23 MR. BOB PETERS: And then recognizing
- 24 Manitoba Hydro was tracking what that deficit was,
- 25 there was an ongoing effort to -- to recover a rolling

- 1 20 percent amount of the deficit every time Manitoba
- 2 Hydro applied for new diesel rates?
- MR. ROBIN WEINS: Up until about 2010,
- 4 Mr. Peters.
- 5 MR. BOB PETERS: And I guess that begs
- 6 the question, Mr. Weins: Why is Manitoba Hydro not
- 7 seeking to refresh the rates in the diesel community
- 8 when it appears that they're set approximately \$1.5
- 9 million below cost of service?
- MR. ROBIN WEINS: Well, Mr. Peters, to
- 11 have done that would have meant that we would have had
- 12 to have included something in this particular Rate
- 13 Application. And as -- as I mentioned a few moments
- 14 ago, we have still not -- we have still not put
- 15 together the 2013 prospective cost of service study.
- 16 So we weren't in a position to respond to questions
- 17 regarding the cost of service.
- MR. BOB PETERS: Does that suggest, Mr.
- 19 Weins, that Manitoba Hydro plans to come back to this
- 20 Board with a diesel rate application in the -- in the
- 21 near term?
- MR. ROBIN WEINS: I think Manitoba
- 23 Hydro would make that determination once its looked at
- 24 that cost of service study, and it may well be that
- 25 Manitoba Hydro would return with a diesel application.

2543 MR. BOB PETERS: What will that cost of 1 service study tell you that the -- that page 417 in Board counsel's book of documents doesn't already tell 3 you? MR. ROBIN WEINS: Well, I mean, we 5 would confirm actual results up to the end of March 7 2012; we would update the forecast for 2013. 8 MR. BOB PETERS: All right. And just then leave me with the timeline that you're suggesting 10 that would take place at Manitoba Hydro. 11 MR. ROBIN WEINS: We would be looking to conclude that study -- cost of service study within 13 the next couple of months -- within the next couple of 14 months. MR. BOB PETERS: 15 Thank you, Mr. Weins. And the Board can expect to hear from Manitoba Hydro 17 one way or the other following that, as to its 18 intentions? 19 MR. ROBIN WEINS: We can make our 20 intentions known as soon as we know them ourselves. 21 MR. BOB PETERS: Fair enough. 22 23 (BRIEF PAUSE) 24 25 MR. BOB PETERS: Mr. Weins, I see in my

- 1 notes -- and I -- I'm going to apologize to the Board.
- 2 I can't -- I don't believe I have a reference before
- 3 the Board. I think it might have been in the actual
- 4 Application, which I could get.
- 5 But you had mentioned that in terms of
- 6 the capital costs in dispute, Manitoba Hydro's
- 7 received, I've got a note here, \$2.3 million, March 31
- 8 of 2011, and \$5.8 million, April 4th of 2012, for a
- 9 total of \$8.1 million?
- 10 MR. ROBIN WEINS: That sounds right.
- 11 MR. BOB PETERS: And I -- I apologize,
- 12 I -- I don't have a reference. I think it might have
- 13 been the -- the filing of the Utility, or it could have
- 14 been in an information request, but...
- 15 I couldn't reconcile that with the Board
- 16 directive on page 407 that there was unrecovered
- 17 capital costs of 4.4 million, when the payment made was
- 18 8.1 million.
- 19 Was there additional capital over and
- 20 above the previous capital that was included in the
- 21 payments?
- MR. ROBIN WEINS: Yes, that would be
- 23 the case.
- 24 MR. BOB PETERS: And is it the case,
- 25 Mr. Weins, that Manitoba Hydro seeks to -- when it

PUB - MANITOBA HYDRO GRA 01-08-2013 2545 wants to make a capital upgrade now in the diesel zone, the settlement agreement is such that those capital upgrades are to be discussed, approved, implemented, 3 but not put thro -- through the rate structure of Manitoba Hydro? 6 MR. ROBIN WEINS: The normal situation would -- would be as you described, Mr. Peters. We 7 would review those with the parties and they would be convinced of the necessity for the expenditure, and we'd have the funds available, and we'd make the 10 11 contributions. 12 13 (BRIEF PAUSE) 14 15 MR. BOB PETERS: Mr. Weins, also in --16 on page 408 of the book of documents that you have before you is a Directive number 6 from the Public 17 18 Utilities Board in its Order 134/10. And this relates 19 to the discussion and the -- the proceedings that -that included a future plan as to whether or not the 21 diesel zone communities could be put on -- on a service that would allow them -- residents and the businesses 22 23 to use space heat within the community?

"space heat" here, but unlimited utilization, given the

MR. ROBIN WEINS: I don't see the word

24

- 1 -- given that the current limits are 60 amps in the
- 2 case of residential and 2,000 kilowatt hours in the
- 3 case of general service, it would most likely be for
- 4 space heat.
- 5 MR. BOB PETERS: Let me -- let me start
- 6 it this way then, Mr. Weins. Does Manitoba Hydro have
- 7 a current plan to connect the four (4) diesel
- 8 communities to the Manitoba Hydro transmission grid?
- 9 MR. ROBIN WEINS: No, we do not.
- 10 MR. BOB PETERS: Is one (1) -- has
- 11 Manitoba Hydro concluded that it will not connect these
- 12 communities to this -- to the transmission grid?
- MR. ROBIN WEINS: One can never say
- 14 "never", Mr. Peters. But given the magnitude of the
- 15 costs and the very, very preliminary discussions that
- 16 we've had with the federal agency, it -- it appears
- 17 unlikely.
- 18 MR. BOB PETERS: Manitoba Hydro has
- 19 concluded that it's cost prohibitive to connect these
- 20 communities to -- to the grid?
- 21 MR. ROBIN WEINS: Relative to other
- 22 options, it is -- it is -- it's more costly than --
- 23 than other options which -- for Manitoba Hydro.
- 24 MR. BOB PETERS: Has Manitoba Hydro a -
- 25 a five (5) year, fully costed plan to migrate

- 1 residential and non-government general service diesel
- 2 zone customers to grid rates for all consumption?
- MR. ROBIN WEINS: No, while we don't
- 4 have such a plan -- although, we did file a document
- 5 back in December of 2011, December 22nd of 2011, which
- 6 studied the likely cost, the impact, of making such a
- 7 decision to remove the service limitations in the case
- 8 of residential customers, and the 2,000 kilowatt hour
- 9 per month limitation in the case of general service
- 10 customers. And we did file that with the Public
- 11 Utilities Board last Dec -- December of 2011.
- MR. BOB PETERS: And the position of
- 13 Manitoba Hydro was to continue that way or to not go in
- 14 that direction?
- 15 MR. ROBIN WEINS: There's been no
- 16 decision taken to date permanently either way. But the
- 17 conclusion, if anything, that we can -- we can draw
- 18 from that is that it would be costly, it would be
- 19 costly to Manitoba Hydro, it would be costly to the
- 20 government agencies that support Manitoba Hydro by
- 21 funding the difference between grid rates and the costs
- 22 to provide diesel generated -- diesel generated energy,
- 23 and that there may be ways better to approach the issue
- 24 of heating for customers in the diesel zone.
- MR. BOB PETERS: Was there a positive

2548 support from Canada and Manitoba governments to extend the capability to have grid rates for all consumption? 3 (BRIEF PAUSE) 5 6 MR. ROBIN WEINS: The main Federal 7 funding agency, which is Aboriginal Affairs and Northern Development, have advised us not -- they don't have the ability to fund such a change at the present 10 time. 11 MR. BOB PETERS: So, from Manitoba Hydro's perspective, is anything further being done 13 with respect to this directive or is it -- is nothing further being done? 14 15 MR. ROBIN WEINS: Nothing further is 16 being done at the present time. 17 MR. BOB PETERS: Is Manitoba Hydro 18 expecting anything further from the Board in respect to this directive? 19 20 MR. ROBIN WEINS: I won't say that 21 we're expecting anything further. The information was 22 provided to the Board as part of the current proceeding 23 and it -- it speaks for itself. Manitoba Hydro's not 24 asking for anything. 25 MR. BOB PETERS: On the issue of

- 1 heating, Mr. Wittmeier, I'm going to do my best to see
- 2 if I can get Mr. Weins to sit further back, but, in
- 3 terms of further heating residences in the diesel zone,
- 4 the Board's understanding in past orders has been that
- 5 it is considered inefficient to use electricity from
- 6 diesel generation to space heat.
- 7 Have I got that right?
- 8 MR. WAYNE WITTMEIER: Yes, you have
- 9 that correct.
- 10 MR. BOB PETERS: And in terms of
- 11 providing space heat through electricity, would each
- 12 residence need a 200 amp service?
- MR. WAYNE WITTMEIER: I believe that's
- 14 a good estimation.
- MR. BOB PETERS: And right now the
- 16 maximum permitted is at 60 amp?
- 17 MR. WAYNE WITTMEIER: That's correct.
- 18 MR. BOB PETERS: And, if Manitoba Hydro
- 19 was to provide 200 amp service to all of the
- 20 residential customers in the diesel zone, the
- 21 infrastructure and the apparatus, if I may, that is
- 22 there to provide the electricity is undersized?
- 23 MR. WAYNE WITTMEIER: I believe that's
- 24 a correct estimation. We would see an increase in load
- 25 growth which would require us to install additional

- 1 diesel generators.
- 2 MR. BOB PETERS: And is it still -- is
- 3 it still least cost to do that as opposed to putting in
- 4 landlines? Do you -- do you have any information on
- 5 that?
- 6 MR. WAYNE WITTMEIER: Yeah, I believe
- 7 you're correct there. It's -- it's still a least-cost
- 8 option to increase the generation to serve that versus
- 9 having a landline installed.
- 10 MR. BOB PETERS: Is it more efficient
- 11 to heat with diesel fuel as the energy source directly
- 12 in the furnace, as opposed to electric space heat that
- 13 arises as a result of diesel generators?
- 14 MR. WAYNE WITTMEIER: I'm -- I'm not
- 15 sure I'm going to get these numbers exactly right, but
- 16 from what I understand the -- the energy that we
- 17 produce by burning diesel to generate electricity is
- 18 approximately 33 percent of the energy. If you burn
- 19 the fuel directly in a furnace, I believe there can be
- 20 closer to the 60 percent and higher to serve that --
- 21 the -- the energy you get out of that fuel. That's
- 22 from -- from my knowledge.
- 23 MR. BOB PETERS: Do you know if there
- 24 are high-efficiency diesel fuel furnaces as -- like
- 25 there are natural gas high-efficiency furnaces?

- 1 MR. WAYNE WITTMEIER: I believe those
- 2 options do exist.
- 3 MR. BOB PETERS: And Mr. Weins had
- 4 suggested that there may be other heating options,
- 5 other than electricity. Mr. Wittmeier, are you aware
- 6 of what any of those other heating options are?
- 7 MR. WAYNE WITTMEIER: Yes, I believe
- 8 so.
- 9 MR. BOB PETERS: What do they include?
- 10 MR. WAYNE WITTMEIER: Well, there --
- 11 there are other systems that, whether it be geothermal
- 12 or -- or systems like that, that could be used --
- 13 biomass, some of those might be options as well, that'd
- 14 be considered, but all tend to be very capital
- 15 intensive --
- MR. BOB PETERS: At this point in time
- 17 is Manitoba Hydro embarking on any studies as to what
- 18 other heating sources could be offered in the diesel
- 19 zones?
- 20 MR. WAYNE WITTMEIER: We're not
- 21 necessarily looking at heating sources; we're looking
- 22 at the -- the ability of augmenting our diesel
- 23 generation, and to look at other ways of producing
- 24 electricity that may reduce our reliance on diesel.
- MR. BOB PETERS: I completely didn't

2552 understand that. I'm being honest. You're -- you're looking to augment your diesel generation with further diesel production? 3 MR. WAYNE WITTMEIER: No. Looking at alternate sources of energy that might be able -emerging technologies that might be able to support us in -- in reducing our reliance on diesel, to some extent. 9 MR. BOB PETERS: And you're suggesting 10 new technologies like wind or run-of-the-river plants, 11 and... 12 MR. WAYNE WITTMEIER: Yeah. I believe 13 all those are -- are in -- would be considered. 14 MR. BOB PETERS: All right. 15 16 (BRIEF PAUSE) 17 18 MR. BOB PETERS: Mr. Wittmeier, I'm not 19 sure if this is going to be in an area of -- of your knowledge and expertise, but in terms of demand-side 21 management offerings in the diesel zone, are you 22 responsible for any demand-side management programs for the -- for the diesel zones? 23 24 MR. WAYNE WITTMEIER: No, Mr. Peters, 25 I'm not.

- 1 MR. BOB PETERS: And you're not aware
- 2 of what those may or may not be?
- 3 MR. WAYNE WITTMEIER: I -- I know there
- 4 are efforts going on in the communities to continue to
- 5 -- to support the communities in energy efficiency or
- 6 Power Smart programs but as to the details of what's
- 7 all been done, I don't have those answers.
- 8 MR. BOB PETERS: In -- in analyzing
- 9 Manitoba Hydro's future plans for energy to the diesel
- 10 zone, sir, does Manitoba Hydro take into account the --
- 11 the CO2 emissions that would -- would exist as a result
- 12 of the diesel, compared to -- to grid?
- 13 MR. WAYNE WITTMEIER: Yes, I believe
- 14 those calculations are done on a regular basis and
- 15 reported to the appropriate agencies.
- 16 MR. BOB PETERS: And the conclusion
- 17 that the Board will take from your evidence is that it
- 18 is still more costly to run gridlines than it would be
- 19 to find alternate sources for -- for energy for the
- 20 diesel zone.
- 21 MR. WAYNE WITTMEIER: If I understand
- 22 your comment correctly, I -- I think I agree that the -
- 23 the -- there's no -- I guess there's no other
- 24 alternative out there that's more cost-effective than -
- 25 than operating diesels at this point in time.

2554 1 (BRIEF PAUSE) 2 3 MR. WAYNE WITTMEIER: Mr. Peters, I've been handed some information on the First Nation's Power Smart program. Now, I can't provide any detail on it but I can just give you a little background. 7 "Is implementing Power Smart initiatives to upgrade in insulation 9 and provide basic energy efficiency 10 materials in homes in the remote 11 diesel communities. To date, a 12 hundred and sixteen (116) homes have 13 been completed. It is estimated that 14 a further eighty-five (85) homes may 15 be eligible for upgrades which are 16 anticipated to be completed by 2013/'14." 17 18 Thank you. 19 MR. BOB PETERS: Thank you very much for that, Mr. Wittmeier. The last question. And I 21 recall, perhaps not accurately, but you had some 22 responsibilities for Selkirk thermal plant back in the 23 day. Can you provide the Board with the CO2 emissions 24 of the diesel -- of a diesel generation compared to what you were using when coal was the fuel of choice in

- 1 Selkirk?
- 2 MR. WAYNE WITTMEIER: I'd have a
- 3 difficult time giving you an answer that I would feel
- 4 comfortable with. I'd have to go back and do some
- 5 research to -- but I suspect that the ratio would be
- 6 significantly different.
- 7 MR. BOB PETERS: Well, maybe I'll take
- 8 you up on that -- that offer to provide you with a --
- 9 would you provide an undertaking through your counsel
- 10 to advise the Board on the -- on the CO2 output per
- 11 unit of -- maybe per megawatt, or however you size your
- 12 plant, compared to -- to a coal generation?
- 13 MR. WAYNE WITTMEIER: I'm sure I could
- 14 but Selkirk isn't operating on coal at this point of
- 15 time, you --
- 16 MR. BOB PETERS: No, I'm aware of that.
- 17 But you could --
- 18 MR. WAYNE WITTMEIER: I suspect we
- 19 could do some research and get some information rela --
- 20 relative to that.
- MR. BOB PETERS: It doesn't have to be
- 22 compared to Selkirk; it could be Brandon if you choose.
- MR. WAYNE WITTMEIER: Yes.
- MR. BOB PETERS: All right.
- MR. ROBIN WEINS: Mr. Peters, I'm not

- 1 any closer to being able to give you an answer on
- 2 Selkirk or Brandon, which I'm sure we can arrive at
- 3 fairly quickly, but we did provide a report a couple
- 4 years back to the government where -- in which we
- 5 stated that approximately 8,000 tonnes of greenhouse
- 6 gas emission are emitted annually as a result of the
- 7 diesel generation.
- 8 MR. BOB PETERS: Mr. Weins, just so
- 9 that we're clear then, if we look to -- to page 411,
- 10 we're looking at roughly 13 million kilowatt hours of
- 11 consumption on an annual basis and that would give rise
- 12 to the 8,000 tonnes?
- MR. ROBIN WEINS: Yes, I did -- this
- 14 study is a couple years old, so we've had some energy
- 15 usage growth since then. So the number might be a
- 16 little higher but as an order of magnitude, 8,000
- 17 tonnes is probably pretty close.
- 18 MR. BOB PETERS: All right. You've
- 19 taken away Mr. Wittmeier's homework and no need to do
- 20 that. I'd like to thank Mr. Wittmeier, Mr. Weins, Mr.
- 21 Cormie and Mr. Rainkie for their answers.
- Mr. Chairman, those conclude my
- 23 questions. I believe that Mr. Gange would like the
- 24 microphone, subject to any questions the Board may have
- 25 at this point in time.

```
2557
1
                   MR. WILLIAM GANGE: Perhaps we could
   take five (5) minutes Mr. Chair?
3
                   THE CHAIRPERSON: Let's do that. Take
   five (5) please.
5
   --- Upon recessing at 1:58 p.m.
7
   --- Upon resuming at 2:08 p.m.
8
9
                   THE CHAIRPERSON: I believe everyone's
10
   in position. Mr. Gange...?
11
   CROSS-EXAMINATION BY MR. WILLIAM GANGE:
13
                   MR. WILLIAM GANGE:
                                       Thank you, Mr.
14
   Chair. I'd like to thank Mr. Williams for stepping
15
   down. I -- I unfortunately have another commitment
   that will take me away from here for tomorrow and
   Thursday; unfortunate, but it couldn't be avoided. So,
17
18
   as a result, Mr. Williams has stepped down to allow me
19
   to -- to go out of -- out of step.
20
                   I'm -- I'm going to start -- and I --
21
   and I think, Mr. Weins, I think everybody else can sit
   back and drink coffee, 'cause I -- I think that
22
23
   virtually all of my questions will be for you.
24
                   One (1) of the things that we're -- or
   that -- that we're talking about today is -- is the
```

- 1 question of rates. And although you've been doing this
- 2 for a long period of time, and these things are more
- 3 than second nature to you, we do have a new Board and a
- 4 new process here. I'd like to go back to the -- the
- 5 first principles of rate-setting.
- 6 And -- and I'm going to give you a
- 7 number of -- of propositions, sir, that I think are the
- 8 foundation of regulatory -- the regulatory process in
- 9 setting rates, and I just need to have you either
- 10 comment on them or just agree with them. But the --
- 11 one (1) of the first principles, and I don't in -- I
- 12 don't pretend that I'm going to be able to comment on
- 13 all of them, or -- or list all of them.
- 14 But one (1) of the first principles of
- 15 rate-setting is that there has to be an effectiveness
- 16 in yielding total revenue requirements under a fair
- 17 return standard.
- Would you agree with that, sir?
- 19 MR. ROBIN WEINS: I certainly recognize
- 20 it. Yes, I'd agree with that.
- 21 MR. WILLIAM GANGE: So -- so in other
- 22 words, what -- what's being looked at from the
- 23 perspective of the regulator is there has to be enough
- 24 money coming in to keep the utility going, and -- and
- 25 although Manitoba Hydro is different than a private

2559 organization, nevertheless you have to have a fair return in order to cover your costs? 3 MR. ROBIN WEINS: That's -- that's fair. 5 MR. WILLIAM GANGE: And -- and --6 MR. ROBIN WEINS: I'd go along with 7 that. 8 MR. WILLIAM GANGE: -- and when you're 9 designing the rates that's the -- that's the starting 10 point, is it not, sir, of your analysis, your department's analysis? What do we have to charge given 11 the expenses that we know are going to be incurred? 13 What are the -- the charges in order to recover all of 14 that. 15 MR. ROBIN WEINS: That's right. 16 MR. WILLIAM GANGE: Okay. Secondly --17 a second very fundamental principle is that in setting 18 rates, regulators are attempting to ensure revenue 19 stability from year to year? 20 21 (BRIEF PAUSE) 22 23 MR. ROBIN WEINS: You know, I would 24 look on that one as certainly a desirable attribute but 25 it's not of the same level of primacy or key role as --

- 1 as the first one (1) that you mentioned.
- 2 MR. WILLIAM GANGE: And -- and I would
- 3 agree with that. I mean, the -- the first one (1) is
- 4 the -- the fundamental aspect. But -- but one (1) of
- 5 the aspects also is this whole concept that we have
- 6 referred to from time to time during Mr. Peters's
- 7 questioning and -- and in previous hearings of the desi
- 8 -- the desirability to avoid the concept of rate shock.
- 9 MR. ROBIN WEINS: That's -- that's
- 10 predictability and stability of rates.
- 11 MR. WILLIAM GANGE: Yes.
- MR. ROBIN WEINS: You -- you referenced
- 13 revenue stability.
- 14 MR. WILLIAM GANGE: Yes, and -- and --
- 15 but the revenue stability comes into play, in terms of
- 16 if -- if the expenses are going to be to sta -- same,
- 17 then -- then you want the revenue to be stable as well?
- 18 MR. ROBIN WEINS: As -- as much as
- 19 possible, yes.
- 20 MR. WILLIAM GANGE: Yes. And -- and
- 21 you said it very well, that -- that the -- but I'm
- 22 going to put it a little bit differently. The flip
- 23 side of the revenue stability is the concept that you -
- 24 that the regulator wants to make sure that the
- 25 utility is in a position so that -- that an unexpected

- 1 event will not result in rate shock, as -- as much as
- 2 possible, for the consumer.
- 3 Would that be fair?
- 4 MR. ROBIN WEINS: I mean, it would --
- 5 it -- it would be fair. It would be fair. I'm not --
- 6 again, I'm not sure that it has the kind of primacy as
- 7 the first subject that -- that you mentioned.
- 8 MR. WILLIAM GANGE: Yes.
- 9 MR. DARREN RAINKIE: Mr. Gange, maybe I
- 10 could just -- when I hear --
- 11 MR. WILLIAM GANGE: I didn't really
- 12 want to hear from you, Mr. -- Mr. Rainkie, but go
- 13 ahead.
- 14 MR. DARREN RAINKIE: I think most of
- 15 the counsel in the room feel the same as you do. But -
- 16 but I think, you know, when I hear -- we talk about
- 17 needing a level of reaching earnings in the company to
- 18 -- to -- as a shock absorber, if you like, against un -
- 19 un -- negative financial events. So I think of the
- 20 principle of financial integrity, what you've just
- 21 described, is what I would call it in terms of, you
- 22 know, regulatory principles if that helps.
- 23 MR. WILLIAM GANGE: It -- it does help.
- 24 Thank you, sir. Another concept is that, in -- in
- 25 setting rates, that the utility, and thereafter the

- 1 regulator, is looking to make sure that, as -- as far
- 2 as possible, there's fairness of the specific rates in
- 3 the apportionment of total costs of service among the
- 4 different customers.
- 5 Would you agree with that, sir?
- 6 MR. ROBIN WEINS: Yes, I would.
- 7 MR. WILLIAM GANGE: And so that's
- 8 something that we will eventually get to, in terms of
- 9 the cost of service study. That's -- that's one (1) of
- 10 the aspects that would be considered in the cost of
- 11 service study, is it not, sir?
- MR. ROBIN WEINS: Well, it's not just
- 13 in the cost of service study. It's in the rate design
- 14 itself, where we talk about equal treatment of equals
- 15 and appropriately unequal treatment of unequals.
- 16 MR. WILLIAM GANGE: And -- and perhaps
- 17 the same concept as -- as what you've just said, that
- 18 there ought to be an avoidance of undue discrimination
- 19 in rate relationships?
- MR. ROBIN WEINS: Yes.
- 21 MR. WILLIAM GANGE: And -- and although
- 22 sometimes those things are -- are -- it requires a
- 23 balancing act -- and I think that your description of -
- 24 of the rate design for the diesel communities would
- 25 be one (1) of those situations, would it not, where

- 1 you've got to balance the fact that here you have one
- 2 (1) community, the diesel communities, that are -- are
- 3 so much more difficult to serve and, therefore, much
- 4 more costly to serve. And -- and what you're trying to
- 5 do in your rate design is to avoid discrimination in
- 6 the rates.
- 7 Would that be fair?
- 8 MR. ROBIN WEINS: I think before I
- 9 agree with that as a particular example, we're going to
- 10 have to have some further conversation. But we do want
- 11 to avoid what you call undue discrimination, which is
- 12 discrimination that without -- without, as some people
- 13 like to say, limiting the generality of that kind of
- 14 reference. We want to avoid discrimination which is
- 15 not appropriate, given the nature of the burdens that a
- 16 customer puts on the system.
- 17 MR. WILLIAM GANGE: Fair enough, thank
- 18 you. And -- and that's very helpful as well. And --
- 19 and the final concept that I'm going to put to you is
- 20 that in the design of the rates, and by the utility and
- 21 then by a regulator, one of the issues is the
- 22 efficiency of the rate classes in discouraging wasteful
- 23 use of the service while promoted -- promoting all
- 24 justified types and amounts of use.
- MR. ROBIN WEINS: Yes, I would agree

2564 that's one of the key principles. 2 MR. WILLIAM GANGE: Okay. Thank you. Sir, I -- I provided to Ms. Ramage a document that is 3 entitled, "Green Action Centre Documents, Re: Rate Review," and I believe that Mr. Simonsen has indicated that that will be Green Action Centre Exhibit 4. 7 --- EXHIBIT NO. GAC-4: Green Action Centre 9 Documents Re: Rate Review 10 11 CONTINUED BY MR. WILLIAM GANGE: 12 MR. WILLIAM GANGE: And at page 1, 2, 13 3, and 4, there was an exchange between the Chair and 14 Mr. Warden on, I believe, day 2 of this Hearing. And 15 the Chair was asking Mr. Warden about the take-up of 16 DSM programs. And Mr. Warden, at page 3 of the exhibit and page 663 of the transcript, starting at line 20, 17 18 Mr. Warden said: 19 "The uptake would be improved with the 20 appropriate price signals, and that's 21 why previous applications before this 22 Board have been with inverted rates. So 23 we'd like to see the more you use 24 electricity, the more you're going to 25 pay for that."

- 1 Mr. Warden introduced in -- at that
- 2 time, the concept of inverted rates. And would you
- 3 agree with me, sir, that inverted rates, inclining
- 4 rates, same concept?
- 5 MR. ROBIN WEINS: Yes.
- 6 MR. WILLIAM GANGE: And for the -- we
- 7 have had, in previous hearings, quite lengthy
- 8 discussions about inclining rates. And your proposal
- 9 before the Board at this hearing is that you have a
- 10 flat rate, and there is no proposal for an inclined
- 11 rate.
- 12 Is that correct, sir?
- 13 MR. ROBIN WEINS: Yes, that's correct.
- 14 MR. WILLIAM GANGE: And so in order for
- 15 the Board to understand the concept of in -- inclined
- 16 rates or inverted rates, Mr. Weins, can -- can you
- 17 explain what it means, what an inverted rate or an
- 18 inclined rate is?
- 19 MR. ROBIN WEINS: Well, a inclined rate
- 20 expression simply means that as the customer uses more
- 21 energy per time period -- typically, in our rate
- 22 structure it's per month -- that the price increases.
- 23 And it means that typically we will define a rate block
- 24 for customer class, say at -- at -- for the initial,
- 25 just to take an example, 900 kilowatt hours a month, we

- 1 will charge one rate. And if the customer exceeds 900
- 2 kilowatt hours, we will charge the customer a higher
- 3 rate on all the usage that exceeds 900 kilowatt hours.
- The expression "inverted rates" -- I
- 5 believe, anyway -- came from the -- the historical
- 6 practice, which was nearly universal, of having
- 7 declining block rates, because the initial block was
- 8 intended to recover a significant portion of the fixed
- 9 costs, and then the remaining block or blocks would
- 10 recover the variable costs which were less than the
- 11 initial block had to recover, which was both fixed and
- 12 variable.
- 13 So most rate structures in North
- 14 America, going back twenty-five (25) or so years, were
- 15 of the declining block variety. So the expression
- 16 "inverted rates" came to mean, well, we're going to
- 17 turn that right on its head and we're going to have --
- 18 we're going to have a rate structure where we charge
- 19 more.
- 20 And why would we -- why -- why would we
- 21 have, first, a declining block rate structure, and then
- 22 why would we have made a determination -- or why would
- 23 some utilities and some regulators have made a
- 24 determination a generation or so ago that -- that it
- 25 would be more appropriate to have either a flat or an

- 1 inclining block rate structure really relates to what
- 2 the nature of costs was then and what it is now.
- For most utilities back then, you had a
- 4 certain amount of fixed costs, or costs were defined to
- 5 fall into a fixed category, that you wanted -- you
- 6 didn't want their recovery to be dependent on variable
- 7 consumption. So you recovered them in the first 500 or
- 8 900 kilowatt hours per month along with the variable
- 9 costs, and thereafter you recovered only the variable
- 10 costs.
- 11 It was also considered efficient because
- 12 it would tell the customer, you know, Hey, you can
- 13 actually use more of this because it -- what it's
- 14 really costing at this point is only the variable
- 15 costs. What -- what has happened subsequently for at
- 16 least some utilities is that the decision of a customer
- 17 to consume more relates to a marginal cost which is, in
- 18 many cases, higher than the embedded cost.
- 19 So it becomes appropriate then to
- 20 consider what is the most efficient way of pricing.
- 21 And that would be that if -- that you recover your
- 22 embedded cost in the initial block and your higher
- 23 avoided or marginal costs in the higher block.
- 24 So we do have utilities principally on
- 25 the West Coast of the United States, as well as Canada

- 1 and also in Quebec, which have an inclining rate based
- 2 on those principles. Ontario also has a -- an
- 3 inclining rate as well, not necessarily based on
- 4 exactly the same principles, but based on similar
- 5 considerations.
- 6 MR. WILLIAM GANGE: Would it be fair to
- 7 say that the -- that the declining rate system was
- 8 designed at a time where energy was treated and
- 9 believed to be limitless?
- 10 MR. ROBIN WEINS: No, I -- I would
- 11 disagree with that.
- MR. WILLIAM GANGE: Would you?
- MR. ROBIN WEINS: I would disagree with
- 14 that. The -- the study of economics doesn't deal with
- 15 goods that are in limitless supply; there's always a
- 16 limitation. So it may have been at a time when it was
- 17 believed that the variable cost of energy was less to -
- 18 that you could actually provide increasing amounts to
- 19 customers at variable cost rather than recovering a
- 20 fixed cost in all of the -- in all of the rate
- 21 structure.
- MR. WILLIAM GANGE: Okay. And you've
- 23 given an example, and if I can give another example.
- 24 If the -- if the flat-rate cost -- and I -- and I'm
- 25 just going to pick numbers, so they aren't intended to

- 1 be accurate, but just for the purpose of -- of
- 2 illustrating the -- the inclining block rate.
- And so if the -- if the flat rate were
- 4 to be eight (8) cents per kilowatt hour, the -- the
- 5 first block might well be set at something like six (6)
- 6 cents. and then -- and you mentioned the 900
- 7 kilowatts, I believe, that you -- you said. And the
- 8 second block might be set at ten (10) cents or ten and
- 9 a half (10 1/2) cents, something like that.
- 10 MR. ROBIN WEINS: That's -- that's
- 11 certainly a good example.
- 12 MR. WILLIAM GANGE: And -- and so that
- 13 the -- the basic usage would be consumed at a rate that
- 14 would be less than the flat rate, and that smaller
- 15 amount would be recaptured in the second block for
- 16 those -- by those customers who actually hit the second
- 17 block.
- Is that correct, sir?
- 19 MR. ROBIN WEINS: Well, I -- I'm taking
- 20 it that you're describing two (2) situations in which
- 21 you want to recover the same revenue from the same
- 22 customer or the same group of customers. And one (1)
- 23 is via a flat rate which is equal to the embedded cost,
- 24 and the other is via an inclining block rate in which
- 25 the initial block of consumption is set to be -- to

- 1 recover less than the embedded cost on some criteria
- 2 which we haven't established and the subsequent block
- 3 is set to recover more.
- 4 MR. WILLIAM GANGE: Would you agree
- 5 with me, sir, that because when -- when this matter was
- 6 dealt with by this Board previously, the concept was
- 7 that it would be revenue neutral?
- 8 Is that correct?
- 9 MR. ROBIN WEINS: That's correct.
- 10 MR. WILLIAM GANGE: And would you agree
- 11 with me that the ideal situation, in terms of the
- 12 differentiation between the first block and the second
- 13 block, is that the -- the difference between the blocks
- 14 is significant enough that the consumer can see the
- 15 difference?
- 16 MR. ROBIN WEINS: Well, it's going to
- 17 have more impact if it is significant, but you've got,
- 18 as you can appreciate, a number of criteria that you
- 19 have to consider when you're coming up with that
- 20 difference. Presumably you want the incremental usage
- 21 to be at marginal cost, unless you have a good reason
- 22 why you would want to have it different from marginal
- 23 cost.
- 24 You would -- and -- and, you know,
- 25 marginal cost isn't, as -- as we've discussed before,

- 1 sometimes it's a notoriously difficult concept to pin
- 2 down. But you would at least like it to approximate
- 3 marginal cost, and you would like to set your first
- 4 block based on some -- the size of your first block
- 5 based on some meaningful criteria. It's probably not
- 6 going to be based on cost but it might be.
- 7 And -- and then the -- the price that
- 8 you attach to your first block, you know, revenue
- 9 neutral situation, is simply going to fall out of where
- 10 you set your second block price, and what size you set
- 11 your first block.
- 12 MR. WILLIAM GANGE: Correct.
- MR. ROBIN WEINS: Okay. And it may be
- 14 -- it may result in a wide difference, or it may not.
- MR. WILLIAM GANGE: There are,
- 16 according to the studies, and -- and I -- I don't know
- 17 if this was -- if -- if you, in looking at -- at the
- 18 concept of inclined rates, came to the conclus -- same
- 19 conclusion, but the studies that have been done and
- 20 published suggest that there are numerous benefits to
- 21 an inclined rate structure.
- 22 Is that a fair statement? There are
- 23 also disadvantages but I'm just going to ask you to
- 24 agree that there are -- that there are numerous
- 25 benefits to it.

2572 There are benefits to 1 MR. ROBIN WEINS: pricing electricity as close as possible to marginal cost; that may be an inclining block rate structure, or 3 it may be something else. 5 MR. WILLIAM GANGE: Okay. And just dealing with the inclining block structure. One (1) of the potential benefits is that it has the potential to 7 act as a desi -- demand-side management tool. 9 Would you agree with that, sir? 10 Well, it sends a MR. ROBIN WEINS: price signal regarding the value of use, or the value 11 12 of -- alternatively, the value of conservation. And 13 the customer can make the decision, given -- assuming 14 that they have the information they need the customer 15 can make the decision as to whether or not they will 16 choose -- elect at the margin to conserve or to use. 17 Some of that information is the marginal cost. Other 18 information, of course, is the cost of conservation. And is it fair that 19 MR. WILLIAM GANGE: the -- the theoretical belief is that higher prices 21 ought to result, doesn't always, but ought to result in 22 lower consumption? 23 MR. ROBIN WEINS: Actually that's a --24 that's a fairly well established principle in 25 economics.

2573 MR. WILLIAM GANGE: Okay. And in the -1 - in our -- in our -- in Green Action Centre Exhibit number 4, the Chair was asking Mr. Warden about the --3 what -- what the Chair characterized as the poor uptake of DSM programs. Would you agree with me, sir, that one (1) of the benefits of an inclined block structure is that it applies to everybody, whereas a DSM program 7 is only going to apply to those people who actually take the time to invest in the DSM measure? 10 11 (BRIEF PAUSE) 12 13 MR. ROBIN WEINS: Well, that's tautologically true, Mr. Gange. It -- the inverted 14 15 rate -- or the price signal from the rate structure 16 applies to everybody who uses the commodity, and the demand-side management applies to those who see the 17 18 benefit of it, are able to make their own investment 19 and take advantage of whatever the Utility is prepared to invest. So, I -- I would agree it's true. MR. WILLIAM GANGE: And -- and --21 22 MR. ROBIN WEINS: Just in that 23 tautological sense. 24 MR. WILLIAM GANGE: Yes, thank you. And you mentioned that -- that -- that the studies that

- 1 -- that you've accepted is that higher prices should
- 2 result in lower consumption which then also ought to
- 3 translate into lower greenhouse gas emissions.
- Would you agree with that, sir?
- 5 MR. ROBIN WEINS: Well, it has -- it
- 6 certainly has the potential to do that, assuming that
- 7 consumption is foregone, that -- in the Manitoba
- 8 situation, that the consumption that's foregone
- 9 releases hydroelectric energy that can be used in
- 10 markets in which coal or natural gas are the primary
- 11 fuels for generating electricity and can back off those
- 12 fuels then, yes, it has the potential to reduce global
- 13 carbon emissions.
- 14 MR. WILLIAM GANGE: Thank you, sir.
- 15 The -- the -- a benefit of the inclined rate is that it
- 16 -- it does send a stronger price signal then just the
- 17 flat rate.
- Would you agree with that, sir?
- 19 MR. ROBIN WEINS: Oh, yes. A higher --
- 20 a higher rate is going to send a stronger signal for
- 21 conservation than a lower rate.
- MR. WILLIAM GANGE: Would you also
- 23 agree with this, sir, that in terms of those -- the
- 24 principles that we talked about and -- and the
- 25 apportionment of costs of service, that an inclined

- 1 block rate has the potential to apportion more fairly
- 2 the costs of service because it assigns a higher
- 3 proportion of costs to the large customers who bear a
- 4 greater responsibility for the increasing costs?
- 5 MR. ROBIN WEINS: I'm not sure that I
- 6 would agree with that, Mr. Gange. If it were possible
- 7 and we had the knowledge -- necessary knowledge, the
- 8 appropriate price is to charge marginal cost on all
- 9 kilowatt hours affecting every customer, because it
- 10 sends that price signal to every kilowatt hour. In the
- 11 case where marginal costs exceed embedded cost, that
- 12 would transfer too much money to Manitoba Hydro within
- 13 the framework of the regulatory compact, unless we had
- 14 a larger political or policy framework that dealt with
- 15 the surplus effectively.
- 16 So, I'm -- I'm not certain that a higher
- 17 rate for incremental consumption does address the
- 18 fairness criterion; it does address the efficiency
- 19 criteria.
- 20 MR. WILLIAM GANGE: Okay.
- MR. RAYMOND LAFOND: Mr. Gange, when
- 22 you refer to a larger customer within a particular
- 23 class, for instance, the residential customer class --
- 24 MR. WILLIAM GANGE: With -- within the
- 25 same class. And -- and when I use the word "larger",

2576 Mr. Lafond, what I was referring to was larger consumer of -- of power -- of electrical power. That's what I 3 was referring to. 4 And I -- I think that you and I were on the same page on that, were we not, Mr. Weins? 6 7 (BRIEF PAUSE) 9 MR. ROBIN WEINS: Well, I think you 10 were trying to equate that to the fairness criterion, and -- and I'm saying that I'm not certain that I agree 11 12 with you. I think the fairness criterion is best 13 judged by -- you know, like treatment of likes. And a 14 higher right for a thousand kilowatt hour customer as 15 compared to an 800 kilowatt hour a month customer 16 doesn't necessarily address that. It may, but it 17 doesn't necessarily do it. 18 19 CONTINUED BY MR. WILLIAM GANGE: 20 MR. WILLIAM GANGE: Okay. And I -- at 21 the risk of getting into a perhaps meaningless argument 22 with you, can I -- can I take your example of an eight 23 hundred (800) customer as opposed to a one thousand 24 (1,000) customer? The -- if the -- the customer 25 that's using 200 kilowatts more, if that person were to

- 1 reduce those -- that consumption, there would be
- 2 potentially the possibility of being able to export
- 3 that 200 kilowatts.
- 4 MR. ROBIN WEINS: But -- but by the
- 5 same token, if the 800 kilowatt hour customer were to
- 6 reduce to six hundred (600) you would have exactly the
- 7 same potential.
- MR. WILLIAM GANGE: Yes.
- 9 MR. ROBIN WEINS: You know, in order --
- 10 in order to attribute fairness in this type of a
- 11 situation, you have to make some sort of a social value
- 12 judgment about the value of one (1) customer's
- 13 consumption versus another's. And -- and I think those
- 14 types of -- those types of value-laden determinations
- 15 are really not very easy to make.
- 16 MR. WILLIAM GANGE: Okay. Thank you.
- 17 I -- I won't get into the argument any further than
- 18 that, Mr. Weins.
- 19 Would you agree with me that -- sir,
- 20 that -- that the inclining block rate maintains
- 21 universal affordability, in that on the assumption that
- 22 low income customers are -- are more likely to be low
- 23 consumption customers? The low income customers have
- 24 the advantage of the lower tier rate, and may well be
- 25 paying for all of their electricity at a rate below the

- 1 flat rate?
- MR. ROBIN WEINS: You know, in the --
- 3 in the very circumscribed situation in which -- which
- 4 you describe --
- 5 MR. WILLIAM GANGE: Yes.
- 6 MR. ROBIN WEINS: -- if low income
- 7 customers are low kilowatt hour customers and high
- 8 income customers are high kilowatt hour customers, it -
- 9 it may improve affordability. We don't know what the
- 10 rest of people's budgets are like, and all -- all the
- 11 things they have to deal with. But again you're
- 12 getting into the question of applying value to one (1)
- 13 customer as opposed to another customer.
- 14 So I'm not going to be able to travel
- 15 very far down that road with you, Mr. Gange.
- 16 MR. WILLIAM GANGE: Okay. That's fair
- 17 enough. Would you agree with me, sir --
- 18 MR. RAYMOND LAFOND: Okay. Can I --
- 19 can I --
- MR. WILLIAM GANGE: Yes, sir?
- 21 MR. RAYMOND LAFOND: -- ask Mr. Gange -
- 22 like, I'm -- I'm trying to following where you're
- 23 leading to, and what comes to my mind is in terms of --
- 24 of the discussion we're having, which is theoretically
- 25 I totally agree with you; however, in practice I'm not

- 1 sure at all how you would bring that into some kind of
- 2 order, or some kind of a sug -- a recommendation in
- 3 that, for instance -- even based on income.
- 4 You can have a wealthy single person
- 5 living in a 1,400 square foot home built five (5) years
- 6 by 2X6s, well insulated, versus the other person with
- 7 five (5) children whom -- who are teenagers and take
- 8 twenty (20) minute showers, and plus sisters from
- 9 University living at home, so a total of eight (8)
- 10 persons in that home, yes, maybe 3 or 400 square feet
- 11 more, but using a lot more electricity. And one (1) of
- 12 the reasons is because they have converted to
- 13 electricity many years ago, because they thought --
- 14 Hydro was telling them it was going to be much better,
- 15 while this new home is using gas and because prices are
- 16 much -- so where do you get there fairness, because
- 17 they're so different? Unless you brought it down to
- 18 one (1) person, whether or not they're heating with
- 19 electricity or their water heater is electricity. So
- 20 I'm not sure at all how we could deal with that.
- 21 MR. WILLIAM GANGE: Well, sir, the --
- 22 where -- where I am going is attempting to set up the
- 23 testimony of -- of Green Action Centre on -- on this
- 24 very issue. And, yes, of course there are always going
- 25 to be individual situations that -- as -- as you

- 1 described.
- 2 And -- and the testimony that I think
- 3 will be put forward by Mr. Chernick on behalf of the
- 4 Green Action Centre is that there are many regulators
- 5 and many utilities across North America that have
- 6 wrestled with this issue, including this Board
- 7 previously, including Manitoba Hydro previously, to
- 8 attempt to deal with the -- the -- this concept.
- 9 And one can never design a system that
- 10 is going to please everybody in every situation. And -
- 11 and what has to be done is to design a system that,
- 12 generally speaking, is going to be promoting issues of
- 13 fairness and -- and non-discriminatory situations.
- 14 So I -- I understand the concept, or the
- 15 -- the -- I understand that issue, but it's a bigger
- 16 issue than just drilling down to one (1) on one (1).
- 17 So that's -- that's -- hopefully that answers...
- 18 MR. RAYMOND LAFOND: Partly. And I can
- 19 -- and I can see it applying much more with larger
- 20 industrial use customers than, for instance, with -- or
- 21 -- or general use customers than, for instance,
- 22 families or individuals, because most of their
- 23 situations are very different. There can be from one
- 24 (1) person to eight (8) persons in a home, for
- 25 instance?

2581 MR. WILLIAM GANGE: I -- I agree with 1 you, sir. I agree with you on that. And -- and with that I'll continue on -- in terms of -- of the -- the 3 discussion in terms of the bene -- the potential benefits, with Mr. Weins. 6 7 CONTINUED BY MR. WILLIAM GANGE: 8 MR. WILLIAM GANGE: Would you agree 9 with me, sir, that -- I -- I mean, that one (1) of the issues that I raised was that -- that the -- the 10 implementation of a -- an inclining block structure can 11 12 operate as -- as a demand-side management measure. And 13 in that concept the inclining block structure is number 14 1) easy to implement. It -- it requires work from your 15 department, but it's -- it's relatively easy to put it 16 into place. 17 Is it not, sir? 18 MR. ROBIN WEINS: Well, I -- you know, 19 I -- I wouldn't say it's without its burdens, but, you 20 know, in terms of if -- if you make a decision that 21 that's what you want to do, yes, we -- we come to this 22 Board and we explain to them why and -- and if they 23 agree with us then they approve it and we program it 24 into our billing system. But it's actually quite a bit 25 more complicated than that, you know, as the

- 1 discussions that we've had over the last five (5) or
- 2 six (6) years are -- are testimony to.
- 3 And -- and as I think everybody in this
- 4 room, or most people in this room are aware that we --
- 5 we did, at one (1) point, implement a -- an inverted
- 6 rate structure, and in a -- in a way in which we
- 7 thought would be the easiest way to implement, which
- 8 was to do it -- to gradually increase the difference
- 9 between the blocks. And as you're aware, we
- 10 experienced some problems, because we hadn't taken into
- 11 adequate account the situation that exists within
- 12 Manitoba, with respect to availability of gas and
- 13 alternative fuels and the commitment of many people in
- 14 the province to electric heat.
- So we basically got the message through
- 16 a series of Board orders that we needed to deal with
- 17 that issue before we could bring back the question of
- 18 inclining block rates.
- 19 So easy to implement? Well, in some
- 20 respect yes, and in others, ver -- very much no.
- 21 MR. WILLIAM GANGE: And -- and what I
- 22 meant by easy to implement was that, for instance, it
- 23 does not require any new technology; it doesn't require
- 24 any fancy metering that would be a capital cost to
- 25 Manitoba Hydro and its customers.

2583 MR. ROBIN WEINS: In -- in terms of 1 hardware, yeah, I think you're -- I think you're right, and our experience proved that, that we could certainly 3 do that. But there's obviously much more to successfully implementing a change in rate methodology than just having the necessary hardware. MR. WILLIAM GANGE: And -- and as -- as 7 you stated, and -- and Mr. Warden also said the -- the same thing, that the real problem with inclining rates in Manitoba has been the electrical heat customer? 10 11 12 (BRIEF PAUSE) 13 14 MR. ROBIN WEINS: Yes, I would say 15 that's been the biggest issue over the period that we 16 actually had inverted rates in place. 17 18 (BRIEF PAUSE) 19 20 MR. WILLIAM GANGE: And, sir, in... 21 22 (BRIEF PAUSE) 23 24 MR. WILLIAM GANGE: And at -- at page 5 25 of Exhibit 4, I provided to you, sir, the Hydro

2584 response to PUB IR 1-01. And -- and in that the -what Hydro commented upon was that: 3 "Other jurisdictions such as BC Hydro have recently introduced inclining 5 block rates to replace the single rate schedule for residential 6 customers, with the objective of encouraging conservation by 9 reflecting the legacy cost of energy 10 in the first block and the marginal 11 cost of new energy in the second 12 block." 13 And would you agree, sir, that the --14 the legacy cost of energy is considerably lower than 15 the marginal cost of new energy? 16 17 (BRIEF PAUSE) 18 19 MR. ROBIN WEINS: Mr. Gange, if you'd asked me that question five (5) years ago I would have 21 said yes, without much hesitation; today I'm not so 22 certain. It does appear still to be lower, but if you 23 look at the existing rate that we're proposing for 24 residential, which is reflective of the legacy cost, it 25 is seven point two (7.2) cents a kilowatt hour. And

2585 our estimate of marginal cost, looking forward, the long run marginal cost is eight and a half (8 1/2) cents. To -- to me that is close enough to say that we 3 are approximating marginal cost today in the residential rate. 6 MR. WILLIAM GANGE: When you say that -- that eight (8) cents, is that the average cost? The -- the marginal cost, with respect to the new generation, is significantly higher than eight (8) 10 cents, is it not, sir? 11 MR. ROBIN WEINS: I -- I'll have to 12 state this subject to check, but the marginal cost is 13 based upon a levelized value over the next twenty (20) years or so, which captures, you know, the cost of... 14 15 16 (BRIEF PAUSE) 17 18 MR. ROBIN WEINS: So I -- I'm advised 19 that the -- that the incremental cost of new generation is also with -- within that -- that type of a range of 21 eight (8) -- eight (8) cents or so, eight and a half (8 22 1/2) cents a kilowatt hour. 23 So that -- that is the marginal energy 24 cost that we're looking at going forward. It doesn't 25 capture all of the -- it doesn't capture the -- for

2586 example, the distribution marginal costs, but those are a relatively small part of the marginal cost of energy looking forward for the residential customer. So, yes, I think you probably do have room to raise residential rates to reflect marginal costs, but it's not the kind of room that we thought we had five (5) years ago. 7 8 MR. RAYMOND LAFOND: Marginal costs would include transmission? 9 10 MR. ROBIN WEINS: Generation, 11 transmission, distribution, and customer related costs, 12 as well. 13 14 CONTINUED BY MR. WILLIAM GANGE: 15 MR. WILLIAM GANGE: Sir, if you look at page 10 of Exhibit 4. So this is from Board Order 17 number 116/'08. And under inverted rates the Board 18 said that it: 19 "Encourages Manitoba Hydro to develop 20 plans to employee an inverted rate 21 structure for all customer classes, 22 initially to be designed on a revenue 23 neutral to Manitoba Hydro basis, and 24 to send a price signal for every

kilowatt hour of energy used to

- 1 promote conservation."
- 2 Has -- has Manitoba Hydro ever prepared
- 3 a study with respect to inverted rates or inclined
- 4 block rate?
- 5 MR. ROBIN WEINS: If you're referring
- 6 to the general application of inclining block rates
- 7 among all classes, no, Manitoba Hydro has not.
- 8 MR. WILLIAM GANGE: Has -- has Manitoba
- 9 Hydro done anything with respect to complying with the
- 10 Board encouragement, as -- as disclosed on page 10 of
- 11 Exhibit 4?
- 12 MR. ROBIN WEINS: Mr. Gange, well, step
- 13 back for a minute. That's not quite true. We
- 14 certainly did not look at the details associated with
- 15 application of marginal costs rates to any class other
- 16 than the residential class. But the Board -- the Board
- 17 will be familiar -- perhaps the current membership, not
- 18 so much.
- 19 But we did file with the Board back in
- 20 2008, I believe, a study that was undertaken for -- on
- 21 our behalf by National Economic Research Associates
- 22 that looked at the broad principles around marginal
- 23 cost pricing of electricity to Manitoba customers in
- 24 all groups. But we didn't look at any specific types
- 25 of design.

- 1 MR. WILLIAM GANGE: Has -- has there
- 2 been a study undertaken with respect to the residential
- 3 class to attempt to address the issue of the electric-
- 4 heat customer and the problem faced by that customer?
- 5 MR. ROBIN WEINS: Not formally,
- 6 although, it's certainly the intent of Manitoba Hydro
- 7 to look at how we would deal with it most appropriately
- 8 with electric heat in the context of an inclining block
- 9 rate structure.
- 10 MR. WILLIAM GANGE: And -- and when you
- 11 say, Mr. Weins, it's -- it's the intention of Hydro to
- 12 do so, that study though hasn't -- hasn't yet been
- 13 undertaken?
- 14 MR. ROBIN WEINS: No, it's not.
- MR. WILLIAM GANGE: Is there a
- 16 timeline? Is it -- is it on the list of to-dos?
- MR. ROBIN WEINS: We don't have a
- 18 specific timeline. It is on the list of to-dos,
- 19 looking forward. But there's no specific timeline
- 20 that's set.
- 21 MR. WILLIAM GANGE: Okay, thank you.
- 22 One (1) of the things that came out of the position of
- 23 -- of -- well, first of all, the November 6th letter
- 24 from the PUB to the parties talked about setting up a -
- 25 a stakeholder conference to discuss cost of service

2589 and time-of-use rate review. And -- and the rebuttal of Manitoba Hydro at pages 45 and 46 said that Manitoba Hydro is prepared to consider a stakeholder conference on these matters once the current GRA, including the cost of service and time-of-use rate review, is concluded. 7 Do you recall that, sir? MR. ROBIN WEINS: Yes, I do. 9 MR. WILLIAM GANGE: The concept of a 10 stakeholder conference though is -- they -- the -- the 11 rebuttal went -- also went on to say: 12 "A technical conference would not, 13 however, be intended to solicit 14 alternatives to its already filed 15 proposal." 16 That's at page 45 of the rebuttal. 17 MR. ROBIN WEINS: I do recall that. 18 MR. WILLIAM GANGE: What did you mean 19 by that, that it would not be intended to solicit alternatives? 20 MR. ROBIN WEINS: We have a cost of 21 service study that's before the Board. We have a time-22 23 of-use rate proposal that's since superceded by the 24 November 6th filing; but nevertheless, that, at least conceptually, is still before the Board and has been

- 1 delayed beyond the timing for these particular
- 2 hearings.
- 3 And the comment that you have just
- 4 referenced was intended to say -- was intended to say -
- 5 those proposals have already been filed. If we
- 6 organize a stakeholder conference with respect to those
- 7 particular proposals, we're not asking for alternatives
- 8 to be filed. If we were -- I -- I believe that,
- 9 conceptually, you were referencing -- you were
- 10 referencing issues like inclining block rates, which
- 11 we're saying we -- we are prepared at some point to
- 12 look at stakeholder conferences, but not in the same
- 13 timing as we want to look at the issues that we've
- 14 already filed --
- MR. WILLIAM GANGE: Okay.
- 16 MR. ROBIN WEINS: -- with the Public
- 17 Utilities Board.
- 18 MR. WILLIAM GANGE: Thank you. Do I
- 19 understand you, sir, to be saying that -- that, for
- 20 instance, a workshop on rate options outside of the
- 21 current process, but -- but to be set up perhaps by the
- 22 Public Utilities Board or administered by the Public
- 23 Utilities Board, that Hydro would be prepared to be
- 24 soliciting alternatives to the current rate structure?
- MR. ROBIN WEINS: Apart from the

```
2591
   existing time-of-use proposals -- proposal and the cost
   of service study material, I -- I'm not -- I'm not in a
   position to commit Manitoba Hydro to that. But I'm
   saying that we're certainly prepared to consider it.
5
 6
                          (BRIEF PAUSE)
                  MR. WILLIAM GANGE:
                                        I -- I don't have
   the reference for you, sir, but I believe that during
   the opening comments Mr. Warden made a comment that it
10
   would be Hydro's preference that a change in the rate
11
12
   design, that -- that there should only be, at -- at
13
   most, one (1) per year. I -- I-- and I don't believe
14
   that you were present.
15
                  But -- but would that comment come as a
16
   surprise to you?
17
                  MR. ROBIN WEINS:
                                     No, it wouldn't.
18
                  MR. WILLIAM GANGE:
                                       No. And so the --
19
   in -- in that kind of a situation, sir, the -- the
   current proposal before the Board is for a flat rate to
21
   be implemented and -- as -- as you discussed with Mr.
22
   Peters, across the board, varying, as you -- as you
23
   pointed out, within the classes, but -- but generally,
24
   an across-the-board increase of -- at 3.5 percent?
25
                  MR. ROBIN WEINS: For cost revenues,
```

- 1 yes.
- MR. WILLIAM GANGE: Yes. And so that -
- 3 that the -- Hydro would be opposed to suggestion that
- 4 -- that, in fact, when the Board reconvenes in the next
- 5 hearing and -- and is considering rate designs at -- at
- 6 that hearing, that -- that, for instance, an inclined
- 7 block structure be implemented?
- MR. ROBIN WEINS: I need some
- 9 clarification on what you mean by "the next hearing".
- 10 MR. WILLIAM GANGE: The next -- what --
- 11 what -- we deferred a number of issues and -- and --
- 12 time-of-use costs, but also the -- the larger picture
- 13 of rate design was deferred to -- to the hearing at --
- 14 at some ill-defined time which currently is just, as I
- 15 understand it, the spring.
- 16 MR. ROBIN WEINS: We have the same
- 17 understanding, Mr. Gange. And in that context, I -- I
- 18 -- Manitoba Hydro would very, very much like to
- 19 implement any rate changes that are approved by this
- 20 Board for April the 1st of 2013. And I have some
- 21 difficulty imagining that we can complete the portions
- 22 of this Application which have been deferred in time
- 23 for April the 1st of 2013.
- 24 So we would have to have some kind of
- 25 position on when we wanted to implement any rate

2593 changes, concepts, proposals, that come out of that process. And what Mr. Warden is saying is that he would prefer not to do it more than once a year. So I 3 would be looking in that context of probably implementation of changes coming forth in -- probably for the following April of 2014. 7 But I -- I don't -- you know, I don't know for sure how that process of review is going to unfold, so I'm commenting hypothetically. And maybe I've already said more than I should. 10 11 MR. WILLIAM GANGE: Thank you, sir. 12 And if you could look at page 12 of Exhibit 4. And 13 this is an excerpt, sir, from Board Order 5/12 where, in the final Order 5/12 the Board, as -- as its first 14 15 finding under, Section 20.12.0: 16 "The Board requires Manitoba Hydro to 17 file preliminary reports and status 18 updates on inverted rates with the 19 view to creating a significantly 20 higher-priced second energy block, 21 but providing an accommodation to 22 electric-heat customers, some of 23 which do not have access to natural 24 gas for heating." 25 That's what we were just talking about,

2594 sir. You don't have a timeline for when Manitoba Hydro will satisfy the requirement of the Board with respect to inverted rates? 3 MR. ROBIN WEINS: I don't have a timeline today, no. 6 7 (BRIEF PAUSE) 9 MR. WILLIAM GANGE: Thank you, Mr. Weins, that concludes my questioning. Thank you very 10 11 much, Mr. Chair. 12 MR. RAYMOND LAFOND: I have a question. 13 Mr. Gange, based on your questioning and presentation, 14 would you recommend, essentially, to start 15 approximating to some extent inclining rates, that the 16 basic monthly charge be removed? 17 MR. WILLIAM GANGE: I don't believe 18 that that's part of Mr. Chernick's testimony. He'll be 19 here next week, Monsieur -- Monsieur Lafond, and you can certainly ask him about that. 21 I -- what I -- what I would -- you've 22 asked me what I would recommend to you. I -- I'm going 23 to go on a different tangent. I think that it's 24 unfortunate that Board Order 5/12, that that requirement has not yet been complied with. I think it

- 1 would be helpful to everybody if -- if that requirement
- 2 were repeated in this hearing by -- by this Board.
- 3 We -- we did -- I -- I can say, Monsieur
- 4 Lafond, Professor Miller is -- is reminding me that the
- 5 Green Action Centre or -- under its previous acronym,
- 6 supported Manitoba Hydro's position at the last hearing
- 7 of lowering the basic charge by -- I can't exactly
- 8 remember the amount, but it was a couple of dollars, I
- 9 believe.
- 10 Mr. Weins...? It was something like
- 11 that.
- MR. ROBIN WEINS: By a dollar per year.
- MR. WILLIAM GANGE: Okay, thank you.
- 14 So we did -- we did support that position. And I --
- 15 and I do think, more than that, Mr. Chernick would be
- 16 happy to respond to any questions that you have about
- 17 the inclined block rate next week.
- 18 THE CHAIRPERSON: I'm looking at the
- 19 time, and we have some time available. And I wonder,
- 20 Mr. Williams, are you prepared to step into the breach?
- 21 MR. BYRON WILLIAMS: I'm not sure I can
- 22 fill the -- the shoes of either Mr. Peters or My -- My
- 23 Friend, Mr. Gange. I'm certainly ready. I do have
- 24 some materials to distribute. So, Mr. Chair, I wonder
- 25 if we could stand down for just a few minutes for that

2596 purpose. 2 THE CHAIRPERSON: Let's take ten (10) minutes. Thank you. 3 4 5 --- Upon recessing at 3:07 p.m. --- Upon resuming at 3:20 p.m. 7 THE CHAIRPERSON: I believe we're ready 9 to resume proceeding, so over to you, Mr. Williams. 10 MR. BYRON WILLIAMS: Yes, and hopefully 11 I'll -- I'll just be referring to two (2) documents. 12 One (1) is a new assembly of CAC supporting materials, which I believe should be marked as CAC Exhibit number 13 8 and it should -- I'm not sure if the panel has it --15 it does, okay. 16 17 --- EXHIBIT NO. CAC-8: CAC supporting materials 18 19 CROSS-EXAMINATION BY MR. BYRON WILLIAMS 20 MR. BYRON WILLIAMS: And so, Mr. Weins, 21 we'll spend a bit of time on that. The other thing you 22 may want to have available is from my friend Mr. 23 Peters, his Volume III, and specifically page 417. We 24 wont be there for a while but -- or for a few minutes anyways, but if you just want to have it nearby.

2597 1 And Mr. Weins, you have those documents? 2 MR. ROBIN WEINS: I do. 3 MR. BYRON WILLIAMS: And on behalf of our clients, Mr. Weins, let us say that it's great to have you back looking as exceedingly fit as -- as you 6 do. 7 MR. ROBIN WEINS: Thank you for your kind words, Mr. Williams. 9 MR. BYRON WILLIAMS: And just for the 10 panel's benefit, I'm going to spend a little time on -on de -- issues related to diesel. We've eliminated a 11 bit of our -- our material, given Mr. Peters's work, but we still have a bit to cover and then we'll be 13 14 going to the issue of price elasticity which -- or the 15 responsiveness of consumers to price signals, which 16 both the panel this morning and my friend Mr. Gange, touched upon. So, those will be the two (2) subjects 17 18 that we -- we hope to cover. 19 Mr. Weins, just recognizing that there are a number of interim diesel orders as well as --21 before this panel. I wonder if you can -- you would 22 agree to assist me and assist the panel in just at a --23 I'll -- and I'll walk you through it, but at a high 24 level, walking through a bit of the history of this

25 diesel file?

- 1 MR. ROBIN WEINS: We can do that.
- 2 MR. BYRON WILLIAMS: And back to a time
- 3 when I was better looking, Mr. -- Mr. Weins. It's hard
- 4 to believe. But -- if -- if we -- there's an
- 5 inordinate amount of heckling Mr. Chair.
- 6 Sorry, Mr. Weins. But if we think of
- 7 the diesel file back pre the 2004 agreement, it would
- 8 be fair to say that there had been a large accumulated
- 9 deficit accrued relatable to variable and capital
- 10 costs?
- MR. ROBIN WEINS: Well, it was related
- 12 to all the costs that were incurred to provide service
- 13 in the diesel community. That was simply the volume of
- 14 cost that had not been recovered to March the 31st of
- 15 2004, from the rates that were charged.
- 16 MR. BYRON WILLIAMS: Fair enough. And
- 17 I appreciate that. And so, in addition to, kind of,
- 18 the -- the large accumulation of historical costs not
- 19 recovered in rates, would it be fair to say that there
- 20 was also an impassioned debate on a going-forward basis
- 21 in terms of who should be responsible for -- for costs
- 22 going forward from that 2004 date?
- 23 MR. ROBIN WEINS: Well, there was
- 24 certainly some discussion about it.
- MR. BYRON WILLIAMS: Now, you indicated

- 1 to My Friend, Mr. Peters, that -- and -- and directing
- 2 your attention certainly to page 1 of CAC Exhibit 8,
- 3 you indicated to My Friend, Mr. Peters, that there was
- 4 an agreement reached in -- in the early part of 2004,
- 5 Mr. Weins? Agreed?
- 6 MR. ROBIN WEINS: There was a tentative
- 7 settlement arrived at about July of 2004.
- 8 MR. BYRON WILLIAMS: And one aspect of
- 9 that tentative sent -- settlement dealt with a
- 10 mechanism to address the pre-2004 deficit, correct?
- MR. ROBIN WEINS: Yes.
- MR. BYRON WILLIAMS: And just --
- 13 without getting into too many details, it would be fair
- 14 to say that certainly Manitoba Hydro agreed to kick in
- 15 certainly in the range of \$17 million to help eliminate
- 16 the then accumulated deficit.
- Would that be fair, sir?

18

19 (BRIEF PAUSE)

- 21 MR. ROBIN WEINS: Yes, that's correct,
- 22 Mr. Williams.
- 23 MR. BYRON WILLIAMS: And, Mr. -- Mr.
- 24 Weins, just referring you to page 3 of CAC 8.
- 25 Hopefully, this is the right reference, but there was

- 1 also an agreement, without getting into too many
- 2 details, by -- by what was then known as INAC, to -- to
- 3 make a contribution to some of the deficit that had
- 4 accumulated prior to 2004, agreed?
- 5 MR. ROBIN WEINS: No, that's not quite
- 6 correct. What we were looking for and sub --
- 7 subsequently became part of the agreement, was that we
- 8 would recover the capital costs which had not yet been
- 9 depreciated in the diesel zone via contributions rather
- 10 than through a rate, and that is what INAC agreed to
- 11 support.
- MR. BYRON WILLIAMS: Thank you for
- 13 that, Mr. Weins. And just so I'm clear though, in
- 14 terms of the recovery of the capital cost, was -- and
- 15 I'm not looking at the post 2004 period, what -- did
- 16 INAC also agree to make a contribution to the costs
- 17 pre-2004?
- MR. ROBIN WEINS: Oh, definitely,
- 19 definitely. If you're referring to page 3 that is what
- 20 this is referring to.
- 21 MR. BYRON WILLIAMS: So what -- what
- 22 this represents looking to page 3, which is the
- 23 Corporation's response to CAC/Manitoba Hydro Diesel 1
- 24 da -- First Round 13B is contributions made by what was
- 25 then known as INAC, as well as other Federal and other

- 1 provincial agencies, to the deficit that had accrued
- 2 prior to 2004?
- 3 MR. ROBIN WEINS: No, not the deficit.
- 4 MR. BYRON WILLIAMS: The capital costs.
- 5 MR. ROBIN WEINS: The capital that was
- 6 included that had not been depreciated and that was
- 7 still in service for the four (4) diesel communities.
- MR. BYRON WILLIAMS: Yeah, and I was
- 9 imprecise. So what this represents is a contribution
- 10 to the capital that had been not yet depreciated, but
- 11 that had been in -- in place prior to 2004?
- MR. ROBIN WEINS: Correct.
- 13 MR. BYRON WILLIAMS: And in terms of
- 14 what was then known as INAC, it made a contribution in
- 15 the range of \$20 million plus interest, agreed?
- MR. ROBIN WEINS: Yes.
- 17 MR. BYRON WILLIAMS: And the
- 18 contribution of the other Federal and the other
- 19 provincial agencies was in the range of a million
- 20 dollars?
- 21 MR. ROBIN WEINS: Well, this refers to
- 22 payments received after July 7, 2005. So, from my
- 23 recollection, this would not have included the entire
- 24 contribution of those agencies, because some of it was
- 25 made before July the 7th, 2005.

PUB - MANITOBA HYDRO GRA 01-08-2013 2602 MR. BYRON WILLIAMS: And -- and I thank 1 you for this, Mr. Weins. This is all -- all though looking at that capital that had not been depreciated 3 prior to 2004? 5 MR. ROBIN WEINS: Yes, it is. 6 MR. BYRON WILLIAMS: Now I see that, in terms of the other Federal and other provincial agencies, interest was not charged to them in respect of these payments. 10 Is that right, sir? 11 MR. ROBIN WEINS: To my recollection 12 that's correct. 13 MR. BYRON WILLIAMS: And why was that? 14 MR. ROBIN WEINS: Well, in part it 15 would certainly be because the obligation to make these 16 payments was presented to them as -- they could do it 17 in a lump sum at the time, which some of them did, or 18 they could -- they would be charged -- at that time we 19 had two (2) approved rates for government customers in the diesel zone and they could elect to continue paying the higher rate until the contribution -- or the amount 21

- 23 (2) payments, and some opted to continue to pay the
- 24 higher rate, and we simply did not elect to apply
- 25 interest to it at that time.

22

was amortized. Some paid immediately, some paid in two

- 1 Whereas, with INAC, as they were known
- 2 then, we had a specific agreement that called for them
- 3 to pay a specific amount, and on any amounts that were
- 4 paid after a certain date that -- that there would be
- 5 interest that would be chargeable to it.
- 6 MR. BYRON WILLIAMS: So to the extent
- 7 that interest wasn't charged, that would be borne by
- 8 the grid customers, sir?
- 9 MR. ROBIN WEINS: It would flow through
- 10 the Hydro's bottom-line, which I guess is the same
- 11 thing.
- 12 MR. BYRON WILLIAMS: Now -- now, Mr.
- 13 Weins, as we look to the agreement reached as -- as
- 14 you've indicated, tentatively in July of 2004,
- 15 conceptually moving forward the -- the idea was to have
- 16 the funding of capital expenditures and related annual
- 17 fixed costs funded through customer contributions
- 18 rather than -- than rates, agreed?
- 19 MR. ROBIN WEINS: Well, yes, certainly
- 20 the vast majority of capital expenditures we were
- 21 expecting, as part of this agreement, we would fund by
- 22 capital contribution.
- MR. BYRON WILLIAMS: Now, just
- 24 directing your attention to page 7 and 8 of CAC-8, Mr.
- 25 Weins. And you had a discussion with My Friend Mr.

- 1 Peters, in terms of the post-2004 accumulated operating
- 2 cost deficit in the diesel zone.
- 3 Do you recall that discussion, sir?
- 4 MR. ROBIN WEINS: Yes, I do.
- 5 MR. BYRON WILLIAMS: And -- and just
- 6 for the purposes of clarity, Mr. -- Mr. Weins, I
- 7 believe you estimated that figure to be in -- about \$8
- 8 million, earlier in your discussion with Mr. Peters?
- 9 MR. ROBIN WEINS: That was my
- 10 recollection.
- MR. BYRON WILLIAMS: And if we look to
- 12 page 7 of CAC-8, being a excerpt from Order 134/'10, it
- 13 seems to be suggesting that the calculated post-2004
- 14 accumulated deficit was -- was \$7 million to the end of
- 15 March 2010.
- 16 Mr. Wein, not a -- a lot -- Weins -- not
- 17 a lot turns on it, but is that -- do you have any sense
- 18 of whether the 7 million or the 8 million is a more
- 19 accurate figure, sir?
- 20 MR. ROBIN WEINS: Well, I would say at
- 21 that time that it -- it references that the 7 million
- 22 would be more accurate. You know, over that period of
- 23 years internally we made several calculations and the
- 24 number changed from one (1) to the other, which is why
- 25 I'm remembering a ballpark number rather than a precise

- 1 amount.
- This would reference the end of March
- 3 2010 and I would accept that.
- 4 MR. BYRON WILLIAMS: And that figure in
- 5 the range between 7 and \$8 million was -- in essence,
- 6 Manitoba Hydro did not seek to recov -- cover that from
- 7 the diesel customers?
- MR. ROBIN WEINS: That's correct.
- 9 MR. BYRON WILLIAMS: It essentially
- 10 forgave it?
- MR. ROBIN WEINS: Well, what we said at
- 12 the time was that we were not going to consciously, or
- 13 as -- as a matter of deliberate intent, try to recover
- 14 it. We would track it. There was some expectation in
- 15 some cases, in some years, we may actually achieve
- 16 surpluses that would offset it, but that, to the extent
- 17 that it was not recovered by such surpluses, that, yes,
- 18 it would be -- it would be forgiven or absorbed in
- 19 Manitoba Hydro's bottom-line.
- 20 MR. BYRON WILLIAMS: And the bottom-
- 21 line, again, is the grid customers, sir; were you
- 22 equating them?
- 23 MR. ROBIN WEINS: That is the bottom-
- 24 line.
- MR. BYRON WILLIAMS: And -- and I

2606 believe, Mr. Weins, just -- and subject to check, the -- the deficit in the 2010/'11 year would have been in the range of 1.4 or \$1.5 million, sir? 3 MR. ROBIN WEINS: I think we discussed that earlier and that -- that sounds right. 6 MR. BYRON WILLIAMS: Now, Mr. Weins, 7 just directing you -- your attention to pages 14, roughly through 18. But start at page 14 of CAC 9 Exhibit 8. 10 Would it be accurate to say that in terms of post-2004 capital expenditures, Hydro has not 11 12 received contributions from any government agency, 13 other than what we now know as AANDC? 14 MR. ROBIN WEINS: That would be 15 correct. 16 17 (BRIEF PAUSE) 18 19 MR. BYRON WILLIAMS: And, Mr. Weins, ballpark -- and I'm not sure if page 18 will assist you with this or not. But can -- can you estimate --21 22 estimate what is owed, in -- in terms of capital 23 contributions from these other government agencies? 24 MR. ROBIN WEINS: I'm -- I'm advised

the most recent number we have is eight hundred and

- 1 fifty-six thousand dollars (\$856,000)
- MR. BYRON WILLIAMS: Okay. And, sir,
- 3 that -- that eight hundred and fifty-six thousand
- 4 (856,000), would I -- would I be correct in suggesting
- 5 that it does not include interest? Or -- or does it?
- 6 MR. ROBIN WEINS: Does not include
- 7 interest.
- 8 MR. BYRON WILLIAMS: And would -- would
- 9 I also be correct in suggesting it doesn't include any
- 10 cost associated with Brochet soil remediation?
- 11 MR. ROBIN WEINS: That would also be
- 12 correct.
- 13 MR. BYRON WILLIAMS: So certainly, if
- 14 one threw in interest and Brochet soil remediation, one
- 15 might be getting closer to a million dollars, sir?
- 16 MR. ROBIN WEINS: That sounds likely.
- 17 MR. BYRON WILLIAMS: Now, Mr. Weins,
- 18 directing your attention to page 16, my understanding
- 19 is that Manitoba Hydro did send out letters, seeking to
- 20 collect these capital contributions, some dating back a
- 21 number of years, to potential contributors in August of
- 22 2012, agreed?
- MR. ROBIN WEINS: Yes.
- 24 MR. BYRON WILLIAMS: And to date, is it
- 25 -- it's -- it's accurate to say that you've not

```
2608
   received any contribution from -- for the post-2004
   capital expenditures?
 3
                  MR. ROBIN WEINS: That's correct.
 5
                          (BRIEF PAUSE)
 6
 7
                  MR. BYRON WILLIAMS: Mr. Weins, just
   peeking at -- at page 18 of CAC Exhibit 8, and you'll
   agree with me that it's a response to an Information
   Request CAC/Hydro 1-94(c)?.
10
11
                   MR. ROBIN WEINS: Sure.
12
                   MR. BYRON WILLIAMS: And, Mr. Weins, is
13
   -- is this -- directing your attention to the column,
    "Capital costs," does this suggest that the post-2004
14
15
   capital costs associated with diesel sites has been
16 about $12.4 million?
17
                   MR. ROBIN WEINS: Yes, it does.
18
                   MR. BYRON WILLIAMS: And to date, AANDC
19
   has paid in the range of $7 million, recognizing that -
   - that this total may not reflect the Tadoule Lake
21
   major overhaul generation figure?
22
23
                          (BRIEF PAUSE)
24
25
                   MR. ROBIN WEINS: The may -- the
```

- 1 Tadoule major overhaul is listed here as part of the
- 2 total capital costs. What's not listed is any
- 3 contribution in respect of it, because I believe that
- 4 one has not yet been finalized. But there's another
- 5 item here that's since 2004, which is a genset that was
- 6 added at Tadoule Lake for which a contribution was
- 7 received from AANDC. And we've discussed this at
- 8 previous hearings, for which continual contribution has
- 9 been received from other government customers.
- 10 MR. BYRON WILLIAMS: So, so, Mr. Weins,
- 11 just so I understand that point, is that non-
- 12 contribution from other government customers reflected
- 13 on -- on this table?
- 14 MR. ROBIN WEINS: Well, the item isn't
- 15 mentioned at all on this table, so the contribution or
- 16 non-contribution is not reflected either.
- 17 MR. BYRON WILLIAMS: Without going to
- 18 too much difficulty, Mr. Weins, would it be possible to
- 19 update this table to reflect that additional capital
- 20 cost?
- 21 MR. ROBIN WEINS: Yeah, I -- I would
- 22 suggest that it's more in the nature to expand rather
- 23 than to update, because I believe it's the oldest item
- 24 -- it's the oldest item on here, or would be if it were
- 25 here.

2610 MR. BYRON WILLIAMS: So the undertaking 1 would be to -- forgetting your words, Mr. Weins, I think you said add --3 MR. ROBIN WEINS: To add it onto. 4 5 MR. BYRON WILLIAMS: Add the additional item related to the Tadoule Lake generation that is not reflected on this current table. 7 8 MR. ROBIN WEINS: That's right. 9 10 --- UNDERTAKING NO. 55: Manitoba Hydro to add the 11 item related to Tadoule 12 Lake generation that is not 13 reflected on the current 14 table 15 CONTINUED BY MR. BYRON WILLIAMS: 17 MR. BYRON WILLIAMS: Now, Mr. Weins, 18 you had a discussion with My Friend, Mr. Peters, about the -- the one (1) of the -- well, the major item to which Manitoba Hydro and Brochet have not reached 21 agreement. 22 And that is the \$2.87 million soil remediation associated with Brochet? 23 24 MR. ROBIN WEINS: Yes. 25

2611 1 (BRIEF PAUSE) 2 MR. BYRON WILLIAMS: So, Mr. Weins, 3 just asking you to -- to turn to page 23 of CAC Exhibit 8, which is Appendix 11.1 -- or, you'll agree with me, is a excerpt from Appendix 11.1, Schedule 3? MR. ROBIN WEINS: Yes. 7 MR. BYRON WILLIAMS: And if we go down to the bot -- the bottom line on the -- on the bottom right-hand column, we see that seven hundred and forty-10 11 seven thousand, six hundred and seven dollar figure 12 (\$747,607) which represents the depreciation expense 13 and the interest expense that Manitoba Hydro wishes to add to the cost of service for -- for the diesel 14 15 communities, agreed? 16 MR. ROBIN WEINS: Well, in fact, that we have added to the cost of service as it's presented 17 18 in this Application. 19 MR. BYRON WILLIAMS: And just so I understand it, sir, this wouldn't -- am I correct in 21 suggesting to you that this only reflects the AANDC 22 outstanding capital and deprec -- and interest, or does 23 it also reflect the outstanding capital and interest 24 from other government? 25 MR. ROBIN WEINS: Are you referring to

2612 the seven hundred and forty-seven --2 MR. BYRON WILLIAMS: Yes, I am, sir. 3 MR. ROBIN WEINS: -- thousand It would reflect the amount that would be 4 (747,000)? applicable to all contributors, simply because if AANDC was a signatory to the agreement, was not prepared to make that contribution, we didn't -- we determined that 7 it wouldn't be reasonable to ask the other government customers to make it in the form of a contribution. we would calculate the whole amount and put it into the 10 cost of service, if you will, the current year cost 11 12 service, depreciation and interest on those amounts. 13 MR. BYRON WILLIAMS: And just so I'm 14 clear, Mr. Weins, leaving aside the soil rem --15 remediation, if we look to other categories for 16 interest expense, that would be Manitoba Hydro's 17 calculation of the interest expense owed by both the 18 AANDC and the other government? 19 MR. ROBIN WEINS: Correct. 20 21 (BRIEF PAUSE) 22 23 MR. BYRON WILLIAMS: Timing-wise, Mr. 24 Weins, do you have any thoughts on the appropriateness 25 of seeking to include the other government costs, given

2613 that you didn't take efforts to -- by correspondence, anyways -- to recover it until August of 2012? 3 MR. ROBIN WEINS: Could you repeat that, please? 5 MR. BYRON WILLIAMS: How about I ask it 6 better? 7 MR. ROBIN WEINS: Either would work. MR. BYRON WILLIAMS: Mr. Weins, just in terms of outstanding amounts from the -- from the government, other than AANDC, we've agreed that 10 Manitoba Hydro didn't send correspondence seeking 11 12 recovery until August of 2012? 13 MR. ROBIN WEINS: That's correct. 14 MR. BYRON WILLIAMS: And so my question 15 to you, sir, is -- is whether, given how relatively new 16 Hydro's efforts are in terms -- at least 17 correspondence, in terms of recovering it, whether it's 18 -- whether, in your view it's -- it's -- this is the 19 most appropriate time to try and include it, in terms of the cost of service, sir? MR. ROBIN WEINS: Well, I'm not sure 21 22 that there is any appropriate time that's more 23 appropriate than any other to include it. It's either costs that, for various reasons, we were not able to 24

seek or we did not seek recovery of them, and they were

- 1 incurred at various times in the past.
- What's included in here is interest from
- 3 the date of the in-service. It's -- it's laid out
- 4 there for the Board and for participants to see.
- 5 Whether it will be possible to recover those costs at
- 6 all is in part -- it's, in part, a decision of the
- 7 Board. If they believe that interest should accrue
- 8 only from August the 10th of 2012, then that would be
- 9 what Manitoba Hydro would do.
- 10 MR. BYRON WILLIAMS: Mr. Weins, we'll -
- 11 I thank you for that, and certainly my client will
- 12 reflect upon it. Turning to page 24 of CAC Exhibit 8,
- 13 and specifically the -- the second-last paragraph and,
- 14 really, the last two (2) lines.
- Just to make sure my understanding is
- 16 correct, you've indicated already, sir, in your
- 17 conversation with -- with My Friend, Mr. Peters, that
- 18 the rate that Manitoba Hydro is seeking, with regard to
- 19 government customers being two dollars and twenty-seven
- 20 cents (\$2.27) per kilowatt hour, is less than the in --
- 21 indicative rate under the approved form -- let me back
- 22 up. It's less than the indicative rate of two dollars
- 23 and fifty-four cents (\$2.54).
- Is that right, sir?
- MR. ROBIN WEINS: Yes.

2615 1 (BRIEF PAUSE) 2 MR. BYRON WILLIAMS: We're going to 3 jump a few pages, Mr. Weins, to page 30. I believe you've indicated in my -- in conversations with My Friend, Mr. Peters, that a final compilation of the costs associated with diesel in the 2011/2012 year has not yet been completed. 9 Is that correct, sir? 10 MR. ROBIN WEINS: That's correct. 11 MR. BYRON WILLIAMS: Is it accurate to say though that the revenues are some -- a bit more 13 than three hundred thousand (300,000) lower than 14 projected? 15 MR. ROBIN WEINS: Yes, it is. 16 MR. BYRON WILLIAMS: And, Mr. Weins, in turn -- in the events that the costs remain the same 17 18 but the revenues are -- are lower, would it be accurate 19 to say that those costs would flow to the bottom line of Hydro and to the grid? 21 MR. ROBIN WEINS: Yes. 22 MR. BYRON WILLIAMS: Mr. Weins, at --23 just -- this will be the one reference to Board counsel 24 -- Board counsel's document, page 417. 25 You'll recall your conversation with My

```
2616
   Friend, Mr. Peters, in terms of the projected loss for
   the 2012/'13 year of $1.4 million, sir.
                   You recall that?
 3
                   MR. ROBIN WEINS: Yes.
 5
                   MR. BYRON WILLIAMS: And am -- am I
   correct in suggesting that was based upon an assumption
   of revenue of $6.4 million?
 7
 8
 9
                          (BRIEF PAUSE)
10
                  MR. BYRON WILLIAMS: As set out on the
11
   right-hand side, Mr. Weins, under '12 --
13
                   MR. ROBIN WEINS: I -- I do see it.
14
   I'm just trying to place it all in context and get the
15
   time right as well. So it looks as if this was filed
   on July the 6th of this year, so based on the rates
17
   that we were requesting at that time...
18
                   MR. BYRON WILLIAMS: I've got an answer
19
   for you for -- for that, Mr. Weins, if you're --
20
                   MR. ROBIN WEINS: I thought you were
21
   supposed to ask the questions.
22
23
                          (BRIEF PAUSE)
24
25
                   MR. BYRON WILLIAMS: Well, let's --
```

- 1 let's start with this one (1), sir. Can -- the -- the
- 2 calculation of the \$1.4 million deficit reflected in
- 3 Schedule 4.4, as presented here, was based on an
- 4 assumption of revenue of \$6.4 million, agreed?
- 5 MR. ROBIN WEINS: Yes.
- 6 MR. BYRON WILLIAMS: And flipping you
- 7 back to my book, Mr. Weins, at page 32, specifically to
- 8 your -- Hydro's response to CAC-1-93(e), would it be
- 9 correct to suggest that that revenue figure might be
- 10 overstated by about one hundred and fifty thousand
- 11 dollars (\$150,000)?
- 12 MR. ROBIN WEINS: Yes, based on the
- 13 fact that these rates didn't come into effect until
- 14 September the 1st.
- 15 MR. BYRON WILLIAMS: So all other
- 16 things being equal, Mr. Weins, the -- the net loss
- 17 would be an additional hundred and fifty thousand
- 18 (150,000) higher?
- 19 MR. ROBIN WEINS: That would be a
- 20 reasonable inference, assuming everything else
- 21 progresses to the end of the year as it was forecast at
- 22 that time.
- 23 MR. BYRON WILLIAMS: Mr. Weins, thank
- 24 you for that quick review of diesel history. I may
- 25 have a few more questions on it, but I -- I don't

2618 anticipate many. 2 I'd like to -- to turn to -- to a discussion of the response of consumers to price. Mr. Weins, you'll recall in your -- if you're looking for references in the -- in the CAC materials, we're not going to be there for a couple minutes, but you can 7 start at page 41. 8 9 (BRIEF PAUSE) 10 11 MR. BYRON WILLIAMS: Mr. Weins, you'll 12 recall in your discussion with Mr. Peters this morning, 13 in terms of the proposed rate increases for the 14 residential class and focussing on the energy charge 15 rather than the -- the other charge, a key rationale you offered was that -- that Manitoba Hydro was trying 17 to approximate -- try -- trying to approximate the 18 marginal cost of energy and that the energy rate had 19 the most influence on usage. 20 Did I cap -- capture your message --21 MR. ROBIN WEINS: Yes. 22 MR. BYRON WILLIAMS: -- there, sir? 23 And so I'd -- I'd like to not necessarily talk about 24 inverted rates, but talk about this -- how consumers 25 respond to price.

- 1 And, Mr. Weins, am I correct in
- 2 suggesting that in traditional economic thought, the
- 3 concept of own price elasticity describes the
- 4 relationship between changes in price and changes in
- 5 the quantity of good demanded?
- 6 MR. ROBIN WEINS: That's correct.
- 7 MR. BYRON WILLIAMS: And price
- 8 elasticity in this context, Mr. Weins, is the
- 9 percentage change in use one might observe as a result
- 10 of a 1 percent increase in price, all other things
- 11 being constant?
- 12 MR. ROBIN WEINS: Yeah. You -- you
- 13 could describe it that way. It's simply the -- the
- 14 ratio of the response of the quantity to the response
- 15 of the price. So if the -- to use your example of a 1
- 16 percent change in price, if -- if the quantity demanded
- 17 changes by 1 percent, you have what's called unitary
- 18 elasticity, that the response is proportioned to the
- 19 change in price. Obviously, there are other levels of
- 20 response, too.
- 21 MR. BYRON WILLIAMS: And would I be
- 22 correct, at a general level, in suggesting that a
- 23 demand for good would be considered to be more
- 24 inelastic if a 1 percent increase in price leads to a
- 25 less than 1 percent decrease in use?

- 1 MR. ROBIN WEINS: Well, in fact, that's
- 2 the definition of "inelastic".
- 3 MR. BYRON WILLIAMS: I thought I had
- 4 that Mr. Weins.
- Now, and you had a bit of a discussion
- 6 with my Friend, Mr. Gange, of -- of this exact
- 7 Information Response on page 41. But as we sit today,
- 8 Mr. Weins, if -- if Hydro's application is granted, the
- 9 proposed residential April 1st, 2013 would be seven
- 10 point two (7.2) cents per kilowatt hour?
- MR. ROBIN WEINS: Yes, I believe
- 12 precisely seven point two-o-two (7.202) cents, but
- 13 you're -- you're there.
- 14 MR. BYRON WILLIAMS: Like Mr. Peters, I
- 15 missed that critical o-two (02).
- 16 And the current estimate of long run
- 17 marginal cost of Manitoba Hydro is in the range of
- 18 eight point five-two (8.52) cents per kilowatt hour?
- MR. ROBIN WEINS: Yes.
- 20 MR. BYRON WILLIAMS: And, Hydro would
- 21 agree that in terms of short run marginal costs, the
- 22 proposed seven point two (7.2) cent rate for
- 23 residential customers would be higher than current
- 24 short run marginal cost?
- MR. ROBIN WEINS: Yes.

2621 MR. BYRON WILLIAMS: 1 Now, Mr. Weins, subject to check, would I be correct in suggesting to you that to move from that seven point two (7.2) cents 3 to an -- to the eight point five-two-o-two (8.5202) would require about an 18 percent increase in -- in residential rates? 7 MR. ROBIN WEINS: That would be close. MR. BYRON WILLIAMS: Mr. Weins, there -- there are other factors, but in terms of how consumers -- in terms of factors that influence 10 11 consumers inclination and motivation to respond to price changes, would it be fair to say that the 13 availability of substitutes to electricity is an 14 important factor? 15 MR. ROBIN WEINS: Yeah, generally 16 speaking, when you're talking about factors that impinge on price-elasticity, the availability of 17 18 substitutes is fairly important. 19 MR. BYRON WILLIAMS: Now, circled on page 41 of CAC Exhibit 8, Mr. Weins, you'll see a 21 statement from Manitoba Hydro suggesting that price-22 elasticity for electricity in the residential secture -23 - sector is traditionally low, therefore requiring a 24 substantial difference to affect a marginal change. 25 Do you see that, sir?

2622 1 MR. ROBIN WEINS: Yes, I do. 2 MR. BYRON WILLIAMS: And that's your 3 view? MR. ROBIN WEINS: Pardon? 5 MR. BYRON WILLIAMS: That is your view, 6 sir? MR. ROBIN WEINS: That has been the 7 general finding in studies of residential response to price changes; is -- is that it's fairly inelastic. I 10 believe in the study that you've included in your document here that we're looking at, some are point --11 point one (.1) or point one five (.15) percent as being 13 the price-elasticity, and that's -- you know, so within 14 the range of broad experience. 15 MR. BYRON WILLIAMS: And -- and let's --16 MR. ROBIN WEINS: It -- it doesn't 17 respond close to proportionate to what the price 18 changes are. 19 MR. BYRON WILLIAMS: And, Mr. Weins, thank you for that segue, a better segue then I would 21 have offered, no doubt. If you could turn to page 36. 22 First of all you'll -- you'll agree with 23 me that this is a study prepared by NERA Economic 24 Consulting for Manitoba Hydro -- or this is a excerpt 25 from a study prepared by NERA Economic Consulting for

- 1 Manitoba Hydro, looking at the -- a review of time of
- 2 use and inverted electric rate struc -- structures for
- 3 application in Manitoba?
- 4 MR. ROBIN WEINS: Yes.
- 5 MR. BYRON WILLIAMS: And, directing
- 6 your attention to page 38, Mr. Weins, you'll see --
- 7 you'll agree with me that NERA has presented, for
- 8 Manitoba Hydro's consideration, its estimates of own
- 9 price-elasticities by -- by time of day, period, and by
- 10 season, agreed?
- MR. ROBIN WEINS: Yes, it is.
- MR. BYRON WILLIAMS: And focussing on
- 13 residential and farm, the est -- estimate provided by
- 14 NERA in -- in the -- for the summer, let's say peak
- 15 period, was a negative point zero two eight (.028),
- 16 agreed?
- MR. ROBIN WEINS: Yes.
- 18 MR. BYRON WILLIAMS: And focussing on
- 19 residential and farm, for the winter peak, the estimate
- 20 of NERO -- NERA, excuse me -- N-E-R-A -- is negative
- 21 point zero five six (.056), agreed?
- MR. ROBIN WEINS: Yes.
- 23 MR. BYRON WILLIAMS: Mr. Weins, this is
- 24 probably stretching your memory and mine a fair bit,
- 25 but -- so I'll ask you to turn to CAC Exhibit 8, page

- 1 46, in the top right-hand corner.
- 2 And you'll -- you'll recall that -- pag
- 3 -- page 46 in the top right-hand corner, Mr. Chair.
- 4 Mr. Weins, you'll -- you'll recall that
- 5 during that hearing, Manitoba Hydro was asked a -- a
- 6 question to explain how marginal costing at current
- 7 levels would reduce domestic load in each of the
- 8 customer classes.
- 9 Do you recall that question being asked,
- 10 sir?
- MR. ROBIN WEINS: With some difficulty,
- 12 but this helps.
- MR. BYRON WILLIAMS: And when you say
- 14 "this", Mr. Weins, you're referring to Manitoba Hydro
- 15 Undertaking number 88, which was filed in that hearing?
- MR. ROBIN WEINS: Yes.
- 17 MR. BYRON WILLIAMS: And -- and moving
- 18 your attention to page 47, and -- and the table -- and
- 19 focussing on the residential line, you'll agree with me
- 20 that at the time the current rate for residential
- 21 customers was presented by Manitoba Hydro is five point
- 22 eight (5.8) cents per kilowatt hour?
- MR. ROBIN WEINS: Yes.
- 24 MR. BYRON WILLIAMS: And the estimate
- 25 of marginal-cost base rates per kilowatt hour was seven

- 1 point six (7.6) cents per kilowatt hour, agreed?
- 2 MR. ROBIN WEINS: Yes.
- 3 MR. BYRON WILLIAMS: And if we see the
- 4 -- the figure 31 percent on the top line on the right-
- 5 hand side, that represents the percent change in price
- 6 needed to take, at that point in time, from current
- 7 rates to marginal-cost based rates for residential
- 8 customers, agreed?
- 9 MR. ROBIN WEINS: Yes.
- 10 MR. BYRON WILLIAMS: And so in
- 11 estimating, at that point in time, the -- how marginal
- 12 costing would reduce domestic loads, what Manitoba
- 13 Hydro did was take that 31 percent times the estimate
- 14 of price-elasticity at winter -- wintertime of 5.6
- 15 percent, and concluded that the short-term load
- 16 reduction, if marginal cos -- cost was applied would be
- 17 1.7 percent, agreed?
- MR. ROBIN WEINS: Yes.
- 19 MR. BYRON WILLIAMS: Now, Mr. Weins, if
- 20 -- if we did the same calculation today for residential
- 21 customers, assuming that it would take about an 18
- 22 percent rate increase to move from the April 1st, 2013
- 23 rate to Hydro's estimate of marginal cost -- long --
- 24 long-run marginal cost, to calculate the -- the
- 25 estimated short-term load reduction one would simply

2626 multiply the 18 percent times again the zero -- the 5.6 2 MR. ROBIN WEINS: Well, that -- that's 3 the correct mathematics, you know, assuming eve -everything else that we've posited here remains the same as it was, that would be the correct mathematics, 7 and that would be result that you'd get, yes. 8 MR. BYRON WILLIAMS: Okay. And -- and the result, subject to check, would be in the range of 1.03 percent? 10 11 MR. ROBIN WEINS: That sounds like it 12 would be close. 13 MR. BYRON WILLIAMS: And that was one 14 (1) of the points you were making to My Friend Mr. 15 Gange, in terms of the fact that -- in terms of 16 residential customers, there's been a narrowing of the 17 gap between prices and Hydro's estimate of long-run 18 marginal costs? 19 MR. ROBIN WEINS: That's right. 20 21 (BRIEF PAUSE) 22 23 THE CHAIRPERSON: Just clarify 24 something for me again, and I -- I heard two (2) 25 different things and I want to make I understand. The

- 1 marginal cost that we're talking about, eight-point-
- 2 five (8.5), does not include transmission and
- 3 distribution. I got --
- 4 MR. ROBIN WEINS: I -- I believe it
- 5 does actually include --
- THE CHAIRPERSON: Okay.
- 7 MR. ROBIN WEINS: -- transmission and
- 8 distribution. We were having some discussion earlier
- 9 about, you know, what the levelized costs of -- of
- 10 Manitoba Hydro's next generation is, and it was
- 11 approximately the same. But I would actually hae to go
- 12 back and check the -- how the eight-point-five (8.5)
- 13 came about.
- 14 But the marginal cost of generation, in
- 15 the long-run levelized cost, may not act -- may not be
- 16 exactly the same as our next generation source, because
- 17 we -- we're looking -- we're several years away from
- 18 our next generation source. So there would be some --
- 19 some discount from it, at least in the early years.
- 20 So I'm -- I'm -- I believe it's on the
- 21 record somewhere. We could certainly get you the
- 22 composition of the eight and a half (8 1/2) sets. I
- 23 just have to refresh myself where it is.
- 24 THE CHAIRPERSON: It is kind of -- it
- 25 is kind of germane to what we're talking about now,

- 1 because it -- it would have the effect of -- of
- 2 broadening the spread between the current residential
- 3 and the marginal cost, wouldn't it? Did I under -- did
- 4 I -- am I missing that, or...?
- 5 MR. ROBIN WEINS: What -- what we're
- 6 saying is if -- if you look at the levelized costs, I -
- 7 I believe it's over twenty (20) years, of all of our
- 8 facilities that are germane to this marginal cost,
- 9 transmission, distribution, and generation -- and it's
- 10 about eight and a half (8 1/2) cents -- I suppose this
- 11 discussion points to some of the difficulties in terms
- 12 of defining and accurately assessing marginal cost,
- 13 because it's not -- it's not a factor that stays the
- 14 same over time. It varies over time.
- 15 And, you know, one (1) -- one (1)
- 16 definition or approach to marginal cost may be use --
- 17 be useful for one (1) purpose but not so much another.
- 18 But broadly speaking for the purpose of looking at
- 19 conservation programming, Manitoba Hydro today uses
- 20 eight and a half (8 1/2) cents. And that does include
- 21 generation, which is the vast majority of it,
- 22 transmission, and distribution.
- 23 MR. RAYMOND LAFOND: I -- I'd like you
- 24 to tell me whether my -- my reasoning is proper. I am
- 25 not surprised at the narrowing of the gap, because

2629 simply -- I mean, the cost of generation is between two-thirds (2/3s) and three-quarters (3/4s) financing costs, and -- and interest costs as we all know, or 3 debt servicing costs, have decreased substantially, proportionally speaking. So it would all -- it would in great part depend on the financing costs at the time of construction? 7 MR. ROBIN WEINS: That would certainly be a factor that would certainly be included in it, 10 yes. 11 12 (BRIEF PAUSE) 13 14 MR. ROBIN WEINS: Yes, I have just been 15 handed the -- Manitoba Hydro's response in the current 16 proceeding -- I thought it was on the current record -to CAC/Manitoba Hydro Second Round 27B, in which we 17 18 note: "The current estimates of 19 20 transmission and distribution 21 marginal costs in 2011 dollars are: 22 transmission, sixty dollars and 23 forty-six cents (\$60.46) per kilowatt 24 per year; distribution, sixty-three 25 dollars and eight-three cents

```
2630
                      ($63.83) per kilowatt per year; and
 1
                      those amounts translate into per
 3
                      kilowatt hour of point-six-nine (.69)
                      cents and point-seven-three (.73)
 5
                      cents respectively."
 6
                   And then when you add to that the
   generation cost of seven-point-one-one (7.11) cents per
   kilowatt hour that's where you get the eight-point-
 9
   five-two (8.52).
10
11
                          (BRIEF PAUSE)
12
   CONTINUED BY MR. BYRON WILLIAMS:
13
14
                   MR. BYRON WILLIAMS: Mr. Weins, now the
15
  -- the NERA results were in 2005, agreed?
                   MR. ROBIN WEINS: The study was
16
17
   completed in 2005, yes.
18
                   MR. BYRON WILLIAMS: And assuming that
19
   you've kept up somewhat with the -- the literature, it
   -- it's fair to say that there have continued to be
21
    reviews of the responses of different types of
22
   consumers to price increases since then?
23
                   MR. ROBIN WEINS: You know, I'm sure
24
   there have but I haven't followed those. At -- at one
25
    (1) point we did a review of literature probably even
```

- 1 prior to this. And there was a tonne of it, believe
- 2 me, and it's probably been added to in the time since
- 3 then, but I haven't precisely kept up with it, no.
- 4 MR. BYRON WILLIAMS: Okay. And so, Mr.
- 5 Weins, no -- I -- I just want to make sure -- I'll
- 6 scratch off a few questions probably. The 2008 white
- 7 paper by EPRI on price elasticity of demand for
- 8 electricity is not a document you're intimately
- 9 familiar with?
- 10 MR. ROBIN WEINS: No, I'm not. That --
- 11 you know, that doesn't mean to say I couldn't take a
- 12 look at it and respond to questions on that, but I need
- 13 a bit of time to do that.
- 14 MR. BYRON WILLIAMS: And -- and
- 15 similarly -- and Mr. Weins, we've probably accomplished
- 16 enough for my purposes, but the 2012 study by EPRI,
- 17 Understanding Electric Utility Customers, that wouldn't
- 18 be a document that springs right to the top of your
- 19 mind?
- 20 MR. ROBIN WEINS: No. I will point out
- 21 a couple of small matters that could have an impact on
- 22 -- on this, just to round out the discussion.
- 23 As you yourself noted, this is short-
- 24 term load reduction: short-term elasticities.
- 25 Typically longer-term elasticities are higher because

- 1 the customer has more change to respond. The range of,
- 2 if you will, substitutes becomes greater: a customer
- 3 can buy a new fridge, a customer can change their
- 4 heating system, a customer can opt not to use
- 5 electricity for certain uses.
- 6 So it is higher in the longer term. And
- 7 -- and the -- the other point is that -- I appreciate
- 8 that potential impacts on usage from moving prices up
- 9 in the range of 18, 25, 30 percent are not -- are not
- 10 very high; they're not very much. But still --
- 11 probably, it's still true that energy price has -- as
- 12 little as the impact appears to be here, it's greater
- 13 then what would happen with the basic monthly charge.
- 14 Unless you had some -- made some rather huge and
- 15 dramatic changes to the basic monthly charge. The
- 16 basic monthly charge would affect somebodies decision
- 17 as to whether or not they want to take the product at
- 18 all.
- 19 MR. BYRON WILLIAMS: Fair enough, Mr.
- 20 Weins. And I did have a few more questions about this.
- 21 And in terms of the literature, it would
- 22 be fair to say that -- focussing on the electricity
- 23 industry -- there have been a lot fewer studies of
- 24 price elasticity in the long run.
- MR. ROBIN WEINS: You know, I'm not

- 1 certain of that. It would make intuitive sense because
- 2 they're simply harder to do and they require more data.
- MR. BYRON WILLIAMS: And, Mr. Weins, if
- 4 I'm taking you too far, in terms of literature, you'll
- 5 -- you'll -- you'll stop me.
- 6 Would it also say -- be fair to say
- 7 that, in terms of residential customers, there's been
- 8 relatively little analysis of how particular customer
- 9 characteristics, such as number of people in the
- 10 household, household income and education effect their
- 11 responsiveness to price?
- 12 MR. ROBIN WEINS: You know, I would
- 13 have to refresh my memory with the literature in order
- 14 to be able to respond in a meaningful way to that.
- 15 Certainly -- typically when -- if you would imagine
- 16 setting out to do such a study, you would want a
- 17 correct for those influences, so they would probably be
- 18 included in the study.
- 19 MR. BYRON WILLIAMS: Mr. Weins, sir,
- 20 are you familiar with the concept of structural
- 21 inelastic demand? And if you need a definition, Mr.
- 22 Weins, I can give you -- offer you one.
- 23 MR. ROBIN WEINS: I -- I can't say that
- 24 I am, Mr. Williams.
- MR. BYRON WILLIAMS: Well, Mr. Weins,

- 1 let me put it a different way. Are -- are you aware
- 2 that -- whether research in -- in the area of price
- 3 elastic -- elasticity, in terms of consumer behaviour,
- 4 has suggested that some firms appear to be structurally
- 5 incapable of adjusting usage to prices?
- And, Mr. Weins, just to finish it, with
- 7 an explanation for that, that these firms operate
- 8 processes where electricity is used as an input in a
- 9 fixed relationship with other inputs to achieve a
- 10 specified level of output, and therefore factor
- 11 substitution is not possible?
- MR. ROBIN WEINS: Well, what that tells
- 13 me is that in these cases the -- the firm or -- or the
- 14 household for that matter has set up its operations in
- 15 such a way as to use electricity in a certain way. And
- 16 it has a lot of limitations on the changes that it can
- 17 make, which is a significant part why we say that long-
- 18 term responses are likely to be greater than short-term
- 19 responses, because the stock of capital that's
- 20 affecting the usage of electricity can be changed in
- 21 the long-term, whereas it can't be changed in the
- 22 short-term. So I'm -- I'm not sure we're not talking
- 23 about the same thing.

24

25 (BRIEF PAUSE)

- 2 MR. BYRON WILLIAMS: And, Mr. Weins,
- 3 again if you -- if you can act -- answer this: Are --
- 4 are you aware whether there are certain studies within
- 5 the literature finding significant regional differences
- 6 in price elasticities for residential customers to --
- 7 which are intrib -- attributed in part to climate?
- 8 MR. ROBIN WEINS: Well, that -- that
- 9 wouldn't be surprising because climate would govern the
- 10 type of use a customer would want to make. And there's
- 11 probably limits, upper or lower, in terms of
- 12 temperature variability that customers are willing or
- 13 even able to accept.
- 14 So climate could definitely have an
- 15 effect. A more benign climate, there would be fewer
- 16 heat sensitive uses and -- and therefore that
- 17 constraint would tend to operate less.
- 18 MR. BYRON WILLIAMS: And, Mr. Weins, if
- 19 you're not familiar with this term within the
- 20 literature, that's fair as -- well, I won't even use
- 21 the term.
- In the marketplace, would it be fair to
- 23 say that there are -- are customers who pay so little
- 24 attention to their electricity consumption and bills
- 25 that they don't realize a price change has occurred?

- 1 MR. ROBIN WEINS: I'm sure that can
- 2 happen.
- 3 MR. BYRON WILLIAMS: You might be
- 4 speaking to one (1) of them, Mr. Weins, not my wife
- 5 though.
- 6 MR. RAYMOND LAFOND: And the Snowbirds.
- 7 MR. BYRON WILLIAMS: Mr. Chair, just
- 8 subject to a couple of moments to review my notes, I
- 9 believe those are my questions of Mr. Weins.
- I do want to apologize to Mr. Rainkie.
- 11 I have lots of questions for you next week, but -- so
- 12 don't -- don't be hurt.
- MR. DAVID CORMIE: Mr. Chairman, Mr.
- 14 Peters asked before the break about the relationship
- 15 between emissions from a diesel plant versus the coal
- 16 plant. And I know we didn't take that as an
- 17 undertaking, but we have that information.
- The diesel plant emits about 600
- 19 kilograms per gigawatt hour of -- of generation. A
- 20 coal plant, such as Selkirk, would have produced around
- 21 a thousand kilograms per gigawatt hour in -- in rough
- 22 numbers. So diesel produces about 60 percent of the
- 23 emission of coal.
- 24 MR. BYRON WILLIAMS: I have no further
- 25 questions, Mr. Chair.

```
2637
                   THE CHAIRPERSON: Unless some other
 2 business to conduct we are adjourned for the evening,
 3 and we'll see each other again tomorrow morning at nine
 4 o'clock.
 5
 6
                         (PANEL RETIRES)
 7
 8 --- Upon adjourning at 4:19 p.m.
9
10
11 Certified Correct,
12
13
14
15
16
17 Cheryl Lavigne, Ms.
18
19
20
21
22
23
24
25
```

TANTIODA	A HIDNO GNA	01 00 2019	Fage 2030 0.	
\$	2617:4	2461:14,22	2636:4	2596:2
<b>\$1.4</b> 2616:2	<b>\$6.85</b> 2442:8	2465:3	1,000	<b>10.4</b> 2448:12
2617:2	\$60.46	2467:15,22 2469:14,25	2415:23	<b>10.7</b> 2489:3
\$1.449	2629:23	2479:25	2416:2	<b>10.8</b> 2429:24
2539:11	\$63.83	2480:11	2417:1 2418:23	
\$1.465	2630:1	2481:23	2576:24	<b>10:49</b> 2468:5
2536:21	<b>\$7</b> 2404:19	2485:11,12	<b>1,400</b> 2579:5	100
<b>\$1.5</b> 2542:8	2441:12	2492:24 2493:5,16		2394:21,22
2606:3	2604:14	2497:21	<b>1,500</b> 2476:17	2397:13 2412:19
\$10,000	2608:19	2498:4,24		2426:16,21
2478:2	\$70,309	2499:6,16	<b>1,850</b> 2454:1	2430:20
\$12.4	2489:9	2500:13	2471:17 2477:5	2431:9
2608:16	\$747,607	2501:3 2502:10,18		2442:8
\$150,000	2529:15	2502:10,18	<b>1,985</b> 2477:7	2444:7,9
2617:11	2611:12	,23 2522:3	<b>1.03</b> 2626:10	2446:20 2515:5
<b>\$17</b> 2599:15	\$785,000	2528:9	<b>1.4</b> 2606:3	2516 <b>:</b> 21
<b>\$18</b> 2441:11	2538:14	2529:11	<b>1.7</b> 2625 <b>:</b> 17	2517 <b>:</b> 21
·	<b>\$8</b> 2541:4,6	2531:19	1/2	100-megawatt
\$19,000	2604:7	2532:22 2533:18	2394:3,8,1	2444:6
2482:18	2605:5	2535:16	1,25	<b>1-01</b> 2584:1
\$2.27	<b>\$8.1</b> 2544:9	2546:10	2395:17,20	
2396:10	\$856,000	2557:24	2396:3	<b>10th</b> 2614:8
2397:3 2614:20	2607:1	2558:11,14	2400:23	<b>11</b> 2479:16
		2560:1,3,4	2401:7	2504:14
<b>\$2.3</b> 2544:7	0	2562:9,25 2563:2	2402:7,8 2406:16,23	11,000
<b>\$2.54</b> 2396:9	<b>02</b> 2620:15	2564:12	2407:2	2394:10
2614:23	<b>028</b> 2623:15	2569:22	2415:9	11,001
\$2.87		2572:6	2426:1,11	2394:12
2610:22	<b>056</b> 2623:21	2573:6	2527:11	11.1
\$20		2577:12	2569:9 2585:2,22	2611:5,6
2404:13,18	1	2578:12 2579:11,18	2627:22	<b>11:02</b> 2468:6
2421:13 2601:15	<b>1</b> 2395:16 2400:22	2580:16,24	2628:10,20	<b>11-1</b> 2527:24
	2407:3,21,	2581:9,14	<b>1:01</b> 2513:20	<b>116</b> 2554:12
<b>\$22</b> 2421:14	22 2408:22	2582:5	<b>1:30</b> 2512 <b>:</b> 19	
<b>\$30</b> 2488:15	2414:25	2588:22		116/'08
\$4,000	2423:5,21	2591:13 2596:12	<b>1:58</b> 2557 <b>:</b> 6	2586:17
2447:1	2430:9	2599:2	<b>10</b> 2431:11	<b>118</b> 2461:20
\$5	2431:8 2432:1	2600:23	2436:6,15	<b>12</b> 2418:12
2488:2,3,1	2433:10	2604:24	2454:8,12, 22 2457:16	2516:3
2	2435:14	2610:19	24 24 3 7 : 1 6	2593:12 2616:12
<b>\$5.8</b> 2544:8	2436:1	2617:1 2619:10,15	2479:9,15	2616:12
<b>\$50</b> 2475:24	2441:25	,17,24,25	2487:11,14	12:05
<b>\$6</b> 2444:16	2449:19 2455:2	2622:12	2494:2	2513 <b>:</b> 19
	2457 <b>:</b> 9	2626:14	2569:8,9	<b>13</b> 2556:10
<b>\$6.4</b> 2616:7	2460:1,18	2628:15,17	2586:16 2587:10	134/10
		2630:25	2507.10	2397:21

		01 00 2013	rage 2009 01	
2524:12	2625:21	2469:22	2564:17	<b>2009</b> 2399:6
2533:21	2626:1	2473:4	2579:8	2517:25
2545:18	2632:9	2479:25	2585:13	2518:9,14
		2480:11	2628:7	
134/'10	<b>180</b> 2464:8	2481:9		<b>2010</b> 2466:12
2604:12	2465:19,21	2490:16	20.12.0	2536:21
<b>13B</b> 2600:24	2466:20	2492:1	2593:15	2542:3
	2467:7	2494:13	<b>200</b> 2428 <b>:</b> 11	2604:15
<b>14</b> 2414:23	2468:21	2495:19	2442:9,11,	2605:3
2489:1	<b>19</b> 2404:13	2502:24	12	2010/'11
2497:20		2504:17	2446:20,23	2606:2
2519:4	19,500	2531:18	2453:21,25	
2606:7,8	2394:13,14	2533:1	2463:5	<b>2011</b> 2424:13
148/11	190	2536:4	2465:25	2457:9
2535:19	2470:24,25	2564:12,14	2549:12,19	2489:8
	•	2569:20	2576:25	2533:2
<b>15</b> 2431:11	1-94 (c		2577 <b>:</b> 3	2535:11
2435:21	2608:10	2596:11		2536:11
2445:11	<b>1975</b> 2399:3	2597:17 2602:19,23	<b>2000</b> 2399:4	2537:10
2448:22	1000	·	2483:22,25	2544:8
2449:4,15	1980s	2614:14	2484:6	2547:5,11
2451:23	2484:19	2626:24	<b>2002</b> 2392 <b>:</b> 2	2629:21
2452:2	<b>1989</b> 2392:1	2,000		2011/2012
2517:16	<b>199</b> 2463:6	2395:12,15	2003	2615:7
2622:12	199 2403:0	<b>,</b> 25	2399:4,5	
<b>150</b> 2450:24	<b>1991</b> 2484:5	2396:17,22	2003/'04	<b>2012</b> 2393:22
2451:3	<b>1992</b> 2484:5	2417:3,16	2494:25	2415:7
2453:24		2424:10,21	<b>2004</b> 2393:24	2423:5,21
2454:2	<b>1A</b> 2533:19	2425:1	2402:23	2429:25
2465:3	1st	2450:25	2402:23	2457:7,10,
2467:7,21	2393:17,22	2454:4	2522:7	17 2459:23
2468:20	2396:13	2471:6	2523:7	2528:2
2470:23	2466:12	2476:15,19	2523:3	2533:2
2472:2	2518:14	<b>,</b> 25	2533:25	2536:16,17
2475:2,7,1	2527:12	2527:1,2,6	2533:25	2538:13,18
7	2535:5	2546:2	22	,23 2543:7
150,000	2592:20,23	2547:8	2599:4 <b>,</b> 7	2544:8
2617:18	2617:14	2,500	2600:4,15	2607:22
	2620:9	2418:24	2600:4,13	2613:2,12
150-megawatt	2625:22		2602:4	2614:8
2451:20		<b>2.27</b> 2535 <b>:</b> 10	2603:14	2631:16
<b>16</b> 2607:18	2	<b>2.5</b> 2440:12	2609:5	2012/13
	<b>2</b> 2398:2	<b>2.54</b> 2535:12		2385:8
18		2.34 2333.12	<b>2005</b> 2479:21	2012/'13
2429:4,5,1	2405:1	<b>2.7</b> 2440:12	2517:5	2616:2
0	2407:20	<b>2/3s</b> 2629:2	2601:22,25	
2431:20,22	2408:11		2630:15,17	<b>2013</b> 2385:23
2477:6	2410:3 2423:13	<b>2:08</b> 2557 <b>:</b> 7	2006	2393:6,18
2514:14,17	2423:13	<b>20</b> 2390:18	2479:4,10	2396:13
2518:17,22		2430:23,25	·	2400:22
2519:1	2445:9	2431:11	2008 2463:3	2414:25
2606:8,20	2449:24	2540:3	2476:23	2442:1
				2527:20
2621:5	2462:8		2631:6	2536:15,18
2608:8 2621:5	2460:15 2462:8	2540:3 2541:1 2542:1	2587:20 2631:6	2527:20

FUB MANITUD.	A HIDNO GNA		rage 2040 0.	
2539:8	<b>26</b> 2494:12	2394:13,16	379	2475:10
2542:15		2417:18	2457:3,16	2488:24
2543:7	<b>2610</b> 2389:24		2458:19	2503:4
2592:20,23	<b>2637</b> 2385:24	3.7 2416:14	2461:16	2519:5
2620:9	2387:17	2440:14	2478:19	400 0005 01
2625:22	<b>27B</b> 2629:17	<b>3.78</b> 2394:4	2482:24	<b>400</b> 2385:21
0012/14		2401:17		2488:24
2013/14	<b>2X6s</b> 2579:6	2423:16	<b>38</b> 2442:19	2489:1
2385:8		2424:3	2457:4,5	2579 <b>:</b> 10
2013/'14	3	<b>3/4s</b> 2629:2	2623:6	<b>401</b> 2492:12
2554:17	<b>3</b> 2387:6		<b>381</b> 2459:19	<b>402</b> 2497:11
<b>2014</b> 2593:6	2391:6	<b>3:07</b> 2596 <b>:</b> 5	2462:8	
	2394:3,8,1	<b>3:20</b> 2596:6	2467:3	<b>404</b> 2503:3
<b>21</b> 2494:12	1,24	20 0000 10	2478:12,13	405
<b>22nd</b> 2547:5	2397:8	<b>30</b> 2393:12	2479:23	2519:3,6,1
<b>23</b> 2611:4	2400:23	2394:20,21	2481:20	8
<b>23</b> 2011:4	2401:7	2426:4,13,	2482:9	<b>407</b> 2533:18
230	2402:7	16 2433:13	<b>386</b> 2462:22	
2463:8,17,	2407:3,13,	2434:12 2503:6,14	2483:21	2544:16
20 2465:23	16 2408:17	2615:4	2497:19,20	408
2466:1,21	2415:9	2632:9		2524:11,14
<b>2385</b> 2385:24	2425:10		<b>39</b> 2483:20	2530:11 <b>,</b> 12
	2426:1,11	300,000	2497:20	2545:16
<b>2388</b> 2387:3	2440:6	2615:13	397	<b>409</b> 2528:2
<b>2389</b> 2387:4	2444:23	300-	2485:2,11	<b>41</b> 0010 7
<b>2391</b> 2387:12	2454:13	horsepower	2489:19	<b>41</b> 2618:7
	2459:20	2451:14		2620:7
<b>24</b> 2614:12	2460:15		4	2621:20
<b>2400</b> 2387:13	2462:9	<b>31</b> 2457:9	<b>4</b> 2393:1	<b>410</b> 2528:9
	2468:15	2463:8	2395:2	2529:11
<b>2422</b> 2389:5	2473:3,5	2479:13 2489:8	2397:7,24	<b>411</b> 2536:4
<b>2439</b> 2389:8	2479:23	2544:7	2399:13,19	2556:9
<b>246</b> 2398:6	2492:14	2625:4,13	2424:1	
	2496:3	·	2434:15	<b>417</b> 2539:7
<b>248</b> 2398:6	2498:9,12,	<b>31st</b> 2536:13	2440:16	2543:2
<b>25</b> 2429:7	14,16	2598:14	2448:14,22	2596:23
2482:22	2502:19	<b>32</b> 2617:7	2449:6,7,1	2615:24
2487:22	2516:22		0 2546:7	<b>420</b> 2415:2
2492:21	2517:8	<b>33</b> 2550:18	2564:6,13	<b>421</b> 2415:12
2566:14	2525:23	<b>330</b> 2385:21	2573:3	2416:25
2632:9	2527:10	<b>35</b> 2441:13	2583:25	2417:15
<b>250</b> 2423:4	2564:13,16		2586:16	2440:5
2441:1,8	2579:10 2599:24	<b>36</b> 2622:21	2587:11	2441:19
	2600:19,22	<b>363</b> 2448:10	2593:12	
<b>2509</b> 2389:12	2600:19,22	2452:16	2601:7	<b>425</b> 2425:8
<b>2513</b> 2389:20		2454:6	<b>4.4</b> 2544:17	<b>426</b> 2427:2
<b>2557</b> 2387:14	<b>3.3</b> 2416:6	<b>368</b> 2464:11	2617:3	<b>427</b> 2514:4
<b>2564</b> 2388:5	<b>3.4</b> 2416:6	<b>37</b> 2442:20	<b>4.7</b> 2394:21	<b>45</b> 2589:2,16
<b>2596</b> 2387 <b>:</b> 15	<b>3.5</b> 2402:13	<b>37.3</b> 2396:1	2426:22	<b>46</b> 2589:2
2388:6	2440:9		<b>4:19</b> 2637:8	2624:1,3
2500.0	2591 <b>:</b> 24	<b>373</b> 2481:13	<b>40</b> 2470:25	
	3.6		20 21/0.20	461,353

4th 2481:8         2422:22         26001:22         8,000         2613:10           2544:8         52 2389:6         2603:24         2556:5,12,         abail           5         53 2389:9         7.02 2441:24         2456:55         abid           5         2394:20         2509:9         7.02 2441:24         8.5         2506:11           2445:17         53.5 2529:3         7.2 2584:25         2627:2,12         ability           2443:15         2534:13         7.2 2584:25         8.52 2620:18         2448:19           2445:9         2513:3         7.202         2621:3         2630:9         2489:14           2449:19         55 2389:21         2442:3,5         8.52 2620:18         2448:19           249:19         55 2389:21         2442:3,5         8.52 2620:12         2621:4         2548:9           249:19         59:16         7.6 2625:1         2517:3,21         able 242:2         258:19:2           249:12         59:16         70 2427:24         2577:2,4         22         247:14         2548:9           249:12         252:11,22         2429:14         257:15,23         2440:17         251:1         246:14           249:12         252:1         252:1         2	FOB MANITODA	I IIIDNO GNA	01 00 2013	rage 2041 01	2707
47 2624:18	2441:23	500		2621:20	2608:18
The content of the			7		
4th 2481:8         2422:22         2601:22         2603:24         2556:5,12,         abail         2489:12         2603:24         2556:5,12,         abail         2489:14         2556:5,12,         abail         2489:14         2556:5,12,         abail         2489:14         2556:5,12,         abail         2489:14         abide         2489:14         abide         2489:14         abide         2509:9         7.02 2441:24         8.1 2544:18         abide         2506:11         2442:13         2534:13         7.2 2584:25         2627:2,12         ability         2620:10,22         2620:10,22         2620:18         2411:24         2448:19         244		2567:7	<b>7</b> 2397:6		2611:21
4th 2481:8   2422:22   2601:22   2556:5,12   2489:14	<b>48</b> 2454:11	<b>51</b> 2389:3	2441:9	2628:10,20	2612:5,18
2544:8	<b>4th</b> 2481:8		2601:22	8,000	2613:10
5         2439:22         21 2605:5         8.1 2544:18         abide           5         2394:20         2509:9         7.02 2441:24         8.5         2627:2,12         ability           24315:13,14         2426:17         53.5 2529:3         7.2 2584:25         8.52 2620:18         2411:24           2443:15         2439:13         2620:10,22         2630:9         2448:11           2441:15         54 2389:13         2621:3         2621:3         2630:9         2489:14           2448:20         248:23         2610:10         2620:12         8.5202         2499:17           2452:3         2610:10         2620:12         80 2427:24         2581:12           2490:17         59.16         70 2427:24         800         2440:17           2491:22         2534:13         2516:16         2576:15,23         2445:14           2490:17         59.16         70 2427:24         800         2440:17         249:12         258:11,22         2429:14         2576:15,23         2445:14           2496:4         2529:1         2517:5,22         85 249:15         2445:14         2577:5         246:24           2551:2,4         2579:5,7         6         2395:17,20         77.24         800	2544:8			2556:5,12,	abail
5         2394:20         53         2389:9         7.02         2441:24         abide         2506:11           2415:13,14         2226:17         53.5         2529:3         7.11         2630:7         2627:2,12         2bility           2434:15         238:13         7.2         2584:25         8.52         2620:18         2448:19           2445:9         2448:20         2513:3         7.202         8.5202         2499:14           2449:19         55         2389:21         2442:3,5         80         2427:24         2551:22           2472:18         58         2396:3         7.6         2625:1         80         2427:24         2551:22           2491:22         2528:11,22         2429:14         2576:15,23         2446:20,           2496:4         2529:1         2516:16         2576:15,23         2446:20,           2557:2,4         2518:16         2577:5         2446:9,1           2582:1         6         2395:17,20         2517:5,22         85 2429:15         2436:24           2583:24         2545:17         2582:2         75 2482:21         866,000         2456:24           2584:20         2586:7         2582:2         75 2482:21         88 2624:			· ·	16	2489:14
5         2394:20         253 2389:9         7.02 2441:24         8.5         2506:11           2426:17         243:13         2509:9         7.11 2630:7         2627:2,12         ability           2443:15         2534:13         2534:13         2620:10,22         2630:9         2448:11           2445:9         2513:3         7.202         249:13         2621:4         259:12           2449:19         55 2389:21         2442:3,5         2620:12         80 2427:24         2548:9           2472:18         58 2396:3         7.6 2625:1         2517:3,21,         2496:24         2528:12           2490:17         59.16         70 2427:24         800         2440:17         2436:20,           2493:12         2528:11,22         2429:14         2576:15,23         2446:14           2493:12         2528:11,22         2429:14         2576:15,23         2446:14           2557:2,4         2529:1         2516:16         2576:15,23         2446:14           2579:5,7         6         73 2630:4         856,000         2456:24           2583:24         2545:17         277:5         2422:1         2607:4         2486:20           2586:7         2582:2         75 2482:21         88	5			<b>8.1</b> 2544 <b>:</b> 18	abide
2415:13,14   2426:17   2434:15   253.5 2529:3   2534:13   2534:13   2620:10,22   2630:9   2448:19   2448:19   2452:3   2620:10   2620:12   2620:14   2548:9   2452:3   2452:3   2620:12   2620:14   2548:9   2452:3   2472:18   58 2396:3   7.6 2625:1   22   2436:20,	<b>5</b> 2394:20		<b>7.02</b> 2441:24	0.5	2506:11
2426:17         53.5 252913         7.2 2584:25         8.52 2620:18         2441:24           2431:15         2534:13         2620:10,22         2630:9         2448:19           2448:20         2513:3         7.202         8.5202         2499:17           2449:19         255 2389:21         2442:3,5         80 2427:24         2548:9           2472:18         58 2396:3         7.6 2625:1         22         247:13,21,         able 2421:           2491:22         59.16         70 2427:24         800         2445:17         2445:14           2493:12         2528:11,22         2429:14         2576:15,23         2445:14           2546:25         2534:13         2515:7         2577:5         2446:19,1           2582:1         2534:13         2516:16         85 2429:15         2454:21           2579:5,7         6         2395:17,20         257:5,22         2577:5         2446:9,1           2583:24         2559:1         2569:5         256:10         2607:4         2469:4           2588:20         2555:5,22         75 2482:21         88 2624:15         2499:18           2440:13         2535:5,22         75 2482:21         900 2390:1         2556:12           256:14			<b>7.11</b> 2630:7		ability
2434:15         2441:15         2439:13         2620:10,22         2630:9         2448:19, 2489:14         2441:15         2445:9         2513:3         2620:10,22         2630:9         2449:19         2499:17         249:12         249:17         2499:17         2513:3         7.202         2621:4         2598:9         2499:17         2558:12         2490:17         259:16         2620:12         80 2427:24         2551:22         2436:20, 2440:17         2491:22         258:11,22         2493:12         2528:11,22         249:14         2576:15,23         2445:14         2576:15,23         2445:14         2577:5         2446:20         2446:19,1         2551:7         2577:5         2445:14         2577:5         2446:9,1         2551:17         2577:5         2445:14         2577:5         2446:9,1         246:9,1         246:9,1         246:9,1         246:9,1         246:9,1         246:9,1         246:9,1         2455:17         2581:1         2554:14         2559:15         2446:9,1         2455:17         2612:4         88 2624:15         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2487:9         2556:14         2556:14			<b>7 2</b> 2584·25	·	_
2441:15         54 2389:13         2621:3         2530:9         2489:14         2499:14         2499:17         2499:17         2621:3         8.5202         2499:14         2499:17         25389:21         2620:12         80 2427:24         2551:22         2436:24         2557:12         2551:22         2551:23         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13         2551:13		2534:13			2448:19,20
2448:20 2449:19         2513:3 55 2389:21         7.202 2442:3,5 2620:12         2621:4 2621:4 2620:12         2499:17 2548:9 2551:22           2472:18 2490:17 2491:22         58 2396:3 2528:11,22 2528:11,22 2493:12         7.6 2625:1 2528:11,22 2499:14 2529:1         2517:3,21, 2526:15,23 2440:17 2577:5 2440:17 2577:5 2446:9,1 2577:5 2446:9,1 2577:5,7 2582:1         2601:4 2529:1 2516:16 2517:5,22 2579:5,7         800 2440:17 2577:5 2577:5 2446:19,1 2577:5 2446:19,1 2577:5 2446:19,1 2577:5 2446:19,1 2577:5 2446:19,1 2459:17         2446:19,1 2459:17           2583:24 2583:24 2586:7 2586:12 2461:16,17         856,000 2456:24 2489:64         2469:4 2489:64         2469:4 2489:64         2469:4 2489:64         2469:4 2488:20         2560:0         2469:4 2488:20         2560:0         2469:4 2488:20         2560:0         2560:1         2560:1         2560:1         2560:1         2560:1         2560:1         2560:1         2560:1         2560:1		<b>54</b> 2389:13		2630:9	
2449:19         55 2389:21         2442:3,5         2620:12         80 2427:24         2551:22         2551:22         2551:22         2551:22         2551:22         2551:22         2436:20,         2576:13,21,         able 2421:         2551:22         2436:20,         2436:20,         2440:17         2491:22         2429:14         2576:15,23         2440:17         2429:14         2576:15,23         2440:17         245:14         2577:5         2446:20,         2440:17         2586:21         2577:5         2446:20,         2577:5         2446:21         2577:5         2446:21         2577:5         2446:21         2577:5         2446:21         2577:5         2446:21         2577:5         2456:24         2455:17         2582:1         62395:17,20         73 2630:4         85 2429:15         2455:17         2455:17         2584:21         2586:24         2545:17         2584:21         2586:24         2586:7         2582:2         75 2482:21         85 6,000         2456:24         2487:9         2487:9         2487:9         2487:9         2488:26         2487:9         2488:26         2487:9         2488:26         2586:7         2487:9         2498:18         2498:18         2498:18         2498:18         2498:18         2498:18         2498:18         2498:18         2498:		2513:3			2499:17
2452:3         2610:10         2620:12         80 2427:24         2551:22           2472:18         58 2396:3         7.6 2625:1         2517:3,21,         able 2421:22           2490:17         2491:22         59.16         70 2427:24         800         2440:17           2493:12         2528:11,22         2429:14         2576:15,23         2445:14           2546:25         2534:13         2515:7         2577:5         2446:9,1           2557:2,4         2579:5,7         6         2517:5,22         2554:14         2455:17           2583:24         2545:17         2569:5         2612:4         856,000         2456:24           2584:20         2569:5         2582:2         747,000         2607:4         2469:4           2440:13         2553:5,22         75 2482:21         88 2624:15         2487:9           2446:14         2427:18,19         9         2458:21         2407:2           5.4 2394:19         2426:14         60         2427:18,19         8 2385:23         2451:3,19, 2558:12           5.8 2624:22         7 2546:1         2407:2         2566:1,3         2577:2           5.9 2394:15         2550:20         2569:4         2569:4         2569:1		<b>55</b> 2389:21		2621:4	
2472:18         58 2396:3         7.6 2625:1         2517:3,21, 22         able 2421: 2436:20, 2491:12         2436:20, 2436:20, 2446:15, 23         2436:20, 2446:15, 23         2446:17, 22         2436:20, 2446:19, 122, 2499:14         2576:15, 23         2445:14         2576:15, 23         2445:14         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2577:5         2446:9, 13         2455:17         2577:5         2446:9, 13         2455:17         2583:24         2583:24         2583:24         2583:24         2585:17, 20         2583:24         2585:17         2612:4         856,000         2456:24         2486:24         2487:9         2498:18, 249:15         2487:9         2498:18, 249:15         2487:9         2498:18, 249:15         2487:9         2498:18, 249:15         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2556:1         2556:1         2556:1		2610:10	· ·	<b>80</b> 2427:24	2551:22
2490:17         59.16         7.6 2625:1         22         2436:20, 2440:17           2493:12         2528:11,22         2429:14         2576:15,23         2445:14           2496:4         2529:1         2515:7         2577:5         2446:9,1           2557:2,4         2577:5,7         6         2517:5,22         85 2429:15         2454:21           2582:1         6 2395:17,20         2545:17         2607:4         2455:17           2584:20         2569:5         2612:4         88 2624:15         2488:20           2586:7         2582:2         75 2482:21         2607:4         2488:20           2586:7         2582:2         75 2482:21         2499:6,1         2487:9           2440:13         2535:5,22         2416:2,25         9 2458:21         2500:7           5.4 2394:19         6.8         2427:18,19         90 2556:1         2556:1           5.6 2625:14         2427:18,19         8 2385:23         24 247:9         2573:18           5.8 2624:22         7 2546:1         2407:2         900 2565:25         2573:18           5.9 2394:15         2550:20         2569:4         2566:1,3         266:1,3         2613:24           5/12         2636:22         2579:9 <td></td> <td><b>58</b> 2396·3</td> <td></td> <td></td> <td><b>able</b> 2421:23</td>		<b>58</b> 2396·3			<b>able</b> 2421:23
2493:12         2528:11,22         2429:14         2576:15,23         2445:14           2496:4         2529:1         2515:7         2577:5         2446:9,1           2546:25         2534:13         2516:16         2577:5         2446:9,1           2557:2,4         2579:5,7         6         2517:5,22         85 2429:15         2454:21           2582:1         6 2395:17,20         73 2630:4         856,000         2456:24           2583:24         2545:17         2612:4         88 2624:15         2487:9           2586:7         2582:2         75 2482:21         2487:9         2498:18           5,000 2417:8         6.5         750         9 2458:21         2498:18           2440:13         2535:5,22         2416:2,25         9 2458:21         2500:7           5.4 2394:19         60         2427:18,19         8         2385:23         2451:3,19         2558:12           256:1         2429:13         8 2385:23         24 2475:9         2573:18           5.8 2624:22         7 2546:1         2407:2         900 2565:25         2577:2           5.9 2394:15         2550:20         2569:4         2566:1,3         2633:24           2594:24         2636:22	2490:17			22	2436:20,22
2496:4 2546:25 2546:25 2557:2,4 2579:5,7 3 2582:1 2584:20 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:3 2575:5 2499:15 2499:15 2584:20 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:8 2440:13 2446:25 3255:5,22 2416:2,25 3246:24 2599:1  2426:14 2427:18,19 2426:14 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2582:2 2586:7 2588:21 2498:18,  9 2498:18,  9 2498:18,  2499:18,  9 2451:3,19, 2558:12 2558:12 241:10 2429:13 2406:16,23 2407:2 2593:13,14 2594:24 2636:18 2550:20 2569:4 2566:1,3 2566:1,3 2613:24 2594:24 2594:24 2636:18 2580:24 2594:14 2594:24 2636:18 2580:24 2594:14 2594:24 2636:18 2599:2,24 2636:14 2428:10 2461:16,17 2588:23 2606:9 2398:12 2510:3	2491:22			800	
2546:25 2557:2,4 2579:5,7 2582:1 6 2395:17,20 2583:24 2584:20 2586:7 2586:7 2582:2 75 2482:21  5,000 2417:8 2440:13 2446:25  6.85 2442:11 2535:5,22 2535:5,22 2416:2,25 2542:12  6.85 2442:11 2545:17 2582:2 75 2482:21  75 2483:23  2406:16,23 2406:16,23 2407:2 2566:1,3 2577:2 2577:2 2593:13,14 2593:13,14 2593:13,14 2593:13,14 2593:13,14 2593:13,14 2594:24 2594:24 2594:24 2594:24 2636:18 2597:55  24 2448:20 2607:4 28 2607:4  85 2607:4  85 2607:4  85 2607:4  85 2429:15  2487:9  2498:18,  90 2390:1 2552:5,6  90 2556:1  2577:2 2577:2 2577:2 2566:1,3 2613:24 2593:13,14 2593:13,14 2636:18 2599:2,24 2636:18 2599:2,24 2636:18 2599:2,24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2603:24 2397:13,23 2488:20 2510:3				2576 <b>:</b> 15 <b>,</b> 23	
2557:2,4 2579:5,7 2582:1 2583:24 2584:20 2586:7 2582:2 2582:2 258				2577:5	
2579:5,7 2582:1 6		2001.10		<b>85</b> 2429:15	
2582:1 6 2395:17,20 2545:17 2569:5 2582:2 75 2482:21 88 2624:15 2487:9 2498:18, 2440:13 25242:11 70.00 2417:8 6.5 25446:25 6.85 2442:11 70.00 2576:25 6.85 2442:11 70.00 2556:14 2429:13 2426:14 2626:1 2429:13 2451:4,8,1 2451:4,8,1 2594:24 2549:15 2550:20 2594:24 2594:24 2636:18 2594:24 2636:18 2427:18,19 2427:18,19 2594:24 2636:18 2594:24 2636:18 2594:24 2636:18 2427:18,19 2428:10 2461:16,17 2588:23 2606:9 2398:12 2510:3 2588:23 2606:9 2398:12 2510:3 2588:23 2606:9 2398:12 2510:3	· ·		·	2554:14	
2583:24			<b>73</b> 2630:4	856 000	
2584:20       2569:5       2569:5       2482:21       2487:9       2487:9       2498:18, 2498:18, 2499:6, 1       2498:18, 2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2499:6, 1       2550:7       2500:7       2550:12       2550:25       2556:1       2552:5, 6       2552:5, 6       256:1       2552:5, 6       256:1       2578:12       2578:18       2578:12       2578:18       2577:2       2578:18       2577:2       2578:18       2577:2       2578:14       2566:1, 3       2578:14       2566:1, 3       2566:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3       266:1, 3			747,000	· ·	
2586:7       2582:2       75 2482:21       24487:9       2498:18       2498:18       2499:6,1       2500:7       2500:7       2500:7       2501:25       2501:25       2500:7       2501:25       2501:25       2501:25       2501:25       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2552:5,6       2573:18       2406:16,23       2407:2       2566:1,3       2577:2       2578:14       2566:1,3       2566:1,3       2567:8       2567:8       2633:14       2569:6       2569:6       2633:14       2569:6       2635:13       2580:24       2580:24       2580:24       2580:24       2580:24       2580:24       2599:2,24       2468:5,6       2530:8       2530:8       2548:7       2603:24       2603:24       2603:24       2603:24       2603:24       2604:18       2397:13,23       25			2612:4		2484:20
5,000         2417:8         6.5         750         2440:13         2498:18, 2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2499:6, 1         2500:7         2500:7         2500:7         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2501:25         2552:5, 6         2553:18         2406:16, 23         242:10         242:10         254:11         256:11         2406:16, 23         2407:2         256:13         256:13         256:13         266:13         266:13         266:13         266:13         266:13         266:13         266:13         266:13         266:13         266:13 <td>2586:7</td> <td></td> <td><b>75</b> 2482:21</td> <td>88 2624:15</td> <td></td>	2586:7		<b>75</b> 2482:21	88 2624:15	
2440:13       2535:5,22       2416:2,25       9 2458:21       2500:7         5.4 2394:19       60       90       2556:1         5.6 2625:14       2429:13       2429:13       2406:16,23         2626:1       2451:4,8,1       2406:16,23       24277:2         5.8 2624:22       7 2546:1       2431:10       2566:1,3         2593:13,14       2550:20       2569:4       2567:8         2593:13,14       2636:22       2579:9       2569:6         2594:24       2636:18       2588:23       2603:24         2594:10       2596:14       2596:14       2468:5,6         2593:13,14       2636:18       2599:2,24         2594:24       2636:18       2596:14         2594:24       2636:18       2599:2,24         2596:14       2408:5,6       2530:8         2427:18,19       2428:10       2588:23       2606:9         2428:10       2588:23       2606:9       2398:12	<b>5,000</b> 2417:8				2498:18,21
2446:25     6.85 2442:11     7th 2601:25     9:00 2390:1     2501:25       5.4 2394:19 2426:14     2427:18,19 2429:13     8 2385:23 242475:9     2451:3,19, 2558:12     2552:5,6       5.6 2625:14 2626:1     2429:13 2451:4,8,1     2406:16,23 2475:9     2573:18 2577:2     2577:2       5.8 2624:22 7 2546:1 2549:16 259:24 2593:13,14 2594:24     2550:20 2569:4 2569:4 2569:6     2566:1,3 2563:13     2566:1,3 2563:14 2633:14 2633:14 2594:24 2585:2,7,9 2636:18     2588:23 2606:9     2588:23 2398:12     2397:13,23 2398:12       50 2410:8,19 2428:10 2461:16,17     6th 2429:25 2588:23 2606:9     2606:9     2397:13,23 2500:3     2397:13,23 2500:3       2427:18,19 2461:16,17     2588:23 2606:9     2606:9     2397:13,23 2398:12     2510:3					
5.4       2394:19       60       90       2552:5,6         5.6       2625:14       2429:13       8       2385:23       24 2475:9       2558:12         5.8       2624:22       7 2546:1       2406:16,23       200 2565:25       2577:2         5.8       2624:22       7 2546:1       2407:2       900 2565:25       2577:2         5.9       2394:15       2550:20       2569:4       2566:1,3       266:1,3       261:24         5/12       2593:13,14       2636:22       2579:9       2580:24       2569:6       2633:14         2594:24       2636:18       2585:2,7,9       A       Aboriginal         5:15       2445:11       663       2564:17       2596:14       2468:5,6       AANDC       2530:8         50       2410:8,19       69       2630:3       2599:2,24       AANDC       2597:13,23       2548:7         2428:10       2428:10       2588:23       2606:9       2397:13,23       2397:13,23       2598:12         2461:16,17       2588:23       2606:9       2398:12       2510:3				<b>9</b> 2458 <b>:</b> 21	
2426:14     60     8     2427:18,19     8     2451:3,19, 2558:12     2558:12       5.6 2625:14     2429:13     8 2385:23     24 2475:9     2558:12       5.8 2624:22     7 2546:1     2407:2     900 2565:25     2577:2       5.9 2394:15     2550:20     2431:10     2566:1,3     266:1,3       5/12     2593:13,14     2636:22     2579:9     2569:4     2569:6       2593:13,14     2636:22     2580:24     2580:24       2594:24     2636:18     2585:2,7,9     A       5:15 2445:11     663 2564:17     2596:14     2408:5,6       50 2410:8,19     69 2630:3     2599:2,24       2427:18,19     69 2630:3     2603:24     2397:13,23       2428:10     2588:23     2604:18     2397:13,23     2588:23       2461:16,17     2588:23     2606:9     2398:12     2510:3	<b>5.4</b> 2394·19	<b>6.85</b> 2442:11	7th 2601:25	<b>9:00</b> 2390 <b>:</b> 1	
5.6 2625:14       2427:18,19       8       2451:3,19, 2475:9       2558:12         2626:1       2429:13       2406:16,23       24 2475:9       2573:18         5.8 2624:22       7 2546:1       2407:2       900 2565:25       2577:2         5.9 2394:15       2549:16       2431:10       2566:1,3       2613:24         5/12       2593:13,14       2536:22       2579:9       2569:4       2569:6         2593:13,14       2594:24       2585:2,7,9       2580:24       2585:2,7,9         2594:11       2586:14       2596:14       2468:5,6       2397:11         2398:8       2503:24       2599:2,24       2468:5,6       2530:8         2427:18,19       2428:10       2588:23       2604:18       2397:13,23       2548:7         2461:16,17       2588:23       2606:9       2398:12       2510:3		60		90	
3.6 2623.14 2626:1       2429:13 2451:4,8,1       2429:13 2406:16,23 2406:16,23       24 2475:9       2573:18 2577:2         5.8 2624:22       7 2546:1 2549:16 2550:20 2550:20 2550:20 2593:13,14 2594:24       2550:20 2569:4 2569:6       2566:1,3 2567:8 2567:8 2567:8 2569:6       2633:14 2633:14 2633:14 2599:2         5:15 2445:11 50 2410:8,19 2427:18,19 2428:10 2428:10 2461:16,17       663 2564:17 2596:14 2603:24 2603:24 2603:24 2606:9       2599:2,24 2604:18 2397:13,23 2398:12       AANDC 2548:7         2588:23 2588:23 2606:9       2588:23 2506:9       2506:9       2506:13 24 2475:9       2573:18 2577:2         2577:2 2566:1,3 2566:1,3 2566:1,3 2566:1,3 2566:1,3 2567:8 2569:6       2633:14 2633:14 2663:14       2633:14 2633:14 2663:14       2633:14 2633:14 2663:14         2588:23 2599:2,24 2428:10 2461:16,17       2588:23 2606:9       2606:9       2606:14 249:15 2510:3				2451:3,19,	
5.8 2624:22       7 2546:1       2407:2       900 2565:25       2578:14         5.9 2394:15       2549:16       2431:10       2566:1,3       2613:24         5/12       2636:22       2579:9       2569:6       2633:14         2593:13,14       2600 2577:6       2580:24       2585:2,7,9       A       2397:11         5:15 2445:11       663 2564:17       2596:14       2468:5,6       2397:11       2398:8         50 2410:8,19       69 2630:3       2599:2,24       2603:24       2397:13,23       2548:7         2428:10       2588:23       2606:9       2398:12       2510:3				' '	
5.6     2624.22     2549:16     2431:10     2566:1,3     2613:24       5.9     2394:15     2550:20     2569:4     2567:8     2633:14       2593:13,14     2636:22     2579:9     2569:6     2635:13       2594:24     2636:18     2585:2,7,9     A     2397:11       5:15     2445:11     663     2564:17     2596:14     2468:5,6     2530:8       2427:18,19     2428:10     2588:23     2604:18     2397:13,23     2598:12     2510:3       2588:23     2606:9     2398:12     2510:3				900 2565.25	
5.9     2394:15     2550:20     2569:4     2567:8     2633:14       5/12     2593:13,14     2636:22     2580:24     2636:18     2585:2,7,9     A     Aboriginal       5:15     2445:11     663     2564:17     2596:14     2468:5,6     2530:8       50     2410:8,19     2427:18,19     2428:10     2588:23     2606:9     2397:13,23     2398:12       2588:23     2588:23     2506:9     2398:12     2510:3	<b>5.8</b> 2624:22				
5/12     2636:22     2579:9     2569:6     2635:13       2593:13,14     2594:24     2580:24     2585:2,7,9     A     2397:11       5:15 2445:11     663 2564:17     2596:14     2468:5,6     2397:11       50 2410:8,19     69 2630:3     2599:2,24     2603:24     2397:13,23       2427:18,19     2588:23     2606:9     2397:13,23     2398:12       2588:23     2510:3	<b>5.9</b> 2394:15			'	
2593:13,14 2594:24 2636:18 2585:2,7,9 3.m 2390:1 2397:11 2398:8 2427:18,19 2428:10 2461:16,17 2588:23 2580:24 2580:24 2580:24 2580:24 2585:2,7,9 A a.m 2390:1 2468:5,6 2530:8 2599:2,24 2603:24 2603:24 2604:18 2397:13,23 2588:23 2606:9 2580:24 2580:24 2580:24 2580:24 2580:24 2580:24 2580:24 2580:24 2580:24 2580:24 2599:2,24 2468:5,6 2530:8 2548:7 2588:23 2606:9 2510:3	5/12				
2594:24 2636:18 2585:2,7,9 2636:18 2596:14 2596:14 2599:2,24 2427:18,19 2428:10 2461:16,17 2588:23 2585:2,7,9 A a.m 2390:1 2398:8 2468:5,6 2530:8 2503:24 2603:24 2603:24 2604:18 2397:13,23 2588:23 2606:9 2588:23 2585:2,7,9 A a.m 2390:1 2398:8 2398:8 2398:8 2510:3	l '				
5:15 2445:11     663 2564:17     2596:14     2468:5,6       50 2410:8,19     2427:18,19     2428:10     2599:2,24       2428:10     2588:23     2606:9     2397:11       2397:11     2398:8       2397:11       2468:5,6     2530:8       2599:2,24     2603:24       2604:18     2397:13,23       2397:11       2397:11       2397:11       2397:11       2398:8       2500:2       258:23       258:23       258:23       258:23       2506:9				A	=
50 2410:8,19     69 2630:3     2596:14     2468:5,6       2427:18,19     2428:10     2599:2,24     2603:24       2461:16,17     2588:23     2606:9     2397:13,23       2596:14     2468:5,6     2530:8       2599:2,24     2598:23     2599:2,24       2603:24     2397:13,23     2588:23       2506:9     2510:3	<b>5:15</b> 2445:11				
69 2630:3 2599:2,24 AANDC 2548:7 2603:24 2397:13,23 2598:23 2606:9 2398:12 2510:3					
2428:10	· ·	<b>69</b> 2630:3		AANDC:	
2461:16,17 2588:23 2606:9 2398:12 2510:3		<b>6th</b> 2429:25			
2000.5					
	2462:1,10	2589:24		2531:8	
2475:8,11, 2616:16 2532:7,24 <b>absolutely</b>	· ·	2616:16		2532:7,24	absolutely
12 2614.12 2606:13 2418:18	12			2606:13	
2461:15					2461:15

PUB - MANITUBA	HIDRO GRA	01-08-2013	Page 2642 01	_ 2/0/
2501:18	accountant	2446:25	2544:3	2466:16,23
absorbed	2511:15	2605:15	actually	2472:16
2605:18	accounting	2634:9	2418:2	2473:13,17
	2487:13	achieved	2419:22	,25
absorber	2511:14	2472:17	2435:21	2474:11
2561:18	2537:2		2453:7	2475:13
acc 2421:6		achieves	2458:13	2486:3,13
	accounts	2487:7	2459:11,16	2529:12
accept	2397:12,14	acknowledge	2461:10	2544:19
2427:9	,15,17,18	2390:5	2462:2	2549:25
2439:13	2424:23		2479:14,19	2609:19
2455:5 2502:10	2441:10	acronym 2595:5	2482:14,25	2610:5
	2538:11	2393:3	2493:13	2617:17
2605:3 2635:13	2541:13	across	2536:16	address
2033:13	accrue	2400:23	2567:13	2442:16
acceptable	2614:7	2411:8,16	2568:18	2457:2
2509:6	accrued	2412:10	2569:16	2575:17,18
2512 <b>:</b> 11	2531:20	2421:7	2572:23	2576:16
accepted	2598:9	2471:19	2573:8	2588:3
2412:7	2601:1	2580:5	2581:24	2599:10
2574:1		2591:22	2583:16	addressed
	accumla	across-all-	2605:15	2530:15 <b>,</b> 17
accepting	2540:1	rate-	2627:5,11	,20,22
2469:10	accumulate	classes	actuals	
access	2540:1	2415:8	2536 <b>:</b> 11	adequate
2395:14	accumulated			2530:14
2438:25		across-the-	<b>add</b> 2389:21	2582:11
2484:20	2522:7 2540:4,24	board	2434:11	adjourned
2498:22	2598:8	2591:24	2487:11,14	2637:2
2593:23	2599:16	act 2562:23	2534:11	adjourning
accessed	2600:4	2572:8	2610:3,4,5	2637:8
2499:21,22	2604:1,14	2627:15	,10 2611:14	
accommodatio		2635:3	2630:6	adjudicate
	accumulating	Action		2526:5
<b>n</b> 2593:21	2539:22	2388:4	<b>added</b> 2490:3	adjust
accomplished	accumulation	2564:4,6,8	2609:6	2487:25
2631:15	2598:18	2573:2	2611:17	adinated
accordance	accurate	2579 <b>:</b> 23	2631:2	<b>adjusted</b> 2447:16
2506:3,17	2463:9	2580 <b>:</b> 4	<b>adder</b> 2490:3	2447:10
2508:23	2569:1	2595 <b>:</b> 5		adjusting
	2604:19,22	actual	<b>adders</b> 2489:21	2634:5
according	2606:10	2395:18		adjustments
2397:13		2404:23	addition	2436:23
2571.16	2607 <b>:</b> 25	/404 - / 3		
2571:16			2409:1	
2571:16  account	2615:11,18	2412:6,15	2430:4	
account 2444:16	2615:11,18 accurately	2412:6,15 2459:22	2430:4 2434:1	2590:22
account 2444:16 2515:8	2615:11,18  accurately 2411:25	2412:6,15	2430:4 2434:1 2493:22	2590:22
account 2444:16 2515:8 2533:22,23	2615:11,18  accurately 2411:25 2554:21	2412:6,15 2459:22 2482:15,24	2430:4 2434:1	2590:22
account 2444:16 2515:8 2533:22,23 2537:21	2615:11,18  accurately 2411:25 2554:21 2628:12	2412:6,15 2459:22 2482:15,24 2516:14	2430:4 2434:1 2493:22	2590:22  administrati  on 2492:3
2444:16 2515:8 2533:22,23 2537:21 2538:7,10	2615:11,18  accurately 2411:25 2554:21 2628:12  achieve	2412:6,15 2459:22 2482:15,24 2516:14 2517:10	2430:4 2434:1 2493:22 2598:17	2590:22  administrati  on 2492:3  advance
account 2444:16 2515:8 2533:22,23 2537:21	2615:11,18  accurately 2411:25 2554:21 2628:12	2412:6,15 2459:22 2482:15,24 2516:14 2517:10 2521:2	2430:4 2434:1 2493:22 2598:17 additional	administrati on 2492:3

	71 111 1110 0101	01 00 2010	- 1 age 2019 01	
advantage	2512 <b>:</b> 17	2450:17	2483:14	2423:11
2573:19	2538:2	2451:2	2486:23	2458:13
2577:24	after-the-	2470:4	2543:3	2461:1,2,1
advise	fact	2471:13	2589:14	3,19
	2519:25	2476:18	2590:5 <b>,</b> 14	2463:21
2397:4	2519:25	2523:2	2593:10	2464:2,6,2
2399:16	against	2532:24	2614:16	2 2466:5
2400:1 2481:22	2411:19	2545:2	alternate	2478:6
2531:4	2412:17	2598:7	2443:4	2482:20
2555:10	2561:18	2599:4	2495:14	2485:2
2333:10	agencies	2600:1,7	2552:5	2492:19
advised	2397:7,8	2603:2,13,	2553:19	2515:10
2429:14	2547:20	21 2610:21		2516:9
2456:12	2553:15	2612:6	alternative	2519:23
2458:7	2601:1,19,	agreements	2495:20	2529:13,18
2548:8	24 2602:8	2525 <b>:</b> 22	2553:24	,19,24
2585:18	2606:23		2582:13	2531:13,16
2606:24		agricultural	alternativel	2532:19
<b>AE</b> 2460:2,11	agency	2495:7,10	<b>y</b> 2572 <b>:</b> 12	2533:22,23
	2546:16	<b>ahead</b> 2425:7	-	2542:1
Affairs	2548:7	2471:16	alternatives	2567:4
2390:22	2606:12	2561:13	2589:14,20	2569:15
2397:11,23	aggregate	airtime	2590:7,24	2595:8
2398:8	2496:8	2538:4	<b>am</b> 2399:7,20	2598:5
2530:8	<b>ago</b> 2405:1		2422:6	2602:21
2548 <b>:</b> 7	2435:11	albeit	2435:19	2603:3
affect	2443:2	2503:16	2452:18	2605:1
2424:25	2445:5	Alberta	2579:22	2612:4,10
2437:17	2517:1	2421:13	2611:20	amounts
2621:24	2533:14		2612:2	2428:3
2632:16	2542:14	alive	2616:5	2441:10,11
affected	2566:24	2523:18	2619:1	2459:22
2435:14,15	2579:13	allocate	2628:4,24	2482:13,14
2479:25	2584:20	2471:24	2633:24	2483:15
2480:12	2586:7	allocation	amenable	2498:22
2515:13		2474:1	2403:9	2531:11
- CC L :	agreed		3	2533:3
affecting 2575:9	2463:4	allow	America	2535:15
2634:20	2599:5,14 2600:4,10	2490:23	2421:7 2566:14	2563:24
2034:20	2600:4,10	2501:24	2580:5	2568:18
affects	2603:18	2540:18	2300.3	2603:3
2435:10	2607:22	2545:22	American	2612:12
afford	2611:15	2557:18	2455:11	2613:9
2473:1	2613:10	allowed	among	2630:2
	2617:4	2429:11	2432:18	amp 2442:8,9
affordabilit	2623:10,16	2460:10	2562:3	2549:12,16
<b>y</b> 2577:21	,21	2463:4	2587:7	<b>,</b> 19
2578:9	2625:1,8,1	2497:21		
afoot	7 2630:15	2504:25	amortized	amps 2442:11,12
2517:20		allows	2529:18	2442:11,12 2546:1
afternoon	agreement	2492:6	2602:22	
2391:22	2397:10,22		amount	analysis
2JJ1•22	2398:3,15	already	2406:25	2392:5

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611 Serving Clients Across Canada

PUB - MANITUBA	. HIDRO GRA	01-08-2013	Page 2044 O.	L 2707
2519 <b>:</b> 25	2436:4	2549:21	2430:5	2527 <b>:</b> 8
2559:10,11	2442:22		2441:25	2578:12
2633:8	2521:9	apparent	2448:12	2580:19
	2522:21	2505:11	2491:25	
analyzing	2553:7	appeal	2502:21	apportion
2553:8		2493:20		2575:1
ancillary	2556:21 2580:17		2522 <b>:</b> 5 2523 <b>:</b> 8	apportionmen
2473:21	2300:17	appear	2526:15	t 2562:3
	anticipate	2503:7		2574:25
Anderson	2618:1	2584:22	2527:11	23/4:23
2386:14	anticipated	2634:4	2535:1	appreciate
2398:5	2554:16	APPEARANCES	2540:6	2400:18
2523:14	2334.10	2386:1	2542:13,20	2439:20
annual	Antoine		,25 2544:4	2523:23
2418:21	2386:12	appeared	2587:6,15	2570:18
2429:22	anymore	2518:6	2592:22	2598:17
2430:3	2506:15	2533:20	2611:18	2632:7
2442:19		appearing	2620:8	approach
2489:2	anyone's	2399:16	2623:3	2402:4,21
2529:17,18	2525:25	2400:1	applications	2433:20
2539:23	anything		2490:11,15	2547 <b>:</b> 23
2540:18	2435:15	appears	2495:10	2628:16
2556:11	2526:17,19	2457:16	2504:8	2020:10
2603:16	2527:5	2489:18	2510:15	approached
	2547 <b>:</b> 17	2503:5	2564:21	2497:2 <b>,</b> 5
annualized	2548:12,18	2542:8	amm1 d a d	appropriate
2529:23	,21,24	2546:16	<b>applied</b> 2395 <b>:</b> 16	2389:11,15
annually	2587:9	2632:12	2409:15	2444:2
2429:17		appendix	2410:10	2455:20
2556:6	anyway	2429:24	2424:18	2468:1
	2566:5	2448:12	2526:15	2505:9
another's	anyways	2489:3	2527:12,13	2506:3,9,1
2577:13	2596:25	2519:13	2542:2	8 2507:2
answer	2613:2	2527:24	2625:16	2508:22
2396:25	Apart	2611:5,6		2509:2,5,1
2400:18,19	2590:25	appliances	applies	2,20
2406:14	2390:23	2437:1,3	2402:9	2510:1
2421:24	apartment	2437:1,3	2573:7,16,	2512 <b>:</b> 23
2430:10	2438:14	applicable	17	2513 <b>:</b> 6
2436:4	2441:2	2424:11	apply	2553 <b>:</b> 15
2474:9,17	<b>APEGM</b> 2389:9	2612:5	2395:11	2563 <b>:</b> 15
2484:11	2507:19	application	2396:23	2564:20
2504:12	2509:4,10	2385:7	2405:2	2566:25
2506:20	•	2392:25	2406:2	2567:19
2510:23	apologies	2392:23	2435:1	2575 <b>:</b> 8
2533:12	2464:15	2395:4	2491:21	2613:19,22
2555:3	apologize	2396:16	2497:15	,23
2556:1	2508:18	2397:16	2498:11,13	appropriatel
2616:18	2544:1,11	2400:22	,15,16	
2635:3	2636:10	2401:4,16	2573 <b>:</b> 8	<b>y</b> 2562:15
answering	apparatus	2416:5	2602:24	2588 <b>:</b> 7
2510:10	2390:23	2424:17,25	annluine	appropriaten
	2390:23	2427:6	applying	ess
answers	2333.0	2429:23	2395:8	2612:24
			2396:20	

UB - MANITUBA	A HIDRO GRA	01-08-2013	Page 2645 01	. 2101
approval	2400:22	2426:11	18	2473:19
2469:15	2414:25	2556:2	2507:18,22	attribute
2491:25	2423:10	arrived	2508:24	
2492:2	2441:25			2559:24
2504:7	2457:9	2599:7	assume	2577:10
2510:14	2527:12	arrives	2440:8	attributed
2512:5	2544:8	2454:17	2541:6	2635:7
2522:6	2592:20,23		assumes	
	2593:6	articulated	2464:9	audit
approve	2620:9	2523:25		2511:11,12
2581:23	2625:22	aside	assuming	auditor
approved		2612:14	2501:19	2511:15
2393:23	arcing		2516:14	
2395:17	2477:3	aspect	2572 <b>:</b> 13	auditors
2401:5,16	area	2503:21	2574:6	2511:21,2
· ·	2391:2,17	2560:4	2617:20	augment
2416:5		2599:8	2625:21	2552:2
2441:25	2392:12	aspects	2626:4	
2483:22	2415:4	2392:10	2630:18	augmenting
2527:12,13	2552:19	2412:8	assumption	2551 <b>:</b> 22
2534:23	2634:2	2560:5	2577:21	August
2535 <b>:</b> 20	areas 2419:3	2562:10		2607:21
2545:3		2302:10	2616:6	2613:2,12
2592:19	aren't	assembly	2617:4	2614:8
2602:19	2414:25	2596:12	attach	2014:0
2614:21	2507:8	assessed	2571 <b>:</b> 8	authority
approves	2568:25			2455:13
2497:14	Arguably	2421:2	attempt	authorized
2497:14	2432:15	assessing	2391:15	
approximate		2628:12	2440:9	2510:13,2
2402:25	argument		2489:21	availabilit
2404:9	2576:21	assigns	2520:6	2482:11
2459:21	2577:17	2575:2	2540:11	2507:10
2478:6	arguments	assist	2580:8	2509:17,1
2571:2	2524:20	2448:9	2588:3	2582:12
2618:17	2324:20	2450:10		2621:13,1
	arise	2597:22	attempting	
approximatel	2391:17	2606:20	2440:8	available
<b>y</b> 2404:13	2486:7	2000.20	2492:10	2427:7
2411:1	2491:12	assistance	2559:18	2439:10
2415:23	2500:19,20	2510:19	2579:22	2443:5
2444:16		associated	attention	2445:17,2
2482:21	arises	2399:11	2599:2	2446:14
2484:3	2550:13	2485:9	2603:24	2450:8,12
2542:8	arrangement	2587:14	2606:7	25 2451:1
2550:18	2450:23		2607:18	2452:7,8
2556:5	2453:25	2607:10	2608:13	2455:21
2627:11	2466:11	2608:15	2623:6	2456:16,1
	2470:5,14,	2610:23		,22
approximatin	20 2471:5	2615:7	2624:18	2458:11,1
<b>g</b> 2585:4	20 24/1.5	Associates	2635:24	2460:2
2594:15	arrangements	2587:21	attract	2464:23
April	2398:10		2503:25	2469:7
2393:17	2530:14	association		2472:11
ムンノン・エー		2476:5	attractive	Z4/Z:11
2396:13	arrive	2506:4,12,	2443:21	2473:22

	MANTIODA	IIIDNO GNA	01 00 2015	rage 2040 O.	
24	74:6	2551:5	2519:25	2446:1	2403:9
24	75:2	2553:1	2520:14	2447:6	2404:25
	78:11	2555:16	2535:6	2448:2	2406:13
1	81:15	2582:4,9	2536:12	2453:22	2413:4
	82:1,3	2634:1	2568:1,3,4	2472:1	2424:13
1	84:2,12,	2635:4	2571:4,5,6	2474:2	2433:20
1	,25		2579:3	2482:18	2436:9
	90:22,24	awareness	2585:13	2485:4	2472:21,25
1	91:19	2414:6	2594:13	2497:14	2474:23
1	92:17	away 2405:11	2616:6,16	2499:22	2485:16
1	93:10	2523:21	2617:3,12	2504:18	2489:7
24	94:11	2556:19	2625:7	2535:25	2492:2
	45:10	2557:16		2539:23	2494:8
	95:19	2627:17	basic	2540:19	2496:8
	96:22		2392:19	2541:18,20	2497:4
			2393:25	2553:14	2498:3
Aven		B	2394:5,15	2556:11	2534:15
23	85:21	background	2401:20	2586:23	2535:2
aver	age	2554:6	2402:16	2598:20	2538:5,6
1	96:2	backup	2403:13,20		2540:4
	02:3	2460:24	2404:18,22	BC 2421:2,11	2544:2
	15:8		2405:5,7,1	2438:2	2549:13,23
	17:6,7,1	backwards	2 2407:22	2584:3	2550:6,19
9	_ , , , , _	2497:3	2408:7,21,	<b>bear</b> 2575:3	2551:1,7
2.4	27:19,20	balance	24 2409:1		2552:12
	28:5	2408:6	2410:22	became	2553:13
	38:5	2444:8	2418:12	2505:11	2556:23
	88:14	2471:6	2420:8,9	2537:14	2557:9
	89:16	2475:9	2421:9,11,	2600:7	2564:5,14
	20:16	2540:24	17	becomes	2566:5
	85:7	2563:1	2425:10,13	2448:3,4	2569:7
		balanaina	2440:24,25	2465:13	2587:20
	aged	balancing 2455:13	2441:4,11,	2567:19	2590:8
241	17:19		12,14	2632:2	2591:9,13
avoi	d	2562:23	2442:7	hami n	2594:17
24	32:12	ballpark	2554:9	begin	2595:9
24	35:6	2604:25	2569:13	2491:12	2596:8,13
25	60:8	2606:20	2594:16	<b>begs</b> 2542:5	2598:4
25	63:5,11,	barrier	2595:7	behalf	2604:7
14		2462:19	2632:13,15	2580:3	2606:1
22701	dance	2503:19	,16	2587:21	2609:3,23
	62:18		basically	2597:3	2614:7
25	02:10	<b>base</b> 2421:20	2429:6	2337.3	2615:4
avoi	ded	2624:25	2440:19	behaviour	2620:11
24	33:7	based	2582:15	2432:10	2622:10
25	57:17	2395:18		2433:22	2627:4,20
25	67:23	2461:6	basing	2434:24	2628:7
awar	<b>e</b> 2393:3	2475:13	2516:25	2634:3	2631:1
	98:13	2476:20	<b>basis</b> 2401:8	<b>bel</b> 2390:4	2636:9
	32:12,13	2482:10	2404:9		
,1		2516:9,13,	2418:21	belief	believed
	34:11	20	2429:22	2405:3	2568:9,17
	37:20,23	2517:3,16	2435:18	2572 <b>:</b> 20	believes

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611 Serving Clients Across Canada

		01 00 2013	rage 2047 O.	
2512 <b>:</b> 22	2414:19,20	2597:12,13	2398:25	2524 <b>:</b> 11
2513:5	2415:1,5,6	,24	2399:21	2525 <b>:</b> 25
	2416:6,12,	2615:12	2400:7,18	2526:5
benchmark	24 2417:18	2620:5	2404:16	2528:1,9
2415:19	2418:14,19	2623:24	2414:21,22	-
<b>bene</b> 2581:4	<b>,</b> 25	2631:13	2415:4,22	2530:11 <b>,</b> 12
benefit	2420:10,12	blended	2417:16,23	,16
2445:7	2423:9	2537:22	2427:3	2531:4,12
2453:18	2425:7,10		2429:20,22	
2487:8	2428:4,23	block	2430:10,12	
2492:16	2429:2	2394:10,12	2434:3	2535:20
2498:17	2435:14	,14	2442:18,22	
2514:15	2441:7,13,	2438:14	,24	2541:18
2573:18	15 2443:16	2535:22	2448:9,13	2542:20
2574:15	billed	2565:23	2449:18	2543:3,16
2597:10	2410:22	2566:7,9,1	2453:18	2544:1,3,1
benefits	2418:5,8,1	1,15,21	2457:2,6	5 2545:18
2571:20,25	0,11,15	2567:1,22, 23	2462:21	2547:11
2572:1,7	2423:10		2464:5	2548:18,22
2572.1,7	2515:11	2569:2,5,8	2466:4	2553:17
2581:5	2517:11	,15,17,24, 25	2469:15,22	
	2518:10	2570:2,12,	2470:7	2555:10
benign	billing	13	2471:5	2556:24
2635:15	2389:5	2571:4,8,1	2472:4 2479:22	2558:3 2564:22
<b>best</b> 2400:17	2414:14	0,11	2479:22	2565:9,15
2417:15	2419:14,16	2572:3,6	2483:5,22	2570:6
2432:24	2422:20,25	2573:6	2485:1	2580:6
2489:15	2427:1,6,2	2575:1	2488:23	2581:22
2549:1	2 2431:19	2577:20	2489:3	2582:16
2576:12	2514:6,14,	2581:11,13	2490:11	2586:16,17
better	24	2582:18	2492:16	2587:10,16
2422:7	2516:13,14	2584:5,10,	2493:13	<b>,</b> 19
2431:22	,15,20	12	2496:2	2589:22,25
2450:7	2518:8,11,	2587:4,6	2497:13,14	2590:17 <b>,</b> 22
2458:23	16 2581:24	2588:8	<b>,</b> 20	<b>,</b> 23
2477:22	billings	2590:10	2500:12	2591:20,22
2488:4	2434:17	2592 <b>:</b> 7	2503:3	2592:4,20
2547:23		2593:20	2504:13	2593:13,14
2579:14	bills	2595:17	2505:14	<b>,</b> 16
2598:3	2408:16	blocks	2508:4,6,1	2594:2,24
2613:6	2418:24	2415:14,15	1	2595:2
2622:20	2421:19 2423:11,13	2566:9	2512:7,10,	2614:4,7
beyond	,18	2570:13	24 2513:9	2615:23,24
2435:15	,10 2635:24	2582:9	2514:3,5,6	Board's
2590:1		board	<b>,</b> 12	2504:7
bigger	biomass	2385:3,13,	2515:23	2549:4
2580:15	2551:13	14,15,16,2	2518:2,5 2519:3	<b>Bob</b> 2386:2
	<b>bit</b> 2458:23	0 2386:2	2519:3	2387:13
biggest	2510:10	2389:17	2521:20	2400:12,13
2503:19	2560:22	2391:23	0	2401:2,11,
2583:15	2581:24	2395:17	2523:16,17	20
<b>bill</b> 2408:12	2596:21	2397:4	,20	2402:1,11,
DIII 2408:12	2000.21	2391:4	,20	2402:1,11

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611 Serving Clients Across Canada

FUB -	MANIIODA	A HIDRO GRA	01-08-2013	Page 2648 01	_ 2707
1 5	,20	2457:2,12,	17	,12,20	2524:11
	03:20	15,21	2499:3,14	2538:3,12,	2528:1
				2536:3,12, 17	
	04:1,8,1	2458:4,8,1	2500:11,23		2529:11
	21	8	2501:7,12	2539:1,6,1	2536:4
	05:13	2459:18,25	2502:2,7	4,18,21	2539:7
	06:7,18	2460:13,17	2503:2,9	2540:7,16,	2543:3
	07:1,7,1	2462:6,7,2	2504:5,11	23	2545:16
	18,19,25	0	2505:1,13,	2541:5,17,	2617:7
	08:6,14,	2463:1,12,	16 2506:20	23	books
	, 25	14,19	2507:10,13	2542 <b>:</b> 5 <b>,</b> 18	2541:15
	09:4,8,1	2464:4,15,	,17,21,25	2543:1,8,1	
	19	20	2508:3,10,	5,21,25	border
24	10:2,12,	2465:10,11	17 2509:3	2544:11,24	2488:12
24		,16,21	2510:3,22	2545:15	<b>borne</b> 2603:7
24	11:5,17	2466:3	2511:11 <b>,</b> 22	2546:5,10,	
24	12:16,23	2467:1,10,	2512:8,13	18,24	<b>bot</b> 2611:9
24	13:10,17	24	2513:15 <b>,</b> 22	2547:12 <b>,</b> 25	bottom
24	14:5,15,	2468:8,9,2	<b>,</b> 25	2548:11 <b>,</b> 17	2488:25
20		5	2514:1,11,	<b>,</b> 25	2536:19
24	15:11,21	2469:12,16	17,22	2549:10,15	2541:13
	16:4,9,1	,21 2470:6	2515:19	<b>,</b> 18	2605:20,23
6		2471:4,12,	2516:5,19	2550:2,10,	2611:9
24	17:12,13	21 2472:3	2517:18 <b>,</b> 19	23	2615:19
	2 2419:1	2473:18	2518:1,12,	2551:3,9,1	
1	20:16	2474:10,21	15	6 <b>,</b> 25	bottom-line
	23:1,2,1	2477:14,15	2519:2,11,	2552:9,14,	2603:10
	14,20,23	2478:1,5,1	16,17	18	2605:19
	24:5,9,1	0,17,21,24	2520:2,6,1	2553:1,8,1	Brandon
	22	2479:5,22	9	6 2554:19	2555:22
	25:6,15,	2480:9,14,	2521:8,14,	2555:7,16,	2556:2
	,24	21	23	21,24	
	26:12,16	2481:12,19	2522:9,15,	2556:8,18	breach
1	0,25	2482:12,23	20 2523:21		2595:20
	29:16,19	2483:4,13,	2524:7,9	<b>body</b> 2518:6	break
	30:1,9	19 2484:10	2524:7,3	Bonjour	2510:24
	31:15,24	2485:1,10,	0,11,19,22	2390:4	2636:14
	32:4	15,17	2527:5,10,		
		2486:6	20,24	<b>book</b> 2414:22	breakdown
	38:22,23 39:7,12,	2486:6	2528:8,17	2416:24	2503:4
			1	2417:16	break-even
20		2488:6,7,2	2529:9,17,	2440:5	2429:4
	41:17,18	3 2489:18	25	2442:17	
	42:6,13	2490:9	2530:4,10,	2448:10	brief
	44:1,10,	2491:7	21	2452:17	2401:24
1	,22	2492:8,12,	2531:2,12,	2457:4	2403:18
	48:7,8,1	23	23	2462:22	2406:5
1	25	2493:1,4	2532:5,11,	2463:14	2407:9
	49:8,12,	2494:4,10,	15,18	2483:20	2412:3
1	2450:11	15,20	2533:8,17	2488:25	2414:3,10
	51:14	2495:2,5,1	2534:2,5,1	2492:13	2420:14,18
1	52:13	1,17,22	0,20	2503:3	2422:15
	53:16,17	2496:2,18	2535:18,24	2514:5	2425:4
24	54:5	2497:1,6,1	2536:3,10,	2519:4	2427:13
	55:7,22	0,18,25	14,17,24	2522:3	2442:24
24	56:7,17	2498:7,13,	2537:3,6,9		

		IIIDNO GNA		rage 2049 Oi	
24	444:20	2634:25	<b>burn</b> 2550:18	23	calculate
24	445:3	briefly	burning	2618:11,22	2520:12,13
24	449:22	2417:22	_	2619:7 <b>,</b> 21	,16,17
24	456:1,10	2417:22	2550:17	2620:3,14,	2612:10
24	462:12,24	2456:8	business	20	2625:24
24	463:24	2430:0	2520:21	2621:1,8,1	calculated
24	464:13,18	<b>bring</b> 2454:3	2637:2	9	
24	465:1	2511:21	businesses	2622:2,5,1	2423:18 2429:8
24	466:25	2579:1	2448:1	5 <b>,</b> 19	
24	468:23	2582:17	2545:22	2623:5,12,	2460:20
24	470:11	broad		18,23	2521:10
24	474:14	2411:15	<b>buy</b> 2474:8	2624:13 <b>,</b> 17	2535:11
24	479:1	2587:22	2632:3	<b>,</b> 24	2604:13
24	480:7,19	2622:14	<b>Byron</b> 2386:7	2625:3,10,	calculating
24	484:8		2387:15	19	2406:8
24	490:7	broaden	2408:9	2626:8 <b>,</b> 13	calculation
24	496:16	2431:5	2595:21	2630:13 <b>,</b> 14	2461:13
25	502:14	broadening	2596:10,19	<b>,</b> 18	2518:21
25	504:3	2628:2	,20	2631:4,14	2519:25
25	505:6,18		2597:3 <b>,</b> 9	2632:19	2538:9
25	510:7	broadly	2598:2,16,	2633:3,19,	2612:17
25	511:1,18	2414:12	25	25	2617:2
25	520:23	2628:18	2599:8,12,	2635:2,18	2625:20
25	524:24	Broch	23	2636:3,7,2	
25	527:18	2531:25	2600:12,21	4	calculations
25	528:5	Dunchat	2601:4,8,1		2553:14
25	529:7,21	<b>Brochet</b> 2395:3	3,17	C	2604:23
25	537:18		2602:1,6,1		calendar
25	538:20	2531:19,25	3	<b>CAC</b> 2386:7	2516:2
25	543:23	2607:10,14 2610:20,23	2603:6,12,	2388:6	
25	545:13	2010:20,23	23	2525:21	calender
25	548:4	broken	2604:5,11	2596:12,13	2449:14
25	552:16	2492:14	2605:4,9,2	<b>,</b> 17	Canada
25	554:1	brought	0,25	2599:2,24	2397:11,23
25	559:21	2461:21	2606:6,19	2606:8 2608:8	2398:9
25	573:11	2579:17	2607:2,8,1	2611:4	2421:7,9
25	576:7		3,17,24	2614:12	2525:19
25	583:12,18	budgets	2608:7,12,	2618:5	2530:9
	22	2578:10	18	2621:20	2532:6
25	584:17	building	2609:10,17	2623:25	2533:9
25	585:16	2392:23	2610:1,5,1		2534:10,16
25	591:6	hildi	6,17	CAC/Hydro	2548:1
25	594:7	<pre>buildings 2434:23</pre>	2611:3,8,1	2608:10	2567:25
25	599:19	2434:23	9	CAC/Manitoba	Canadian
1	606:17	<b>built</b> 2579:5	2612:2,13,	2600:23	2389:7
1	608:5,23	<b>bulk</b> 2438:19	23	2629:17	2439:15,24
	611:1		2613:5,8,1		
	612:21	bullet	4 2614:10	CAC-1-93(e	canvass
1	615:1	2485:18	2615:3,11,	2617:8	2523:17
1	616:9,23	burdens	16,22	<b>CAC-8</b> 2388:6	canvassed
	618:9	2563 <b>:</b> 15	2616:5,11,	2596:17	2523:16
	626:21	2581:19	18,25	2603:24	
	629:12		2617:6,15,	2604:12	cap 2468:14
26	630:11				2472:5

2479:25 2428:17 2532:19 2580:4 2480:5,22 2618:20 capital 2533:5 2595:5	
2480:5,22 capital 2533:5 2595:5	2559:24
Capital Capital	2569:11
2010:20	2574:6
2528:15   <b>case</b> 2395:19   <b>cents</b>	2502.2
capabilities         2529:2,13         2403:12         2396:1,	3,9
2411:22 2530:1,14 2405:17 ,10 239	7:2
capability         2531:13,21         2421:17         2406:16	2591:4
2433:5 2532:22 2431:4 2407:2	2504.20
2433.3 2441:9,	2505.22
2496:25 2534:6,7 2460:1,15, 2442:3,	8   2500.24
2498.5 2535:14 17 2445:10	, <sup>   </sup>   2599.2 14
2548·2 2544:6,17, 2461:11,14 2487:22	15 2602.15
19,20 2487:16 2528:11	,22 2603:19
capable         2545:1,2         2489:6         2529:1	2607.13
2494:17 2551:14 2540:21 2534:13	, 14 2614.11
2496:19,22 2582:24 2544:23,24 2569:4,	0,8
2498:6 2598:9 2546:2,3 ,9 2584	:25
capacity 2600:8,14 2547:7,9 2585:3,	2633.15
2392:4 2601:4,5,1 2575:11 0,21,22	
2399:9 0 2602:3 cases 2614:20	•
2411:21,25 2603:16,20 2394.25 2620:10	
2412:12 ,22 ,2408:20 ,18 262	1:3 2490:13
2428:18,21 2606:11,22 2412:21,22 2624:22	2503:14
2433:9 2607:20 2413:4 2625:1	2504:1
2443:22 2608:2,14, 2428:6 2628:10	,20 Certificate
2444:3,13 15 2481:2 2629:23	2387:17
2445:17,18 2609:2,19 2496:24 2630:4,	5,7
,19,22 2611:22,23 2567:18 <b>cer</b> 2432:	Certified
2446.6.10. 2634:19 2605.15	2637:11
13.17.23 canned 2634.13 certain	Chair
2412:7	Chair
1 244/,2,1/ 1 2465.19	2422:20
2447:2,17 2450:18,25 2466:6 2427:12	2422:20 2557:2.14
2450:18,25 2451:11,12 2466:6 2411:15 2432:13	2422:20 2557:2,14 2564:13.15
2450:18,25 2451:11,12 .13.18.21	2422:20 2557:2,14 2564:13,15
2450:18,25 2451:11,12 ,13,18,21 2454:20 2466:6 2411:15 2432:13 2612:15 2436:21 2436:21 2436:21	2422:20 2557:2,14 2564:13,15 2573:3,4
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2466:6 2411:15 2432:13 2436:21 2585:25 2618:20 2618:20 22567:5	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2466:6 2411:15 2432:13 2612:15 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21	,22 2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:6 2411:15 2432:13 2612:15 2436:21 2436:21 2436:21 2585:25 2618:20 2567:5 2459:4 2473:15 2473:15 2567:4	,22 2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:6 2411:15 2432:13 2612:15 2436:21 2436:21 2585:25 2618:20 2567:5 2473:15 2473:15 2567:4 2575:16	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7.25
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2466:6 2411:15 2432:13 2612:15 2436:21 2436:21 2585:25 2618:20 2567:5 2459:4 2575:16 2575:16 22576:11	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8  2466:6  2411:15 2432:13 2436:21 2436:25 2612:15  2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2585:25 2618:20 2567:5 2459:4 2567:4 2557:22 2575:16 22576:11 2584:22	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2466:6  2411:15 2432:13 2436:21 2436:21 2436:25 2612:15  2436:21 2436:21 2436:21 2436:21 2436:21 2436:25 2443:6 2567:5 2459:4 2473:15 2567:4 2557:22 2575:16 22575:16 22603:4	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 2466:6  2466:6 2466:6 24411:15 2432:13 2432:13 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2459:4 2473:15 2567:4 2557:22 2575:16 2603:4 2603:4 2632:5	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 2466:6  2466:6  2466:6 2466:6 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2  2466:6  2466:6 2466:6 2466:6 2466:6 2466:15 2466:15 2469:22 2470:8 2459:4 2459:4 2459:4 2473:15 2436:1 2576:4 2576:11 2603:4 2603:4 2632:5 2518:10	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2466:6  2466:6  2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2473:15 2432:13 2432:13 2436:21 2436:21 2436:21 2443:6 2459:4 2567:5 2459:4 2567:5 2473:15 2576:16 2473:15 2632:5 2632:5 2633:1 2633:1 2634:15	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2466:6  2466:6  2466:6  2466:6  2466:6  2466:6  2466:6  2466:15 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5  2473:19,23 2471:18  2466:6  2466:6  2411:15 2432:13 2436:21 2436:21 2436:21 2443:6 2459:4 2459:4 2459:4 2459:4 2473:15 2436:1 2576:11 2603:4 2632:5 2518:10 2633:1 2635:4	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2474:5,11, 20,2486:13 2466:6  2466:6 2466:6 2466:6 2466:6 2466:6 2466:15 2466:15 2473:15 2486:15 2473:15 2486:13 2474:4  2466:6 2411:15 2432:13 2436:21 2436:21 2436:21 2436:21 2443:6 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2473:15 2436:1 2436:1 2436:1 2557:22 2576:11 2632:5 2632:5 2633:1 2633:1 2633:1 2635:4	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2474:5,11, 20 2486:13  2466:6  2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2466:6 2470:8 2470:8 2471:18 2474:4 2477:11   2486:6 2411:15 2432:13 2436:21 2436:21 2436:21 2443:6 2473:15 2443:6 24473:15 24473:15 2459:4 2459:4 2473:15 2436:21 2443:6 2443:6 2443:6 2443:6 2443:6 2443:6 2443:6 2443:15 2459:4 2473:15 2436:21 2436:21 2436:21 2443:6 2443:6 2443:15 2567:4 2459:4 2473:15 2436:21 2443:6 2443:6 2443:6 2443:15 2567:4 2459:4 2473:15 2436:21 2443:6 2473:15 2436:21 2436:21 2576:11 2603:4 2603:4 2632:5 2518:10 2633:1 2635:4 2635:4 2635:4	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10
2450:18,25       2466:6       2411:15       2432:13         2451:11,12       2585:25       2411:15       2432:13         2454:20       2585:25       2443:6       2459:4         2459:1,7       2459:1,7       2459:14       2585:14       257:22         2466:15       2466:15       2470:8       2451:8,15       257:22       2575:16         2470:8       2472:7,10,       2574:13       2436:1       2584:22         2473:19,23       2471:18       2474:4       2477:11       2633:1         2487:18       2477:11       2474:4       2477:11       2434:3         2487:18       2476:5       2456:5       2436:1       2434:3	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2474:5,11, 20 2486:13 2487:18  capacity-  2466:6  2411:15 2432:13 2432:13 2466:21 2411:15 2612:15 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2443:6 2443:6 2447:5 2459:4 2567:5 2443:1 2567:4 2557:22 2575:16 22575:16 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2436:1 2447:11 26ase 2518:10 2633:1 2633:1 2635:4 2635:4 2635:4 2636:16 2635:4 2636:16 2638:24 2638:4 2477:11 2487:18 2477:11 2487:18 2488:24 2488:4	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13 2513:23
2450:18,25     2466:6     2411:15     2432:13       2451:11,12     2585:25     2612:15     2436:21       2454:20     2585:25     2618:20     2457:15       2459:1,7     2459:1,7     2459:1,7     2459:14     2567:5       2460:2     2585:14     2576:15     2473:15       2466:15     2469:22     2451:8,15     2576:11       2470:8     2470:8     2436:1     2584:22       2470:8     2471:18     2603:4       2473:19,23     2574:13     2632:5       2473:19,23     2471:18     2518:10     2633:1       2473:19,23     2471:18     2518:10     2635:4       2473:19     2474:4     2518:10     2635:4       2487:18     2477:11     2620:22     2743:13       2487:18     2478:24     2388:4     2499:20       2458:24     2452:9     2510:11	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13 2513:23 2556:22
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:15 2469:22 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2473:19,23 2473:19 2486:13 2487:18  capacity- reduction 2443:13  2466:6  2466:6  2466:6  2466:6  2466:6  2411:15 2432:13 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2473:15 2459:4 2473:15 2486:1 2557:22 2575:16 2436:1 2567:4 2557:22 2575:16 2436:1 2584:22 2576:11 2633:1 26	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13 2513:23 2556:22 2636:13
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:6  2472:7,10, 17,22,23,2 5 2473:19,23 2473:19,23 2473:18  captive  captive  captive  2455:17  captives 2458:24 2471:15 2432:13 2432:13 2432:13 2436:21 2436:21 2436:21 2436:21 2443:6 2473:15 2459:4 2567:5 2459:4 2567:5 2473:15 2575:22 2575:16 2436:1 2557:22 2575:16 2436:1 2557:22 2575:16 2436:1 2584:22 2575:16 2436:1 2584:22 2436:1 2584:22 2585:14 2632:5 2632	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13 2513:23 2556:22 2636:13
2450:18,25 2451:11,12 ,13,18,21 2454:20 2455:17 2459:1,7 2460:2 2466:6  2470:18 2470:18 2470:17 2460:2 2470:8 2470:8 2472:7,10, 17,22,23,2 5 2473:19,23 2473:18  carried 2473:19 2473:18  carried 2473:19 2473:18 2474:4 20 2486:13 2487:18  capacity- reduction 2443:13  2466:6  2466:6  2411:15 2432:13 2432:13 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2436:21 2473:15 2473:15 2473:15 2476:11 2557:22 2575:16 2436:1 2576:11 2584:22 2576:11 2603:4 2603:4 2632:5 2518:10 2633:1 2633:1 2635:4 2635:4 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2636:1 2646:1	2422:20 2557:2,14 2564:13,15 2573:3,4 2594:11 2595:24 2598:5 2624:3 2636:7,25 Chairman 2385:14 2391:23 2398:25 2414:21 2438:24 2467:25 2468:10 2512:13 2513:23 2556:22 2636:13 CHAIRPERSON

2407:15	D - MANIIODA	BA HIDRO GRA	01-08-2013	Page 2001 O	L 2/0/
2407:15         2592:19         2442:7         2538:6         \$2456:12         2486:1         2420:20         2619:4,17         2516:8,13         2606:1         2496:1         2496:1         2421:18         2621:12         2556:1,2,1         2621:2         cities         2435:23         2632:15         8 2575:8         2627:12         2439:1         2435:23         2632:15         8 2575:8         2627:12         2439:1         2439:1         2439:1         2439:1         2439:1         2439:1         2439:1         2439:1         2439:1         2439:1         2621:2         cities         2439:1         2626:9         2439:1         2439:1         2626:9         2439:1         2439:1         2626:9         2439:1         2439:1         2626:19         2439:1         2439:1         2626:19         2439:1         2439:1         2626:12         2439:1         2439:1         2626:12         2439:1         2631:1         2531:1         2580:3         2551:2:2         2551:2:3         2552:9         2559:9         2559:9         2559:9         2559:9         2626:2:3         253:2:0         263:5         26arife         2430:1         2626:2:2         259:19         2626:2:2         259:19         2626:2         259:19         2626:2         263:11         2637:17	2 2400:9	23 2403:15	2.13.14	2439:11.13	circumstance
2419:18,24   2593:1,5   2485:20   2585:12   2486:1   2420:20   2619:4,17   2516:8,13   2606:1   2496:1   2421:18   2621:12   2559:11   2621:2   2435:23   2632:15   8 2575:8   2627:12   2435:23   2632:15   8 2575:8   2627:12   2439:13   2437:5   2634:16   2599:16   2692:240:1   2499:8   2599:7   2533:1   2632:13,15   2476:1   2503:11   2633:9   2503:13   2592:19   2595:15   2595:73   2596:2,8					
2420:20         2619:4,17         2516:8,13         260:1         2496:1           2421:18         2621:12         2559:11         2621:2         cities           2435:23         2632:15         8 2575:8         2627:12         2439:1           2437:5         2634:16         2594:16         cheques         City 238           2440:1         characterist         cceques         cheques         Colarific           2475:1,15         2496:3         2595:7         2533:1         clarific           2513:16         2503:11         2633:9         characteriza         2595:15         Chernick         2599:9           2595:18         2596:2,8         characteriza         characteriza         charged         Cheryl         2637:17         2626:23         2530:25         2395:2         Cheryl         2637:17         2626:2         2530:25         2395:2         Cheryl         2637:17         2626:2         250:12         charge         2598:15         2506:1,25         2627:62         2430:1         2627:62         2430:1         2637:17         2626:2         2627:6,24         2533:1         2607:6,24         253:1         2607:6,24         2508:1         2607:6,24         2508:1         2508:1         2208:1         2208					
2421:18         2621:12         2559:11         2621:2         cities           2435:23         2632:15         2566:1,2,1         2626:9         2439:1           2437:5         2634:16         2594:16         cheques         City 238           2440:1         characterist         2595:7         2533:1         clarific           2468:2         ics 2493:8         2632:13,15         Chernick         n 2499           2476:1         2503:11         2503:11         2595:15         2599:19           2557:3,9         2533:10         chargeable         2594:18         Clarifie           2596:2,8         tion         2530:25         2406:1         2637:17         clarify           2626:23         2530:25         2406:1         2637:17         clarify           2627:6,24         2532:10         2406:1         2637:17         clarify           2521:23         charge         2598:15         2506:1,25         2604:6           2396:16         2394:4,5,1         2603:7         chief         class           2401:10         5,17         2401:17,21         2393:25         2405:1         2407:23           2440:12         2404:14         2394:1,23         2467:17,23	· ·	· ·			· ·
2422:1         2622:9,18         2566:1,2,1         2626:9         cities           2435:23         2632:15         8 2575:8         2627:12         2439:1           2437:5         2634:16         2594:16         cheques         City 238           2440:1         characterist         2595:7         2533:1         clarific           2475:1,15         2496:3         2632:13,15         Chernick         n 2499           2476:1         2503:11         2503:11         2598:3         2595:9           2557:3,9         2539:18         characteriza         charged         2594:18         2430:1           2626:2,8         tion         charged         2594:18         2430:1           2627:6,24         2530:25         2395:2         Cheryl         2637:17         2626:2           2637:1         characterize         d 2573:4         2512:2         2637:17         2626:2           challenge         d 2573:4         2594:18         2506:1,25         260:2           2396:16         2394:4,5,1         2603:7         chief         2394:2           2419:10         5,17         240:1         2579:7         240:2           2436:6,8         240:3,13,14         2394:1,23		· ·	· ·		2496:1
2435:23         2632:15         8 2575:8         2627:12         2439:1           2440:1         characterist         2599:7         cheques         2533:1         clarific           2468:2         2496:3         2618:14,15         2533:1         clarific         n 2499           2476:1         2503:11         ,16         2580:3         2512:2         2595:15         clarific           2557:3,9         2595:18         characteriza         chargeable         2603:5         Chernick's         2594:18         2637:17         clarific           2595:18         2596:2,8         2530:25         2395:2         Cheryl         2626:23         2532:10         2406:1         2637:17         clarify         2626:2         2637:1         characterize         2523:5         chic         chic         2391:1         2626:2         2637:17         clarify         2604:6         clarify         2604:6         clarify         2604:6         chic         clarify         2604:6         clarify         2604:6         clarify         2604:6         clarify         2604:6         chic         clarify         2604:6         chic         clarify         2604:6         chic         clarify         2604:6         chic         chic         chic<					cities
24337:5         2634:16         8 25/518         2627:12         City 238           2440:1         characterist         2595:7         2618:14,15         2533:1         clarific           2476:1         2496:3         2496:3         2632:13,15         2580:3         2592:9           2513:16         2503:11         2633:9         chargeable         2595:15         Clarific           2557:3,9         2595:18         characteriza         2603:5         Chernick's         clarific           2626:28         2530:25         2395:2         Cheryl         2626:2           2627:6,24         2532:10         2406:1         2637:17         2626:2           2637:1         characterize         2516:8         Chic 2391:1         2604:6           2521:23         charge         2598:15         2506:1,25         2393:12           251:23         charge         2598:15         2506:1,25         2393:12           2396:16         2393:25         2602:8,18         2508:11,20         2394:2           2419:10         5,17         2402:1         2393:25         2405:1         2579:7         2401:8           2437:2,3         ,15,21         2394:1,23         2467:11         247:1         2					2439:1,4,5
2440:1         characterist         2595:7         2618:14,15         2533:1         clarific         n 2499           2475:1,15         2496:3         2496:3         2632:13,15         ,16         2580:3         2592:9           2476:1         2503:11         2503:11         2533:9         chargeable         2595:15         Chernick's         2592:9           2595:18         characteriza         2603:5         Chernick's         2430:1         2406:1         2637:17         2626:2         2530:25         2395:2         Cheryl         2626:2         2637:17         2626:2         2532:10         2406:1         2637:17         2626:2         2637:17         2626:2         2637:1         2627:6,24         2532:10         2516:8         Chic 2391:1         2604:6         2637:1         2626:2         2535:10         2516:8         Chic 2391:1         2604:6         262:2         2535:10         2602:8,18         2506:1,25         2393:11         2604:6         262:2         2508:11         2004:6         2004:6         2004:6         2002:8,18         2508:11,25         2393:11         2604:6         2004:6         2002:8,18         2508:11,25         2393:11         2006:1         2006:1         2006:1         2006:1         2006:1         2006:1				2627:12	<b>G: L</b> 0006 16
Characterist   Chargeable   C		2634:16		cheques	City 2386:16
2475:1,15		characterist		2533:1	clarificatio
2476:1 2513:16 2513:16 2513:16 2513:16 2513:16 2513:16 2513:16 2557:3,9 2595:18 2633:9 2603:5 2603:5 2594:18 2530:25 2596:2,8 2626:23 2627:6,24 2637:1 266:2 2391:1 2637:1		ics 2493:8	· ·	Champiale	<b>n</b> 2499:14
2503:11 2633:9 2633:9 2633:9 2633:9 2595:18 2596:2,8 2596:2,8 2627:6,24 2637:1 2637:1 2637:1 2637:1 2637:4 2637:1 2637:4 2637:1 2637:4 2637:2 2637:1 2637:4 2637:2 2637:1 2637:4 2637:2 2637:1 2637:2 2637:1 2637:2 2637:1	· ·	2496:3	· ·		2512:20
2513:16 2557:3,9 2595:18 characteriza 2596:2,8 2626:23 2627:6,24 2637:1 characterize characterize 2637:1 characterize 2532:10 2646:1 2553:5 2594:18 2647:2 2627:6,24 2637:1 characterize 2516:8 Cheryl 2626:2 2637:1 characterize 2516:8 Chic 2391:1 2604:6 2521:23 charge 2598:15 2598:15 2506:1,25 2396:16 2393:25 2396:16 2393:25 2396:16 2394:4,5,1 2603:7 2419:10 5,17 2420:1,6 2401:17,21 2433:26,8 2433:3,14 2437:2,3 2436:6,8 2403:13,14 2437:2,3 2440:12 2404:18,22 2404:18 2405:5,7,1 2407:21 2450:20 2501:20 2407:22,23 2408:4 2598:15 2502:24 2408:1,5,7 2409:25 2502:24 2408:1,5,7 2409:25 2502:24 2408:1,5,7 2502:24 2502:24 2408:1,5,7 2502:24 2502:25 2502:24 2502:24 2502:24 2502:24 2502:24 2502:25 2502:24 2502:26 2502:24 2502:26 2502:24 2502:26 2502:24 2502:26		2503:11	,16		2592:9
Characteriza   Characteriza   Charged   Chernl   Charged   Cheryl   Clarify   Capacitarity   C		2633:9	chargeable	2595:15	-1
2596:2,8         tion         charged         2594:18         clarify         2626:23         2530:25         2395:2         Cheryl         2637:17         2626:23           2627:6,24         2532:10         2516:8         Chic 2391:1         clarity           2637:1         characterize         2516:8         Chic 2391:1         clarity           2604:6         2523:5         chief         clarity         2604:6           2521:23         charge         2598:15         2506:1,25         2393:1           2541:6         2598:15         2508:11,20         2393:2           2396:16         2393:25         2602:8,18         2508:11,20         2394:2           2419:10         5,17         charges         2579:7         2401:8           2420:1,6         2401:17,21         2393:25         2405:2         2405:1           2434:24         2402:17         2393:25         2405:1         2405:1         2405:2           2440:12         2404:18,22         2405:2         2468:20         2405:1         2405:2         2468:20         2405:1           2444:8         2405:5,7,1         2407:21         2507:16         2418:1         2507:16         2418:1           2501:20	· ·		2603:5	Chernick's	
2626:23			.3	2594:18	2430:11
2627:6,24 2637:1  2637:1  characterize challenge d 2573:4  2532:10  charge  2598:15  2506:1,25  2393:2  change  2393:25  2602:8,18  2508:11,20  2394:2  2419:10  5,17  2420:1,6  2406:17  2434:24  2402:17  2434:24  2402:17  2436:6,8  2437:2,3  2406:1  2406:1  2392:20  choice  14  2437:2,3  2406:1  2394:1,23  2406:1  2394:1,23  2406:1  2406:1  2394:1,23  2406:1  2394:1,23  2406:1  2406:1  2394:1,23  2405:10  2402:3  2406:1  2394:1,23  2405:10  2402:3  2406:1  2394:1,23  2405:10  2402:3  2406:2  2406:2  2406:2  2406:2  2406:2  2406:2  2406:2  2406:2  2407:22,23  2408:4  2554:25  2408:4  2554:25  2410:10,23  2406:2  257:7,9  2409:1,2,5  2518:17  2224  2408:1,5,7  2410:10,23  2400:2  2502:24  2408:1,5,7  2410:10,23  2400:2  2554:25  2426:2  2427:21  2555:22  2583:5  2411:19  2421:3,9,1  2555:22  2588:3  2618:1  2625:5  26288:3	· ·		_	Chow.1	clarify
2637:1         characterize         2516:8         Chic 2391:1         clarity           challenge         d 2573:4         2524:6         chief         class           2521:23         charge         2598:15         2506:1,25         2393:1           change         2393:25         2602:8,18         2508:11,20         2394:2           2396:16         2394:4,5,1         2603:7         children         ,24           2419:10         5,17         charges         2579:7         2401:8           2434:24         2401:17,21         2392:20         choice         14           2436:6,8         2403:13,14         2394:1,23         2467:17,23         ,10           2440:12         2404:18,22         2406:2         2468:20         2405:1           2444:8         2405:5,7,1         2407:21         2507:16         2418:1           2501:20         2407:22,23         2408:4         2554:25         2425:1           2502:24         2408:1,5,7         2410:10,23         2440:3         2430:1           2577:7,9         2409:1,2,5         ,25         choices         2430:1           2583:5         2411:19         2422:3,9,1         2555:22         2587:1				_	2626:23
challenge         d 2573:4         2523:5         2541:6         chief         class           2521:23         charge         2598:15         2506:1,25         2393:1           change         2393:25         2602:8,18         2508:11,20         2394:2           2396:16         2394:4,5,1         2603:7         children         ,24           2419:10         5,17         charges         2579:7         2401:8           2434:24         2402:17         2392:20         choice         14           2436:6,8         2403:13,14         2394:1,23         2465:10         2402:3           2440:12         2404:18,22         2405:2         2468:20         2405:1           2444:8         2405:5,7,1         2407:21         2507:16         2418:1           2450:20         2407:22,23         2408:4         2554:25         9 2419           2501:20         2407:22,23         2409:25         2408:4         2554:25         9 2419           2518:17         ,22,24         2410:10,23         2440:3         2440:3         2430:1           2548:9         2411:19         2428:1         2429:11         2555:22         2587:1           2591:11         2410:12         2420:8,2	·	2532:10			
challenge         d 2573:4         2541:6         chief           2521:23         charge         2598:15         2506:1,25         2393:25           2396:16         2394:4,5,1         2603:7         children         ,24           2419:10         5,17         charges         2579:7         2401:8           2420:1,6         2401:17,21         2392:20         choice         14           2434:24         2402:17         2393:25         2405:10         2402:3           2437:2,3         ,15,21         2405:2         2467:17,23         ,10           2440:12         2404:18,22         2406:2         2468:20         2413:8           2445:20         2         2406:2         2469:9         2413:8           2405:20         2407:22,23         2408:4         2554:25         9 2419           2501:20         2407:22,23         2409:25         2408:4         2554:25         9 2419           2518:17         ,22,24         2410:10,23         2440:3         2430:1           2548:9         2410:12         2428:1         2427:21         2565:2           2583:5         2411:19         2421:3,9,1         2555:22         2587:1           2591:11	2637:1	characterize		Chic 2391:1	_
2521:23         charge         2598:15         2506:1,25         2393:1           change         2393:25         2602:8,18         2508:11,20         2394:2           2396:16         2394:4,5,1         2603:7         children         ,24           2419:10         5,17         charges         2579:7         2401:8           2420:1,6         2401:17,21         2392:20         choice         14           2434:24         2402:17         2393:25         2405:10         2402:3           2437:2,3         ,15,21         2405:2         2467:17,23         ,10           2440:12         2404:18,22         2406:2         2468:20         2413:8           2445:20         2         2407:21         2507:16         2418:1           2502:24         2408:1,5,7         2409:25         250:25         2425:1           2518:17         ,22,24         2409:25         240:25         240:3           2548:9         2410:22         2420:8,21         2427:21         256:2           2583:5         2411:19         2421:3,9,1         2555:22         255:22         2587:1           2619:9,16,         2420:10         2433:25         250:2         255:22         2588:3 <td>challenge</td> <td><b>d</b> 2573:4</td> <td></td> <td>chief</td> <td>2604:6</td>	challenge	<b>d</b> 2573:4		chief	2604:6
change         2393:25         2598:15         2508:11,20         2394:2           2396:16         2394:4,5,1         2602:8,18         2508:11,20         2394:2           2419:10         5,17         charges         2579:7         2401:8           2420:1,6         2401:17,21         2392:20         choice         14           2436:6,8         2403:13,14         2393:25         2405:10         2402:3           2440:12         2404:18,22         2406:2         2468:20         2405:1           2444:8         2405:5,7,1         2407:21         2507:16         2418:1           245:120         2         2408:4         2554:25         92419           2501:20         2407:22,23         2409:25         2409:25         2425:1           2518:17         ,22,24         2410:10,23         2440:3         2430:1           2540:3         ,14         2418:12         2427:21         2565:2           2588:5         2411:19         2421:31         2555:22         2587:1           2591:11         2412:18         6,17         2572:16         2588:3           2619:9,16,         2420:10         2433:25         250:21         2555:22         2587:1	_				class
2396:16 2396:16 2419:10 2420:1,6 2434:24 2434:24 2437:2,3 2440:12 2444:8 2445:20 2501:20 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:24 2502:25 2502:25 2502:26 2502:26 2502:26 2502:26 2502:27 2502:26 2502:27 2502:26 2502:27 2502:28 2502:28 2502:29 2502:29 2502:29 2502:20 2502:		_		· ·	2393:16
2419:10     5,17     charges     2579:7     2401:8       2420:1,6     2401:17,21     2392:20     choice     14       2434:24     2402:17     2393:25     2405:10     2402:3       2437:2,3     ,15,21     2404:18,22     2406:2     2468:20     2405:1       2440:12     2404:18,22     2406:2     2469:9     2413:8       2445:20     2     2407:21     2507:16     2418:1       245:120     2     2408:4     2554:25     2425:1       2501:20     2407:22,23     2409:25     2409:25       2518:17     ,22,24     2410:10,23     2400:2       2527:7,9     2409:1,2,5     ,25     2410:10,23     2440:3     2430:1       2548:9     2410:22     2420:8,21     2427:21     2565:2       2583:5     2411:19     2421:3,9,1     2555:22     2587:1       2591:11     2412:18     6,17     2572:16     2588:3       2619:9,16,     2420:10     2433:25     chosen       2625:5     2423:16     259:13     chosen	_		-	2300:11,20	2394:2,3,9
2420:1,6 2434:24 2434:24 2436:6,8 2437:2,3 2440:12 2444:8 2445:20 2501:20 2502:24 2502:25 2502:24 2502:24 2502:25 2502:24 2502:26 2502:26 2502:27 2502:26 2502:27 2502:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:28 2602:30 2602			2603:7	children	<b>,</b> 24
2434:24       2402:17       2392:20       choice       2402:3         2436:6,8       2403:13,14       2393:25       2405:10       2402:3         2437:2,3       ,15,21       2405:2       2468:20       2405:1         2440:12       2404:18,22       2406:2       2468:20       2413:8         2445:20       2       2407:21       2507:16       2418:1         2501:20       2407:22,23       2409:25       2409:25       2425:1         2502:24       2408:1,5,7       2410:10,23       2440:3       2426:2         257:7,9       2409:1,2,5       ,25       2410:10,23       2420:3       2430:1         2548:9       2410:22       2420:8,21       2427:21       2565:2         2583:5       2411:19       2421:3,9,1       2555:22       2587:1         2591:11       2412:18       6,17       2572:16       2588:3         2591:11       2412:18       6,17       2572:16       2588:3         2618:1       2420:10       2433:25       2618:1         2625:5       2423:16       259:13       2410:13       2618:8			charges	2579:7	2401:8,10,
2434:24       2402:17       2393:25       2405:10       2402:3         2437:2,3       ,15,21       2405:2       2468:20       2405:1         2440:12       2404:18,22       2406:2       2468:20       2413:8         2445:20       2       2407:21       2507:16       2418:1         2501:20       2407:22,23       2409:25       2409:25       2425:1         2518:17       ,22,24       2409:1,2,5       2410:10,23       2440:3       2426:2         2548:9       2410:22       2420:8,21       2429:11       2555:22         2583:5       2411:19       2421:3,9,1       2555:22       2587:1         2591:11       2412:18       6,17       2555:22       2588:3         2591:11       2420:10       2433:25       256:2       2588:3         2621:24       2421:11       2516:2       259:13       2618:1         2625:5       2423:16       259:13       2410:13       2138es	·	· ·	2392:20	choice	14
2430:0,8 2437:2,3 2440:12 2444:8 2445:20 2501:20 2502:24 2518:17 2527:7,9 2540:3 2548:9 2591:11 2619:9,16, 19 2621:24 2625:5  2403:13,14 2394:1,23 2405:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2407:21 2408:4 2409:25 2409:25 2410:10,23 2440:3 2420:10 2420:8,21 2421:11 2619:9,16, 19 2621:24 2625:5  2403:13,14 2394:1,23 2467:17,23 2468:20 2468:20 2469:9 2469:9 2418:1 2409:25 2409:25 2410:10,23 2410:10,23 2440:3 2420:1 2420:8,21 2421:3,9,1 2555:22 2587:1 243:25 2516:2 2559:13  2410:13  2467:17,23 2468:20 2468:20 2468:20 2468:20 2469:9 2418:1 2409:25 2418:1 2409:25 2410:10,23 2440:3 2420:1 2420:8,21 2427:21 2555:22 2587:1 2555:22 2587:1 2618:1 2625:5  2423:16  2559:13  2467:17,23 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2418:1 2425:1 2554:25 2420:10 2430:1 2555:22 2557:16 2558:3 2618:1			2393:25		2402:3,7,8
2437:2,3       ,15,21       2404:18,22       2405:2       2468:20       2413:8         2444:8       2405:5,7,1       2407:21       2507:16       2418:1         2501:20       2407:22,23       2409:25       2409:25         2502:24       2408:1,5,7       2410:10,23       240:2         2518:17       ,22,24       2409:1,2,5       2410:10,23       2426:2         2540:3       ,14       2418:12       2427:21       2565:2         2583:5       2410:22       2420:8,21       2429:11       2575:2         2591:11       2412:18       2421:3,9,1       2555:22       2587:1         2619:9,16,       2420:10       2433:25       256:2         259:13       2421:11       2559:13       2618:1			2394:1,23		<b>,</b> 10
2444:18	·		2405:2	· ·	2405:19
2444:8 2445:20 2501:20 2502:24 2518:17 2527:7,9 2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2405:5,7,1 2407:21 2407:21 2408:4 2409:25 2410:10,23 2410:10,23 2410:10,23 2410:10,23 2410:10,23 2410:10,23 2440:3 2426:2 2420:8,21 2427:21 2555:22 2587:1 2575:2 2588:3 2619:9,16, 19 2621:24 2625:5 2420:10 2433:25 2516:2 2559:13 2410:13 2507:16 2507:16 2507:16 2507:16 2507:16 2507:16 2507:16 2507:16 2507:16 2507:16 2554:25 2410:10,23 2410:10,23 2410:10,23 2410:10,23 2410:10,23 2420:8,21 2421:3,9,1 2555:22 2588:3 2618:1 2625:5 2420:10 2433:25 2516:2 2559:13			2406:2		2413:8
2443:20 2501:20 2502:24 2518:17 2527:7,9 2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2407:22,23 2408:4 2409:25 2410:10,23 2410:10 2420:8,21 2420:8,21 2420:8,21 2420:8,21 2420:8,21 2420:8,21 2420:8,21 2555:22 2588:3 2618:1 2618:1					2418:1,3,1
2501:20 2502:24 2518:17 2527:7,9 2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2407:22,23 2409:25 2410:10,23 2410:13 2420:10 2421:11 2421:11 2421:11 2421:11 2421:11 2421:13 2421:13 2410:13 2425:11 2425:11 2426:2 2420:8,21 2421:3,9,1 2575:22 2588:3 2618:1 2618:1			2408:4		9 2419:10
2502:24					2425:17
2518:17 2527:7,9 2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5  2409:1,2,5 2409:1,2,5 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:12 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:11 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2412:17,19 2420:21 2420:8 2410:13 2430:1 2430:1 2430:1 2430:1 2430:1 2555:22 2557:1 2555:22 2588:3 2618:1 2628:2 2559:13					2426:2
2527:7,9 2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2409:1,2,5 ,25 2418:12 2418:12 2420:8,21 2420:8,21 2429:11 2421:3,9,1 6,17 2433:25 2516:2 2559:13  choose 2431:6 2565:2 2427:21 2575:2 2587:1 2420:10 2433:25 2516:2 2559:13  choose 2431:6 2565:2 2588:3 2618:1 2625:5				2440:3	2430:16
2540:3 2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5  2410:22 2410:22 2420:8,21 2420:8,21 2429:11 2555:22 2587:1 2421:3,9,1 6,17 2433:25 2516:2 2516:2 2559:13  2410:13  2565:2 2575:2 2587:1 2588:3 2618:1 2625:5  2420:10 2433:25 2516:2 2559:13	· ·			choose	2431:6
2548:9 2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2410:22 2420:8,21 2429:11 2429:11 2429:11 2421:3,9,1 2421:3,9,1 2575:2 2587:1 2421:3,9,1 2421:3,9,1 2575:2 2588:3 2618:1 2421:11 2575:2 2588:3 2618:1 2420:10 2433:25 2516:2 2559:13 2410:13 2575:2 2588:3 2618:1		· ·			2565:24
2583:5 2591:11 2619:9,16, 19 2621:24 2625:5 2411:19 2412:18 2421:3,9,1 6,17 2433:25 2572:16 2588:3 2618:1 2619:9,16, 2421:11 2433:25 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2					2575:23,25
2591:11 2619:9,16, 19 2621:24 2625:5 2412:18 2420:10 2433:25 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2 2516:2		2411:19			2587:15,16
2619:9,16, 19 2621:24 2625:5 2423:16 2433:25 2516:2 2410:13 2618:1 2625:5 2423:16 2559:13					2588:3
19 2621:24 2421:11 2516:2 <b>chosen</b> 2423:16 2559:13 <b>classes</b>		2420:10			2618:14
2625:5 2423:16 2559:13 2410:13 Classes	19 2621:24	2421:11			
L 2022-1 2 L 2404 6 L 2392-1					
2032.1,3	2632:1,3	2424:6		2460:11	2392:18,22
2000.20	2635:25	·		2476:15	2393:10
changed   '''''     circled	changed		2523:4	circled	2394:8,18,
2395:23 2426:3,5,8 <b>chart</b> 2621:19	_		chart	2621:19	23 2396:24
2419:21 ,10 2441:20 2400:2			2441:20		2400:23
2517:4 2428:25 2458:19 <b>CITCHISCIDE</b> 2401.3			2458:19		2401:3
2429:1,6,7 2497:11 <b>d</b> 2578:3 2403:2				a 2578:3	2403:2
2634·20.21 ,8 circumstance 2405:2			ahasa	circumstance	2405:23
2440:23,24	•			2447:18	2409:18
2486:7	_			2486:7	2563:22
2393:7,15, 2441:5,6,1 <b>check</b> 2586:2	2393:/,15,	2441:5,6,1	check		2586:21

2591:23 2624:8  clean 2514:2  clean 2514:2  clear  2441:19 2526:12 2555:12,14 2556:9 2600:13 2612:14  client  2460:21 2614:11 2757:22  clients 2597:4  clients 2597:4  coincidence 2438:3 2625:12 2438:3 2625:12 2438:3 2625:12 2438:3 2626:12 2636:13,20 2493:12 2556:20 2495:12 2557:22 2557:22 2557:22 2558:24 2558:24 2553:4,5 2558:24 2563:2	2576:15  Impares 2396:2  Imparing 2420:25  Imparison 2417:15 2439:7,16  Imparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  Impilation 2615:6
2624:8         Coal 2472:20 2495:12,13 2495:12,13 2495:12,13 2495:12,13 2495:12,13 2495:12,14 2555:4 25 2389:17 2395:2,6,1 2395:2,6,1 2555:12,14 2391:16 2396:3,14 2556:9 2477:7 2480:15 2419:9 2490:13 2612:14 Coast 2567:25 2487:10 2491:20 2534:19 2539:24 2512:24 2512:24 2512:24 2512:24 2512:24 2512:24 2512:24 2512:24 2593:5 258:24 2553:4,5 2597:4 2498:20 2498:20 2593:5         Communities communities 2393:1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2395:2,6,1 2474:11,19 2396:3,14 20 2486:15 2480:15 2480:15 2480:15 2480:15 2491:20 2534:19 2534:19 2534:19 2534:19 2539:24 2546:8,12, 2546:8,12, 2546:8,12, 2566:24 2593:5           client	2396:2  mparing 2420:25  mparison 2417:15 2439:7,16  mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  mpilation
2624:8       2495:12,13       2555:4       communities         clear       2554:25       2393:1       2395:2,6,1         2441:19       2555:12,14       2391:16       2395:2,6,1         2556:12       2574:10       2474:11,19       2396:3,14       239:14,20         2556:9       2636:15,20       2477:7       2399:14,20       2399:14,20         2600:13       23       2480:15       2419:9       2419:9         2612:14       Coast       2486:2       2424:1       2534:19         2460:21       2567:25       2491:20       2539:24         2491:20       2539:24       2545:21       2546:8,12,         2614:11       2557:22       2512:24       2546:8,12,         2597:4       2493:9       2558:24       2553:4,5         2597:4       2493:9       2558:24       2554:11         261imate       2428:20       2593:5       2562:24         2438:3       2428:20       2563:2	2396:2  mparing 2420:25  mparison 2417:15 2439:7,16  mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  mpilation
clean       2514:2       ,16,18       coming       2393:1       coming         2441:19       2555:12,14       2391:16       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2,22       2396:3,14       2399:14,20       2399:14,20       2399:14,20       2399:14,20       2399:14,20       2399:14,20       2399:14,20       2399:14,20       2419:9       2419:9       2424:1       2534:19       2534:19       2534:19       2539:24       2539:24       2545:21       2546:8,12,       2546:8,12,       2512:24       2546:8,12,       2557:22       2546:8,12,       2553:4,5       2553:4,5       2554:11       2562:24       2562:24       2562:24       2562:24       2562:24       2562:24       2562:24       2563:2	2420:25  mparison 2417:15 2439:7,16  mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  mpilation
clear       2554:25       2395:2,6,1         2441:19       2555:12,14       2391:16       2,22         2556:12       2574:10       2474:11,19       2396:3,14       2399:14,20         2556:9       2636:15,20       2477:7       2399:14,20       2399:14,20         2600:13       2480:15       2419:9       2424:1       2534:19         2612:14       2567:25       2487:10       2539:24       2539:24         2460:21       2614:11       2557:22       2495:12       2545:21       2546:8,12,         261ents       2614:11       2557:22       2512:24       2546:8,12,       2553:4,5         2597:4       2493:9       2558:24       2553:4,5       2554:11       2562:24       2562:24       2562:24       2562:24       2562:24       2563:2	2420:25  mparison 2417:15 2439:7,16  mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  mpilation
2555:12,14 2441:19 2526:12 2574:10 2539:17 2391:16 2474:11,19 2556:9 2636:15,20 2477:7 2399:14,20 2419:9 2400:13 2612:14  Coast 2567:25 2486:2 2486:2 2424:1 2539:24 2539:24 2460:21 2614:11 2557:22 2614:11 2557:22 2512:24 2614:11 2557:4  Coincide 2570:19 262:24 2562:24 2562:24 2563:2	mparison 2417:15 2439:7,16 mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7 mpilation
2574:19 2526:12 2556:9 2600:13 2612:14  Coast 2567:25 2480:15 2480:15 2424:1 2539:14,20 2419:9 2419:9 2574:10 2480:21 2567:25 2487:10 2491:20 2539:24 2539:24 2512:24 2513:8 2597:4  Climate 2438:3 2428:20 2593:5 262:24 2563:2	2417:15 2439:7,16 imparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7
2556:9 2600:13 2612:14  Coast 2567:25 2480:15 2424:1 2539:14,20 2419:9 2424:1 2567:25 2487:10 2491:20 2539:24 2512:24 2614:11 2557:22 2512:24 2512:24 2513:8 2597:4  Coincide 2438:3 2636:15,20 2477:7 2480:15 2480:15 2486:2 2487:10 2539:24 2545:21 2546:8,12, 2512:24 2512:24 2512:24 2512:24 2553:4,5 2597:4  Coincidence 2438:3 2636:77:0.1	2439:7,16  mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7  mpilation
2536.9 2600:13 2612:14  Coast 2480:15 2424:1 2567:25 2487:10 2491:20 2491:20 2495:12 2512:24 2512:24  Clients 2597:4  Coincide 2493:9  Coincidence 2438:3  2635-77.0.1	mparisons 2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7
2612:14     Coast     2486:2     2424:1     2534:19       client     2567:25     2487:10     2539:24       2460:21     coffee     2495:12     2545:21       2614:11     2557:22     2512:24     2546:8,12,       clients     coincide     2513:8     20       2597:4     2493:9     2558:24     2553:4,5       climate     coincidence     2570:19     2562:24       2438:3     2428:20     2593:5     2562:24       2563:2     2563:2	2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7
client     2567:25     2487:10     2539:24       2460:21     coffee     2491:20     2545:21       2614:11     2557:22     2512:24     2546:8,12,       clients     coincide     2513:8     20       2597:4     2493:9     2558:24     2553:4,5       climate     coincidence     2570:19     2562:24       2438:3     2428:20     2593:5     2562:24       2563:2     2563:2	2414:21 2415:1,6 2416:24 2418:20 2421:5 2425:7
client     2507:20     2491:20     2539:24       2460:21     2614:11     2557:22     2495:12     2545:21       2614:11     2557:22     2512:24     2546:8,12,       clients     coincide     2513:8     20       2597:4     2493:9     2558:24     2553:4,5       climate     coincidence     2570:19     2562:24       2438:3     2428:20     2593:5     2562:24       2563:2     2563:2	2415:1,6 2416:24 2418:20 2421:5 2425:7
2460:21 2614:11 2557:22 2495:12 2512:24 2512:24 2597:4  clients 2597:4  climate 2438:3 2625:7:0.1 2507:22 2595:12 2595:12 2595:12 2593:5 2428:20 2593:5 2428:20 2563:2	2416:24 2418:20 2421:5 2425:7 empilation
2614:11	2418:20 2421:5 2425:7 empilation
clients         coincide         2513:8         20           2597:4         2493:9         2558:24         2553:4,5           climate         coincidence         2570:19         2554:11         2562:24           2438:3         2428:20         2593:5         2563:2	2421:5 2425:7 empilation
2597:4 2493:9 2558:24 2553:4,5 2570:19 2562:24 2562:24 2563:2	2425:7
climate     coincidence     2570:19     2554:11       2438:3     2428:20     2593:5     2562:24       2635:77:0.1     2430:13:25     2563:2	mpilation
2438:3 2428:20 2593:5 2563:2 2563:2	-
2430:3 2420:20 2563:2	2615.6
2635:7,9,1 2430:13,25 commencing 2601:7 co	2010.0
	mpiled
4,15 2431:5,9,1 2390:1 2611:15	2538:22
close 0,14 comment community co	mplete
2/12·1/   coincident   2/10/10	2592 <b>:</b> 21
2417:21 2428:21 2553:22 2545.23	
2441:12   2430:11   2558:10,12   2563·2   <b>co</b>	mpleted
2489:17 2590:3 2598:13	2398:3
2491:12   2591:10,15	2554:13,16
acmmon to d	2615:8
2556:17 2391:24 2584.2	2630:17
25/2:2 company co	mpletely
2585:3 2400:14 <b>commenting</b> 2452:10	2551:25
2621:7 <b>collect</b> 2593:9 2506:2	mpletion
2485:20   comments   2510:1	2539:5
2626:12 2607:20 2398:6 2521:3	2339:3
closed collected 2591:10 2561:17 co	mpliance
2541:16 2408:4 commercial comparable	2392:9
	mplicated
2406.4.0	2581:25
column 2320:23 compare	
CIOSCI	mplied
2404.19	2594:25
	mply
2556:1 2611:10 2473:10 2483:3	2455:13
2607:15 compared	mplying
2460.10 11 2500 10 2437.21	2587 <b>:</b> 9
2403:11 ,12 2483:8 2462:4	
closing   combinations   0455.0	mponent
2481:20	2402:12
2524.4 20 committed 2484:21	2407:4
2502.9	2409:2,9,2
commodity	0 2410:14
2554:23 2560:15 2573:16 2555:12,22	2504:6
2373.10	

	I I	1	1 age 2000 of	
components	conclus	2501:16	consideratio	2597:15
2401:9	2571:18	Conrad	<b>ns</b> 2568:5	2618:3,24
2407:3,6,2	conclusion	2399:1	considered	2621:10,1
0 2408:11	2504:23		2438:14	2630:22
2520:21	2504:23	consciously	2495:23	consumes
composition	2507:5	2605:12	2549:5	2437:12
2627:22	2547:17	consent	2551:14	
	2553:16	2525:16,24	2552:13	consumption
con 2447:19	2571:19	2526:1	2562:10	2389:7
2458:14	23/1.19			2414:13
2531:25	conditional	consented	2567:11 2619:23	2415:14,1
concept	2522:12	2531:10	2019:23	2416:12
2560:5,8,2	conditions	consents	considering	2424:9
3 2561:24	2442:20	2524:16,18	2592:5	2437:7
2562:17	2443:21	,20	consolidatio	2438:25
2563:19	2447:16	2525:3,14,	n 2392:21	2439:3,15
2565:2,4,1	2447:10	15	n 2392:21	23 2440:2
5 2570:6	2440:11	-	constant	2516:6,10
2571:1,18	2484:3	consequentia	2401:21	2527:3
		<b>1</b> 2393:9	2482:10,11	2547:2
2580:8,14	2490:23	consequently	2619:11	2548:2
2581:13	2491:3,17,	2427:14	constitute	2556:11
2589:9	21			2567 <b>:</b> 7
2619:3	conduct	conservation	2410:19	2569:25
2633:20	2637:2	2572:12,18	constraint	2572:22
concepts	conference	2574:21	2635:17	2574:2,7,
2593:1	2588:25	2584:8	constraints	2575:17
conceptually		2587:1	2452:22	2577:1,13
2409:24	2589:3,10, 12 2590:6	2628:19	2432:22	23 2635:2
2535:13	12 2390:0	conserve	construction	
2589:25	conferences	2414:1	2629:7	contain
2590:9	2590:12	2572:16	consult	2408:16
2603:15	confidence		2393:7	contains
2003:15	2501:25	consider		2459:20
concern	2501:25	2389:13	Consulting	contaminate
2434:2		2421:5	2622:24,25	
2502:22	confident	2438:17	consume	2532:2
concomna	2525:16	2465:23,24	2405:4	CONTENTS
concerns 2526:4	confidently	2502:25	2413:24	2387:1
2320:4	2523:4	2510:24	2416:10	context
conclude		2512 <b>:</b> 22	2567:17	2403:5
2398:19	confirm	2513:3	2507.17	2588:8
2452:19	2415:6	2567:20	consumed	2592:17
2543:12	2543:6	2570:19	2516:9	
2556:22	confirmation	2589:3	2569:13	2593:4
concluded	2530:13	2591:4	consumer	2616:14
2466:4		considerably	2414:17,18	2619:8
2466:4 2546:11,19	conjunction	2584:14	2561:2	contin
•	2443:3,11		2570:14	2459:8
2589:6	connect	consideratio	2570:14	Continent
2625:15	2546:7,11,	n	2634:3	Continent
concludes	19	2392:16,17	∠034:3	2446:9
2400:6		2393:4	consumers	contingenci
2594:10	connected	2623:8	2405:15	<b>s</b> 2450:20
	2451:4			

TOD MANIIC	JDA IIIDKO GKA	01 00 2013	rage 2004 01	2707
2451:19	2564:11	2442:21	24	5 2510 <b>:</b> 22
2458:25	2576:19		2449:3,11,	2511:3,20,
2459:17	2581 <b>:</b> 7	conversation	15,24	24
2481:2	2586:14	2563:10	2450:14	2512:12,21
	2610:16	2614:17	2451:16	2519:2,10,
contingency	2630:13,20	2615:25	2452:23	23,24
2447:19		conversation	2453:19,23	2520:5,9,2
2450:10,17		<b>s</b> 2615:5	2454:10	5
2451:1,6	2393:24		2455:7,10	2521:9,12
2453:20,24	2472:9	conversion	2456:3,12,	2556:21
2454:1	continuous	2422:3,5	20	2636:13
2456:21	2491:15	convert	2457:5,11,	
2459:2,6		2422:10	14,20	corner
2466:10,13		2464:10	2458:1,5,7	2624:1,3
2470:19	2455:17	2465:17	,22	corporate
2476:9,10,	contractual		2459:19,24	2400:18
13,16,25	2471:13	converted	2460:7,16	2505:9
2477:10,23	contributing	2421:19	2463:3,10,	
2481:2	2475:7	2579:12	13,17	corporation
continual	2537:15	Converter	2464:1,21	2389:14
2609:8	2557:15	2399:6	2466:7	2413:6,15
	contribution	converts	2467:1	2463:21
continuation	2487:12	2467:5	2468:10	2464:7
2490:11	2528:16		2469:21	2494:3
continue	2600:3,16	convinced	2470:2,13	2498:4
2468:11	2601:9,14,	2545:9	2471:8,14,	2508:13
2481:2,4,1	18,24	cooking	23 2472:9	2510:12,13
0,11	2602:21	2411:13	2473:24	,17,21
2490:25	2603:22		2474:12,16	2512:21,22
2493:16	2608:1	co-optimizes	,23	2513:5
2499:12	2609:3,6,8	2471:16	2475:6,21	2541:14,20
2531 <b>:</b> 7	,12,15	coordination	2476:8	Corporation'
2547:13	2612:7,9	2476:18	2477:15,18	<b>s</b> 2412:24
2553:4	contribution	cope 2447:10	2478:3,18	2413:3,13
2581:3	<b>s</b> 2545:11	Cope 2447:10	2479 <b>:</b> 11	2491:9,11
2602:20,23	2600:9,24	copies	2481:1,18,	2600:23
continued	2603:17	2398:2,14,	20 2485:25	correct
2407:18	2606:12,23	17 2534:17	2486:8,9	2400:25
2417:12	2607:20	<b>copy</b> 2397:21	2487:5,21	2401:7,10,
2423:1			2488:10,24	19,22
2438:22	contributor	Cormie	2489:10,20	2402:17,19
2441:17	2531:8	2387:7	<b>,</b> 23	2407:23
2448:7	contributors	2390:25	2492:8,11	2408:2,8,1
2453:16	2607:21	2391:7	2493:21	7,19,25
2462:6	2612:5	2399:25	2494:23	2409:11
2465:10	control	2400:3,6	2495:4	2410:5
2468:8	2452:8,9	2432:1	2504:10,16	2413:16
2477:14		2442:15,22	2505:8,15,	2415:10
2488:6	controller	,24 2443:2	20 2506:23	2416:8,15
2513:25	2434:13	2444:1,4,1	2507:12,15	2419:21
2517 <b>:</b> 18	controllers	4,18	,20,24	2422:20
2519:16	2434:20	2445:6,16	2508:2,7,8	2423:7,12,
	27J7.2U	2446:1,5		
2524:9	convenient	2448:8,17,	<b>,</b> 15 <b>,</b> 19	22

		A HIDNO GNA		rage 2000 0.	
2	424:8,12	2626:4,6	2532:19	2630:7	2567:2,4,9
2	425:19	2633:17	2533:4		,10,15,23
2	435:19	2637:11	2535:6	costed	2574:25
2	444:25		2536:5	2546:25	2575:2,3,4
2	448:16,23	correctly	2538:9,24	cost-	<b>,</b> 11
2	449:10,11	2424:14	2540:13	effective	2586:1,6,8
2	460:22	2432:6	2541:11	2553:24	,11
2	463:2	2445:6	2542:9,15,	costing	2587:15
2	465:15,20	2457:22,25 2553:22	17,24	2413:15	2592:12
2	467:9	2333:22	2543:1,12	2567:14	2598:10,12
2	478:17,23	correlated	2546:19	2624:6	,18,21
2	480:2,13,	2405:4	2547:6		2600:8,16
	7 2481:17	corresponden	2550:3	2625:12	2601:4
	492:20	=	2562:9,10,	costly	2603:17
1	494:19	<b>ce</b>	13	2546:22	2608:14,15
	497:16,17	2613:1,11,	2567:17,18	2547:18,19	2609:2
	23,24	17	,22	2553:18	2612:25
	503:7,8	corridor	2568:17,19	2563:4	2613:24
1	514:16	2477:3	,20,24	costs	2614:5
1	516:4	cos 2625:16	2569:23	2392:25	2615:7,17,
	519:9,23	cos 2023:10	2570:1,21,	2403:21,24	19 2620:21
	521:22	cost 2392:5	23,25	· ·	2626:18
1	522:13,19	2393:5	2571:3,6	2404:2,12, 23	2627:9
	526:6,21	2395:18	2572:3,17,		2628:6
1	527:4,16	2396:2,7	18	2405:19,21	2629:3,4,6
1	529:16	2402:25	2575:8,11	,25 2406:1	,21
	530:3	2403:1,7,1	2582:24	2408:2,7	
	532:17	1	2584:9,11,	2409:6,21,	cottage
1	534:1,25	2404:9,16	14,15,24	25	2419:3,12
1	540:10	2405:9,11,	2585:1,2,4	2411:21,25	cottages
1	541:22	14	,7,8,12,14	2412:6,20	2418:6
	549:9,17,	2406:8,11,	,19,24	2413:1,5,7	
1	4 2550:7	19,20,23	2586:2	,8,12	Council
	565:12,13	2413:19,20	2587:23	2414:7	2455:12
	569:18	2428:5,15,	2588:25	2428:17	counsel
1	570:8,9	24 2461:16	2589:5,21	2485:8	2386:2
	571:12	2472:15	2591:1,25	2487:1,15,	2400:8
	599:10,21	2485:21	2598:14	17,18	2510:12
1	600:6	2486:4,18,	2600:14	2500:9	2555:9
	601:12	22 2487:12	2604:2	2521:3,4,6	2561:15
	602:12	2488:2,8,1	2607:10	<b>,</b> 7	2615:23
	605:8	1 2493:23	2609:20	2528:13,15	
	606:15	2494:2	2611:14,17	2530:14	counsel's
	607:4,9,1	2496:11	2612:11	2532:23	2414:22
	2608:3	2518:18	2613:20	2533:1,5,1	2417:16
	611:20	2519:7,12,	2618:18	4,24	2514:5
	612:19	19	2620:17,24	2535:13	2519:4
	613:13	2520:4,8,1	2625:16,23	2536:20	2522:3
	614:16	3,16,17,19	,24	2544:6,17	2524:11
	615:9,10	2521:1,10,	2627:1,14,	2546:15	2528:1
	616:6	11 2527:21	15	2547:21	2529:11
I	617:9	2528:2	2628:3,8,1	2559:2	2543:3
	619:1,6,2	2529:2	2,16	2562:3	2615:24
	2621:2	2531:20	2629:1	2566:9,10	count
	~U~I•~		2029:1		

FOB MANITOE	A HIDRO GRA	01 00 2013	rage 2000 0.	
2446:11	critical	2624:6,20	2472:5	<b>,</b> 23
country	2436:21	2625:6	2473:1,11	2419:6,16,
2419:4	2620:15	2628:2	curtailed	20,23
2419:4	areas	2629:15,16	2453:1	2421:1,20
2434:3,7	cross	<b>,</b> 19	2457:23	2422:3,19,
couple	2523:13	currently	2482:25	24
2391:16	crossed	_		2423:3,4
2433:10	2477:3	2392:3 2399:7	2495:3	2427:17
2484:1	2524:1	2401:21	curtailment	2428:8
2543:13	Cross-	2441:21	2445:7	2429:5,9
2556:3,14	examinatio	2444:23	2448:23	2430:15 <b>,</b> 19
2595:8	n	2464:9	2449:6,10	,20,23
2618:6			2452:10,24	2431:8,16,
2631:21	2387:13,14	2467:4,11 2492:24	2453:2	18
2636:8	,15		2454:8,12	2437:11 <b>,</b> 13
course	2400:12	2501:15	2458:12	2438:5
2417:6,20	2557:12	2535:9	2461:22	2439:2
2434:15	2596:19	2592:14	2469:11	2440:16
2493:17	cumulative	<b>curt</b> 2480:22	2482:5	2441:8,20,
2500:8	2395:21	curtail	2483:1	21 2446:24
2572:18	<b>cur</b> 2447:23	2445:13	2509:25	2448:15,19
2572:18	2448:19	2445:13	curtailments	2449:9,13
	2509:25	2448:20	2449:1,4,1	2452:2,3,9
<b>cover</b> 2396:6	2309:23	2452:4	3,16	2453:3,10,
2472:15,18	current	2454:22	2450:6,9	11,12
2533:4,5	2389:24	2479:14,15	2452:25	2454:21
2559 <b>:</b> 2	2392:11	,16	2454:13	2455:16
2597:13 <b>,</b> 18	2393:17		2457:17	2457:23,24
2605:6	2394:6	curtailable	2472:15	2458:2,10
covered	2395:24	2392:21	2480:23	2460:1,6,8
2451:1	2423:18,20	2400:4	2482:15,24	,11,15,18,
2487:15	2464:21	2431:25	•	19 <b>,</b> 23
	2467:17	2433:4	cus 2453:3	2461:1,3,1
covering	2481:8	2442:14,18	cushion	1 2464:9
2476:9	2483:23	<b>,</b> 25	2476:17	2465:5,13,
covers	2489:7	2443:11,15		14,17
2453:25	2494:12	,18	<b>cust</b> 2502:8	2466:18
<b>cra</b> 2434:18	2521:2	2444:12,17	customer	2467:2,3,4
Cra 2434:10	2525:5	,24	2389:4	<b>,</b> 11 <b>,</b> 17 <b>,</b> 22
creates	2528:22	2445:18	2403:4	2468:15,16
2451:6	2531:22	2446:21	2404:2,10,	2469:2,5,1
creating	2535:16	2447:7,15,	14,17,24	2,18
2593 <b>:</b> 19	2536:7	24 2448:15	2405:3,6,1	2473:3,9,1
	2539:10,15	2450:15	9,23	6 2478:16
credited	2540:7,16	2451:25	2406:12	2479:25
2482:14	2546:1,7	2456:13	2407:14,21	2481:16,22
criteria	2548:22	2457:8	2411:23	2482:6,14,
2570:1,18	2587:17	2459:21	2412:8,14,	20 2483:7
2571:5	2589:4	2461:14	15	2485:3
2575:19	2590:21,24	2463:22	2413:18,24	2486:17
	2591:20	2464:6,22	2415:24	2491:8
criterion	2610:7,13	2466:5,17	2416:3,17,	2493:18,19
2575:18	2612:11	2467:6,18	19	,24 2494:3
2576:10,12	2620:16,23	2468:14	2417:13,17	2497:5,6
	1		·	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611 Serving Clients Across Canada

2518:24	
24	4
2499:16,24       2416:5,10       15,25       2516:6       2451         2501:7,13,       2418:1,4,8       2495:6,16       2577:12       2452         21       21       2496:3,5,1       2496:3,5,1       2452         2503:6,11,       2420:7,8,9       0,19       2419:8,10       2455         2515:8       2423:25       2498:5       2432:16       2455         2518:24       2424:7,16,       2499:4       2480:11       20         2519:1       20       2500:13       2631:17       ,20         2565:16,2       ,12       2502:9,23       2631:17       ,20         2566:1,2       2427:7,11       2503:13       D       2458         2566:1,2       2429:1,11       2515:12,15       DARREN       2463         2572:13,14       12,14       2526:13,14       2387:8       2470         2576:14,15       1,14       2540:9,19       2538:5       2471         2577:59,22,       2430:16,17       ,23,24       2432:18       2547:2,8,1       2538:5       2471         2577:5       2433:1,3,9       0,24       258:19,10       256:19,14       247       258:5       247         258:3:10       22       256:19,14 <td></td>	
2501:7,13,	
21	
2503:6,11, 2420:7,8,9 0,19 2497:2,21 2491:8,10 2455 2515:8 2423:25 2498:5 2498:5 2462:8 2456 2515:8 2423:7,16, 2499:4 2480:11 2457 2519:1 20 2500:13 2631:17 ,20 2565:20,24 ,12 2506:13,14 2556:12,16 2428:1 2514:24 da 2600:24 2462:8 2466:1,2 2429:1,11, 2515:12,15 2575:9,22, 2430:16,17 ,23,24 2391:8 2431:8 2576:14,15 1,14 2549:1 2577:5 2433:1,3,9 0,24 2577:5 2433:1,3,9 0,24 2586:3,11, 2435:5,24 2566:3,11, 2435:5,24 2566:3,11, 2435:5,24 2566:3,11, 2435:5,24 2566:3,11, 2435:5,24 2568:4 2436:9,11 2569:16,22 2566:3,11, 2435:5,24 2568:19 2568:3,11, 2435:5,24 2568:19 2568:3,11, 2435:5,24 2568:19 2568:3,17 2437:18 2577:2,23 2430:16,17 2577:2,23 2476:24:8 2438:7 2577:2,23 2430:16,17 2437:18 2575:2,23 2470:2586:3,11, 2435:5,24 2568:19 2568:3,17 2437:18 2575:2,23 2439:2,2 2436:2,3 2440:4,13, 2578:7,8 2624:8 2438:7 2577:2,23 2439:2,2 2438:7 2578:1,9 2438:7 2578:7,8 2633:1 2441:6,14, 2582:25 2531:10,22 2486:2580:20,21 2492:7 2493:1,2,3 2440:4,13, 2578:7,8 2635:10 2441:6,14, 2582:25 2531:10,22 2486:239:1,2,3 2440:4,13, 2578:7,8 2635:10 2441:6,14, 2582:25 2531:10,22 2486:239:1,5 2439	
24 2514:15       ,11,22       2497:2,21       2419:6,10       2455         2515:8       2423:25       2498:5       2462:8       2462:8         2518:24       2424:7,16,       2499:4       2480:11       20         2519:1       20       2500:13       2631:17       2457         2563:16       2425:2,8,9       2501:23       2631:17       ,20         2566:1,2       2427:7,11       2503:13       D       2468         2569:22       2429:1,11,       2515:12,15       DARREN       2463         2576:13,14       12,14       2526:13,14       2387:8       2466         2575:9,22,       2430:16,17       ,23,24       2331:8       2466         2577:5       2433:1,3,3       0,24       2538:5       2561:9,14         2583:10       22       2562:4       2562:19,14       23         2577:5       2433:13,39       0,24       2439:1,3,1       2475         2583:10       22       2562:4       2439:1,3,1       2475         2586:3,11,       2435:5,24       2568:19       5 2633:2       2476         2603:17       2437:18       2575:22,23       2395:7       2478         2632:1,2,3       2440:4,13	
2515:8 2518:24 2422:7,16, 2499:4 2519:1 20 2500:13 2631:17 2653:16 2425:2,8,9 2500:29,23 2565:20,24 2566:1,2 2427:7,11 2503:13 2566:1,2 2566:1,2 2429:1,11, 2514:24 2569:22 2429:1,11, 2515:512,15 2572:13,14 12,14 2575:9,22, 2430:16,17 2577:5 2432:18 2547:2,8,1 2577:5 2432:18 2547:2,8,1 2514:24 2533:13 2470 2577:5 2433:1,3,9 2578:13 211,14,17, 2549:20 2562:4 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2437:18 2575:3 2624:8 2438:7 2577:22,23 2563:10 22 2562:4 2439:1,3,1 2632:1,2,3 2440:4,13, 2578:7,8 2632:1,2,3 2440:4,13, 2578:7,8 2632:1,2,3 2440:4,13, 2578:7,8 2632:1,2,3 2440:4,13, 2578:7,8 2439:12 2479 2586:5,10 2441:6,14, 2588:25 2393:12 2393:12 2393:12 2443:4,7,1 2587:23 2586:7,21 2439:24 2439:13,15 2481 2439:13,15 2481 22395:9,16 22447:10,11 2605:7,21 2608:18 2402:18 2403:10 2404:6 2459:20,23 2460:12 24562:21 24562:21 24562:21 24562:21 24562:21 24562:21 24562:21 24562:8 2445:14 2456:8 2445:13 2631:17 2645:8 2446:214 2455:25 2614:19 2608:18 2456:24 2455:25 2501:23 2631:17 2455:6 2446:14	
2518:24	:3,12,
2519:1 2563:16 2425:2,8,9 2501:23 2565:20,24 2566:1,2 2566:1,2 2567:12,16 2428:1 2569:22 2429:1,11, 2515:12,15 2575:9,22, 2430:16,17 2575:9,22, 2430:16,17 2577:5 2431:1,6,1 2577:5 2432:18 2577:5 2433:1,3,9 2578:13 211,14,17, 2583:10 22 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2435:5,24 2586:3,11, 2437:18 2576:24:8 2438:7 2586:3,11, 2437:18 2577:22,23 2430:16,17 2549:20 2561:9,14 2578:13 211,14,17, 2549:20 2562:4 2439:1,3,1 2473 2576:14,15 2578:13 211,14,17, 2549:20 2562:4 2439:1,3,1 2473 2586:3,11, 2435:5,24 2568:19 2633:2 2476 2438:7 2577:22,23 2439:24 2477 2632:1,2,3 2440:4,13, 2578:7,8 2624:8 2635:10 2441:6,14, 2582:25 2531:10,22 2486 2393:12 2438:4,7,1 2588:4 2635:10 2441:6,14, 2582:25 2531:10,22 2486 2393:12 2438:4,7,1 2587:23 2492:7 2488 2593:21 2492:7 2488 2393:12 2443:4,7,1 2587:23 2598:22 2554:11 2489 2393:12 2443:4,7,1 2587:23 2598:22 2598:22 2492:7 2488 2493:10,22 2444:24 2593:22 2554:11 2489 2493:15 2401:17 2425:8 2447:10,11 2605:7,21 2608:18 2493:10 2402:18 2455:5 260:23 2404:6 2459:20,23 2460:14 2652:21 2444:24 2550:23 2404:6 2459:20,23 2460:14 2652:21 2444:6 2459:20,23 2460:14	,,
2563:16 2425:2,8,9 2501:23 2565:20,24 2566:1,2 2427:7,11 2503:13 D 2248 2566:1,2 2428:1 2566:12,16 2428:1 2514:24 2569:22 2429:1,11, 2515:12,15 2572:13,14 2575:9,22, 2431:1,6,1 2577:14,15 1,14 2540:9,19 2577:5 2433:1,3,9 2578:13 2578:13 211,14,17, 2549:20 2588:4 2583:10 2588:4 2436:9,11 2569:16,22 2439:1,3,1 2632:1,2,3 2632:1,2,3 2430:16,17 2578:33 22 2470:2,8,1 2566:3,11, 2435:5,24 2566:4 2566:3,11, 2436:9,11 2569:16,22 2562:4 2439:13,1,2473 2632:1,2,3 2430:4,13, 2578:78 2632:1,2,3 2430:4,13, 2578:78 2633:10 27 27 288:4 299:10	:11,14
2565:20,24	,
2566:1,2 2567:12,16 2428:1 2567:12,16 2428:1,11, 2515:12,15 2572:13,14 12,14 2575:9,22, 2430:16,17 2576:14,15 1,14 2577:5 2432:18 2577:5 2433:1,3,9 2578:13 2578:13 2578:13 2583:10 22 2586:3,11, 2435:5,24 2586:3,11, 2603:17 2603:17 2603:17 2633:8 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:1,2,3 2632:2 276 288 2894:20,22 2985:84 299:24 241:6,14, 2588:7 2588:7 2588:84 2441:6,14, 2588:7 2588:78 2588:78 2577:22,23 2584:7 2632:1,2,3 2440:4,13, 2588:78 2589:20,21 2441:6,14, 2582:25 2531:10,22 2485 2394:20,22 21,18,24 2397:1,5 2441:0,11 2605:7,21 2608:18 2403:10 2455:5 2403:10 2455:5 2403:10 2455:5 2403:10 2455:5 2403:10 2455:5 2403:10 2455:5 2403:10 2455:5 2452:1 2462:2 2456:13,14 2562:2 2608:18 2603:4 2492:7 2608:18 2492:7 2608:18 2492:7 2492:7 2408:18 2403:10 2455:5 2403:10 2466:14	:1,7,2
2567:12,16 2569:22 2429:1,11, 2515:12,15 2572:13,14 2575:9,22, 2430:16,17 2576:14,15 1,14 2540:9,19 2577:5 2433:1,3,9 2576:14,15 2583:10 2586:3,11, 2435:5,24 2586:3,11, 2588:4 21 2437:18 2577:25 2632:1,2,3 263	59 <b>:</b> 24
2569:22	
2572:13,14 2575:9,22, 2430:16,17 2576:14,15 1,14 2577:5 2432:18 2577:5 2433:1,3,9 2578:13 211,14,17, 2549:20 2586:3,11, 2435:5,24 212588:4 2436:9,11 2569:16,22 2632:1,2,3 2437:18 2577:22,23 2632:1,2,3 2440:4,13, 2580:20,21 2441:6,14, 2582:25 2393:12 2441:6,14, 2582:25 2393:12 2443:4,7,1 2583:10 2441:6,14, 2583:25 2393:12 2393:12 2443:4,7,1 2583:22 2395:9,16 2393:12 2444:24 2593:22 2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2453:13,14 2612:9 2402:18 2403:10 2404:6 2459:20,23 2620:23 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2624:21 2626:13,14 2387:8 2387:8 2391:8 2470:9,19 2538:5 2531:10,14 2470:14 2474 2474 2474 2474 2474 2474 2474 24	:10,13
2575:9,22, 2430:16,17	2464 <b>:</b> 1
23	
2576:14,15 ,23,24 2432:18 2547:2,8,1 2561:9,14 2577:5 2433:1,3,9 2578:13 ,11,14,17, 2549:20 2439:1,3,1 2586:3,11, 2435:5,24 2562:4 2439:1,3,1 2588:4 2437:18 2575:3 2476 2632:1,2,3 2440:4,13, 2633:8 2635:10 2441:6,14, 2582:25 2538:2 2476 2488 2499:20 2414:6,14, 2583:2 2477 2479 2479 2479 2479 2479 2479 247	
,23,24       2432:18       2547:2,8,1       2561:9,14       2473         2577:5       2433:1,3,9       0,24       2473         2578:13       ,11,14,17,       2549:20       data 2414:14       2474         2583:10       22       2562:4       2439:1,3,1       2475         2586:3,11,       2435:5,24       2568:19       5 2633:2       2476         2603:17       2437:18       2576:16,22       date 2389:7       2477         2603:17       2437:18       2575:3       2395:7       2478         2632:1,2,3       2440:4,13,       2578:7,8       2469:13,15       2481         2635:10       2441:6,14,       2582:25       2531:10,22       2485         2393:12       2443:4,7,1       2587:23       2547:16       2488         2394:20,22       2444:24       2593:22       2554:11       2489         2395:9,16       2444:24       2602:19       2598:22       2492         2397:1,5       2447:10,11       2605:7,21       2607:24       2494         2401:17       2453:13,14       2605:7,21       2608:18       2495         2402:18       2455:5       2614:19       2608:18       2495         2404:6 <t< td=""><td>:8,14,</td></t<>	:8,14,
2577:5	472 <b>:</b> 9
2578:13	
2583:10 2586:3,11, 2435:5,24 2568:19 2586:3,11, 21 2588:4 2436:9,11 2569:16,22 2439:1,3,1 2475 2603:17 2603:17 2437:18 2575:3 2624:8 2438:7 2577:22,23 2439:24 2439:24 2439:1,3,1 2476 2477 2603:17 2437:18 2575:3 2395:7 2440:4,13, 2578:7,8 2469:13,15 2481 2580:20,21 2492:7 2485 2531:10,22 2485 2531:10,22 2486 2393:12 2394:20,22 2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2403:10 2404:6  22 2562:4 2568:19 2569:16,22 2577:22,23 2577:22,23 2439:24 2499:27 2488 2469:13,15 2492:7 2531:10,22 2531:10,22 2534:19 2534:19 2534:19 2598:22 2598:22 2492 2492 2492 2492 2492 2492 2493:10 2403:10 2404:6  2459:20,23 2600:23  2614:3 2602:23 2620:23	:16,23
2586:3,11, 2435:5,24 2568:19 5 2633:2 2476 21 2588:4 2436:9,11 2569:16,22 date 2389:7 2603:17 2437:18 2575:3 2395:7 2624:8 2438:7 2577:22,23 2439:24 2479 2632:1,2,3 2440:4,13, 2578:7,8 2469:13,15 2481 2635:10 2441:6,14, 2582:25 2531:10,22 2486 2393:12 243:4,7,1 2587:23 2547:16 2395:9,16 2444:24 2602:19 2598:22 2492:7 2395:9,16 2444:24 2602:19 2598:22 2492:7 2396:6,24 2447:10,11 2605:7,21 2603:4 2493:10 2402:18 2403:10 2404:6 2459:20,23 2460:14 2620:23 2460:14	:6,21
21 2588:4	
2603:17 2624:8 2632:1,2,3 2632:1,2,3 2440:4,13, 2578:7,8 2635:10 2441:6,14, 2582:25 2393:12 2393:12 2394:20,22 2395:9,16 2396:6,24 2397:1,5 2447:10,11 2402:18 2403:10 2404:6 2400:14 2575:3 2577:22,23 2439:24 2439:24 2578:7,8 2469:13,15 2481 2492:7 2486 2492:7 2584:7 2534:19 2587:23 2584:7 2587:23 2547:16 2588:25 2547:16 2588:25 2547:16 2602:19 2598:22 2492 2492 2492 2492 2492 2493:13,14 2605:7,21 2607:24 2494 2494 2403:10 2404:6 2459:20,23 2460:14	
2624:8 2632:1,2,3 2632:1,2,3 2440:4,13, 2578:7,8 2469:13,15 2485 2635:10 2441:6,14, 2582:25 2531:10,22 2486 2393:12 2394:20,22 2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2403:10 2404:6 2396:0,24 2403:10 2404:6 2408:7 2577:22,23 2577:22,23 2439:24 2492:7 2489:24,21 2581:10,22 2584:7 2587:23 2587:23 2587:23 2587:16 2598:22 2554:11 2492 2598:22 2603:4 2493 2603:4 2605:7,21 2607:24 2608:18 2607:24 2608:18 2603:10 2608:18 2603:10 2608:18 2603:10 2608:18 2608:18 2609:9,12 2614:19 2620:23	:3,18
2632:1,2,3 ,4 2633:8	
,4 2633:8     18     2580:20,21     2492:7     2485       2635:10     2441:6,14,     2582:25     2531:10,22     2486       customers     23     2584:7     2534:19     2487       2393:12     2443:4,7,1     2587:23     2547:16     2488       2394:20,22     2444:24     2593:22     2554:11     2489       2395:9,16     2445:13     2602:19     2598:22     2492       2397:1,5     2447:10,11     2605:7,21     2607:24     2494       2401:17     2453:13,14     2609:9,12     2608:18     2495       2402:18     2455:5     2614:19     2612:9     2614:3     2505       2403:10     2459:20,23     2620:23     dated 2415:7     20 2       2404:6     2460:14     2624:21     dated 2415:7     2507	
2635:10     2441:6,14,     2582:25     2531:10,22     2486       customers     23     2587:23     2547:16     2488       2394:20,22     1,18,24     2593:22     2554:11     2489       2395:9,16     2444:24     2602:19     2598:22     2492       2397:1,5     2447:10,11     2605:7,21     2607:24     2494       2401:17     2453:13,14     2612:9     2608:18     2495       2403:10     2455:5     2614:19     2620:23     dated 2415:7     20 2       2404:6     2460:14     2624:21     dated 2415:7     2507	
customers         23         2584:7         2531:10,22         2487           2393:12         2443:4,7,1         2587:23         2547:16         2488           2394:20,22         2444:24         2593:22         2554:11         2489           2395:9,16         2445:13         2602:19         2598:22         2492           2397:1,5         2447:10,11         2605:7,21         2607:24         2494           2401:17         2453:13,14         2612:9         2608:18         2495           2403:10         2455:5         2614:19         2614:3         2505           2404:6         2460:14         2620:23         dated 2415:7         20.2	
2393:12	:5,21
2394:20,22 2394:20,22 2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2403:10 2404:6	
2394:20,22 2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2403:10 2404:6 2444:24 2602:19 2603:8 2603:4 2605:7,21 2609:9,12 2609:9,12 2608:18 2614:3 2614:3 2614:3 2620:23 2620:23 2620:23 2620:23	:10,23
2395:9,16 2396:6,24 2397:1,5 2401:17 2402:18 2403:10 2404:6  2445:13 2603:8 2603:4 2607:24 2609:9,12 2609:9,12 2612:9 2614:3 2614:3 2614:3 2614:19 2	
2397:1,5 2401:17 2402:18 2403:10 2404:6  2447:10,11 2605:7,21 2609:9,12 2609:9,12 2608:18 2612:9 2614:3 2614:3 2614:19 2620:23 2620:23 2620:23 2620:23 2620:23	:21
2401:17 2402:18 2403:10 2404:6  ,21,25 2609:9,12 2608:18 2614:3 2614:3 2614:3 2620:23  dated 2415:7 2620:23	:23
2401:17 2402:18 2403:10 2403:10 2404:6 2453:13,14 2612:9 2614:3 2614:3 2614:3 2614:19 2620:23 2620:23 2620:23 2620:23 2620:23 2620:23	: 4
2403:10 2403:10 2404:6 2459:20,23 2460:14 2620:23 2620:23 2620:23 2620:23 2620:23 2620:23	:10,16
2404:6 2459:20,23 2620:23 2620:23 2507 2507	:8,15,
1 2460•14 1 2624•21 1 4-4-4 1 2507	506:23
$\begin{bmatrix} 2405.3 & 22 \end{bmatrix}$ 2460:14 $\begin{bmatrix} 2624:21 \end{bmatrix}$ dates $\begin{bmatrix} 2507 \end{bmatrix}$	:12,15
2405:3,22 2406:2,3,9 2462:15 2625:8,21 2434:11 ,20,	24
2406.2,3,9 2463:4 2626:16 2508	:2,8,1
2408:15,21 2474:7 2633:7 dating 5,19	
,24 2479:23 2635:6,12, 2607:20 2509	:7,15
2409:5,9,1 2479:23 2633:6,12, 6 2480:4,15 23 <b>DAVID</b> 2387:7 2511	:3,20,
2410:3,7,1 2482:8 customer's 2391:7 24 2	512:12
I Z4IVIS./.I I CUSCOMELS I	:10,24
1 0, 1, 3, 1, 1, 1, 1	:5,9,2
2403.22 2444.4 14 5 25	21:12
2430.21	:13
0,10,10,20	
2412:14,10 2400:21 2400:21 2440:17 24 day	. 22 25
2413:14	:23,25

2472:1	FOB MANITODA	I IIIDNO GNA	01 00 2013	rage 2000 OI	
2472:1	2471.16	2516.7 10	2/22.10	2521.0	2515.1 0 1
2554:23 2564:14 2623:9 2564:14 2623:9 2535:11 2536:20,22 2590:1 260:1				2551:9	2515:1,8,1
2554:14   12518:14   2623:9   2537:3,6,1   22536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2536:20,22   2590:1   2517:   2545:81,3   2605:13   2405:14   2506:13   2599:10,16   2522:13,16   2599:10,16   2522:13,16   2599:10,16   2522:13,16   2600:2   2399:10,16   2405:14   2405:14   2405:14   2405:14   2405:14   2405:14   2405:14   2405:14   2405:14   2406:2   2419:   2405:14   2406:2   2419:   2406:2   2410:   24		= :		degree	
2564:14			,22	-	2516:1,6,8
252319	2564:14	1 2518:14	deficit		,13,14,15,
days 2391:16         2547:5,11         ,25         2590:1         2511:1           2454:8,13,         decide         2538:15         2605:13         2518:2518:2539:16           DC 2476:24         decides         ,12,18,24         2419:20         2419:13         2540:4,8,9           de 2597:11         2468:17         2541:19,24         delivered         desidemend           deadline         2468:17         2542:1         delivered         demand           deadlines         2508:13         2600:3         2522:13,16         demand           deadlines         2508:13         2600:3         2524:19         demand           death         2402:2,16         2604:2,14         2392:20,23         demand           desiti18         2469:1,13,         2607:2,14         2392:20,23         demand           2451:18         2469:1,13,         2617:2         23 2405:22         2405:2           2454:16         17         deficits         2406:2         2413:1           2458:24         2510:1         2540:2         23,25         demand           2459:6,8,1         257:7,16         258:14         257:17,16         2410:10,14         2425:1           2580:8         2632:16         2614	2623:9	2535:11		delayed	16,17,22
2454:8,13,   decide   2538:15   2605:13   2518: 2518: 2605:13   2619:	<b>da</b> 2201.16	2547:5,11	· ·	2590:1	2517:10,13
2499:19,19,	_			4-1-1	,14,15
DC 2476:24   decides   2540:4, 8, 9   deliver   2631:					2518:16
DC 2476:24         decides         2549(4, 8, 9) abliver         2631:         262597:11         2419:20 2465:17         2541:19, 24 2541:19, 24 2475:12         2633:         263:         264:         263:         264:         263:         264:         263:         264:         263:         264:         264:         263:         264:	22	2419:13	2539:16	2605:13	
de 2597:11         2419:20 2465:17 2541:19,24 2475:22 2631: 2632:16         2491:13 2468:17 2542:1 2599:9.9         delivered 2572:13,16 2522:13,16 2522:13,16 2522:13,16 2522:13,16 2522:13,16 2522:13,16 2523:18 2400:16         deciding 2600:3 2601:1,3 demand 2402:2,16 2606:2 2394:1,17, 2451:18 2469:1,13, 2617:2 23 2405:22 2405: 2451:18 2469:1,13, 2617:2 23 2405:22 2405: 2451:18 2469:1,13, 2617:2 23 2405:22 2405: 2451:18 2469:1,13, 2617:2 23 2405:22 2405: 2451:18 2569:1,18 2539:23 2409:10,12 2433: 2458:24 2510:1 2540:2 1,14,17,19, 2459:6,8,1 2567:16 2569:14 2572:13,15 2409: 2410: 2410: 2410: 2410: 2459: 245	DC 2476.24	decides	2540:4,8,9	deliver	
de 2597:11         2449:120 2468:17 2468:17         2541:19,24 delivered delivered 2491:13         deciding 2599:9 2475:14 2522:13,16 2599:10,16 2522:13,16 2599:10,16 2522:13,16 2599:10,16 2522:13,16 2490:16         deciding 2599:10,16 2522:13,16 2522:19 demand-2435:         demande 2435: demand 2435: demand 2435: demand-2435: demand-2435	<b>DC</b> 2470.24		,12,18,24		
deadline         2468:17         2542:1         delivered         2475:14         demande           2491:13         deciding         2599:10,16         2522:13,16         demande         2619:           2490:16         decision         2600:3         demande         2432:19         demande           2450:8,19         2468:13,21         2604:2,14         2392:20,23         demanderelation           2451:18         2469:1,13,         2606:2         2394:1,17,         2405:2           2454:16         17         deficits         2406:2         2405:2         2405:2           2455:24         2510:1         2539:23         2409:10,12         2433:           2459:6,8,1         257:7,7,16         defice         2410:10,14         246:1           2568:14         2572:13,15         2419:6         2411:18,19         245:12           2578:11         2581:20         2614:6         2405:14         222,25         demanderelation           2580:8         2632:16         define         2410:10,14         246:1           2582:16         decisions         2405:17,18         2425:1,1         2572:           2581:1         decision         2405:14         2426:2,8         2581: <tr< td=""><td><b>de</b> 2597:11</td><td></td><td>2541:19,24</td><td>24/3.22</td><td>2633:21</td></tr<>	<b>de</b> 2597:11		2541:19,24	24/3.22	2633:21
deadlines         2468:17         2598:9         2475:14         2619:           deadlines         2508:13         2599:10,16         2522:13,16         2243:19         demand-243:1           2490:16         decision         2601:1,3         demand         2432:20,23         2438:1           2450:8,19         2468:13,21         2606:2         2394:1,17,         2405:2         2405:2           2454:18         2469:1,13,         2617:2         23 2405:22         2413:           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2459:6,8,1         2547:7,16         deficits         2409:10,12         2433:           2459:6,8,1         2547:7,16         define         2410:10,14         246:10           2459:14         2572:13,15         240:1         22,25         demands           2578:11         2581:20         2565:23         2412:17,18         demands           2588:7         2614:6         2405:14         22,25         demands           2588:7         2621:6         241:17,18         22,25         demands           258:11         258:20         2565:23         2412:17,14         22,25         demands           258:11	441:			delivered	demanded
deadlines         2598:13         2599:10,16         2522:13,16         demand-2435:           deal         2600:3         demand-2435:         demand-2435:           deal         2402:2,16         2604:2,14         2392:20,23         demand-2435:           2450:8,19         2468:13,21         2606:2         2394:1,17,         2405:2         2405:22           2451:18         2469:1,13,         deficits         2406:2         2413:           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2458:24         2510:1         2540:2         ,14,17,19,         demand-2435:           2458:24         2510:1         2540:2         ,14,17,19,         demand-2435:           2458:24         2510:1         2540:2         ,14,17,19,         demand-2435:           2459:6,6,1         2572:13,15         2405:14         ,22,25         2410:           2459:14         2572:13,15         2405:14         ,22,25         2410:         246:           2579:20         2614:6         2405:17         2425:11,13         2572:         2572:           2580:8         2632:16         defined         ,19,20,24         2573:         2573:           2581:1         2		2468:17		2475:14	2619:5,16
deadlines         2508:13         2600:3         2524:19         demand 2435:           deal         2402:2,16         2604:2,14         2392:20,23         demand demand-2405:1,13           2450:8,19         2468:13,21         2604:2,14         2392:20,23         demand-2405:2           2451:18         2469:1,13,         2617:2         2334:1,17,         relat           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2458:24         2510:1         2540:2         14,17,19,         demands           2459:6,8,1         2547:7,16         define         23,25         2410:10,14         2446:           2578:11         2561:20         2405:14         22,25         demands           2578:11         2581:20         2565:23         2410:10,14         2446:           2579:20         2614:6         2552:34         2411:18,19         2552:           2581:7         decisions         2405:17,18         2425:11,13         2573:           2581:7         decisions         2405:17,18         2425:11,13         2573:           2581:7         decline         2427:1,6         demonst           2391:19         2405:4         2497:15         2427:1,6	2491:13	deciding		2522:13,16	2019.0,10
2490:16         decision         2601:1,3         demand         2435:           deal         2402:2,16         2604:2,14         2392:20,23         demand-relat           2450:8,19         2468:13,21         2606:2         2394:1,17,         relat           2451:18         2469:1,13,         2617:2         23 2405:22         2405:           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2458:24         2510:1         2540:2         ,14,17,19,         demand-demand           2458:4         2510:1         2540:2         ,14,17,19,         demand-demand           2459:6,8,1         2547:7,16         2405:14         ,22,25         2410:           258:14         2567:16         2405:14         ,22,25         2410:           2579:20         2614:6         2565:23         2412:17,18         2572:           2580:8         2632:16         defined         ,19,20,24         2572:           2581:1         2581:2         2405:17,18         2425:11,13         2573:           2581:1         decisions         2405:17,18         2425:11,13         258:           2581:1         decine         2497:15         2427:1,6         demonst	deadlines	_	·	· ·	demand-rate
deal         2402:2,16         2604:2,14         2392:20,23         demand           2450:8,19         2408:13,21         2606:2         2394:1,17,         2405:22         2405:22         2405:22         2405:22         2405:22         2405:22         2405:22         2405:22         2405:22         2413:245:16         17         deficits         2406:2         2413:245:24         2510:1         2539:23         2409:10,12         2433:243:24         2510:1         2539:23         2409:10,12         2433:243:24         2510:1         2540:2         ,14,17,19,         demands         2410:10,14         2446:2         2413:24         2510:1         2540:2         ,14,17,19,         demands         2410:10,14         2446:2         2410:10,14         2446:2         2410:10,14         2446:2         2410:10,14         2446:2         2410:10,14         2446:2         2411:18,19         2556:16         2405:14         22,25         demands         2411:18,19         2552:255:23         2411:18,19         2552:25         demands         2405:14         22,25         demands         2405:14         22,25         demands         2405:14         22,25         demands         2412:17,18         2252:12         2412:17,18         22552:25         demands         2405:14         2242:11         225		2300.13		2021.19	2435:8
deal         2402:2,16         2606:2         2394:1,17, 2405:22         249:1,17, 2617:2         2394:1,17, 2405:22         2405:22         2405:22         2405:22         2405:22         2405:22         2413:24         2406:2         24405:22         2413:24         2456:21         2509:1,18         2539:23         2409:10,12         2433:24         2410:10,12         2433:24         2510:1         2540:2         ,14,17,19, demands         2440:10,12         2433:24         2510:1         2567:16         2405:14         22,25         2410:10,14         2446:2         2410:2 <t< td=""><td>2490.10</td><td>decision</td><td>·</td><td>demand</td><td>, ,</td></t<>	2490.10	decision	·	demand	, ,
2450:8,19         2468:13,21         2606:2         2394:1,17,         2405:22         2405:22         2405:22         2405:22         2405:22         2413:245:16         2406:2         2413:245:16         2406:2         2413:245:24         2509:1,18         2539:23         2409:10,12         2433:243:243:243:243:243:243:243:243:243	deal	2402:2,16	1	2392:20,23	
2451:18         2469:1,13,         2617:2         23 2405:22         2413:           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2458:24         2510:1         2540:2         ,14,17,19,9         demands           2459:6,8,1         2547:7,16         define         2410:10,14         2446:           2568:14         2572:13,15         2419:6         2411:18,19         246:           2579:20         2614:6         2405:17,18         245:12         2572:           2580:8         2632:16         defined         ,19,20,24         2572:           2588:7         decisions         2405:17,18         2425:11,13         258:           2588:7         decisions         2405:17,18         2427:1,6         demonst           2391:19         decline         2497:15         2427:1,6         demonst           2391:19         decline         2497:15         2427:1,6         demonst           2391:19         decline         2497:12         2433:9,12         denost           2478:15         decline         2497:13         2433:9,12         denost           2525:14         decline         2497:12         2433:9,12         denost	2450:8,19	•	2606:2	2394:1,17,	related
2454:16         17         deficits         2406:2         2413:           2456:21         2509:1,18         2539:23         2409:10,12         2433:           2458:24         2510:1         2540:2         ,14,17,19, demands           2459:6,8,1         2547:7,16         define         2410:10,14         2446:           2568:14         2572:13,15         2419:6         2411:18,19         246:           2579:20         2614:6         2565:23         2412:17,18         2552:           2580:8         2632:16         defined         ,19,20,24         2572:           2588:7         decisions         2405:17,18         2425:11,13         253:           2581:9         decisions         2497:15         2426:2,8         253:           2391:19         2403:10         2497:15         2427:1,6         248:           2391:19         decline         2429:1,6,7         demonst           2477:22         2436:2         2497:11         2433:9,12,6           2552:14         decline         243:2         243:3           2478:15         decrease         249:1,6,7         244:6,13,           2552:14         decrease         249:1,6,7         244:6,13,	2451:18		2617:2	23 2405:22	2405:25
2456:21			405:-:		2413:5
2498:24					2433:6
2459:6,8,1 7 2478:14 2568:14 2568:14 2572:13,15 2578:11 2579:20 2614:6 2580:8 2632:16 262:16 2405:17,18 2582:16 2588:7 2403:10 2405:17,18 2425:11,13 2581:20 2405:14 2582:16 2580:8 2632:16 2405:17,18 2425:11,13 2573: 2588:7 2403:10 2405:17,18 2425:11,13 2581:  2403:10 2405:17,18 2425:11,13 2581:  2403:10 2407:15 2427:1,6 2400:18 2431:6 2431:6 2436:2 2497:15 2429:1,6,7 2432:8 2431:6 2477:22 2525:14 2621ining 2572:6 2586:7,15, 21 2588:7  2628:12 2434:6,13, 2386:  2478:15 2629:4 2650:19 2644:3,7,8,1 2629:4 2570:6 2529:4 2600:18,19 2551:1 26ealt 2598:20 2540:21 2628:12 2628:12 2628:12 2628:10 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:4 2633:21 2629:7,18 2629:4 2633:21 2559: 2628:12 2499:7,18 2559: 2628:12 2499:7,18 2629:4 2633:21 19 2559: 2628:16 2629:4 2620:2 2499:7,18 2629:4 2633:21 2629:4 2633:21 2629:4 266ered 2633:21 2629:4 266ered 2633:21 2629:7,18 2629:4 2633:21 2629:7,18 2629:4 2633:21 2629:7,18 2629:4 2633:21 2629:7,18 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7,18 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 2633:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:21 2629:7 2628:16 263:10 2750:14 2		•		· ·	
7 2478:14         2567:16         define         2410:10,14         2446:           2568:14         2572:13,15         2405:14         ,22,25         demand-           2579:20         2614:6         2565:23         2411:18,19         2552:           2580:8         2632:16         defined         ,19,20,24         2572:           2582:16         2632:16         defined         ,19,20,24         2573:           2588:7         2403:10         2405:17,18         2425:11,13         2553:           2391:19         2405:4         2497:15         2427:1,6         demonst           2391:19         decline         2497:15         2427:1,6         demonst           2431:6         2436:2         2497:11         2432:8         2532:           2525:14         decline         2429:1,6,7         denied           2477:22         2436:2         2497:11         2433:9,12,         denied           2572:6         2566:7,15,         2628:12         2434:6,13,         2386:           deals         2478:15         decrease         definitely         15,24         departm           2570:6         2619:25         2500:19         2444:3,7,8         292:4         2495:15			2540:2		
2568:14			define		2410:7,19
2578:14		2567:16		· ·	2446:12
2578:11 2579:20 2614:6 2580:8 2632:16 26s8:7 26usions 2405:17,18 2425:11,13 2573: 2425:11,13 2573: 2403:10 2405:17,18 2426:2,8 2426:2,8 2427:1,6 2428:4,12 2523:14 2427:22 2525:14 2525:14 2572:6 256:7,15, 21 2568:7  26eals 2478:15 26ealt 2428:8 2572:6 26ealt 2428:8 2572:10 26ealt 2428:8 2524:13 2572:6 26ealt 2428:8 2524:13 2572:6 26ealt 2428:8 2575:14 2599:9 2531:24 26eply 2635:14 2599:9 2531:24 26eply 2635:14 2598:20 2540:21 2628:16 2620:2 2628:16 2499:7,18 26partm 2446:22 2398: 2497:11 2446:22 2398: 2497:11 2446:22 2398: 2497:11 2497:15 2444:3,7,8,1 2405: 2497:15 2444:3,7,8,1 2405: 2498:8,11, 2599:9 2531:24 26eply 2635:14 2598:20 2540:21 2628:16 2498:8,11, 26partm 2499:7,18 26partm 2599:9 2531:24 26eply 2635:14 2506: 2598:20 2540:21 2628:16 2498:8,11, 26partm 2499:7,18 26partm 2499:7,18 26partm 2559: 2628:16 2499:7,18 26partm 2499:7,18 26partm 2599:7,18 26partm 2599:7,18 26partm 2599:9 2531:24 26partm 2506: 2598:20 2540:21 2628:16 2499:7,18 26partm 2499:7,18 26partm 2499:7,18 26partm 2499:7,18 26partm 2499:7,18 26partm 2499:7,18 26partm 2599:7,18 26partm 2499:7,18 26partm 2599:9 2591:0 2591	2568:14	2572:13,15		,22,25	domand-aida
2580:8 2632:16 defined ,19,20,24 2573: 2573: 2582:16 decisions 2405:17,18 2426:2,8 243:10 2405:4 2497:15 2427:1,6 demonst 2431:6 2436:2 defines 2433:9,12, 2573: 2525:14 declining 2572: 2666:7,15, 21 2568:7 decisions 2478:15 decrease 2478:15 decrease 2575:14 decrease 2575:15 decrease 2575:14 dec	2578:11	2581:20		2411:18,19	
2580:8         2632:16         defined         ,19,20,24         2572:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2573:         2581:         2681:         2681:         2681:         2681:         2681:         2681:         2680:         267	2579 <b>:</b> 20	2614:6	2565:23	2412:17,18	2552:20,22
2582:16         decisions         2405:17,18         2425:11,13         2573:           2588:7         decisions         2403:10         2415:16         2426:2,8         2581:           dealing         2405:4         2497:15         2427:1,6         demonst           2391:19         decline         24297:15         2428:4,12         2523:           2431:6         2436:2         defines         2429:1,6,7         denied           2477:22         declining         2433:9,12,         denied         2534:           2525:14         declining         24         Denise         2534:           deals         2566:7,15,         21 2568:7         definitely         2433:9,12,         depart         2434:6,13,         2386:         depart         2495:15         3         2443:7,8,1         2443:7,8,1         2443:7,8,1         2444:3,7,8,1         2445:         2405:         2446:22         2495:15         2500:19         2444:3,7,8,1         2452:11         2398:         2575:14         2452:11         2398:         2559:14	2580:8		defined	,19,20,24	
2588:7         decisions         2403:10         2415:16         2426:2,8         2581:           dealing         2405:4         2497:15         2427:1,6         demonst           2391:19         decline         2428:4,12         2523:           2431:6         2436:2         2436:8         2429:1,6,7         denied           2477:22         2436:2         2497:11         2432:8         2534:           2525:14         declining         24         Denise           2572:6         2566:7,15,         2628:12         2434:6,13,         2386:           deals         21 2568:7         defining         24         Denise           2478:15         decrease         2495:15         2434:6,13,         2386:           dealt 2428:8         2619:25         2495:15         2443:7,8,1         2405:           2524:13         decreased         2500:19         2444:3,7,8,1         2495:           2570:6         2629:4         2600:18,19         2446:22         2392:           2575:14         deeply         2635:14         2452:11         2506:           2599:9         2531:24         definition         2486:11,13         2511:           debate         2540:21					2573:17
dealing         2403:10         2497:15         2427:1,6         demonst           2391:19         decline         2436:2         2429:1,6,7         denied           2477:22         2436:2         defines         2432:8         2534:           2525:14         declining         2566:7,15, 21 2568:7         defining         2433:9,12, Denise           2572:6         2566:7,15, 21 2568:7         definitely         2433:9,12, Denise         2386:           deals         2628:12         2434:6,13, 2386:         2386:           dealt         2428:8         2495:15         2443:7,8,1         2405:           dealt         2428:8         2495:15         2443:7,8,1         2405:           2570:6         2629:4         2500:19         2444:3,7,8         departm           2575:14         deeply         2635:14         2452:11         2398:           2599:9         2531:24         definition         2486:11,13         2511:           debate         2598:20         2540:21         2628:16         2498:8,11,         departm           debt 2629:4         defer         2633:21         19         2559:           Dec 2547:11         2523:18         definitive         2499:7,18		decisions	1	· ·	2581:12
dealing         2405:4         2567:4         2428:4,12         2523:           2391:19         decline         2431:6         2429:1,6,7         denied           2477:22         2436:2         2497:11         2433:9,12,         2534:           2525:14         declining         2433:9,12,         Denise           2572:6         2566:7,15,         2628:12         2434:6,13,         2386:           deals         21 2568:7         defining         24         Denise           2478:15         decrease         2495:15         2443:7,8,1         2386:           dealt 2428:8         2619:25         2495:15         3         depart           2570:6         2629:4         2600:19         2444:3,7,8         departm           2575:14         2629:4         2600:18,19         2452:11         2398:           2599:9         2531:24         definition         2486:11,13         2511:           debate         2598:20         2540:21         2628:16         2499:7,18         2591:           defer         2629:4         2633:21         19         2559:           debate         2540:21         2628:16         2498:8,11,         2500:14           2598:20 <td></td> <td>2403:10</td> <td></td> <td>·</td> <td>domonatrato</td>		2403:10		·	domonatrato
2431:6         decline         2436:2         defines         2429:1,6,7         denied           2477:22         2436:2         2497:11         2432:8         2534:           2525:14         declining         2433:9,12,         Denise           2572:6         2566:7,15,         2628:12         2434:6,13,         2386:           deals         21 2568:7         definitely         243:7,8,1         2386:           dealt         2428:8         2495:15         3         depart           2524:13         decreased         2500:19         2443:7,8,1         2405:           2570:6         2629:4         2600:18,19         2446:22         2392:           2575:14         deeply         2635:14         2452:11         2508:           2599:9         2531:24         definition         2486:11,13         2511:           debate         2598:20         2628:16         2498:8,11,         2501:           debt         2629:4         2633:21         19         2559:           debt         2629:4         2633:21         2498:8,11,         2500:14         2498:8,11,           1         2500:14         2499:7,18         2500:14         2499:7,18         2500:14	dealing	2405:4		·	
2431:6       2436:2       defines       2432:8       2432:8       2534:         2477:22       declining       2497:11       2433:9,12,       Denise         2525:14       2566:7,15,       21 2568:7       defining       24       Denise         2572:6       2566:7,15,       21 2568:7       definitely       2434:6,13,       2386:         deals       2619:25       definitely       2443:7,8,1       2405:         dealt 2428:8       2619:25       2495:15       3       depart         2524:13       decreased       2500:19       2444:3,7,8       depart         2570:6       2629:4       2600:18,19       2446:22       2392:         2575:14       deeply       2635:14       2452:11       2398:         2599:9       2531:24       definition       2486:11,13       2511:         debate       2620:2       2497:22       2581:         2598:20       2540:21       2628:16       2498:8,11,       departm         debt 2629:4       defer       2633:21       19       259:         defor       2523:18       2437:17       2500:14       249:7,18       2500:14         2392:1       2392:15       2438:6       25	2391:19	4 1	256/:4		2523:2
2477:22     2436:2     2497:11     2432:8     2534:       2525:14     declining     2566:7,15,     2433:9,12,     Denise       2572:6     2566:7,15,     21 2568:7     2628:12     2434:6,13,     2386:       deals     2478:15     decrease     2495:15     2443:7,8,1     2405:       dealt 2428:8     2619:25     2500:19     2444:3,7,8     depart       2524:13     decreased     2502:17     2446:22     2392:       2575:14     2629:4     2600:18,19     2452:11     2398:       2599:9     2531:24     definition     2486:11,13     2506:       debate     2598:20     2540:21     2620:2     2497:22     2581:       debt 2629:4     defacto     2628:16     2498:8,11,     departm       2598:20     2540:21     2633:21     19     2559:       debt 2629:4     definitive     2499:7,18     259:0:14       December     2523:18     2437:17     2500:14     2499:7,18       2392:1     2392:15     2438:6     2503:22     2514:6,15,	2431:6		defines		denied
2525:14         declining         253:14         2433:9,12,         Denise           2572:6         2566:7,15,         2628:12         2434:6,13,         2386:           deals         2478:15         decrease         2495:15         2443:7,8,1         2405:           dealt 2428:8         2619:25         2500:19         2444:3,7,8         depart           2570:6         2629:4         2600:18,19         2446:22         2392:           2575:14         2599:9         2531:24         definition         2486:11,13         2511:           debate         2598:20         2540:21         2628:16         2498:8,11,         departm           debt 2629:4         defer         2633:21         19         2559:           debt 2629:4         definitive         2499:7,18         2599:7,18         2500:14           departm         2531:24         2633:21         19         2559:           defer         2633:21         19         2559:           defer         2437:17         2500:14         2500:14           2392:1         2392:15         2438:6         2503:22         2514:6,15,	2477:22	2436:2			2534:3
2572:6     2566:7,15, 21 2568:7     defining 262434:6,13, 2386: 2478:15     2434:6,13, 15,24     depart 2428:8       2478:15     decrease 2619:25     2495:15 3 2443:7,8,1 2405: 33     depart 2428:8       2524:13     decreased 2570:6     2629:4 2600:18,19 2446:22 2392: 2446:22 2392: 2446:22 2392: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2454:17 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2506: 2452:11 2500: 2581: 2452:11 2559: 2452:11 2559: 2452:11 2559: 2452:11 2559: 2452:11 2559: 2452:11 2550: 2452:11 2550: 2452: 2452: 2500: 2452: 2452: 2500: 2581: 2452: 2500: 2452: 2500: 2452: 2500: 2452: 2500: 2452: 2500: 2452: 2500: 2452: 2452: 2500: 2452: 250		declining			
deals         21 2568:7         definitely         2434:6,13, 15,24         depart 2443:7,8,1         2386: 2495:15         depart 2443:7,8,1         depart 2405: 3         depart 340: 3<		-	defining		Denise
deals         2478:15         decrease         2495:15         3         depart         2405:           dealt 2428:8         2619:25         2500:19         2443:7,8,1         2405:           2524:13         decreased         2500:19         2444:3,7,8         depart           2570:6         2629:4         2600:18,19         2446:22         2392:           2575:14         2599:9         2635:14         2452:11         2506:           2599:9         2531:24         definition         2486:11,13         2511:           debate         2598:20         2540:21         2620:2         2497:22         2581:           debt 2629:4         defer         2633:21         19         2559:           Dec 2547:11         2523:18         definitive         2499:7,18         2500:14           2500:14         2500:14         2500:14         2500:14         2500:14           2392:1         2392:15         2438:6         2514:6,15,         2500:	2012.0		2628:12	2434:6,13,	2386:16
2478:15         decrease         2619:25         2495:15         2443:7,8,1         2405:           dealt 2428:8         2619:25         2500:19         2444:3,7,8         departm           2570:6         2629:4         2500:19         2444:3,7,8         2392:           2575:14         2600:18,19         2446:22         2392:           2599:9         2531:24         2635:14         2452:11         2506:           2598:20         2531:24         2620:2         2497:22         2581:           2598:20         2540:21         2628:16         2498:8,11,         259:           debt 2629:4         2623:21         2499:7,18         259:           Dec 2547:11         2523:18         2437:17         2500:14         2499:7,18           259:20:14         2437:17         2503:22         2500:14         2461:           2392:1         2392:15         2438:6         2514:6,15,         2500:	deals	ZI Z300:/	406151-01		denart
dealt 2428:8         2619:25         2493:13         3         2403: departm           2524:13         decreased         2500:19         2444:3,7,8         2392: 2392: 2446:22         2392: 2446:22         2392: 2446:22         2392: 2446:22         2392: 2446:22         2392: 2452: 11         2398: 202: 2452: 11         2506: 2452: 11         2506: 2452: 11         2506: 2452: 11         2506: 2452: 11         2506: 2562: 2466: 2566: 2466: 2566: 2	2478:15	decrease	_		=
dealt 2428:8       2524:13       decreased       2500:19       2444:3,7,8       departm         2570:6       2629:4       2600:18,19       2446:22       2392:         2575:14       2599:9       2635:14       2452:11       2398:         2599:9       2531:24       definition       2486:11,13       2511:         debate       2620:2       2497:22       2581:         2598:20       2540:21       2628:16       2498:8,11,       departm         debt 2629:4       defer       2633:21       19       2599:7,18       2599:7,18       2599:7,18       2599:7,18       2500:14       2500:14       2461:       2500:14       2500:       2500:         December       deferred       2438:6       2503:22       2514:6,15,       2500:		2619:25			2405:8,10
2524:13 2570:6 2575:14 2599:9  deeply 2531:24  definition 2486:11,13 2511: 2598:20 2540:21  defer  Dec 2547:11  December 2392:15  defersed 2392:17 2446:22 2392:2452:11 2454:17 2506: 2486:11,13 2511: 2620:2 2497:22 2581: 2633:21 19 2599:7,18 2599:				-	department
2570:6 2575:14 2599:9  deeply 2531:24  definition 2486:11,13 2511: 2598:20 2540:21  debt 2629:4  Dec 2547:11  December 2392:1  2600:18,19 2452:11 2452:11 2454:17 2506: 2486:11,13 2511: 2581: 2620:2 2497:22 2581: 2633:21 19 2633:21 19 2699:7,18 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599: 2499:7,18 2599:			2502:17		2392:2
2575:14     deeply     2635:14     2454:17     2506:       2599:9     definition     2486:11,13     2511:       debate     2598:20     2540:21     2620:2     2497:22     2581:       debt 2629:4     defer     2633:21     19     departm       Dec 2547:11     2523:18     2437:17     2500:14     2499:7,18       December     deferred     2437:17     2503:22     2461:       2392:1     2392:15     2514:6,15,     2500:		2629:4	2600:18,19		
2599:9  debate 2598:20  debt 2629:4  Dec 2547:11  December 2392:1  debt 2531:24  definition 2486:11,13 2511: 2497:22 2497:22 2581: 2628:16 2633:21 2633:21 2633:21 2633:21 2633:21 2633:21 2633:21 2633:21 2633:21 2699:7,18 2690:4 2499:7,18 2500:14 2409:7,18 2500:14 2500:14 2461: 2500:	2575:14	deeplv	2635:14		
debate         defacto         2620:2         2497:22         2581:           2598:20         2540:21         2628:16         2498:8,11,         departm           debt 2629:4         defer         2633:21         19         2559:           Dec 2547:11         2523:18         2437:17         2500:14         2461:           December         deferred         2438:6         2503:22         2500:           2392:1         2392:15         2514:6,15,         2500:	2599:9				
2598:20 2540:21 2628:16 2498:8,11, 2633:21 19 2559:  Dec 2547:11 2523:18 2633:21 2699:7,18 2500:14 2499:7,18 2500:14 2437:17 2500:14 2438:6 2392:1 2392:15 2628:16 2498:8,11, 2559: 2499:7,18 2500:14 2401: 2500: 2500:	dobata	2331:24			
debt 2629:4     defer     2533:21     19     2559:       Dec 2547:11     2523:18     definitive     2437:17     2500:14     2461:       December     2392:1     2392:15     2500:14     2500:22		defacto			2581:15
debt 2629:4         defer         2633:21         19         2559:           Dec 2547:11         2523:18         definitive         2499:7,18         depend           December         deferred         2437:17         2500:14         2461:           2392:1         2392:15         2514:6,15,         2500:	2598:20	2540:21		2498:8,11,	department's
Dec 2547:11         2523:18         definitive 2437:17         2500:14         depend 2437:17           December 2392:1         2392:15         2438:6         2503:22         2500:20	<b>debt</b> 2629:4		2633:21	19	2559:11
Dec 2547:11         2523:18         2437:17         2500:14         depend           December         deferred         2438:6         2503:22         2461:           2392:1         2392:15         2514:6,15,         2500:			definition	2499:7,18	
December         deferred         2437.17         2503:22         2461:           2392:1         2392:15         2514:6,15,         2500:	<b>Dec</b> 2547:11	2523:18			depend
2438:6 2503:22 2500: 250	December	deferred			2461:3
2392:1   2392:13   2314.0,13,1			2438:6		2500:20
dofinition    2620.			definitively		2629:6
2515:9,25 2393:4,13 <b>definitively</b> 25	2515:9,25	2393:4,13		25	2029.0

08 1111111081	1 1111110 0141	01 00 2013		
dependent	2391:6	2509 <b>:</b> 23	2540:13 <b>,</b> 18	differences
2467:11,19	2392:14	2542:23	2542:2,7,2	2418:3,4
2567:6	2408:10	2566:22,24	0,25	2635:5
	2440:22	·	2545:1,21	
depending	2442:25	determinatio	2546:7	different
2460:20	2503:10,20	<b>ns</b> 2577:14	2547:1,22,	2425:23
2461:9,22	2562:13,24	determine	24	2434:23
2470:15	2563:5,20	2519 <b>:</b> 12	2549:3,6,2	2437:6,23
2529 <b>:</b> 3	2580:9,11		0	2438:3
depicted	2587:25	determined	2550:1,11,	2453:1,9
2441:21	2591:12	2425:21	13,17,24	2454:7
	2592:13	2485:4	2551:18,22	2458:3
deprec		2612 <b>:</b> 7	,24	2460:19
2611:22	designate	develop	2552:2,3,7	2461:9,14
depreciated	2497:21	2586 <b>:</b> 19		2485:23
2600:9	2498:8,10,		,21,23	2497:22
2601:6,10	18	developed	2553:9,12,	2498:18,22
2602:3	2499:6,17	2443:10,25	20	,23
2002:3	2500:13	developing	2554:11,24	2499:7,17
depreciation		2494:6	2556 <b>:</b> 7	2500:13,1
2528:15	designated	2494.0	2562:24	2528:23
2533:24	2460:24	development	2563:2	2555:6
2535:14	2461:5	2397:11	2597:11,20	2558:25
2611:12	2492:20	2398:9	<b>,</b> 25	2562:4
2612:12	designed	2473:20	2598:7,13	2570:22
	2403:21,23	2530:9	2600:9,23	
derive	2409:5	2548 <b>:</b> 8	2601:7	2579:17
2520:8	2411:20		2602:20	2580:23
describe	2454:15	diesel	2604:2	2594:23
2578:4		2387:6	2605:7	2626:25
2619:13	2469:23	2390:24	2608:15	2630:21
	2484:23	2391:6	2611:14	2634:1
described	2514:23	2393:1	2615:7	differentia
2430:24	2568:8	2395:2,6,1	2617:24	<b>ed</b> 2393:1
2545:7	2586:22	1,22	2636:15,18	<b>ea</b> 2555.10
2561:21	designing	2396:13,19		differentia
2580:1	2559:9	2397:1,24	, 22	ion
do o o má bo o		2399:13,19	diesels	2411:14
describes	designs	,20	2553 <b>:</b> 25	2570:12
2619:3	2592:5	2423:24,25	<b>dif</b> 2419:25	4: ££1
describing	desirability	2424:1,7,1	QII 2419:25	differently
2569:20	2560:8	5 2496:13	differ	2460:20
4		2512 <b>:</b> 17	2461:12	2560:22
description	desirable	2514 <b>:</b> 2	difference	differs
2388:3	2559:24	2521:15		2436:14
2389:2	detail	2524:13	2416:20	4: 66: - 11
2393:15	2554:5	2524:13	2420:1	difficult
2452:17	2334.3		2421:4	2503:15
2562:23	details	2527:21	2449:18	2555:3
descriptor	2553:6	2528:2,10	2534:12	2563:3
2402:9	2587:14	2534:18	2547:21	2571:1
4704.7	2599:13	2535:1,5,8	2570:13 <b>,</b> 15	difficultie
		つにつだった	0.0	
<b>desi</b> 2560:7	2600:2	2536:6	<b>,</b> 20	2628•11
<b>desi</b> 2560:7 2572:8	2600:2	2537 <b>:</b> 15	,20 2571:14	2628:11
				2628:11 difficulty

	A HIDRO GRA	01-08-2013	Page 2000 01	
2609:18	2587:10	2628:11	2399:11	2483:21
2624:11	2307:10	2631:22	2404:6,7	2488:25
2024:11	discontinuat	2031:22	2404:0,7	2492:13
<b>dig</b> 2531:16	ion	discussions	2408:19,23	2503:3
direct	2477:16	2499:11	2412:11,13	2514:5
2391:14	discontinued	2502:5	2586:1,11	2514:5
2398:19	2477:19	2503:23		
2400:6,21	2517:23,24	2515:7	2627:3,8	2519:4
2402:23	2518:2	2525:15	2628:9,22	2522:3,13,
2423:24	2310:2	2546:15	2629:20,24	17
2425:24	discount	2565:8	distribution	2523:14,16
2423:17	2443:16	2582:1	-related	<b>,</b> 19
	2472:13	dispatch	2405:21	2524:12
2506:7	2478:15		41.1.1.1	2528:1
2522:1 2535:2	2481:15	2445:20,21	district	2529:12
2535:2	2627:19	2447:7	2419:6	2536:5
directed	discouraging	2471:15	divide	2539:7
2400:16		2473:25	2520:3	2543:3
2432:20	2563 <b>:</b> 22	dispatchable	divided	2545:16
directing	discriminati	2459:11,12		2564:4,9
2599:1	<b>on</b> 2562:18	dispatched	2415:13	2596:11
2603:24	2563:5,11,	_	2471:12	2597 <b>:</b> 1
	12,14	2453:6	division	dollar
2606:7	discuss	2459:17	2390:21,23	2459:22
2607:18		dispatching	2392:3	2538:14
2608:13	2464:20	2447:23	2399:7,8	2595:12
2623:5	2512:16	dispense	2510:4	2611:11
direction	2588:25	2524:17	document	
2433:16	discussed			dollars
2433:16 2507:8	discussed 2405:1	displace	2504:25	2396:8,10
			2504:25 2547:4	2396:8,10 2397:2
2507:8 2547:14	2405:1	displace 2485:12	2504:25 2547:4 2564:3	2396:8,10 2397:2 2404:13
2507:8 2547:14 <b>directive</b>	2405:1 2523:6	displace 2485:12 displacement	2504:25 2547:4 2564:3 2615:24	2396:8,10 2397:2 2404:13 2421:13,14
2507:8 2547:14 <b>directive</b> 2389:10	2405:1 2523:6 2535:2	displace 2485:12 displacement 2496:5,19	2504:25 2547:4 2564:3 2615:24 2622:11	2396:8,10 2397:2 2404:13 2421:13,14 2423:5
2507:8 2547:14 <b>directive</b> 2389:10 2397:20	2405:1 2523:6 2535:2 2545:3	displace 2485:12 displacement 2496:5,19 displaces	2504:25 2547:4 2564:3 2615:24	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10	2405:1 2523:6 2535:2 2545:3 2570:25	displace 2485:12 displacement 2496:5,19	2504:25 2547:4 2564:3 2615:24 2622:11	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21	displace 2485:12 displacement 2496:5,19 displaces 2485:23	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 discussing	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing 2486:1,2	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing 2486:1,2 dispute	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 discussing	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing 2486:1,2 dispute 2530:23	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4 2503:21	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing 2486:1,2 dispute 2530:23 2531:1,3,1 3 2532:5,7	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4 2503:21 <b>discussion</b>	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2488:2,3,1 2,14,16 2489:9
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4 2503:21 <b>discussion</b> 2433:19	displace 2485:12 displacement 2496:5,19 displaces 2485:23 displacing 2486:1,2 dispute 2530:23 2531:1,3,1 3 2532:5,7 2544:6	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19 <b>directly</b> 2550:11,19	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4 2503:21 <b>discussion</b> 2433:19 2498:4	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2488:2,3,1 2,14,16 2489:9
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19 <b>directly</b> 2550:11,19 <b>disadvantage</b>	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7 <b>discussing</b> 2435:4 2503:21 <b>discussion</b> 2433:19 2498:4 2531:7	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22 2416:25	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19 <b>directly</b> 2550:11,19	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8
2507:8 2547:14 <b>directive</b> 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19 <b>directly</b> 2550:11,19 <b>disadvantage</b>	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 <b>documentatio</b> <b>n</b> 2522:24 2523:1,9 2525:2,8,1 1 <b>documents</b> 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23  disagree 2568:11,13	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4 2598:24	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17 2448:10	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23  disagree 2568:11,13  disappear	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4 2598:24 2603:25	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 <b>documentatio</b> <b>n</b> 2522:24 2523:1,9 2525:2,8,1 1 <b>documents</b> 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17 2448:10 2452:17	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22 2617:11
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23  disagree 2568:11,13  disappear 2473:10	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4 2598:24 2603:25 2604:3,8	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17 2448:10 2452:17 2457:4	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22 2617:11 2629:21,22
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23  disagree 2568:11,13  disappear	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4 2598:24 2603:25 2604:3,8 2610:18	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17 2448:10 2452:17 2457:4 2462:22	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22 2617:11 2629:21,22 ,25 domestic
2507:8 2547:14  directive 2389:10 2397:20 2509:4,10 2518:4,6 2524:15 2530:11 2533:19 2544:16 2545:17 2548:13,19  directly 2550:11,19  disadvantage s 2571:23  disagree 2568:11,13  disappear 2473:10	2405:1 2523:6 2535:2 2545:3 2570:25 2591:21 2606:4 2609:7  discussing 2435:4 2503:21  discussion 2433:19 2498:4 2531:7 2545:19 2578:24 2581:4 2598:24 2603:25 2604:3,8 2610:18 2618:3,12	displace	2504:25 2547:4 2564:3 2615:24 2622:11 2631:8,18 documentatio n 2522:24 2523:1,9 2525:2,8,1 1 documents 2388:4 2390:4,8 2390:4,8 2398:1,4 2414:22 2416:25 2417:16 2440:5 2442:17 2448:10 2452:17 2457:4	2396:8,10 2397:2 2404:13 2421:13,14 2423:5 2434:19 2441:11,12 2442:7 2447:1 2475:24 2478:2 2482:17 2488:2,3,1 2,14,16 2489:9 2529:14 2595:8 2601:20 2607:1,15 2614:19,22 2617:11 2629:21,22

TOD MA	NIIODA NIDRO GRA	01 08 2013	rage 2001 01	
2487:8	2523:15	<b>easy</b> 2436:22	effectively	eight-three
2500:1	<b>due</b> 2452:19	2577:15	2575:15	2629:25
2624:7	2515:13	2581:14,15	effectivenes	eighty-five
2625:1	2 2525:17	2582:19,22	s 2558:15	2429:15
<b>done</b> 239	0.17	economic	<b>S</b> 2000:10	2442:8,11
2423:1	duplication	2445:20	efficiency	2538:14
2423:1	24//:1/	2445:20	2553:5	2554:14
2474:1		2471:19,25	2554:9	2334:14
2474.1		2471:19,25	2563:22	either
2504:1		2474:1	2575:18	2397:17
2505:2	1 22	2496:24	efficient	2410:11
,25 25	OC.7	2498:24	2436:23	2438:16
2527:2	2490.13	2499:1	2474:2,4,5	2447:18
2542:1		2507:16	2550:10	2464:10
2548:1	0 4 1 0 1 6	2587:21	2567:11,20	2525:7
,16	2434:21	2619:2		2527:15
2553:7	14 2435:12	2622:23,25	effort	2528:25
2571:1	0440 00	·	2413:13	2547:16
2580:1	0457 17	economically	2439:20	2558:9
2587:9		2431:23	2541:25	2566:25
	2479:9	2473:8	efforts	2595:22
Dorsey	2486:9	economics	2553:4	2609:16
2399:6	2489:4,24	2438:9	2613:1,16	2613:7,23
double	2494:25	2447:8	·	elastic
2442:9	,11 2498:23,25	2568:14	eight 2396:3	2634:3
	2499:1	2572:25	2406:16,23	
doubt	2503:17		2407:2	elasticities
2622:2	2515:9	<b>edict</b> 2505:3	2431:10	2631:24,25
dramatic	2517:1,11	education	2569:4 2576:22	2635:6
2632:1	5 2540:1	2397:14	2576:22	elasticity
<b>draw</b> 240	2560:6	2424:23	2580:24	2597:14
2547:1	2501.0	2432:6	2585:2,7,9	2619:3,8,1
	2624:5	2527:15	,21	8 2621:22
drawn 24	75:3	2633:10	2606:25	2631:7
dream		effect	2607:3	2632:24
2451:1		2396:9	2620:18	2634:3
	carrier	2444:5,7	2621:4	elect
drilling		2445:21	2623:15	2448:15
2580:1	2471:7	2453:12	2624:22	2500:13
drink	2604:8	2456:23	2627:22	2572:16
2557:2	2 2606:5	2489:19	2628:10,20	2602:20,24
driving	2627:8	2498:22		
2451:8		2515:13	eighteen	elected
	earry 2599:4	2518:6	2441:11	2462:15
drought	2627:19	2617:13	2461:20	elections
2454:1	earnings	2628:1	2477:6	2460:14
2455:1	2541:8,16	2633:10	eight-point	ologbud a
2494:2	5 2561:17	2635:15	2627:1	electric
<b>DSM</b> 2387	.6		2630:8	2392:4,6
2391:6	easier	effective		2416:21
2564:1	I 2523:9	2441:25	eight-point-	2417:2,5,7
2573:5		2496:12	five	,9,14
	2582:7	2535:5	2627:12	2422:19
ducks				2437:20

2550:12 2582:14 2588:3,8 2623:2 2631:17  electrical 2455:11 2576:2 2583:10  electrically 2439:17  electrical 2439:17  electrical 2576:2 2583:10  electrically 2439:17  electrical 2439:17  electrical 2439:17  electrical 2576:2 2583:10  electrically 2439:17  embarking 2586:20  embarking 2586:20  embedded 2593:22  embedded 2593:22  electricity 2405:14 2405:8,11 2405:14 241:10,13 2413:1,5,8 2417:24 2411:10,13 2413:1,5,8 2417:4 2432:23 2447:14 2432:23 2447:14 2489:13 2570:1 2584:8 219 2292:19 2393:24 240:5  emphasize 2403:15 2403:15 2403:15 2403:15 2433:15,2 2432:17 employed 2391:25 2431:3 2432:17 employee 2586:20 2433:17,12 2403:23 2417:24 2405:8,11 2412:6,20 2417:24 2476:5 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2483:20,2 2484:2,13 2599:5,11, 222550:17  emerge 2584:8 2584:8 ,13,19,24	,18,21 ,2552:5 ,2553:5,9,1 ,9 2554:9 ,2556:14	2426:4,10,	emphasis	eliminate	2441:2
2582:14       2588:3,8       2420:5       2427:9,12         2582:2       2518:19       2420:5       13         2631:17       else 2482:18       2403:15       2428:2,4,         2597:11       emphasize       2428:2,4,         2403:15       2431:3       2432:17         2455:11       2572:2       2557:21       2431:3         2576:2       2572:4       2391:25       2434:4,9         2583:10       2617:20       2399:2       2436:23         electrically       2626:5       employee       2437:7,12         2439:17       embarking       2586:20       18 2438:8         2593:22       embodded       2417:24       2454:20,2         electricity       2405:8,11       2417:24       2454:20,2         2405:8,11       2417:24       2476:5         2411:10,13       2413:1,5,8       2586:19       2482:15         2417:4       2567:18,22       2586:19       2484:2,13         2492:23       2569:23       2403:10       2427:8         2499:3       2403:10       2427:8       2485:3,5,         2599:5,11,       2250:6       2584:8       ,13,19,24	, 2552:5 2553:5,9,1 6 9 2554:9 8 2556:14	12 22			
2582:14 2588:3,8 2623:2 2631:17  electrical 2576:2 2583:10  electrically 2439:17  electric- heat 2593:22  electricity 2405:14 2593:22  electricity 2405:14 2411:10,13 2412:6,20 2417:14 2432:23 2417:4 2432:23 2447:14 2489:13 2598:24 22590:16  eliminated 2420:5  emphasize 2428:2,4, 2420:5  emphasize 2428:2,4, 2428:2,4, 2403:15 2403:15 2403:15 2432:17  employed 2433:15,2 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:17 2432:23 2447:14 2412:6,20 2411:10,13 2413:1,5,8 2586:20 2417:24 2405:8,11 2412:6,20 2417:24 2405:8,11 2412:6,20 2417:24 2432:23 2447:14 2432:23 2569:23 2447:14 2489:13 2575:11 2422:550:17  emerge 2502:6  emphasize 2403:15 2431:3 2432:17 2432:17 2432:17 2432:17 2432:23 2447:24 2454:20,2 2447:24 2454:20,2 2447:24 2454:20,2 2447:24 2586:19 2482:15 2482:15 2482:15 2586:19 2482:15 2586:19 2482:15 2586:19 2483:20,2 2484:2,13 2575:11 2427:8 2584:8 ,13,19,24 2486:17	, 2552:5 2553:5,9,1 6 9 2554:9 8 2556:14	12,22	2392:19	2599:15	2550:12
2588:3,8 2623:2 2631:17  electrical 2518:19 2597:11  else 2482:18 2529:2 2576:2 2583:10  electrically 2617:20 2617:20 2439:17  electric- heat 2551:17 embarking 2593:22 electricity 2405:14 2593:22 electricity 2405:14 2411:10,13 2412:6,20 2411:10,13 2413:1,5,8 2417:4 2432:23 2417:4 2432:23 2447:14 2489:13 2597:6  emphasize 2403:15 2403:15 2403:15 2403:15 2403:15 2404:25 employed 2433:15,2 2432:17 employee 2439:25 2434:4,9 2432:25 2447:24 245:23 2447:24 245:24 245:24 245:24 245:25 2485:3,5, 2486:17	2553:5,9,1 6 9 2554:9 8 2556:14	2427:9,12,			2582:14
2623:2 2631:17  electrical 2455:11 2576:2 2583:10  electrically 2439:17  electric- heat 2593:22  embarking 2593:22  embloyee 2403:15 2440:23 2411:10,13 2405:14 2411:10,13 2411:10,13 2411:10,13 2417:4 2432:23 2417:4 2489:13 2570:1	9 2554:9 2556:14				
2631:17       else 2482:18       2403:15       2431:3         2455:11       2529:2       2434:9       2432:17         2576:2       2572:4       2391:25       2434:4,9         2583:10       2617:20       2399:2       2436:23         electrically       2626:5       employee       2437:7,12         2439:17       embarking       2586:20       18 2438:8         electric-heat       2551:17       encompasses       2441:6         2593:22       2404:12       2405:8,11       2475:21         2405:14       2412:6,20       2475:21       2476:5         2411:10,13       2413:1,5,8       2586:19       2482:15         2432:23       2569:23       2586:19       2484:2,13         249:13       2570:1       2403:10       5         2489:13       2575:11       2427:8       2485:3,5,         259:50:17       emerge       2584:8       ,13,19,24	2556:14	-			· ·
electrical         else 2482:18         2433:15         2431:3           2455:11         2576:2         2557:21         employed         2433:15,2           2583:10         2617:20         2391:25         2434:4,9           electrically         2626:5         employee         2437:7,12           electric-         2551:17         embedded         2586:20         2440:23           electricity         2404:12         encompasses         2441:6           2405:14         2405:8,11         encouragemen         2475:21           2417:24         2454:20,2         2476:5           2411:10,13         2413:1,5,8         2482:15           2417:4         2567:18,22         2586:19         2482:15           2432:23         2569:23         2403:10         5           2489:13         2575:11         2427:8         2485:3,5,           2599:5,11,         2250:6         2584:8         ,13,19,24			_	2597:11	
2455:11       2529:2       2434:9       2432:17         2576:2       2572:4       2391:25       2434:4,9         2583:10       2617:20       2399:2       2436:23         electrically       2626:5       employee       2437:7,12         2439:17       embarking       2586:20       18 2438:8         electric-heat       2551:17       encompasses       2440:23         electricity       2404:12       encouragemen       2475:21         2405:14       2412:6,20       2475:21       2476:5         2411:10,13       2413:1,5,8       Encourages       2482:15         2417:4       2567:18,22       2586:19       2484:2,13         2432:23       2569:23       encouraging       16,17,20,         2489:13       2570:1       2403:10       2427:8       2485:3,5,         2599:5,11,       emerge       2584:8       ,13,19,24         2486:17	2565:21	·		<b>else</b> 2482:18	
2455:11 2576:2 2583:10 2617:20 2617:20 2626:5 2439:17 2439:17 2593:22 2404:12 2405:14 2411:10,13 2411:10,13 2417:4 2432:23 2432:23 2432:23 2437:7,12 2577:21 2577:21 2391:25 2434:4,9 2399:2 2436:23 2437:7,12 2439:25 2437:7,12 2440:23 2440:23 2441:6 2441:2 2405:8,11 2412:6,20 2417:24 245:21 2476:5 2482:15 2482:15 2482:15 2482:15 2483:20,2 2484:2,13 2569:23 2447:14 2489:13 2575:11 2427:8 2584:8 2485:3,5, 2586:17	2568:8,17		2434:9		
2576:2 2583:10 2617:20 2617:20 2399:2 2436:23 2436:23 2437:7,12 2439:17 2439:17 2551:17 2551:17 2551:17 2405:14 2411:10,13 2411:10,13 2411:10,13 2417:4 2432:23 2447:14 2489:13 2549:5,11, 22 2550:17  2572:4 2399:2 2434:4,9 2399:2 2436:23 2436:23 2447:24 2586:20 2423:25 2440:23 2441:6 2417:24 2454:20,2 2475:21 2476:5 2482:15 2482:15 2482:15 2482:15 2482:15 2482:15 2483:20,2 2586:19 2484:2,13 2570:1 2403:10 2427:8 2586:37 2485:3,5, 2586:17			employed		
2583:10       2617:20       2399:2       2436:23         electrically       2626:5       employee       2437:7,12         2439:17       embarking       2586:20       2440:23         electric-       2551:17       encompasses       2441:6         2593:22       2404:12       encouragemen       2475:21         electricity       2405:8,11       2412:6,20       2476:5         2411:10,13       2413:1,5,8       2587:10       2482:15         2417:4       2567:18,22       2586:19       2483:20,2         2432:23       2569:23       2586:19       2484:2,13         2489:13       2570:1       2403:10       5         2489:5,11,       2575:11       2427:8       2485:3,5,         259:50:17       2502:6       2584:8       ,13,19,24	2584:9,11,	·			2576:2
electrically       2626:5       employee       2437:7,12         electric-heat       2551:17       encompasses       2440:23         electricity       2404:12       encouragemen       2475:21         electricity       2405:8,11       encouragemen       2476:5         2411:10,13       2412:6,20       2482:15         2417:4       2567:18,22       2586:19       2484:2,13         2432:23       2569:23       encouraging       16,17,20,         2447:14       2570:1       2403:10       2427:8       2485:3,5,         249:5,11,       emerge       2584:8       ,13,19,24         2486:17	14,15	·			2583:10
2439:17       embarking       2586:20       18 2438:8         electric-       2551:17       encompasses       2440:23         heat       2404:12       2454:20,2         electricity       2405:8,11       2475:21         2405:14       2412:6,20       2482:15         2411:10,13       2413:1,5,8       2567:18,22       2484:2,13         2432:23       2569:23       2586:19       2484:2,13         2447:14       2570:1       2403:10       5         2489:13       2575:11       2427:8       2485:3,5,         2549:5,11,       emerge       2584:8       ,13,19,24         2486:17					electrically
electric-heat       2551:17       encompasses       2440:23         2593:22       2404:12       2454:20,2         electricity       2405:8,11       2475:21         2405:14       2412:6,20       2482:15         2417:4       2567:18,22       2586:19         2432:23       2569:23       encouraging       16,17,20,         2447:14       2570:1       2403:10       2427:8       2485:3,5,         2549:5,11,       emerge       2584:8       ,13,19,24         2486:17					_
heat       embedded       2417:24       2454:20,2         electricity       2405:8,11       encouragemen       2475:21         2405:14       2412:6,20       2482:15         2411:10,13       2413:1,5,8       Encourages       2483:20,2         2432:23       2567:18,22       2586:19       2484:2,13         2447:14       2570:1       2403:10       5         2489:13       2575:11       2427:8       2485:3,5,         2549:5,11,       emerge       2584:8       ,13,19,24         2486:17	·		2586:20	embarking	
heat       embedded       2417:24       2454:20,2         2404:12       encouragemen       2475:21         2405:14       2412:6,20       2413:1,5,8       encourages         2417:4       2567:18,22       2586:19       2484:2,13         2432:23       2569:23       encouraging       16,17,20,         2447:14       2570:1       2403:10       2427:8       2485:3,5,         249:5,11,       emerge       2584:8       ,13,19,24         2486:17	2593:20		encompasses	2551:17	electric-
2593:22  electricity 2405:8,11 2412:6,20 2411:10,13 2413:1,5,8 2417:4 2432:23 2432:23 2447:14 2489:13 2549:5,11, 22 2550:17  2404:12 encouragemen t 2587:10 2475:21 2476:5 2482:15 2482:15 2483:20,2 2586:19 2484:2,13 2570:1 2403:10 2427:8 2584:8 2584:8 2584:8 2584:7	2618:14,18		=	embedded	heat
electricity       2405:8,11       t 2587:10       2476:5         2405:14       2412:6,20       2482:15         2411:10,13       2413:1,5,8       2483:20,2         2417:4       2567:18,22       2586:19       2484:2,13         2432:23       2569:23       encouraging       16,17,20,         2489:13       2570:1       2403:10       5         2489:5,11,       2575:11       2427:8       2485:3,5,         2549:5,11,       22 2550:17       2584:8       ,13,19,24	4 2632:11	·			2593:22
2405:14 2412:6,20 2413:1,5,8 2417:4 2432:23 2447:14 2489:13 2567:11 2489:5,11, 22 2550:17  2412:6,20 2482:15 2482:15 2483:20,2 2484:2,13 2586:19 2484:2,13 2584:8 2584:8 2485:3,5, 2584:8 2584:8 2584:8 2482:15 2485:3,5, 2485:3,5, 2584:8 2584:8 2486:17	energy-		_		electricity
2411:10,13 2413:1,5,8 2417:4 2432:23 2447:14 2489:13 2575:11 2599:5,11, 22 2550:17  2413:1,5,8 Encourages 2483:20,2 2484:2,13 2586:19 encouraging 2403:10 2403:10 2427:8 2584:8 2584:8 2584:8 2486:17	efficient		<b>t</b> 2587:10	· ·	I - I
2417:4 2567:18,22 2586:19 2484:2,13 2432:23 2569:23 encouraging 16,17,20, 2489:13 2575:11 2427:8 2485:3,5, 2549:5,11, 22 2550:17 emerge 2503:6	2437:2		Encourages	·	
2432:23	•	· · · · · · · · · · · · · · · · · · ·	=		· ·
2447:14 2570:1 2403:10 5 2489:13 2575:11 2427:8 2485:3,5, 2549:5,11, 22 2550:17 emerge 2584:8 ,13,19,24					
2489:13					
2549:5,11, 22 2550:17 emerge 2584:8 ,13,19,24 2486:17	2436:9	-			
22 2550:17 emerge 2504.8 715711721	i energy-			2373.11	
	related		2584:8	emerge	
oner or	2443:14		energy	2502:6	
2390.19				emergencies	· ·
2400.10	engage				
2489:2,5	2531:7		·		
2490:21,2	engaged	2490:21,22		•	
,24,23	2486:23		· · · ·		
2401.16		2492:14,20			
emergency 2402.25	2504:22	2494:7,16,			
2443:20 2403:1 3 1	2304:22				
244/:18	engine			2447:18	
2454:20 2404:3	2451:12	2496:12,20	· · ·		
24/9:12,15	engineer			2479:12,15	· ·
omerging 25 2406.1	2200 10			emerging	1
2552.6	2504.11 10	2498:22,25			ZU Z035:Z4
electronic 2499:1,6,	2505:23	2499:1,6,2			electronic
2389:5	0506-1 5 5	=	·		2389:5
2421:19 2556.6 2410.1 0.2 2500:2,3,	1 ,9,10,16,2	2500:2,3,1			2421:19
$\begin{bmatrix} 2422:19,25 \\ 2030:23 \\ 32412:0 \end{bmatrix}$	F 0F07.0			2636:23	2422:19,25
emissions 2/13.12.14 2501:14,1	5 2507:9 2508:20,22	2501:14,15		emissions	element
2503:15	2509:12,16		·		
2554:23 2414.8 2507:11	,20				
elements 2574:3,13 2418:15 2509:24					
2413:9 2636:15 2420:5 6 7 2510:5	engineering				2413:9
eleven 2420.3,677 2512:25	2504:22,24				eleven
2504·14 2513:11	2506:3,12,				
2630:10 2424.2		2518:24,25		2636:18	
emitted 2425.11 14 2319:7,0,	2509:18,25	2519:7,8,1		emitted	-
2556:6	-   2009.10,2	2.19.20		2556.6	2554:15
2547:22	engineers		.16	2336:6	l l

		A HIDNO GNA	01 00 2013	rage 2005 01	2,0,
1	04:24	2433:21	2624:24	2626:5	2575:11
	05:4	equals	2625:13,23	evidence	exceeded
1	06:2,8,2	2562:14	2626:17	2392:11	2401:7
	2507:2		estimated	2398:19	
	08:11,20	equate	2554:13	2400:7,21	exceedingly
	09:5	2576:10	2604:7	2401:15	2454:17
25	10:1	equating	2625:25	2423:24	2597 <b>:</b> 5
engi	neer's	2605:22		2425:17	exceeds
_	02:20	equipment	estimates	2437:9,11	2566:1,3
25	04:8	2399:11	2506:10	2442:15	Except
25	05:9	2450:2,4	2507:4	2522:2,10	2467:1
25	08:13,25	2451:6	2623:8	2525:24	
		2452:20	2629:19	2528:19	exception
_	neers 07:22		estimating	2536:8	2532 <b>:</b> 22
231	07:22	equipped	2625:11	2553:17	excerpt
	lled	2400:17	estimation	exact	2593 <b>:</b> 13
24	44:24	equivalent	2549:14,24	2452 <b>:</b> 17	2604:12
ensu	e	2487:7	·	2620:6	2611:6
	25:10	2500:9	<b>eve</b> 2626:4		2622:24
		2535 <b>:</b> 7	evening	exactly	
ensu			2434:13	2418:7	excess
	80:9	error	2637:2	2489:11	2393:12
	87:14	2456:14		2550:15	2395:24
25.	59:18	especially	event	2568:4	exchange
ensu	res	2434:21	2399:20	2577:6	2564:13
24	94:16	essence	2454:16	2595:7	excuse
ente:	d	2413:14	2455:2	2627:16	2623:20
	66:9	2605:5	2458:11	Examination-	
24	00:9		2494:17 2496:13	in-chief	exercise
enti	re	essentially	2534:21	2387:12	2453:8
24	18:25	2435:17	2561:1	2391:12	2455:3
	30:17	2487:19	2301:1		2480:15
	94:17	2492:18	events	example	2526:1
	16:2	2518:7	2561:19	2408:16	exhibit
26	01:23	2594:14	2615:17	2421:12	2388:3
enti	retv	2605:9	eventually	2425:15	2414:23
	34:3	<b>est</b> 2623:13	2562:8	2436:19,24 2440:7	2489:1
		establish		2450:7	2497:20
enti		2459:7	everybody	2467:3	2519:4
25	64:4		2434:5,6	2476:22	2564:6,8,1
envi	ronmenta	established	2557:21	2476:22	6 2573:2
113	<b>y</b> 2532:1	2434:1	2573:7,16	2563:9	2583:25
EPRI		2506:11	2580:10	2565:25	2586:16
l	31:7,16	2570 <b>:</b> 2	2582:3 2595:1	2568:23	2587:11
	·	2572 <b>:</b> 24	2090:1	2569:11	2593:12
equa		estimate	everyone's	2576:22	2596:13 <b>,</b> 17
	38:10,11	2490:1,2	2557 <b>:</b> 9	2586:1	2599:2
	16:14,16	2511:25	everything	2619:15	2606:9
	62:14	2512:1	2466:2		2608:8
	69:23	2585:1	2482:18	examples	2611:4
26	17:16	2606:21,22	2523:17	2428:7	2614:12
equa	11y	2620:16	2617:20	exceed	2621:20
		2623:13,19	<u> </u>		2623:25

JD MANIIODA	A HIDNO GNA	01 00 2013	rage 2004 01	2707
Exhibits	2606:11	2442:24	2476:21	2592:4
2387:3	2608:2	2634:7	extracted	2611:16
2388:2	expense	explicit	2527:25	2617:13
exist 2551:2	2533:23	2540:11,14	2327:23	2620:1
	2537:22	,22	extracts	2626:15
2553:11	2611:12,13	·	2524:12	factor
existence	2612:16,17	exploratory	extremely	2427:15,1
2483:25	2012:10,17	2503:23	2428:6	,25
existing	expenses	export	2120.0	2428:20,2
2421:20	2559:12	2443:22		2429:4,10
2461:20	2560:16	2452:22	F	2430:11,1
2466:18	expensive	2484:4,14,	<b>face</b> 2408:24	,25
2584:23	2474:7	16,18	2410:8	2431:2,5,
2591:1		2485:12,24	2412:18	,10,14,19
	experience	2486:1	2426:22	20 2473:2
exists	2417:17	2487:6,17,	2449:13	2496:10,1
2435:13	2424:2	18	2516:12	2514:18,2
2439:10	2430:8	2488:9,21	2526:25	2514:10,2
2472:7	2431:7,13	2492:10	faced	2538:1
2582:11	2434:11	2500:3	2514 <b>:</b> 25	2621:14
expand	2437:24,25	2501:1,4	2588:4	2628:13
2609:22	2457:8	2577:2		2629:9
	2481:4		faces	2634:10
expanded	2521:2	exported	2390:25	2034.10
2476:2	2583:3	2477:8	2418:2	factors
expands	2622:14	exporting	2449:25	2427:8
2476:12	experienced	2445:9	facilitate	2429:2
expansion	2582 <b>:</b> 10		2492:3	2437:17,
_		exports	2499:13	2438:4
2476:4	expertise	2445:8,15	6	2487:13
expect	2552:20	2486:2	facilitates	2621:9,1
2413:18	explain	expressed	2501:3	16
2481:3	2407:16	2484:19	facilities	factual
2500:4	2415:4	expression	2399:22	2481:21
2512:18	2417:23	2565:20	2404:6	
2543:16	2427:3	2566:4,15	2406:24	factually
expectation	2430:12	2300:4,13	2412:13	2457:13
2413:22,23	2438:5	extend	2432:20	2479:6
2493:7	2446:3	2490:16	2435:4	2486:7
2605:14	2449:18	2548:1	2533:6	<b>fail</b> 2456:
	2456:7	extension	2628:8	£-:1-4
expected	2458:23	2392:6	facility	failed
2415:5	2466:4	2491:21	2435:4	2450:4
2472:19	2504:13		2496:13	failing
2491:4	2514:22	extensions	2490:13	2455:20
expecting	2565:17	2493:14	<b>fact</b> 2438:12	2526:4
2530:5,7	2581:22	extent	2446:14	failure
2548:18,21	2624:6	2552:8	2476:3	2434:14
2603:21	explained	2594:15	2479:3	2434:14
	2481:1	2603:6	2516:24	2450:3
expenditure		2605:16	2521:11,13	2451:5
2545:9	2514:3,6,1 2		2534:23	2452:20
	∠	extra	2525.15	∠430:13
expenditures	explanation	2413:24	2535:15	

TOD MAN	IIODA IIIDNO GNA	01 00 2015	rage 2005 O.	2707
2534 <b>:</b> 8	2580 <b>:</b> 22	2428:10	2535 <b>:</b> 11	2629:2,6
2543:21	fancy	2470:23	2589:14	finding
2558:16	2582:24	2472:2	2590:5,8,1	2507 <b>:</b> 7
2559:1,	4	2475:2,7,8	4 2616:15	2507:7 2593:15
2561:3,	5 <b>farm</b>	,11,12,17,	2624:15	2622:8
2563:7,	2623:13,19	24	<b>files</b> 2457:6	2635:5
2568:6	favourably	2617:10,17	111es 2437:0	
2571:22	2484:21	fifty-four	filing	finds
2572:19		2535 <b>:</b> 12	2397:21	2444:12
2578:16	February	2614:23	2429:24	<b>fine</b> 2510:25
2598:8,3	2515:9		2430:2,3	2513:14
19	2516:1,7,1	fifty-nine	2527 <b>:</b> 25	
2599:13	1,18	2528:10,21	2544:13	fingers
2621:12	2517:3,7,1	<b>,</b> 25	2589:24	2523:14
2623:24	2	2534:13	<b>fill</b> 2391:15	2524:1
2630:20	federal	fifty-six	2595 <b>:</b> 22	fingertips
2632:19	,22 2397:8	2607:1,3		2406:22
2633:6	2413:23	·	filled	finish
2635:20	2546:16	fifty-three	2466:21	
fairly	2548:6	2441:22	final	2454:6
2403:6	2600:25	2529:3	2502:11,17	2634:6
2461:13	2601:18	2534:12	2522:6	finished
2476:4	2602:7	figure	2525:2	2512:19
2482:10	<b>feel</b> 2555:3	2482:11	2533:15	fire 2452:14
2556:3	2561:15	2528:23	2563:19	
2572:24	2561:15	2604:7,19	2593:14	fires
2575:1	feeling	2605:4	2615:6	2476:24
2621:18	2399:25	2608:21	finality	2477:2,3
2622:9	feels	2611:11	2523 <b>:</b> 2	firm 2413:22
	2400:17	2617:9		2461:7,21
fairness		2625:4	finalized	2465:13
2562:2	<b>feet</b> 2579:10	figures	2522:23	2467:5,23
2575:18	Fernandes	2528:25	2532 <b>:</b> 23	2469:9,10,
2576:10	2386:5		2536 <b>:</b> 1	17 2484:21
2577:10	fewer	<b>file</b> 2389:9	2609:4	2495:3
2579:16		2398:2	finally	2496:10
2580:13	2480:22 2632:23	2490:15	2399:25	2498:22
<b>fall</b> 2392	:12 2632:23	2509:4,9	finance	2499:24
2418:15		2547:4,10	2391:17	2500:5,10,
2567:5	<b>fift</b> 2461:16	2587:19	2391:17	17,21
2571:9	fifteen	2593:17	financial	2501:4,8,1
falls	2431:11	2597:25	2434:12	0,15,18,25
2440:21		2598:7	2456:23	2503:14
	2445:11	filed	2473:19	2634:13
familiar	2448:22	2401:5,16	2499:15,20	firms
2517:2	2449:4,15	2416:6	, 23	2634:4,7
2587:17	2451:23	2429:22,24	2500:1,5	
2631:9	2452:2	2448:12	2514:15	first
2633:20	2476:16	2457:7	2561:19,20	2391:19
2635:19	2517:16	2489:3	financially	2394:9
familiari	tv	2505:14	2431:16,18	2395:12
2435:3	fifty	2523:19	·	2397:10,12
families	2396:3,8	2534:18	financing	,14,16,24
Tamitites	2416:25			

FUB	MANTIODA	IIIDNO GNA	01 00 2013	rage 2000 01	2707
241	5:5,22	2496:4	fluctuates	formal	2459:10
	4:20	2529:3	2470:21	2518:4,6	2481:7,11
	6:9	2534:13		2541:12	
	5:23	2546:25	<b>fly</b> 2510:10		fridge
249	2:16	2557:2,4	focus	formally	2632:3
252	1:19	2579:5,7	2401:12	2523:7	friend
252	5:22	2582:1	focussing	2533:15	2595:23
252	7:1,2,6	2584:20	2618:14	2588:5	2596:22
,14	2530:7	2586:7	2623:12,18	formula	2597:16
253	9:11	2622:12	2624:19	2397:13	2599:1,3
255	4:4	2623:21	2632:22	<b>forth</b> 2593:5	2603:25
255	8:5,11,	2624:21		10101 2555.5	2610:18
14		2627:2	<b>foot</b> 2476:2	forty	2614:17
256	0:1,3	£: +	2579:5	2470:25	2615:6
	1:7	five-two	footprint	2475:10	2616:1
256	6:21	2620:18	2471:20	2611:10	2620:6
	7:7	2630:9	2471.20	forty-eight	2626:14
256		five-two-o-	2470.2,4,1	2454:11	front 2478:8
	0:12	<b>two</b> 2621:4			2482:4
	1:3,4,8	e: a	forecast	forty-seven	
,11		fixed	2480:24	2529:14	fuel
	4:10	2403:13,21	2504:17	2612:1	2550:11,19
	8:23	2404:2,23	2509:22	forty-six	,21,24
	3:14	2408:7	2521:10	2629:23	2554:25
	0:24	2470:15,21	2536:14,18		fuels
	2:22	,22	2538:13	forward	2574:11,12
		2471:21	2539:15	2446:10	25/4:11,12
fisca		2566:8,11	2543:7	2447:6	
	0:8	2567:4,5	2617:21	2580:3	fulfill
	7:13,17	2568:20	forecasting	2585 <b>:</b> 1 <b>,</b> 24	2446:18
	8:20	2603:17	2489:20	2586:3	2506:15
	9:23	2634:9		2588:19	<b>full</b> 2404:16
	9:4,24	<b>flat</b> 2403:13	forecasts	2598:22	2418:11
	1:8,9,2	2565:10	2521:4	2603:15	
1		2566:25	foregone	forwarded	full-cost
	6:11,12	2569:3,14,	2482:15	2512 <b>:</b> 6	2528:10,13
	9:10	23 2574:17	2574:7,8		,19,22
254	1:20	2578:1		foundation	2534:12
fit 2	597:5	2591:20	forest	2558:8	fully
6.		flat-rate	2476:24	fourth	2486:21,23
five	- 10 11		2477:2,3	2524:15	2493:15
	5:13,14	2568:24	forgave	C	2530:20
241		flexibility	2605:10	framework	2546:25
	4:15	2443:6		2525:4	
	0:13	2498:6	forgetting	2575:13,14	function
	6:25	flip 2560:22	2610:2	frees	2511:12
	8:20		forgiven	2446:22	2512:3
	9:19	flipping	2605:18	frequency	functions
	2:3	2617:6	form 2492:9	2454:25	2412:6
	C 1 7		TOTM 2492:9	Z434:Z3	
247	6:17	<b>flow</b> 2603.9	0511.7	l	£., 1 0 5 40 0
247 248	8:1,3,1	<b>flow</b> 2603:9	2511:7	frequent	<b>fund</b> 2548:9
247 248 2 2	8:1,3,1 490:17	2615:19	2514:25	frequent 2448:3	<b>fund</b> 2548:9 2603:21
247 248 2 2 249	8:1,3,1			_	

		I IIIDNO GNA	01 00 2013	rage 2007 OI	
2560	:4	2575:6,20,	general	2445:14	generators
funded		21,24	2385:7	2550:17	2445:21
		2576:19,20	2392:22	generated	2450:20
2397 2603		2577:8,16	2393:11,15	2520:7	2456:25
2003	);1/	2578:5,15,	2394:7,18	2547:22	2471:19,22
fundin	ıg	16,20,21	2395:8,13,	2347:22	, 25
2397	:13	2579:21	14,25	generating	2473:22
2547	:21	2581:1,7,8	2396:8,17,	2399:5	2486:11,15
2548	3:7	2582:21	21 2397:17	2446:17,23	2550:1,13
2603	3:16	2583:7,20,	2408:15,21	2450:18,24	genset
funds		24 2584:19	,23	2451:21	2609:5
2545	5.10	2585:6	2409:9,16,	2574:11	2609:3
		2586:14,15	17,18,20	generation	<b>Geo</b> 2507:22
furnac	_	2587:8,12	2410:6,17,	2389:22	geothermal
2550	:12,19	2588:1,10,	18,20	2393:2	2551:11
furnac	es	15,21	2411:9,18,	2399:13,19	
2550	:24,25	2589:9,18	22 2412:17	2406:24	germane
	·	2590:15,18	2424:19,25	2412:8	2627:25
future		2591:8,18	2425:7,17	2471:10,15	2628:8
2473		2592:2,10,	2426:3,13	,18	<b>gets</b> 2475:23
2521		17 2593:11	2427:16,23	2472:21	_
2545		2594:9,13,	2430:4	2474:3,25	getting
2553	3:9	17	2433:12,13	2485:20,21	2390:18
		2595:13,23	2438:15,19	2486:3	2419:25
G	;	2597:16	2495:6	2487:11,24	2422:6
<b>GAC</b> 23	386:9	2620:6	2503:5	,25 2488:8	2488:4
G3 G 4	0000 4	2626:15	2525:17 <b>,</b> 20	2496:19	2522:12
	2388:4	<b>gap</b> 2466:20	2526:15 <b>,</b> 22	2549:6	2576:21
2564	: 8	2626:17	2527:6	2550:8	2578:12
Gange	2386:9	2628:25	2535:22	2551:23	2599:13
2387	:14		2540:5	2552:2	2600:1
2556	:23	<b>gas</b> 2392:5	2546:3	2554:24	2607:15
2557	1:1,10,	2437:25	2547:1,9	2555:12	gigawatt
12,1	.3	2474:22,24	2580:21	2556:7	2636:19,21
2558	:21	2550 <b>:</b> 25	2587:6	2566:24	given
2559	:5,8,1	2556:6	2619:22	2585:9,19	2494:24
6		2574:3,10	2622:8	2586:10	2545:25
	:2,11,	2579:15	generality	2608:21	2546:1,14
14,2		2582:12	2563:13	2610:6,12	2559:11
	:8,9,1	2593:24		2627:10,14	2563:15
1,23		gathering	generally	,16,18	2568:23
	:7,16,	2534:7	2393:22	2628:9,21	2572:13
	2563:17	G211G0	2402:24	2629:1	2597:12
2564	:2,11,	gauge	2403:24	2630:7	2612:25
12		2414:6,16,	2412:7	2636:19	2613:15
	6:6,14	17,19	2418:5	generation-	
	:6,12,	gauged	2430:6	-	giving
	2569:12	2414:12	2435:25	related	2473:11
	:4,10	gen	2532:9	2405:18	2511:13
	:12,15	2471:9,24	2580:12	2409:6	2555:3
	:5,19		2591:23	generator	<b>GL</b> 2538:10
	3:1,14,	genera	2621:15	2444:6	<b>-1</b> - <b>-1</b> 0 407 0
21,2		2452:14	generate	2452:1	<b>glad</b> 2487:8
2574	:14,22				

OD MANIIODA	A HIDNO GNA	01 00 2013	rage 2000 01	2707
global	2426:21	2435:2,25	2536:24	2627:8
2574:12	2501:5,24	2459:22	2537:2	head 2566:1
going-	2503:6	2493:6	2567:15	
forward	2575:4	2523:6	happens	hear 2543:1
2598:20	2632:2,12	2524:16	2419:14	2561:10,1
	2634:18	2542:5	2472:24	,16
gone 2407:12	Green 2388:4	2553 <b>:</b> 23	2514:4	heard 2432:
goods	2564:4,6,8	2603:10		2442:4
2568:15	2573:2		happy	2445:6
	2579:23	Н	2595:16	2469:19
Gosselin	2580:4	Hacault	<b>hard</b> 2437:10	2626:24
2385:14	2595:5	2386:12	2524:1	hearing
govern			2598:3	2390:17
2635:9	greenhouse 2556:5	hae 2627:11	harder	2400:16
government	2574:3	<b>half</b> 2396:3	2633:2	2521:16
2395:15		2406:16,23		2524:17
2396:5,18	grid	2407:2	hard-pressed	2526:3
2397:1,7,8	2395:10,21	2436:7,8	2512:15	2533:20
,9,15	2396:20	2512:16	hardware	2540:6
2424:23	2424:7	2569:9	2583:2,6	2564:14
2425:2	2526:14	2585:2,21	<b>Harms</b> 2391:1	2565:9
2527:14	2535:7	2627:22		2592:5,6,
2535:4,9,1	2537:14	2628:10,20	haven't	,13
0,21	2540:19	halls	2479:20	2595:2,6
2547:20	2546:8,12,	2526:24	2493:15	2624:5,15
2556:4	20 2547:2,21	hamper	2494:23	hearings
2602:19	2548:2	2492:9	2511:5	2560:7
2606:12,23	2553:12		2518:7	2565:7
2609:9,12	2603:8	hand 2501:19	2523:6	2590:2
2611:24	2605:21	2625:5	2530:17	2609:8
2612:8,18,	2615:20	handed	2533:15	
25 2613:10		2554:4	2538 <b>:</b> 22 2570 <b>:</b> 2	heat 2415:2
2614:19	gridlines	2629:15	2630:24	2416:21,2
governments	2553:18	handled	2631:3	2417:2,5,
2548:1	group	2460:5		,9,14 2437:20
<b>GRA</b> 2540:25	2430:16		having	2441:2
2589:4	2431:5	handy	2430:24	2495:14,2
	2466:10	2406:15	2432:12	2545:23,2
gradually	2471:3	happen	2433:23	2546:4
2582:8	2476:9	2481:3	2444:6	2549:6,11
granted	2569 <b>:</b> 22	2495:1	2446:20 2448:2	2550:11,1
2424:17	groupings	2525 <b>:</b> 7	2455:3,23	2582:14
2527:11	2440:11	2632:13	2466:16,20	2583:10
2535:4		2636:2	2473:13	2588:4,8
2620:8	groups	happened	2473:13	2635:16
	2587:24	2434:21	2503:14	heated
gravel			2000.II	meateu
gravel 2496:8	growth		2518.5	2122.22
2496:8	2549:25	2435:11,12	2518:5 2532:1	2432:22
2496:8  great 2597:4	_	2435:11,12 2457:13	2532:1	2439:17
2496:8	2549:25 2556:15	2435:11,12 2457:13 2477:1	2532:1 2550:9	2439:17 <b>heater</b>
2496:8  great 2597:4	2549:25	2435:11,12 2457:13	2532:1	2439:17

2494:11,17	FOB MANITODA	A HIDNO GNA	01 00 2019	rage 2009 O.	
2416:12	2411:14	2597 <b>:</b> 23	history	2512 <b>:</b> 16	2411 <b>:</b> 12
2436:19 high- 2437:3,23, 25	2416:22	2632:10	_	2520:7,14,	1 1
2497:3,23, efficiency 2550:24,25 hit 2569:16 2575:10 hundred 2632:1	2436:19				
25 2494:11,17 2495:5,10, 20 2547:24 2426:10 2477:2,4,7 2599:13 2437:8 2431:8 2431:8 2431:8 2431:1 2599:18 2471:1 2599:18 2471:1 2599:18 2471:1 2599:18 2471:1 2599:2,10 256:2,1 2599:2,1 256:2,2 248:10 256:2,2 248:10 2579:3,1 258:2,2 2461:20 258:2,2 2461:20 2471:2 2599:18 2556:2,2 2602:2,1 2578:18,22 2578:18,22 2578:18 2438:19 256:18,22 258:19 248:15 258:2,2 261:10,12 2578:18 20 2578:18 20 258:19 248:18 2578:2,16 258:2,9 248:2,2 248:10 2578:18 241:18 2578:19 2443:20,22 2602:21,24 241:8 2450:2 241:8 2599:15 2448:8 2599:15 2448:8 2599:15 2448:8 2599:15 2448:8 2599:15 2448:10,21 2599:15 2448:10,21 2599:15 2448:10,21 2599:15 2448:10,21 2599:25 2448:20 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:10 2599:25 2448:20 2599:15 2448:20 2599:25 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2448:20 2599:15 2599:15 2599:15 2448:20 2599:25 2448:20 2599:15 2599:15 2448:20 2599:25 2448:20 250:15 2599:15 2448:20 2599:15 2599:15 2448:20 2599:25 2448:20 2389:36, 2599:15 2448:20 2389:36, 2599:25 2448:20 2389:36, 2389:36, 2399:25 2441:14 12399:39 2556:10 2399:16, 12 2399:19 2468:14, 21 2441:19 2566:2,3 2399:16, 12 2400:21 2400:21 2400:21 241:11 2599:19 2468:14, 21 2441:19 2576:18 2576:18 2576:28 2576:29 2576:29 2576:20 2577:20 2576:20 2576:20 2576:20 2576:20 2576:20 2576:20 2576:20 2576:20 2576		_			2398:/
2494:11,17   higher   home   2576:14,15   2416:25   2421:14,15   2421:14,15   2421:14,15   2431:18   2431:12   2581:25   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2581:26   2481:11   2481:11   2581:26   2481:11   248		_			<b>huge</b> 2632:14
20 2547:24	2494:11,17			2575:10	hundred
20 2547:24	2495:5,10,	_		2576:14,15	2416:25
2549:1,3	20 2547:24	2426:10	2417:2,4,7	2577 <b>:</b> 5	
2551:4, 6,1	2549:1,3	2427:24,25	,9,14	2578:7 <b>,</b> 8	
8,21	2551:4,6,1	2434:18	2419:12	2584:25	
2579:18	8,21	2437:8	2432:21	2585:22	
2593:24	2579:18	2471:1	2579:5,9,1	2586:25	
2632:4	2593:24	2550:20	0,15	2614:20	
heckling         2566:2         homes         2624:22,25         2489:9           2598:5         ,23         2418:5,6         2625:1         2529:13,19           held 2385:19         2577:20         2554:10,12         2636:19,21         2554:12           2456:21         2574:1,19,         ,14         hours         2576:23           He'll         20         2575:2,16         homework         2394:11,13         2576:23           2594:18         2576:14         2556:19         ,14         2606:25           2443:20,22         2602:21,24         2411:8         2396:18,22         2601:21           2445:22         2617:18         homegeneous         ,25         2615:13           2450:9         2620:23         honest         2415:23         2615:13           2471:4         2632:6         hope 2523:14         242:10,21           2591:12         higher         2599:18         2428:11         hundreds           2599:15         2445:8         2580:17         2433:15         hundreds           2599:15         2445:8         2580:17         2441:1,8         hundreds           2599:15         246:13         249:19         2449:6,7         hurt 2636:1	2632:4	2556:16	2580:24	2620:10 <b>,</b> 18	
2598:5	heakling	2566:2	homes	2624:22,25	
held 2385:19         ,23         2439:17         2630:33,8         2538:14           2456:21         2574:1,19,         ,14         hours         2576:23         2577:6         2394:11,13         2577:6         2394:11,13         2577:6         2394:11,13         2577:6         2394:11,13         2577:6         2395:12,15         2606:25         2606:25         2606:25         2606:25         2606:25         2606:25         2606:25         2611:10,13         2607:3         2606:25         2611:10,13         2607:3         2606:25         2611:10,13         2607:3         2606:25         2611:10,13         2607:3         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2607:3         2611:10,13         2611:10,13         2611:10,13         2611:10,13         2611:10,13         2611:10,14         2607:3         2611:10,14         2611:10,14         2611:10,14         2611:11         2611:11         2611:10,14         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11         2611:11	_	2567:18,22		2625:1	
held 2385:19         2572:20         2554:10,12         2636:19,21         2554:12           2456:21         2574:1,19,         ,14         hours         2576:23           Re'11         2575:2,16         homework         2394:11,13         2577:6           2594:18         2576:14         2556:19         .14         2606:25           help         2585:9         homogeneous         .25         2601:10,1           2445:22         2602:21,24         2411:8         2395:12,15         2611:10,1           2450:9         2620:23         homest         2415:23         2611:10,1           2471:4         2631:25         2552:1         2418:23,24         2617:10,21           2510:21         higher-         2597:18         2425:1         2425:1         2520:15           2510:23         higher-         2593:20         2596:10         2441:1,8         2438:13         hundred-suite           2599:15         2445:8         2599:25         2448:22         2441:1,8         2438:13         hurt 2636:1           2595:1         highest         2595:24         hospital         2449:1,7         hydro 2385:           2561:22         2516:10,16         1         2476:23         2475:14		,23		2630:3,8	·
Re'll         20         homework         2394:11,13         2576:23           2594:18         2575:2,16         2575:21         256:19         7.4         homework         2394:11,13         2577:6           help         2585:9         homegeneous         ,25         260:25         260:25           2445:22         2617:18         2396:18,22         2611:10,1           2452:4         2631:25         255:11         2415:23         2615:13           2471:4         2632:6         hope 2523:14         2424:10,21         hundreds           2550:21         higher-         2597:18         2428:11         hundreds           2599:15         2445:8         2580:17         2435:18         2438:13           helpful         highest         2599:25         2448:22         hurt 2636:1           2595:1         2416:13         2432:21         hydr 252:5           261:22         2516:10,16         hot 2476:23         2475:14         2386:4           2624:12         ,21         hot 2476:23         2475:14         2386:4           269:19         2441:14         1 2397:3         2520:11,15         13,21           264:22         2516:10,16         hot 2476:23         2475:14<	<b>held</b> 2385:19	2572:20		2636:19,21	
He'll         20         2575:2,16         2575:2,16         2576:14         2576:14         2576:14         2576:14         2556:19         ,14         2606:25           help         2585:9         homogeneous         2395:12,15         2607:3         2607:3           2443:20,22         2602:21,24         2411:8         2396:18,22         2611:10,1         2611:10,1           2445:22         2602:23         honest         2415:23         2617:10,1         2617:10,1           2450:9         2620:23         honest         2415:23         2617:10,1         2617:10,1           2471:4         2632:6         hope 2523:14         2428:11         hundred           2510:21         higher-         2597:18         2428:11         hundreds           2599:15         2445:8         2580:17         2435:18         suite           2599:15         2445:8         2599:25         2448:24         hurt 2636:1           2595:1         Aighest         2599:25         2448:24         hurt 2636:1           2595:1         highest         2599:25         2448:24         hurt 2636:1           2561:22         2516:10,16         hospital         2474:25         hyd 2522:5           helps 2482:4	2456:21	2574:1,19,		houre	
2594:18	He'11				
help         2576:14         2556:19         2395:12,15         2607:3           2443:20,22         2602:21,24         2411:8         2395:12,15         2611:10,13           2450:9         2620:23         honest         2415:23         2615:13           2452:4         2631:25         2552:1         2448:23,24         2617:10,1           2471:4         2632:6         hope 2523:14         2425:1         2520:15           2550:21         higher-         2597:18         2428:11         hundreds           2599:15         2445:8         2580:17         2435:18         2438:13           2599:15         2445:8         2599:25         2448:22         hurt 2636:1           2563:18         2409:15         hospital         2449:6,7         hyd 2522:5           2561:22         2516:10,16         2474:25         hydro 2385:           2561:22         2516:10,16         2476:23         2475:14         2386:4           2561:22         2516:10,16         2396:1,4,1         258:23         hydro 2385:6           2624:12         ,21         hou         2488:20         2387:6           2561:23         2441:14         2397:3         255:11         256:12         239:16,0		2575:2,16		·	
Name		2576:14	2556:19		
2443:20, 22 2445:22 2450:9 2452:4 2471:4 2631:25 2552:1 2442:10,21 2510:21 2523:11 2561:23 2599:15 2445:8 2599:25 2409:15 2409:15 2416:13 2599:25 2441:18 2396:18,22 2617:10,10 2425:1 2424:10,21 2523:11 2561:23 2599:15 2445:8 2599:25 2441:1,8 2438:13 2599:25 2448:22 2441:1,8 2438:13 2599:25 2448:22 2441:1,8 2438:13 2442:10,21 2520:15 2442:10,21 2520:15 2444:10,21 2520:15 2448:21 2516:23 2599:15 2445:8 2599:25 2441:1,8 2438:13 2442:2 2441:1,8 2438:13 2442:2 2449:6,7 2447:25 256:122 256:122 256:124 2516:10,16 2624:12 21 2396:1,4,1 2397:3 2520:11,15 2398:3 2389:3,6, 2406:17 2546:2 2599:19 2468:14,21 2442:3 2566:2,3 2396:15,21 2449:10,19 2488:20 2396:18,22 2499:19 2488:40 2499:19 2488:10 2441:1,8 2438:13 2442:10 2488:20 2387:6 2396:1,4,1 2397:3 2520:11,15 2520:15 2441:14 2406:17 2546:2 2556:10 2393:16,21 246:10,11 2567:8 2399:22 2441:10,11 2567:8 2399:22 2449:10,19 2468:14 2408:17 2575:9 2398:9,13 2445:10 2408:24 2408:19 2488:15  Bistorically 2487:23  Bonest 2418:23 2418:23 2441:123 2396:18,22 2411:1,0,11 2411:11 2400:2,24,240:21 2488:9 2488:20 2387:6 2396:18,22 2411:14 2411:11 2411:11 2400:2,24,240:21 2488:9 2488:15  Bistorically 2488:23 Bonest 2411:10,11 2397:3 246:2 256:2 256:2 256:2 256:2 257:1,2,6 239:16,21 256:2 257:1,2,6 239:16,21 256:2 257:1,2,6 239:16,21 256:2 256:2 257:1,2,6 239:16,21 256:2 256	-	2585:9	homogeneous		
2445:22	·	2602:21,24	_		
2452:4 2631:25 2552:1 2418:23,24 2617:10,10,10,10,10,10,10,10,10,10,10,10,10,1		2617:18		·	
2471:4 2631:25 253:14 2424:10,21 2427:12 2521:14 2510:21 higher- priced hope 2523:14 2428:11 2561:23 2445:8 2599:15 2445:8 2599:25 2448:22 hurt 2636:3		2620:23			
2510:21 2523:11 2523:11 2561:23 2599:15 2445:8 2599:20 2596:10 2441:1,8 2438:13  highest 2599:25 2409:15 2416:13 2512:2 2521:2 2521:2 2521:2 2521:2 2521:8 249:21 2522:2 252:2 25			2552:1		
higher-		2632:6	hope 2523:14		
Priced   Comparison   Compari		higher-	2597:18		2520:15
2599:15		_	honefully		hundred-
helpful         2593:20         2596:10         2441:1,8         2438:13           helpful         highest         2599:25         2448:22         hurt 2636:13           2595:1         2409:15         2416:13         2432:21         2454:11         hyd 2522:5           helps 2482:4         2515:24         2516:10,16         2476:23         2475:14         2386:4           2561:22         2516:10,16         not         2475:14         2386:4           2624:12         ,21         hour         2488:20         2387:6           2624:12         ,21         hour         2518:23         2389:3,6           2399:25         high-level         2396:1,4,1         2518:23         2389:3,6           2399:25         2441:14         2397:3         2520:11,15         ,13,21           2499:19         2468:14,21         2417:17         2546:2         25           2499:19         2468:14,21         2441:9,24         2566:2         2395:17           2584:21         historical         2445:10,11         2566:2,3         2396:15           2575:9         2398:9,13         2566:2,3         2397:22           high 2421:20         2541:3         2472:1         2411:11         2402:2		-			suite
helpful         highest         2599:25         2448:22         hurt 2636:1           2595:1         2409:15         2432:21         2449:6,7         hyd 2522:5           helps 2482:4         2515:24         2432:21         2474:25         hydro 2385:           2561:22         2516:10,16         hot 2476:23         2475:14         2386:4           2624:12         ,21         hour         2488:20         2387:6           2399:25         high-level         2396:1,4,1         2518:23         2389:3,6           2399:25         high-level         2397:3         2520:11,15         ,13,21           2499:19         2468:14,21         2406:17         2546:2         2391:6,21           2499:19         2468:14,21         2441:9,24         2565:25         2395:17           2584:21         historical         2442:3         2566:2,3         2396:15           2584:21         historical         2445:10,11         2567:8         2397:22           high 2421:20         2541:3         2449:10,19         2575:9         2398:9,13           2428:3,6         2566:5         2475:15         2411:11         2402:2,4,           2436:9         2486:9         2475:25         2633:10         2	2599:15				2438:13
2563:18 2595:1  helps 2482:4 2561:22 2516:10,16 he's 2390:21 hesitate 2499:19 hesitation 2584:21 hesitation 2584:21 hesitation 2584:21 hesitation 2584:21 historical Hey 2567:12 high 2421:20 2478:6 2478:6 2488:30 2441:14 2566:5 2478:6 2498:15 high 2421:20 2488:36 2488:30 2488:20 2387:6 2498:18 2406:17 2546:2 255 2391:6,21 2417:17 2566:2,3 2393:16,11 2566:2,3 2396:15 2396:15 2441:11 2397:3 2566:2,3 2396:15 2396:15 2441:14 2567:12 2478:6 2499:19 high 2421:20 2488:3,6 2488:3,6 2488:3,6 2488:3,6 2488:3,6 2488:3,6 2488:3,6 2488:3,6 2488:15 Historically 2487:23 Households	helpful				<b>h</b> 0626.10
2595:1	2563:18	=			nurt 2636:12
helps 2482:4         2416:13 2515:24         2432:21         2474:25         hydro 2385:24           2561:22 2624:12         2516:10,16 2516:10,16         2476:23         2475:14 2386:4         2386:4           2624:12         ,21         hour         2488:20 2387:6         2387:6           he's 2390:21 2399:25         high-level 2441:14 2397:3 2520:11,15 2520:11,15 2527:1,2,6         2391:6,21 2527:1,2,6         2391:6,21 2527:1,2,6           hesitate 2499:19         2468:14,21 2441:9,24 2556:20 2393:16,1         2556:10 2556:25 2556:25 2393:16,1         2393:16,1           2584:21         historical 2445:10,11 2567:8 2397:22         2449:10,19 2566:2,3 2396:15         2396:15 2566:2,3 2396:15           Hey 2567:12         2478:6 2539:22 2541:3 2449:10,19 2575:9 2398:9,13         2399:22 2449:10,19 2575:9 2398:9,13           high 2421:20 2428:3,6 2434:17 2598:18 2475:25 2633:10 2448:17 2598:18 2475:25 2633:10 2402:2,4,2         2402:2,4,2           2486:9 2488:15         Historically 2487:23         Households 2405:14,2	2595:1		_	·	<b>hyd</b> 2522:5
2561:22 2624:12 he's 2390:21 2399:25 hesitate 2499:19 hesitation 2584:21 hey 2567:12 high 2421:20 2428:3,6 2428:3,6 2428:3,6 2438:15 hour  2396:1,4,1 1 2397:3 2406:17 2406:17 2441:9,24 2565:25 2393:16,1 2442:3 2441:9,24 2566:2,3 2396:15 2441:9,24 2566:2,3 2396:15 2441:9,24 2566:2,3 2396:15 2393:16,1 2526:2,3 2396:15 2393:16,1 2566:2,3 2396:15 2396:15 2393:16,1 2566:2,3 2396:15 2396:15 2396:15 2478:6 2449:10,19 2451:9 household 2402:2,4, 2402:	helps 2482:4				<b>hydro</b> 2385:6
2624:12       ,21       hour       2488:20       2387:6         he's 2390:21       high-level       2396:1,4,1       2520:11,15       2389:3,6,         2399:25       2441:14       2397:3       2520:11,15       2391:6,21         hesitate       hinges       2406:17       2546:2       2391:6,21         2499:19       2468:14,21       2441:9,24       2556:10       2393:16,1         hesitation       2469:1       2442:3       2565:25       2395:17         2584:21       historical       2445:10,11       2566:2,3       2396:15         Hey 2567:12       2478:6       2449:10,19       2567:8       2397:22         high 2421:20       2541:3       2451:9       household       23 2399:2         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2434:17       2598:18       2475:25       2633:10       2404:21         2486:9       Historically       2487:23       Households	2561:22		hot 2476:23	2475:14	2386:4
he's 2390:21       high-level       2396:1,4,1       2518:23       2389:3,6,         hesitate       2441:14       2406:17       2527:1,2,6       2391:6,21         hesitate       hinges       2417:17       2546:2       25         2499:19       2468:14,21       2441:9,24       2556:10       2393:16,1         hesitation       2584:21       historical       2442:3       2566:2,3       2395:17         2584:21       historical       12       2478:6       2567:8       2397:22         high 2421:20       2539:22       2449:10,19       household       23 2399:2         2428:3,6       2566:5       2472:1       2411:11       2402:2,4         2434:17       2598:18       2475:25       2633:10       2404:21         2486:9       Historically       2487:23       Households	2624:12		hour	2488:20	2387:6
1	hale 2390.21		2396:1,4,1		2389:3,6,9
hesitate       hinges       2441:14       2406:17       2527:1,2,6       2391:6,21         hesitation       2468:14,21       2441:9,24       2556:10       2393:16,1         hesitation       2469:1       2442:3       2565:25       2395:17         2584:21       historical       2445:10,11       2566:2,3       2396:15         Hey 2567:12       2478:6       12       2567:8       2397:22         high 2421:20       2539:22       2449:10,19       2575:9       2398:9,13         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2434:17       2598:18       2475:25       2633:10       5,22         2486:9       Historically       2487:23       Households         Households       2405:14,2	1	-		· ·	
hesitate       hinges       2417:17       2546:2       25         2499:19       2468:14,21       2441:9,24       2556:10       2393:16,1         hesitation       2469:1       2442:3       2565:25       2395:17         2584:21       historical       2445:10,11       2566:2,3       2396:15         Hey 2567:12       2478:6       ,12       2575:9       2398:9,13         high 2421:20       2539:22       2449:10,19       23 2399:2         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2434:17       2598:18       2475:25       2633:10       5,22         2486:9       Historically       2487:23       Households       2405:14,2         Households       2405:14,2		∠441:14			2391:6,21,
hesitation       2469:1       2441:9,24       2565:25       2395:17         2584:21       historical       2445:10,11       2566:2,3       2396:15         Hey 2567:12       2478:6       ,12       2567:8       2397:22         high 2421:20       2539:22       2449:10,19       2575:9       2398:9,13         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2434:17       2598:18       2475:25       2633:10       5,22         2486:9       Historically       2487:23       Households       2405:14,2         Households       2405:14,2		hinges			
hesitation       2469:1       2442:3       2565:25       2395:17         2584:21       historical       2445:10,11       2566:2,3       2396:15         Hey 2567:12       2478:6       249:10,19       2575:9       2398:9,13         high 2421:20       2541:3       2451:9       household       23 2399:2         2434:17       2566:5       2472:1       2411:11       2402:2,4,         2486:9       2488:15       2477:21       2634:14       2405:14,2         2487:23       Households       2405:14,2	2499:19	2468:14,21	2441:9,24		2393:16 <b>,</b> 19
Hey 2567:12       historical       2445:10,11       2567:8       2397:22         high 2421:20       2539:22       2449:10,19       2575:9       2398:9,13         2428:3,6       2566:5       2472:1       2411:11       2402:2,4         2486:9       2488:15       2477:21       2634:14       2405:14,2         2487:23       Households       2405:14,2	hesitation	2469:1	2442:3		
Hey 2567:12       2478:6       ,12       2575:9       2397:22         high 2421:20       2541:3       2451:9       household       23 2399:2         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2486:9       2486:9       2477:21       2634:14       2405:14,2         2488:15       Historically       2487:23       Households       2405:14,2	2584:21	historical	2445:10,11	·	
high 2421:20     2539:22     2449:10,19     2575:9     2398:9,13       2428:3,6     2566:5     2472:1     2411:11     2402:2,4,       2486:9     2488:15     2477:21     2634:14     2405:14,2       Historically     2487:23     Households	How 2567.12		<b>,</b> 12		
high 2421:20       2541:3       2451:9       household       23 2399:2         2428:3,6       2566:5       2472:1       2411:11       2402:2,4,         2434:17       2598:18       2475:25       2633:10       5,22         2486:9       2488:15       2487:23       2634:14       2405:14,2	ney 200/:12			25/5:9	
2428:3,6 2434:17 2486:9 2488:15 2566:5 2598:18 2475:25 2477:21 2434:14 2402:2,4, 5,22 2404:21 2405:14,2	_		2451:9	household	
2434:17 2486:9 2488:15 Historically 2475:25 2477:21 2404:21 2405:14,2	2428:3,6		2472:1	2411:11	
2486:9 2488:15 <b>Historically</b> 2487:23 <b>Households</b> 2404:21 2487:23 <b>Households</b>	2434:17		2475:25	2633:10	
Land Land Land Land Land Land Land Land			2477:21	2634:14	
$\begin{bmatrix} 2578.78 \end{bmatrix} \begin{bmatrix} 2405:24 \end{bmatrix} \begin{bmatrix} 2407:12,2 \end{bmatrix} \begin{bmatrix} 2407:12,2 \end{bmatrix}$		<del>-</del>	2487:23	Households	· ·
	2578:7,8	2405 <b>:</b> 24	2488:2		2407:12,20

		A HIDNO GNA	01 00 2015	rage 2070 OI	
24	109:22	3	2549:18	2434:4	
	10:13	2486:3,18,	2551:17	2435:8	I
	11:24	19	2553:10	2441:25	<u>I'd</u> 2555:2,4
	12:5	2487:7,24	2558:25	2450:16	2556:20
	13:18	2488:3,10,	2575:12	2459:23	2557:14
24	14:6,16	12,19	2579:14	2460:25	2558:4,20
	19:19	2489:8,21	2580:7	2468:15	2559:6
24	21:8,11,	2494:6,16,	2582:25	2469:1	2618:2,23
12	2,22	18	2583:25	2472:1	2628:23
24	22:5,18,	2496:20,23	2584:2,3	2479:5	
22	2	2497:1	2586:19,23	2485:19	<b>idea</b> 2603:15
24	24:1,6	2499:3,16	2587:2,7,9	2486:4,11	ideal
	28:14	2504:14	2588:6,11	2490:19	2570:11
24	29:16	2505:10	2589:2,3	2492:13	identical
24	30:22	2506:1,14,	2590 <b>:</b> 23	2494:21	
24	33:7,19	16,21,25	2591:3	2500:6,12,	2395:21
24	34:25	2508:21	2592:3,18	16 2501:16	2396:20
24	38:7 <b>,</b> 25	2509:9	2593:16	2504:19	2416:11
24	39:14,22	2511:5	2594:1	2508:11	identified
24	43:3,6,9	2513:3	2599:14	2522:11	2419:16
,1	4,17,19,	2518:10	2600:23	2524:19	2468:16
22		2519:6,7,1	2605:6	2525 <b>:</b> 25	identify
24	44:5,11,	1,20	2606:11	2526:2,14	2404:11
15	5,23	2520:20	2607:19	2530:17	
24	45:22	2521:3	2610:10,20	2532:16	<b>III</b> 2414:21
	46:8,13	2522:5,15,	2611:13	2533:22	2596:23
24	48:11,21	21,24,25	2613:11	2535:20	I'11 2400:21
24	49:20,25	2523:12,24	2614:9,18	2539:19	2439:12
	50:12,24	2524:15,21	2615:20	2544:6	2453:17
24	51:17	2525:3	2618:16	2548:12,23	2521:24
24	52:11,21	2527:13	2620:17,20	2553:9	2532:6
	53:21	2528:23	2621:21	2591:11	2555:7
24	54:2	2530:1,5,1	2622:24	2595:6	2581:3
	55:18,19	3,15	2623:1	2603:10	2585:11
, 2		2532:1,6,2	2624:5,14,	2605:19	2596:11
24	56:24	0 2533:19	21 2625:13	2612:16	2597:23
	57:6,8,1	2534:11,22	2628:19	2613:16	2623:25
	2458:8	2535:3,25	2629:17	2617:8	2631:5
	60:1	2536:11	hydroelectri	2620:8	ill-defined
	163:3	2537:5	<b>c</b> 2574:9	2623:8	2592:14
	64:22	2539:10,15		2625:23	
	65:23,24	, 22	Hydro's	2626:17	illustrating
	166:4,22	2540:17,25	2392:8,11	2627:10	2569 <b>:</b> 2
	67:5,19,	2541:10,24	2393:5	2629:15	I'm 2390:16
	2468:13	2542:2,6,1	2398:1	Hydro-US	2392:2,14,
	69:24	9,23,25	2400:6	2476:11	24 2399:18
	70:1,3,8	2543:10,16	2401:4		2400:3
, 2		2544:25	2403:6	hypothetical	2407:1,15
	72:8,25	2545:5	2404:18	2498:1,2	2411:3
	73:7,20	2546:6,8,1	2409:23	2502:5,8	2421:18,23
	75:8,16,	1,18,23,24	2410:21,24	hypothetical	2422:4
	3 2476:24	2547:13,19	2415:8	<b>ly</b> 2593:9	2424:13
	77:8,11	,20	2416:5		2429:14
2.4	85:5,8,1	2548:17	2424:17		

		A HIDNO GNA	01 00 2013	rage 2071 O	
2	438:6	2595:18,21	2396:12	e	included
2	439:10	,23	2401:3	2504:15,23	2407:25
2	440:1	2596:14	2415:5	2505 <b>:</b> 3,12	2414:25
2	441:19	2597:10	2428:23,24	2507:6	2419:10
2	452:14	2600:13,15	2500:1		2429:23
2	456:12	2604:25	2632:8	incapable	2527:25
2	458:7	2606:20,24		2634:5	2529:10
2	464:11	2612:13	impassioned	incentive	2542:12
2	467:2	2613:21	2598:20	2422:11	2544:20
2	474:17,18	2616:14	impinge	incentives	2545:20
1	478:7	2627:20	2621:17		2601:6,23
	482:2	2630:23	implement	2433:5,6	2614:2
	483:2	2631:10	_	inception	2622:10
	486:6	2632:25	2581:14	2503:5	2629:9
	501:8	2633:4	2582:5,7,1	inclination	2633:18
	508:4	2634:22	9,22		
	510:18	2636:1	2592:19,25	2621:11	includes
	512:14		implementati	inclined	2393:5
	516:24	imagine	<b>on</b> 2581:11	2565:10,15	2394:12
	518:3	2451:10	2593:5	,18,19	2399:12
	519:17	2633:15	:	2571:18 <b>,</b> 21	2407:2,5
1	522:4	imagining	implemented	2573:6	2520:15
1	525:15	2592:21	2395:7	2574:15 <b>,</b> 25	2528:13
	532:13		2545:3	2587:3	2529:1
	534:7	immediate	2591:21	2592:6	including
	535:18	2390:15	2592 <b>:</b> 7	2595:17	2393:6
	536:17	2450:4	implementing	inclining	2439:16
	537:23	2451:19	2554:7	2565:3 <b>,</b> 8	2485:21
	540:21	immediately	2583:5	2567:1	2529:5
	544:1	2439:10	implication	2568:1,3	2580:6,7
	549:1	2451:9	2499:23	2569:2,24	2589:4
	550:14,15	2477:6	2499:23	2572:3,6	
1	552:1,18,	2602:22	important	2572:3,6	income
2			2621:14,18		2445:14
1	555:13 <b>,</b> 16	impact	imposed	2581:11,13	2537:7
	25 2556:2	2414:19	2456:24	2582:18	2539:9,19
	557:20	2416:6,12		2583:9	2541:7,19
	558:6 <b>,</b> 12	2428:14	imprecise	2584:4	2577:22,23
1	560:21	2431:16,18	2601:9	2587:6	2578:6,8
	561:5,6	2499:15,20	improve	2588:8	2579:3
	563:19	2500:5	2500:6	2590:10	2633:10
	568:24	2503:22	2578:9	2594:15	incorrectly
1		2547:6		include	2528:20
	569:19	2570:17	improved	2392:18	
	571:23	2631:21	2564:19	2393:9	increase
	575 <b>:</b> 5 <b>,</b> 16	2632:12	INAC	2404:5	2394:3,4,8
1	576:11	impacted	2600:2,10,	2533:21	,9,16,17,1
	578:14,22	2494:6	16,25	2551:9	9
1	25	2515:3,4	2601:14	2586:9	2395:16,18
1	579:20	2541:7	2603:1	2607:5,6,9	,20
	584:21			2612:25	2396:23
1	585:18	impacting	inadequate	2613:19,23	2401:7
	591:2,3	2539:19	2428:10	2627:2,5	2402:3,6,1
	593:9	impacts	inappropriat	2628:20	6 2404:22
2	594:22		11 -130		

PUB - MANITOBA	A HIDRO GRA	01-08-2013	Page 26/2 01	
2412:24	2485:21	2478:4	influences	in-service
2416:7,11	2486:18,24	2485:11	2633:17	2531:21
2417:18	2487:23	indication	information	2533:6
2420:6	2570:20	2423:5	2389:4,16	2614:3
2423:16	2575:17	2469:16	2406:14	install
2424:17,20	2585:19		2422:18,23	2549:25
2425:16	increments	indicative	2481:20,25	
2426:1,2,5	2493:12	2535:12	2483:17	installed
,9,10,13,1		2614:21,22	2512:24	2434:20
4,17,22	incur	indifferent	2513:8	2550 <b>:</b> 9
2428:25	2403:24	2429:5,9	2528:3	instance
2432:7,11	incurred	2487:6	2544:14	2445:8
2436:1,12,	2404:24	2488:20	2548:21	2452:20
15	2405:19	2493:22	2550:4	2462:1
2440:10,16	2409:21	2519:1	2554:4	2575:23
2472:24	2411:25	individual	2555:19	2579:3
2486:14	2414:7	2401:9	2572:14,17	2580:20,21
2490:24	2530:14	2401:9	,18 2608:9	<b>,</b> 25
2501:1	2540:9		2620:7	2582:22
2526:13,25	2559:12	,21 2431:8 2438:18	2636:17	2590:20
2527:11,14	2598:12	2579:25		2592:6
2535:4,8,1	2614:1		infrastructu	instances
7,21	incurs	individually	re 2549:21	2401:6
2549:24	2403:22	2438:17	infrequent	
2550:8		individuals	2448:2	instantly
2582:8	independent	2580:22	2479:18	2452:7
2591:24	2453:12		infrequently	instead
2619:10,24	Indian	industrial	2503:17	2414:1
2621:5 2625:22	2397:22	2443:4		2452:1
2023:22	indic	2492:17,18	initial	
increased		2493:19	2565:24	insufficient
2395:21	2525:19	2496:7	2566:7,11	2486:12
2419:17	indicate	2502:23 2580:20	2567:22	insulated
2440:14	2411:19	2380:20	2569:25	2579:6
2535 <b>:</b> 7	2512:15	industry	initialled	insulation
increases	indicated	2632:23	2523:3	2554:8
2393:20	2396:5	inefficient	initially	
2394:23,24	2398:5	2549:5	2436:16	integrity
2395:1,19	2407:20		2586:22	2561:20
2402:2,8	2455:18	inelastic		intended
2415:9	2457:21	2619:24	initiative	2409:25
2433:8	2478:12	2620:2	2491:9,11	2415:19
2565:22	2484:10	2622:9	initiatives	2484:24
2618:13	2488:11	2633:21	2554:8	2515:21
2630:22	2499:5	inference		2566:8
increasing	2564:5	2617:20	inordinate	2568:25
2424:2	2598:25	inflict	2598:5	2589 <b>:</b> 13 <b>,</b> 19
2424:2	2599:3	2428:16	<pre>input 2634:8</pre>	2590:4
2440:23,24	2603:14		inputs	intensive
2568:18	2614:16	influence	2634:9	2551 <b>:</b> 15
2575:4	2615:5	2403:3		
20,0.1		2618:19	inquiries	intent
incremental	indicates	2621:10	2495:16	2402:24

FOD MAI	NT TODAY	IIIDNO GNA		rage 2073 01	
2484:2		2506:22	2564 <b>:</b> 22	2523 <b>:</b> 20	2469:3,4
2540:2,	1 4	2511:23	2565:2,3,1	2563:21	2470:21
16 2588			6,17	2580:12	2471:12
2605:13		internally	2566:4,16	2581:10	2473:15,16
		2604:23	2573:14	2590:10,13	2474:18,24
intention	n .	interpretati	2582:5	2592:11	2475:3
2588:11	L	on 2508:12	2583:16	2597:11	2476:16
intention	ns		2586:17,20		2479:17,18
2543:18	3,20	interpreted	2587:3	<b>item</b> 2389:21	,19,20
		2518:5	2593:18	2502:18,19	2480:1
interchar	-	interrupt	2594:3	2529:12	2481:4
<b>bly</b> 244	14:2	2460:21	2618:24	2609:5,14,	2486:2,20
interconr	nect	2490:23	2623:2	23,24	2487:7,10,
<b>ed</b> 2490	):20	2496:14		2610:6,11,	21 2488:14
			invest	19	2489:7
interconr	nect	interrupted	2573:9,20	items	2491:11,19
ion		2494:22,24	investment	2404:10	2492:17
2476:11	1,20	interrupting	2573:18	2530:22	2500:7
interest		2447:12		2531:1,18,	2503:12
2484:19	9	interruption	involved	21 2532:22	2504:19,23
2528:14	4	2458:15,16	2398:10	2537:22	2507:6,13,
2531:20	)	,19,21	IR 2584:1		15 2508:25
2532:18	3	2503:17		it'11	2509:22
2533:23	3	2303:17	<b>irrigation</b> 2428:8,9	2500:23	2510:13,15
2535:14	4	interruption	2428:8,9	<b>it's</b> 2403:23	,16,17,20
2601:15	5	<b>s</b> 2450:21	isn't	2406:15	2511:7,8,1
2602:8,	, 25	2460:18	2428:21	2413:25	3 2520:20
2603:5,	, 7	interval	2494:4	2414:12,22	2521:10
2607:5,	,7,1	2435:22	2524:19	,23	2525:20,24
4		2517:16	2555:14	2419:13	2529:23
2611:13	3,22		2570 <b>:</b> 25	2420:11	2531:17
<b>,</b> 23		Intervenor	2609:14	2427:23,24	2532:11
2612:12	2,16	2534:17	issue	2429:15	2539:3,4
,17		Intervenors	2393:11	2430:6	2541:4
2614:2,	, 7	2391:24	2472:20	2431:3	2546:19,22
2629:3		2399:1	2507:11,14	2432:23,24	2550:7
intereste	ed l	intimatal.	2515:17	2435:17	2559:25
2466:19		<pre>intimately 2631:8</pre>	2523:17	2436:19	2562:12,13
		2031:0	2526:5	2437:22	2565:22
interests	3	intrib	2547:23	2438:19	2567:13
2493:8		2635 <b>:</b> 7	2548:25	2442:2,4,1	2570:16
interim		intrigued	2579:24	0	2571:1,5
2493:14	4	2421:18	2580:6,15,	2443:12,13	2573:20
2502:11			16 2582:17	2446:5	2580:15
2522:6		introduce	2583:15	2447:6,9	2581:15,19
2535:20	J <b>,</b> 25	2390:13	2588:3	2451:7	,24 2586:6
2597:20		2410:13	2597:14	2452:6,17	2588:6,11,
intorio-	_	introduced	issued	2453:5	14 2594:23
interject		2565:1		2458:17	2597:4
2510:11	L .	2584:4	2507 <b>:</b> 25	2459:7,8,1	2598:3
intermit	tent	intuitive	issues	2	2607:25
2496:7			2491:11	2461:6,12,	2608:9
internal		2633:1	2511:14	14,15	2609:22,23
		inverted	2512:17	2465:7	

FOB MANITOD.	A HIDRO GRA	01-08-2013	Page 26/4 01	L 2707
2611:17	2526:1	2578:7,8	2445:1,5,1	2491:11
2613:17,18		2584:25	6,24	_
,23	jurisdiction	2585:22	2446:3	larger
2614:3,6,2	<b>s</b> 2389:8	2586:25	2452:15	2408:15
2 2619:13	2420:23	2614:20	2461:25	2416:10
	2437:8			2433:14,17
2622:9	2439:8,15,	2620:10,18	2465:5	2456:18
2627:20	25 2584:3	2624:22,25	2487:16	2472:11
2628:7,9,1		2625:1	2517:6,13	2575:14,22
3 2630:20	justified	2629:23	2519:14	,25 2576 <b>:</b> 1
2631:2	2563:24	2630:1,3,8	2575:21	2580:19
2632:11,12		kilowatts	2576:1	2592:12
I've 2390:17	K	2430:24	2578:18 <b>,</b> 21	
			2580:18	largest
2391:25	<b>key</b> 2559:25	2569:7	2586:8	2426:4,6,7
2497:23	2564:1	2576:25	2594:12,19	2476:9
2521:20	2618:15	2577:3	2595:4	_
2538:1	kick 2454:2	knowledge	2628:23	Larry
2544:7	2599:14	2550:22	2636:6	2385:16
2554:3		2552:20		<b>last</b> 2395:22
2593:10	kilograms	2575:7	Lafond's	2414:8,23
2616:18	2636:19,21	2373:7	2457:3	2415:2
	kilowatt	known	<b>laid</b> 2614:3	2438:24
	2394:11,13	2397:24	1a10 2014.3	2470:24
J		2543:20	<b>Lake</b> 2389:22	2478:2
January	,14	2600:2,25	2395:3	
2385:23	2395:12,15	2601:14	2608:20	2479:24
2392:1	,25	2603:1	2609:6	2481:21
2466:12	2396:1,4,1		2610:6,12	2488:25
2481:8	0,17,22	<b>Kurt</b> 2391:24	·	2489:19
2515:9	2397:3	<b>kV</b> 2393:12	landline	2492:2
2516:1,7,1	2406:17	2394:20,21	2550:9	2510 <b>:</b> 23
1,17	2415:23	,22 2423:4	landlines	2514 <b>:</b> 4
2517:3,7,1	2417:17	2426:4,14,	2550:4	2520 <b>:</b> 7
1	2418:23,24	17,21		2535:8
	2424:10,21	2433:13	large	2540:5 <b>,</b> 25
judge	2425:1	2503:6,14	2394:18	2547:11
2508:22	2430:20	· ·	2409:18	2554:20
judged	2441:1,8,9	kV.A	2410:6	2582:1
2576:13	,24 2442:3	2410:8,19	2417:4	2595:6
	2445:10,12	2518:23	2425:8,17	2614:14
judgment	2518:23		2426:4,13	
2577:12	2520:7,14,	т	2427:23	lastly
July 2429:24	17	L	2428:12	2426:25
2457:7	2527:1,2,6	<b>Lac</b> 2395:3	2433:13,22	2481:12
2599:7	2528:11	lack 2486:11	2436:9	later
2601:22,25	2546:2		2443:3,11	2392:16
2603:14	2547 <b>:</b> 8	Lafond	2462:9	2393:5
2616:16	2556:10	2385:15	2470:7	
	2556:10 2565:25	2416:18	2492:18	Lavigne
jump 2523:11		2417:10	2503:6	2637:17
2525:13	2566:2,3	2419:2,19	2515:14	<b>law</b> 2511:7
2615:4	2567:8	2432:3,5	2575:3	
June 2392:1	2569:4	2434:10	2598:8,18	lawyers
	2575:9,10	2435:16		2523:22
jurisdiction	2576:14,15	2438:13	largely	2525:13
	2577:5	2441:4		
-		-		

		IIIDNO GNA	01 00 2013	rage 2075 01	
lead	2391:14	2514:14	levels	2449:3	2632 <b>:</b> 21
250	08:12	2566:10	2414:13	2454:13	2633:4,13
		2568:17	2415:19	2463:7	2635:5,20
lead:	-	2569:14	2416:12	2489:14	
25	78:23	2570:1	2497:22	2514:6,14,	litigation
lead	s	2614:20,22	2498:19	24 2518:16	2532:12
262	19:24	2619:25	2499:7,18	limiting	little
leas	_	2635:17	2500:14	2563 <b>:</b> 13	2390:16
	67:16	<b>let's</b> 2415:5	2619:19	2503:13	2400:15
	93:17	2430:19	2624:7	limitless	2427:9
	17:21 <b>,</b> 22	2442:23	levied	2568:9,15	2458:23
	22:22	2442:23		limits	2488:11
	50:3	2462:21	2411:19	2449:4	2490:3
	67:16	2464:4,20	2412:17	2452:24	2510:10
	71:2	2464:4,20	liable	2546:1	2514:2
	89:24	2408:2	2455:19	2635:11	2539:4
	13:16	2513:16	light		2554:6
	27:19	2515:10	2481:16	line 2450:21	2556:16
		2536:18		2477:4	2560:22
	t-cost	2557:3	lighting	2529:12	2597:10
255	50:7	2596:2	2411:13	2536:19	2632:12
leave	<b>e</b> 2394:5	2616:25	2436:23	2537 <b>:</b> 7	2633:8
	15:3	2617:1	likelihood	2539:19	2635:23
	83:13	2622:15	2501:5	2541:14	living
	93:20	2623:14		2564 <b>:</b> 17	2419:8
	21:25		likely	2605:21,24	2579:5,9
	43:9	letter	2417:15	2611:9	•
		2506:24	2461:12	2615:19	load 2392:5
leav	_	2588:23	2495:23	2624:19	2427:10,15
26.	12:14	letters	2525:7	2625:4	,17,25
lega	су	2607:19	2546:3	lines	2428:19
258	84:9,14,	11 2204.6	2547:6	2486:21	2429:2,4,1
24		level 2394:6	2577:22 2607:16	2614:14	0
legi	timacy	2402:7		list	2430:14,15
	29:4	2404:7	2634:18	2387:3,4	,16,17,20,
		2413:8,23	likewise	2388:2	23
leng		2416:13	2537:10	2389:1	2431:2,19,
250	01:12	2417:3	limit	2558:13	20 2435:10 2436:19
leng	thy	2436:2,9 2460:24	2424:10	2588:16,18	
_	65:7	2461:5,8,2	2463:6		2437:21 2443:18
1	2396:22	1 2468:14	2515:10	listed	2443:10
		2503:22		2461:19	,18,21
	10:8,19	2512:5	limitation	2485:18	2450:15
	20:7	2559:25	2480:21	2609:1,2	2450:15
	26:13	2561:17	2547:9	listening	2451:3,25
	31:20,21	2597:24	2568:16	2452:18	2456:13
	40:24 46:5	2619:22	limitations		2458:13
		2634:10	2547:7	listing	,17 2459:1
	59:9		2634:16	2519:19	2460:5,8,2
	70:4	levelized	limited	litany	4
	77:7	2585:13	2392:23	2401:3	2461:2,3,7
	81:6 86:14	2627:9,15		literature	,10,13,14,
	93:12	2628:6	2427:1,5 2428:3	2630:19 <b>,</b> 25	20
24	30:14		2420:3	2030.19,23	

	PIANTIODA	I IIIDNO GNA	01 00 2015	rage 2070 01	L 2707
24	62:2,18	2500:3	2434:18	lowering	2552:21,22
	64:7,22	2510:12,20	2437:17	2595 <b>:</b> 7	2572:8
	66:5,9,1	2516:24	2479:21		2573 <b>:</b> 17
7,		2517:1	2523:8	low-load	2581:12
	67:5,6	2524:1	2579:11	2538:1	
	69:9,10	2525:9	2604:16,17	<b>LUBD</b> 2427:4	manager
	70:18	2558:2	2632:23	2429:17	2390:21,23
	73:1,17	2585:2	2634:16	2431:21	2392:2,3
	75:8,10	2620:16		2515:13,15	2399:4,6,7
	79:14,15	2625:23	lots 2422:5		2506:9
,1	· ·	2632:24	2474:5	lump 2602:17	2510:4
	82:8,20	2634:17	2636:11	lunch	2511:8
	86:10		Louella	2510:24	managers
	87:2	longer	2391:1		2510:4
	88:1	2400:15			
	92:17,22	2424:11	love 2525:3	M	mandated
	93:8	2435:13	low	magnitude	2449:1
	94:11,17	2448:4	2421:8,14,	2546:14	<b>Mani</b> 2439:16
	95:3,5	2454:8	15,16	2556:16	Manitoba
	96:9,11,	2456:24	2427:15	<b>main</b> 2548:6	
	2499:25	2466:8,15	2428:4,19,	maintain	2385:3,6,2
	00:5	2469:23	20 2429:1		2 2386:4,7
	14:18,20	2470:21	2431:2	2455:8	2387:6
	18:17	2472:7	2434:4,6	2461:7	2389:3,6,9
	38:1	2473:4	2437:7	2496:12	,13,21
	49:24	2490:12	2438:2	2541:12	2391:6,21,
	24:7	2632:6	2455:3	maintains	25
	25:15,25	longer-term	2472:12	2539:14	2392:8,11
	31:24	2631:25	2496:9,11	2577:20	2393:5,16, 19
		1 an <del>a</del> - mun	2515:18	maintenance	2395:9,17
load		<b>long-run</b> 2521:6	2516:8	2390:23	2396:15,24
24	86:21	2625:24	2537 <b>:</b> 25	2399:8,10	2397:22,25
load	s	2626:17	2577:22,23	2487:23	2398:9,13,
24	28:3,12		2578:6,7		23
24	32:9	2627:15	2621:23	<b>maj</b> 2439:5	2399:2,12
24	35:7,17	long-term	lower	major	2400:6
24	58:3,6,9	2500:6,7,9	2416:12	2421:10	2401:4
24	62:16,18	<b>,</b> 25	2418:22	2432:12	2402:2,4,1
24	66:18	2501:10	2421:10	2435:6	5,22
24	92:18	2634:21	2431:1,5,1	2439:1,4,5	2403:6
24	96:7	<b>loop</b> 2413:10	4 2436:19	2448:2	2404:18,21
26	25:12	_	2438:8,10	2608:21	2405:13,24
loca	+0	loss 2476:20	2515:10	2609:1	2407:12,20
	41:3	2494:2	2516:15	2610:19	2409:22,23
25	41:3	2539:9	2572:22		2410:13,21
loca	tion	2616:1	2574:2,3,2	majority	,24
24	63:16	2617:16	1 2577:24	2410:20	2411:24
long	2403:6	losses	2584:14,22	2603:20	2411.24
_	46:7	2487:25	2615:13,18	2628:21	2412:3
	52:13		2635:11	Man 2470:22	2413.17
	72:22	lot 2417:4		manago	2414.5,15
	77:21	2420:7	lower-	manage	2415.7
	87:6	2429:12	consumptio	2435:6	2410:3
127		2433:11	<b>n</b> 2440:18	management	ムコエフ・エフ

<u> </u>		A HIDRO GRA		rage 2077 01	
2	421:8,22	2476:11,24	2541:10,24	<b>MAPP</b> 2446:8	2626:18
	422:5,18,	2477:8,11	2542:1,6,1	2470:5,7,1	2627:1,14
2.		2479:5,14	9,22,25	4	2628:3,8,1
2	424:1,6,1	2485:5,7,1	2543:10,16	Manah 0457 0	2,16
7	2428:14	2	2544:6,25	March 2457:9	2629:21
2	429:16	2486:3,4,1	2545:5	2533:2 2536:13	marginal-
2	430:22	0,11,13,19	2546:6,8,1	2536:13 2543:6	cost
2	433:7,19	2487:7	1,18,23,24	2544:7	2624 <b>:</b> 25
2	434:4,25	2488:19	2547:13,19	2598:14	2625:7
2	435:8	2489:8,21	,20	2604:15	2025.7
2	437:7,12,	2490:19	2548:1,11,	2605:2	marked
2	0,24	2492:13	17,23		2596:13
2	438:2,7,2	2494:6,16,	2549:18	margin	market
5		18,21	2551:17	2572:16	2443:21,23
2	439:14,22	2496:20,23	2553:9,10	marginal	2446:6
	441:24	2497:1	2558:25	2402:25	2447:13,24
2	443:3,6,8	2499:3,16	2574:7	2403:1,7,1	2466:15,17
1	14,17,19,	2500:6,12,	2575 <b>:</b> 12	1	2471:9
2.		15 2501:16	2580 <b>:</b> 7	2405:9,14	2472:6,10,
	444:5,11,	2504:14,19	2582:12,25	2406:8,11,	25
1	5,23	2505:10	2583:10	19,20,22	2473:6,19,
1	445:22	2506:1,14,	2586:19,23	2413:7,8,1	21
	446:8,12,	16,21,25	2587:2,7,8	2,20	2474:8,19
1	5,21	2507:23	,23 2588:6	2414:7	2475:19,23
	448:11,21	2508:11,21	2589:2	2474:24	2477:11
	449:20,25	2509:9	2591:3	2486:22	2484:14,17
	450:12,15	2511:5	2592:18	2487:11	,18
	23	2513:3	2593:16	2488:2,8	2486:1,4,1
	451:17	2518:10	2594:1	2500:9	3,18,20,22
1	452:11,20	2519:6,7,1	2595:6	2519:7,12,	,24,25
1	453:20	1,19	2599:14	19	2487:6
1	454:2	2520:20	2605:6,19	2520:4,13,	2488:13,18
1	455:18,19	2521:3	2607:19	17 <b>,</b> 19	,19,22
	22	2522:5,10,	2610:10,20	2521:1,3,4	2494:1
1	456:24	15,21,24,2	2611:13	,6,7,10	2500:3
1	457:6,8,1	5	2612:16	2567:17,23	2501:4
1	2458:8 459:23	2523:12,24	2613:11	2570:21,22	marketplace
1	460:1,25	2524:19,21 2525:2,24	2614:9,18 2618:16	<b>,</b> 25 2571 <b>:</b> 3	2635:22
	463:3	2526:2,24	2620:17	2572:2,17	
	464:22	2527:13	2621:21	2575:8,11	markets
	465:23,24	2528:23	2622:24	2584:10,15	2490:19
1	466:4,22	2530:1,5,1	2623:1,3,8	2585:1,2,4	2500:10
1	467:5,19,	3,17	2624:5,14,	,8,12,23	2574:10
2		2532:1,6,1	21 2625:12	2586:1,2,5	match
1	468:13,15	5,19	2627:10	,8	2489:11
1	469:1,24	2533:19,21	2628:19	2587:15,22	material
1	470:1,3,8	2534:11,21	2629:15	2618:18	2508:5
1	22	2535:3,20,		2620:17,21	2535:1
1	472:1,7,2	25 2536:11	manner	,24 2621.24	2591:2
4		2537:5	2393:21	2621:24 2624:6	2597:12
2	473:7,20	2539:10,15	2453:6	2625:11,16	
1	475:8,16,	,19,22	2471:25	,23,24	materials
2		2540:17,25	2474:2,5	, 43, 44	2388:6
		, -	!		

### 2411:9	PUB - MANITOBA	A HIDNO GNA	01-08-2013	Page 26/8 01	2707
2495:7	2468:17	may 2410:8	2510:22	2414:14	2471:18
2534:18		_			
24554:10					·
2595:24			· ·	2313.24	
2596:12,17				mechanism	24//:3,/
math 2441:9		•		2599:10	member
math 2441:9         meam 2407:16 (2457:13 and 2467:13 and 2467:13 and 2467:13 and 2467:13 and 2467:13 and 2467:14 and 2467:13 and 2467:14 and 2467:14 and 2467:14 and 2467:14 and 2467:14 and 2467:15 and 2467:16 and 2467:16 and 2467:16 and 2467:17 and	· ·		2593:9	modium	2385:15,16
math 2441:9         2459:13         2425:22         2409:17         2497:73         members           2467:3         2481:6         2437:10         2431:8,12         2407:17         2391:23           mathematical         2488:6         2437:10         2433:12         2393:22           ½402:12         2493:7,9,1         2441:9         meet 2443:19         2442:22           mathematics         2499:1         2476:6         245:22         membership           2626:4,6         2500:2,12         2537:1         2452:4,12           2333:10         2503:22         2560:3         meeting         2541:3           2333:10         2503:22         2566:14         2450:15         262:32           2477:1         2503:22         2566:14         2450:15         263:24           2477:1         2503:22         2566:13         meeting         253:23           2477:1         2503:22         2566:13         meeting         253:32           2477:1         2503:17         2561:4         2450:15         266:34           2477:1         2524:2         258:19         2456:6         merting           2507:7         2524:2         258:19         2456:6         merting	2618:5		mean 2407:16		2446:8
mathematical         2473:4         2431:8,12         2409:17         members           2467:3         2481:6         2437:10         2427:17         2391:23           mathematical         2493:7,9,1         2439:6         2433:12         2443:22         2398:25           1y 2402:12         2493:7,9,1         2441:9         meet 2443:19         meetpership           2423:15         8 2497:9         2476:6         2445:22         membership           mathematics         2499:1         2550:21         2450:25         2587:17           matter         2500:2,12         2537:1         2458:14         2518:3           2393:10         2503:22         2543:5         2485:13         2539:22           2477:1         2503:22         2560:3         meeting         2541:3         2531:2           2477:1         2523:24         2581:9         2456:6         mentioned           2477:1         2524:2         2589:18         2526:24         2402:22           2570:5         2528:18         2629:1         megawatt         2410:17           250:13         2542:24         2631:1         247:1         2430:1           260:13         2542:24         2631:1         247:1	math 2441:9		2421:21		2457:3
2467:3         2481:6         2437:10         2427:17         2391:23           mathematical         2498:6:19         2437:10         2433:12         2398:25           ly 2402:12         2493:7,9,1         2441:9         meet 2443:19         2445:22           2423:15         8 2497:9         2476:6         2445:22         membership           2626:4,6         2500:2,12         2537:1         2458:14         2558:14           2393:10         2503:22         2560:3         meeting         2541:3         2539:22           2474:3         2521:5         2566:14         2450:15         2623:24           2477:1         2523:24         2581:9         2456:6         mentioned           2477:1         2524:2         2581:8         2526:24         2403:22           2570:7         2524:2         2581:8         2526:24         2402:22           2570:5         258:18         2562:2         2570:5         258:18         256:24         2402:22           2570:5         2528:18         2629:1         megwatt         240:22         250:18           263:14         2547:23         263:11         2447:1         243:11         243:11         2447:1         223:24      <			2425:22		
athematical         2481:6         2437:10         2447:17         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         239:123         2442:22         member 2443:19         member 2443:19         membership         2445:22         membership         258:11         245:12         245:13         258:17         258:17         258:17         258:13         258:17         2518:3         258:17         2518:3         253:24         2518:3         253:24         2518:3         253:24         2518:3         253:22         250:24         245:14         245:13         253:24         253:14         245:14         263:13         253:24         253:14         245:14         263:13         253:24         258:18         252:24:1         263:13         252:24:2         258:18         252:24:2         258:18         252:24:2         263:11         2447:1         242:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         240:22         <			2431:8,12		
Mathematical   2496:19   2439:6   2443:19   met 2443:19   2442:12   2423:15   8 2497:9   2476:6   2445:22   2425:25   2587:17   2526:4, 6   2500:2, 12   2537:1   2458:14   2518:3   2539:22   2458:13   2539:22   2458:14   2518:3   2539:22   2474:2   2474:3   2518:3   2539:22   2474:3   2528:15   2455:14   2458:13   2539:22   2474:3   2521:5   2566:16   2455:14   2633:13   2539:22   2577:1   2458:14   2508:17   2566:16   2455:14   2633:13   2577:2   2524:18   2525:10   2589:18   2526:24   2409:22   2563:34   2457:3   2474:3   2528:18   2634:14   2547:23   2631:11   2447:1   2423:24   2634:14   2547:23   2631:11   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2448:10   2458:14   2458:	2467:3	2481:6	· ·		
Ly 2402:12   2493:7,9,1   2441:9   meet 2443:19   2446:22   2498:5,25   2499:1   2506:21   2450:25   2558:17   25515:21   2452:4,12   2500:2,12   2537:1   2458:14   2518:3   2518:3   2498:5,25   2560:3   2485:13   2539:22   2560:3   2450:25   2450:25   2450:25   2458:14   2539:22   2560:3   2450:15   2623:24   2477:1   2523:24   2581:9   2456:6   2455:14   2633:13   2507:7   2524:18   2525:10   2592:9   2570:5   2528:18   2629:1   2477:1   2523:24   2631:1   2447:1   2433:4   2634:14   2547:23   2633:11   2447:1   2433:4   2634:14   2547:23   2539:22   2570:5   2528:18   2629:1   2456:20   2470:22   2570:18   2525:10   2592:9   2526:24   2470:12   2430:11   2447:1   2433:4   2447:1   2433:4   2547:23   2539:24   2539:24   2539:24   2539:24   2539:24   2539:34   2556:24   2539:24   2539:34   2556:24   2570:25   2589:4   2570:25   2589:4   2570:25   2589:4   2570:25   2589:4   2570:25   2589:4   2570:25   2589:4   2570:25   2589:4   2	mathematical			2433:12	
### ### ### ### ### ### ### ### ### ##	lv 2402:12	2493:7,9,1		meet 2443:19	2442:22
mathematics         2498:5,25         2506:21         2450:25         2587:17           acter         2499:1         2500:2,12         2515:21         2452:4,12         2452:14,12         memory           matter         2502:5         2543:5         2485:13         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2539:22         2541:3         2539:22         2541:3         2539:22         2541:3         2539:22         2541:3         2539:22         2541:3         2539:22         2541:3         2539:22         2541:3         2550:15         2623:24         2631:12         2455:14         2633:13         263:13         2456:6         2475:14         2633:13         265:15         2528:18         2529:19         2456:6         240:22         240:22         240:22         220:22         2570:5         2528:18         2629:1         2447:1         2475:14         2430:11         2447:1         2475:14         2430:11         2447:1         2475:14         2430:11         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1         2447:1 <th></th> <td>8 2497:9</td> <td></td> <td></td> <td>membership</td>		8 2497:9			membership
mathematics         2499:1         2500:2,12         2515:21         2452:4,12         memory           matter         2500:2,12         2537:1         2458:14         2518:3         2518:3           2393:10         2503:22         2560:3         meeting         2541:3         2593:24           2474:3         2521:5         2566:16         2450:15         2623:24           2477:1         2523:24         2581:9         2456:6         mentioned           2577:7         2524:2         2589:18         2526:6         mentioned           2570:5         2528:18         2629:1         megawatt         2410:17           2605:13         2542:24         2631:11         2447:1         2423:24           2634:14         2547:23         2631:1         2447:1         2423:24           2634:14         2549:21         meaning         245:1         2430:1           matters         2551:4,24         2439:5         2456:20,22         2507:18           2392:14,17         2553:2         253:26         2471:6         2516:19           2393:4         256:24         256:24         2571:5         263:14         246:25         251:19           2589:4         268:16		2498:5,25			_
matter         2500:2,12         2537:1         2458:14         2518:3           2393:10         2503:22         2560:3         2445:16         2508:17         2561:4         2450:15         262:24           2474:3         2521:5         2566:16         2455:14         2623:24         2633:13           2507:7         2524:2         2581:9         2456:6         mentioned           2524:18         2525:10         2592:9         megwatt         2402:22           2570:5         2528:18         2629:1         2447:1         2423:24           2634:14         2547:23         2631:1         2447:1         2423:24           2634:14         2549:21         meaning         2451:1         2430:11           2634:14         2549:21         meaning         2451:1         2430:11           2392:14,17         2553:2         2532:6         2471:6         2516:19           2393:4         2554:14         2439:5         2456:20,22         2507:18           2398:7,11         2556:24         2571:3,14         2475:14,24         2571:2         2556:14           2405:22         2576:16         263:14         2488:2,20         2560:1           2405:22         2576:16 <th></th> <td>2499:1</td> <td></td> <td></td> <td></td>		2499:1			
matter         2502:5         2543:5         2485:13         2518:3           2393:10         2503:22         2560:3         2560:3         2533:22           2415:16         2508:17         2561:4         2450:15         2623:24           2477:1         2523:24         2581:9         2455:14         2633:13           2507:7         2524:2         2589:18         2456:6         mentioned           2524:18         2525:10         2592:9         2402:22           2570:5         2528:18         2629:1         2447:1         2423:24           2634:14         2547:23         meaning         2454:1         2433:11           2634:14         2549:21         meaning         2454:1         2447:1         2433:1           2392:14,17         2553:2         253:26         2471:6         2516:19         2516:19           2393:4         254:4         253:2         253:2         2507:18         256:24         2517:21           2398:7,11         2556:24         2571:3         2477:26         2542:13         2475:14,24         2517:21           258:4         256:16         263:14         2487:23         2542:15         256:17           2405:22         257	2626:4,6	2500:2,12		· ·	_
2393:10	matter	2502:5			
2415:16 2474:3 2521:5 2561:4 2477:1 2523:24 2581:9 2566:16 2456:6 2524:18 2525:10 2589:18 2526:24 2589:9 2570:5 2524:2 2589:18 2525:13 2634:14 2633:13 2657:7 2524:2 2589:19 2456:6 2526:24 2402:22 2570:5 2528:18 2629:1 2631:11 2447:1 2447:1 2423:24 2633:13 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:13 2444:10 2444:10 2451:1 2444:10 2475:14,24 2392:14,17 2555:2 2532:6 2471:6 2571:3,14 2482:12 2589:4 2581:6 2633:14 2487:23 2544:5 2589:4 2631:21 2571:13,14 2487:23 2544:5 2571:3,14 2488:2,20 2560:1 2448:21 2410:1 2578:9 2427:18 2444:7,9 2448:21 2410:1 2578:9 2447:12 2450:24 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2410:1 2476:2 2446:2 2410:1 2476:2 2410:1 2476:2 2446:2 2410:1 2476:2 2446:2 24					2539:22
2474:3 2477:1 2523:24 2477:1 2527:7 2524:2 2589:18 2526:24 2570:5 2528:18 2605:13 2547:24 2589:18 2549:21 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:23 2634:14 2547:13 2447:1 2447:1 2447:1 2423:24 2451:1 2447:1 2430:11 2447:1 2430:11 2447:1 2443:1 2444:10 2454:1 2444:10 2456:20,22 2507:18 2393:4 2554:14 2556:24 2571:5 2471:6 256:24 2571:3,14 2589:4 2551:13,14 2571:3,1				meeting	2541:3
2477:1				2450:15	2623:24
2507:7 2524:18 25270:5 2528:18 2529:9 2570:5 2528:18 2605:13 2542:24 263:14 2547:23 2549:21 2634:14 2547:23 2531:11 2455:1  matters 2551:4, 24 2553:2 2532:6 245:2 245:1 245:1 2439:7 2589:18 2629:1 2447:1 2447:1 2423:24 2431:1 2556:24 2571:5 2476:25 2542:13 2571:13,14 25				2455:14	2633:13
2524:18	· ·			2456:6	montioned
2570:5 2528:18 2529:1 2605:13 2542:24 2631:11 2447:1 2423:24 2631:11 2451:1 2430:11 2430:11 2454:1 2430:11 2454:1 2430:11 2456:20,22 2557:18 2589:4 2631:21 2558:16 2572:3,4 2631:21 2572:3,4 2631:21 2578:9 2410:1 2578:9 2444:7,9 2569:6 2427:18 2446:20,23 2455:20 2459:14 2450:24 2450:24 2450:24 2450:24 2450:24 2450:24 2450:21 2465:8,18 2432:24 2458:22 2463:5,6,8 2452:11 2462:1,10 2515:25 251:1 2462:1 2463:20 2464:21 2466:25 2573:9 2464:8 2438:12 2428:13 2515:8 2438:12 2458:22 2467:7,8   measure 2462:1 2463:20 2464:8 2438:12 2428:13 2515:8 2458:22 2427:21 2464:8 2428:13 2438:17 2438:17 2438:17				2526:24	
2605:13					
### ### ### ### ### ### ### ### ### ##				=	
matters         2549:21         meaning         2456:20,22         2507:18           2392:14,17         2553:2         2532:6         2471:6         2516:19           2398:7,11         2556:24         2571:5         2476:25         254:13           2589:4         2568:16         2633:14         2476:25         2542:13           2631:21         2571:13,14         meaningless         2488:2,20         2560:1           2405:22         2576:16         2576:21         megawatts         2573:25           2410:1         2596:22         2577:24         means         2446:20,23         2573:25           2411:21         2596:22         2476:2         2446:20,23         2609:15           24427:19         2608:20,25         2565:17,20         2451:3,4,1         2415:18           2449:5,9         2627:15         2476:2         2451:2,3         2455:20           2464:21         2628:16         2507:19         2451:17         2515:25           2464:21         2628:16         2507:19         2461:17         message           2464:21         2465:25         2542:11         2455:20         2582:15           2463:20         2422:24         2582:22         2463:5,6,8 <t< td=""><th></th><td></td><td>2631:11</td><td></td><td></td></t<>			2631:11		
matters         2551:4,24         2439:5         2434:16         2507:18           2392:14,17         2553:2         2532:6         2471:6         2516:19           2398:7,11         2556:24         2571:5         2476:25         2542:13           2589:4         2568:16         2571:13,14         2488:2,20         2560:1           maximum         2572:3,4         2576:21         2555:11         2561:7           2405:22         2576:16         2576:21         2569:6         2576:21           2409:22         2577:24         means         2444:7,9         2569:6           2411:21         2596:22         2476:2         2459:14         2450:24         2609:15           2412:12         2605:15         2476:2         2451:3,4,1         2415:18         2415:18           2448:21         2605:15         2476:2         2451:3,4,1         2415:18           2448:21         2617:24         ,23         2453:21,24         2582:15           2463:20         2463:16         2430:12         2455:20         2582:15           2465:8,18         2426:25         2542:11         2462:1,10         2515:25           2467:6         2434:12         2582:22         2463:5,6,8	2634:14		meaning		
2392:14,17 2393:4 2393:4 2398:7,11 2556:24 2556:24 2571:5 2633:14 2589:4 2631:21 2571:13,14 2572:3,4 2576:21 2446:20,23 2444:7,9 2573:25 2446:20,23 2444:7,9 2446:20,23 2446:20,23 2457:24 2457:24 2457:24 2457:24 2457:24 2457:24 2457:24 2457:26 2457:27 2458:27 2458:27 2458:27 2458:27 2458:27 2458:28 2458:28 2458:28 2458:28 2458:28 2468:28 2471:6 2471:6 2476:25 2574:13 2560:1 2576:16 2488:2,20 2573:25 2444:7,9 2446:20,23 2444:7,9 2446:20,23 2446:20,23 2458:20 2458:20 2458:20 2458:20 2458:20 2458:20 2458:20 2458:20 2458:20 2458:20 2468:20 2458:20 2458:20 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2468:20 2	matters		_		
2393:4 2398:7,11 2589:4 2568:16 2571:13,14 2571:3,14 2572:3,4 2576:21 2488:2,20 2576:21 2499:22 2410:1 2578:9 2410:1 2578:9 2411:21 2578:9 2411:21 2578:9 2412:12 2605:15 2412:12 2605:15 2412:12 2605:15 2412:12 2608:20,25 2412:12 2448:21 2448:22 2449:51 2448:22 2455:20 2463:41 2462:41 2	2392:14,17			· ·	
2398:7,11 2589:4 2631:21 2589:4 2631:21 2571:13,14  maximum 2405:22 2410:1 2596:22 2411:21 2596:22 2412:12 2605:15 2427:18 2444:7,9 2412:12 2427:19 2448:21 2449:5,9 2448:21 2449:5,9 2448:21 2463:20 2464:21 2465:8,18 2467:6 2492:19 2517:4,7 2556:24 2571:5 2533:14 2476:25 2488:2,20 2560:1 2488:2,20 2555:11 2560:1 2488:2,20 2555:11 2560:1 2488:2,20 2560:1 2488:2,20 2560:1 2488:2,20 2560:1 2488:2,20 2560:1 2560:6 2492:19 241:21 2596:22 2457:18 2449:5,9 2627:15 2628:16 2430:12 2451:3,4,1 2415:18 2461:4 2450:24 2451:3,4,1 2415:18 2451:20 2461:17 2465:8,18 2467:6 2492:19 2514:13 2439:12 2437:22 2458:22 2463:20 2464:8 2439:12 2465:8,18 2467:6 2492:19 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2517:4,7 2468:16 2571:5 2633:14 2476:25 2576:21  means 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2444:7,9 2446:20,23 2444:7,9 2446:20,23 2449:13 2455:24 2451:12 2458:22 2468:8 2467:7,8 2517:4,7 2561:10 2561:7 2560:1 2488:22 2447:18 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2449:13 2455:21 2458:22 2466:4,19, 2517:4,7 2518:12 2467:7,8 2412:13 2476:25 2476:21 2488:22 2467:16 2449:16 2476:21 2468:8 2446:20,23 2449:16 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2449:16 2446:20,23 2449:16 2446:20,23 2449:16 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2449:16 2447:18 2446:20,23 2449:16 247:18 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2449:16 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2449:16 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 2446:20,23 24	· ·				
2589:4 2631:21 2568:16 2571:13,14 2571:23,4 2576:21 2405:22 2409:22 2577:24 2411:21 2596:22 2412:12 2427:19 2448:21 2448:21 2448:21 2448:21 2448:21 2448:21 2448:21 2448:21 2448:21 2448:21 2462:15 2458:26 2463:20 2463:30 2468:20 2463:30 2468:8 2573:9 2465:4,19, 2438:17 2560:1 2446:20,23 2446:20,23 2450:24 2451:3,4,1 7,19,24 2451:3 2453:21,24 2451:3 2453:21 2450:24 2451:3 2450:24 2451:3 2465:4,19, 2428:13 2480:10 2460:1			meaningful	· ·	
2631:21         2588:16 2571:13,14 2572:3,4 2405:22         2571:13,14 2576:16         2633:14 2488:2,20 2560:1         2548:5 2560:1         2560:1 2560:1         2560:1 2560:1         2600:1         2600:1         2600:1 <t< td=""><th>· ·</th><td></td><td></td><td></td><td></td></t<>	· ·				
maximum         2571:13,14         meaningless         2488:2,20         2560:1           2405:22         2576:16         2576:21         2555:11         2560:1           2409:22         2577:24         means         2444:7,9         2569:6           2410:1         2596:22         2459:14         246:20,23         2609:15           2412:12         2605:15         2476:2         2450:24         2415:18           2448:21         2608:20,25         2565:17,20         7,19,24         2415:18           249:5,9         2627:15         2453:21,24         2582:15           2463:20         maybe         2507:19         2461:17         2518:20           2465:8,18         2430:12         2462:1,10         2515:25           2467:6         2434:12         2582:22         2463:5,6,8         2521:1           2492:19         2437:22         2439:12         2464:8         2428:13           2515:8         2439:12         2573:9         2465:4,19,         2438:17           25949:16         2573:25         2467:7,8         2428:13			2633:14		
### 2576:16			meaningless	· ·	
2409:22			_	2555:11	2561 <b>:</b> 7
2409:22 2410:1 2578:9 2411:21 2596:22 2459:14 2476:2 2427:19 2448:21 2449:5,9 2459:14 2459:14 2453:21,24 2463:20 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2596:22 2427:18 2427:18 2427:18 2427:18 2427:18 2426:25 2459:14 2476:2 2459:14 2476:2 2455:17,20 7,19,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2454:2,3 2458:22 2507:19 2461:17 2515:25 2462:1,10 2515:25 2463:5,6,8 2521:1 2482:21 2463:4,19 2515:8 2427:21 2465:4,19, 2517:4,7 2519:16			2570.21	megawatts	2569:6
2410:1 2411:21 2411:21 2412:12 2427:19 2448:21 2449:5,9 2449:5,9 2459:14 2430:12 2465:8,18 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2410:1 2596:22 2459:14 2450:24 2450:24 2450:24 2450:24 2451:3,4,1 7,19,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2453:21,24 2455:20 2461:17 2542:11 2582:22 2463:5,6,8 2432:24 2427:21 2464:8 2428:13 2438:17 2517:4,7 2549:16			means		2573:25
2411:21 2412:12 2412:12 2427:19 2448:21 2449:5,9 2451:21 2463:20 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2499:15  2499:15  2405:22 2450:24 2451:3,4,1 7,19,24 2453:21,24 2453:21,24 2453:21,24 2455:20 2461:17 2462:1,10 2515:25 2462:1,10 2515:25 2463:20  meant 2411:4 2462:1,10 2515:25 2582:22 2463:5,6,8 2434:12 2439:12 2455:20 2582:15 2618:20  meter 2404 2512:1 2582:22 2463:5,6,8 2521:1 2465:4,19, 2438:17 2517:4,7 2549:16			2427:18	,	2609:15
2412:12 2427:19 2448:21 2449:5,9 2453:21 2463:20 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2608:20,25 2565:17,20 ,23 2565:17,20 ,23 2453:21,24 2453:21,24 2453:21,24 2454:2,3 2455:20 2461:17 2462:1,10 2515:25 2582:22 2463:5,6,8 2432:24 2437:22 2437:22 2463:5,6,8 2438:17 2573:9 2581:12 2467:7,8  2415:18  measage 2453:21,24 2453:21,24 2454:2,3 2465:2,3 2462:1,10 2515:25 2462:1,10 2515:25 2463:5,6,8 2428:13 2439:12 2437:22 2437:22 2437:22 2427:21 2573:9 2581:12 2573:9 2581:12 2467:7,8  metering		2596:22	2459:14	· ·	merely
2427:19 2448:21 2449:5,9 2453:21,24 2453:21,24 2454:7,12 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2608:20,25 2665:17,20 ,23  7,19,24 2453:21,24 2454:2,3 2453:21,24 2454:2,3 2455:20 2507:19 2461:17 2462:1,10 2515:25 2582:22 2463:5,6,8 2432:24 2437:22 2437:22 2437:22 2437:22 2437:22 2437:22 2437:22 2438:17 2517:4,7 2549:16	2412:12		2476:2		
2448:21	2427:19	2608:20,25	2565:17 <b>,</b> 20		2415.10
2449:5,9 2454:7,12 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16   meant 2411:4 2454:2,3 2455:20 2461:17 2461:17 2582:15 2430:12 2507:19 2461:17 2462:1,10 2515:25 2582:22 2463:5,6,8 2434:12 2582:22 2463:5,6,8 2427:21 2465:4,19, 2517:4,7 2549:16  meant 2411:4 2454:2,3 2455:20 2461:17 2462:1,10 2515:25 2463:5,6,8 2432:24 2427:21 2465:4,19, 2428:13 2438:17 metering	2448:21	2617:24	<b>,</b> 23		message
2454:7,12 2463:20 2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2430:12 2430:12 2430:12 2455:20 2507:19 2461:17 2462:1,10 2515:25 2582:22 2463:5,6,8 2434:12 2437:22 2427:21 2573:9 2581:12 2581:12  2430:12 2465:4,19, 2465:4,19, 2438:17  metering 2430:12 2467:7,8  2409:15	2449:5,9	2627:15	moant 2/11./	· ·	2582:15
2463:20     maybe     2507:19     2461:17     meter 2404       2465:8,18     2426:25     2542:11     2462:1,10     2515:25       2467:6     2434:12     2432:24     2582:22     2463:5,6,8     2521:1       2492:19     2437:22     2437:22     2464:8     2427:21     2465:4,19,       2515:8     2458:22     2573:9     22,23,25     2438:17       2517:4,7     2499:15     2581:12     2467:7,8     metering	2454:7,12	2628:16			2618:20
2464:21 2465:8,18 2467:6 2492:19 2514:13 2515:8 2517:4,7 2519:16  2426:25 2542:11 2582:22 2463:5,6,8 2521:1 2462:1,10 2515:25 2463:5,6,8 2521:1 2463:5,6,8 2521:1 2463:5,6,8 2463:5,6,8 2521:1 2465:4,19, 2428:13 2428:13 2517:4,7 2517:4,7 2499:15 2581:12 2667:7,8  metering 2420:10	2463:20	maybe			meter 2/0/.5
2465:8,18 2467:6 2492:19 2514:13 2515:8 2458:22 2463:5,6,8 2521:1  measure 2464:8 2427:21 2573:9 2517:4,7 2499:15 2581:12 2582:22 2463:5,6,8 2521:1  metered 2464:8 2428:13 2438:17 2573:9 2581:12 2582:22 2463:5,6,8 2521:1  metering 2428:13 2428:13 2438:17	2464:21	=			
2467:6 2492:19 2514:13 2515:8 2517:4,7 2549:16  2432:24 2434:12 2437:22 2437:22 2437:21 2573:9 2582:22 2463:5,6,8 ,18,20 2464:8 2427:21 2573:9 2573:9 2582:22 2463:5,6,8 ,18,20 2468:13 2428:13 2428:13 2428:17 2573:9 2582:22 2467:7,8  metering 2428:13	2465:8,18				
2492:19 2514:13 2515:8 2458:22 2517:4,7 2549:16  2437:22 2437:22 2427:21 2573:9 2581:12  2465:4,19, 2438:17 2581:12  2467:7,8  metered 2464:8 2428:13 2438:17 2573:9 2581:12 2467:7,8	1		2582 <b>:</b> 22		Z 3 Z I : I
2514:13 2515:8 2517:4,7 2549:16 2437:22 2439:12 2427:21 2573:9 2573:9 2581:12 2465:4,19, 22,23,25 2467:7,8 2438:17	2492:19		measure		metered
2515:8 2517:4,7 2519 2517:4,7 2519 2517:4,7 2519 2511:12 2465:4,19, 22,23,25 2467:7,8 2438:17 2438:17			2427:21		2428:13
2517:4,7 2549:16 2581:12 2581:12 2467:7,8 metering					2438:17
2499:15 2467:7,8 metering					matau:
2501:8   measured   2470.3.24   2438:18,	· ·				_
	2010.10	2501 <b>:</b> 8	measured	2470:3,24	2438:18,19

PUB = MANITOBA	A HIDRO GRA	01-08-2013	Page 26/9 01	_ 2707
2582:24	2601:15,19	3,15,19	2427:20,22	2468:1,12
2302.24	2604:8,14,	2477:6	2435:14	2514:3,8
meters	18,21		2441:8	2519:3
2458:5	2605:5	missed	2447:1	2528:19
method	2606:3	2620:15	2516:10,15	2535:3
2495:14	2607:15	missing	2527:3	2538:2
	2608:16,19	2539:8	2547:9	2597:16
methodologie	2610:22	2628:4	2565:22,25	2618:12
<b>s</b> 2436:6	2616:2,7		2567:8	2637:3
methodology	2617:2,4	misspoke	2576:15	
2393:7	•	2464:16		motivation
2437:4	mind 2511:6	misunderstoo	monthly	2621:11
2583:5	2525:21	<b>d</b> 2508:18	2392:19	move 2419:14
	2578:23	<b>NTTO</b> 0206.14	2393:25	2433:24
methods	2631:19	<b>MKO</b> 2386:14	2394:5,15	2495:16,18
2393:8	mine 2623:24	2397:24	2401:20	2621:3
metres		2398:4,7,1	2402:16	2625:22
2497:3	minimum	2,17 2525:22	2403:13,21	
MI 2471:14	2516:13	2323:22	2404:8,18,	moved
	minor	model	22	2447:15
Michael	2440:12	2423:15	2405:5,7,1	movement
2386:14	minute	modify	2 2407:22	2517:20
microphone	2435:21	2433:22	2408:7,22,	moving
2521 <b>:</b> 24	2452:3	2433.22	24	2433:16,20
2556:24	2517:16	moment	2409:1,15	2603:15
	2523:15	2475:24	2410:22	2624:17
mid 2418:14	2579:8	2517 <b>:</b> 7	2416:6	2632:8
mid-April	2587:13	moments	2418:11	
2418:14	2307:13	2405:1	2419:14	multipart
	minutes	2533:14	2420:8,10,	2410:9
Mid-area	2445:1,5	2542:13	21	multiples
2446:8	2448:21,22	2636:8	2421:3,9,1	2486:19
middle	2449:19		1 2423:7	
2434:16	2451:23	money 2422:6	2425:10,13	multiply
2454:19	2452:2	2475:13	2431:19	2626:1
2519:18	2468:3	2530:1	2435:18,21	myself
migrate	2477:1	2558:24	2442:7	2512 <b>:</b> 21
2546:25	2557 <b>:</b> 2	2575 <b>:</b> 12	2478:15	2627:23
	2595:25	Monsieur	2514:20	
miles 2451:9	2596:3,24	2594:19	2518:22,23	3.7
Miller	2618:6	2595:3	2594:16	<u>N</u>
2386:10	MIPUG	month	2632:13,15	narrowing
2595:4	2386:12	2394:11,13	<b>,</b> 16	2626:16
		· · · · · · · · · · · · · · · · · · ·	months	2628:25
million	MISO	,15 2395:13,15	2418:13 <b>,</b> 17	Nation
2444:16	2450:17,23	2395:13,15	2457:19	2397:14,17
2536:22	2454:1	2404:14,18	2515:9 <b>,</b> 25	National
2539:12	2455:9	,19	2516:3,7,2	2587:21
2541:4,6	2466:11	2415:23	2 2517:8	Z38/ <b>:</b> Z1
2542:9	2470:4	2415:23	2543:13 <b>,</b> 14	Nations
2544:7,8,9	2471:5,10,	2417:8,17	morning	2397:10,12
,17,18	11,14,23	2421:13,14	2390:3,5,1	,24
2556:10	2475:16,19	2424:11,21	6 2398:24	2527:15
2599:15	2476:2,3,1	2423:1	0 2390:24	2530:8
		1		

			1490 2000 01	
Nation's	2541:7,16,	government	2424:13	occasions
2554:4	19 2617:16	2547 <b>:</b> 1	2517:25	2533:2,12
			2588:23	
natural	neutral	nor 2396:18	2589:24	occur
2550:25	2487:4	2398:10		2418:16
2574:10	2489:17,22	normal	np	2460:18
2593:23	2490:5	2435:10	2386:14,16	2524:20
nature	2499:22	2545:6	numerous	occurred
2490:18,19	2515:3	<b>North</b> 2421:7	2571:20,24	2457:19
2526:24	2518:18			2458:20
2558:3	2570:7	2455:11	0	2483:1
2563:15	2571:9	2566:13		2515:8
2567:2	2586:23	2580:5	objections	2635:25
2609:22	neutrality	northern	2526:4	
b	2500:24	2397:11,23	objective	occurring
nearby 2596:25	nevertheless	2398:8	2487:3	2490:2
2596:25		2487:25	2584:7	occurs
nearly	2559:1	2530:8		2395:6
2566:6	2589:24	2548:8	objectives	2428:9
necessarily	night	<b>note</b> 2544:7	2467:15,16	2482:5
2413:3	2434:17,22	2629:18	obligated	o'clock
2413:3	2486:10	2029:10	2450:24	2445 <b>:</b> 9
2551:21	nine 2458:21	noted	obligation	2512:18
2568:3	2489:9	2631:23	2446:17,19	2512:16
2576:16,17	2637:3	<b>notes</b> 2463:6	2450:16	2637:4
2618:23	2037.3	2488:23	2451:1,20	2037:4
2010:23	nineteen	2544:1	2452:12	October
necessary	2404:13	2636:8	2452:12	2399:3
2398:1	2482:17		2456:6	2423:10
2485:20	ninety	nothing	2458:24	2489:7
2511:4	2470:25	2390:5	2459:3	Odette
2575 <b>:</b> 7	2475:9	2548:13,15	2470:14,17	2386:5
2583:6		notice	,22 2472:2	
necessity	nobody	2440:10	2474:8	offer
2545:9	2502:9	2448:21	2602:15	2467:16
	<b>non</b> 2609:11	2449:9		2469:4
negative		2452:3	obligations	2486:17
2561:19	non-	2454:7,11	2443:20	2488:18
2623:15,20	contributi	2469:5,6	2445:23	2494:1
neighbours	<b>on</b> 2609:16	2477:20,21	2452:5	2509:24
2411:2,4,6	non-	2491:18	2455:14	2555:8
	discrimina	2494:24	observation	2633:22
NERA	tory	noticeable	2422:12	offered
2622:23,25	2580:13		2434:3	2428:24
2623:7,14,		2503:5		2469:9
20 2630:15	none 2492:25	notices	obtained	2519:9,21
N-E-R-A	non-electric	2452:24	2500:21	2551 <b>:</b> 18
2623:20	2439:4	notionally	obvious	2618:16
<b>NERC</b> 2455:10	non-	2524:16	2419:24	2622:21
	electric-		2421:21	offori
<b>NERO</b> 2623:20		notoriously	obviously	offering
net 2402:13	heated	2571 <b>:</b> 1	2583:4	2483:21
2537:7	2439:1	November	2583:4	2502:19
2539:19	non-	2415:7	2019:19	offerings
2JJJ.13		ZIIJ./		

00 141	ANTIODA	. IIIDNO GNA	01 00 2013		L 2707
2552 <b>:</b>	21	2468:20	2484:17	<b>,</b> 18	2406:16
offices		one-fifty	2493:15	2466:5,8,2	2426:11
2526:		2467:21	2501:1	3	2427:17
		2467:21	opposed	2467:4,11,	2429:13
officia	-	2400:20	2419:5	17 <b>,</b> 20	2432:25
2490:	10	one-six	2423:6	2469:10	2435:5,6
off-pea	k	2528:11,21	2452:21	2473:12	2443:23
2433:		2534:13	2490:10	2475:6,7,8	2447:13
2499:		ongoing	2501:15	,10	2451:10
2520:		2482:18	2502:11	2477:15,17	2502:11,1
		2492:5	2550:3,12	<b>,</b> 19	<b>,</b> 25
offset		2531:4	2576:23	2478:2,6,1	2518:5 <b>,</b> 7
2500:		2541:25	2578:13	1,14,16,20	2523:18,2
2605:	16		2592:3	2479:3,15,	2524:12
of-use		online		16 2480:16	2533:21
2589:	23	2451:23	<b>opt</b> 2454:20	2481:1,6,2	2535:19
		on-peak	2632:4	4	2541:4
<b>Oh</b> 2463		2474:25	opted	2482:16,22	2545:18
2574:			2602:23	2483:1,7	2556:16
2600:	18	Ontario		2492:16,17	2559:2 <b>,</b> 13
okay		2421:12	option	,24	2565:14
2390:	9,12	2568:2	2448:19	2493:4,5,1	2577:9 <b>,</b> 10
2398:	21	onto 2610:4	2449:4,8,1	6,23,24	2579:2
2407:	7		3	2494:10,13	2586:16
2435:	16	opening	2450:6,9,1	2495:13,19	2593:13 <b>,</b> 1
2526:	7	2398:5	1,12,14	2496:3	2594:24
2528:	17	2591:10	2451:25	2497:21	2604:12
2534:	10	operate	2452:16,19	2498:24	2633:13
2539:	1	2496:9,11	,21	2499:6,16	orders
2559:	16	2581:12	2453:1,2,3	2500:13	
2564:	2	2634:7	,5,7,10,11	2502:10	2549:4
2568:	22	2635:17	,12,13,19	2550:8	2582:16
2571:	13	operates	2454:6,11,	optional	2597:20
2572:	5	2427:17	15,21	2427:6	organizatio
2573:	1	2427:17	2455:6,8,1	2427:0	2559:1
2575:		operating	6	options	organize
2576:		2431:19	2457:22,23	2448:15	2590:6
2577:		2553:25	,24	2450:7	
2578:		2555:14	2458:12,15	2460:2,19	original
2588:		2604:1	,16,19,20	2463:7	2518:24,2
2590:		operation	2459:5,6,9	2478:11,21	2533 <b>:</b> 4
2595:		2399:10,12	,10,11,12,	<b>,</b> 22	others
2596:		,21	14,15	2481:14,17	2419:5
2607:		2487:23	2460:9,14,	<b>,</b> 25	2461:23
2626:			15,20,23,2	2492:15	2532:24
2627:		operations	5	2546:22,23	2582:20
2631:		2479:12	2461:17,18	2551:2,4,6	
<b>old</b> 255		2536:6,7	,19,22,25	,13	otherwise
	0.14	2634:14	2462:4,10,	2590 <b>:</b> 20	2484:13 2500:15
oldest		operator	16	order	
2609:	23,24	2452:9	2463:4,7	2394:2,8	o-two 2442:
one-eig	hty	2456:14	2464:7,9,1	2397:21	2620:15
2466:	_	opportunity	0,24	2405:9	ought
			2465:13,17		

OD MAN	ITIODA	IIIDNO GNA	01 00 2013	rage 2002 01	2707
2562:18	;	2415:2,12	2603:24	2514:24	Partly
2572:21		2416:25	2604:12		2580:18
2574:2		2417:15	2606:8,20	partially	
ourselves	_	2425:8	2607:18	2530:21	party 2398:9
2523:7	,	2427:2	2608:8	participant	2526:3
	,	2440:5	2611:4	2470:17	pass
2543:20	'	2441:19	2614:12	participants	2451:10,13
output		2448:10	2615:4,24	2443:15	2487:1
2486:15	ò	2452:16	2617:7	2470:16	<pre>past 2395:19</pre>
2555:10	)	2454:6	2618:7	2471:2,10	2446:7
2634:10	)	2457:3,16	2620:7	2477:12	2447:3
outside		2458:19	2621:20	2614:4	2479:9
2439:6		2459:18,19	2622:21		2481:5
2590:20	)	2461:16	2623:6 <b>,</b> 25	participate	2484:16
		2462:7,21	2624:3,18	2460:9	2515:6
outstandi	_	2463:10	pages	2462:16,17	2549:4
2398:11		2464:11	2385:24	participated	2614:1
2611:22	2,23	2467:3	2489:19	2459:20	
2613:9		2478:12,13	2589:2		Patti 2386:
overall		<b>,</b> 19	2606:7	participatin	2387:12
2392:7		2479:23	2615:4	<b>g</b> 2462:19	2390:7,10
2402:6		2481:13,20		2490:14	14
2421:16		2482:9,24	<pre>paid 2459:22</pre>	participatio	2391:12,13
2426:1		2483:21	2475:3,18,	<b>n</b> 2464:10	2392:10
2430:23	3	2485:2,10	23 2481:16	2480:11	2393:14
2431:14		2488:24	2482:18		2395:1
2463:20		2489:1	2489:4	particular	2396:12,25
2537:5		2492:12	2602:22	2428:2	2397:19
		2497:11,19	2603:4	2435:3	2398:18,23
overhaul		,20 2503:3	2608:19	2440:4	2399:15,23
2608:21		2514:4	Pambrun	2459:25	2400:5
2609:1		2519:3,6,1	2386:16	2461:11	2422:17
oversight	:	4,18		2484:5	2510:9
2512:6		2524:11,14	panel	2485:9	2513:14
overstate		2528:1,8	2385:13	2489:6	2523:10
2617:10		2529:11	2387:6	2517:7	2524:6
2017:10	'	2530:11,12	2391:6	2538:7,10	2525:12
<b>owed</b> 2606	5:22	2533:18	2399:17	2541:7	2526:6
2612:17	'	2536:4	2400:2,7,1	2542:12	PAUSE
owing 242	28:1	2539:7	7 2596:14	2563:9	2401:24
<b>y</b>		2543:2	2597:16,21	2575:22	2403:18
		2544:16	,22 2637:6	2590:1,7	2406:5
P		2545:16	panel's	2633:8	2407:9
p.m		2556:9	2597:10	particularly	2412:3
2513:19	,20	2564:12,16		2433:11	2414:3,10
2557:6,	7	<b>,</b> 17 2576:5	<b>paper</b> 2631:7	particulars	2420:14,18
2596:5,	6	2583:24	paragraph	2497:9	2422:15
2637:8		2586:16	2488:25	2497.9	2425:4
pag 2624:	2	2587:10	2614:13	parties	2444:20
		2589:16	pardon	2399:21	2445:3
<b>page</b> 2387	1:2	2593:12	2410:18	2525:4,17,	2449:22
2388:3		2596:23	2622:4	23 2545:8	2456:1,10
2389:2		2599:2,24	2022:4	2588:24	2462:12,2
2398:6		2600:19,22	partaking		

<u> </u>	MANTIODA	IIIDNO GNA	01 00 2015	rage 2005 O.	2707
246	53:24	2420:23	2467:20	2465:5	2494 <b>:</b> 2
	54:13,18	2431:20,21	2497:11,12	2471:8	2514:14,17
	55:1	2441:23	2498:25	2520:14,17	2515:6,7
	66:25	2453:3	2517:13,15	2527:3	2516:16,21
	58:23	2455:23	2520:11	2528:11	2517:3,5,2
	0:11	2456:4	2623:14,19	2547:9	2
	4:14	2485:4		2555:10,11	2518:17 <b>,</b> 22
	9:1	2531:9,11	peaking	2565:21,22	2519:1
	30:7,19	2564:25	2430:23	2567:8	2527 <b>:</b> 11
	34:8	2602:23	peaks	2569:4	2535:5,22
	00:7	2603:3	2432:12	2591:13	2540:3
	6:16	2635:23	2435:6	2595 <b>:</b> 12	2541:1
250	2:14		peeking	2614:20	2542:1
	04:3	paying	2608:8	2620:10,18	2550:18,20
	5:6,18	2440:14	2000:0	2624:22,25	2591:24
	.0:7	2472:13	pejorative	2625:1	2619:10,16
	1:1,18	2477:24	2515:21	2629:23,24	,17,24,25
1	20:23	2478:1	penalties	2630:1,2,7	2621:5
252	24:24	2479:6	2455:14,19	2636:19,21	2622:12
ı	27:18	2500:15			2625:4,5,1
	28:5	2515:16	penalty	percent	3,15,17,22
252	29:7,21	2577:25	2455:8,23	2394:3,5,8	2626:1,10
	37 <b>:</b> 18	2602:20	2456:4,23	,11,13,15,	2632:9
	88:20	payment	2514:25	16,19,20,2	2636:22
254	13:23	2460:19	2515:22	1,25	
ı	15:13	2482:11	people	2395:18,20	percentage
254	18:4	2544:17	2393:3	2397:13	2420:1
255	52:16	payments	2419:4,11	2400:23	2421:21
255	64:1	2481:21,23	2421:19	2401:7,18	2481:15
255	9:21	2482:5,7,1	2422:10	2402:7,8,1	2535:7 2619:9
257	3:11	6 2483:6	2436:5,17	3 2412:19	2019:9
257	6:7	2530:13	2563 <b>:</b> 12	2415:9 2416:7,14	percentages
258	3:12 <b>,</b> 18	2544:21	2573:8	2416:7,14	2396:23
,22	2	2601:22	2582:4,13	2423:16	2483:14
258	34:17	2602:9,16,	2633:9	2423:16	Perfect
258	35:16	23	people's	2424:3	2390:14
259	1:6	-		14,18,22	
259	94:7	<b>pays</b> 2443:14	2578:10	2427:18,19	perhaps
259	9:19	2444:16	per	,24	2391:3
260	06:17	<b>peak</b> 2417:8	2394:11,13	2429:4,5,7	2400:21
260	08:5,23	2427:10	<b>,</b> 15	,10	2401:13
261	1:1	2428:3,22	2395:13,15	2430:25	2402:23
261	.2:21	2430:15,16	2396:1,10,	2431:9,20,	2422:7
	.5:1	,17,21,22	18,22	22	2430:10
	6:9,23	2431:3	2397:3	2436:1,6,7	2437:13
ı	.8:9	2432:9,16,	2417:17	,8,16	2448:8
ı	26:21	23,24,25	2419:5,6	2440:9,12,	2481:10
	29:12	2433:6,22,	2423:5	14,16	2484:5
	30:11	23	2428:5	2441:13,15	2526:24
263	34:25	2434:13,24	2441:24	2472:18	2540:17
pav 2	2397:2	, 25	2445:10,11	2482:21,22	2554:21
	0:22,23	2435:6,17,	2448:22	2487:11,14	2557:1
	8:6,13	21	2449:1,5	2492:22	2562:16
	, -	2446:12,22	2454:8,9		2576:21

TOD MANI.	TOBA HIDRO GRA		rage 2004 01	
2587:17	2576 <b>:</b> 25	2416:4,9,1	2468:8,9,2	,17,21,25
2590:21	2579:4,6,1	6	5	2508:3,10,
	8 2580:24	2417:12,13	2469:12,16	
period		,22 2419:1	,21 2470:6	2509:3,16
2403:6	personal-	2420:16	2471:4,12,	· · · · · · · · · · · · · · · · · · ·
2427:20,2		2423:1,2,1	21 2472:3	2
2435:18	2432:21	2,14,20,23	2473:18	2511:3,11,
2448:22	persons	2424:5,9,1	2474:10,17	22
2454:7,9,	2468:16	5,22	<b>,</b> 21	2512:8,13
1,18	2579 <b>:</b> 10	2425:6,15,	2477:14,15	2513:15,22
2456:19 2459:2,4	2580 <b>:</b> 24	20,24	2478:1,5,1	<b>,</b> 25
2497:23	person's	2426:12,16	0,17,20,21	2514:1,11,
2497:23	=	,20,25	<b>,</b> 24	17,22
2501:22		2429:16,19	2479:5,11,	2515:19
2520:11	perspective	2430:1,9	22	2516:5,19
2525:9	2408:10	2431:15,24	2480:3,9,1	2517:18,19
2535:8	2466:17	2432:3,4	4,21	2518:1,12,
2539:25	2475:16	2438:22,23	2481:12 <b>,</b> 19	15
2558:2	2510:12	2439:7,12,	2482:3,12,	2519:2,11,
2565:21	2529:4	20	23	16,17,24
2583:15	2548:12	2441:17,18	2483:4,10,	2520:2,6,9
2600:15	2558:23	2442:4,6,1	13,19	,19
2604:22	Peter	3	2484:10	2521:1,8,1
2623:9,15		2444:1,10,	2485:1,10,	4,23
·		15,22	15,17,25	2522:9,15,
periods	Peters	2448:7,8,1	2486:6	20 2523:21
2427:13	2386:2	8 <b>,</b> 25	2487:3	2524:7,9
2496:1	2387:13	2449:8,12,	2488:6,7,2	2525:1
2497:16	2400:10,12	17 2450:11	3 2489:18	2526:2,7,1
2498:9,12		2451:14	2490:9	0,11,19,22
16,20,23,	1,20	2452:13	2491:7	2527:5,10,
5		2453:16,17	2492:8,12,	20,24
2499:2,8,		2454:5	23	2528:8,17
8 2500:15	2403:20	2455:7,22	2493:1,4,2	
2503:18	2404:1,8,1	2456:4,7,1	2	25
2517:1	5,21	3,17	2494:4,9,1	2530:4,10,
permanent	2405:13	2457:2,12,	0,15,20,24	
2419:13	2406:7,18	15,21	2495:2,5,1	2531:2,12,
2436:15	2407:1,7,1	2458:4,8,1	1,17,22	17,23
2490:10	1,18,19,25	2459:18,25	2496:2,18 2497:1,6,1	2532:5,11, 15,18
2491:6	2408:6,14,	2460:13,17	0,18,25	2533:8,17
2492:4	20,25	,23	2498:7,13,	2534:2,5,1
2502:19	2409:4,8,1	2462:6,7,2	17	0,20
permanently	3,19	0	2499:3,14	2535:18,24
2491:4	2410:2,12,	2463:1,12,	2500:11,23	2536:3,10,
2547:16	24	14,19	2501:7,12	14,17,24
	2411:4,5,1	2464:4,15,	2502:2,7	2537:3,6,9
permitted	7	20	2503:2,9	,12,20
2504:21	2412:16,23	2465:10,11	2504:5,11	2538:1,3,1
2549:16	2413:10,17	,16,21	2505:1,13,	2,17
person	2414:5,15,	2466:3	16,20	2539:1,6,1
2510:13	20	2467:1,10,	2506:20	4,18,21
2511:6,25	2415:11,21	13,24	2507:10,13	2540:7,16,
		10,24	2507.10,13	2340.7,10,

2547:12,25 2548:11,17 25 2549:10,15 18 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2553:1,8,1 6 2554:3,19 2553:7,16, 21,24,25 2553:9,2586:20 2584:25 2590:11 2609:11 2620:10,12 2620:10,12 2620:10,12 2620:10,12 2620:10,12 2620:10,12 2621:3,4 2621:3,4 2622:11,12 2622:11,12 2624:21 2624:21 2625:1,6,1 2625:1,6,1 2630:25 2631:20 2632:7 2632:7	2:2 2:2 3:6 9:18 4:5 4:11 5:19 2:600:15 2:004 4:1,13 5:11 8:1,14 2:4,10 8:13,16
2541:5,17, 23 2542:4,5,1 plan 2545:20 2539:23 0,18 2546:7,25 2547:4 2553:25 2544:11,24 2546:7,15 2546:5,10, 14,18,24 2547:12,25 2548:11,17 2586:20 2586:20 2586:20 2548:11,17 2586:20 2548:11,17 2586:20 2590:11 2546:23 2548:11,17 2586:20 2590:11 2546:23 2548:11,17 2586:20 2551:16 2521:15 2531:1 2550:2,10, 2551:16 2621:1,12 2550:2,10, 2551:16 2622:11,12 2550:2,10, 2551:3,9,1 6,25 2552:9,14, 18,24 2553:1,8,1 2550:1,16,16 2553:1,8,1 2550:1,16,16 2553:1,8,1 2550:1,16,16 2553:1,8,1 2550:1,16,16 2554:2,10,17 2550:1,16,18,20 2555:1,16,18,20 2550:1,16,18,20 2555:1,16,18,20 2555:1,16,18,20 2555:1,16,18,20 2550:1,16,18,20 2555:1,16,18,20 2555:1,16,18,20 2555:1,16,18,20 2550	2:2 5:6 6:18 6:5 6:11 6:19 6:600:15 6:004 6:1,13 6:11 6:1,14 6:4,10 6:13,16 6:13
23	6:6 6:18 6:5 6:11 6:19 6:600:15 6:004 6:1,13 6:11 6:1,14 6:4,10 6:13,16 6:13
2542:4,5,1 plan 2545:20	6:6 6:18 6:5 6:11 6:19 6:600:15 6:004 6:1,13 6:11 6:1,14 6:4,10 6:13,16 6:13
0,18       2546:7,25       2551:16       poor 2573:4       2609         2543:1,8,1       2547:4       2553:25       portage       2614         5,21,25       planned       2555:14       2385:21       2634         2544:11,24       2480:24       2556:25       portion       possit         2546:5,10,       plans       2567:14       2396:19       2500         14,18,24       2542:19       2582:5       2404:5       post 2         2547:12,25       2553:9       2584:25       2426:23       post 2         2548:11,17       2586:20       2590:11       2432:8       2609:11       2462:2       2609:11       2462:2       2609:11       2521:15       2608         2549:10,15       2554:22       18,22       2535:1       2535:1       2608       2620:10,12       2535:1       2608         23       18,20       2622:13,4       2566:8       pottons       2493         2551:3,9,1       6,25       2552:10       2623:15,21       2592:21       2512         6,25       2552:9,14,       2550:15       2623:12       posited       2572         2553:1,8,1       2560:15       2631:20       position       2573 <t< td=""><td>2:18 4:5 4:11 <b>Ply</b> 0:19 2:600:15 <b>2:004</b> 4:1,13 5:11 8:1,14 <b>2:ial</b> 9:4,10 8:13,16</td></t<>	2:18 4:5 4:11 <b>Ply</b> 0:19 2:600:15 <b>2:004</b> 4:1,13 5:11 8:1,14 <b>2:ial</b> 9:4,10 8:13,16
2543:1,8,1	2:5 2:11 2:19 2:600:15 2:004 2:1,13 3:11 3:1,14 2:4,10 3:13,16 3:13
5,21,25       planned       2555:14       2385:21       possil         2544:11,24       2480:24       2556:25       portion       2500         2546:5,10,       plans       2567:14       2396:19       2500         14,18,24       2542:19       2582:5       2404:5       post 2         2547:12,25       2553:9       2584:25       2426:23       post 2         2548:11,17       2586:20       2590:11       2432:8       2602         2549:10,15       2554:22       2609:11       2462:2       2606         2549:10,15       2554:22       2620:10,12       25535:1       2608         2550:2,10,       2636:15,16       2621:3,4       2566:8       potent         2551:3,9,1       2636:15,16       2622:11,12       2592:21       2503         2552:9,14,       2552:10       2625:1,6,1       2592:21       2503         2552:9,14,       2560:15       2631:20       posited       2572         2554:3,19       2560:15       2631:20       position       2573         2555:7,16,       2446:4       2483:19       2591:23       2512:22       2503         2555:7,26       2512:9       2591:23       2512:22       2512:22	2:11 2:19 2:600:15 2:004 3:1,13 3:11 3:1,14 2:ial 3:4,10 3:13,16 4:13
2544:11,24 2545:7,15 2546:5,10, 14,18,24 2553:9 2586:20 2590:11 2544:12,25 2549:10,15 2549:10,15 2554:22 2555:12 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2552:10 2522:10 2523:1,6,1 18,24 2553:1,8,1 2553:1,8,1 2553:1,8,1 2555:7,16, 21,24,25 2512:9 2548:19 2556:25 2556:25 259:10 2590:11 2404:5 25422 2590:11 2432:8 2604:25 2608:10,12 2521:15 2608: 2608:20 2590:11 2462:2 2608:20 2590:11 2462:2 2508:20 2590:11 2462:2 2508:20 2590:11 2462:2 2508:20 2590:11 2462:2 2508:20 2590:11 2462:2 2508:20 2590:11 2462:2 2508:20 2590:11 2462:2 2551:15 2608:20 2535:1 2508:20 2535:1 2508:20 2535:1 2508:20 2535:1 2508:20 2538:20 2508:20 2508:20 2590:21 2	2004 8:1,13 8:1,14 8:1,14 8:1,14 8:1,14 8:13,16
2545:7,15 2546:5,10, 14,18,24 2542:19 2582:5 2548:11,17 25 2549:10,15 2559:10 2636:15,16 27 2559:10 2567:14 2590:11 2609:11 2609:11 2609:11 2521:15 2608 2550:2,10, 2636:15,16 2622:11,12 2552:20 2552:9,14, 18,24 2552:10 2552:10 2622:11,12 2622	2:19 2:004 2:1,13 5:11 3:1,14 2:14 2:4,10 3:13,16
2546:5,10, 14,18,24 2542:19 2586:20 2548:11,17 2549:10,15 2549:10,15 2553:12 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2555:12 2552:10 2552:9,14, 18,24 2555:7,16, 21,24,25 2551:2,9 2551:2,9 2551:2,9 2551:3,9,1 6 2554:3,19 2555:7,16, 21,24,25 2551:2,9 2446:4 2483:19 2551:23 2551:22 2551:20 2551:20 2551:20 2551:20 2551:20 2552:20	2600:15 2004 8:1,13 5:11 8:1,14 cial 9:4,10 8:13,16
2542:19 2542:19 2542:19 2582:5 2547:12,25 2548:11,17 2586:20  2590:11 2432:8 2604:25 2549:10,15 2554:22 2555:12 2555:12 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2552:10 2552:10 2552:9,14, 18,24 2553:1,8,1 2554:3,19 2555:7,16, 21,24,25 2512:9 2512:9 2512:9 2512:9 2512:9 2582:5 2582:5 2404:5 2582:3 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:5 2404:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2406:2 2535:1 2521:15 2606 2606 2607 2607 2608 2608 2608 2608 2608 2608 2608 2608	2004 8:1,13 8:11 8:1,14 2:4,10 8:13,16
2547:12,25 2548:11,17 25 2549:10,15 2554:22 2555:12 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2552:10 2552:10 2552:9,14, 18,24 2553:1,8,1 6 2554:3,19 2554:3,19 2555:7,16, 21,24,25 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:9 2553:1,8,1 2553:1,8,1 2553:1,8,1 2555:7,16, 21,24,25 2553:1,8,1 253:1,8,1 253:1,8	2004 8:1,13 8:11 8:1,14 2:4,10 8:13,16
2548:11,17 ,25 2549:10,15 ,18 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2553:1,8,1 2554:27 2554:3,19 2555:7,16, 21,24,25 2586:20 2590:11 2609:11 2609:11 2609:11 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2608 2620:10,12 2521:15 2530:1 2600:1 2530:1	1:1,13 5:11 8:1,14 2:ial 0:4,10 8:13,16
plant 2549:11, 17	5:11 3:1,14 <b>:ial</b> 9:4,10 3:13,16
2549:10,15       2554:22       2620:10,12       2535:1       2608         18       2550:2,10,       2636:15,16       2621:3,4       2566:8       potent         23       18,20       2622:11,12       2592:21       2592:21         2551:3,9,1       2623:15,21       2592:21       2592:21         6,25       2552:10       2624:21       2592:21       2514         2552:9,14,       2552:10       2625:1,6,1       2626:5       2574         2553:1,8,1       2560:15       2631:20       position       2575         2554:3,19       2446:4       2483:19       2398:16       2591:23       2512:22         2512:9       2512:9       2512:22       2632	3:1,14 cial 9:4,10 3:13,16
2554:22 2550:2,10, 23 2551:3,9,1 6,25 2552:9,14, 18,24 2553:1,8,1 6 2554:3,19 2554:3,19 2555:7,16, 21,24,25 2555:12 2555:12 2636:15,16 2621:3,4 2622:11,12 2622:11,12 2623:15,21 2624:21 2624:21 2626:5 2626:5 2626:5 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2631:20 2632:7 2538:16 2632:7 2632:7 2632:22 2632:7 2632:22	cial 0:4,10 0:13,16
2550:2,10, 23	0:4,10 3:13,16 4:13
23	0:4,10 3:13,16 4:13
2551:3,9,1 6,25 2552:9,14, 18,24 2553:1,8,1 6 2554:3,19 2555:7,16, 21,24,25  2551:3,9,1 2623:15,21 2624:21 2624:21 2624:21 2625:1,6,1 2626:5 2574 2630:25 2631:20 2632:7 2	3:13,16 4:13
6,25     2552:9,14,     2552:10     2624:21     posited     2572       18,24     play 2440:17     1 2630:25     2626:5     2572       2553:1,8,1     2560:15     2631:20     position     2573       6     2632:7     2389:14     2573       2554:3,19     2446:4     2483:19     2591:23     2410:25     2632       21,24,25     2512:9     2512:22     2632	1:13
2552:9,14, 18,24 play 2440:17	
2532:9,14, 18,24 2553:1,8,1 2560:15 2631:20 2632:7 2554:3,19 2555:7,16, 21,24,25 2512:9  play 2440:17 1 2630:25 2626:5 2574 2631:20 2632:7 2389:14 2575 2575 2631:20 2632:7 2389:14 240:25 2512:22 2632 2572 2572 2572 2572 2572 2572 2572 25	• '
play 2440:17 2553:1,8,1 2560:15 2631:20 position 2575 2532:7 2554:3,19 2555:7,16, 21,24,25 2512:9 2512:2	:6,12
2554:3,19 2555:7,16, 21,24,25  2560:13  2631:20 2632:7 2389:14 2581 2581 2581 2591:23 2512:22  2572 2632 2573 2632 2573 2573 2581 2581 2581 2581 2581 2581 2581 2581	
please 2554:3,19 2555:7,16, 2446:4 2483:19 2512:29 2512:29 2532:7 2309:14 2309	
2554:3,19 2555:7,16, 21,24,25 2446:4 2483:19 2591:23 2512:22 2632	
2555:7,16, 21,24,25 2512:29 2512:22 2632	
2512:9	
2557:4 2557:4	cially
2591:22 2580:10 2523:23,24 2453	3:13
2595:22 2613.4 2526:11 2524:22 2575	:2
2596:23   point-seven- 2525:25   power	
2599:1,3   plus 2590:7   three   2526:3,8   -	.14
2630:4 2542:16	
2610:18 24/0:1/,21 254/:12 254/:12	
2014:17   2407:22   101-101   2557:10   2477	
2013.0 2494.2 2500:25	
2510:1 2579:0 2588:22	
2010:12   2001:13   point-some-   2391:3   2504	
2620:14 point 2396:1 odd 2592:25	:0 ':4,13
2636:14 2412:25 2445:10 2595:6,14 2501	
Determine 2410-12	
policy	1:5,7
2597.12	
2446:15,16 2392:6 possession 2370	
pick 2451:4 2469:17 2424:3 2398:4 practs	
2568:25 2493:18 2509:4,10 possibility 2540	:5,8
<b>picked</b> 2497:25 2523:22 2489:24 2566	
2471.8 2502.2 4 2540:17,22 2524.21 2578	3:25
picks 2471.6 2516:20 2575:14 2577:2 pre 25	598:7
2518.8.18   policy-	
picture 2522:11,22 related possible pre-20	
2592:12 2528.11.21 2540:11 2409:22 2599	
piece 2451:5 ,25 2529:3 political 2499:25 2600	):
2300:19	

	A HIDRO GNA	01 00 2013	rage 2000 01	
precise	2464:23	2396:25	2634:2	<b>prime</b> 2531:7
2436:4	2506:16	2430:8	2635:6,25	principally
2604:25	2507:4,8	2470:5,13	price-	2530:6
precisely	2512:14	2472:14	elasticiti	2567:24
2398:14	2573:19	2481:9	<b>es</b> 2623:9	
2483:10	2587:2	2516:17		principle
2489:14	2589:3	2521:9	price-	2559:17
2620:12	2590:11,23	2544:20	elasticity	2561:20
2631:3	2591:4	2560:7	2621:17	2572:24
preclude	2595:20	2564:21	2622:13	principles
2480:14	2612:6	2565:7	2625:14	2558:5,11,
2492:5	2622:23,25	2595:5	prices	14 2561:22
	prepares	2609:8	2472:23	2564:1
predict	2511:25	previously	2484:21,22	2568:2,4
2489:12,14	preparing	2515:15	2488:9	2574:24
predictabili	2538:24	2570:6	2489:13,20	2587 <b>:</b> 22
<b>ty</b> 2560:10		2580 <b>:</b> 7	2490:24	prior
_	presence	price	2494:1	2540:5,24
predicted	2476:1	2413:13,18	2500:6	2600:4
2450:2	present	2432:16,17	2501:1	2601:2,11
predicting	2548:9,16	2433:6,16,	2504:17	2602:4
2489:25	2591:14	21	2505 <b>:</b> 22	2631:1
predominantl	presentation	2447:13,24	2506:6,17	private
y 2474:21	2415:16	2475:23	2507:7	2558:25
_	2594:13	2486:1,16,	2509:20,21	
prefer		18,20,23	2511:13	<b>pro</b> 2474:2
2467:20	presented	2488:13,19	2512:4	probability
2502:17	2602:16	,22	2520:1	2455:2
2503:14	2611:17	2489:24,25	2572:20 2574:1	2490:1
2515:2	2617:3	2490:1,2,4	2574:1	
2523:1	2623:7	2503:16	2626:17	probably
2593:3	2624:21	2509:17	2632:8	2421:17
preference	presently	2520:3	2634:5	2435:11,12 2436:10
2511:25	2469:23	2564:20		2441:1,15
2523:12	2498:7	2565:22	pricing	2482:4
2591:11	preserve	2571:7,10	2435:25	2498:23
preferred	2466:18	2572:11	2493:25	2556:17
2402:4	2473:12	2573:15	2497:22	2571:5
2495:13		2574:16	2498:19,23	2586:4
	Presumably	2575:8,10	2499:8,18	2593:4,5
preliminary	2570:20	2586:24 2597:14,15	2500:14 2567:20	2623:24
2546:15	presume	2597:14,15	2567 <b>:</b> 20 2572 <b>:</b> 2	2630:25
2593 <b>:</b> 17	2521:5	2618:3,25	2572 <b>:</b> 2 2587 <b>:</b> 23	2631:2,6,1
premise	pretend	,10,15,16,	ZJ01;ZJ	5 2632:11
2484:11	2558:12	19,24	primacy	2633:17
premium		2621:12,21	2559:25	2635:11
2453:3	pretty	2622:9,17	2561:6	problem
	2417:20	2625:5	primarily	2583:9
preparation	2432:20	2630:22	2531:17	2583:9
2506:6	2434:4	2631:7		
prepared	2556:17	2632:11,24	primary	problems
2454:22	previous		2574:10	2582:10
2454:22	previous	2633:11		

			1496 2007 01	
procedure	Professor	2504:15	2426:21	2540:13
2479:12	2595:4	2510:5		2541:11
		2512 <b>:</b> 25	proportion	2542:15
procedures	profitabilit	2513 <b>:</b> 11	2470:18 2575:3	
2479:17	<b>y</b> 2500:24	2514:7,23,	25/5:3	<b>proved</b> 2583:3
proceeding	profitable	25	proportional	
2392:11,13	2501:6	2519:8 <b>,</b> 21	<b>ly</b> 2629:5	provide
<b>,</b> 18 2494:5	program	2554:5	proportionat	2389:3
2525:5	2389:19	2573 <b>:</b> 7	<b>e</b> 2482:19	2398:16
2548:22	2400:4	2581:23	2622:17	2400:17
2596:9	2427:4	programming		2413:13
2629:16	2429:17	2628:19	proportionat	2422:18,2
proceedings	2431:25		<b>ely</b> 2441:5	2433:21
2392:9	2442:14,18	programs	proportioned	2443:19,2
2406:10	2443:1,12,	2467:14	2619:18	2448:1
2513:17	13,14,15,2	2482:7,21		2454:1
2545:19	5	2484:1,23	proposal	2455:17
	2444:12,17	2552 <b>:</b> 22	2424:24	2460:24
process	,24	2553:6	2469:15	2462:10
2511:21	2445:7,18	2564:16	2565:8,10	2473:23
2531:3,4	2447:7,16,	2573 <b>:</b> 5	2589:15,23	2475:10
2536:1	24 2448:16	progress	2591:1,20	2476:15
2538:24	2449:2	2540:12	proposals	2487:9
2539:4	2457:9		2590:5,7	2491:17
2558:4,8	2459:21	progresses	2591:1	2502:3
2590:21	2463:6,22	2617:21	2593:1	2506:21
2593:2,8	2467:6,14,	prohibitive		2508:8
processes	16,18	2546:19	proposed	2520:10
2433:4	2468:14,17	projected	2393:6,21,	2530:13
2634:8	2469:7,23	2539 <b>:</b> 9	22 2394:4,9,2	2547 <b>:</b> 22
produce	2472:6	2615:14	3,24	2549:19,2
2483:11	2479:24	2615:14	2395:4,7	2554:5,9,
2550:17	2480:12		2396:13,16	3 2555:8,
2550:17	2483:20,24	prolonging	2414:24	2556:3
produced	2484:6,12	2524:11	2423:19	2568:18
2636:20	2485:3,19	promote	2423:19	2598:12
produces	2487:4	2587:1	2442:20	provided
2636:22	2489:3,9		2442.20	2398:14
	2490:10,16	promoted	2465:11	2406:14
producing	,23	2563:23	2466:6	2429:19
2488:3	2491:3,14,	promoting	2512:4	2442:19
2551:23	17,18	2427:8	2618:13	2443:5
product	2492:3,4,5	2563:23	2620:9,22	2469:6
2632:17	,6,9,14	2580 <b>:</b> 12		2478:15
4	2493:9,14		proposing	2485:19
production	2494:6,7	pronouncemen	2393:16,20	2497:13
2486:5,22,	2495:19 <b>,</b> 23	ts 2389:10	2584:23	2508:4,6
25	2497:15	2509:5,11	propositions	2533:10
2525:8,10	2498:6	propane	2558:7	2534:16,1
2552 <b>:</b> 3	2499:12	2495:24		2536:10
professional	2501:14	proper	prospective	2548:22
2505:4	2503:4,7,1	2628:24	2527:21	2564:3
2507:22	0,20,25	2020:24	2528:2	2583:25
	•	properly	2538:24	

PUB = MANITUBA	A HIDRO GRA	01-08-2013	Page 2000 Ol	L 2707
2623:13	2398:25	quantities	2617:25	2395:1
2623:13		_		
provides	2457:6	2472:6	2631:6,12	2396:12,25
2475:8,9,1	2512:6,24	quantity	2632:20	2397:19
0 2481:13	2513:9	2619:5,14,	2636:9,11,	2398:18,21
2490:12	2545:17	16	25	2399:15,23
2523:14	2547:10	10	queue	2400:5,10
2323.14	2590:16,22	quarries	2491:13	2422:17
providing	published	2496:8		2423:25
2400:19	-		2499:4,10	2464:16
2411:21	2571:20	quarter	quick 2539:1	2510:9
2413:12	purchase	2449:7	2617:24	2513:14
2443:8,17	2437:2	Quebec		2522:2
2465:17	2485:13	2421:1	quickly	2523:10,23
2487:8		2437:15,22	2492:15	
2499:16	purchased	,23 2568:1	2556:3	2524:6,10
	2487:10		<b>quite</b> 2450:9	2525:12
2501:5	purpose	question	2516:24	2526:6,8
2524:16	2397:16	2419:25	2516:24	2564:3
2549:11		2420:24		range
2593:21	2399:16	2421:24	2581:24	2404:17
province	2400:1	2426:1	2587:13	2416:3
2432:22	2569:1	2438:24	2600:5	2421:6
2437:19,21	2596:1	2457:3		2436:12
2439:6	2628:17,18	2474:18	R	
2488:21	purposes	2499:11	rainfall	2488:13
	2406:10	2510:23		2585:20
2582:14	2416:22	2525:2	2428:10	2599:15
provincial	2427:22		Rainkie	2601:15,19
2397:9	2604:6	2542:6	2387:8	2605:5
2601:1,19		2554:20	2390:15	2606:3
2602:7	2631:16	2558:1	2391:8,15	2608:19
	pursuing	2578:12	2537:21,25	2620:17
provision	2525:14	2582:17	2538:4,5	2622:14
2529:1,12	- 1 - 0400 16	2584:20	2541:15	2626:9
provisions	<b>puts</b> 2489:16	2594 <b>:</b> 12	2556:21	2632:1,9
2528:14	2537:21	2613:14	2561:9,12,	rare 2447:18
	2563:16	2624:6,9	14 2636:10	
<b>proxy</b> 2520:7	putting	questioned		2454:24
<b>PUB</b> 2397:20	2524:13	2522:2	Rainkie's	rarely
2398:3	2534:9		2390:20	2450:6
2414:22	2550:3	questioning	raise 2526:4	2477:20
2489:1	2000.0	2560:7	2586:5	2479:9
2497:20		2594:10,13	2300:3	. 0484 0
2504:18	Q	augations	raised	<b>rata</b> 2474:2
2519:4	quantificati	questions	2499:11	ratchet
1	on 2519:22	2391:17	2504:5	2515:1,5,1
2524:12,15		2399:21,24	2581:10	4,16,20
2584:1	quantifies	2400:4,16	Dama ea	2516:20
2588:24	2402:3	2440:2	Ramage	2517:2,20
PUB-approved	2489:4	2442:16	2386:4	2518:9,19,
2500:16	2519:6	2514:2	2387:12	21
Dublie	quantify	2542:16	2390:7,10,	
Public	2406:9	2556:23,24	14	ratcheted-up
2385:3,20	2483:5	2557 <b>:</b> 23	2391:12,13	2516:9
2389:17	2487:14	2595:16	2392:10	<b>rate</b> 2385:7
2391:23	240/•14	2616:21	2393:14	2387:6
				230/:0

	-		1490 2003 01	
2388:5	2529:5	2625:22,23	2535 <b>:</b> 7 <b>,</b> 22	ratio
2391:6	2534:12,22		2542:2,7	2470:18
2392:14,18	2535:4,9,1	ratepayers	2547:2,21	2514:14
,22,23	0,12,16	2537:14	2548:2	2555:5
2393:10,15	2540:3,5	rates	2558:1,9	2619:14
,20,23	2542:12,20	2389:19	2559:9,18	
2394:10,19	2545:4	2390:21	2560 <b>:</b> 10	rationale
2395:24	2560:8	2391:2	2561:25	2618:15
2396:5,6,9	2561:1	2392:2,3,5	2562:2	rats 2392:21
,16,18	2562:13,19	,21,25	2563:6,20	Raymond
2397:2,16	,24	2393:11	2564:22	2385 <b>:</b> 15
2400:4,23	2563:5,22	2395:2,6,8	2565:2,3,4	2416:18
2401:3,7,1	2564:4,9	,10,11,21,	,8,16	2417:10
0 2402:12	2565:10,11	22	2566:4,7,1	
2403:1,3,8	,17,18,19,	2396:8,13,	6 2571:18	2419:2,19
,15	21,23	19,20	2582:18	2432:3,5 2434:10
2407:13,16	2566:1,3,1	2402:2	2583:9,16	
2408:10	3,18,21	2403:7	2584:5	2435:16 2438:13
2410:4,9,1	2567:1	2409:21	2586:5 <b>,</b> 17	
4 2413:9	2568:1,3,7	2413:7	2587:3,6,1	2441:4
2416:11	,20	2414:24,25	5 2590:10	2445:1,5,2
2418:2,7	2569:2,3,1	2418:18	2593:18	4 2446:3
2420:5,6	3,14,23,24	2420:22,25	2594:3,15	2452:15
2423:16	2571:21	2423:18,19	2598:15,19	2461:25
2424:2,25	2572:3	,20 2424:7	2602:19	2465:5
2426:12,17	2573:15	2433:8	2603:18	2487:16
,22 2427:6	2574:15,17	2436:1,6	2616:16	2517:6,13
2428:24	,20,21	2437:7	2617:13	2519:14
2429:3,12,	2575:1,17	2438:2,8	2618:24	2575:21
14 2430:4	2577:20,24	2442:14,18	2621:6	2578:18,21
2431:21,22	,25 2578:1	<b>,</b> 25	2624:25	2580:18
,23,25	2582:6	2444:12,17	2625:7	2586:8
2432:8	2583:5	,24		2594:12
2433:4,23	2584:6,23	2445:18	rate-setting	
2434:4,6,9	2585:5	2447:15	2558:5,15	2636:6
2435:9,12	2586:20	2448:16	rather	re 2385:6
2436:12,15	2587:4	2457:9	2393:25	2388:5
2438:10	2588:9	2459:21	2412:23	2459:6
2440:22	2589:1,5,2	2463:22	2419:20,24	2482:6
2442:25	3	2468:14	2428:18	2564:4,9
2443:4,12,	2590:20,24	2472:6	2459:15	reach
15 2447:7	2591:11,20	2487:20	2461:2	2486:3,20
2467:14,16	2592:5,13,	2497:15	2469:8	2488:17
2483:21	19,25	2500:8,16	2474:2	
2502:19	2595:17	2502 <b>:</b> 21	2510:9	reached
2510:5,14,	2600:10	2504:9	2521:6	2446:16
15 2515:1	2602:21,24	2511:7	2568:19	2599:4
2518:16,24	2614:18,21	2512:25	2600:9	2603:13
,25	,22	2513:11	2603:18	2610:20
2526:13,15	2618:13,18	2515:16	2604:25	reaching
,25	2620:22	2518:8	2609:22	2561 <b>:</b> 17
2527:7,9	2623:2	2520:11	2618:15	
2528:10,13	2624:20	2522:7,23	2632:14	reading
,19,22		2523:4		2437:6
	•			

PUB - MANITUBA	HIDRO GRA	01-08-2013	Page 2690 01	. 2707
2495:6	2497:12	2413:11	15 2541:25	2474:6
2524:14	2504:17	2413.11	2559:13	2490:14
2324:14		recognize		2490:14
ready 2482:8	2579:12	2413:6,7	2566:8,10,	reducing
2595:23	2613:24	2428:23	11 2567:21	2443:7,8
2596:8	rebuttal	2558:19	2569:21	2552:7
real 2583:9	2589:1,11,		2570:1,3	reduction
rear 2303:9	16	recognizing	2600:8	2500:5
reality	11	2403:1	2605:13	
2498:1	recall	2428:15	2613:2	2625:16,25
realize	2422:4	2433:10	2614:5	2631:24
2455:4	2455:22	2443:16	recovered	re-enters
	2463:9	2467:25	2405:25	2472:25
2635:25	2514:8	2512:14	2534:6	
really	2540:23	2541:23	2535:15	reestablish
2405:10	2554:21	2597:19	2567:7,9	2447:19
2434:17,24	2589:7,17	2608:19	2598:14,19	re-establish
2440:21	2604:3	recollection	2605:17	2459:3,9,1
2477:24	2615:25	2514:12		3
2491:23,25	2616:3	2601:23	recovering	
2493:15	2618:4,12	2602:11	2568:19	re-
2510:18	2624:2,4,9	2604:10	2613:17	establishe
2515:17	recalling		recovery	<b>d</b> 2473:6
2525:11	2424:13	recommend	2404:16	reestablishi
2561:11	2493:11	2594:14,22	2528:14	<b>ng</b> 2450:10
2567:1,14	2473.11	recommendati	2529:2	<b>3</b> 2100 <b>,</b> 10
2577:15	recaptured	on 2579:2	2540:8	re-
2614:14	2569:15		2541:1	establishi
	receive	reconcile	2567:6	<b>ng</b> 2459:14
reason	2398:17	2544:15	2600:14	reestablishm
2466:9,14	2418:14	reconvenes	2613:12,25	ent
2468:25		2592:4	2013:12,23	2450:13
2469:1	received		reduce	2450.15
2472:4	2528:16	record	2429:1,2	re-
2473:18	2533:1,15	2422:7	2434:24	establishm
2477:19	2544:7	2483:14	2436:21	ent
2489:11	2601:22	2511:23	2446:18,21	2459:15
2570:21	2606:12	2524:14	2452:11	refer
reasonable	2608:1	2627:21	2467:20	2395:10
2501:19	2609:7,9	2629:16	2472:5	2418:5
2612:8	recent	recorded	2477:4,5	2427:14
2617:20	2606:25	2426:20	2499:24	2534:25
		2457:24	2517 <b>:</b> 20	
reasoning	recently		2551:24	2575 <b>:</b> 22
2628:24	2584:4	recov 2605:6	2574:12	reference
reasons	recess	recover	2577:1,6	2417:3
2433:10	2468:1,12	2403:21	2624:7	2481:15
2434:8	2513:16	2404:23	2625:12	2497:22
2442:25		2409:5,25	reduced	2498:8,11,
2443:23	recessing	2411:20		19
2453:1	2468:5	2412:19,25	2467:7	2499:7,17
2457:1	2513:19	2413:5	2480:1	2500:14
2462:15	2557 <b>:</b> 6	2533:13	reduces	2503:21
1 2466.8	2596:5		2443:12	2544:2,12
2466:8 2469:22	2596:5 recognition	2539:24 2540:3,12,	2443:12 2466:12	2544:2,12 2563:14

2457:7 2493:15 2586:5 2608:20 2609:19 2611:23 2612:4  2481:23,24 2481:23,24 2483:6 2495:8,10 2500:1,9 2500:1,9 2500:23 2462:3 2595:8  2595:8	- 00	MANIIODA	HIDRO GRA	01-08-2013	Page 2691 01	
2599:25   2584:24   regulator   2545:18   2545:18   2567:1,17   2455:11, 2   2566:24   2567:1,17   2455:11, 2   2560:24   2560:12   2560:14   2560:12   25	259	91:9	reflective	2506:4,11	2392:25	2446:6
2605:2	259	99:25			2420:4	2528:24
2615:23	ı			_	2545:18	
referenced         2480:7         2580:12         2562:1         2508:1         2492:7         2508:1         2508:1         2508:1         2508:1         2508:1         2508:1         2508:1         2508:1         relations         2551:24         2508:2         2508:1         relations         2551:24         2551:24         2551:24         2551:24         2551:24         2551:24         2551:24         2551:24         2430:14         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12         240:12 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>						_
2471:7   2521:2   2563:21   2508:1   reliance   2551:24   2550:12   2611:21   regulators   2469:2   2552:7   references   2542:7   2566:23   relationship   2607:23   2580:4   2430:14   2462:10   2522:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:4   2471:20   2502:12   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:14   2580:12   2580:14					·	
2550:12   2611:21   regulators   2551:12   2552:17						2482:7
Teference   2590:4   Teferesh   2559:18   2469:2   2552:7				2563:21	2508:1	reliance
2590:4         refreesh         25542:7         2566:23         relationship         relief           2604:21         2627:23         2580:4         2430:14         2462:10           2604:21         2633:13         regulatory         2447:20         2502:12           referencing         refused         2390:21         2488:8,11         reluctance           2590:9,10         regard         2392:8         2634:9         2525:12           2397:1         2614:18         2558:8         relationship         2511:20           2397:1         2614:18         2558:8         relationship         2511:20           2515:4         regarding         2575:13         s 2562:19         relying           2515:4         2397:21         reimbursed         2392:19         rem 2612:1           2560:6         2397:21         reimbursed         2392:19         rem 2612:1           2567:1,3         2509:11         relatable         2427:10         2506:11           2576:1,3         259:11         relatable         2430:17         2615:17           2596:11         2572:11         259:12         2475:12         2431:12         2467:12           2611:25         2476:12         2431:12	1		2611:21	regulators	relations	2551 • 24
references         2542:7         2566:23         relationship         relief           2604:21         2627:23         2580:4         2430:14         2462:10           2618:5         2633:13         regulatory         2447:20         2502:12           referencing         refused         2391:21         2488:8,11         2525:17           2590:9,10         regard         2392:8         2634:9         2525:17           referred         2469:18         2491:20         2636:14         reluctant           2397:1         2614:18         2558:8         2561:22         relationship         reluctant           2515:4         2389:4,11         2558:8         relationship         relying         2539:21           2463:11         2422:19,23         relationship         relying         2539:21         remying         2539:21         remying         2539:21         remying         2539:21         remin         2539:21         remin         2539:21         remin         2420:23         remin         remin         2420:23         remin         remin         2420:23         remin         remin         2420:23         remin         2420:23         remin         2420:212         2420:212         remin         2420:212 </td <td>259</td> <td>90:4</td> <td>refresh</td> <td>_</td> <td>2469:2</td> <td></td>	259	90:4	refresh	_	2469:2	
2604:21   2627:23   2580:4   2430:14   2462:10   2502:12     referencing	refe	rences				
2618:5         2633:13         regulatory         2447:20         2502:12         2502:17         2502:17         2502:17         2502:17         2502:17         2502:17         2502:12         2502:19         2511:20         2511:20         2511:20         2511:20         2511:20         2502:19         2511:20         2502:19         2503:22         2539:21         2502:19         2539:21         2502:19         2539:21         2502:17         2502:19         2539:21         2502:19         2539:21         2502:19         2503:21         2502:19         2539:21         2502:19         2539:21         2502:19         2503:21         2502:19         2503:21         2502:19         2503:21         2602:13         2509:11         2509:11         2600:12         2470:12         2470:12         2470:12         2470:12         2470:12         2470:12         2470:12         2470:12         2470:12         2470:12					- 1	
referencing         refused         2390:21         2448:8, 11         reluctance         2525:20         2391:2         2619:4         reluctance         2525:12         2590:9, 10         regard         2391:2         2619:4         reluctance         2525:17         2525:12         2591:20         2636:14         reluctant         2525:17         2525:18         2634:19         2511:20         reluctant         2511:20         relying         2511:20         relying         2539:21         relyi						
2442:21         2525:20         2391:2         2619:4         2525:17           2590:9,10         regard         2392:8         2634:19         2525:17           referred         2469:18         2397:1         2614:18         2558:8         relationship         2511:20           2515:4         regarding         2551:3         s 2562:19         2539:21         relying           2550:6         2389:4,11         2397:21         reimbursed         2392:19         rem 2612:1           2560:6         2397:21         reimbursed         2392:19         rem 2612:1           2576:1,3         2509:11         relatable         2427:10         2506:17           2587:5         2542:17         2598:9         2430:17         2506:17           2599:24         2600:19,20         2476:12         2431:12         2472:12         2566:9           2624:14         regards         2389:22         2483:15         2398:7         2566:9           reflect         regards         2389:22         2483:15         2398:7         266:5           reflect         region         2405:22         254:21         255:20         remains           reflect         region         2405:22         254:21 <td></td> <td></td> <td></td> <td></td> <td></td> <td>2502:12</td>						2502:12
2442:21         2525:20         2391:2         2619:4         2552:17,           2590:9,10         regard         2392:8         2634:9         2636:14         reluctant           2575:13         2614:18         2558:8         relationship         2511:20           2515:4         2389:4,11         2561:22         s 2562:19         relying           2556:60:6         2397:21         2530:2,5,7         2420:23         remain           2576:1,3         2599:11         relatable         2427:10         2506:17           2596:11         2572:11         relatable         2431:3         remain           2500:19,20         2476:12         2415:7         2431:3         remaining           2601:25         2541:20         regardless         2415:7         2437:8         2467:17           2601:25         2476:12         2431:12         2472:12         2566:9           reflect         regards         2389:22         2483:15         remains           2409:21         247:11         2406:12         2555:20         remains           2409:21         247:11         2406:12         2555:20         remediate           2395:20         2471:1         2406:1,24         2555:20<	ı	-	refused			reluctance
zefored referred         2469:18 2491:20 2431:20 2536:14         2636:14 reluctant 2511:20         reluctant 2511:20           2397:1 2514:18 2513:4         2614:18 2558:8 2561:22 s 2562:19         2511:20 relying 2575:13         relationship 2559:21         relying 2539:21           2515:4 2560:6         2389:4,11 2397:21         relmbursed 2530:2,5,7 2420:23 rem 2612:1         rem 2612:1           referring 2463:11 242:19,23 2576:1,3 2509:11 2587:5         2509:11 242:17 2598:9         2427:10 2506:17 2615:17 2598:9         2430:17 2615:17 2615:17 2598:9         2430:17 2615:17	ı	-	2525:20	2391:2	2619:4	
referred         2469:18         2491:20         2636:14         2511:20           2397:1         2614:18         2558:8         2556:22         \$ 2562:19         relationship         2539:21           2511:20         2560:6         2397:21         2389:4,11         2399:21         2500:25,7         2420:23         rem 2612:1           2463:11         2422:19,23         rela 2555:19         2421:1         2506:17         2506:17           2587:5         2542:17         2598:9         2430:17         2506:17         2506:17           2599:24         2600:19,20         2476:12         2431:12         2472:12         256:19           2601:25         2541:20         relate         2434:5,6         2467:17         256:9           2601:21         regards         2475:19         2431:12         2472:12         256:9           2601:21         region         2405:22         2483:15         2398:7         2626:5           reflect         2471:11         2406:1,24         2555:20         2393:2         253:2           reflect         2476:10         2481:23,24         240:12         253:2         266:5           reflect         region         2405:2         256:2         256:5 <td>259</td> <td>90:9,10</td> <td>regard</td> <td>2392:8</td> <td>2634:9</td> <td></td>	259	90:9,10	regard	2392:8	2634:9	
2397:1   2614:18   2561:22   2561:29   5256:19   2575:13   2575:13   2575:13   2575:13   2575:13   2576:	refe	rred	_	2491:20	2636:14	
2514:18				2558:8	relationshin	2511:20
Pagarding   2575:13   2539:21   2539:21   2539:21   2560:6   2389:4,11   2397:21   2530:2,5,7   2420:23   remain   2576:1,3   2599:11   2572:11   2598:9   2430:17   2615:17   2596:11   2572:11   2598:9   2430:17   2615:17   2599:24   2620:19,20   2476:12   2431:12   2472:12   2566:9   2431:25   2624:14   2475:16   2598:9   2433:15   2398:78   2431:12   2475:16   remains   2666:9   2624:14   region   2405:22   2438:15   2398:7   2439:21   2508:7   2626:5   2471:11   2406:1,24   2555:20   2472:12   2566:9   2439:21   2533:21   2626:5   2499:21   2472:1,22   2412:7,9,1   2499:21   2476:10   2481:23,24   2420:12   2607:10, 2608:20   2635:5   2295:23   2462:3   2607:10, 2609:19   Regis   2500:2,9   2448:2   2610:23   2610:25   2611:23   2385:14   2516:25   2478:9   2598:8   2609:17, 16   2533:24   2509:17   2609:17   2620:	1			2561:22	- 1	relying
2389:4,11   2389:4,11   2397:21   2530:2,5,7   2420:23   2463:11   2422:19,23   2530:2,5,7   2420:23   2576:1,3   2509:11   2598:5   2427:10   2506:17   2598:9   2430:17   2615:17   2599:24   2600:19,20   2611:25   2624:14   2601:21   2401:21   2407:10   2566:9   2611:25   2624:14   2611:25   2541:20   2431:12   2472:12   2566:9   2611:25   2541:20   2405:22   2483:15   2398:7   2601:21   2615:17   2615:17   2615:17   2616:25   2612:12   2612:24   2612:24   2612:25   2612:24   2612:25   2612:24   2612:25   2612:24   2612:25   2612:24   2612:25   26				2575:13		
referring         239:21         2530:2,5,7         2420:23         remain           2463:11         2422:19,23         rela 2555:19         2421:1         2401:21           2576:1,3         2509:11         relatable         2427:10         2506:17           2587:5         2542:17         2598:9         2430:17         2615:17           2599:24         regardless         2415:7         2437:8         2467:17           2601:25         2476:12         2431:12         2472:12         2566:9           2611:25         2541:20         related         2475:16         remaining           refers         2485:21         2389:22         2483:15         2398:7           2601:21         regards         2389:22         2483:15         2398:7           2601:21         region         2405:22         256:20         remediate           2395:20         2471:11         2406:1,24         2555:20         remediate           2395:20         2472:12,22         2412:7,9,1         relatively         remediate           2493:15         238         2495:8,10         2405:6         2531:20           2586:5         regional         2483:23         2420:12         2607:10 <t< td=""><td></td><td></td><td>2389:4,11</td><td>reimbursed</td><td>relative</td><td></td></t<>			2389:4,11	reimbursed	relative	
2463:11         2492:19,23         rela 2555:19         2440:23         remain           2576:1,3         2509:11         2587:5         2542:17         2598:9         2430:17         2615:17           2596:11         2572:11         2598:9         2430:17         2615:17           2599:24         regardless         2415:7         2437:8         2467:17           2601:25         2476:12         2431:12         2472:12         2566:9           2624:14         regards         2389:22         2483:15         2398:7           2601:21         region         2405:22         2546:21         remains           reflect         region         2405:22         2546:21         remediate           2395:20         2472:21,22         2412:7,9,1         relatively         2532:1           2409:21         ,23         2,15,20         2405:6         remediate           2457:7         ,23         2,15,20         2405:6         remediate           2586:5         regional         2483:6         2436:22         2607:10           2608:20         2635:5         2500:19         2448:2         2610:23         2610:23           2611:23         2385:14         2516:25 <td< td=""><td></td><td></td><td>2397:21</td><td></td><td>2392:19</td><td>rem 2612:14</td></td<>			2397:21		2392:19	rem 2612:14
2576:1,3 2587:5 2598:11 2596:11 2599:24 2600:19,20 2611:25 2624:14  regardless 2601:21 2611:25 2624:14  refers 2601:21 reflect 2395:20 2472:21,22 2472:12 2598:9 2430:17 2613:3 2616:25 266:9  region 2405:22 2472:12 2555:20 2471:11 2406:1,24 2457:7 2437:8 2389:22 245:19 2392:14 2500:21 2626:5 region 2405:22 2472:12 2566:9 remaining 2452:19 2392:14 2500:21 2626:5 remediate 2395:20 2471:11 2406:1,24 2555:20 2493:15 2586:5 2608:20 2635:5 regional 2483:6 2483:6 2495:8,10 2440:11 2610:23 2612:4 2612:12 2626:5 2609:19 2611:23 2612:4 2614:12 2612:15 2612:23 2612:4 2614:12 2610:23 2612:4 2614:12 2610:23 2612:4 2616:17 2609:19,16 2610:7,11 2609:12,16 2609:12,16 2609:12,16 2609:12,16 2610:7,13 2617:2 Regulation 2392:3 regulations 2506:11 2637:32 2617:2 reflecting 2586:9 regulations 2506:17 26237:23 2610:41 26237:23 2603:16 2600:6,11 relatable 2430:17 2431:3 2437:23 2447:10 2447:10 2447:10 2447:10 2447:12 2556:17 2431:12 2449:7 2598:9 2443:15 2447:16 2447:10 2447:11 2447:16 2447:10 2447:16 2447:10 2447:11 2447:10 2447:11 2447:10 2447:11 2447:10 2448:15 2448:19 2448:1		_	2399:21		2420:23	remain
2576:1,3   2509:11   2598:9   2430:17   2615:17   2599:24   2599:24   2476:12   2431:12   2472:12   2566:9   2431:12   2566:9   2431:12   2566:9   2566:9   2624:14   2599:24   2622:19   2392:14   2500:21   2626:5   2624:14   2610:21   2472:12   2409:21   2472:12   2406:1,24   2555:20   2472:12   2531:20   2472:12   2531:20   2452:19   2392:14   2555:20   2532:1   2626:5   2470:12   2472:12   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:7,9,1   2412:12   2412:15   2566:9   2483:15   2531:20   2531:20   2608:20   2635:5   2495:8,10   2440:11   2610:23   2610:19   2610:23   2385:14   2516:25   2478:9   2595:8   2482:19   2595:8   2482:19   2595:8   2482:19   2595:8   2482:19   2595:8   2482:19   2595:8   2531:20	246	63:11	2422:19,23	<b>rela</b> 2555:19	2421:1	2401:21
2587:5 2596:11 2599:24 2600:19,20 2611:25 2624:14  regardless 2476:12 2541:20 2612:1  regards 2430:17 2598:9 2472:12 2541:20  relate 2437:8 2472:12 2566:9 261:21  regards 2452:19 2392:14 2500:21 2626:5  reflect 2395:20 2471:11 2406:1,24 2457:7 2437:8 2389:22 2483:15 2398:7 2601:21  region 2405:22 2471:11 2406:1,24 2555:20 2493:15 2472:21,22 2412:7,9,1 2493:15 2586:5 2478:10 2481:33,24 2420:12 2493:15 2586:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2608:20 2635:5 2500:1,9 2448:2 2610:23 2611:23 2612:4 2614:12 2620:71 2620:19 2611:23 2612:4 2614:12 2620:71 2	257	76:1,3	2509:11	relatable	2427:10	
2596:11	258	37:5	2542:17		2430:17	
26900:19,20         regardless         2476:12         2431:12         2437:38         2467:17           2611:25         264:14         2541:20         related         2475:16         remains           refers         2452:19         2392:14         2500:21         2626:5           reflect         region         2405:22         256:20         remediate           2395:20         2471:11         2406:1,24         2555:20         remediate           2493:15         2389:21         2405:22         2532:1           2409:21         ,23         2,15,20         2405:6         2532:1           2493:15         2476:10         2481:23,24         2420:12         2531:20,           2493:15         2483:6         2436:22         2607:10,           2586:5         regional         2483:6         2436:22         2607:10,           2608:20         2635:5         2500:1,9         2448:2         2610:23           2609:19         Regis         2502:23         2462:3         remember           2611:23         2385:14         2516:25         2478:9         2595:8           reflected         2420:7,11         2533:24         258:15         2604:25           2389	259	96:11	2572:11		2431:3	
2600:19,20 2611:25 2624:14  refers 2601:21  regards 2405:19 2405:22 2409:21 2472:21,22 2472:21,22 2472:21,22 2409:21 2476:10 2481:23,24 2406:1,24 2493:15 2586:5 2608:20 2608:20 2608:20 2608:20 2608:20 2608:20 2611:23 28egis 2611:23 28egis 2612:4 2610:23 2611:23 2611:23 2611:23 2611:23 2612:4 2610:23 2611:23 2612:4 2610:23 2612:4 2610:23 2612:4 2610:23 2612:4 2610:23 2612:15 2612:4 2610:123 2612:4 2610:123 2612:4 2610:123 2612:4 2610:123 2612:4 2610:123 2612:4 2610:7,13 2617:2 2609:12,16 2609:12,16 2609:12,16 2609:12,16 2609:12,16 2610:7,13 2617:2  reglecting 2584:9  regulation 2598:11 2597:11 2693:16 2598:11 2598:11 2598:11 2598:10 2603:16 2610:6,11  releases remind 2437:32 2506:1	259	99:24	regardless		2434:5,6	=
2611:25         2624:14         2541:20         2431:12         2472:12         2300:3           refers         2452:19         2389:22         2483:15         2398:7         2626:5           reflect         region         2405:22         2546:21         remediate         2532:1           2395:20         2471:11         2406:1,24         2555:20         remediate           2395:20         2472:21,22         2412:7,9,1         relatively         2532:1           2409:21         ,23         2476:10         2481:23,24         2420:12         2531:20           2457:7         ,23         2476:10         2481:23,24         2420:12         2607:10           2586:5         regional         2483:6         2436:22         2607:10           2586:5         regional         2495:8,10         2440:11         2610:23           2608:20         2635:5         2500:1,9         2448:2         2612:15           2609:19         Regis         2502:23         2462:3         remember           2612:4         258:14         2516:25         2478:9         2595:8           2612:4         2420:7,11         2529:2         2503:17         2604:25           2389:23         24	260	00:19,20	_		2437:8	
refers         2452:19         2389:22         2483:15         2398:7           2601:21         region         2405:22         2546:21         2626:5           reflect         2471:11         2406:1,24         2555:20         remediate           2395:20         2472:21,22         2412:7,9,1         relatively         2532:1           2409:21         ,23         2476:10         2481:23,24         2420:12         2531:20,           2493:15         2476:10         2483:6         2436:22         2607:10,           2586:5         regional         2483:6         2436:22         2607:10,           2609:19         Regis         2500:1,9         2448:2         2610:23           2611:23         2385:14         2516:25         2478:9         2595:8           2612:4         2385:14         2516:25         2478:9         2595:8           reflected         2420:7,11         2533:24         258:15         248:19         2595:8           2389:23         2431:21,23         2535:13         2586:2         remind           2509:12,16         2553:14         2586:11         2633:8         2518:2           reflecting         2392:3         2603:16         2574:9	261	11:25		2431:12	2472:12	2566:9
refers         regards         2452:19         2389:22         2483:15         2398:7           zeflect         region         2405:22         2546:21         remediate           2395:20         2471:11         2406:1,24         2555:20         2532:1           2409:21         ,23         2472:21,22         2412:7,9,1         relatively         2532:1           2457:7         ,23         2,15,20         2405:6         2531:20,           2493:15         regional         2483:6         2436:22         2607:10,           2586:5         regional         2495:8,10         2440:11         2610:23           2609:19         Regis         2500:1,9         2448:2         2612:15           2612:4         2385:14         2516:25         2478:9         2595:8           2612:4         regular         2528:15         2482:19         remember           2389:23         2431:21,23         2535:13         2586:2         remind           2389:23         2431:21,23         2535:13         2586:2         remind           2609:12,16         2553:14         2586:11         2633:8         2518:2           reflecting         2392:3         2603:16         2574:9	262	24:14	2541.20	related	2475:16	remains
2601:21         2452:19         2392:14         2500:21         2626:5           reflect         2471:11         2405:22         2546:21         2555:20         remediate           2395:20         2472:21,22         2412:7,9,1         relatively         2532:1         remediation           2457:7         2493:15         2476:10         2481:23,24         2420:12         2531:20           2586:5         regional         2483:6         2436:22         2607:10           2608:20         2635:5         2495:8,10         2440:11         2610:23           2609:19         Regis         2500:1,9         2448:2         remember           2611:23         2385:14         2516:25         2478:9         2595:8           2612:4         regular         2528:15         2482:19         2595:8           reflected         2420:7,11         2529:2         2503:17         2604:25           2389:23         2431:21,23         2536:6         2613:15         2470:6           2609:12,16         2553:14         2596:1         2633:8         2518:2           reflecting         2392:3         2598:11         2574:9         2508:20           reflecting         2392:3         2603:16 </td <td>refe</td> <td>re</td> <td>-</td> <td></td> <td>2483:15</td> <td>2398:7</td>	refe	re	-		2483:15	2398:7
reflect         region         2405:22         2546:21         remediate           2395:20         2471:11         2406:1,24         2555:20         remediate           2409:21         2472:21,22         2412:7,9,1         relatively         remediation           2457:7         2493:15         2476:10         2481:23,24         2420:12         2531:20           2586:5         regional         2483:6         2436:22         2607:10           2608:20         2635:5         2495:8,10         2440:11         2610:23           2609:19         Regis         2500:1,9         2448:2         remember           2611:23         2385:14         2502:23         2462:3         remember           2612:4         regular         2528:15         2482:19         2595:8           reflected         2429:7         2533:24         2581:15         2604:25           2389:23         2431:21,23         2535:13         2586:2         remind           2509:12,16         2553:14         2586:11         2633:8         2518:2           2610:7,13         2617:2         Regulation         2598:11         2597:11         2597:19           2584:9         regulations         2600:16,11			2452:19		2500:21	2626:5
reflect         2471:11         2406:1,24         2555:20         remediation           2395:20         2472:21,22         2412:7,9,1         relatively         remediation           2457:7         2476:10         2481:23,24         2420:12         2531:20,           2493:15         2476:10         2481:23,24         2420:12         2607:10,           2586:5         regional         2483:6         2436:22         2607:10,           2608:20         2635:5         2495:8,10         2440:11         2610:23           2609:19         Regis         2500:1,9         2448:2         2612:15           2611:23         2385:14         2516:25         2478:9         2595:8           2612:4         regular         2528:15         2482:19         2595:8           2389:23         2431:21,23         2533:24         2581:15         2604:25           2389:23         2431:21,23         2535:13         2586:2         remind           2609:12,16         2553:14         2597:11         2633:8         2518:2           2610:7,13         2617:2         Regulation         2598:11         2633:8         2518:2           reflecting         2392:3         2603:16         2574:9         <			region		2546:21	
2395:20 2409:21 2409:21 2457:7 2493:15 2586:5 2608:20 2609:19 2611:23 2612:4 2614:12  reflected 2389:23 2420:7,11 2429:7 2439:21 2420:7,11 2429:7 2420:7,11 2429:7 2439:21 2412:7,9,1 2405:6 2481:23,24 2420:12 2436:22 2607:10, 2481:23,24 2440:11 2440:11 2610:23 2610:23 2612:15  remember 2595:8 remember 2595:8 remember 2595:8 remember 2595:8 remember 2595:8 remember 2528:15 2482:19 2504:25 2604:25 rememberin 2529:2 2503:17 2604:25 remind 2532:1 remediation 2531:20, 2405:6 2440:11 2440:11 2500:1,9 2448:2 remember 2595:8 rememberin 2598:15 2586:2 2604:25 remind 2586:2 2470:6 253:8 remind 2598:11 2598:11 2598:11 2598:10 2508:20 reminded 2508:20 reminded 2508:20 reminded 2508:20 reminding 2508:20			=		2555:20	
2409:21       ,23       2,15,20       2405:6       2531:20,         2493:15       2476:10       2481:23,24       2420:12       2531:20,         2586:5       regional       2483:6       2436:22       2607:10,         2608:20       2635:5       2500:1,9       2440:11       2610:23         2609:19       Regis       2500:1,9       2448:2       2612:15         2612:4       2385:14       2516:25       2478:9       259:8         2614:12       regular       2528:15       2482:19       259:8         reflected       2429:7       2533:24       2581:15       2604:25         2389:23       2431:21,23       2535:13       2586:2       remind         2541:19       2515:16       2536:6       2613:15       2470:6         2609:12,16       2553:14       2597:11       2633:8       2518:2         2610:7,13       2598:11       2598:11       2574:9       2508:20         reflecting       2584:9       regulations       2610:6,11       relevant       reminding         2584:9       regulations       2610:6,11       relevant       reminding	239	95:20		· ·	11	2532:1
2457:7 2493:15 2586:5 2608:20 2609:19 2611:23 2612:4 2614:12 2420:7,11 2429:7 2389:23 2541:19 2541:19 2609:12,16 2609:12,16 2610:23 2610:25 2610:23 2610:25 26	1				<u> </u>	remediation
2493:15       2586:5       2483:6       2436:22       2607:10,         2608:20       2635:5       2495:8,10       2440:11       2610:23         2609:19       Regis       2500:1,9       2448:2       2612:15         2612:4       2385:14       2516:25       2478:9       2595:8         2614:12       regular       2528:15       2482:19       remember         2389:23       2431:21,23       2533:24       2581:15       2604:25         2389:23       2431:21,23       2535:13       2586:2       remind         2609:12,16       2553:14       2586:11       2633:8       2518:2         2610:7,13       2617:2       Regulation       2598:11       2574:9       reminded         2584:9       regulations       2603:16       releases       reminding	245	57:7				2531:20,25
2586:5 2608:20 2609:19 2611:23 2612:4 2614:12  reflected 2389:23 2541:19 2609:12,16 2609:12,16 2610:7,13 2617:2  reflecting 2586:5  2495:8,10 2500:1,9 2448:2 2502:23 2462:3 2516:25 2478:9 2528:15 2482:19 2529:2 2503:17 2533:24 2535:13 2536:6 2535:14 2596:11 2597:11 2597:11 2598:11 2598:11 2598:20 2508:20 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:21 2610:23 2610:21 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:21 2610:23 2610:21 2610:23 2612:15 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2612:15 2610:23 2610:21 2610:23 2610:21 2610:23 2610:21 2610:23 2612:15 2610:23 2610:21 2610:23 2610:21 2610:21 2610:23 2610:21 2610:23 2610:21 2610	249	93:15				2607:10,14
2608:20 2609:19 2611:23 2612:4 2614:12  reflected 2389:23 2502:7,11 2429:7 2431:21,23 2516:25 2503:17 2529:2 2503:17 2533:24 2533:24 2533:24 2533:24 2533:13 2541:19 2609:12,16 2609:12,16 2610:7,13 2617:2  reflecting 2584:9  2500:1,9 2448:2 2462:3 2462:3 2478:9 2595:8  remember 2529:2 2503:17 2533:24 2533:24 2533:13 2536:6 253:13 2536:6 2533:8 2576:1 2597:11 2597:11 2597:11 2597:11 2597:11 2597:11 2597:11 2597:11 2597:11 2598:11 2598:20 2508:20 2508:20 2506:1	258	36:5	regional			2610:23
2609:19       Regis       2502:23       2462:3       remember         2611:23       2385:14       2516:25       2478:9       2595:8         2612:4       regular       2528:15       2482:19       remembering         2614:12       2420:7,11       2529:2       2503:17       2604:25         2389:23       2431:21,23       2535:13       2586:2       remind         2541:19       2515:16       2536:6       2613:15       2470:6         2609:12,16       2553:14       2597:11       2633:8       2518:2         2617:2       Regulation       2598:11       2598:11       2574:9       2508:20         reflecting       2584:9       regulations       2610:6,11       relevant       reminding         2506:1	260	08:20	2635:5	· ·		2612:15
2611:23 2612:4 2614:12  regular 2420:7,11 2429:7 2431:21,23 2515:16 2609:12,16 2610:7,13 2617:2  reflecting 2584:9  2385:14  2385:14  2516:25 2478:9 2595:8  2482:19 2503:17 2529:2 2533:24 2533:24 2535:13 2536:6 2613:15 2613:15 2633:8 2518:2  remind 2597:11 2597:11 2597:11 2598:11 2598:11 2598:20  regulations 2603:16 2610:6,11  relevant 2506:1	260	09:19	Regis	·		
2612:4       2614:12       regular       2528:15       2482:19       rememberir         2614:12       2420:7,11       2529:2       2503:17       2604:25         2389:23       2431:21,23       2535:13       2586:2       remind         2541:19       2515:16       2536:6       2613:15       2470:6         2609:12,16       2553:14       2586:11       2633:8       2518:2         2610:7,13       2617:2       Regulation       2598:11       2574:9       2508:20         reflecting       2584:9       regulations       2610:6,11       relevant       reminding	261	11:23	=			
2614:12       1egular         2420:7,11       2529:2       2503:17         2389:23       2431:21,23       2535:13       2586:2         2541:19       2515:16       2536:6       2613:15       2470:6         2609:12,16       2553:14       2597:11       2597:11       2598:11       2574:9       2508:20         reflecting       2392:3       2603:16       2574:9       2508:20         regulations       2610:6,11       relevant       reminded         2508:1       2508:1       2508:1	261	12:4				2595:8
reflected       2420:7,11       2533:24       2581:15       2604:25         2389:23       2431:21,23       2535:13       2586:2       remind         2541:19       2515:16       2536:6       2613:15       2470:6         2609:12,16       2553:14       2597:11       2633:8       2518:2         2617:2       Regulation       2598:11       2574:9       2508:20         reflecting       2584:9       regulations       2610:6,11       relevant       reminded         2508:20       reminding	261	14:12	regular			remembering
2389:23	mo £1.	astad	2420:7,11			2604:25
2541:19 2541:19 2509:12,16 2609:12,16 2610:7,13 2617:2  reflecting 2584:9  2515:16 2536:6 2586:11 2597:11 2597:11 2598:11 2598:11 2603:16 2610:6,11  releases 2574:9 2508:20 reminded 2508:20 reminded 2508:20 2508:20						momi
2609:12,16 2610:7,13 2617:2  reflecting 2584:9  2513:16  2553:14  2586:11  2597:11  2598:11  2603:16  2603:16  2610:6,11  2613:18  2633:8  2518:2  releases  2508:20  regulations  2610:6,11  relevant  reminding  2506:1			•			
2610:7,13 2617:2  reflecting 2584:9  Regulation 2392:3  regulations 2603:16 2603:16 2603:16 2610:6,11  releases 2574:9 2508:20 reminded 2508:20 reminding 2506:1	1					
2617:2       Regulation       2598:11       releases       reminded         2392:3       2603:16       2574:9       2508:20         regulations       2610:6,11       releases       reminded         2508:20       2508:20		-	2553:14		2633:8	2518:2
reflecting 2584:9  regulations 2586:11 2574:9 2508:20 regulations 2610:6,11 relevant 2506:1		*	Regulation		releases	reminded
reflecting 2584:9 regulations 2610:6,11 relevant reminding 2500:1	26.	11:2	_		2574:9	2508:20
2584:9	refle	ecting				romindina
2495:12   relates   2427:23   2506:1	258	34:9	=	∠01U:0,11		_
			2495:12	relates	2427:23	2000:1

2595:4	2625:5	2470:17	2474:11	2420:2,3,1
remote	request	2489:12	2476:9	1,22
2393:1	2400:22	2522:24	reserves	2421:1
2393.1	2415:8	requirement	2447:19	2423:3,25
2554:10	2419:23	2412:9,12	2450:10,13	2424:6,16
2334:10	2458:12,14	2412:9,12	· ·	2436:2,8,1
remove		2456:15	,18 2455:20	0
2547 <b>:</b> 7	,15 2462:21	2470:8	2456:5,15,	2437:11,18
removed	2464:5	2470:0	18 2458:24	2438:5,14,
2502:21	2490:9	2403:13	2459:3,16	18
2502:21	2505:25		2460:25	2439:14,23
2594:16		2491:16		2440:4
	2509:4	2502:20	2466:13	2441:20,21
rental	2510:14,17	2504:7	2471:17,18	,23
2487:19	2522:11,12	2506:13,14	2474:1,4,7	2526:13
rentals	<b>,</b> 18	2533:22	2475:22	2546:2
2487:22	2523:18	2594:2,25	2476:3,7,1	2547:1,8
	2524:3	2595:1	4,16	2549:20
repeat	2526:12	requirements	2477:10	2575:23
2613:3	2534:2	2428:2	2485:22	2584:6,24
repeated	2535:20	2470:1	2487:12	2585:5
2595:2	2544:14	2506:18	residence	2586:3,5
	2608:10	2558:16	2549:12	2587:16
repetition	requested			2588:2
2499:15	2389:20	requires	residences	2618:14
replace	2402:8	2522:17	2549:3	2620:9,23
2584:5	2411:22	2562:22	residential	2621:6,22
	2432:7	2581:14	2389:6	2622:8
report	2502:12	2593:16	2394:2	2623:13,19
2429:17,21	2512:20	requiring	2395:8,11	2624:19,20
,23	2513:1,12	2621:23	2396:7,21	2625:7,20
2442:19	2533:9,11	rese 2466:10	2397:18	2626:16
2457:5	2535:3	1ese 2400.10	2401:14,17	2628:2
2489:2,7		research	2402:17	2633:7
2506:22,24	requesting	2392:5	2403:12	2635:6
2556 <b>:</b> 3	2419:20	2555:5,19	2404:2,10,	
reported	2433:8	2587 <b>:</b> 21	17,24	residents
2553 <b>:</b> 15	2616:17	2634:2	2405:3,15	2526:12
monomta	requests	researched	2406:1,9,1	2545:22
reports	2406:14	2463:15	2	resistence
2437:6 2593:17	2491:8	2103.13	2407:13,21	2493:18
2593:17	2497:19	reserve	2408:11	
representati	require	2443:20	2410:3,12,	resolving
<b>ve</b> 2510:20	2473:4	2450:16,22	14,16	2531:3
representati	2549:25	2451:2	2411:1,5,8	resources
_	2549:25	2452:5,12	,10,15	2444:11
<b>ves</b> 2498:3		2453:20,24	2415:13,20	2490:15
represents	2621:5	2455:9,14	,24	rognost
2510:17	2633:2	2456:21	2416:10,16	respect
2529:25	required	2459:1	<b>,</b> 19	2389:18
2532:19	2398:2	2466:10,11	2417:14,23	2393:16
2600:22	2429:8	2470:1,4,7	<b>,</b> 25	2397:20
2601:9	2460:23	,14,16,17	2418:3,7,1	2403:24
2611:12	2461:1,4	2471:2,6	9,22	2405:11,12
	•		,	2414:7

F O D MA	TIVITIODA	IIIDNO GNA	01 00 2013	rage 2093 01	2707
2440:3	3	2622:8	2531:25	2499:22	<b>Rex</b> 2399:2
2482:	15	2629:15	2550:13	2500:24	right-hand
2502:3	18	responses	2553:11	2533:22	2611:10
2503:	1	2630:21	2556:6	2558:16	2616:12
2512:2	25	2634:18,19	2557:18	2559:18	2624:1,3
2513:	10	•	2561:1	2560:13 <b>,</b> 15	2024:1,3
2531:	17	responsibili	2571:14	,17,23	rise 2491:3
2533:	6	ties	2572:21	2569:21	2511:13
2534:3	18	2391:21	2574:2	2570:7	2533:21
2548:3	13,18	2398:23	2619:9	2571:8	2556:11
2582:3	12,20	2554:22	2626:7,9	2586:22	risk 2524:10
2585:8	8	responsibili	results	2616:7	2576:21
2587:3	3,9	ty	2393:7	2617:4,9	
2588:2	2	2392:4,7,1	2428:5	revenues	road 2578:15
2590:	6	2 2399:10	2537:5	2394:24	Robin
2594:2	2	2505:24	2538:23	2403:6	2387:10
2602:8	8	2509:1,21	2543:6	2426:2,7	2390:20
2609:3	3	2532:7		· · · · · · · · · · · · · · · · · · ·	2391:10,22
respect	i 1	2575:4	2630:15	2472:16	,24
2630:		25/5:4	resume	2487:7	2392:13
2630:		responsible	2513:17	2500:1,7,1	2393:19
respond		2390:24	2596:9	2 2591:25	2395:5
2400:	4	2392:14,24	Resumed	2615:12,18	2396:15
2432:	16,17	2399:19	2387:7,8	revert	2397:6,25
<b>,</b> 19		2506:6	2391:7,8	2431:7	2398:20
2433:4	4,5	2532:25	2391:7,0	2469:8	2401:1,8,1
2435:2	24	2552:22	resuming	reverting	9,22
2436:3	18	2598:21	2468:6	2469:10	2402:5,14,
2450:	5	responsive	2513:20	2469:10	19,21
2512:	9	2433:3,14	2557:7	review	2403:23
2542:3	16	2433:3,14	2596:6	2388:5	2403.23
2595:3	16	2430:10	retained	2392:15	20,25
2618:2	25	responsivene	2480:4	2393:7,13	2405:16
2621:	11	<b>ss</b> 2597:15	2541:8	2492:5	
2622:		2633:11	2541:0	2505:9,10,	2406:13,21
2631:	12	rest	retirements	13 <b>,</b> 25	2407:5,24
2632:3			2472:20	2512:1,3,5	2408:3,8,1
2633:	14	2418:2,19	RETIRES	2545:8	3,18,23
		2515:11 2578:10	2637:6	2564:5,9	2409:3,7,1
responde		25/8:10		2589:1,5	1,14,24
2525:2	22	resul	return	2593:8	2410:5,15
response	e	2447:10	2542:25	2617:24	2411:3,7
2435:	7	result	2558:17	2623:1	2412:5,21
2436:	13,14	2401:4	2559:2	2630:25	2413:2,16,
,16		2401:4	revenue	2636:8	21
2479:	14	2436:7	2394:3,9		2414:12,18
2533:1	15		2400:24	reviewing	2415:10,18
2584:		2477:16	2402:3,6,1	2504:21	2416:1,8,1
2600:2		2486:14	0 2415:9	2507:3,4	5,23
2608:		2491:7	2440:9	reviews	2417:19,25
2617:8		2503:9	2447:5	2630:21	2419:8,22
2618:3		2504:24	2447:5		2420:4
2619:		2505:3	2489:17,22	revisit	2421:6,23
,20 2		2521:10	2490:5	2453:18	2422:13
		2526:14	443U.J		

		IIIDNO GNA	01 00 2010	rage 2094 01	
24	23:8,13,	2499:9,19	2558:19	2607:6,11,	rough
	,22	2500 <b>:</b> 17	2559:3,6,1	16,23	2636:21
24	24:4,8,1	2501:2,11,	5,23	2608:3,11,	
1	19,24	17	2560:9,12,	17,25	roughly
24	25:12,19	2502:4,16	18 2561:4	2609:14,21	2441:8
, 2	2,25	2503:8,12	2562:6,12,	2610:4,8,2	2556:10
24	26:15,19	2514:10,16	20	4	2606:8
, 2	4 2427:5	,20 2515:2	2563:8 <b>,</b> 25	2611:7,16,	round
24	29:18,21	2516:4,12,	2565:5,13,	25	2419:4,9
24	30:6,13	23	19	2612:3 <b>,</b> 19	2600:24
24	31:17	2517:9,15,	2568:10,13	2613:3,7,1	2629:17
24	32:15	24	2569:10,19	3,21	2631:22
24	35:2,20	2518:3,14,	2570:9 <b>,</b> 16	2614:25	row 2390:25
24	36:3	20	2571:13	2615:10 <b>,</b> 15	2523:15
24	37:16	2522:8,14,	2572:1,10,	,21	
24	38:16	19,25	23	2616:4,13,	<b>run</b> 2423:15
24	39:3,9,1	2525:1	2573:13,22	20	2447:25
8	2440:21	2526:17,21	2574:5,19	2617:5,12,	2492:15
	41:7	2527:4,8,1	2575 <b>:</b> 5	19 2618:21	2500:4
24	42:2,10	6,23	2576:9	2619:6,12	2521:5
1	44:25	2528:7,12,	2577:4 <b>,</b> 9	2620:1,11,	2553:18
1	58:10	24	2578 <b>:</b> 2 <b>,</b> 6	19 <b>,</b> 25	2585:2
	60:22	2529:16,23	2581 <b>:</b> 18	2621:7,15	2620:16,21
	62:3,14	2530:3,6,1	2583:1,14	2622:1,4,7	,24
	65:3,7,1	9,24	2584:19	<b>,</b> 16	2632:24
5,		2531:6,15	2585:11,18	2623:4,11,	run-of-the-
1	66:1	2532:3,9,1	2586:10	17,22	river
1	67:9,13	3,17,21	2587:5,12	2624:11,16	2552:10
1	68:19	2533:11	2588:5,14,	,23	rural
	69:3,14,	2534:1,4,8	17	2625:2,9,1	2432:22
19		,15,24	2589:8,17,	8	2452.22
	78:7,13,	2535:23	21	2626:3,11,	
23		2536:2,9,1	2590:16,25	19	S
	79:3,8	3,16,23	2591:17,25	2627:4,7	<b>sale</b> 2472:17
	80:3,13,	2537:1,4,8	2592:8,16	2628:5	2485:6
	,25	,11,16,23	2594:4	2629:8,14	2500:2,3
	82:2,13	2538:16,22	2595:12	2630:16,23	<b>sales</b> 2447:2
	83:2,9,1	2539:3,13, 17,20,25	2597:2,7	2631:10,20 2632:25	2472:18
1	23 84:15	2540:10,20	2598:1,11, 23	2632:25	2484:17
1	85:7,14,	2541:2,9,2	2599:6,11,	2634:12	2485:12
1	2490:12	2341:2,9,2	2399:0,11,	2635:8	2486:1
	91:10	2542:3,10,	2600:5,18	2636:1	2492:10
	92:21,25	22	2601:3,5,1		2500:21,22
	93:2,6	2543:5,11,	2,16,21	role 2559:25	2501:4,8,1
1	94:8,14,	19	2602:5,11,	rolled	0 2502:1
19		2544:10,22	14	2537:4	sanction
	95:9,15,	2545:6,24	2603:9,19	2538:7	2456:17
1	,25	2546:9,13,	2604:4,9,2		
	96:6,21	21	0	rolling 2541:1,25	Saskatchewan
	97:4,8,1	2547:3,15	2605:8,11,		2437:13,14
	24	2548:6,15,	23	room 2561:15	,24 2438:1
	98:2,10,	20 2555:25	2606:4,14,	2582 <b>:</b> 4	satisfaction
1	,21	2556:13	24	2586 <b>:</b> 5 <b>,</b> 6	2455:9
				<u> </u>	=

		01 00 2010	1490 2000 01	
2524:19	season	2613:25	2572:10	2392:5,6,
2530:18	2418:24,25	acolei na	2575:10	9,22
	2447:2,6	seeking		2393:6,11
satisfactory	2518:9	2497:2	sense	17
2524:5	2623:10	2530:12	2466:22	2394:7,18
satisfy		2534:11	2473:7	2395:8,13
2452:22	seasonal	2540:25	2495:6	14,25
2594:2	2416:17	2542:7	2537:2	2396:8,17
saving	2417:23	2607:19	2573:23	21 2397:1
2421:21	2418:1,6	2612:25	2604:17	2402:9
2421:21	2419:5,7,1	2613:11	2633:1	2403:2
2422:3	0 2420:3,6	2614:18	sensitive	2404:5,12
<b>saw</b> 2467:2	2423:3,6	seeks	2635:16	2408:15,2
2477:6	2445:19,24	2544:25	<b>sent</b> 2599:9	,23
schedule	2446:1		sent 2599:9	2409:9,10
2491:20	second	seems	sentence	17,18,20
2528:9	2394:11	2604:13	2489:19	2410:6,17
2529:11	2409:1	<b>seen</b> 2461:24	<b>SEP</b> 2487:1	18,20
2536:3,4	2418:5	2469:24	2494:11	2411:9,18
·	2419:12	2479:20		22 2412:1
2584:6 2611:6	2459:7	2516:25	2502:18,21 2504:8	2424:19
2617:3	2466:14	sees 2426:4		2425:1,8,
2017:3	2472:4		2520:10	7
schedules	2494:10	2479:23	separate	2426:4,13
2401:10	2558:3	2497:13	2458:5	2427:16,2
scientists	2559:17	segue	September	2433:12,
2507:23	2569:8,15,	2622:20	2393:21	2438:15,2
2307.23	16 2570:12	select	2395:21	2442:8,9
scratch	2571:10	2427:7	2423:5,21	2450:20
2631:6	2584:11	2427:7	2535:5,21	2456:22
<b>seal</b> 2389:12	2593:20	<b>self</b> 2496:18	2617:14	2487:9
2502:20	2629:17	self-	2017:14	2497:3
2502:20		generation	series	2494:3
22,24	second-last	2496:4	2582:16	2500:17
2505:2,12	2614:13	2490:4	serve	2501:15
2506:3,12,	secondly	Selkirk	2404:24	2502:9,1
19	2504:21	2399:5	2405:19	•
2507:1,2,5	2559:16	2554:22	2410:17	2503:6,1 2526:22
,6		2555:1,14,	2410:17	2527:7,2
2508:1,13,	Section	22 2556:2	2433:1	2527 <b>:</b> 7 <b>,</b> 2.
2300.1,13,	2593:15	2636:20	2446:12,17	
2509:2,6,1	sector	<b>sell</b> 2443:22	,23 2459:1	2535:22
3 2510:4	2621:23	2445:18	2550:8,20	2538:9,2
3 2310:4		2446:9	·	2540:13
sealed	secture	2486:24	2563:3,4	2541:12
2507:9	2621:22	2400.24	served	2542:9,1
2522:13,16	secure	selling	2393:1,12	17,24
sealing	2500:7	2496:20,22	2394:20,21	2543:2,12
2509:16,17		send	<b>,</b> 22	2545:21
,19	seeing	2574:16 <b>,</b> 20	2431:23	2546:3
•	2441:3	2586:24	serves	2547:1,7
seals	<b>seek</b> 2402:2	2607:19		2549:12,
2505:10	2540:8	2607:19	2424:1	2562:3,9
2508:21	2605:6		service	1,13
		sends		2563:23

PUB - MANITOBA	A HIDRO GRA	01-08-2013	Page 2090 0.	L 2707
2574 <b>:</b> 25	2630:7	2436:18	2433:21	2631:15
2575:2	seventy	2446:16	2564:20	Simonsen
2588:25	2429:14	2472:19,23	2597:15	2564 <b>:</b> 5
2589:5,22	2489:8	2499:25	signatory	
2591:2		2521:5	2389:16	simply
2598:12	several	2620:21,24	2512:23	2415:15
2601:7	2466:8	2631:23	2512:25 2513:7	2422:18
2611:14,17	2477:1	short-run	2612:6	2423:17
2612:11,12	2604:23	2521:1,6		2428:19
2613:20	2627:17	· ·	signature	2438:8
services	severe	short-term	2510:16	2460:4
2392:8	2454:16	2447:4	2511 <b>:</b> 8	2469:2
2473:21	-h -l	2625:15,25	signed	2492:2,5
	shakes	2631:24	2398:15	2503:10
servicing	2390:19	2634:18,22	2522:12,16	2565:20
2629:4	shaky	shoulder	significant	2571:9
serving	2390:16	2497:12	2393:3	2598:13
2404:6	Shamattawa	2499:2	2393:3	2602:24
<b>sets</b> 2627:22	2395:3	2520 <b>:</b> 11	2420:1,10	2612:5
		showers	2437:20	2619:13
setting	<b>shape</b> 2492:9	2579:8	2440:25	2625:25
2413:7	<b>share</b> 2426:7		2440:23	2629:1
2505:21	2450:17,25	showing	2476:4	2633:2
2523:22	2470:18	2415:22	2566:8	single
2558:9	2532:25	2535:13	2570:14,17	2394:4
2559:17	-h	shown	2634:17	2476:10
2561:25	<b>shared</b> 2453:22	2416:13	2635:5	2498:11
2588:24	2433:22	2417:15		2579:4
2633:16	sharing	2418:20,24	significantl	2584:5
settlement	2450:23	2525:19	<b>y</b> 2431:13	single-
2397:22	2451:2	2539:11	2555 <b>:</b> 6	family
2398:2	2453:25	a.b. a.s.a	2585:9	2417:1,4
2545:2	2466:10,11	shows	2593:19	•
2599:7,9	2469:25	2437:11 2478:19	signing	sir 2400:21
<b>seven</b> 2397:6	2470:4,16	2520:10	2483:7	2402:20
2416:25	2471:3,5	2320:10	2485:3	2514:9
2441:8,12,	<b>shed</b> 2460:23	<b>shut</b> 2451:21	a i em a	2519:17
23	2461:1,2,4	<b>sic</b> 2446:9	<b>signs</b> 2510:19	2534:21
2442:2,5	,7,17		2510:19	2553:10
2529:13,14	2462:10	sign 2510:4		2558:7,18
2538:13	2482:8	2511:5	similar	2559:10
2584:25		2525:18,20	2393:21	2561:24
2611:10,11	shedding	signal	2411:16	2562:5,11
2612:1	2462:1	2413:13,18	2431:11	2564:3
2620:9,12,	sheets	2432:16,17	2437:22,24	2565:3,12 2569:18
22 2621:3	2510:5	2433:16	2451:7	2569 <b>:</b> 18 2570 <b>:</b> 5
2624:25	<b>shock</b> 2560:8	2572:11	2481:4	2570 <b>:</b> 5 2572 <b>:</b> 9
	2561:1,18	2573:15	2484:1,25	2572 <b>:</b> 9 2573 <b>:</b> 5
seven-fifty		2574:16,20	2510:15	2574:4,14,
2416:2	shoes	2575:10	2525:1	18,23
seven-point-	2391:16	2586:24	2568:4	2577 <b>:</b> 19
one-one	2595:22	signals	similarly	2577:13 2578:17 <b>,</b> 20
	short			20,0.1,720
		•		

F O D M	MITTODA	IIIDNO GNA	01 00 2015	rage 2097 O	2707
2579:	:21	situations	smaller	<b>sorry</b> 2406:3	2435:25
2581:	2,9,1	2562:25	2406:24	2407:1,15	2537:25
7	·	2569:20	2569:14	2440:1	2580:12
2583:	20,25	2579 <b>:</b> 25		2442:3	2621:16
2584:		2580:13,23	Smart 2553:6	2452:14	2628:18
2585:	:10		2554:5,7	2478:17	2629:5
2586:	:15	six	<b>smoke</b> 2477:2	2519:17	2636:4
2589:	: 7	2442:7,11	Snowbirds	2527:1,13	
2590:	:19	2529:1,14	2636:6	2536:4,17	speaks
2591:	9,19	2569:5		2598:6	2548:23
2593:	11,13	2577:6	social	<b>sort</b> 2577:11	specific
2594:	:1	2582:2	2577:11	SOFT 25//:11	2461:1
2599:	:17	2611:11	society	sought	2562:2
2602:	:10	2623:21	2507:18	2404:22	2587:24
2603:	: 8	2625:1		2533:21	2588:18,19
2604:	3,19	sixteen	soil	2539:23	2603:2,3
2605:	*	2554:12	2531:19,25	sounds	specifically
2606:		ai	2532:2		2524:14
2607:		sixty	2607:10,14	2544:10	
2611:	-	2429:13	2610:22	2606:5	2596:23
2612:		2629:22	2612:14	2607:16	2614:13
	15,20	sixty-one	<b>sold</b> 2447:5	2626:11	2617:7
	16,24	2441:22	2484:16	source	specified
2615:		sixty-three		2389:6	2634:10
2616:		2629:24	Soldier	2439:14,22	speed
2617:		2029:24	2385:16	2447:4	2451 <b>:</b> 10
2618:		<b>size</b> 2411:12	solicit	2485:5,8,9	2431.10
2621:		2460:4	2589:13,19	2494:16	spend
2622:		2555:11		2495:20,24	2596:21
2624:		2571:4,10	soliciting	2550:11	2597:10
2633:		slate	2590:24	2627:16 <b>,</b> 18	<b>spent</b> 2530:1
		2418:11	somebodies	sources	
sisters			2632:16	2485:11	spike
2579:	: 8	slight	somebody	2491:1	2489:24
<b>sit</b> 254	19:2	2461:24	2421:2	2551:18,21	2490:1,2
2557:	:21	slow-	2421:2	2552:5	spikes
2620:	: 7	developing		2553:19	2454:17
sites		2450:1,8	2511:4 2531:16		
2608:	.15		2331:10	southern	<b>spiking</b> 2447 <b>:</b> 25
2000:	. 13	small	someone	2488:1	2447:25
situati	ion	2392:22	2493:8	space	spillage
2454:	:23	2394:7	2507 <b>:</b> 7	2415:25	2486:14
2469:	: 9	2395:9	2511:7	2495:10	spilling
2500:	:18	2409:17	sometime	2545:23,25	2486:12
2501:	: 6	2410:6	2517:4	2546:4	2488:4
2545:	: 6	2420:12		2549:6,11	
2570:	:11	2427:16	somewhat	2550:12	<b>spin</b> 2497:2
2571:	: 9	2433:12	2630:19		spinning
2574:	: 8	2441:2	somewhere	spare	2451:4
2577:	:11	2462:2,3	2436:7	2451:11,13	
2578:	: 3	2478:9	2482:3	,18	sporadic
2580:	:10	2496:7	2541:4	<b>speak</b> 2497:3	2428:16
2582:	:11	2586:2	2627:21	_	spread
2591:	:19	2631:21		speaking	-

FOB MANITOD.	A HIDRO GNA	01 00 2013	rage 2030 0.	2707
2628:2	2401:13	2628:13	2567 <b>:</b> 1	2494:13
	2434:22		2568:21	2495:18
spring	2442:23	steady	2571:21	2499:5
2418:11,13	2444:6	2461:13	2572:3,6	
2592:15	2491:23,25	step	2573:6,15	subscription
springs	2546:5	2479:15,16	2581:11,13	2465:8,12,
2631:18	2557:20	2557:19	2582:6	18 2467:20
	2594:14	2587:12	2586:21	2480:4
square	2606:8	2595:20	2588:9	subsequent
2579:5,10				2393:13
sta 2431:7	2617:1 2618:7	stepped	2590:24	2540:3
2560:16	2018:7	2557 <b>:</b> 18	2592 <b>:</b> 7	2570:2
	started	stepping	structured	2370.2
stability	2434:16	2557:14	2393:20	subsequently
2559:19	2466:11	2557.14		2567:15
2560:10,13		steps	structures	2600:7
,15,23	starting	2479:13	2566:13	subsidized
stable	2415:2	stock 2437:1	2623:2	2540:19
2560:17	2452:1	2634:19	studied	2340:19
2300.17	2528:1		2547:6	subsidy
stack	2559:9	<b>stop</b> 2633:5		2537:14
2479:18	2564:17	stopped	studies	substantial
2495:2	state	2540:25	2540:13	2621:24
stakeholder	2391:20	2340.23	2551:17	2021:24
2588:25	2398:23	strategies	2571:16,19	substantiall
2589:3,10	2585:12	2443:5	2573:25	<b>y</b> 2629:4
2599:5,10		strategy	2622:8	substitutes
2390:0,12	stated	2412:24	2632:23	
stamp	2533:14	2413:4,6	2635:4	2621:13,18
2504:25	2556:5	2413.4,0	<b>sub</b> 2600:6	2632:2
2506:10,17	2583:8	stray		substitution
stamped	statement	2515:19	subclass	2634:11
2506:14	2435:24	stretching	2392:23	successfully
	2536:5,7	2623:24	2426:7,17	2583 <b>:</b> 5
stamping	2571:22		subclasses	2303.3
2507:3	2621:21	strikes	2415:17	sufficient
stand		2422:9	2425:18	2458:11
2512:14	States	stronger		2460:8
2595:25	2446:11,24	2574:16,20	subject	sufficiently
	2567:25	·	2532:11	2462:9
standard	Station	<b>struc</b> 2623:2	2538:6	
2455:11	2399:5,7	structural	2556:24	<b>sug</b> 2579:2
2508:1,12		2633:20	2561:7	suggest
2558:17	stations		2585:12	2458:4
standards	2399:12	structurally	2606:1	2462:8
2455:12	statistical	2634:4	2621:2	2480:22
2508:23	2431:7	structure	2626:9	2523:24
	a+a+u-	2392:18	2636:8	2542:18
standby	status	2403:9,16	subjects	2571:20
2495:1	2593:17	2413:9	2597 <b>:</b> 17	2608:14
standpoint	<b>stay</b> 2419:4	2420:5		2609:22
2422:2	_	2435:8,9,1	submissions	2609:22
	stayed	3 2545:4	2523:25	
<b>start</b> 2390:5	2488:20	2565:22	2524:4	suggested
2400:21	stays	2566:18,21	subscribe	2503:24

FUB	MANTIODA	IIIDNO GNA	01 00 2013	rage 2099 01	2707
25!	51:4	support	2608:11	2390:13	2482:9,16
1	34:4	2392:8	2613:21		2520:10
		2396:7	2614:15	sworn	2609:13,15
	esting	2547:20	2630:23	2387:9,10	,19
	43:9	2548:1	2631:5	2390:10	2610:7,14
1	52:9	2552 <b>:</b> 6	2634:22	2391:4,9,1	2624:18
I	04:13	2553:5	2636:1	0	
	07:4,9	2595:14		system	tackle
1	11:21	2600:11	surplus	2405:23	2529:10
	16:6		2389:18	2409:10,23	Tadoule
	19:2,22	supported	2392:21	2410:25	2389:22
262	21:2,21	2595:6	2443:22	2419:16	2395:3
sugge	estion	supporting	2472:11	2428:17,22	2608:20
	92:3	2388:6	2474:5,6,1	2430:18,22	2609:1,6
		2596:12,17	9,20	2432:13,24	2610:6,11
sum 2	2602:17		2483:20,24	2434:25	
summa	ary	suppose	2484:2,16	2437:25	tail 2394:14
248	81:13	2444:22	2485:3,18	2444:5	2535 <b>:</b> 22
		2473:22	2486:17	2450:19	take-up
summe	_	2502:24	2487:19	2452:21	2564:15
	18:17	2521:16	2488:18	2457:25	
	19:12	2534:21	2489:2,5	2461:3,10	taking
	23:5	2628:10	2490:21	2490:19	2491:14
	28:18	supposed	2492:13,20	2496:20,23	2512:3
	46:10,16	2616:21	2494:7,18,	2501:16	2569:19
	76:23		21 2495:22	2563:16	2633:4
262	23:14	surcharge	2496:12	2568:7	talk 2411:17
sunse	et	2396:7	2497:14	2580:9,11	2494:5
249	91:2	<b>sure</b> 2411:3	2498:25	2581:24	2501:8
	92:6	2433:15	2499:5,21	2632:4	2561:16
		2438:6	2500:2,22		2562:14
_	rceded	2439:10	2501:14	systems	2618:23,24
258	89:23	2441:19	2503 <b>:</b> 15	2434:16,22	
supe	rvision	2474:17,18	2505:21	2435:5	talked
250	05:22	2478:7	2509:24	2436:17,18	2574:24
250	06:7	2482:2	2510:5	2551:11,12	2588:24
253	10:2	2483:2	2512:25		talking
		2496:21	2513:10	T	2421:20
	rvisor	2507:1	2519:8,20	tab 2415:2	2423:6
251	12:2	2508:4	2536:20		2500:25
supp:	lemental	2510:18	2575 <b>:</b> 15	2442:19 2457:4,5	2501:10
245	50:16	2550:15	surpluses	2457:4,5	2557:25
245	51:20	2552:19	2605:16,17	2483:20	2593:25
245	52:5	2555:13	2003:10,17		2621:16
supp:	1404	2556:2	surprise	2497:20	2627:1,25
		2560:24	2591:16	2503:4	2634:22
250	04:18	2561:6	surprised	2519:4	
supp:	liers	2562:1		2522:3	tangent
247	71:10	2575:5	2628:25	<b>table</b> 2387:1	2594:23
supp.	1.7	2575:5 2579:1,20	surprising	2389:24	tariff
		4J/9:1,4U	2635:9	2457:18	
<b>1</b>	_		2000.0	2437.10	2527 <b>:</b> 15
	44:8	2593:8			
247	44:8 77:7	2593:8 2595:21	suspect	2459:19 2462:7	tautological
24 <sup>7</sup> 250	44:8	2593:8		2459:19	tautological 2573:23

D MANIIODA	IIIDNO GNA	01 00 2013	rage 2700 0.	
tautological	2599:6,9	2618:13	2574:14	2473:24
<b>ly</b> 2573:14	tentatively	2620:21	2577:16	2474:19
tax 2432:13	2603:14	2621:9,10	2588:21	2478:3
Cax 2432:13		2626:15	2590:18	2480:13
technical	term 2436:18	2628:11	2593:11	2483:22
2589:12	2472:19	2632:21	2594:9,10	2490:22
technologies	2490:13	2633:4,7	2595:13	2491:5
2552:6,10	2491:5	2634:3	2596:3	2494:19
·	2500:1	2635:11	2597:7	2497:17,2
technology	2501:19	terribly	2600:12	2498:1
2582:23	2515:3	2433:2	2602:1	2501:2
teenagers	2542:21		2614:11	2502:12
2579:7	2631:24	test 2539:11	2617:23	2503:8,1
<b>.</b>	2632:6	testifying	2622:20	2507:21
temperature	2634:18	2521:19	that'd	2508:4,1
2635:12	2635:19,21	1	2551:13	2510:19,2
ten 2431:10	terms 2421:2	testimony		2512:10
2454:8,12,	2432:9,10	2534:7	that's	2513:14
22 2457:16	2436:14	2579:23	2399:24	2514:16
2468:3	2442:20	2580:2	2401:11,19	2516:4
2478:1	2447:16	2582:2	, 22	2521:21
2479:9	2448:11	2594:18	2402:19	2522:8,1
2569:8	2452:22	<b>tha</b> 2524:3	2408:18	19
2596:2	2472:5	thank	2409:11	2526:6,2
tend 2405:21	2482:25	2390:13	2410:5	2527:4,1
2411:10,11	2483:15	2390:13	2413:3,12	2528 <b>:</b> 7
2412:11,14	2484:3,25	2400:5,9,1	2414:15	2529:16
2417:8	2490:22	3 2406:7	2415:10	2530:3
2417.0	2491:17,21	2417:10	2416:8,15	2531:4
2419:9	2493:25	2419:1	2421:10	2532:3,1
2420:7	2499:21	2422:13	2423:8,9,1	2534:8
2421:14,15	2520:7	2430:2	1	2538:23
,16	2531:2	2431:24	2424:5,8,1 2 2425:19	2539:8
2428:12	2544:5	2442:6,13		2540:10
2436:11,12	2549:3,10	2454:5	2429:19,21	2541:22
2438:9	2552:20	2467:24	<b>,</b> 22	2549:13,
2501:21,24	2560:15	2468:2,9	2430:3,20	,23
2526:23	2561:21	2472:3	2432:25 2434:23	2550:21
2551:14	2562:8	2483:18	2442:4	2553:24
2635:17	2570:11	2513:15,22	2444:25	2559:3,9
	2574:23	2518:15	2445:17,19	5 2560:9
tended	2578:23	2524:7	2449:11	2562:7,9
2403:14	2581:3,4,2	2526:8	2451:1	2563:18
2434:8	0 2583:1	2534:21	2456:21,22	2564:1,2
tends 2411:8	2598:21	2535:19	2450:21,22	2565:13
2412:9	2600:14	2543:15	2459:9	2569:10
2421:8	2601:13	2554:18,19	2460:7,22	2570:9
2431:7,12	2602:7	2556:20	2461:2,19,	2572:23,
2495:12	2604:1	2557:13,14	2401:2,19,	2573:13
2500:5	2606:11,22	2561:24	2464:1,9	2574:8
	2613:9,16,	2563:17	2465:11,15	2576:2,2 2578:16
tens 2/2/1.10				7.378 <b>:</b> 16
tens 2434:18	17 <b>,</b> 19 2616:1	2564:2	2467:9	2580:17

2589:16,22	0:7 5:20 8:19 8:3:16,18 2577:5 cow 7:16 7:3 2631:1
2587:13	0:7 5:20 8:19 8:3:16,18 2577:5 cow 7:16 7:3 2631:1
2588:20	5:20 8:19 8:16,18 2577:5 cow 7:16 7:3 2631:1
2589:16,22	3:19 3:16,18 3:16,7:5 cow 7:16 7:3 2631:1
,23       2466:16       2632:10       2629:2       to-do         2593:25       2472:11       2633:2       they've       2629:2       to-do         2599:21       2479:12       2455:17       2516:1       token         2600:5       2487:17       2530:21       2516:1       token         2602:12       2488:10       third       2607:14       263         2608:3       2490:3       2409:8,9,2       2607:14       263         2609:5       2492:19       0       thro 2545:4       tonne         2610:8       2493:2,23       2485:17,18       2537:22       255         2613:13,22       2494:2       2504:6       2537:22       255         2613:10       2503:4       thirty       2538:8       17         2619:6       2506:5,23,       2434:12       257:22       255         2620:1       24 2511:4       2488:14       2557:17       top 2         2622:2,13       253:25,7       2479:13       2519:3       253         2634:19       2540:11,14       2479:13       2519:3       253         2634:19       2540:11       247:9       257:22       2577:24       262         themselves	3:16,18 2577:5 FOW 7:16 7:3 2631:1
2593:25	3:16,18 2577:5 <b>cow</b> 7:16 7:3 2631:1
2594:18	2577:5  cow 7:16 7:3 2631:1
2599:21     2479:12     2455:17     2516:1     token       2600:5     2487:17     2530:21     2518:17     tomor       2602:12     2488:10     249:30:21     threw     255       2608:3     2490:3     2409:8,9,2     2607:14     263       2609:5     2492:19     0     thro 2545:4     tonne       2610:8     2493:2,23     2485:17,18     throughout     2537:22     255       2613:13,22     2494:2     2504:6     2537:22     255       2615:10     2503:4     thirty     2538:8     17       2619:6     2506:5,23,     2434:12     2538:8     17       2620:1     24 2511:4     2488:14     2557:17     top     2557:17       2626:3,19     2532:5,7     thirty-one     2557:17     top     2519:3     2519:3       2634:19     2540:11,14     thirty-seven     2519:3     2519:3     262       2634:19     2547:15     2395:25     2577:24     262       themselves     2568:15     2477:9     2424:10     242       2572:20     2588:19     2391:1     2398:16     244:10       theoretical     2598:4     260:16     2543:9     2543:9     244       thereafter     26	cow 7:16 7:3 2631:1
2455:17 2600:5 2487:17 2602:12 2488:10 2605:8 2489:23 2608:3 2490:3 2609:5 2492:19 2610:8 2613:13,22 2494:2 2615:10 2619:6 2620:1 2622:2,13 2620:1 2622:2,13 2620:1 2622:2,13 2630:21 2630:8 2630:8 2630:8 2630:8 2630:8 2630:8 2630:8 2630:8 2630:8 2630:8 2630:1 2630:8 2630:8 2630:1 2630:8 26	cow 7:16 7:3 2631:1
2602:12	7:16 7:3 2631:1
2605:8       2489:23       third       2607:14       263         2608:3       2490:3       2409:8,9,2       thro 2545:4       tonne         2610:8       2493:2,23       2485:17,18       throughout       tonne         2613:13,22       2494:2       2504:6       2537:22       255         2615:10       2503:4       thirty       2538:8       17         2619:6       2506:5,23,       2434:12       Thursday       tool         2620:1       24 2511:4       2488:14       2557:17       top 2         2620:3,19       2532:5,7       thirty-one       257:10       2479:13       2519:3       253         2634:19       2540:11,14       thirty-seven       2519:3       253         2635:20       2547:15       2395:25       2577:24       262         2414:25       2568:15       tho 2405:1       2424:10       242         2414:25       2588:19       2391:1       2398:16       242         2572:20       2588:19       2391:1       2588:16,18       244         2578:24       2609:4       2626:16       2543:9       2588:16,18         2598:4       2609:4       2626:16       2588:15       2588:16,18	7:3 2631:1
2608:3 2490:3 2609:5 2492:19 2610:8 2613:13,22 2494:2 2615:10 2503:4 2620:1 2622:2,13 2626:3,19 2632:5,7 2633:19 2632:5,7 2633:19 2632:5,7 2633:19 2633:19 2634:19 2635:20 2540:11,14 2635:20 2550:2 2568:15 2568:15 2572:20 2588:19 2598:4 2609:4 2609:8,9,2 2409:8,9,2 2485:17,18 2485:17,18 2485:17,18 2537:22 255 2537:22 255 2538:8 17 2632:2 2434:12 2488:14 2557:17 2622:2,13 2527:10 2626:3,19 2532:5,7 2630:8 2536:21 2639:10 2532:5,7 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2536:21 2630:8 2630:8 2536:21 2630:8	2631:1
2609:5       2492:19       0       thro 2545:4       tonne         2610:8       2493:2,23       2485:17,18       throughout       tonne         2613:13,22       2494:2       2504:6       2537:22       255         2615:10       2503:4       2506:5,23,       2538:8       17         2619:6       2506:5,23,       2434:12       2538:8       17         2620:1       24 2511:4       2488:14       2557:17       top       2         2620:1       2532:5,7       2488:14       2557:17       top       2       244         2630:8       2536:21       2479:13       2519:3       253       253         2634:19       2540:11,14       thirty-seven       2395:25       2577:24       262         2414:25       2562:2       253:23       tho 2405:1       2477:9       2424:10       242         2414:25       258:15       2477:9       2391:1       2398:16       242       248         2572:20       258:19       2391:1       2398:16       2543:9       248         2578:24       2609:4       2468:11       2588:16,18       2543:9       244         2626:16       2633:7       2626:16       2594:15	5
2610:8 2613:13,22 2494:2 2503:4 2619:6 2506:5,23, 2620:1 2622:2,13 2633:9 2633:9 2634:19 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 2635:20 2568:15 2414:25 2588:19 2588:19 2598:4 2609:4 2609:4 2609:4 2609:4 2609:4 2609:4 2613:13,22 2485:17,18 2504:6 2504:6 2537:22 2538:8 2537:22 2538:8 2537:22 2538:8 27 2538:8 27 2538:8 27 2557:17 2557:17 2692 2588:19 2595:25 2577:24 262 2568:15 2477:9 2577:24 263 262 2588:19 2395:25 2577:24 263 262 2588:19 2395:25 2577:24 263 262 2588:19 2391:1 2424:10 242 248 248 248 248 248 2572:20 2588:19 2598:4 2609	5
2613:13,22	
2615:10	5:5,12,
2619:6 2620:1 2620:1 2622:2,13 2626:3,19 2630:8 2634:19 2635:20 2547:15 2635:20 2553:23 2614:25 2568:15 2414:25 2568:15 2568:15 2572:20 2588:19 2598:4 2626:16 2633:7 2434:12 2488:14 2557:17 2409 2488:14 2557:17 2409 2557:17 2509 2449:13 2519:3 253:5 262:2 2577:24 2529:7 2577:24 262	
2620:1 2620:1 2620:2,13 2620:3,19 2626:3,19 2630:8 2634:19 2635:20 2532:5,7 2635:20 2532:2 2532:2 2536:21 2539:25 2577:24 2630:8 2536:21 2547:15 2598:4 2572:20 2588:19 2598:4 2609:4 2626:16 2633:7  2488:14 25577:17  2598:4 2488:14 25577:17  2598:14 25577:17  2409 2 2479:13 2519:3 2	
2620:1 2622:2,13 2622:2,13 2626:3,19 2630:8 2634:19 2635:20 2547:15 2553:23 2644:25 2553:23 2644:25 2553:23 2644:25 2553:23 2652:2 2568:15 2572:20 2588:19 2598:4 2609:4 2626:16 2633:7 2488:14 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 2557:17 259:4 2519:3 2530 2519:3 2519	2572:8
2622:2,13 2626:3,19 2630:8 2634:19 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 2635:20 2547:15 262:2 2568:15 2414:25 2568:15 2577:24 2635:25 2414:25 2568:15 2577:24 2635:25 2414:25 2568:15 2477:9 2577:24 263 263:25 2	
2630:8 2536:21 2479:13 2519:3 253 2634:19 2547:15 2395:25 2577:24 262 2414:25 2568:15 2477:9 2424:10 242 2572:20 2588:19 2391:1 2398:16 248 2598:4 2626:16 263:7 2588:16,18 244 263:17 263	
2634:19 2635:20 2547:15 2553:23 2414:25 2568:15 2577:24 2588:19 2577:20 2588:19 2598:4 2626:16 2626:16 2636:21 2636:21 2637:25 2622 2637:24 263 2632 2632 2632 2632 2632 2632 263	
2635:20	
themselves       2553:23       2577:24       263         2414:25       2562:2       2477:9       2424:10       242         theoretical       2583:4       Thomas       timeline       248         2572:20       2598:4       2391:1       2398:16       249         theoreticall       2598:4       2609:4       2468:11       2588:16,18       244         thereafter       2633:7       2612:24       ,19       Toron         2594:1       5       242	
themselves       2562:2       tho 2405:1       tiered       topic         2414:25       2568:15       2477:9       2424:10       242         theoretical       2583:4       Thomas       timeline       248         2572:20       2588:19       2391:1       2398:16       top-10         theoreticall       2598:4       2468:11       2588:16,18       244         thereafter       2626:16       2612:24       ,19       Toron         2598:1       242       2598:1       242	
2414:25     2568:15     2477:9     2424:10     242       2572:20     2588:19     2391:1     2398:16     242       2578:24     2609:4     2468:11     2588:16,18     244       2578:24     2626:16     2626:16     2633:7     2594:15     700	1:18
theoretical     2583:4     Thomas     2426       2572:20     2588:19     2391:1     2398:16       theoreticall     2598:4     2609:4     2543:9       y 2578:24     2626:16     2626:16     2612:24     19       thereafter     2633:7     2594:15     242	
2572:20	:21
theoretical1     2598:4     thoughts     2543:9     244       y 2578:24     2626:16     2633:7     2612:24     794:15     7000       thereafter     2633:7     242	1:13
theoretical 2609:4 2543:9 2543:9 244 2626:16 2633:7 2612:24 ,19 Toron 2594:1 5	evel
Y 25/8:24     2626:16     2468:11     2588:16,18       thereafter     2633:7     2612:24     ,19     Toron       2594:1     5     242	
thereafter 2633:7 2612:24 ,19 26101	
1 2594.1 5 1 242	
1 2000.10 1 310000110	1:12
2567:9 2416.2 timely total	
thermal 2417.1 3 8 2491.24 239	1:24
2399:5	2:9
2441.22	3:25
1 thermostat   2446.25   242	3:9,11
2446:22 2563:3 2436:20 2447:1 2589:1,5	1:3
2621:23 <b>they'll</b> 2454:3 2591:1 246.	2:2
2634:10 2419:14 2478:2 2592:12 246.	3:8
2635:16 2438:17 2482:17 246.	
2495·19 2488:15 <b>timers</b> 246	5:6,7,8
2489:8 2436:21 249.	5:2
I I I I I I I I I I I I I I I I I I I	5:2 2:22
there's 2415:16,18 2538:14 2612:23 252	5:2 2:22 7:14
2409:8 2432:21 2576:14,23 today 2432:3	5:2 2:22 7:14 0:3,14,
2410.0	5:2 2:22 7:14 0:3,14,
2420.9	5:2 2:22 7:14 0:3,14, 2529:19
2430.4	5:2 2:22 7:14 0:3,14, 2529:19
2437:1	5:2 2:22 7:14 0:3,14, 2529:19 1:13 5:10 5:20
2430.0	5:2 2:22 7:14 0:3,14, 2529:19 1:13 5:10 5:20 1:9
2440:10	5:2 2:22 7:14 0:3,14, 2:529:19 1:13 5:10 5:20 1:9 3:16
2444:8 17 2506:6 2585:4 257	5:2 2:22 7:14 0:3,14, 2:529:19 1:13 5:10 5:20 1:9 3:16 2:3

2608:20 2609:2	2487:18	2442:14	twice 2418:8	0510 16
2609:2				2510 <b>:</b> 16
	2546:8,12	2448:9		2517:16
	2586:9,11	2457:15	two-o-two	2526:23
totally	2627:2,7	2459:18	2442:5	2533:12
2578 <b>:</b> 25	2628:9,22	2462:20	2620:12	2565:21,23
touched	2629:20,22	2483:19	two-thirds	2631:25
2597:17	travel	2514:1	2629:2	2633:15
track 2405:9	2578:14	2521:15	two-thirty	typify
2411:24	23/0:14	2522:4	2466:1,21	2417:6
2540:14	treated	2530:10	·	2417:0
2605:14	2397:15,17	2536:3	tying	
	2419:15	2539:6	2518:12,15	U
tracked	2568:8	2566:17	<b>type</b> 2428:7	ultimately
2541:11	treatment	2611:4	2484:20	2443:10
tracking	2562:14,15	2615:17	2497:5	2532:24
2541:24	2576:13	2618:2	2498:6	un
tracks	£	2622:21	2501:6	2561:18,19
2412:5	tried	2623:25	2577:10	
2412:5	2447:11	turning	2585:20	unaffected
traders	trilogy	2414:20	2635:10	2405:6
2504:20	2414:23	2423:23	types	uncertainty
2507:4,13	trouble	2457:3	2449:25	2503:16
trading	2422:5	2614:12	2484:20	unconditiona
2467:14			2497:6	1 2522:18
2506:8	<b>true</b> 2397:21	turns 2485:1	2563:24	<b>1</b> 2322:18
2511:9	2398:14	2604:17	2577:14	underlying
	2411:7	twelve	2587:24	2484:11
traditional	2468:18	2418:12	2630:21	undersized
2619:2	2573:14,20	2516:3		2549:22
traditionall	2587:13	twenty	typical	
<b>y</b> 2621:23	2632:11	2390:18	2404:1,10,	understand
transcript	<b>try</b> 2404:22	2404:13	17,24	2400:25
2387:17	2512:17	2421:13	2415:20,24	2432:2
2398:6	2538:3	2431:11	2416:19,21	2440:2
2564:17	2540:3	2579:8	2417:1,14	2457:25
_	2605:13	2585:13	2418:22	2463:1 2471:5
transfer	2613:19	2628:7	2422:3 2437:11,12	2471:5
2575:12	2618:17	twenty-five	243/:11,12	2475:1
translate	trying	2487:22	typically	2480:10
2574:3	2402:25	2497:22	2395:19	2536:8
2630:2	2541:2	2566:14	2403:5	2538:8
translates	2563:4	2300.14	2405:17	2550:16
2402:7	2576:10	twenty-one	2408:16	2552:1
	2578:22	2494:12	2411:12	2553:21
transmission	2616:14	twenty-seven	2418:9,13	2565:15
2399:11	2618:16,17	2396:10	2419:13	2580:14,15
2405:20	turn 2398:22	2397:2	2420:2	2590:19
2406:20,25	2400:7	2535:10	2427:16,23	2592 <b>:</b> 15
2408:1,4	2400:7	2614:19	2428:20	2609:11
2412:11	2425:7	twont	2431:1,4	2611:20
2450:21	2427:1	<b>twenty-six</b> 2494:12	2484:15	2626:25
2485:22	2431:25	Z494:1Z	2491:22	understandin
2486:12,20	2101.20		2496:6,9	understandin

PUB - MANITUB.	A DIDRO GRA	01-08-2013	Page 2/03 0.	L 2/0/
<b>g</b> 2398:1	unfortunate	upgrades	2556 <b>:</b> 15	2478:20
2401:13	2557:17	2545 <b>:</b> 3	2566:3	2481:11
2486:6	2594:24	2554:15	2569:13	2401.11
	2394:24	2554:15	2570:20	
2532:4	unfortunatel	<b>upon</b> 2390:1		V
2549:4	<b>y</b> 2398:15	2467:19	2618:19	valuable
2592:17	2557 <b>:</b> 15	2468:5,6	2632:8	2501:20
2607:18	0410 05	2475:4,23	2634:5,20	
2614:15	unit 2413:25	2481:6,7	usages	value
2631:17	2414:8	2513:19,20	2411:11	2423:6,7
understood	2428:5,15	2557:6,7		2443:8,17,
2401:15	2520 <b>:</b> 4	2584:2	useful	24 2448:4
2442:15	2555 <b>:</b> 11	2585:13	2628:17	2455:4
2453:20	unitary	2596:5,6	users	2466:16
2457:22	2619:17	2597:17	2491:15	2472:11
2521:8		2614:12	2503:13	2473:13,16
	United			2477:25
2522:1,9	2446:10,24	2616:6	utilities	2479:20
undertake	2567 <b>:</b> 25	2637:8	2385:3,20	2500:10,20
2436:22	universal	upper	2389:17	,21
2439:19	2566:6	2635:11	2391:23	2572:11,12
2483:11			2398:25	2577:11 <b>,</b> 12
2510:23	2577 <b>:</b> 21	uptake	2421:10	2578:12
	universally	2389:5	2446:10	2585:13
undertaken	2498:16	2422:19,24	2457:6	
2587:20	University	2502:23	2512:24	value-laden
2588:2,13	_	2564:19	2513:9	2577:14
undertaking	2579 <b>:</b> 9	2573 <b>:</b> 4	2545:18	values
2421:25	unless	usage	2547:11	2423:3
2422:17,22	2570 <b>:</b> 21	2394:12	2566:23	
2439:13,22	2575:13	2395:5,11,	2567:3,16,	variability
2509:3,9	2579 <b>:</b> 17	13,14,24	24 2580:5	2412:10
2512:10	2632:14	2396:17,21	2590:17,22	2635:12
2513:3	2637:1	,22	,23	variable
2555:9	. 1 . 1 . 1	2403:3,11		2396:2,7
2610:1,10	unlikely	2405:6,22	utility	2528:13
2624:15	2546:17	2409:15,22	2403:22	2566:10,12
2636:17	unlimited	2411:8,9,1	2512:6	2567:6,8,9
2030.17	2545:25	5 2412:8,9	2544:13	,14
Undertakings		2415:19	2558:24	2568:17 <b>,</b> 19
2387:4	unrecovered		2560:25	2598:9
2389:1	2529:13	2417:7,9	2561:25	
undue	2533:24	2418:15,20	2563:20	variation
2562:18	2535:14	,22,23	2573:19	2461:24
2563:11	2544:16	2419:17	2631:17	varied
2303:11	update	2422:8	Utility's	2470:15
unequal	2397:20	2428:9,16,	2411:20	24/0:13
2562:15	2543:7	21 2431:2	Z411;ZU	varies
unequals	2609:19,23	2432:17,18	utilization	2432:18
2562:15		,19	2417:5	2486:22
7707:12	updates	2433:6,9	2545:25	2628:14
unexpected	2593:18	2436:2,8,2	utilize	variety
2560:25	upgrade	1 2437:18		<u> </u>
unfold	2545:1	2438:5	2481:10	2412:6
2593:9	2554:8	2514:13	2503 <b>:</b> 15	2566:15
2030:3	2001.0	2515:18	utilized	various
	l	L		ļ

PUB - MANITOBA	A HIDRO GRA	01-08-2013	Page 2704 01	_ 2707
2389:7	2477:4	2399:1,18	,12,19,22	2442:2,10
2436:5		2521:21	2402:5,11,	2442.2,10
2430:3	voltages		14,19,21	2458:10
· ·	2393:12	2549:8,13,	*	
2457:18	volume	17,23	2403:20,23	
2495:12	2414:21	2550:6,14	2404:4,11,	2462:3,14
2519:8		2551:1,7,1	20,25	2463:3
2538:11	2416:11	0,20	2405:16	2464:21
2613:24	2520:2	2552:4,12,	2406:7,13,	
2614:1	2596:23	24	21	2,15,20
<b>vary</b> 2403:24	2598:13	2553:3,13,	2407:5,11,	
2404:3	volunteered	21 2554:3	19,24	2467:9,13,
2410:1	2432:1	2555:2,13,	2408:3,8,1	
2411:12		18,23	3,18,23	2468:10,19
2437:19	F.7	ways 2477:22	2409:3,7,1	· · · · · ·
2461:21	W	2539:4	1,14,24	14,19
	wait 2453:7	2547:23	2410:5,15	2478:7,13,
varying	walk 2464:5	2551:23	2411:3,7	23
2591:22	2597:23		2412:5,16,	2479:3,8,2
<b>vast</b> 2410:20	11	wealthy	21	1
2603:20	<b>walking</b> 2597:24	2579:4	2413:2,11,	
2628:21	2597:24	weather	16,21	13,17,25
vehicle	Warden	2454:16,17	2414:12,18	
2501:3	2390:17	we'd 2545:10	,24	25
2301:3	2523:21	2564:23	2415:6,10,	2483:2,9,1
<b>ver</b> 2582:20	2564:14,15	2304:23	18	5,18,22,23
verifies	,16,18	week	2416:1,8,1	2484:11,15
2458:9	2565:1	2489:11,12	5,23	2485:2,7,1
	2573:3	,15,25	2417:15,19	4,16
verify	2583 <b>:</b> 8	2594:19	, 25	2488:24
2511 <b>:</b> 16	2591 <b>:</b> 10	2595:17	2419:1,8,2	2490:12
versus	2593:2	2636:11	2 2420:4	2491:8,10
2416:21	Warden's	weekly	2421:6,23	2492:12,21
2441:6	2391:15	2485:4	2422:13	,25
2449:19		2490:4	2423:2,8,1	2493:2,6
2550:8	wasn't	2497:13	3,17,22	2494:8,14,
2577:13	2456:13	2502:20	2424:4,8,1	19,21
2579:6	2470:14	2504:8,18	2,19,24	2495:7,9,1
2636:15	2478:20	·	2425:6,12,	5,19,21,25
via	2509:17	Wein 2604:16	19,22,25	2496:6,21
2569:23,24	2515:21	Weins	2426:15,19 ,24 2427:5	2497:4,8,1 1,17,24
2600:9	2518:4	2387:10	2429:18,21	
	2603:7	2390:21,22	2429:18,21	2498:2,10, 15,21
<b>view</b> 2593:19	wasteful	2391:2,10,	3	2499:9,19
2613:18	2563:22	19,20,22,2	2431:17,24	2500:17
2622:3,5	water 2486:9	5 2392:13	2431:17,24	2501:2,9,1
virtually	2487:19,22	2393:14,19	2435:2,20	1,17
2410:21	2488:4	2395:5	2436:3	2502:4,16
2434:5	2579:19	2396:15	2437:16	2503:2,8,1
2437:21		2397:6,19,	2438:16,23	2 2504:5
2477:16	Wayne 2387:9	25	2439:3,9,1	2514:3,10,
2557:23	2390:22	2398:18,20	8	16,20,23
voltage	2391:9	2400:14,20	2440:2,21	2515:2
VOICage	2398:24	2401:1,2,8	2441:7,18	2516:4,12,
		1	2111.//10	2010.7,12,

	MANTIODA	IIIDNO GNA	01 00 2015	rage 2700 01	2707
23		2551:3	2603:9,13,	15 <b>,</b> 20	2541 <b>:</b> 2
	7:9,15,	2555 <b>:</b> 25	19,25	2632:20,25	2548:21
24		2556:8,13,	2604:4,6,9	2633:3,12,	2551:20,21
	8:3,14,	20 2557:21	,16,20	19,22,23,2	2556:9,10
17,		2558:19	2605:8,11,	5	2557:24,25
	21:16,24	2559:3,6,1	23	2634:6,12	2563:9
	22:8,10,	5,23	2606:1,4,6	2635:2,8,1	2566:16,17
	19,21,2	2560:9,12,	,14,19,24	8	,18
	2524:10	18 2561:4	2607:6,11,	2636:1,4,9	2578:24
	25:1,16	2562:6,12,		2030:1,4,9	2584:23
	26:11,17	20	16,17,23 2608:3,7,1	Weins's	2585:24
		2563:8,25		2522:1	2590:7,11
,21			1,12,17,25	welcome	
	27:4,8,1	2565:5,13,	2609:10,14	2400:14	2591:4
6,2		16,19	,18,21	2521:18	2596:8
	28:7,12,	2568:10,13	2610:2,4,8		2615:3
18,		2569:10,19	,17,24	we'll	2618:5
	29:10,16	2570:9,16	2611:3,7,1	2401:13	2622:11
	3,23	2571:13	6,25	2439:18	2627:1,17,
	30:3,6,1	2572:1,10,	2612:3,14,	2461:7	25 2628:5
9,2		23	19,24	2483:15,16	2634:22
	31:6,14,	2573:13,22	2613:3,7,8	<b>,</b> 17 2508:8	West 2567:25
15,		2574:5,19	,13,21	2512:1	!
	32:3,9,1	2575:5	2614:10,25	2528:17	we've
	7,21	2576:5,9	2615:4,10,	2531:15	2423:17
	33:11	2577:4,9,1	15,16,21,2	2536:18	2428:8,24
	34:1,4,8	8 2578:2,6	2	2537:13	2447:21
	5,24	2581:5,18	2616:4,12,	2538:3	2456:3,4,5
1	35:23	2583:1,14	13,19,20	2596:21	2466:9
	86:2,8,9	2584:19	2617:5,7,1	2597:13	2487:15
	3,16,23	2585:11,18	2,16,19,23	2614:10	2491:22
	37:1,4,8	2586:10	2618:4,11,	2637:3	2493:13
	,13,16,	2587:5,12	21	we're	2495:15
23		2588:5,11,	2619:1,6,8		2503:21
	88:13,16	14,17	<b>,</b> 12	2420:20	2504:22
,22		2589:8,17,	2620:1,4,8	2421:4 2440:23	2523:16
	39:3,13,	21	,11,19,25		2533:11
	20,21,2	2590:16,25	2621:1,7,8	2454:13,18	2546:16
5		2591:17 <b>,</b> 25	<b>,</b> 15 <b>,</b> 20	2456:24	2556:14
	10:10,20	2592:8,16	2622:1,4,7	2466:19	2570:25
254	1:2,9,2	2594:4,10	,16,19	2469:4	2582:1
2		2595:10,12	2623:4,6,1	2472:12,21	2590:13
	12:3,6,1	2596:20	1,17,22,23	,22	2597:11
	.9,22	2597:1,2,4	2624:4,11,	2473:11	2609:7
	3:5,11,	,7,19	14,16,23	2486:23	2613:10
1	19,25	2598:1,3,6	2625:2,9,1	2487:6,8	2626:5
	4:10,22	,11,23	8 <b>,</b> 19	2489:12,25	2631:15
, 25		2599:5,6,1	2626:3,11,	2490:4,20	whatever
	15:6,15,	1,21,24	19	2493:22	2573:19
24		2600:5,13,	2627:4,7	2509:19	
1	16:6,9,1	18	2628:5	2519:14	whereas
3,2		2601:3,5,1	2629:8,14	2523:4,7	2453:6
	7:3,15	2,16,21	2630:14,16	2526:12	2573:7
254	18:6,15,	2602:2,5,1	,23	2527:8	2603:1
	2549:2	1,14	2631:5,10,	2535:16	2634:21

2419:6	FOB MANITOD	H HIDNO GNA	01 00 2013	rage 2700 01	
2439:14	whether	13 2558:21	22,23	4	2551:1,5,7
2439:14 6	2419:6	2559:5,8,1	2600:12,21		,10,20
2476:12	2439:14	6	2601:4,8,1	_	2552:4,12,
2482:5		2560:2,11,			
2488:20			•	2635:12	•
2493:16 2496:22 2562:7,16, 2509:23,24 2562:17,16, 2509:23,24 2564:12,11, 2605:4,9,2 2599:23,24 2564:12,11, 2605:4,9,2 2599:23,24 2564:12,11, 2506:6,14, 2606:6,19 2556:15 256:15 256:6,14 2606:6,19 2556:15 2556:10 2556:10 2556:10 2556:11 2570:4,10 2608:7,12, 2559:18 2579:18 2579:18 2579:18 2579:18 2579:18 2579:18 2579:18 2613:15,17 24 6,17 218 268:24 2556:19 268:24 2557:20,24 29 268:24 2557:20,24 29 268:24 2557:20,24 29 268:21 2557:20,24 268:21 2557:20,24 268:21 2557:20,24 268:21 2557:20,24 269:21 263:14 2557:21 263:14 2578:5,16, 2613:5,8,1 262:14 262:14 263:16 278:11,7,8 2613:5,14, 262:14 262:14 263:16 278:11,7,8 2613:5,14, 262:14 262:14 263:16 278:11,7,8 2613:5,8,1 262:11 263:14 2658:17,7,20, 2616:5,11, 262:14 262:14 262:14 262:11 258:17,20, 2616:5,11, 262:14 262:11 262:10 258:17,20, 2616:5,11, 262:11 258:17,20, 2616:5,11, 262:11 258:17,20, 2616:5,11, 262:11		· ·		wind 2552:10	
2496:22			-	···	
2502:22					
2509:23,24 2511:7 12 256:615 256:614 256:61,4 256:61,9 256:61,4 256:61,12 2545:20 22 2569:12 2551:11 2570:4,10 2509:7,12, 2551:15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2571:12,15 2604:18 2573:1,21, 2610:1,5,1 2604:18 2573:1,21, 2610:1,5,1 2604:18 2573:1,21, 2610:1,5,1 2603:15,17 24 2632:17 2576:19,20 2518:9,19, 2618:9,19, 2623:17 2634:2 2577:8,16 2635:4 2578:5,16, 2635:4 2578:5,16, 2635:4 2578:5,16, 2618:5,8,1 2400:17 2583:7,20, 2618:1,7,8 2619:20 2581:1,7,8 2619:20 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:1,7,8 2619:30 2625:14 2581:14 2581:14 2581:14 2581:14 2581:15 2581:15 2581:10 2581:1,7,8 2619:30 2618:13 26			-		
2511:7			· ·		
2526:15   2565:6,14   2606:6,19   2428:19   2556:19				2439:17	2330:20
2520.13				winter	Wittmeier's
2545:20					2556:19
2551:11 2570:4,10 2590:10,17 2514:25 2595:19,24 2551:11 2570:12,15 18 2570:15 2571:12,15 18 2570:15 2571:12,15 18 2570:15 2571:12,15 18 2570:15 2571:12 2604:18 2573:1,21, 2610:1,5,1 2506:20,22 2613:15,17 24 6,17 2516:20,22 2596:24 2628:24 2575:20,24 9 2518:9,19, 24 2632:17 2576:19,20 2612:2,13, 2625:14 2625:14 2635:4 2578:5,16, 2613:5,8,1 2625:14 247:22 2464:2 2578:5,16, 2613:5,8,1 2625:14 2625:					andan
2572:15					
2579:18					
2604:18		· ·			
2613:15,17 2613:15,17 2613:15,17 27 2613:15,17 28 2614:5 26574:14,22 2611:3,8,1 2612:2,13 2623:17 2634:2 2634:2 26578:5,16, 2613:5,8,1 2625:14 2406:12 2635:4 2625:4 2625:14 2625:14 2406:12 2400:17 2583:7,20, 2616:5,11, 2616:5,11, 2616:5,11, 2616:5,11, 2617:6,15, 2612:10 2638:4 2638					2597 <b>:</b> 21
2613:15,17					wont 2506:15
18 2614:5   2574:14,22   2611:3,8,1   2517:20   2628:24   2575:20,24   9   2518:9,19,   2632:17   2576:19,20   2612:2,13,   2625:14   2447:22   2464:2   2577:8,16   2635:4   2579:21   4 2614:10   2625:14   2491:20   2505:20,22   2400:17   2583:7,20,   2616:5,11,   wise 2403:10   2597:12   2612:10   2586:14,15   2617:6,15,   2612:10   2588:1,10,   2618:11,22   2530:4   2599:21   2622:2,51   2599:20   2400:17   2589:9,18   2620:3,14,   2399:17   2443:4   2599:20   2591:15   2592:2,10   9   2400:17   2589:9,18   2622:2,5,1   2391:4,14   2599:20   2599:20   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2599:20   2612:10   2612:1,8,1   26				•	
2632:17 2634:2 2634:2 2635:4 2577:8,16 2635:5,16 2635:4 2578:5,16, 2613:5,8,1 2625:14 2491:20 2625:14 2491:20 2625:14 2581:1,7,8 2615:3,11, 2625:14 2581:1,7,8 2615:3,11, 2625:14 2581:1,7,8 2615:3,11, 2625:14 2400:17 2581:7,20, 2616:5,11, 2612:10 2581:7,20, 2616:5,11, 2612:10 2581:1,10, 2581:8 23 2612:10 2581:1,10, 2581:1,0, 2581:1,20 2581:1,20 2581:1,21 2590:15,18 20 2400:1 2590:15,18 20 2400:1 2590:15,18 20 2400:1 2590:15,18 20 2400:1 2590:15,18 20 2400:1 2590:20 2443:4 2590:21,10 2591:8,18 2620:3,14, 2400:1 2590:20 2464:2 2400:1 2590:20 2464:2 2400:1 2590:20 2464:2 2400:1 2590:20 2464:2 2400:1 2590:20 2590:20 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:8 2390:02 2390:8 2390:15 2591:8,18 2622:2,5,1 2390:8 2390:20 2390:8 2390:20 2580:6 2410:18 2591:11 2591:	,18 2614:5		2611:3,8,1		
2636:17 2636:2 2635:4 2677:8,16 2635:4 2677:8,16, 2613:5,8,1 2625:14 2625:14 2625:20,22 2581:1,7,8 2615:3,11, 2625:14 2625:14 2625:14 2625:20,22 2581:1,7,8 2615:3,11, 2625:14 2625:14 2625:14 2625:20,22 2581:1,7,8 2615:3,11, 2625:14 2625:14 2625:20,22 2581:14 2625:14 2625:21 2625:21 2625:21 2625:21 2625:21 2625:21 2625:21 2625:21 2625:21 2626:5,11, 2626:5,11, 2621:13 2621:7 2611:13 2621:7 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2611:13 2621:7 2611:13 2621:7 2611:13 2621:7 2611:13 2611:13 2611:13 2611:13 2621:7 2611:13 2621:7 2611:13 261	2628:24	2575:20,24	_		
2635:4	2632:17	2576:19,20	2612:2,13,		
white 2631:6         20 2579:21         4 2614:10         2625:14         2505:20,22         22 2579:21         2625:14         2505:20,22         24 2511:9           whoever         2582:21         16,22         wise 2403:10         2581:14         2597:12         2400:17         2583:7,20, 2616:5,11, wishes         2597:12         2617:13         2617:14         2597:14         2597:14         2599:15         2618:11,22         2599:17         2599:17         2619:7,21         2400:1         2400:1         2599:20         2390:8         2590:20         2390:2         2390:2         2390:2         2419:11 <td>2634:2</td> <td>2577:8,16</td> <td>23</td> <td>2625:14</td> <td></td>	2634:2	2577:8,16	23	2625:14	
white 2631:6         20 2579:21 2581:1,7,8 2615:3,11, 2615:3,11, 2582:21         4 2614:10 2625:14         2505:20,22 2,24 2511:9           whoever 2400:17         2582:21 2583:7,20, 2616:5,11, 2583:7,20, 2616:5,11, 2612:10         wise 2403:10 2581:14 2597:12 2613:7           whole 2560:5 2612:10         24 2585:6 2586:14,15 2617:6,15, 2617:6,15, 27         2611:13 2613:7         worked 2597:12 2613:7           whom 2493:19 2588:1,10, 2587:8 23         2618:11,22 2619:7,21 2619:7,21 2619:7,21 2619:7,21 2599:15,18         20 2443:4         working 2443:4           2579:7 2589:9,18 2620:3,14, 2399:17         2590:15,18 20 2400:1         workshop 264:2         2590:20 2590:20 2591:8,18 2622:2,5,1 2390:8 2590:20 2593:11 2622:2,5,1 2391:4,14 2593:11 2622:2,5,1 2391:4,14 2593:11 2623:5,12, 2391:4,14 273:2         witnesses 2624:13,17 2390:22 2390:20 274:13:24 2413:24 274:14,14 2525:13 286:7 2448:9         withitmeier 2623:5,12, 2390:22 2390:20 274:13:24 275:12:16 2593:11 2626:8,13 18,24 2390:22 2580:6         2386:7 2498:9 2595:21 2625:3,10, 2398:22,24 275:15,12 2596:9,10, 275:25:10 2596:9,10, 275:25:10 2596:9,10, 275:25:10 2596:9,10, 275:25:10 2598:2,16, 275:25:21 2598:2,16, 275:25:21 2598:2,16, 275:25:21 2598:2,16, 275:25:21 2598:2,16, 275:25:21 2598:2,16, 275:25:21 2599:8,12, 2599:8,12	2635:4	2578:5,16,	2613:5,8,1	wintertime	
whoever         2581:1,7,8         2615:3,11,         wise 2403:10         ,24 2511:9           2400:17         2582:21         16,22         wishes         2587:12           2400:17         2583:7,20,         2616:5,11,         wishes         2597:12           2400:17         24 2585:6         18,25         2611:13         2613:7           whole 2560:5         2586:14,15         2617:6,15,         withdrawing         2613:7           2612:10         2587:8         23         2523:7         worked           2443:4         2530:4         25,21         2619:7,21         witness         2443:4           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2         working           2390:15         2591:8,18         2621:1,8,1         2390:1         2400:1         workshop           2591:115         2592:2,10         9         2390:8         2590:20         worst 2455:1           whose         2594:9,17         5,19         2391:4,14         worth         2413:24           2493:8         Williams         2624:13,17         2391:9         2413:24           who've         2386:7         24         2391:9         2580:6           widely <td></td> <td>20 2579:21</td> <td>4 2614:10</td> <td>2625:14</td> <td>-</td>		20 2579:21	4 2614:10	2625:14	-
whoever         2582:21         16,22         wise         2403:10         2581:14           2400:17         2583:7,20,         2616:5,11,         wishes         2597:12           whole 2560:5         24 2585:6         18,25         2611:13         2613:7           2587:8         23         2587:8         2443:4           whom 2493:19         2588:1,10,         2618:11,22         2523:7         2443:4           2530:4         15,21         2619:7,21         witness         2443:4           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2           2590:15,18         20         2400:1         workshop           2390:15         2591:8,18         2621:1,8,1         2400:1         workshop           2591:15         2592:2,10         9         2390:8         2590:20           2410:18         2594:9,17         5,19         2391:4,14         worst 2455:1           2410:18         2594:9,17         2623:5,12,         Wittmeier         2413:24           2410:18         2386:7         2624:13,17         2390:22         2580:6           2410:1         2386:7         2625:3,10,         2399:2,15,         2580:6           widely	wnite 2031:0	2581:1,7,8	2615:3,11,		·
2400:17         2583:7,20,         2616:5,11,         wishes         2597:12           whole 2560:5         24 2585:6         18,25         2611:13         2613:7           2612:10         2586:14,15         2617:6,15,         withdrawing         243:4           whom 2493:19         2588:1,10,         2618:11,22         witness         2443:4           2530:4         15,21         2619:7,21         witness         2464:2           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2           who's         2590:15,18         20         2400:1         workshop           2390:15         2592:2,10         9         2390:8         2590:20           2593:11         2622:2,5,1         9         2390:8         2391:4,14           whose         2594:9,17         5,19         2391:4,14         worst 2455:1           2493:8         williams         18,23         2390:2         2391:4,14         2413:24           who've         2386:7         24         2391:9         2413:24         wrestled           2525:13         2408:9         19         2399:2,15,         2524:16,18           widely         2557:14,18         2626:8,13         18,24 <td>whoever</td> <td></td> <td></td> <td>wise 2403:10</td> <td>2581:14</td>	whoever			wise 2403:10	2581:14
whole 2560:5         24 2585:6         18,25         2611:13         2613:7           2612:10         2586:14,15         2617:6,15,         withdrawing         2523:7         worked           2587:8         23         2523:7         2443:4           2530:4         15,21         2619:7,21         witness         2464:2           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2           who's         2590:15,18         20         2400:1         workshop           2390:15         2591:8,18         2621:1,8,1         witnesses         2590:20           2511:15         2592:2,10         9         2390:8         2390:8         2590:20           2591:11         2592:2,10         9         2390:8         2391:4,14         worst 2455:1           whose         2594:9,17         5,19         2391:4,14         worth         2413:24           2493:8         Williams         18,23         2387:9         wrestled         2580:6           2419:11         2387:15         2624:13,17         2399:22         2580:6         2580:6           widely         2557:14,18         2625:3,10,         2399:22,15,         2524:16,18         2525:13	2400:17	2583:7,20,	·	wishes	2597:12
## Wind	<b></b>				2613:7
whom 2493:19         2587:8         23         2523:7         2443:4           2530:4         15,21         2618:11,22         witness         2464:2           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2           2590:15,18         20         2400:1         workshop           2390:15         2591:8,18         2621:1,8,1         witnesses         2590:20           2591:11         2592:2,10         9         2390:8         worst 2455:1           whose         2594:9,17         5,19         2391:4,14         worth           2410:18         2595:13         2622:2,5,1         Wittmeier         2413:24           2493:8         Williams         2387:9         wrestled           2419:11         2387:15         2624:13,17         2390:22         2580:6           2419:11         2387:15         2625:3,10,         2398:22,24         written           2408:9         19         2399:2,15,         2524:16,18           widely         2557:14,18         2626:8,13         18,24         ,20 2525:3           wife 2636:4         19,20         2631:4,14         2512:16         wrong 2453:8           william         2597:3,8,9         2			·		worked
whom 2493:19         2588:1,10,         2618:11,22         2523:7         working           2579:7         2589:9,18         2620:3,14,         2399:17         2464:2           who's         2590:15,18         20         2400:1         workshop           2390:15         2591:8,18         2621:1,8,1         witnesses         2590:20           2511:15         2592:2,10         9         2390:8         2590:20           whose         2593:11         2622:2,5,1         2391:4,14         worth           2410:18         2595:13         2622:2,5,1         wittmeier         2413:24           2493:8         Williams         18,23         2387:9         wrestled           2419:11         2387:15         2624:13,17         2390:22         2580:6           2419:11         2387:15         2625:3,10,         2398:22,24         written           2408:9         19         2399:2,15,         2524:16,18           wide 2571:14         2525:21         2626:8,13         18,24         2025:25:3           widely         2596:9,10,         2630:13,14         2400:14         2528:18           wife 2636:4         19,20         2631:4,14         2521:17,18         2458:25	2612:10			_	
2530:4 2579:7 2589:9,18 2589:9,18 2620:3,14, 2399:17 2464:2  who's 2590:15,18 20 2400:1 workshop 2390:15 2591:8,18 2621:1,8,1 2592:2,10 2593:11 2622:2,5,1 2400:1 workshop 2390:8 2390:8 2390:8 2390:8 2390:4,14 2410:18 2595:13 2622:2,5,1 2391:4,14 worth 2410:18 2595:13 2623:5,12, 2493:8 who've 2386:7 2419:11 2525:13 2408:9 wide 2571:14 2525:21 2525:21 2596:9,10, wife 2636:4 wife 2636:4 wife 2636:4 wife 259:2,16, 2386:9 2387:14 2599:8,12. 2620:3,14, 2399:17 2400:1 workshop 2390:20 2390:8 2390:8 2390:8 2390:8 2390:20 2390:8 2390:20 2390:8 2390:20 2390:8 2390:20 2391:4,14 worth 2413:24 wittmeier 2413:24 2438:1 2595:13 2622:3,10, 2399:22,24 2391:9 2399:22,15, 2399:2,15, 2400:14 2598:2,16, 2631:4,14 2512:16 2521:17,18 2458:25 2632:19 2524:10 2458:25 2458:25 2635:2,18 3,17,23 year's 2464:2 2399:17 2464:2 2400:1 workshop 2461:2 Workshop 2461:2 Workshop 2461:2 Workshop 2461:2 Workshop 2461:2 Workshop 2490:1 Workshop 2490:2 Workshop 2490:1 Worth 2410:1	whom 2493:19			2523 <b>:</b> 7	2443:4
2579:7  who's	2530:4			witness	working
who's         2590:15,18         20         2400:1         workshop           2390:15         2591:8,18         2621:1,8,1         2390:8         2590:20           2511:15         2592:2,10         9         2390:8         2390:8         2390:4,14           whose         2594:9,17         5,19         2391:4,14         worth         2413:24           2493:8         Williams         18,23         2387:9         2387:9         wrestled           2493:8         2386:7         2624:13,17         2390:22         2580:6         2580:6           who've         2386:7         24         2391:9         2580:6         2580:6           2419:11         2387:15         2625:3,10,         2398:22,24         2580:6         2580:6           wide 2571:14         2525:21         19         2399:2,15,         2524:16,18         2524:16,18         2525:21         2626:8,13         18,24         2524:16,18         2528:18           widely         2595:20,21         2630:13,14         2400:14         2528:18         2528:18           wife 2636:4         19,20         2631:4,14         2521:17,18         2458:25           William         2597:3,8,9         2633:3,19,         2549:1,8,1 <t< td=""><td>2579:7</td><td></td><td></td><td></td><td>2464:2</td></t<>	2579:7				2464:2
2390:15 2591:8,18 2592:2,10 2593:11 2622:2,5,1 2390:8 2390:8 2593:11 2622:2,5,1 2391:4,14  worth 2410:18 2493:8  who've 2419:11 2525:13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:17,18 2626:8,13 2630:13,14 2630:13,14 2630:14,14 2630:14,14 2631:4,14 2631:4,14 2631:4,14 2632:19 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:2,18  27 288:19 288:25					workshop
2511:15  2592:2,10 2593:11 2622:2,5,1 2594:9,17 2410:18 2493:8  Williams 2386:9 2595:20,21 2438:1  Wife 2636:4  William  2596:9,10 2598:2,16 2598:2,16 2598:2,16 2598:2,16 2598:2,16 2598:2,16 2599:8,12  Witheses 2390:8 2390:8 2390:8 2391:4,14  Worth 2413:24  Wittmeier 2413:24  Wittmeier 2413:24  Wittmeier 2413:24  2390:8  2387:9  2390:8  2390:8  2390:8  2390:8  2390:8  2390:8  2390:8  2390:8  2390:8  2413:24  2598:2,16  2502:3,10, 2398:22,24 2391:9 2399:2,15, 2399:2,15, 2524:16,18 2524:16,18 2524:16,18 2524:16,18 2524:16,18 2524:16,18 2524:16,18 2524:16,18 2528:18  2528:18  2458:25			-		_
## whose   2593:11   2622:2,5,1   2391:4,14   worth   2410:18   2595:13   2623:5,12,   Wittmeier   2413:24   worth   2580:6   written   2580:6   written   2595:13   2625:3,10,   2399:2,15,   2524:16,18   2524:16,18   2525:3   2626:8,13   2400:14   2528:18   wrong 2453:8   2528:18   wrong 2453:8   2458:25   wrong 2453:8					2390:20
whose       2594:9,17       5,19       2391:4,14       worth         2410:18       2595:13       2623:5,12,       Wittmeier       2413:24         2493:8       18,23       2387:9       2390:22       2580:6         who've       2386:7       249:11       2391:9       2580:6         2419:11       2387:15       2625:3,10,       2398:22,24       2580:6         wide 2571:14       2525:21       2626:8,13       2399:2,15,       2524:16,18         2438:1       2557:14,18       2630:13,14       2400:14       2528:18         widely       2596:9,10,       2631:4,14       2512:16       2528:18         wife 2636:4       19,20       2632:19       2521:17,18       2458:25         William       2597:3,8,9       2633:3,19,       2524:10       2549:1,8,1         2386:9       25       24,25       2549:1,8,1       7         2387:14       2599:8,12.       2635:2,18       3,17,23       year's	2511:15		9	2390:8	worst 2455:1
2410:18 2493:8  who've 2419:11 2525:13  wide 2571:14  widely 2438:1  wife 2636:4  wife 2636:4  william  2595:13  2595:13  2623:5,12, 18,23 2387:9 2390:22 2391:9 2625:3,10, 24 2625:3,10, 24 2625:3,10, 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2626:8,13 2630:13,14 2630:13,14 2631:4,14 2631:4,14 2632:19 2633:3,19, 2633:3,19, 2524:10 2597:3,8,9 2598:2,16, 2599:8,12, 2635:2,18  Wittmeier 2413:24  wrestled 2580:6  written 2524:16,18 2522:17,18 2524:16 2521:17,18 2631:4,14 2512:16 2521:17,18 2632:19 2633:3,19, 2524:10 2458:25	whose			2391:4,14	worth
2493:8       Williams       2387:17       2387:27       2387:27       2387:27       2387:27       2390:22       2580:6       2580:1       2580:1       2580:1       2580:1       2580:1       2580:1       2580:1       2580:1       2580:	2410:18	· ·		Wittmeier	
who've       2386:7       2624:13,17       2390:22       2580:6         2419:11       2387:15       2625:3,10,       2398:22,24       2391:9         2525:13       2408:9       19       2399:2,15,       2524:16,18         wide 2571:14       2525:21       2626:8,13       18,24       2522:15,         widely       2595:20,21       2630:13,14       2400:14       2528:18         2438:1       2596:9,10,       2631:4,14       2512:16       wrong 2453:8         wife 2636:4       19,20       2631:4,14       2521:17,18       2458:25         William       2597:3,8,9       2633:3,19,       2524:10       2549:1,8,1         2386:9       25       24,25       2549:1,8,1       Y         2387:14       2599:8,12,       2635:2,18       3,17,23       year's	2493:8	2393:13			2413.24
2386:7 2419:11 2525:13 2408:9 2438:1 2557:14,18 2595:20,21 2438:1 2596:9,10, 2386:9 2386:9 2386:7 2419:11 2525:13 2625:3,10, 2398:22,24 2399:2,15, 2399:2,15, 2399:2,15, 2400:14 2524:16,18 2524:16,18 2630:13,14 2512:16 2528:18 2631:4,14 2521:17,18 2631:4,14 2521:17,18 2632:19 2633:3,19, 2386:9 2597:3,8,9 2633:3,19, 2524:10 2598:2,16, 24,25 2635:2,18 2391:9 2391:9 2391:9 2391:9 2491:16,18 2524:16,18 2525:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:23:18 2635:2		Williams			wrestled
2387:15 2525:13 2408:9 2625:3,10, 2398:22,24 2399:2,15, 2524:16,18 2525:21 2527:14,18 2525:21 2626:8,13 2630:13,14 2596:9,10, 2631:4,14 2596:9,10, 2631:4,14 2597:3,8,9 2597:3,8,9 2386:9 2386:9 2399:2,15, 2626:8,13 2400:14 2512:16 2528:18 2521:17,18 2631:4,14 2632:19 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2599:8,12,18		2386:7	· ·		2580:6
2408:9  wide 2571:14  widely 2438:1  wife 2636:4  William 2386:9 2399:2,15, 2409:14 2525:21 2626:8,13 2626:8,13 2400:14 2595:20,21 2596:9,10, 2631:4,14 2632:19 2632:19 2633:3,19, 2632:19 2633:3,19, 2633:3,19, 2633:3,19, 2633:3,19, 2599:8,12, 2635:2,18  2599:8,12, 2635:2,18  2599:8,12, 2635:2,18  2599:8,12, 2635:2,18		2387:15			written
wide 2571:14       2525:21       2626:8,13       18,24       ,20 2525:3         widely 2438:1       2595:20,21       2630:13,14       2400:14       2528:18         wife 2636:4       19,20       2631:4,14       2521:17,18       2458:25         William 2386:9 2387:14       2598:2,16, 25       24,25       2549:1,8,1       2549:1,8,1         2599:8,12.       2635:2,18       3,17,23       year's	2525:13	2408:9			
widely     2557:14,18     2626:8,13     2400:14     2528:18       2438:1     2595:20,21     2630:13,14     2512:16     2528:18       wife 2636:4     19,20     2631:4,14     2521:17,18     2458:25       William     2597:3,8,9     2633:3,19,     2524:10     2528:18       2386:9     2598:2,16,     24,25     2549:1,8,1     2549:1,8,1       2387:14     2599:8,12,     2635:2,18     3,17,23     year's	wide 2571:14	2525:21			
2595:20,21 2438:1 wife 2636:4 William 2386:9 2387:14 2595:20,21 2596:9,10, 18 2631:4,14 2632:19 2632:19 2633:3,19, 2458:25 2458:25 2458:25 2458:25 2458:25 2458:25		2557:14,18	· ·	· ·	
2438:1  wife 2636:4  William  2386:9  2387:14  2596:9,10,  2631:4,14  2632:19  2632:19  2633:3,19,  24,25  2635:2,18  2512:16  2521:17,18  2458:25  wrong 2453:8  2458:25  2458:25	_	2595:20,21	<i>'</i>		
wife 2636:4     19,20     2631:4,14     2521:17,18     2458:25       William     2597:3,8,9     2632:19     2524:10       2386:9     2598:2,16,     24,25     2549:1,8,1       2387:14     2599:8,12.     2635:2,18     3,17,23   Y year's	2438:1	·	-		wrong 2453:8
William 2597:3,8,9 2598:2,16, 2386:9 2387:14  2599:8,12.  2632:19 2632:19 2524:10 2549:1,8,1 2549:1,8,1 2599:8,12.	wife 2636:4		· ·		2458:25
2598:2,16, 2633:3,19, 2524:10 2386:9 2387:14  2598:2,16, 24,25 2549:1,8,1 25 2635:2,18  2635:2,18  27  year's	*** 1 1 .	•			
2386:9 2387:14 25 2599:8.12. 24,25 2635:2,18 3,17,23 <b>year's</b>					
2387:14 2599:8.12. 2635:2,18 3,17,23 <b>year's</b>			· ·		
2557:1,12, 2636:3,7,2 2550:6,14 2491:18			· ·		=
	2557:1,12,	2000.0,12,	2636:3,7,2	2550:6,14	2491:18

PUB - MANITUBA	A HIDRO GRA	01-08-2013	Page 2/0/ 0.	L 2707
atanda	<b>zero</b> 2431:9			
<pre>yesterday 2445:9</pre>				
2445:9	2488:4			
<b>yet</b> 2533:9	2526:16			
2536:18	2623:15,21			
2539:4	2626:1			
2588:12	zero-two			
2594:25	2441:24			
2600:8	<b>zone</b> 2397:1			
2601:10				
2609:4	2524:13			
2615:8	2527:22			
<pre>yield 2426:1</pre>	2528:10 2535:5			
yielding	2536:6			
2558:16	2537:15			
	2539:9,16			
you'll	2540:14,18			
2461:16	2545:1,21			
2534:25	2547:2,24			
2608:8	2549:3,20			
2611:5	2552 <b>:</b> 21			
2615:25	2553:10,20			
2618:4,11	2600:9			
2621:20	2602:20			
2622:22	2604:2			
2623:6,7	<b>zones</b> 2424:7			
2624:2,4,1	2551:19			
9 2633:4,5	2552:23			
yourself	2332:23			
2631:23				
you've				
2423:14				
2451:11,12				
2484:10				
2523:25				
2556:18				
2558:1 2561:20				
2562:17				
2563:1				
2568:22				
2570:17				
2574:1				
2594:21				
2603:14				
2607:25				
2614:16				
2615:5				
2622:10				
2630:19				
Z				