



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re:

MANITOBA HYDRO
NEEDS FOR AND ALTERNATIVES TO
REVIEW OF MANITOBA HYDRO'S
PREFERRED DEVELOPMENT PLAN

Regis Gosselin	- Chairperson
Marilyn Kapitany	- Board Member
Larry Soldier	- Board Member
Richard Bel	- Board Member
Hugh Grant	- Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
April 25, 2014
Pages 8200 to 8453

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1 --- Upon commencing at 9:05 a.m.

2

3 THE CHAIRPERSON: I believe that we can
4 commence today's proceedings. So without further ado,
5 I'll ask Mr. Peters, please, could you introduce
6 today's events? Thank you.

7 MR. BOB PETERS: Yes, thank you, Mr.
8 Chairman. Good morning. Good morning, ladies and
9 gentlemen. Welcome. This morning, scheduled through
10 the facilitation of CAC (Manitoba), is an Elders and
11 traditional land use panel. They've gathered before --
12 before the Board this morning. To introduce them and
13 to assist in the presentation of their materials will
14 be Ms. Craft, seated to my left, and to her left, also,
15 Ms. Pastora Sala, who will be assisting.

16 There's no other matters of business
17 this morning, Mr. Chairman and panel members, so I
18 suggest we turn it over to Ms. Craft to -- to commence
19 the proceedings and to introduce -- introduce our
20 panel. Thank you.

21 THE CHAIRPERSON: Thank you, Mr.
22 Peters. Bonjour, Madam Craft.

23 MS. AIMEE CRAFT: Bon matin, M.
24 President. Good morning, panel members and to everyone
25 in the room. At the first order of business we would

1 request the opportunity for Elder Flora Beardy to share
2 an opening prayer.

3

4 (OPENING PRAYER)

5

6 MS. AIMEE CRAFT: Before we proceed to
7 introductions, Mr. Chair, I just want to note for the
8 record that the panel is of traditional land users and
9 Elders. We have someone who's going to explain to us a
10 bit -- bit of the difference between those two (2)
11 names that we've used to describe this panel.

12 And both the Elders and traditional land
13 users that are here today represent three (3) of the
14 Northern communities that are partners in the
15 hydroelectric developments that are under consideration
16 by this Board. And I wanted to note for the -- the
17 Board that they have been provided with tobacco and
18 have been asked to share their knowledge, stories, and
19 histories with you today and, in accordance with the
20 protocol, have been offered that -- that tobacco. And
21 those are the -- the red ties that you'll see before
22 you on the table, and -- and that it will be used for
23 the -- the truth of the -- the words that are spoken
24 today.

25 As Mr. Peters mentioned yesterday, this

1 panel met. They are generally not strangers to each
2 other, but we will be introducing them. And -- and
3 some of them didn't know each other very well before
4 having the opportunity to sit together. Although they
5 have come together and will be offering a PowerPoint
6 presentation that we would ask be marked as CAC Exhibit
7 64, but it is a PowerPoint presentation on behalf of
8 the -- the panel members that are sitting here.

9

10 --- EXHIBIT NO. CAC-64: PowerPoint presentation

11

12 MS. AIMEE CRAFT: As well as an Exhibit
13 CAC 64-1, which is a list of Cree words that are meant
14 to assist you as the panel members may be speaking in
15 their language, using certain words in their language,
16 and this is a tool for you to -- to utilize to help you
17 along in understanding some of the words and concepts
18 that may be used today.

19

20 --- EXHIBIT NO. CAC-64-1: List of Cree words

21

22 MS. AIMEE CRAFT: The panel has also
23 asked me to communicate that they come here together in
24 -- in reflecting two (2) particular values that will be
25 guiding their comments today, and those are respect and

1 truth. It was very important for them, sitting
2 together, to acknowledge that those were the
3 foundations of -- of what they would be doing today.

4 So I -- I give those to you as -- as
5 opening remarks for this panel and -- and ask that Mr.
6 Ivan Moose introduce each of the panel members. Mr.
7 Moose will be acting as a facilitator for this panel.
8 So on the mention of those Cree words, he may be doing
9 some translation. He may offer translation for some of
10 the -- the Elders' comments, provide some reminders,
11 and assist with placenames and -- and other things that
12 the Elders and traditional land users may request of
13 him during -- during the presentation today.

14 So with that, I'll -- I'll turn it over
15 to Mr. Moose for the -- the brief introduction of the
16 panel members, and then we'll do a swearing in of each
17 of the -- of the panel members.

18 ELDER IVAN MOOSE: Good morning. We --
19 we appreciate the opportunity to speak. We welcome
20 everybody that's here. I will not be too long as we
21 have only given like two (2) hours. We are very glad
22 for the time to be heard. So I'll start introductions.

23 From my right here, this is Elder Jack
24 Massan. He's a lifetime resource users -- user. He
25 worked with all the -- he worked with the projects in

1 plumbing and piping. He's retired now, but he's a
2 full-time resource user in his trap line area.
3 Immediately to his right is his wife. She's a teacher.
4 Her name is Christine Massan. She's from Fox Lake.

5 And next to...

6

7 (BRIEF PAUSE)

8

9 MR. IVAN MOOSE: And next -- oh, there
10 we go. I can hear myself. So, sorry about that.
11 Okay.

12 We'll move along to Ila, Ila Disbrowe,
13 right, not Disbrowe, okay, Disbrowe, from TCN. She's a
14 traditional land user. Immediate to his right -- from
15 her right is Robert Spence. He's a -- he's from TCN.
16 He's a trapper, hunter, resource user, traditional
17 fisherman. He's an artist, and he does art work of
18 welding and carving and painting. He's also a
19 traditional land user.

20 Next to him is Elder Flora Beardy, from
21 York Factory. She just told me to introduce her as
22 Elder, but she does trap and hunt. Next to her is Noah
23 Massan, Elder Noah Massan from Fox Lake. He's a trap
24 line holder, trapper, hunter, fisher -- fisherman. He
25 worked with all the projects right from day 1 as a --

1 in various -- various positions, but his main -- his
2 main -- he was as an operator. He worked in all the
3 projects. He knows about the projects they worked on.
4 He's a trap line holder, and his trap line is going to
5 be dearly affected with the Keeyask project.

6 And my name is Ivan Moose. I'm from Fox
7 Lake. To use a -- use an old friend of mine's term,
8 I'm a dissident. Actually we're not dissidents. We're
9 people that care for our people. We're worried about
10 our children and grandchildren. We were taught by our
11 ancestors not to -- not to be -- not to allow people to
12 walk over us, and we've been allowing that too long.
13 And we've been trying to fight it as individual First
14 Nations, but as we learned -- as we know -- as you all
15 know, we're all from the First -- York Factory First
16 Nation but divided years ago by the government. We are
17 still one (1) nation, and that's what we intend to
18 stand together as to fight our cause.

19 We're -- we are very caring, giving
20 people, but un -- unfortunately, our caring and our
21 giving has been taken advantage of by projects that are
22 destroying our lands and our -- all the resources we
23 have, with no benefits to our people whatsoever.

24 So basically, what we're here to do is
25 to -- I mean, we come here to tell you what we feel

1 from our hearts, which is the truth, that you have to
2 know what is being done to our land is not what we
3 want, about the project, the Bipole, whatever project
4 it is.

5 Our people are suffering very bad. I
6 know half -- half these people that sit here have not
7 been up to our area. They haven't seen the conditions
8 we live, or the -- or the condition of our lands, our
9 homes, or whatever. You know, they sit here and
10 they're told things by people that work for them who
11 have no idea of how we live, how we're being dest --
12 destroyed by these projects.

13 So we're just -- we're just here to tell
14 you the truth. We're telling the other side of the
15 coin. Enough lies, time for truth. Sorry to say that,
16 but it -- it's how it is. Thank you.

17 MS. AIMEE CRAFT: At this time we'll do
18 the affirmations for the witnesses, Mr. Chair.

19

20 CAC ELDERS AND TRADITIONAL LAND USERS PANEL:

21 NOAH MASSAN, Affirmed

22 ROBERT SPENCE, Affirmed

23 FLORA BEARDY, Affirmed

24 ILA DISBROWE, Affirmed

25 CHRISTINE MASSAN, Affirmed

1 JACK MASSAN, Affirmed

2 IVAN MOOSE, Affirmed

3

4 EXAMINATION-IN-CHIEF BY MS. AIMEE CRAFT:

5 MS. AIMEE CRAFT: Just as a -- an

6 opening remark to the PowerPoint, and -- and I have to

7 admit I'm a glorified clicker of this PowerPoint

8 presentation, so my comments are very brief to start,

9 which is that this PowerPoint will be presented in

10 essentially three (3) time frames to guide the

11 discussion on socioeconomic impact and -- and benefits

12 to the -- the communities and the people.

13 And the -- we're going to discuss things

14 not in a linear fashion. We're actually going to start

15 with the present. We're going to talk about the

16 current state within the three (3) communities that the

17 panel members represent. We're going to talk a bit

18 about the past, but we're not going to dwell on -- on

19 the past. We're going to speak about it in terms of

20 context and then turn to the future and -- and focus on

21 the future and -- and benefits and impacts in -- in

22 that time frame.

23 And with that, we'll start with just a

24 brief introduction to each of the communities.

25 Now, Fox Lake Cree Nation, it says here,

1 is over a 1,000 kilometres north of Winnipeg and has a
2 population of approximately a thousand members living
3 in Gillam and Bird.

4 And, Mr. Moose, can you confirm that
5 that's correct?

6 MR. IVAN MOOSE: I was going to check
7 on that and I forgot, but we'll have to go with that, I
8 guess.

9 MS. AIMEE CRAFT: Does it sound right
10 to you?

11 MR. IVAN MOOSE: That sounds right.

12 MS. AIMEE CRAFT: Okay. Thank you.
13 And York Factory First Nation -- this question is for
14 you, Ms. Beardy -- is approximately 1,000 kilometres
15 north of Winnipeg on the southeast shore of Split Lake
16 and has a population of roughly five hundred (500)
17 people, and was relocated from Hudson's Bay coast to
18 the current location at York Landing in 1957.

19 Is that right?

20

21 (BRIEF PAUSE)

22

23 ELDER FLORA BEARDY: That sounds right.

24

25 MS. AIMEE CRAFT: And to Tataskweyak

1 Cree Nation, also known as Split Lake, Ms. Disbrowe, is
2 located on the north shore of the Nelson River,
3 approximately 900 kilometres north of Winnipeg, and
4 there's an on-reserve population of about twenty-two
5 hundred (2,200) people with another eleven hundred
6 (1,100) off reserve.

7 Is that correct?

8 MS. ILA DISBROWE: And that's more --
9 more on reserve.

10 MS. AIMEE CRAFT: Okay. And these are
11 the official numbers that we've taken from INAC
12 website, but roughly around -- around that. And
13 Tataskweyak, or TCN, and War Lake have formed a
14 partnership for purposes of Keeyask, which is known as
15 the Cree Nation Partners.

16 Is that correct?

17 MS. ILA DISBROWE: Yeah.

18 MS. AIMEE CRAFT: And the next slide
19 here is a picture of -- of you yesterday, the panel
20 members. And this is an opportunity -- at this time, I
21 think I'd like to ask you take the -- the opportunity
22 to explain to the Board why it is that you're here, why
23 it is that you're speaking on this issue.

24 And -- so maybe we'll start with Mr.
25 Moose. I know you've given us some of your

1 introductory comments, but if you could start leading
2 this discussion, and we'll proceed to the other panel
3 members.

4 MR. IVAN MOOSE: Good morning, again.
5 I got involved in this a little while -- a little while
6 ago. And to answer, like, why I'm here is that I've
7 been working with the project too -- with -- for First
8 Nation, but I hadn't seen any movement forward
9 regarding any benefits of any kind to our First Nations
10 or Fox Lake Cree or other First Nations.

11 And it hurts to see all the damage being
12 done. And it's hurting our land and our people. And I
13 decided it's time to start speaking up against it.
14 I've been forward. I've signed agreements on a premise
15 that we're going to get -- a promise that we're
16 supposed to get benefits, which we didn't and haven't
17 received to date. There been a lot of promises. I
18 have loads of papers sitting at home filled with
19 promises that never panned out.

20 So I thought, as my grandparents used to
21 say, You got to fight for your land. They did foresee
22 what was coming. We were told; we were warned earlier,
23 long ago. Now, we're here as a group, because we got
24 to -- we got to start -- start standing as a nation
25 again, as we were, to fight for what is ours: our

1 lands, our people, and our children, and our
2 grandchildren.

3 And we want to speak as one (1), rather
4 than separately. We want to speak as one (1) unit.
5 That's how we -- we intend to speak, as a unit for our
6 people, for people that can't speak themselves or for
7 people that are being taken advantage of.

8 MS. AIMEE CRAFT: Thank you, Mr. Moose.

9 Mr. Massan -- Mr. Jack Massan...?

10 ELDER JACK MASSAN: Yeah. Jack Massan.
11 I -- I was raised in Gillam and all that area there and
12 -- sorry. And they're -- the rivers and -- the rivers
13 already destroyed early. And we use to call that,
14 Nelson River, Kichesippi, what means 'The Great River'.
15 Now, we used to look after everything that is -- that
16 is in that river. But now we can't even do anything
17 about it because it's been controlled with all these
18 dams that are built.

19 They used to -- that river used to
20 control by itself. We used to look after all the fish
21 and whatever that was in that -- in that water, even
22 our land. And now it's just a meek old river now, it's
23 because controlled by humans. And I don't know, it
24 just -- that river is just so dirty that you can't even
25 see the bottom. Before, you couldn't even see the --

1 we could see the -- the bottom of that river, but now
2 we can't even see anything, so.

3 And I've been asking these questions
4 when we're in meetings, How dirty is that river and
5 what's the turbidity on that river? But nobody ever
6 mentioned how dirty that water is. And it's been --
7 oh, I don't know how long we've been having these
8 meetings. And now they're starting to build a couple
9 more dams.

10 And I asked another question. I said,
11 Instead of building these two (2) dams, why don't they
12 put higher or bigger generators so they can generate
13 more power that they -- that they want for the other --
14 these two (2) dams that they're building? But they --
15 they give me no answer. The only answer they gave me
16 was that they need more water.

17 And I -- so I told them, The water --
18 you can see the spillway. The water's always wide
19 open, just -- just the spillways in the summertime.
20 And why would they need more water? And just a big --
21 bigger generators on those. Take the small ones out of
22 there, bigger generators because they need more power.
23 Well, no answer on that.

24 And all these -- the waters exist, the
25 air has always been there, well, about seventy-two (72)

1 years. Now it's just -- the forest is just so -- you
2 can't even -- I can't even see what -- how it was
3 before. I mean, just -- before, it was just -- it was
4 nice. You know, that's where we had our food from.
5 And now, there's the thing with the hydro, they're
6 putting our hydro -- our -- our bills higher just so
7 they can destroy that water, that we're more -- we're
8 paying to -- they're taking money off us to destroy the
9 water -- the river again. And it just -- I just
10 can't...

11 They have been -- and they're putting --
12 I got the trap line there. They're putting Bipole III
13 right through my trap line. And they already got a
14 transmission line going from Gillam to Churchill, right
15 through my line. Now they're going to have -- destroy
16 it again. So it just -- it just don't seem right for
17 me.

18 Like I said, I was born and raised right
19 around that area. But I don't know if your people ever
20 been in the bush or have you ever been in the water
21 when you knew how the bush is. I don't know how many
22 of you people ever been in -- in the forest and go
23 hunting or trapping or fish. Just -- that's why I'm
24 here. I just -- I have to say something about it, so.
25 We've been fighting over this for the last, I don't

1 know, at least twenty (20), thirty (30) years now.

2 Before -- before -- when Hydro came in
3 there, they didn't even say anything about it. They
4 just destroyed the whole -- the whole thing, flooded --
5 flooded the whole area with the trees underneath. Now,
6 all those trees are coming back up. It just -- I just
7 can't -- I don't think it's -- that's all I have to
8 say. I mean, it just -- I just can't -- I don't know.
9 It's -- it's up to you now, I guess.

10 MS. AIMEE CRAFT: Thank you, Mr.
11 Massan. We'll have an opportunity to come back to some
12 of those things in more detail and with some images
13 that -- that you've shared.

14 Ms. Massan...?

15 ELDER CHRISTINE MASSAN: Hello. Thank
16 you for giving me this opportunity to speak on behalf
17 of not just ourselves, but our children and
18 grandchildren, and those people that are gone home
19 ahead of us. Why we are here and why we speak; we are
20 here to tell you the truth. We're going to speak
21 honestly from our hearts to try to make you understand
22 on why this means so much to us.

23 I have watched some of the most
24 beautiful land being destroyed for the purposes of
25 power. Most of it had been done without any

1 consultation, but now there is some consultation to a
2 certain point. And that part is good.

3 I hope to make you understand -- or we
4 hope to make you understand what it means to us to live
5 in harmony. Now, water was given to us years -- a long
6 time ago and years, years ago. The water was clean and
7 was flowing, and was filled with fish and other things
8 that we can eat. Today, you already heard how dirty,
9 how thick the water is. Fish are dying.

10 Our aski is the same thing. They're
11 plowing through, which I -- I have to think, and I
12 believe I may be right, but the corridors that they are
13 making for the Bipole III are much too wide. I believe
14 that if they would have done further study on more
15 basic ways to help save and preserve what we have, they
16 would have come up with something better instead of the
17 -- the corridors they have running through all our
18 forests. They're going in every direction now.

19 Before, it was beautiful to go for a
20 ride from the Gillam through Fox Lake Reserve on to
21 Conawapa. All the land that had been used by all our
22 forefathers was beautiful to see. You could see
23 wolves, animals, deer, birds. You name it. And now
24 you can't even go that far. Conawapa, which was a
25 traditional site for -- for the land users -- land

1 resource users, they can't go there anymore without
2 having to go through security and stuff.

3 And when we were negotiating, we were
4 going to meetings to help the resource users, we asked,
5 Build us a road so we can use it at any time, because
6 for us to go hunting and trapping and fishing, it's not
7 set by the sun. It's by everything else throughout the
8 day. Our lives are not controlled by a clock. You do
9 things as you see fit and as they are dated.

10 Manitoba Hydro told us that it was too
11 expensive to build a road. Then they said, You would
12 have no problems getting to and from Conawapa. And
13 then it came to, Only a certain time you have to be
14 piloted across. When people try to go there, they
15 can't even go there. And I'm speaking from honest.

16 From -- a friend of mine tried to go to
17 Conawapa. He's a land resource user. They don't let
18 him go through. They tell him to come back at a
19 certain time. That's not the way our lives are run.

20 Our forest, it's like a maze. You know
21 the things they show on computer, TV, the leavers
22 (phonetic), things that people come and do in the dead
23 of night, aliens or whatever they are called. Well,
24 when you get up in a plane and you look down, that's
25 what the Gillam area looks like. They've got corridors

1 this way, that way, in every direction you can think
2 of.

3 It's really in a sad state. I think
4 there must be alternative ways for Manitoba Hydro to --
5 to use in this day and age in order to get that power
6 that they need to sell to the United States.

7

8 (BRIEF PAUSE)

9

10 ELDER CHRISTINE MASSAN: I believe this
11 group was meant to be. I'd never heard of her. I'd
12 never heard of Robert, and they didn't know who we
13 were, and yet yesterday when we sat down, all the
14 pieces started to click together. That was a wonderful
15 feeling.

16 But right now, I have so much on my mind
17 and so much to say. I can only give you little bits
18 and pieces in order to put lots on the table, but
19 hopefully, we'll have some more time after, and I don't
20 want to take all the time away from the rest of the
21 group, so hopefully, we'll have time to share some more
22 later, but thank you, panel, for -- again for having
23 us.

24 MS. AIMEE CRAFT: Thank you, Ms.
25 Massan. Ms. Disbrowe, on this -- on this picture,

1 there's actually a -- a caption, and it says, and these
2 are your words:

3 "This is not even a choice. We are
4 supposed to speak for them."

5 Can you explain to us why you're here,
6 and why you're speaking?

7 MS. ILA DISBROWE: I -- I never plan my
8 months in advance or weeks. I go day by day because
9 we're not in control of our destiny of our days, and to
10 me, my path has led me here because we have to speak
11 for -- for our children, Mother Earth, because we are
12 destroying it. We're destroying what was beautiful
13 that was given to us, and we have to start speaking for
14 all creatures. That's what I meant by that.

15 MS. AIMEE CRAFT: Thank you. Mr.
16 Spence...?

17 MR. ROBERT SPENCE: I was in (CREE
18 LANGUAGE SPOKEN). Thank you. I thank the Creator
19 today for leading us to this point in time today, for
20 bringing us here. (CREE LANGUAGE SPOKEN). We
21 appreciate the time that the Public Utilities Board is
22 giving us here today to come and speak about the truth
23 that affect us. (CREE LANGUAGE SPOKEN). It's hard to
24 come up here and sit to speak the truth, especially
25 when it's so intimidating to be sitting around a -- a

1 bunch of people you have never met in your life.

2 But here, (CREE LANGUAGE SPOKEN), we are
3 the first people, the people of the land. Our
4 grandfathers are here. They're all around us. They're
5 behind us. They're with us here today. They're in
6 this room. So whatever we say, by swearing us in, by
7 not swearing us in, we're here to tell the truth, the
8 only truth.

9 (CREE LANGUAGE SPOKEN). I come here
10 today because (CREE LANGUAGE SPOKEN). I come here to
11 speak...

12

13 (BRIEF PAUSE)

14

15 MR. ROBERT SPENCE: ...on behalf of my
16 children and my grandchildren. (CREE LANGUAGE SPOKEN).
17 We come here to speak the truth about the destruction
18 that Manitoba Hydro causes on our environment, on our
19 being, and on the land and the water, the trees, the
20 animals, the birds. Everything living on this planet,
21 we hold dearly and sacred in our hearts.

22 (CREE LANGUAGE SPOKEN). My umbilical
23 cord is tied to the land that we walk on every day. I
24 come here to speak the truth, that what Manitoba Hydro
25 is doing is killing our mother. Every day we watch

1 what Manitoba Hydro is doing. You go out and you watch
2 your mother die of cancer day. You watch her die over
3 and over and over and over again. Every day, you watch
4 her die.

5 (CREE LANGUAGE SPOKEN). Our
6 grandfathers never taught us to use the way the -- use
7 the land the way Manitoba Hydro's used it. They never
8 taught us to destroy it. We were taught to respect it.
9 (CREE LANGUAGE SPOKEN). I didn't come here for the
10 sake of speaking on behalf of the almighty dollar. The
11 people here who are here to question me today are here
12 to question me because of the fact that they are led by
13 the almighty dollar. They're paid. They're going to
14 be paid. They're paid already to ask the questions
15 that they're going to ask.

16 The difference between them is the
17 feeling we have for the land and the money they make.
18 That's what the difference is. They're paid to do what
19 they do; we're not. We're real. We're from the land,
20 aski. (CREE LANGUAGE SPOKEN). I can't stand to see
21 the land, the water, the land floating down the -- the
22 river. I can't stand to see the areas that I used to
23 play as -- as a kid disappearing or all gone already,
24 the places my grandfather took me to fish, where there
25 was a plentiful amount of fish. There was a lot of

1 fish back then. (CREE LANGUAGE SPOKEN).

2 There was lots. There was reed beds.

3 There was vegetation all over the lake. There was

4 ducks, geese, moose, caribou, everything you can

5 imagine, muskrats, beaver. Today, you're hard pressed

6 to find any of that along that whole river system.

7 That's -- everything that we hold so dear is dying all

8 around us.

9 And also deer is dying all around us.

10 It's so easy for the white man to pick up and move

11 whenever he wants, because his roots are not tied to

12 the earth as -- as tightly as it is for us, our people,

13 Inninuwuk, the people of the land. It's easy for you

14 to pick up and move and go wherever you want. You have

15 no connection to this earth the way we have. The

16 respect we have, you'll never understand, for this

17 earth.

18 So why I speak, why we're here? You

19 have a lifetime. I guess not. I think not. I'm

20 forty-four (44) years old, and I'm only allowed so many

21 minutes to speak, which is not fair, but it's just the

22 way it goes, I guess. So with that, I'll pass the mic

23 over to Elder. Flora...?

24 MS. AIMEE CRAFT: Elder Beardy, can you

25 share with us why you're here and why you're speaking?

1 ELDER FLORA BEARDY: Thanks, everybody.
2 I'm really glad to be here. Thank you for giving us
3 the time to come and -- and talk about our concerns.
4 The Aboriginal people are known as keepers of the land,
5 Okanawaynichikaywak. But a lot of times we are not
6 consulted when projects go on. And -- and that's where
7 things start to go wrong. If we were consulted, we
8 would be able to work together. But today, there is
9 some consultation, which is a good thing. But in the
10 past, this hasn't happened. So how can we help look
11 after the land with these projects when we are not even
12 considered?

13 We've seen so much damage. Every day
14 aski, Earth, cries because of the damage that's been
15 done -- being done to her, every day. And we see this
16 in our communities, the damage that is happening. So
17 we, as Aboriginal people, are here. This group is here
18 to come and share these concerns. And we have to speak
19 for our people that can't speak for themselves.

20 We have to speak for the animals, the
21 birds, the fish, every living thing on Earth, because
22 we believe that everything is connected. And once one
23 (1) thing is damaged, it throws the balance off
24 totally. So how do we fix that? Do we just keep going
25 on, damaging Mother Earth and not fixing anything?

1 We -- we're going to talk about bit
2 about the future, what will our future generations
3 have? Today the Elders say: Teach the youth how to
4 live off the land. Teach them how to do this. Teach
5 them our old teachings, or traditions.

6 Because even though they go to school
7 and they get their -- their -- and they graduate, a lot
8 of them are unable to get jobs. So where do they go?
9 They go to social assistance and they end up going down
10 the wrong path. But at least if they're taught how to
11 live off the land, then they can -- they can survive
12 the way our people did for thousands of years.

13 Ininew kiskaynitamowin, traditional
14 knowledge, has kept the Aboriginal people survive --
15 they're survived with that and it's been passed down
16 from generation to generation. (CREE LANGUAGE SPOKEN).
17 Manitoba Hydro talks about traditional knowledge and
18 working closer with the Aboriginal people. I don't see
19 very much of that happening. I see Western science
20 taking over.

21 And yet it can work if we work together.
22 It can happen. And we are in a partnership, and we
23 should be working towards that so we can work together.
24 But in the past, the chiefs that -- the chief that was
25 at York Factory, late Abraham Beardy (phonetic), he

1 spoke about this happening. Now, how did he know what
2 was going to happen in the future? They all lived in
3 the -- in the Hudson Bay area, York Factory, (CREE
4 LANGUAGE SPOKEN).

5 They didn't go to any cities or anywhere
6 to -- to see what else was going on around the country,
7 but how did they know -- how did those Elders know that
8 this was going to happen to our Earth? It -- I -- I
9 often wonder about that, you know. But today, with all
10 the -- and then for our youth. We talk about -- we're
11 going to talk about the future. I think this is
12 something that we really, really have to look at,
13 because how will they survive? How will our future
14 generations survive?

15 So I think further down the
16 presentation, we're going to have -- we're -- we'll
17 have more time to -- to talk about different things,
18 but that is why I am here too, is to -- to present
19 these concerns and to see what we can do about them, to
20 make sure that the panel hears what is going on, and
21 like we said, We are going to speak the truth. Ekosi.

22 MS. AIMEE CRAFT: Thank you, Elder Bear
23 -- Beardy. Mr. Noah Massan...?

24 ELDER NOAH MASSAN: I'd like to -- to
25 thank Public Utilities Board for this -- for us to come

1 here to speak out to what I -- what I got to say in the
2 past. I want to thank all the -- the people around
3 here, and the people upstairs, I guess, as they're
4 known, I guess. Good morning to you guys.

5 I -- I seen my town started from way
6 back. I still listen to the Elders. When Kelsey first
7 come, the Elders, when they were talking about it, I
8 said (CREE LANGUAGE SPOKEN).

9 You're going to block the river, they
10 said, and the Elders in my community thought Nelson
11 River was going to be real dry, so there would be no
12 fish for us. And our road, kimiskenaanaan, they say,
13 How you going to paddle to go somewhere? That's a
14 vision they seen. They thought Kettle River would be
15 water around it.

16 That's why I'm here, to speak out.
17 Like, they used to tell us (CREE LANGUAGE SPOKEN).
18 It's us that will only be carrying it on, because
19 they're not here no more with us. Excuse me.

20 Because what I know is -- like, they
21 used to say, our place in our community, there were a
22 lot of food around our community before Manitoba Hydro
23 come to our community, because I grow up in Gillam. I
24 see what's going on.

25 And then -- then the met -- a couple

1 Elders used to say (CREE LANGUAGE SPOKEN). That's
2 another word. Our river is getting shorter. I used to
3 wonder what they're talking about. Now -- now, I
4 understood, as, like, I work in these dams to see
5 what's going on now. Just a minute.

6 In my community, there's three (3) dams.
7 Kettle is the first -- Kelsey was the first one that
8 blocked the river. Now it's Kettle, Long Spruce, and
9 Limestone. They're just like basins. The fish can't
10 come up no more, and some of the Elders used to tell
11 me, (CREE LANGUAGE SPOKEN). Like, they want to -- they
12 told me, What do we eat? Look, it's getting further.
13 Our fish are just getting further by Manitoba Hydro.
14 They're pushing us away from my community.

15 There used to be a lot of food right
16 there. There were berries, fish, you name it. Even
17 caribou used to walk to our community. I -- I used to
18 see my mom open the window to shoot a caribou, you
19 know? But these fishes is outside. Now we can't even
20 do that in our community. Manitoba Hydro got a lot of
21 bylaws, everything coming from the city. The people
22 that work for Manitoba Hydro, we live in the -- in the
23 town of bylaws now. Our First Nation people can't even
24 have dog. That's how I look at it.

25 And it's okay for Manitoba Hydro to let

1 their dogs run around in -- at night. Our dogs can't
2 do that, if you've got to buy license and everything.
3 All Hydro thinks about is -- you know, the don't see us
4 -- our feeling. They see what's going on in this -- my
5 group here, I'll say my group.

6 And then the feelings, they get though,
7 that's the feeling I get, too. Hydro will just look at
8 numbers, that's all. Like one (1) Elder told me, you
9 know you go and see those horse races, he told me, one
10 (1) Elder, but he's not with us no more. Them horses,
11 when they race, they got this thing here, they said.
12 Manitoba Hydro got those things on the side of their
13 head. They don't want to listen to the people of --
14 the people that live over there. They just see a
15 dollar sign at the -- at the end of the thing, the
16 vision. That's the vision I'd see when this old guy
17 was telling me.

18 That's why I'm here to speak out, to
19 carry it on. They said, You guys are the ones that
20 (CREE LANGUAGE SPOKEN). They tell us, It's you guys
21 that are going to keep carrying it on. Like my chief
22 of counsel, they don't live in my -- in my -- our town.
23 My cousin Joe (phonetic) lives in Thompson. They never
24 see what's going on in our community, so does our
25 Chief. He's from Churchill. He doesn't even have a

1 clue what's going on. You know, he's got to be right
2 in there to see what's going on in my community.

3 That's all I will say for now, but thank
4 you. Thank you.

5 MS. AIMEE CRAFT: Thank you, Mr.
6 Massan. On this next slide, this is an excerpt from
7 the CAC proceeding and an Elder who's not here today
8 who's from Nisichawayasihk Cree Nation, and this is
9 about a customary law. And Elder Beardy, could you
10 share with us your understanding of -- of this
11 particular customary law and how it applies to what
12 we're doing here today?

13 ELDER FLORA BEARDY: I'll read the
14 quote.

15 "One of our customary laws that we
16 are exercising today is
17 tawinamakewin. We come here and
18 exercise the art of listening in
19 order to create understanding amongst
20 ourselves. We are exercising our
21 customary law today."

22 'Tawinamakewin' means that you're making
23 room for, by listening together, more knowledge and
24 information, and this is what we're doing here today.

25 MS. AIMEE CRAFT: Thank you. Now we're

1 going to move to some of the images that represent the
2 present housing way -- housing health and way of life,
3 and the first relates to travel.

4 Can you --

5 THE CHAIRPERSON: Could you hang on for
6 a second, Ms. Craft, please?

7

8 (BRIEF PAUSE)

9

10 MS. AIMEE CRAFT: Okay. So this image
11 is -- you have to focus in really in fine detail to see
12 that this is a sign pointing to the winter road to York
13 Landing and Ilford. And this is the turnoff from the
14 provincial highway.

15 And, Mr. Spence, could you tell us about
16 some of the issues that -- that you may face in
17 relation to travel and that result from some of the
18 hydroelectric projects past and -- and present and
19 future?

20 MR. ROBERT SPENCE: Yeah. I weigh two
21 eighty (280) right now. The road that leads from
22 Thompson to Gillam, Fox Lake, right now is in a mess,
23 is in shambles. There was sign that was put up on
24 Highway 280 and said, "Partnership with Manitoba Hydro"
25 (CREE LANGUAGE SPOKEN) to repair the roads that led to

1 our communities.

2 And you travel that same today that

3 Manitoba Hydro is so proud to display as being a

4 partner of,

5 it's like playing Russian roulette with your life.

6 There are boulders the size of my hat right on the

7 road. The speed limit is 90 kilometres an hour. You

8 can't travel that -- that fast. You -- on a good day,

9 you can travel to Thompson in hour and a half. With

10 the condition and the way the road is today, with all

11 that traffic that's on the road now, two (2) hours, two

12 and a half (2 1/2) hours.

13 But to travel that road today is like

14 Russian roulette. Behind what -- what cloud of dust

15 are you going smack into a Manitoba Hydro truck or one

16 of their contract -- subcontractor's vehicles? It's a

17 dangerous proposition to go on that road today. I'm

18 pretty sure many of you who are in this room today have

19 never been or will never travel on roads like that.

20 And Manitoba Hydro proudly displays their name on a

21 road that dangerous.

22 MS. AIMEE CRAFT: Mr. Spence, are there

23 any other options, in terms of getting in and out of

24 Tataskweyak, other than -- then this road?

25 MR. ROBERT SPENCE: No, there isn't.

1 MS. AIMEE CRAFT: Elder Beardy, can you
2 express and share with us some of your concerns about
3 winter road travel, especially as it relates to new
4 construction projects?

5 ELDER FLORA BEARDY: Well, in the
6 winter our road is sometimes not very to safe to travel
7 because of the fluctuation in -- in the water.
8 Sometimes Hydro lets the water go so that -- that we
9 end up with water along the shoreline. And when you're
10 trying to go out across the lake, then you have to go
11 through some slush sometimes. And this makes it very
12 dangerous for travel.

13 Even in a summer -- this is winter I'm
14 talking about. In the summer too, there's a lot of
15 problems with floating debris. And those -- those can
16 cause accidents. I think we've had a few accidents
17 with -- with people in -- driving motor boats. But you
18 can see a lot of that debris when you're travelling on
19 the ferry from York Landing to Split Lake.

20 So with the -- with the -- back to the
21 winter, when the hunters and the trappers go out on
22 their snowmobiles, you know, they run into slush and
23 they get stuck. And sometimes they go through the ice.
24 So that's -- there's a -- that's a big safety issue.

25 MS. AIMEE CRAFT: Elder Beardy, can you

1 explain to us what the different methods are to get to
2 and from York Landing?

3 ELDER FLORA BEARDY: Well, right now
4 our winter road is closed, so the only way we get in
5 and out of the community is to fly. And every year,
6 the -- the company puts up their prices because there's
7 no competition.

8 In the summer, we have the ferry, which
9 usually starts running maybe late May, early June. And
10 that runs twice a day. It's a two (2) hour ride each
11 way, so that's about the only way. And the winter
12 road, of course, we -- we were able to use our
13 vehicles. That's about -- that's about it.

14 MS. AIMEE CRAFT: And this next slide,
15 Ms. Massan, is an image that -- that you've shared.

16 Can you explain to us what is that we're
17 seeing here?

18

19 (BRIEF PAUSE)

20

21 MS. AIMEE CRAFT: Or Jack...?

22

23 (BRIEF PAUSE)

24

25 ELDER JACK MASSAN: Well, that's --

1 well, that's a trout fishing line that goes to -- from
2 Gillam to Churchill. And, see, that's part of my trap
3 line right there. And right now in the wintertime the
4 veh -- the Ski-Doos and everything, you just go back
5 and forth on that line. And my trap line is all --
6 always affected 'cause there's so many -- so many
7 vehicles or Ski-doo.

8 And -- and my -- my cabin is -- it's not
9 too far from -- well, it's by Limestone River. And
10 when I go stay over there, like in the wintertime, I
11 hear this noise. There's a -- that transmission line
12 is not too far from where my cabin is, eh. I hear
13 this, Boom, and then another maybe twenty (20), twenty-
14 five (25), and there's other -- another, Boom. You can
15 -- you can hear that when you're -- when you're just
16 going to sleep at night. And it's -- I'm pretty sure
17 it's coming from that transmission line. I don't know
18 what's -- what causes that or -- and I don't know.

19 It's just -- there's another time, it
20 was last winter. I went and checked my traps. They
21 were fixing that transmission line. And there was a
22 big swamp. And then that -- that CAT went right
23 halfways on -- in that swamp. So I went past. They
24 were trying to pull it out. And when I got to -- to
25 that highway, 280 Highway, there -- there was a truck

1 and a -- and a -- I think there was a D8 on top of the
2 trailer.

3 So -- but the CAT was running on top of
4 the -- the -- you know, the motor was going. So I
5 didn't bother. I just -- I turned my truck back on.
6 And I looked -- I seen this -- suddenly I think -- I
7 thought it was some water, so I got out of my truck,
8 and I went and checked it. I looked at it. It was
9 oil. That oil was just -- just like a big -- a small
10 lake. All that oil was just coming from that CAT, that
11 bulldozer, D8, eh.

12 And so I went and told those guys, you
13 know. I don't know what they did after that. I don't
14 know how they got rid of that -- that oil that was
15 spilling in that area, because I -- I went back to my -
16 - went back to Gillam to -- to -- and there's a lot of
17 -- lots of places that I -- that I heard, I seen, that
18 oil spills and all that, it could...

19 MS. AIMEE CRAFT: Mr. Masson, could you
20 explain to us what you might have observed, the -- the
21 reactions of animals in relation to these -- these
22 lines?

23 ELDER JACK MASSAN: Yeah -- yeah,
24 because now the animals that used to go on that -- that
25 area, there's hardly any -- hardly any. Like what I'm

1 saying is that those -- those Ski-Doos, there's so many
2 of them going back and forth and that, it's just like a
3 highway. So they're scaring all the animals out of --
4 that's my trap -- trap line and that. But it -- so
5 just -- I don't know where the animals are going now.
6 They've got to be way out some other place, because
7 they're not around that area. It's...

8 MS. AIMEE CRAFT: And do you recognize
9 this image here? I just put another one up on the
10 screen.

11 ELDER JACK MASSAN: Yeah, that's --
12 Noah -- Noah, is it -- Noah, is that when you're...

13 ELDER NOAH MASSAN: That's -- that's
14 Radisson yard. That Radisson converter station. Way
15 back in '60s, there used to be a nice Elder. Well, you
16 can look at it if you guys ever go to Gillam. You'll
17 see a big bore pit there. That was a beautiful area
18 way back in '60s. I remember because I used to go with
19 my -- my mom and granny to pick berries. There was
20 lots of stuff there. There was a lot of caribou around
21 that area, too.

22 I think they used to -- I know in those
23 years they used to say residential thing. I think the
24 caribou used to migrate near -- close to that area. I
25 haven't seen no caribou around that area right there,

1 because there's too much power there, lots of humming
2 noise. You can hear that from Gillam, even, these
3 things kicking like a big bang, you know? You never
4 see -- hear that way back in '60s, you know?

5 And when -- like, you should see the
6 mess you had in that bore pit, but I think Manitoba
7 Hydro should do something about these pits, dress them
8 up. Look what they did in Gillam there. They dug a
9 bunch of good ground and the -- I mean, they plant
10 moss. They're all at Long Spruce, what I noticed last
11 year. How come they can't, all these things, to the --
12 along the slopes of these things? Grow trees back,
13 that's what I'd like to see, you know.

14 I guess it's nice for them to see that
15 general -- like that, Radisson.

16 MS. AIMEE CRAFT: Mr. Massan, would it
17 be -- would it be fair to say that when you stand near
18 Radisson switching area, if you do a three-sixty (360)
19 turn, that you see something similar to this all
20 around?

21 ELDER NOAH MASSAN: Not -- right here?

22 MS. AIMEE CRAFT: At -- at Radisson.

23 ELDER NOAH MASSAN: What do you mean by
24 that?

25 MS. AIMEE CRAFT: You see -- do you see

1 these lines going out all around into the lands around
2 Radisson?

3 ELDER NOAH MASSAN: Not -- not as much.
4 Like, you see a lot of powerlines in my community.
5 Everywhere you look there's a powerline. Like I walked
6 in all these powerlines and even all the way to
7 Churchill even. I did that, the last powerline I
8 walked. That's all you see is powerlines. Not like in
9 the city here. You don't see too many around here
10 unless you go out on Taylor, along outskirts of the
11 city.

12 MS. AIMEE CRAFT: We're just going to
13 switch landscapes a little bit and move to some of --
14 of these images of homes. And Ms. Disbrowe, can you
15 tell us where these homes that we're about to see are
16 located?

17 MS. ILA DISBROWE: That -- they're in
18 Split Lake. That's... Those are actually people
19 living in those homes. They're so mould infested. My
20 -- these are my sister's homes there. They're both
21 leaking, both of my sisters. My house is doing that
22 too. Our house -- most of the houses you see in Split
23 Lake, they're like that way.

24 Just to make my -- just to get away from
25 being sick each day and coughing, we take trips on

1 weekends. We take trips to the camp just to re --
2 recover from what living in that -- in those homes.
3 You go and rejuvenate. We cough all the time in our
4 homes. We're constantly sick. There -- there's
5 overcrowding in Split Lake. There's about thirty (30)
6 people in one (1) -- one (1) home. There's young
7 people couch surfing, like they are homeless, that they
8 go to other people's homes to sleep on the couch, just
9 to have a place, laundry rooms, just to have a place to
10 sleep.

11 And -- and our people are in -- they end
12 up on the streets in Thompson, that homeless shelter.
13 You -- you see these people. This is their own land.
14 This is where they grew up, and you see them homeless,
15 and you see our homes. Most of the -- the -- in those
16 homes, the floor is all rotten, they -- and you can
17 fall through them. I actually seen a lot of people,
18 even my sister in her home -- in my dad's home. In
19 bathrooms, you can see the floor. In that first
20 trailer, I walked in, there was holes on the floor it
21 was so rotten. Those houses decay fast.

22 MS. AIMEE CRAFT: Thank you. Mr.
23 Moose, can you tell us what -- what we have in front of
24 us in terms of this picture?

25 MR. IVAN MOOSE: Okay, before I do

1 that, you have to realize this is now. This is
2 happening now, where we have a supposed partnership
3 with Manitoba Hydro to help us benefit from all the
4 projects. This is happening today, that these people
5 and our people are living in homes. Our people are
6 living on the streets in Thompson, too. I seen them.

7 Now this is a house they're building.
8 This one is called a RMT, a -- a ready-to-move
9 building, they're putting -- putting up for Hydro
10 employees in Gillam. My cousin calls the Town of
11 Gillam a glorified Hydro camp, because the people that
12 come there, they don't say to live. They come there.
13 They stay and make their money. They leave.

14 And then they have -- they have another
15 saying. It's called a retirement home for people that
16 are ready to retire. They come up there and work for
17 the last two (2) or three (3) years of their career.
18 All these homes are built with two (2) meters. Even
19 the teachers just have meter -- two (2) meters.

20 The town employees that have homes are
21 double metered or given subsidies of Hydro. The one
22 (1) meter that's -- that's in that picture there, one
23 (1) meter is attached to the heat, and that's free.
24 The employees don't pay for that. They only pay for
25 the light.

1 I was paying a Hydro bill one time, and
2 this lady -- I know a lady from Hydro walked in there
3 and she was complaining about her Hydro bill. And I
4 thought, Good, there's somebody complaining. And I saw
5 it, it was eighty-two dollars (\$82), and I'm standing
6 there with mine, seven hundred and sixty-eight dollars
7 (\$768). That's one (1) month. That wasn't even cold
8 yet.

9 See, they're getting all the benefits,
10 and we're the people that originally lived there when -
11 - we're -- we're still call -- called squatters -- what
12 do you call them, squatters. Why can't we -- we --
13 we've questioned. We've asked. Even one (1) of our
14 workers told one (1) of our Elders when our Elder asked
15 her, Why can't we get subsidy for hydro, she said right
16 away, No, we can't. Why the hell not?

17 We should be the ones getting the
18 benefits. It -- it's our land they come and took, our
19 homes, our... I live in a trailer -- or a lot of our
20 members live in the trailers like them that were given
21 to us as a gift from Hydro years, years ago. And the
22 hydro rates, the bills, are over a thousand on the
23 coldest months.

24 My brother-in-law is an old-age
25 pensioner. When you are a couple living as an old-age

1 pensioners, your pension gets cuts in half -- gets cut
2 in half. So my sister gets five sixty (560) and so
3 does the husband. And five sixty (560) -- that's
4 twelve hundred (1,200), okay. In the coldest months,
5 that -- those -- those two (2) cheques combined goes to
6 pay for their hydro bill, so they live on my -- my
7 brother-in-law's pension from where -- where he worked
8 while these guys are living in luxury.

9 You go there in the summertime, nice
10 green lawns, and you see bikes, nice cars, or in the
11 wintertime, Ski-Doos, boats in the summer. That's how
12 our homes should be looking, not living in dumps like
13 we are now. Throw -- and when you have double-wides
14 thrown away, Hydro, they don't give us the opportunity
15 to go and maybe take a door out or a window that's --
16 they're -- they're in good condition.

17 You know what they do? They take them
18 to the dump. They flip them upside down so we can't
19 get at anything. Some of them they put in the hydro
20 yard for their employees to use as cabins. That's how
21 we're being treated today, not thirty (30) years ago,
22 it's today. We're suffering because of these projects.

23 I worked on these projects. I worked
24 with the Band. I signed agreements. I sat with
25 Elders, telling them we're going to get better -- we're

1 going to get better benefits, we're going to get -- our
2 life's going to get better. These Elders are all gone.
3 I -- they made a liar out of me. These people -- Hydro
4 made a liar out of me, telling my Elders -- promising
5 them these things they were going to receive.

6 Still today, I hear my people that work
7 for us sitting up here saying we're getting benefits.
8 We're not getting no benefits. I haven't seen a darn
9 thing since ISA. The only thing I ever seen I held in
10 my hand from Hydro or from the Band was a thousand
11 dollar payout when we signed the ISA. Other than that,
12 nothing tangible.

13 MS. AIMEE CRAFT: Thank you, Mr. --

14 MR. IVAN MOOSE: And we were partners.

15 MS. AIMEE CRAFT: Thank you, Mr. Moose.

16 I'd like to turn now to a -- a photograph of trap line
17 18. And, Jack and Christine Massan, this is your trap
18 line area. Is that right? Okay. And it's a
19 commercial trap line area, but do you use this -- this
20 area for other uses as well?

21 ELDER JACK MASSAN: Oh, yeah. We do
22 the hunting, fishing, and trapping, whatever --

23 ELDER CHRISTINE MASSAN: Collecting.

24 ELDER JACK MASSAN: Yeah.

25 ELDER CHRISTINE MASSAN: We also

1 collected herbs and roots for medicinal purposes. We
2 collect berries and store them over the winter so we
3 can use them throughout the winter until the next
4 growth the following year.

5 ELDER AIMEE CRAFT: And --

6 MS. CHRISTINE MASSAN: And the
7 medicinal purposes are -- I use a lot of the berries
8 and stuff for my diabetes, and it's getting harder and
9 harder each year to -- to benefit from the natural
10 world to manage my diabetes so that I can live a normal
11 life. I can't eat the fish anymore. It -- from the
12 Nelson River, because of the mercury and the way they
13 taste after Manitoba Hydro has done their work, because
14 the water is so murky.

15 And we spoke about the water conditions
16 already. I -- instead of repeating myself, I'd like to
17 just carry on with some of the other things. When you
18 talk to Manitoba Hydro, they want to know exactly where
19 we go to pick these things for medicinal uses. They
20 can't understand how I can't say, Just straight down
21 the road past the tree that's bent -- bent over towards
22 the creek, like that.

23 I can't give them a description, because
24 we don't pick in the same spot every year, because if
25 we do, it's depleting. And so now it takes longer and

1 longer to go out. I have to go further into the bush
2 to get what's good for us, and you'll hear a number of
3 the Elders say the same thing. Years ago, you could
4 pick berries in the backyard, or get your supper just
5 in a bush next to the house, and now it takes the whole
6 day to plan to take the Elders out. You have to have a
7 vehicle, and the list just goes on and on.

8 Life in general, trying to live in
9 harmony as we always have, is getting more and more
10 difficult.

11 ELDER JACK MASSAN: That -- the
12 transmission line, you can see there, that's where my
13 cabin is I was talking about. Yeah, right -- right
14 there, and -- and there was one time, I think these
15 Barren Land caribou came, and I was following them.
16 They went underneath -- they went under the
17 transmission line, so I drove underneath there too.

18 When I was driving, all of a sudden, I -
19 - I don't wear a -- a cap or anything -- excuse me. I
20 was driving underneath there, wondering what -- what's
21 going on. Like, my hair -- someone was pulling my hair
22 up when I was go -- going underneath that -- that trans
23 -- that transmission line. So I said what -- why -- I
24 was looking around. I figured someone was pulling my -
25 - I don't know if that's the power from that line

1 that's pulling -- that was pulling my hair, or?

2 So I went further out, and then I came
3 back. The same thing happened when I was going
4 underneath that powerline. So I don't know what's --
5 what's happening to those -- the animals that go
6 underneath those lines, or I don't know what's --
7 there's -- that's where that's going to be -- that
8 Bipole III is going to go right across that.

9 MS. AIMEE CRAFT: And Mr. Massan, this
10 is a photo of your -- one of your cabins? One of your
11 trapping cabins?

12 ELDER JACK MASSAN: No, no, that's --
13 yeah. Well, when I was fifteen (15) years old, that's
14 when I built that cabin, so it's right after when I --
15 when I escaped from the residential schools. So, yeah,
16 it's -- that's one (1) -- one (1) of my cabins, but the
17 other one is way -- way up the Limestone River.

18 MS. AIMEE CRAFT: Okay. Thank you.
19 Mr. Massan, this is your trap line area, trap line 9?
20 Is that right? Mr. Noah Massan...?

21 ELDER NOAH MASSAN: Yeah, that's right.
22 I inherited that trap line 2000 after my dad died. But
23 it used to belong to the grandfathers before me. And
24 when -- now it's all flooded there. You can see how
25 much of our land is flooded. And then they never got

1 nothing for it from Hydro -- Hydro. And then -- and
2 the other time they build a powerlines right through my
3 trap line in the road.

4 MS. AIMEE CRAFT: Why is your trap line
5 important to you?

6 ELDER NOAH MASSAN: Well, we've been
7 using it as a harvesting. We took -- we harvest right
8 through, not just winter. I used to trap lots. Now,
9 it's sort of slowing me down because of my illness.
10 I'm -- I don't know, I got this thing they call Kennedy
11 Disease. My muscle cells are drying up, they say.
12 They told me I -- I'll be in a wheelchair year 50. I
13 now -- I'm sixty-four (64) now. I still do it.

14 MS. AIMEE CRAFT: And, Mr. Massan, you
15 eat food from this -- this area. How many -- for
16 example, how many geese would you take from your --
17 your trap line area for food every year?

18 ELDER NOAH MASSAN: Well, if I go back,
19 it's just geese when I get home. If I can get twenty-
20 five (25), I'll kill twenty-five (25), I've got enough
21 for fall.

22 MS. AIMEE CRAFT: Yeah.

23 ELDER NOAH MASSAN: In the fall. Not
24 just the geese. The ducks too. Like I fish too.
25 Summertime we pick berries and all that, you know, we

1 don't stop just we've got to stop because season's
2 over. We harvest right until. Just like the farmers.
3 They put their crop in there and then they take them in
4 the fall.

5 MS. AIMEE CRAFT: Mr. Massan, will some
6 of your hunting and trapping areas be affected by
7 Keeyask?

8 ELDER NOAH MASSAN: Lots of it. When I
9 was just recently on the road, you know, Manitoba Hydro
10 has taken a -- a good section of my trap line. There's
11 -- Jack Pine Ridge there, that's where the road's going
12 to be. And the animals are starting to come back after
13 forty (40) years, like they used to be back in '60s.

14 I remember running around Cache Lake;
15 that's only five (5) miles out of Gillam. I was pretty
16 young at that time. Maybe I was a -- I asked my
17 auntie, How old I was when I start trapping. (CREE
18 LANGUAGE SPOKEN) you were pretty young. I think around
19 nine (9) or eight (8), helping my grandpas. That's
20 before Hydro come.

21 Now, we don't even seek in that trap
22 line ever since after Hydro flooded and diverted
23 Buttonhole River (phonetic). Buttonhole River is to go
24 to where the boat launch is. They diverted manmade
25 river from Cache Lake to Kettle River now. It's

1 destroyed. Like, I don't see no more muskrat. When
2 North-South was studying there about ten (10) years
3 ago, that one (1) guy that retired from North-South, he
4 told me they weren't for seeing one (1) muskrat.

5 And I told him, You weren't around, I
6 seen two (2) of them; you know, I seen two (2) in my --
7 I didn't kill them. I feel like they make a comeback.
8 Hopefully they are starting to come back. Now, what's
9 going to happen to those animals that are starting to
10 come back, back to where they were.

11 And the caribou have their little ones
12 on that certain area where the Hydro switching yard's
13 going to be. I asked that question in that other
14 hearing, How far was that? It's only a couple of miles
15 away. What's going to happen to those people when that
16 switching yard and a two (2) power -- three (3) power
17 lines going to run on the road?

18 MS. AIMEE CRAFT: And, Mr. Massan, is
19 that going to have an impact on your commercial
20 activities, but also your food?

21 ELDER NOAH MASSAN: Yeah, because my
22 brothers -- my brother and my helpers are still
23 trapping. They're doing good. What's going to -- I
24 asked them before too, my dad and my grandpas, we used
25 to make our area. We don't have one (1) year or one

1 (1) place. We switch around and make a big circle.
2 Now, my brother was telling me we can't do that now,
3 because you might as well catch whatever you can catch
4 in that area, because Hydro's going to destroy that
5 land, our trapping area.

6 MS. AIMEE CRAFT: Thank you. And,
7 Elder Beardy, this is a -- a quote, just to -- to wrap
8 up this section on -- on the present and -- and move us
9 into the -- the -- into talking a bit more about the
10 past. But can you share your understanding of -- of
11 what it is that is being said here?

12

13 (BRIEF PAUSE)

14

15 ELDER FLORA BEARDY:

16 "Our legacy should be a better one
17 than we have now."

18 What legacy do we have left? In my
19 community, the water has been -- is no good. You know,
20 we can't drink the water. The fish is no good in our
21 area. You have to go further away to get fish. What
22 kind of legacy does that leave us in our community?

23 The kids can't swim -- if they go
24 swimming in the river, they come out, they're covered
25 with some film. And then they go in and shower and

1 sometimes our water's just brown. So what -- what do
2 you do?

3 The -- when they were talking about
4 houses here, that's -- we have the same problem with
5 our houses. They're not -- like my Hydro bill isn't as
6 high as Ivan's, but it -- for the past four (4) months
7 now, I've been paying over \$400. And it's because we
8 don't have proper doors or porches on them and the --
9 and you can just feel a draft go through. So what kind
10 of a legacy is Hydro leaving in our communities?

11 MS. AIMEE CRAFT: Thank you, Elder
12 Beardy. M. President, (FRENCH LANGUAGE SPOKEN) for a
13 break that would be welcomed by the panel.

14 THE CHAIRPERSON: Let's take ten (10)
15 minutes. Thank you.

16

17 --- Upon recessing at 10:30 a.m.

18 --- Upon resuming at 10:47 a.m.

19

20 THE CHAIRPERSON: If everybody can get
21 into position, we will continue with the proceedings
22 please. Thank you for that.

23 Mme. Craft, s'il vous plait?

24

25 CONTINUED BY MS. AIMEE CRAFT:

1 MS. AIMEE CRAFT: Merci, M. President.
2 So now we're going to be changing -- shifting gears a
3 little bit and -- and looking at the past, in
4 construction, infrastructure, and Northern development
5 in -- in the communities and territory that we're
6 speaking of. And this is an image that Mr. Jack Massan
7 and Ms. -- or Elder Christine Massan have shared of the
8 Nelson River.

9 And can you describe a little bit about
10 -- about this picture and -- and the caption that's
11 under it which is, "Remembering to bring your cup"?

12 ELDER JACK MASSAN: Yeah, that was
13 quite a while ago. We use to go paddling around just
14 below where the Limestone Dam is now. We used to go
15 paddling -- paddle across the river. But the woman
16 that raised me, my mom, if I -- you what -- the first
17 thing you -- tell me is that -- that (CREE LANGUAGE
18 SPOKEN), is, Don't forget your cup, because all we
19 needed was a cup. You know, we could just take some
20 water out of the river and we -- we all -- we drive a
21 drink.

22 But now, we can't even do anything about
23 that -- that water is so dirty and so much silt and
24 sand and whatever. Going, there's -- there's a --
25 everything just floating by. There's a lot -- it was a

1 good while ago this guy -- just a memory, (CREE
2 LANGUAGE SPOKEN), and that was the main thing, is don't
3 forget your cup. That's -- you know, we didn't have to
4 worry about water.

5 Now, we have to worry about -- we have
6 to stop where the creeks are to get our water when we
7 go down the Nelson River. So now it's -- because we
8 can't drink that water anymore. It's so dirty.

9 I just -- yeah, I just -- there was one
10 time we went -- we went setting a net by Jackfish
11 Island, we call it. We set a sturgeon net then went
12 and pitched up our tent. The next morning we went and
13 looked at it. We couldn't even our -- that net out of
14 there. There was so much dirt and everything was just
15 -- it -- it was so heavy, you couldn't -- you would
16 have to have to drag it to the shore. That's how much
17 all that thing was going down that river, the Nelson
18 River, what used to be the Kichesippi, the Great River.
19 And now it just -- as I was talking about, I just
20 can't...

21 Anyway, that's -- remember to bring your
22 cup. That's all -- my mom used to tell me that.

23 MS. AIMEE CRAFT: And this next image,
24 you mentioned earlier, this -- that there are more than
25 one (1) -- there's more than one (1) name for the

1 river. And --

2 ELDER JACK MASSAN:

3 Pawaynagonnaykowsipi, yeah. Pawaynagonnaykowsipi.

4 That's -- well, I guess that's what our Elders called

5 it because that's when they used to come from York

6 Factory, Port Nelson, all that, you know,

7 Pawaynagonnaykowsipi. They didn't have to worry about

8 anything else. It's...

9 Maybe Flora will do a little bit more.

10 ELDER FLORA BEARDY: The -- the Elders

11 call the Nelson River -- the original name is the

12 Pawaynagonnaykowsipi. And in English that means that

13 river was so clear that you could see the gravel on the

14 bottom of that river, but it's not like that now.

15 And when they say, "Kichesippi," that

16 was the Great River. That was the other name for it.

17 But it's just been blocked up in different places that

18 it's not the Great River anymore. And all the rivers,

19 of course, that we -- that were used as highways for

20 our people a long time ago, and still do in some areas.

21 MS. AIMEE CRAFT: And fishing is a

22 historical use on the river?

23

24 (BRIEF PAUSE)

25

1 ELDER FLORA BEARDY: Yes. Oh, that was
2 me. The -- the people would come from York Factory and
3 Port Nelson and go up to Jackfish Island, the island
4 Jack mentioned. And they would fish there for a few
5 days, clean and smoke their fish, and then take them
6 back to where they came from. And that was a
7 traditional thing that was done every year.

8 ELDER CHRISTINE MASSAN: I remember as
9 a child growing up living on fish all the warm months
10 of the year and into just before freeze up. And we
11 would have fish boiled, fried, dried, smoked, you name
12 it. As a child, I remember eating the inner parts of
13 the fish, the stomach. My mother taught me how to
14 clean with a flick of the thumb. And then you would
15 pan fry it along with the roe, the eggs which became
16 popcorn for many of us. That was -- I mean, we can't
17 eat fish anymore like this.

18 This is a picture of my great
19 grandfather holding a 45 pound trout quite a few years
20 ago. I don't know if we'd ever find anything that
21 large again, but, yes.

22 MR. IVAN MOOSE: The -- the insides of
23 the fish, too, I remember, they used to use -- there's
24 a little tubing. They call it a (CREE LANGUAGE
25 SPOKEN). It's like a gut. They used to make a hole at

1 one end, and they'd pour milk or tea, and they'd use it
2 as a baby bottle. So there was a lot of uses for the
3 fish of all -- all kinds of uses that are lost.

4 MS. AIMEE CRAFT: Thank you. Now, this
5 next image is of the Nelson River and one (1) of the
6 dams. And, Mr. Noah Massan, can you describe to us
7 which -- which dam that is?

8 ELDER NOAH MASSAN: I think that's
9 Kettle River -- Kettle Dam, I mean. That's the point
10 around. Oh, okay.

11 MS. AIMEE CRAFT: And this one here?

12 ELDER NOAH MASSAN: That's Long Spruce.
13 That's the one we go over.

14 MS. AIMEE CRAFT: Okay. And did you
15 work on these dams?

16 ELDER NOAH MASSAN: I worked in every
17 dam that's near my community, even Conawapa, before --
18 before Cona -- Conawapa was moved this way, towards
19 further down. I worked in all the projects. Like, I
20 worked for Midwest and all that, okay.

21 MS. AIMEE CRAFT: And you made a good
22 living working for -- for Hydro on the dams?

23 ELDER NOAH MASSAN: I made a good
24 living. But now as you get older, how much I looked at
25 in the back, you know. I helped destroy my community

1 and the river too just to make money, you know. I
2 admitted saying that.

3 And here also mention from my -- Fox
4 Lake. They were training to be operators on Portage la
5 Prairie. I was wondering why this Mr. Huff (phonetic)
6 come and got me at that -- I was in that air base
7 that's outside of Portage there, south side, I don't
8 know what hell you call it, south.

9 Anyways he said, Those guys at Catskin
10 (phonetic) just want to talk to you. And I say, What
11 do they want? I don't know. So I said, Wait until I
12 finish the laundry, 'cause I used to do things for the
13 -- the students, you know. So anyways, we went out
14 there. And of course, the late Marley Spence
15 (phonetic), he come to me and tell me he met him. And
16 young Robby Nickway (phonetic), all right, George
17 (phonetic), you're thirty-five (35) years on the
18 equipment, he says, and Mr. Huff looked at me -- that's
19 Manitoba Hydro by the way.

20 He come to me, he said, You run
21 machines? Yeah, these are little toys compared to what
22 I run. I run big machines. The old loader I run is a
23 992. You're sitting about 12 feet up in the air, like
24 a nice little office, but you're rocking and your
25 loading rock. And those are -- the biggest one is D11

1 I run. This one is just a small D6.

2 They were doing -- the students were
3 doing -- farmers that watered their -- they were doing
4 what the cattle drink, I guess. I don't know. It's
5 new to me, too. They dug a hole deeper, and they were
6 sloping it. They wanted to put that barbed wire. They
7 didn't want the like cattle go back in.

8 So they asked me, Douggie (phonetic),
9 this little short guy, he heard about that machine,
10 it'll tip like this, on the slope. So anyways I got on
11 there. When I was walking over to that other machine
12 that other come running to me. He said, Where you
13 going? Mr. Huff told me to run this machine. Then he
14 asked me the same question, You ever run machines
15 before? I told him the same story. I asked him what
16 they wanted to do.

17 I did this in not even half an hour, and
18 I -- and so he told me what to do. You do it in little
19 short site. But I went ahead and did all that, the
20 whole thing. I think I only made about twelve (12)
21 passes.

22 MS. AIMEE CRAFT: And so all that --
23 all those things that you were doing, that was based on
24 your years of experience and -- and training on working
25 on the dams and construction there on heavy equipment?

1 ELDER NOAH MASSAN: That's right. I
2 had a lot of teachers in my past, too.

3 MS. AIMEE CRAFT: Do you -- do you know
4 a lot of people from your community and the surround
5 communities -- I mean, Tataskweyak, York Factory --
6 that are also heavy -- heavy machine operators?

7 ELDER NOAH MASSAN: Well, they have --
8 I went twice to Portage la Prairie. They had people
9 there. Split Lake, too. And I don't -- not York
10 Landing, I don't think. Just Split Lake and Gillam. I
11 was mentoring there, sort of babysitting them, I guess,
12 so they don't go any haywire.

13 MS. AIMEE CRAFT: And are -- are a lot
14 of these -- a lot of the community members that were
15 trained working right now on projects?

16 ELDER NOAH MASSAN: Not really. You
17 got to have five (5) years experience on these
18 projects. That's only one thing that -- sure there's
19 training for our people and the other people. But when
20 -- when you got to go to work there, these contractors,
21 they want five (5) years' experience under your belt --
22 or say under their belt. That's how much experience
23 you want -- they want. They don't want to hire you
24 because you -- you did equipment.

25 You know, there are lots of good

1 operators. All you need is give them opportunity to
2 try to -- you know, you can put them on something like
3 packing or something like that, you know. I started
4 off thanks to Cary Sergeant (phonetic), his little
5 brother took me that day. He -- he saw -- treat me
6 like a -- he always -- I look up to him as a, I don't
7 know, mentor or something 'cause he's the one -- I
8 think, 'cause we keep working, I end up to be what I
9 wanted to be.

10 MS. AIMEE CRAFT: Mr. Massan, do you
11 have any concerns about what some of Fox Lake members,
12 or other -- other -- the First Nation community members
13 might have to do in the context of their employment?
14 So this is a picture, and you asked me to take this
15 picture of -- of this particular area on the side of --
16 of the road.

17 Can you tell us why it was important for
18 you to show this picture?

19 ELDER NOAH MASSAN: Like -- like when
20 you're in Gillam, I don't know how many of you guys
21 travel that road between Long Spruce and Limestone, but
22 you see all these gravel pits. Manitoba Hydro didn't
23 real clean their -- their mess after they built a dam.
24 You know, I worked in there to see it. I know these
25 trees. One (1) Elder from Benito, Manitoba, Scottie

1 Mackie (phonetic), one (1) time we were having coffee.
2 Hey, Noah, do you feel guilty knocking all these nice
3 beautiful trees? And look what Manitoba Hydro's doing.
4 When they're finished with a pit, they don't put the
5 trees back in. They're still buried under this pile
6 of... You go back in our community and you see these
7 little hills. That's trees under there. Why can't
8 they push them out? When I was doing that, I asked
9 that inspector, How come they're not pushing the trees
10 back? Costs too much.

11 What are you talking about, I told him.
12 He didn't -- you -- you shouldn't complain about it
13 when you are knocking the trees down, because money was
14 no problem. Now, there's a problem to put the thing
15 back. Like, this is forty (40) years ago, maybe
16 longer. You know, I think if they would have put all
17 these trees and run over the dead trees, I think the
18 trees would have grown back eventually, or seed them.

19 Put that back -- material back in the
20 pit. They're no good, you know. That's what the Hydro
21 should do now, like -- like what they're doing South
22 Indian Lake, they're cleaning up. I think after this
23 partner of mine said to me so...

24 And there's some people -- like, there's
25 some -- I know where these consultants, they -- they

1 bury a lot of stuff like steel and that, instead of
2 shipping it all around. They bury a lot of steel. I
3 can show you guys where these -- all these, and they're
4 digging more pits. There a whole lot of debris and
5 everything, metal and everything, they buried them in
6 there, you know. They should clean that mess up.
7 They're starting to stick out, these steels, in...

8 MS. AIMEE CRAFT: Elder Massan, do you
9 have any other comments to add in relation to this
10 slide?

11 ELDER JACK MASSAN: When we're doing
12 the -- the Sundance camp, we're digging all the
13 trailers out of there, there's a -- the double-wides,
14 that we took all the double-wides out, but there's
15 still some trailers there, single-wide trailers. But I
16 know for sure, there's about four (4) -- or four (4) of
17 them.

18 And they had a -- a reservoir of
19 Sundance. There was that big hole where they had that
20 water for -- there was a big hole there, so instead of
21 taking those trailers to where -- someplace, they --
22 they just shove them in that hole and buried -- buried
23 all the stuff in that -- that big -- big hole. There
24 was at least four (4), three (3) or four (4) trailers
25 that's in th.

1 And we're just wondering why -- why they
2 didn't take those trailers someplace and -- instead of
3 par -- burying them in the -- in that ground. It
4 just...

5 Another thing I was going to bring up
6 was that Conawapa, where they're going to have that
7 Conawapa dam, when we go -- when we want to go down the
8 river, like on Saturday -- Saturday morning, we have to
9 wait till about 1:00 -- one o'clock in the afternoon
10 before the water comes.

11 You can damn near walk across that
12 Nelson River. That's how -- that's how the water --
13 that's how low the water is. And I told her, it's -- I
14 said, My God, that -- the -- the river was high, even
15 the mosquitos could walk across that river. So just --
16 even on Saturdays and Sundays. And then when you go
17 down river, you can see the -- where the -- the
18 shoreline is, you know, and -- and then when you come
19 back up, all you can see was willows sticking out of
20 the grou -- out -- out of the water, because that's how
21 high the water comes up again.

22 That's below Conawapa dam. So it's --
23 it's just -- I don't know. And when you go down that
24 river and when you come up, you hit these trees that's
25 floating down the river, you know, and sometimes you --

1 then -- then you're tip over your -- your boat, and I
2 don't know why they don't...

3 Anyway, in Stephens Lake, they have
4 somebody there that clears everything you guys -- all
5 the Hydro -- all the Hydro cabins are on those islands.
6 They look after that lake better than what they're
7 going to look after down below, where we do our -- our
8 hunting, trap, and fishing and all that.

9 So yeah, the water is just so -- I don't
10 know. That's -- that's all I can -- because I had to
11 bring that up, so. And -- and now the -- the lake,
12 what she said, the security was so -- so you can't even
13 go down there anymore, because you have to -- when you
14 go down, if you want to go to Port Nelson or York
15 Factory, you have to wait for that dye -- tie -- high
16 dye -- high tide to come up, so.

17 And then you have to wait for the -- the
18 water to come up on that Nelson River before you can go
19 down, so you're going to have to stay by Gillam Island
20 there. Maybe the water will go overnight before you
21 can continue your trip. Before, you didn't have to do
22 that. You -- you could go down there. We could go
23 wherever we want. Now the water gets so God -- low,
24 and -- and it's so hard to -- it's -- takes you longer
25 to get to where you want to go. Before, you know,

1 you'd jump on your boat and you can go down, but now
2 you have to wait for the water to come up through.

3 I'm really sad to bring that up. I know
4 it's pretty hard for us, it is, to have the water so
5 low because of its...

6 ELDER NOAH MASSAN: Hello? What Jack
7 is talking about there in that forebay is Stephens
8 Lake, Manitoba Hydro got boat patrol program going on
9 there since 2008. There seems to be -- because Hydro
10 got cottage winters there. What I had looked at was
11 some people. They say, It's like they're looking after
12 this cottage owners around that community. They all
13 got a boat patrol there. It starts pretty soon now, I
14 guess, until fall.

15 I know there's two (2) Band members
16 working there and former Hydro guys, the boss. They
17 seem to be looking after Manitoba Hydro or these owners
18 better than the people that live in -- harvesters, like
19 me, Jack, the river, you know? You know, just -- just
20 got to change, you know?

21 And they -- I know they harm my Band,
22 too, they have -- they clean up debris just where the
23 public can see, but they don't clean the whole
24 shorelines. They clean in front of Kettle and saddle
25 dam and by the -- where the -- by the airport there

1 where they go swimming, dike 4, dike 5, dike 6, and the
2 boat launch, just where the people -- the public can
3 see it's clean, but they don't do all the whole area.

4 You know, it'd be nice if you guys will
5 go see that, like, they say clean energy. What are
6 they talking about, clean energy, the -- you know? You
7 guys -- that's another thing, too. Manitoba Hydro are
8 always bringing people up in the winter. You can't see
9 all the debris floating around in the ice. When you
10 come in the summer, they get to experience what they
11 see, all these islands, lots of wood drifting.

12 Like I said our scouts had much. One
13 (1) time, I got a big midnight, what they call is that
14 big Long Spruce. We couldn't even lift my net up. We
15 had to cut that net because we couldn't pull that --
16 our net up. It was catching. But I still go fishing.
17 Like, I might be on this thing but I still can take
18 fish out of the net and tie a boat, you know. Thank
19 you.

20 MS. AIMEE CRAFT: Thank you. So now
21 we're going to shift to the third part of the -- the
22 presentation, which is dealing with the future and
23 particular concerns relating to the future, and the
24 first slide is just to situate ourselves and -- and
25 better understand where each of the communities is in

1 relation to the proposed Keeyask generating station,
2 and Conawapa is -- is further up outside of -- of this
3 map area, but it gives a good indication of existing
4 projects and -- and one (1) proposed project in each of
5 the communities that we're -- we're discussing today.

6 And this next slide, I'm going to ask
7 Mr. Spence to -- to describe what it is that he wanted
8 to share in relation to -- of the future.

9 MR. ROBERT SPENCE: What I said here,
10 We were born into the shadow of one time and we'll die
11 in -- in the shadow of another. I meant by saying this
12 that what Manitoba Hydro does, they do not grow from.
13 You don't -- you don't learn from your mistakes. You
14 don't want to open your eyes to what you see you do to
15 the land and the environment, to people, the animals.

16 I'm forty-four (44) years old. There
17 are other people who are older -- a lot older than me
18 who have seen the construction of this dam. I would
19 have figure -- I would have hoped that by now that
20 there would have been technology available to get away
21 from disastrous developments like that development.

22 I was born under the Kel -- the shadow
23 of the Kelsey dam. Now it looks like I'm going to die
24 underneath the shadow of another. So are the rest of
25 my people -- our people. Keeyask. What I meant by

1 this was, whatever Man -- Manitoba Hydro touches, they
2 kill. They're like a cancer on the land, on the river,
3 on the people, and the environment. That's what I
4 meant by this.

5 Your clean, renewable energy posters
6 don't fly with our people, with the grassroots people.
7 That's advertising. Window dressing. That's what that
8 is. We see what is really going on. We're part of it.
9 We're the water. We're the land. We're the air.
10 We're everything that the environment is. You can't
11 lie to us.

12 You can't paint pretty pictures on
13 posters and plaster them all over Manitoba and the
14 United States, and tell us what you're doing is clean,
15 renewable energy. You can't do that to us. You can't
16 make us believe what you're doing is good for the
17 environment. We're not going to believe this, these
18 blatant lies that you're telling to the whole world.

19 What you see there, that looks like the
20 -- in my eyes, the end of an era for a free people.
21 You're killing us every day. I'm sorry, Ila, I -- I
22 have to mention this. When North-South consultants
23 paid by Manitoba Hydro to do all the aquatics
24 environmental studies with their fancy gadgets came
25 into our -- our territory, and other territories to do

1 their studies, they did a lot of work carrying threads
2 around, throwing orange peels in the water after going
3 to university for years, to see how fast the orange
4 peel flows from one point to another. They had to go
5 university for that?

6 All you have to do is open your eyes to
7 see what is really going on there. I don't know why
8 we're even here in the first place to discuss the
9 rights and wrongs and pros and cons of what's going on
10 out there. I don't even understand why it should even
11 be an issue. What we breathe is the air that's all
12 around us. So do the trees, the same trees that you
13 kill and knock down and destroy every day.

14 Those same trees that grow along the
15 shorelines you see here, they're leaning towards the
16 water like as if it was a medieval moat to protect the
17 castle. The water is so powerful, so manipulated now,
18 that these trees can't pro -- protect our castle no
19 more. It's not protecting us anymore, the same waters
20 that we lived off of.

21 Throughout our history as a people are
22 the same waters that Manitoba Hydro are using to
23 killing us -- to kill us today. The same water that
24 gave us life is killing us today, and (CREE LANGUAGE
25 SPOKEN). We can't drink it. (CREE LANGUAGE SPOKEN).

1 I go out on the land, we go out on land all over.

2 Many times I respect what Jack said.

3 (CREE LANGUAGE SPOKEN). Don't forget your cup. Bring
4 your cup. That's so true when you go out on a land
5 away from the Hydro-affected river systems. All you
6 need to is dip your cup in the water and drink it. You
7 don't need no fancy Brita water filters. You don't
8 need none of that.

9 Nature does that all on it's own, but
10 our river can't do that anymore. It just can't. It
11 can't heal itself anymore. Nature has a way of healing
12 itself, but because the river systems all across this
13 land of ours are so manipulated, it can't heal itself
14 no more.

15 Our river system, lakes, and watersheds
16 are like a big artificial aquarium now, controlled by
17 man, by Manitoba Hydro. Is this the legacy that we
18 want to leave for our kids, or us as a people, for you,
19 for us, everybody? I'm not only talking for the First
20 Nations people, but I'm talking for everybody as a
21 whole, Europeans or whatever they -- you -- they -- we
22 all come from.

23 For instance, the Nelson River is dying
24 so fast now that from year to year I can't even find
25 myself to go back out to practice the traditions of my

1 people as much as I used to, because I can't stand to
2 look at her dying. It's hard. Like I said before,
3 it's like watching your mother die of cancer every day.

4 The river system -- the Nelson river
5 system -- it can't heal itself anymore. Everything
6 that is there is like a boundary. All the lines on a
7 map, you see all the dikes, dams, diversions,
8 powerlines, gates, all of that. Do you know what does
9 -- do you know what that does to us? That's like
10 restricting me in my movements, the movements of the
11 land -- the movements of the animals on the land, the
12 people.

13 I try to get away from all of this once
14 in a while just to go to refresh my being -- to recoup.
15 I've gone to places up north where I -- where I hoped
16 that I would get away from all of this so-called
17 development. I went up north, 60 miles north of our
18 community to Recluse Lake, a traditional area as a
19 Tataskweyak people. There was a -- there's a
20 settlement there. Our people are buried there.

21 I went there with Elders that have gone
22 long before us already. They're gone. I valued the
23 company that I shared with them. They were a strong,
24 proud people. Boy, they kept you grounded. They kept
25 you humble. I loved those people with all my heart,

1 and a lot of people that are here today.

2 I went there to get away from all this
3 development. To go recharge my -- my batteries, to go
4 just get away. Well, I felt better the further I went
5 -- the further I went. Keep going. Keep going, I kept
6 telling myself. I got to where I wanted to go, that
7 was Recluse Lake or (CREE LANGUAGE SPOKEN), that's its
8 traditional name. (CREE LANGUAGE SPOKEN), big trees.
9 (CREE LANGUAGE SPOKEN), Little Stranger River
10 (phonetic) is what it's called, connected to (CREE
11 LANGUAGE SPOKEN), Big Stranger River (phonetic).

12 And I sat there in that cabin. I
13 thought, Oh, I'm away from all of this. I can feel
14 better. I got out of the cabin and I looked across the
15 lake. What do I see? A water gauging station put up
16 by the province or Manitoba Hydro. It doesn't matter
17 who put it up there. The province is Manitoba Hydro.
18 Manitoba Hydro's the province. Canada. It doesn't
19 matter what -- what you want to call it.

20 Manitoba Hydro measures the wat -- the
21 amount of water that they can get out of there. Their
22 piggy bank now. That's what they're using that lake
23 as, the whole river systems in Manitoba, their piggie
24 banks. The Churchill River diverted into the Nelson.
25 The sturgeon dying out at Churchill River. There's

1 only about a thousand plus, maybe seventeen (17),
2 fifteen hundred (1,500) sturgeon left.

3 What's going to happen with those
4 sturgeon? They're genetically distinct. Found out by
5 North-South consultants, Manitoba Hydro's own studies.
6 There was sturgeon up at Fiddler Lake twenty (20) years
7 ago, there's none now. That's the last time anybody
8 from TCN has gone up there to fish for sturgeon.
9 Billard Lake, seventeen (17) years ago, eighteen (18)
10 years ago there was sturgeon there. I was there. I
11 seen them. There's none there now. North-South
12 studies, camp, whatever you want to call it, only found
13 one (1) -- one (1) adult sturgeon on that lake, Billard
14 Lake.

15 I told an Elder Noah Garson (phonetic)
16 this, when (CREE LANGUAGE SPOKEN). That can't be, he
17 said to me. What happened to them? (CREE LANGUAGE
18 SPOKEN). They've been all killed off. That can't be.
19 (CREE LANGUAGE SPOKEN). No, that can't be, he said.
20 He was in disbelief that there weren't any sturgeon
21 left at (CREE LANGUAGE SPOKEN), the traditional name
22 for Billard Lake.

23 Now, the only place that there are any
24 sturgeon left on the whole Churchill River is at the
25 mouth of (CREE LANGUAGE SPOKEN, Little Churchill --

1 Little Stranger River, at the junction of (CREE
2 LANGUAGE SPOKEN), Big Stranger River. What's going to
3 happen with those sturgeon there, and what's happening
4 to them now? Are the -- is the same thing that's going
5 to happen to the sturgeon on the Nelson, because
6 Manitoba Hydro wants to build a dam right on a well-
7 known documented sturgeon spotting site at Gull Rapids.

8 Everything that Manitoba Hydro touches
9 dies. Everything. They're killing me today. They're
10 killing us. We're dying. (CREE LANGUAGE SPOKEN). We
11 can't do nothing about what is going on, but at least
12 we can certainly try by helping each other here today.
13 We're our support. We're not -- we don't do this for
14 your benefit. We're not here for your benefit to make
15 you look good, Manitoba Hydro, no.

16 This is your legacy right here. That is
17 not ours. I am not your partner. I will never be your
18 partner until you clean up your act. Until you --
19 enough of the studies of the fish and animals. Enough
20 of them.

21 Start doing something about what you did
22 already to make the future better for our people, for
23 all of us. Quit messing everything up you touch.
24 Ekosi.

25 MS. ILA DISBROWE: When he talks about

1 North-South, like, I grew up in that (CREE LANGUAGE
2 SPOKEN) where you're building that -- where you're
3 going to build Gull Lake. My grandpa -- that was my
4 grandpa, George Sanders's (phonetic), trap line -- trap
5 line 15. My grandpa, George Sanders, drowned, went
6 through the ice in Stephens Lake with his son, and then
7 my brother drowned in Gull Lake.

8 Just -- just in that area where they're
9 going to build a dam, there's Caribou Island, and
10 there's this -- we call it Leon's Island (phonetic),
11 very sacred to us. They never recovered my -- my -- my
12 late -- my baby brother's remains.

13 We were always told, Look after each
14 other. (CREE LANGUAGE SPOKEN). We always had to watch
15 out for our brother. He couldn't speak, but we
16 understood what he wanted. We knew when he wanted to
17 eat, we wanted -- when he was thirsty, when he was
18 cold. We knew, just like we know our -- our
19 environment is dying.

20 North-South was doing studies on
21 animals, fish, rodents, insects. Not once did they
22 ever come to us and ask us how it affected us mentally,
23 emotionally, our health, how it's killing us, and then
24 what's killing us.

25 And before, we were able to go Gull Lake

1 at peace. That was our sanctuary. That was our home,
2 and when the water level goes down, my family, we still
3 had hope to go look for our brother. All these years
4 we still do that, wait for the water levels to go down,
5 then we go scour the -- scour the shorelines.

6 When that dam goes up, all is lost.
7 They'll never -- because that island will be underwater
8 -- most of the area would be underwater, and they
9 minimize by using these small numbers, how much they're
10 going to flood that area.

11 How do they know? They're not God.
12 Only our Creator knows what's happening to our land,
13 and they -- and I see their reports, how they predict
14 the future on how the dams will affect us, but we
15 already know how -- how it's affected us with the other
16 dams.

17 It's our heart that's broken. I watched
18 my brothers drown themselves in alcohol because they --
19 we watched our mom die of cancer, and we're doing it
20 again. We're watching our Mother Earth die of cancer,
21 and that's Hydro. Where is all that support? Where's
22 all these studies that affected inninuwuk? Where's all
23 that report?

24 We don't even have doctors in our
25 community. There's a high rate in -- in our community

1 of cancer, diabetes, hypertension, stillborns. Where's
2 -- where's their report on that? There was never a
3 health needs -- a -- an assessment done on our
4 communities.

5 And really -- and the conditions we -- I
6 raised my kids in Split Lake, and when you look around,
7 twenty (20) year -- twenty (20) -- my daughter's
8 twenty-four (24). Twenty-four (24) years ago, it still
9 looks the same today. There hasn't -- they are
10 claiming they spent millions on our communities, but it
11 was only for their negotiations. They weren't allowed
12 to spend any in our communities. It never reached our
13 communities.

14 How can they claim they spent all this
15 money, and we have all this benefits? Where is it?
16 Why is -- why are homes infested with mould? Why are
17 our homes -- there's people in our own territory
18 homeless. There's -- in Split Lake, there's a high
19 rate of unemployment. Where is all this training
20 they're talking about? Where are all these jobs they
21 claim we have?

22 And how do you expect our people to --
23 on that thing they have, JRS, when they ask you, You
24 have to have a permanent resident. Where you are from?
25 You have to prove it. How can our people prove where

1 they are when they -- when there's thirty (30) people
2 in one (1) home, and there's only one (1) person that
3 has that address? How can you prove it when you don't
4 have a bank account when you're on welfare?

5 How can you have a -- a phone when you
6 don't have a job? Those are the obstacles our people
7 face, but all these claims that they have this rosy,
8 beautiful pictures on them. Just like when -- when
9 you're driving -- I had this dream -- I -- it keeps
10 haunting me, and that dream was so powerful last night.

11 We were in a boat, my family was in
12 these boats, because we're river people. In this
13 dream, there was a storm heading our way, and we were
14 trying to -- like we were trying to go to shore, but
15 all I seen along the shore was jagged rocks, just like
16 a Berlin Wall, and we couldn't -- an old man just
17 behind me, You guys, (CREE LANGUAGE SPOKEN), what's
18 going to happen to our kids? And I looked around
19 looking for an Elder, looking for our grandfather who
20 was talking to me.

21 We couldn't go to the shore, because the
22 shore was already damaged by Manitoba Hydro with their
23 jagged rocks. We couldn't pull our boat. We couldn't
24 go to the shore because our boats get damaged.

25

1 (BRIEF PAUSE)

2

3 MS. ILA DISBROWE: And our -- what --
4 there is this young man driving along the shoreline,
5 and he was trying to come up -- come up from where --
6 from the ice, and then he fell through it, because he
7 couldn't come up because of their -- what do they --
8 their diking, that riprap they did in our community.

9 You can't even (CREE LANGUAGE SPOKEN).

10 I see people, Where do I -- where do I go to -- towards
11 the lake? They look for spots how to get down to the
12 river, because they already trapped us in our
13 community. That's our daily life. I have so much to
14 say but...

15 MS. AIMEE CRAFT: Thank you for -- for
16 sharing that. We're going to turn to Christine Massan,
17 and -- and this is when we talked about the future --
18 this is the first thing that you mentioned, was that
19 language is culture and identity, and the first thing
20 we should talk about is our language, and can you
21 explain to us why that's important to you?

22 ELDER CHRISTINE MASSAN: I was talking
23 about the -- on how -- when everything is in focus and
24 balance, and everything we talk about is our language,
25 our culture, our identity. It's all interwoven. Our -

1 - our language, foods we eat, it's all a part of us.

2 We are the Cree and we speak the Inninu language. We
3 are the Inninuwuk.

4 And it is so strong and powerful that
5 we've been working with some of the youth trying to
6 bring the language back into their communities, and it
7 is very difficult, and it goes back to several reasons.
8 Number 1) the parents have come back from residential
9 school, and how they were made to feel, how they were
10 punished every time they spoke Cree, and then some of
11 them came back home and Manitoba Hydro had already
12 demolished some of the houses along the main street to
13 make room for what they wanted, and anybody -- body
14 that got caught -- that was heard speaking Cree was
15 called down -- they were called squatters. They were
16 made to feel that to be Cree, to be an Inninu was an
17 evil thing.

18 And so we have a big age gap between the
19 very young today and the, say, about forty (40) --
20 forty (40) years old people, it would be mid-range.
21 There's a big gap in there that we're trying to fill
22 very hard, and I'm working with some other educators in
23 trying to do everything we can. As a teacher, I have
24 known many things. I have noticed many things.

25 Even reading a legend to a classroom of

1 students, a mixture of classroom students, those that
2 were the Inninu children would start to make noises and
3 be disruptive because they were so ashamed that I was
4 sharing a legend, a story about their past, and that is
5 what hurt the most and I was powerless to do anything,
6 but they didn't stop me, I kept reading stories. I
7 talked to the children individually.

8 I have worked with children all my life.
9 I was born with thirteen (13) younger siblings and a
10 few older, and that is what I believe my life was, to
11 work with the youth forever. My dreams are filled with
12 nightmares where I'm fighting to save the children from
13 all the water that is coming.

14 I am fighting for housing. These are my
15 dreams. How am I going to be able to help? My whole
16 living being is based on trying to save the culture,
17 trying to help the students and the young people be
18 proud of who they are. The community that we live in,
19 Manitoba Hydro has done a real number on them.

20 And what I said yesterday was, Living
21 with the people in Gillam is not bad. It's not bad at
22 all. I have a lot of good friends that work for
23 Manitoba Hydro. It's their bosses, however, is telling
24 them what to do. Do they have to do such a good job of
25 it?

1 You know, there was a lot of -- a
2 shortage of land for trailers in Gillam as they were
3 getting ready to build the Keeyask dam and the Conawapa
4 dam, you know. And -- and there was the town of
5 Gillam, Fox Lake Cree, and Manitoba Hydro, they also
6 wanted this land, so they divided it up. Manitoba
7 Hydro faced their trailers there, oops, and they faced
8 their trailers going this way.

9 Well, they were taking up twice as much
10 space. And I respect the fact that they wanted a good
11 yard. That wasn't even bad. You know what they
12 started doing in the wintertime? They hired these
13 contractors to come around and put a fence around every
14 trailer, even giving more division. My neighbours have
15 this great big, high fence. All along there are about
16 five (5) or six (6) trailers all fenced in separately
17 between our house and Noah's house. And they, for so
18 many years, kept saying: We want to help. We want to
19 be able to work with you.

20 I was hired as a community liaison
21 officer to shorten that bridge, that gap between Fox
22 Lake and Manitoba Hydro. I don't feel that was even
23 honest, the way that they continue to make divisions.

24 MS. AIMEE CRAFT: Elder Massan...?

25 ELDER CHRISTINE MASSAN: M-hm.

1 MS. AIMEE CRAFT: Just coming back to
2 that question of language. I wanted to ask you if you
3 were aware of programs that are associated to, for
4 example, Keeyask and the adverse effects agreements as
5 an offsetting program that are meant to increase the
6 use of the Cree language and -- and language
7 instruction, and do you view those as a potential
8 positive benefit?

9 ELDER CHRISTINE MASSAN: It is a
10 positive -- it is very positive, the few programs that
11 I have. I mean, I help put on some culture awareness
12 workshops with two (2) other people, and they were
13 excellent. I mean, people were wonderful taking them.
14 But outside the workforce it's kind of different.

15 I don't know how controlled they are.
16 And so we're working on trying to get more funding so
17 we can hire a teacher just to -- just to teach Cree on
18 the -- on the school on the reserve. And so throughout
19 the day every day we give a little bit of instructions
20 in Cree to the kids, you know, (CREE LANGUAGE SPOKEN),
21 those kinds of things, so that they get used to -- used
22 to it a little bit. I mean, at least they can go home
23 and say something.

24 MS. AIMEE CRAFT: Thank you. And being
25 mindful of the time, we have a few more slides. And a

1 lot of the issues that we're going to look at in the
2 next few slides have already been touched upon because
3 these are issues that you've expressed as important to
4 you. So we --

5 ELDER CHRISTINE MASSAN: And I have one
6 (1) more questions.

7 MS. AIMEE CRAFT: Go ahead.

8 ELDER CHRISTINE MASSAN: Okay, I want
9 to stand up for this one, please. I've been thinking
10 about this for the longest time. And you can sort of
11 know -- you can now tell that we're not for any more
12 dams. Enough already. Do something else.

13 But I wanted to talk to the people, ask
14 the people that work for Manitoba Hydro, whoever they
15 are, if you were in our place, if you did not work for
16 Manitoba Hydro or the province, what would your
17 thoughts be today? You know, would you be all gung ho
18 for building a new dam or would you say, No, hold it,
19 that's enough, that's enough now?

20 Mother Earth is spitting back all the
21 garbage that they have buried on there, can't handle no
22 more. There are fires everywhere. Canada and the
23 United States is all having floods, tornados. That's
24 not normal. We are causing all that with the
25 destruction of Mother Earth in our life, nipi.

1 MS. AIMEE CRAFT: Thank you. And as we
2 go through the next few slides I'd like you to keep in
3 mind one (1) question, and -- and we'll -- I'd like
4 each of you to answer it at the end.

5 Can you think of other alternatives that
6 might be better for you than to build more hydro dams?
7 And a second question, which is: Do -- the benefits
8 that might come from hydroelectric development, are
9 those enough to outweigh the potential negative impact,
10 in your view, on your socioeconomic and health
11 interests?

12 Okay, so those are two (2) things I'd
13 like you to keep in mind as we go through. And these
14 are issues that you've identified and -- and pictures
15 that you shared, erosion and -- and debris, and, you
16 know, shorelines that are receding.

17 And -- and, Ila, this is a photo of your
18 grandmother, is that correct? And the shoreline is now
19 10 feet further in than it was when this picture was
20 taken?

21 Is that correct?

22 MS. ILA DISBROWE: Yeah.

23 MS. AIMEE CRAFT: And can one of you
24 share with us some of your concerns around water
25 quality, in particular, swimming?

1 MR. ROBERT SPENCE: I would like to
2 share a fact with you about this picture here. I don't
3 know if this is a mother, a sister, or a niece, but the
4 reason why she's standing there in that water is
5 because there is no other place within reach of our
6 community to go have that kind of fun, or that -- that
7 sort of recreation anymore.

8 By putting either niece, daught --
9 daughter, in that water, she's risking this kid's
10 health. A lot of times our kids go into that water and
11 come out with a grey film all over their body. I've
12 had an employee from Manitoba Hydro laugh at me when I
13 stated this fact in Split Lake.

14 By putting -- by allowing and putting
15 this kid in the water this way, this child, they're
16 risking infection. Sores. Like, as if they were in a
17 third-world country right smack dab in the middle of
18 Canada. Can you believe that? In Canada, third-world
19 country water is degrading, and unhealthy, and unfit
20 for drinking and swimming. Ekosi.

21 MS. AIMEE CRAFT: Thank you. This is a
22 picture of the gate at the Keeyask infrastructure
23 project, and Mr. Jack Massan, could you comment on how
24 the road across a Keeyask dam might improve access, and
25 how that might be a potential benefit to your

1 community, and also any concerns you might have with
2 increased road access?

3

4 (BRIEF PAUSE)

5

6 ELDER JACK MASSAN: That road, it's --
7 it's a long ways from our -- where our community is.
8 This is a lot closer to -- excuse me -- Split Lake and
9 that. It's -- it's more -- but whatever happens to
10 this place, it's -- it will be like all -- all our --
11 all our people will be the same thing.

12 I mean, the Earth where we were born,
13 it's always the same. We're in the different places,
14 but when we're in the bush, everything is still the
15 same. But now -- now they're pushing all these roads
16 and everything all over the place. I don't know, it
17 just -- I just got -- like I said, it's closer to Split
18 Lake and that, and where Fox Lake is, but whatever
19 happens there, we're -- we still -- yeah, just...

20 MS. AIMEE CRAFT: Mr. Moose...?

21 MR. IVAN MOOSE: They say this road'll
22 -- for us, I guess, our -- our benefit is supposed to
23 be that it cuts at least, I don't know, forty-five (45)
24 minutes to an hour to go to Thompson, but I think it's
25 more -- more of a benefit to Hydro to keep -- keep them

1 from going all the way around.

2 But that road opens the door to more
3 people to come to our community, too. There's going to
4 be a lot of strangers coming into our community again,
5 as it was before. We've told these stories over and
6 over again, talked to everybody, but every time a
7 little project starts or any project starts, they got
8 us running around like little -- little chickens, going
9 and ask the same questions.

10 And we tell them, We've asked these
11 questions before. And what did they say to us? It's a
12 different dam. No. It is a different dam, but same
13 effect. It's going to bring in more drugs. As it is
14 now, we've got a lot of drugs at home. It's going to
15 bring in the gangs that sell those drugs, or have
16 people selling drugs for them. It's going to open the
17 door for people to come to our communities, because we
18 have a bar there.

19 A lady eloquently put it at the CAC
20 hearing from Hydro, said when we asked, What's it going
21 to do about the workers? He said, Oh, we've got a good
22 plan, she said. Well planned, they're going to have a
23 -- a bar at the camp. They're going to have
24 recreational facilities at the camp, you know, for the
25 workers.

1 I don't know where this lady was, she
2 wasn't thinking right, because they had all those in
3 previous dams and they still came to our community,
4 still came to Gillam. We were the ones that were
5 getting slaughtered. You know, that opens doors to
6 destruction. It's not Hydro construction, it's Hydro
7 destruction for our people.

8 MS. AIMEE CRAFT: Thank you. M.
9 President, if we could have a few moments just to
10 regroup and discuss how we may shorten this -- given
11 the time frames that we have, that would be much
12 appreciated.

13 THE CHAIRPERSON: Okay. How much time
14 do you need?

15 MS. AIMEE CRAFT: Approximately ten
16 (10) minutes.

17 THE CHAIRPERSON: Okay. Let's take ten
18 (10) minutes, but we're going to -- we're going to
19 continue after the ten (10) minutes. That's our
20 intention to continue. Thank you.

21 MS. AIMEE CRAFT: Thank you.

22

23 --- Upon recessing at 11:51 a.m.

24 --- Upon resuming at 12:09 p.m.

25

1 THE CHAIRPERSON: I believe everyone is
2 in position, so Mme. Craft, s'il vous plait.

3 MS. AIMEE CRAFT: Merci, M. President.
4 We just wanted to note for the -- the Board that Mr.
5 Moose has had to step out for a medical emergency. We
6 understand that there may be some questions for him
7 either from the Board or -- or on cross-examination.
8 We'd be happy to receive any of those questions in
9 writing and -- and to undertake to have responses, if
10 that's acceptable to the Board.

11 THE CHAIRPERSON: Yes, it is. Thank
12 you.

13

14 CONTINUED BY MS. AIMEE CRAFT:

15 MS. AIMEE CRAFT: Thank you. So we'll
16 carry on with the road access issue and I'd like to ask
17 Elder Noah Massan if having access to -- or a shorter
18 road into Gillam through the Keeyask dam is a -- a
19 potential positive benefit in your view?

20 ELDER NOAH MASSAN: Well, the concern I
21 got if there's going to be a road there my trap lines
22 is going to be real destroyed, all that traffic going
23 to go through there. What are they going to do with
24 that 280 road? Are they going to give it back to the
25 animals from -- from Keeyask Road to Long Spruce? Are

1 they going to dismantle everything? You know, if
2 they're going to try and build that road, the -- the
3 sound of it isn't going to build it. I'm concerned
4 about my trap line because there's about fifty (50) --
5 fifty-two (52) culverts between north spruce and then
6 at the junction of Long Spruce.

7 MS. AIMEE CRAFT: Let's move to jobs
8 and training. And here we have two (2) images. And --
9 and Mr. Massan, you're -- Mr. Norm Massan, you're going
10 to recognize yourself in some of these pictures. One
11 (1) of them is a heavy equipment operator training
12 certification that you received. And you're also one
13 (1) of the -- the people in the photo on the Fox Track
14 -- Tracks newspaper or community newspaper with the
15 heavy equipment trainees.

16 Do you recognize yourself in those --
17 those pictures?

18 ELDER NORM MASSAN: Yep.

19 MS. AIMEE CRAFT: Can you tell us how
20 you were involved with the heavy equipment training?

21 ELDER NORM MASSAN: Well, it all
22 started when I brought that issue about Mr. Huff
23 Manitoba heavy -- when those -- those three (3)
24 operators that wanted to see me over there when I was
25 running a dozer. And then I was mentioning those guys

1 in that -- that picture and then I was in York Landing.
2 Manitoba Hydro hire -- they asked me if I want to be an
3 instructor in York Landing.

4 So I said, Sure. I'll go there. And
5 the picture there's a Al DeHolland (phonetic) used to
6 be a key person, that little short guy there. We were
7 certified around October, I think 6, and 2008, I think.
8 I was surprised too when I got that certificate and
9 that other guy too was surprised.

10 MS. AIMEE CRAFT: How many people in
11 this picture are now working as heavy equipment
12 operators? Do you know?

13 ELDER NORM MASSAN: Okay. There's two
14 (2) on highways, Morris Anderson (phonetic) and there
15 was another guy hired about three (3) years ago after
16 we did that training in York Landing, Lawrence Mayham
17 (phonetic), and Charles Spence (phonetic). He took
18 truck driving and heavy equipment. He's working for
19 Hydro, but he's in the stores. And Val Muskins
20 (phonetic), my sister's daughter Arlene (phonetic) and
21 his (sic) husband. And Brandon Wavy (phonetic) he's
22 working out at Thompson, and he's working on a -- on
23 the transmission line this year. He always comes to me
24 when he comes to Gillam, Noah, I'm still hanging onto
25 my job. I said, that's good. And Hydro is giving him

1 a chance to run machinery. And he's driving trucks
2 'cause he's got that license too.

3 MS. AIMEE CRAFT: Thank you. And
4 generally people that have been working as heavy
5 equipment operators and in other trades, have they been
6 keeping their jobs?

7 ELDER NOAH MASSAN: Yeah. And some of
8 them never got hired because they need five (5) years
9 experience. You know, some of them are still waiting.
10 They're not getting the opportunity that they try in
11 certain places. Even right now Conawapa, they're not
12 giving them a chance to work, you know. And they got
13 lots of concerns here, too. Our leaders are not doing
14 nothing about it to help them.

15 They seem to be coming to me. I've got
16 nothing to do with that, but they -- they said, You've
17 been working all these construction union and all that,
18 how did they do it before way back? I said, you've got
19 to have a shop steward representing you that's the guy
20 to see.

21 MS. AIMEE CRAFT: Do any of the other
22 panel members have any concerns about employment?

23 MS. ILA DISBROWE: There's a lot of
24 Band -- our Band members in Split Lake that were laid
25 off to do their turnaround and stuff. They were never

1 called back. And there's a lot of people waiting on
2 the list for JRS and have never been called. So why is
3 that?

4 I asked one -- one (1) contractor why
5 that happens. I don't know, I never see -- in his
6 word, Never seen this person on my list, he says. So I
7 don't know what happens to -- to the JRS. I don't know
8 why our people are not being called back when they
9 worked there before.

10 And all these claims that we're working,
11 and they make it sound like our people don't want to
12 work but they do. They're on -- waiting. Most of them
13 don't have phones.

14 MS. AIMEE CRAFT: Thank you. Let's
15 turn now to housing and heating, and this is a photo of
16 your trailer, Noah Massan, and the trailers beside you
17 are Manitoba Hydro employee trailers.

18 Can you tell us about any concerns that
19 you have about housing conditions? We've talked about
20 that already today but specifically about heating and
21 heating costs.

22 ELDER NOAH MASSAN: I just got a notice
23 about a month ago. I've been paying on this -- this
24 plan they've got. Three hundred (300) -- I pay three
25 forty (340) every month for my Hydro bill. Then I just

1 got a notice on the bill there, they were trying to
2 disconnect my -- my Hydro because my Hydro bill -- like
3 I've been paying three forty (340) right through, but
4 suddenly it jumped up. And this guy never come to our
5 meter to check our meter 'cause the snow is too high.

6 But what I'm doing now, I'm checking the
7 meter every month. On the 14th a guy call me from
8 Winnipeg. I'm doing your guy's job now, I guess.

9 MS. AIMEE CRAFT: And are you -- you
10 doing this because you're concerned about how much you
11 have to pay and balancing your budget?

12 ELDER NOAH MASSAN: That's right. And
13 those trailers, too, in between me and Jack, and
14 there's some trailers between us, and staff houses he -
15 - by the hospital road there. You know my former Chief
16 Walter Brady (phonetic) wanted that land to build
17 houses. They said there wasn't going to be nothing
18 there. There was -- it was nice there. They put lawns
19 there.

20 Look what Manitoba Hydro did last -- a
21 couple years ago. They put these trailers. There was
22 saving that land between me towards town, and between
23 Jack and that. They put these trailers now. See,
24 Hydro -- see what Hydro -- Manitoba Hydro doing is
25 taking the lots, and they told the Band people there

1 were nothing going to be built in there.

2 MS. AIMEE CRAFT: Thank you. The other
3 concern relating to the -- the future that's been
4 expressed by all of the panel members already today is
5 health.

6 And Elder Christine Massan, could you
7 explain to us what some of the -- the health concerns
8 are, and -- and the perspective on health that your
9 panel is bringing, and would like the Board to know
10 about?

11 ELDER CHRISTINE MASSAN: Okay. We were
12 talking about eating things that are good for you,
13 eating things that don't have a lot of additives and
14 MSG and all that stuff in it, because it's -- it isn't
15 good for you. And I have mentioned it several times
16 today about the fish that we were basically raised on
17 when we were kids that we no longer can eat.

18 We eat caribou and moose, chickens,
19 rabbit. Like we eat as much as we can off the land.
20 And when we do that we are in better health than when
21 we're going to the store to buy all the -- not just the
22 fast foods and all that, but even the beef, the pork,
23 and that has some additives to it. The growth hormone
24 and other things that they put in food.

25 You know, we talked about the geese. My

1 granddaughter who I didn't think would ever really like
2 eating wild food, like (CREE LANGUAGE SPOKEN); that's
3 the Cree call (CREE LANGUAGE SPOKEN), like real food.
4 And my granddaughter just loves it when we cook and
5 she'll come over and eat. And she's -- some of you
6 might have met her. She was here for the last hearing.
7 She was one (1) of the youth doing a presentation.

8 But, yeah, that's where it goes. And we
9 used to have -- pickerel used to be pretty good
10 commercial fishing in the Gillam area, but he's been
11 told that he -- he said he can't fish there anymore
12 because of the mercury. That's -- that's put a damper
13 to his business. And so what I had to do the last time
14 we wanted fish, we got it from a resource user in York
15 Landing that went to a prime -- a prime place, a place
16 that hasn't been touched by anybody yet and that's
17 where we got our thing of -- a big package of pickerel.

18 MS. AIMEE CRAFT: And --

19 ELDER CHRISTINE MASSAN: And that's
20 what we mean. And Elders have been saying that long
21 before us, (CREE LANGUAGE SPOKEN) that all this other
22 foods you get munjuice (phonetic). And they say
23 munjuice is a cancer. That's what they talk about,
24 yes.

25 MS. AIMEE CRAFT: And do you have any

1 concerns beyond the physical health effects that might
2 be related to future development?

3 ELDER CHRISTINE MASSAN: (CREE LANGUAGE
4 SPOKEN). Oh, physically it kind of puts a -- a limit,
5 maybe I can use, on where you can go. You can't go to
6 some of the places you had used before for your annual
7 gatherings and your places you would go pitch up a tent
8 and to spend the weekend with your family sharing
9 stories.

10 And just the bonding of the family of
11 the people is not always there when you want to go out,
12 because you're prevented from going anywhere for the no
13 trespassing signs that they post up. And it's not good
14 for us. Certainly don't feel good about it not being
15 able to -- even just walk down a track and make a small
16 fire to cook a few wieners. You know, it's pretty
17 simple, but we can't do stuff like that anymore because
18 everything is controlled beyond out -- beyond us. We'd
19 kind of like to have some of those things back, but I
20 don't think so.

21 MS. AIMEE CRAFT: And, Elder Beardy,
22 you and -- and other Elders from your community have
23 already expressed concern about caribou.

24 Can you tell us what in particular
25 you're concerned about in relation to these -- the

1 socioeconomic prospects? So, you know, how your
2 community members can feed themselves, but also any
3 other impacts that -- the impact on caribou might have
4 on the people of your community?

5 ELDER FLORA BEARDY: Well, we were
6 fortunate this year that the caribou came close to the
7 community again. So we were able to harvest them and -
8 - and everybody in the community was able to eat
9 caribou, fresh caribou meat. But in the past, I've --
10 I've often wondered how healthy are these caribou.
11 Like, they eat moss, you know, but everything that goes
12 up in the air comes down on the ground, and where does
13 it end up and how are these caribou affected.

14 But with the caribous that we've been
15 harvesting, like when you clean them and you cut them
16 up, we have -- I haven't myself seen any -- any
17 sickness in them or, you know, sometimes when you open
18 up a beaver you see puss inside, and you can't eat
19 that, you know. We don't have any beaver or muskrat in
20 our community anymore.

21 But the -- the biggest concern we had
22 were the woodland caribou in the area. And there --
23 and there's a couple of guys from Split Lake,
24 Tataskweyak, that got a woodland caribou close to
25 Kelsey and another one on -- by Keeyask last fall.

1 So we've been saying for years that they
2 are there, they are there, you know, just -- this young
3 fellow didn't know what kind of caribou that was. He
4 had to go ask his father. And his father told him
5 that's a woodland caribou. But those are the ones that
6 we're worried about. If the dam goes -- if the dam
7 goes up will these caribou be protected? They don't go
8 -- roam very far, the woodland. They're not like the
9 other -- the -- the northern herd, what we call Pasko
10 Atikok; that's -- that's barren ground caribou. That's
11 Beverly and the Qamanirjuaq herds. They -- they travel
12 long distances.

13 The -- the Cape Churchill herd is
14 another herd between Churchill and -- and Gillam that
15 stay along the coast. And then, of course, the Pen
16 Island herd that comes from the east. Those travel
17 long distances, but not the woodland caribou.

18 And, you know, we've always lived on
19 caribou. And it -- it's so -- I think it's important
20 to find out what their health is like today. And I
21 think with -- they migrate in certain areas. And if
22 there's like roads cross -- if there's roads built and
23 -- and they can't cross at a certain point in the
24 river, a dam is built, then what's going to happen to
25 them?

1 MS. AIMEE CRAFT: Thank you, Elder.

2 And this question is for Mr. Noah Massan. I'm told
3 that this photo is of a fish that you kissed?

4 ELDER NOAH MASSAN: That's right.

5 MS. AIMEE CRAFT: Can you tell us about
6 any concerns you have relating to fish, including
7 namao, the sturgeon fish?

8 ELDER NOAH MASSAN: Okay. This is the
9 -- below Long Spruce. At one time, North-South said
10 there was only one (1) sturgeon in that between Long
11 Spruce when they did their study between Long Spruce
12 and Limestone. So the professor, Jerry Dick
13 (phonetic), asked Hydro if we can go fishing. We're
14 going to prove them wrong. There's sturgeon in there.
15 Sure enough, me, Jack, and Johnny (phonetic) went. We
16 started from Limestone and we set sturgeon.

17 And we found sturgeon where North-South
18 didn't go, and it's only what's in front of that dam on
19 the side of the spillway. We caught it and I took it
20 out. And then I put it in the water. And this thing,
21 after he went in the water he jumped right out of the
22 water maybe 3 feet. And Jack and Johnny just laughing
23 now, maybe he wants another kiss, he says.

24 But I'm concerned about sturgeon, too,
25 and not just sturgeon, the other fish, too. You know,

1 what's going to happen if Conawapa goes? There's talk
2 right now they're starting to come back towards
3 Limestone after Limestone was there. What's going to
4 happen to the other fish, not just the sturgeon? We --
5 we eat the other fish, too. Like there's mariah. They
6 don't talk too much about mariah or the trout.

7 Look how far Dotch Stone (phonetic) said
8 they had to go to get a trout. They had to go Way
9 River (phonetic), you know. Look at -- I keep thinking
10 about the Elders. (CREE LANGUAGE SPOKEN); that's
11 another word, our river system is getting shorter
12 because of these dams. That's why community, they were
13 concerned about Kettle. But there were nothing studied
14 doing about. They wanted fish ladders built in these
15 things, and it's not happening. They're not thinking
16 about the fish going up, you know. They should have
17 fish ladders that they -- at least they can come up,
18 you know.

19 MS. AIMEE CRAFT: Thank you. So we're
20 -- we're going to go back to that question that I asked
21 you to think about before we -- we had a break. And
22 are there any alternatives that you can think of to
23 building hydroelectric development that would be
24 acceptable to you, and is building further hydro
25 electric development access -- acceptable based on the

1 benefits and the potential negative impacts on you, as
2 Inninuwuk?

3 And maybe I'll start with Elder Jack
4 Massan on that question.

5 ELDER JACK MASSAN: Excuse me. Are
6 there alternatives, you...? Well, let's -- well, the
7 one (1) thing I was -- like I brought up once already
8 is instead of building those two (2) dams, that's when
9 I said, Why don't they put -- put higher, bigger
10 generators on the dams that are already there. If they
11 want more power, they should put bigger...

12 But I asked that question, like I said
13 before, and they never -- the only thing I told me was
14 they need more water to put bigger generators on those
15 dams. But, I mean, the other alternative, I don't know
16 which, I guess these big towers with those windmills
17 or...

18 But trying to save the water, trying to
19 save the Nelson River now, it's already damaged so
20 much. So whatever is left, I don't know. The fish
21 must be -- they can't do anything about it. The
22 water's so dirty right now.

23 MS. AIMEE CRAFT: And in your view,
24 should Keeyask and Conawapa be built?

25 ELDER JACK MASSAN: No. I just -- like

1 I said, what I just finished telling you guys, why
2 don't they just forget about Conawapa and Keeyask,
3 yeah, don't -- don't build it.

4 And there's another thing I was going to
5 bring up, but I don't know, it's -- these -- like on my
6 trap line, Manitoba Hydro gave us a list to the
7 trappers, saying that the trapper has -- he should --
8 Hydro would hire a trapper to do the monitoring on --
9 on his own trap line.

10 But my trap line's been -- been worked
11 on already, for I don't know how long now, at least a
12 year and a half. And Hydro hasn't even -- hasn't even
13 come and asked me what -- you know, didn't hire me or
14 anything. They don't -- the only thing I see on those
15 -- on my trap line is, No trespassing, no trespassing,
16 you know. How are you supposed to do the monitoring
17 when they do -- when they're working on my trap line?

18 The same thing as that Bipole III. They
19 were supposed to hire me, but, no. Yeah, that's --
20 well, that's the only alternative. I mean, just forget
21 about building that Keeyask and Conawapa, because they
22 already got that (CREE LANGUAGE SPOKEN) generating
23 station going already. It's been going for a while
24 already, and it's -- that's what I mean. That's what
25 they're supposed to hire me to do monitoring on, on

1 what they're doing in that bush. But, no, nobody ever
2 come and talk to me about it or...

3 I mean, Hydro wrote out a list what --
4 what the trappers are entitled to do when they're
5 working on their trap lines, but, no, nobody comes.
6 Thank you.

7 MS. AIMEE CRAFT: Elder Christine
8 Massan...? And again, we're -- the same question on
9 alternatives and whether or not you think Hydro -- the
10 two (2) Hydro dams, Keeyask and Conawapa, should be
11 built.

12 ELDER CHRISTINE MASSAN: Well, I've
13 done quite a bit of reading on alternatives, and
14 whether it be wind or gas powered furnaces or whatever
15 that last study was, and I -- I'm not sure which one
16 will be better. It's possible that maybe somebody
17 should do a study on -- on the different methods of
18 power -- generating power, and picking one that's going
19 to do the least amount of damage. Benefits towards us
20 in building the dam just -- I knew ago.

21 I did -- when I was talking about the
22 Cree language just a little bit ago when I was -- got
23 sort of emotional, I forgot to mention that Manitoba
24 Hydro in their agreement had agreed to pay Fox Lake
25 Cree Nation twenty thousand dollars (\$20,000) a year to

1 teach the Cree languages in school. But that's not
2 even enough monies to -- to hire one (1) person to do
3 that at a -- as a full-time job, let alone start buying
4 all the supplies, the books and things that you need.

5 And, so I guess what I'm saying is that
6 if I look at the land, (CREE LANGUAGE SPOKEN) land and
7 (CREE LANGUAGE SPOKEN), and if I look at all the earth,
8 the land, the water and our plate -- sorry I do that --
9 and the plate that we talk about, there's so much
10 damage to it that nobody -- you know, even though Ivan
11 said we did give a thousand dollars (\$1,000) for a one
12 time thing with Fox Lake, it's nice to be given
13 something some time without any other attachments.

14 But it's the -- we need to do a little
15 bit more to be able to protect the three (3) basic
16 elements that I talked about: The land, the air, the
17 fish. And so, yeah, I would like to see a big study
18 done on the different methods of generating power. And
19 I would like to be -- have it presented to me so that
20 we understand and basically the terms, and the
21 terminology -- scientific terminology that they use
22 because that was never done.

23 No, I think the best thing for Manitoba
24 Hydro and the province of Manitoba to do would be just
25 no more dams until we can already -- we can fix what

1 we've done already. Thank you.

2 MS. AIMEE CRAFT: Thank you. Ms.

3 Disbrowe...?

4 MS. ILA DISBROWE: Other alternatives.

5 I can only see solar panel or windmill 'cause I don't -

6 - I don't see any benefits with hydro. I -- I was

7 sitting here, what are the benefits for Hydro when all

8 it's done was tear our community apart. Yeah.

9 It's just -- what do you do when you

10 have a clogged artery? That's what our -- that's

11 what's happening in our river. It's clogged. What do

12 the doctors do when they clog -- when your artery is

13 clogged? They unblock it. They'll heal. Not block it

14 some more.

15

16 (BRIEF PAUSE)

17

18 MR. ROBERT SPENCE: (CREE LANGUAGE

19 SPOKEN). Today in the paper I read about Nelson House,

20 about the partnership that they had with Manitoba Hydro

21 and the amount of monies that they lost this year

22 alone. And the number of people that work at Wuskwatim

23 today. It said four (4) people full time compared to a

24 couple thousand that live there.

25 So if you ask a person like me I say,

1 No. No to more Hydro dams. It just costs too much.
2 And I'm not thinking dollar wise neither. I myself, to
3 support my family, I hunt, fish, trap, I carve, I
4 paint, I do the odd welding jobs. Where -- wherever I
5 can -- whatever I can do to support my family, I'll do
6 it with these, with this, with this.

7 So with Hydro development it turns me
8 off. I see nothing positive about it. With the little
9 money that I do make here and there doing what I do,
10 fishing on a lake that's dead and dying already, for
11 peanuts. I'm still able to buy solar panels myself. I
12 can't afford the nice threads that a lot of you people
13 wear here today, but I sacrificed that for my kids and
14 my family. So do us -- all of us here.

15 And I myself bought solar panels. I
16 took the initiative to do that to show other people
17 that there are other alternatives. They're not as
18 expensive as they used to be. A few years ago I
19 started looking at them online. They cost an arm and a
20 leg. I couldn't afford them. But today I could afford
21 them because they're a cleaner, more renewable energy
22 than Manitoba Hydro is.

23 For a person like me with a grade 9
24 education to be able to hook up a solar panel, anybody
25 can do it. Manitoba Hydro has all sorts of experts at

1 their disposal. Why couldn't you figure out something
2 like that, or go with something like that. Put that on
3 your posters. Ekosi.

4 ELDER FLORA BEARDY: Well, I can't
5 think of any other alternatives. Elder Massan, I -- I
6 agree with everything Elder Christine Massan said, that
7 we have to look into the ones that she mentioned and
8 then with the solar power.

9 But if it does -- if there's any way
10 that -- if it doesn't happen that we can stop these
11 dams, I think Manitoba Hydro should stop and take a
12 look at all the damage that has been done in the past
13 to correct that. And if there's any way that they can
14 save the fish, do it. There's one (1) dam at Kelsey
15 there where there is a spot where they can open it up
16 and the -- and the fish would get by without going
17 through the turbines.

18 You know, things like this if they could
19 stop and revisit everything that -- that has been done
20 wrong in the past, you know, maybe things will work
21 better in the future. But we have to work together.
22 And any committees that come up, I suggest that all --
23 some -- the Aboriginal people, the Elders sit on those
24 committees, like the Monitoring Committee, the one (1)
25 for employment and -- and so on. That -- that's my

1 suggestion. Ekosi.

2 ELDER NOAH MASSAN: I agree to what the
3 other people say. Why is Manitoba Hydro for these dams
4 to go to please the neighbours in the States? Why
5 don't they build their own dams? They must have
6 rivers, or they've got natural gas. They say they got
7 natural gas. Why did they all come to us to power in
8 Manitoba? You know, Manitoba Hydro just -- (CREE
9 SPOKEN). My band got no money. Hydro's willing to
10 give them money for this dam, but we want payback.
11 You know, our -- our band is poor as it is. Why are
12 they putting us further in the hole?

13 I think they should -- like I said to
14 chief and council, they don't realize -- like in the
15 past I sat in a committee and listen -- listened to --
16 maybe I sat in there fourteen (14) years, I think, in
17 that committee. I sti -- I saw a lot -- I looked -- I
18 saw it in the project description. But I was told to
19 observe by one (1) chief, but then -- and then I
20 started thinking, you know, they tell me though. And I
21 started thinking -- and I asked a couple people, What
22 the hell -- what's that mean? And they told me you
23 just sit there and listen, you know, but I -- I
24 couldn't do that, because I work in this -- in these
25 projects to see how they speak out, just like Long

1 Spruce there, like they'll keep you talk -- talking
2 about fish.

3 You know, they have big meetings about
4 fish, sturgeon in Thompson, a couple of places. Not
5 once Manitoba Hydro mentioned they got blocks below
6 Long Spruce, baffle blocks they call them. I'm glad I
7 was there to see. I brought that issue up to Manitoba
8 Hydro. You guys never bring this issue about what are
9 those baffle blocks are for?

10 But no, after I said that in Thompson,
11 some of those Hydro guys come to me and, How do you
12 know about these baffle blocks?

13 Hey, I worked in those projects to see.
14 I was in the right place the right time. I guess you
15 can say that, because I was an operator. I will tell
16 you, as a operator, I was running a grater or dozer or
17 a loader. I was all over the place with the grater
18 making roads, and I see these cement blocks that are
19 blocking the river.

20 When you lift the gate that spillway,
21 all those fish hit that baffle blocks I think, Well,
22 why are there fish are dead there, when Manitoba Hydro
23 says they're not killing fish? I don't think they
24 should build Keeyask or -- or Conawapa unless they do
25 more studies. I'd like to see more studies being done,

1 like, in -- in (CREE LANGUAGE SPOKEN), Gull Rapids.

2 There's a island there where -- where
3 the caribou have their little ones. I'm pretty sure
4 that's going to be underwater, but Hydro said they're
5 going to put rock on there all around, like they did to
6 Split Lake. You know, that water's going to wipe out
7 that island.

8 Look at -- look at that Stephenson (sic)
9 Lake. You go to those islands. Too bad, you guys got
10 to come there and tour around the summertime. I'm
11 pretty sure Manitoba Hydro will do that for you guys,
12 come and look around. I took a professor there. At
13 the last hearing I took him around. He got to see the
14 stuff what we're talking about. He took pictures of
15 it. His name is Peter (phonetic). I had some
16 people...

17 MS. AIMEE CRAFT: So Noah, just to
18 finish that off, in your view, in your opinion, is what
19 is good about economic development and development, is
20 that enough to justify building Keeyask and Conawapa?

21 ELDER NOAH MASSAN: I don't think so.

22 MS. AIMEE CRAFT: Okay. Thank you.
23 I'd like to apologize for having gone over time, but in
24 -- in that same breath, also thank the panel members
25 who have demonstrated courage and have shared a lot of

1 personal stories and -- and experiences and -- and
2 highlighted for the Board members their views through
3 images and -- and words. And so I want to express the
4 gratitude of -- of the Consumers Association of Canada,
5 and -- and of myself personally, and the team that has
6 worked with -- with this panel, and -- and thank also
7 the Board for the opportunity for them to present, not
8 only as presenters, but as -- as fact witnesses and --
9 and to make that space for Elders' evidence and -- and
10 land -- traditional land users to be bringing that
11 perspective to the Board in your important task of
12 decision making in this NFAT proceeding.

13 The panel members, of course, are -- are
14 open to -- to questions from the Board and -- and any
15 of the parties.

16 THE CHAIRPERSON: Thank you. I have no
17 questions for the time being. I will canvass the --
18 the Intervenors to make sure that they have no
19 questions starting with you, Me. Hacault, s'il vous
20 plait.

21 MR. ANTOINE HACAULT: Merci, M.
22 President. I have no questions. I thank the panel for
23 an excellent presentation.

24 THE CHAIRPERSON: Merci, Mr. Hacault.
25 Mr. Orle, please.

1 MR. GEORGE ORLE: Thank you, Mr. Chair,
2 and on behalf of MKO, I'd just like to thank the panel
3 for their presentation, and I have no questions of
4 them.

5 THE CHAIRPERSON: Thank you, Mr. Orle.
6 Mr. Shefman, on behalf of the Manitoba
7 Metis Federation?

8 MR. COREY SHEFMAN: Yes, thank you, Mr.
9 Chair. On behalf of the Manitoba Metis Federation, I'd
10 like to thank the members of the panel for their very
11 interesting testimony today. We don't have any
12 questions for the panel.

13 THE CHAIRPERSON: Thank you, Mr.
14 Shefman. Me. Monnin, s'il vous plait?

15 MR. CHRISTIAN MONNIN: Merci, Mr.
16 President. We have no questions. Thank you.

17 THE CHAIRPERSON: Merci, Me. Monnin.
18 Manitoba Hydro, please, any questions of
19 these witnesses?

20 MS. JANET MAYER: Monsieur, Manitoba
21 Hydro would also like to thank the panellists for
22 appearing today. It is certainly recognized that
23 appearing before a formal panel and taking a position
24 that may be different in some respects from that taken
25 by their community leaders and the majority of their

1 community members who voted in favour of the JKDA and
2 the Adverse Effects Agreement can be difficult.

3 At the -- the CEC hearing, the
4 partnership took the position that community members
5 should have the opportunity to voice their opinions
6 without being subjected to cross-examination by it.
7 Most of these individuals had the opportunity to do so
8 at the -- the CEC hearing, expressing the very same
9 sentiments that we've heard today, and we feel that
10 they should be given that same deference here. For
11 that reason, Manitoba Hydro and its partners will not
12 be asking any questions.

13 I do, however, wish to speak to one (1)
14 matter that was raised this morning. At the CEC
15 hearing and this morning as well, we heard about -- and
16 saw a picture about two (2) meters on Manitoba Hydro
17 housing. That issue was addressed by the partnership
18 at the CEC hearing and in fact, we prepared a written
19 answer to a question about that.

20 I have that here with you -- with me
21 today. If the panel would like to receive a copy of
22 that same document, we can certainly file it today.

23 THE CHAIRPERSON: Yes, we would
24 definitely like to see that document, please.

25 MS. JANET MAYER: I will file that,

1 then, when the proceeding concludes this morning.

2 THE CHAIRPERSON: Thank you very much.

3 Mr. Peters, any questions for the panel?

4 MR. BOB PETERS: No, no questions

5 either, Mr. Chairman. I, too, appreciate the evidence

6 and the -- the witnesses coming forward today to share

7 their experiences and provide the information to the

8 Board, so there will be no questions on behalf of the

9 Board from this side. Thank you.

10 THE CHAIRPERSON: Thank you, Mr.

11 Peters. And with that, I think that ends the

12 proceedings for the -- the morning into the afternoon.

13 So obviously, I -- I hope that Mr. Moon -- Mr. Moose,

14 rather, gets through this emergency and in a way that

15 his health is not affected, and on behalf of the panel,

16 I want to thank all of you for being here today.

17 I know that you've travelled to come to

18 Winnipeg and you've taken the time and trouble to -- to

19 share with us your views about the projects and the

20 impact it's had on your community. So for us, it's

21 very important to hear that, because we -- we have

22 spent a lot of time hearing from experts and

23 consultants, and have read a lot of documents, so it's

24 -- it's good to hear from the people who are directly

25 impacted.

1 It's important for us to -- to hear
2 that, and I thank -- and I want to thank you for -- for
3 being here to -- to do that for us. So, thank you very
4 much for coming to Winnipeg, and with that, I -- I also
5 hope that you have a safe trip home, and that you have
6 a good, enjoyable summer. So, merci, Mme. Craft.

7 MS. AIMEE CRAFT: Merci, M. President.
8 As protocol would dictate, we'll close with a prayer by
9 Elder Beardy.

10

11 (CLOSING PRAYER)

12

13 THE CHAIRPERSON: For the benefit of
14 those that will be here this afternoon, we intend to
15 resume the proceedings at 1:30.

16

17 --- Upon recessing at 12:53 p.m.

18 --- Upon resuming at 1:34 p.m.

19

20 THE CHAIRPERSON: I believe we can
21 start the proceedings. I believe everybody's in
22 position. And so I'll turn the microphone over to you,
23 Mr. Peters.

24 MR. BOB PETERS: Thank you, Mr.
25 Chairman. There might be a couple of matters -- myself

1 and Ms. Ramage may have a couple matters to speak to.
2 But this morning Manitoba counsel -- Manitoba Hydro
3 counsel, Ms. Mayer, indicated that the question about
4 two (2) meters on a home, I believe it was in Gillam,
5 was -- was raised in some of the photographs that were
6 put on the screen.

7 And Manitoba Hydro had a copy of a
8 written question and the written response given, I
9 believe, to the CEC, the Clean Environment Commission.
10 That has been given an exhibit number. And we should
11 just acknowledge that on the record as Manitoba Hydro's
12 next exhibit, which is --

13 MR. KURT SIMONSEN: One eighty-one.

14 MR. BOB PETERS: -- MH-181.

15 MR. KURT SIMONSEN: Correct.

16

17 --- EXHIBIT NO. MH-181: Question and answer
18 regarding two (2) meters on
19 a home

20

21 MR. BOB PETERS: Thank you very much,
22 Mr. Simonsen. And then I'll turn it over -- sorry, I
23 believe --

24 MS. PATTI RAMAGE: That's what I was
25 going to do, too, Mr. Peters, so we're all on the same

1 page.

2 MR. BOB PETERS: You're welcome. Thank
3 you, Mr. Chairman. That's all I have.

4 THE CHAIRPERSON: And just a reminder
5 to everyone, it's our intention to adjourn for the day
6 at five o'clock this afternoon so that five o'clock is
7 the witching hour. So with that I'll turn it over to
8 you, Mr. Williams.

9 MR. BYRON WILLIAMS: Yes. And thank --
10 thank you and good afternoon, members of the panel.
11 Before we ask that the witnesses be sworn or affirmed I
12 have, according to Ms. Fast, five (5) exhibits that I
13 wish to introduce.

14 You should have in front of you load
15 forecasting for the NFAT prepared by Drs. Simpson and
16 Gotham. We would recommend that be marked as CAC
17 Exhibit number 65.

18

19 --- EXHIBIT NO. CAC-65: Load forecasting for the
20 NFAT prepared by Drs.
21 Simpson and Gotham

22

23 MR. BYRON WILLIAMS: And secondly, a
24 review of export price forecasts for the NFAT by Dr.
25 Gotham. And we suggest that be CAC Exhibit 66.

1 --- EXHIBIT NO. CAC-66: Review of export price
2 forecasts for the NFAT by
3 Dr. Gotham
4

5 MR. BYRON WILLIAMS: There should be a
6 smaller document relating to the 2014/'15 planning
7 resource auction, or PRA, of MISO. And that should be,
8 we would recommend, CAC Exhibit 67.
9

10 --- EXHIBIT NO. CAC-67: Document relating to the
11 2014/'15 PRA of MISO
12

13 MR. BYRON WILLIAMS: A much heavier
14 document. I believe that belongs to Mr. Harper. And
15 that would be his PowerPoint presentation, which would
16 be CAC-68.
17

18 --- EXHIBIT NO. CAC-68: PowerPoint presentation by
19 Mr. Harper
20

21 MR. BYRON WILLIAMS: And then again a
22 smaller document, risk analysis in the NFAT, which
23 would be CAC-69.
24

25 --- EXHIBIT NO. CAC-69: Risk analysis in the NFAT

1 document

2

3 MR. BYRON WILLIAMS: And we'll
4 sequentially move through those documents. If I could
5 ask that the witnesses be sworn or affirmed.

6

7 CAC LOAD FORECAST, EXPORT REVENUES, AND ECONOMICS/RISK
8 PANEL:

9 WILLIAM HARPER, Sworn (Qual.)

10 DOUGLAS GOTHAM, Affirmed (Qual.)

11 WAYNE SIMPSON, Previously Sworn (Qual.)

12

13 QUALIFICATION OF WITNESSES:

14 MR. BYRON WILLIAMS: Mr. Simonsen has
15 reminded me that Dr. Simpson has already been sworn in.

16 We're going to start, in terms of
17 qualifications, with you, Dr. Gotham. And with Dr.
18 Simpson, you're the -- are the author of 'Standard
19 Approaches to Load Forecasting and Review of Manitoba
20 Hydro Load Forecast for the NFAT, which was filed in
21 February of 2014 and marked as CAC Exhibit 25?

22 DR. DOUGLAS GOTHAM: Yes.

23 MR. BYRON WILLIAMS: And that document
24 is accurate, to the best of your knowledge and
25 abilities, sir?

1 DR. DOUGLAS GOTHAM: Yes.

2 MR. BYRON WILLIAMS: And the opinion
3 presented in support of that document represents the
4 views both of yourself and Dr. Simpson?

5 DR. DOUGLAS GOTHAM: Yes.

6 MR. BYRON WILLIAMS: Sir, you are also
7 responsible for the report 'Review of Manitoba Hydro
8 Export Price Forecasts for the NFAT', filed in February
9 on 2014 and marked as CAC Exhibit 26?

10 DR. DOUGLAS GOTHAM: Yes.

11 MR. BYRON WILLIAMS: And again, that is
12 accurate to the best of your knowledge and ability?

13 DR. DOUGLAS GOTHAM: Yes.

14 MR. BYRON WILLIAMS: Dr. Gotham, you'll
15 accept, subject to check, that your curriculum vitae is
16 filed as part of CAC Exhibit 33, along with a bee --
17 brief biography marked as CAC Exhibit 35?

18 DR. DOUGLAS GOTHAM: Yes, I will.

19 MR. BYRON WILLIAMS: And sir, you have
20 expertise in, first of all, utility and market
21 operations?

22 DR. DOUGLAS GOTHAM: Yes.

23 MR. BYRON WILLIAMS: And expertise in
24 system planning?

25 DR. DOUGLAS GOTHAM: Yes.

1 MR. BYRON WILLIAMS: And expertise in
2 load forecasting, would that be fair?

3 DR. DOUGLAS GOTHAM: Yes, it would.

4 MR. BYRON WILLIAMS: And through your
5 insight into market activities and as part of the
6 development of your load forecasts, you have developed
7 insight into the economic and regulatory factors
8 affecting wholesale prices in the MISO region in
9 general, as well as in the State of Indiana?

10 DR. DOUGLAS GOTHAM: Yes, that's true.

11 MR. BYRON WILLIAMS: And I sho -- I --
12 I should apologize for using the acronym 'MISO', but
13 you would understand that term to mean the Midwest
14 System Operators, sir?

15 DR. DOUGLAS GOTHAM: Yes.

16 THE CHAIRPERSON: Rather than
17 Midcontint -- Midcontinent?

18 MR. BYRON WILLIAMS: Oh, sorry, sir.
19 It's been a long night and morning. But thank you.

20 Dr. Gotham, you have particular exper --
21 experience within the MISO marketplace, which indeed
22 predates its actual formation?

23 DR. DOUGLAS GOTHAM: That is correct.
24 We've worked with MISO almost from their very start,
25 when they were just operating their transmission system

1 prior to the formation of their wholesale market. We
2 worked with them in developing their requests for
3 proposals for their market monitor when they first
4 hired a market monitor.

5 We've worked, through our work with the
6 Indiana Utility Regulatory Commission, on a number of
7 workgroups, task force committees within the MISO
8 stakeholder community. So, yeah, we've -- we've worked
9 with -- with MISO even before they had a market, yes.

10 MR. BYRON WILLIAMS: And, sir, you hold
11 a PhD in electrical engineering?

12 DR. DOUGLAS GOTHAM: That is correct.

13 MR. BYRON WILLIAMS: And for the past
14 twenty-two (22) years, you have worked at the State
15 Utility Forecast Group at Perdue University?

16 DR. DOUGLAS GOTHAM: Yes.

17 MR. BYRON WILLIAMS: You are currently
18 its director?

19 DR. DOUGLAS GOTHAM: That's correct.

20 MR. BYRON WILLIAMS: And as I
21 understand it, and I'll ask you to confirm, the State
22 Utility Forecast Group -- or SUFG for the reporter --
23 is an independent research and analysis group
24 established by the Indiana General Assemnd -- Assembly,
25 funded by the state government through the Indiana

1 Utility Regulatory Commission?

2 DR. DOUGLAS GOTHAM: That is correct.

3 MR. BYRON WILLIAMS: Can you tell us a
4 -- a bit about the role of the SUFG and how it came
5 into being, sir?

6 DR. DOUGLAS GOTHAM: Yes, the State
7 Utility Forecasting Group was formed as a result of an
8 act of the Indiana General Assembly in response to
9 over-forecasting, over-building of generating capacity
10 in the State of Indiana, which led to two (2) failed
11 nuclear power plants and a utility in bankruptcy.

12 We had a 50 percent reserve margin in
13 the mid-'80s. The General Assembly decided that they
14 wanted to establish an independent forecasting group at
15 one of the state universities to assist the regulatory
16 commission in determining when new power plants were
17 needed.

18 This is part of the Indiana's
19 Certificate of Need Law. So whenever a utility wants
20 to build a -- a new power plant, they file for a
21 certificate of need and then our forecast is used as
22 one of the factors that the regulatory commission uses
23 to determine whether or not that plant is actually
24 going to be needed.

25 So the State Utility Forecasting Group

1 was formed in 1985. We are independent of the
2 commission. We actually work for the university, but
3 the university has a contract with the regulatory
4 commission for us to do our job. One of the main
5 things we do is a long-term, twenty (20) year forecast
6 of electricity prices, consumption, and resource needs
7 for the state as a whole. But we also do a number of
8 other studies as directed by the regulatory commission.

9 MR. BYRON WILLIAMS: Thank you. And --
10 and you've mentioned that the SUFG is independent. And
11 just so I'm clear, does it play an advocacy role on
12 behalf of various stakeholders, or does it have a more
13 advisory role?

14 DR. DOUGLAS GOTHAM: We do not advocate
15 where -- it's -- my -- my position within the
16 university, actually I'm not allowed to be an advocate
17 for one (1) side or the other. We do analysis. We do
18 policy analysis. So where we don't make policy
19 recommendations, we do look at various policy options
20 and then model those options and -- and give the policy
21 makers the best information we can, in terms of what
22 the implications of those policy decisions that they
23 have to make are.

24 So we're not a -- biased. We're not an
25 advocate. We are simply looking to see -- give -- give

1 the best information we can.

2 MR. BYRON WILLIAMS: Thank you. And --
3 and just to be clear about some of your roles, you
4 would provide forecasts of electricity consumption,
5 resource needs, and prices for all eight (8) utilities
6 in the State of Indiana?

7 DR. DOUGLAS GOTHAM: Yes, that's true.

8 MR. BYRON WILLIAMS: And under your
9 legislative mandate, would it be fair to say that
10 you're obliged to assess the probable future growth of
11 the use of electricity within Indiana and within its
12 region?

13 DR. DOUGLAS GOTHAM: Yes.

14 MR. BYRON WILLIAMS: And the State of
15 Indiana is within the MISO region?

16 DR. DOUGLAS GOTHAM: Yes, it is.

17 MR. BYRON WILLIAMS: And am I correct
18 in suggesting that in developing its load forecast for
19 the State of Indiana, one of the inputs that the SUFG
20 will employ is an estimate of expected wholesale prices
21 within the MISO region?

22 DR. DOUGLAS GOTHAM: Yes.

23 MR. BYRON WILLIAMS: And am I also
24 correct in suggesting that your analysis is guided
25 primarily in this regard by estimates of the costs of

1 new entry?

2 DR. DOUGLAS GOTHAM: Yes.

3 MR. BYRON WILLIAMS: And would it be
4 fair to say that in February of 2014 you were selected
5 by MISO to provide a series of independent ten (10)
6 year load forecasts for the MISO region, sir?

7 DR. DOUGLAS GOTHAM: Yes. We started
8 that project in February.

9 MR. BYRON WILLIAMS: And can you tell
10 us a little bit about that project?

11 DR. DOUGLAS GOTHAM: Sure. The -- MISO
12 has -- has asked us to provide a series of three (3)
13 annual ten (10) year load forecasts for their market
14 region, which includes fifteen (15) states. So we are
15 in the process of constructing load forecasting models
16 for each one of the fifteen (15) states for MISO, and
17 we will be producing a ten (10) year forecast which
18 will come out in November. And then we'll produce
19 follow-up forecasts in November of 2015 and -- and
20 2016.

21 MR. BYRON WILLIAMS: Thank you. Am I
22 correct in suggesting that until your selection is to
23 do forecasts for the region, MISO, unlike a number of
24 independent system operators relied solely on utility
25 forecasts and did not have an independent forecast?

1 DR. DOUGLAS GOTHAM: That's -- that's
2 correct. MISO uses for their planning process, for
3 their resource adequacy processes. For their resource
4 -- their capacity requirement processes, they use the
5 forecasts developed by the individual utilities which
6 then they will sum up to the -- the MISO level.

7 MR. BYRON WILLIAMS: Am I also correct
8 in suggesting that, given the absence of independent
9 forecasts, MISO has developed an outline of what it
10 considers to be acceptable and non-acceptable methods
11 of load forecasting?

12 DR. DOUGLAS GOTHAM: That is correct.

13 MR. BYRON WILLIAMS: And you, sir, are
14 familiar with the MISO categorization of acceptable and
15 non-acceptable methods of load forecasting?

16 DR. DOUGLAS GOTHAM: Yes.

17 MR. BYRON WILLIAMS: And in terms of
18 these new duties with MISO, am I correct in suggesting
19 that -- that the State Utility Forecast Group will be
20 developing estimates of statewide average retail
21 prices?

22 DR. DOUGLAS GOTHAM: Yes, we will.

23 MR. BYRON WILLIAMS: And the source
24 data for those estimates will flow from EIA regional
25 pricing data?

1 DR. DOUGLAS GOTHAM: That's -- that's
2 will be the primary driver for those forecasts, yes.

3 MR. BYRON WILLIAMS: And, sir, it would
4 be accurate to say that you have frequently served as
5 an instructor on the subject of load forecasting at
6 both the Regulatory Studies Program and Grid Schools at
7 the Institute of Public Utilities at Michigan State
8 University?

9 DR. DOUGLAS GOTHAM: Yes.

10 MR. BYRON WILLIAMS: And you have
11 provided evidence to the Indiana General Assembly House
12 Commerce Committee on load forecast for the state?

13 DR. DOUGLAS GOTHAM: Yes.

14 MR. BYRON WILLIAMS: And likewise,
15 provided evidence to the General Assembly of Indiana
16 House Ways and Means Committee on load forecasts?

17 DR. DOUGLAS GOTHAM: Yes.

18 MR. BYRON WILLIAMS: Sir, I understand
19 that restructuring and deregulation of the marketplace
20 was a subject of considerable discussion in Indiana in
21 the late 1990s and early 2000s?

22 DR. DOUGLAS GOTHAM: That is correct.
23 The state was looking at whether or not they wanted to
24 -- to restructure the retail electricity industry at
25 the time.

1 MR. BYRON WILLIAMS: And in the context
2 of restructuring, you prepared a report in 1998 for the
3 Indiana Utility Regulatory Commission on the projected
4 impact of restructuring on electricity prices for that
5 great state?

6 DR. DOUGLAS GOTHAM: Yes.

7 MR. BYRON WILLIAMS: And likewise, in
8 2001, you prepared a report for the regulatory
9 commission on the factors of affecting electricity
10 prices in a competitive market?

11 DR. DOUGLAS GOTHAM: Yes.

12 MR. BYRON WILLIAMS: And for the
13 purposes of considering the implications of
14 deregulation, the SUFG created a wholesale pricing
15 model in -- in or about 2000?

16 DR. DOUGLAS GOTHAM: Yes. That was a
17 regional model looking at the -- the State of Indiana
18 as well as neighbouring states within our region of the
19 country at a wholesale level.

20 MR. BYRON WILLIAMS: Thank you. And
21 before the Senate Utilities Commission in February of
22 2013, am I correct that you provided testimony
23 addressing natural gas prices?

24 DR. DOUGLAS GOTHAM: Yes.

25 MR. BYRON WILLIAMS: And in January of

1 2012, you were responsible for the preparation of a
2 report for the Indiana Utility Regulatory Commission
3 considering the impacts of federal environmental
4 regulation on Indiana electricity prices?

5 DR. DOUGLAS GOTHAM: Yes.

6 MR. BYRON WILLIAMS: And without going
7 into the specific years, you have prepared a number of
8 reports on the impact of CO2 restrictions, mercury
9 emission reductions, and the projected impacts of the
10 Clean Air Interstate Rule.

11 Would that be fair, sir?

12 DR. DOUGLAS GOTHAM: Yes.

13 MR. BYRON WILLIAMS: And of course, I
14 missed your famous report on NOx, N-O-X, emissions
15 reductions and their effect on electricity prices,
16 which was prepared on or about June of 2000?

17 DR. DOUGLAS GOTHAM: June of 2000?

18 Yes.

19 MR. BYRON WILLIAMS: I thought I had
20 you stumped there, sir, for a moment.

21 There is an obligation, is there not,
22 for utilities to report on integrated resource planning
23 in Indiana?

24 DR. DOUGLAS GOTHAM: Yes. Indiana has
25 an integrated resource planning rule.

1 MR. BYRON WILLIAMS: And the SUFG
2 played a role in the drafting of the new IRP rule in
3 Indiana?

4 DR. DOUGLAS GOTHAM: That is correct.

5 MR. BYRON WILLIAMS: How is IRP, or
6 integrated resource planning, defined in Indiana, sir?

7 DR. DOUGLAS GOTHAM: In general, it's a
8 process where the utilities are required to file -- go
9 through a process where they're -- they're trying to
10 identify the -- the best options going forward, in
11 terms of not just generating capacity, but also demand-
12 side resources as well as transmission options.

13 So they look, based on their load
14 forecast going forward, determine what the -- the best
15 means from both a low cost and a low risk standpoint
16 are for meeting the -- the future demand for
17 electricity, taking into account all those factors.

18 MR. BYRON WILLIAMS: Than -- thank you.
19 And your organization plays a role in assisting the
20 Indiana Utility Regulatory Commission to review the IRP
21 plans of the eight (8) utilities in Indiana?

22 DR. DOUGLAS GOTHAM: Yes, that's part
23 of our contract with the -- the state commission.

24 MR. BYRON WILLIAMS: And you assist in
25 the review of four (4) IRPs each year?

1 DR. DOUGLAS GOTHAM: That is correct.

2 MR. BYRON WILLIAMS: Sir, just to -- to
3 wrap up with -- with you, you served, at one point in
4 time, as one (1) of two (2) Indiana delegates to the
5 Eastern Interconnection State Planning Counsel, or
6 EISPC, an organization consisting of thirty-nine (39)
7 states, the District of Columbia, and various Canadian
8 provinces?

9 DR. DOUGLAS GOTHAM: That is correct.

10 MR. BYRON WILLIAMS: And EISPC worked
11 with various stakeholders to develop scenarios to be
12 incorporated in long-term resource planning for the
13 eastern interconnection?

14 DR. DOUGLAS GOTHAM: That is correct.

15 MR. BYRON WILLIAMS: And among your
16 responsibilities with the EISPC was serving as head of
17 the modelling working group, member of the futures
18 working group, and member of the president's technical
19 team?

20 DR. DOUGLAS GOTHAM: That is correct.

21 MR. BYRON WILLIAMS: And you currently,
22 sir, serve as an advisor to the EISPC on issues
23 associated with modelling and engineering?

24 DR. DOUGLAS GOTHAM: That is correct.

25 MR. BYRON WILLIAMS: And I recognize

1 that you work for the university and not for any
2 particular organization, but would it be accurate to
3 say that among the other organizations, that Purdue
4 University has cooperated with are the US Department of
5 Energy and the Electric Power Research Institute?

6 DR. DOUGLAS GOTHAM: Yes.

7 MR. BYRON WILLIAMS: Dr. Simpson -- and
8 Mr. Chair, I recognize that Dr. Simpson was qualified
9 as an expert in applied econometrics and applied
10 microeconomics on Wednesday, so we're not going to try
11 to requalify him, but we do want to provide a bit of
12 information so you can understand the basis for his
13 ability to form the opinions that he has.

14 Dr. Simpson, with Dr. Gotham, you are
15 the author of the Load Forecast Report filed in
16 February of 2014 on behalf of CAC (Manitoba)?

17 DR. WAYNE SIMPSON: Yes.

18 MR. BYRON WILLIAMS: And it is
19 accurate, sir, to the best of your knowledge and
20 ability?

21 DR. WAYNE SIMPSON: Yes.

22 MR. BYRON WILLIAMS: And it represents
23 both your opinion and the opinion of Dr. Gotham?

24 DR. WAYNE SIMPSON: Yes.

25 MR. BYRON WILLIAMS: And you've been a

1 busy man, Dr. Simpson. You are also the author of a
2 report on risk analysis, which was filed in February
3 2014 and marked as CAC Exhibit 21?

4 DR. WAYNE SIMPSON: Yes, I am.

5 MR. BYRON WILLIAMS: And, sir, can you
6 explain the term 'a Monte Carlo simulation,' in words
7 that even I can understand?

8 DR. WAYNE SIMPSON: The idea behind
9 Monte Carlo simulation is essentially to postulate, or
10 estimate probability distributions that capture the
11 range of outcomes of some particular variable that has
12 variation, and therefore, in this case, typically
13 there's a risky element to it, and then to make draws
14 from that distribution, or a combined set of
15 distributions in order to understand how the interplay
16 of the forces of different risk factors might affect
17 the overall outcome.

18 MR. BYRON WILLIAMS: Well done, Dr.
19 Simpson. I give you high marks as well, from my
20 perspective. Given your expertise in applied
21 econometrics, I wonder if you can advise us of your
22 experience, if any, with replication methods such as
23 Monte Carlo simulations?

24 DR. WAYNE SIMPSON: There was a lot of
25 work in econometrics using Monte Carlo and other

1 replication methods like bootstrapping, to understand
2 the properties of estimators and their test properties,
3 estimation properties, and so on.

4 MR. BYRON WILLIAMS: Okay. With regard
5 to the issue of load forecasting, I wonder if you could
6 briefly discuss how applied econometrics pro --
7 provides you with the insight to offer opinions on the
8 load forecast modelling and reliability?

9 DR. WAYNE SIMPSON: On the load
10 forecasting, both the applied econometrics and the
11 applied microeconomics are relevant. The applied
12 econometrics is relevant, because we're trying to make
13 estimates and forecasts, and this is what -- this is
14 what econometrics does. It's one of the tools that
15 allows us to do these kinds of things, and the applied
16 microeconomics is relevant, because it's the study of
17 consumer behaviour, or consumer responses, consumer
18 choices. And that includes items like electricity, and
19 therefore, the consumer's decisions about load, and
20 also producers choices, and therefore the producers in
21 Manitoba and their decisions about the amount of
22 electricity they -- they use.

23 MR. BYRON WILLIAMS: And during the
24 2013/'14 Hydro General Rate Application, you provided
25 some analytical advice to CAC (Manitoba)?

1 DR. WAYNE SIMPSON: Yes.

2 MR. BYRON WILLIAMS: And it was at that
3 time that you expressed some concern with the abscess -
4 - absence of analysis of the demand adapting effects of
5 price increases?

6 DR. WAYNE SIMPSON: That's correct.

7 MR. BYRON WILLIAMS: Turning now to the
8 issue of risk analysis, I wonder if you could discuss
9 how applied microeconomics and applied econometrics
10 provides you with the insight to offer opinions on risk
11 analysis related to Hydro's resource planning?

12 DR. WAYNE SIMPSON: Well, the
13 characterization of risk in the modern sense, the
14 statistical characterization comes out of the tools of
15 econometrics, where there's discussion of -- of
16 estimators when there is variability.

17 And in terms of microeconomics, again,
18 there's the behaviour of producers in context of risk,
19 and therefore, the elements of investment analysis
20 would come from that.

21 MR. BYRON WILLIAMS: And you mention,
22 "investment analysis." Through your expertise in
23 applied microeconomics, would you have any familiarity
24 with portfolio theory?

25 DR. WAYNE SIMPSON: Yes. I make no

1 claims about my investment skills, but I -- I
2 understand the concepts underlying it.

3

4 (BRIEF PAUSE)

5

6 MR. BYRON WILLIAMS: I've beaten him
7 down.

8 DR. WAYNE SIMPSON: Quieter than I was
9 on Wednesday, more subdued?

10 MR. BYRON WILLIAMS: And, sir, how, if
11 at all, do replication methods such as Monte Carlo fit
12 within the paradigm of modern risk analysis?

13 DR. WAYNE SIMPSON: Well, again, if you
14 want to try to understand the -- the complexities
15 associated with an organization's that's facing a
16 number of risk factors, Monte Carlo is useful, because
17 it allows us to draw from each of those risk factors
18 and combine them in order to understand what the
19 outcome is, and then, through replication, doing that
20 over and over again, understand the range of possible
21 outcomes that could occur to the firm under different
22 scenarios, and in this case, under different potential
23 development plans for -- for Hydro.

24 MR. BYRON WILLIAMS: Dr. Simpson, you
25 provided expert assistance to CAC (Manitoba) during the

1 extensive risk analysis proceedings during the 2010/'11
2 general rate application?

3 DR. WAYNE SIMPSON: Yes.

4 MR. BYRON WILLIAMS: And you had
5 occasion during that hearing to review the evidence of
6 Drs. Kubursi and Magee with regard to modern risk
7 assessment practices and the risks faced by Manitoba
8 Hydro?

9 DR. WAYNE SIMPSON: Yes.

10 MR. BYRON WILLIAMS: And I wonder if
11 you could briefly discuss the nature of your work with
12 CAC (Manitoba) in that particular proceeding?

13 DR. WAYNE SIMPSON: I didn't provide
14 any testimony to the PUB, but I did write a -- a
15 background paper, if you will, for CAC on Kubursi and
16 Magee's approach, finding that their general approach
17 was a good one, a good lesson for the treating of -- of
18 risk analysis, but that, in terms of the details, there
19 were many steps that were -- were in -- either
20 inappropriate, ill-advised, or simply time-constrained.

21 MR. BYRON WILLIAMS: And through your
22 advice to CAC (Manitoba), you identified some room from
23 (sic) improvement in the approaches of the two (2) good
24 doctors related to probability, distribution, and
25 regressions?

1 DR. WAYNE SIMPSON: Right.

2 MR. BYRON WILLIAMS: And finally, on
3 the subject of risk analysis, you have provided
4 evidence on at least three (3) occasions to the Public
5 Utilities Board with regard to the Manitoba Public
6 Insurance rate stabilization reserve?

7 DR. WAYNE SIMPSON: Three (3) times,
8 yes, that's right.

9 MR. BYRON WILLIAMS: And I wonder if
10 you could discuss how, if at all, the analysis
11 undertaken in that exercise may have relevance for your
12 work in this proceeding?

13 DR. WAYNE SIMPSON: Well, in many
14 respects, that's a -- a less complex exercise, but MPI
15 also faces a number of risks associated with claims and
16 weather and whatnot, and also risks on the investment
17 side, and the cumulative effects of those things,
18 again, is something that can be analyzed using the same
19 sort of tools of risk analysis as can be used to
20 evaluate the impacts of investment plans on Hydro.

21 MR. BYRON WILLIAMS: Thank you. Mr.
22 Harper, you're the author of review of Manitoba Hydro's
23 Preferred Development filed in February 2014 and marked
24 as Exhibit CAC-30?

25 MR. WILLIAM HARPER: That is correct.

1 MR. BYRON WILLIAMS: And you're also
2 the author of this rather heavy PowerPoint marked as
3 CAC Exhibit 68?

4 MR. WILLIAM HARPER: Yes, I am.

5 MR. BYRON WILLIAMS: And you are the
6 author also of certain information responses filed with
7 regard to your evidence?

8 MR. WILLIAM HARPER: Yes, I am.

9 MR. BYRON WILLIAMS: And subject to
10 certain revisions, which have been previously filed as
11 CAC Exhibit 60, the evidence you've provided to date is
12 accurate to the best of your knowledge and ability?

13 MR. WILLIAM HARPER: Yes, it is.

14 MR. BYRON WILLIAMS: And sir, you have
15 expertise in regulatory economics and -- and the
16 economic evaluation of supply and resource planning?

17 MR. WILLIAM HARPER: Yes, I do.

18 MR. BYRON WILLIAMS: You hold a
19 master's degree in management science from the
20 University of Waterloo, with a major in applied
21 economics and a minor in operations research, sir?

22 MR. WILLIAM HARPER: That -- that's
23 correct.

24 MR. BYRON WILLIAMS: Currently, you are
25 associate consultant with Econalysis Consulting Service

1 and have almost thirty (30) years' experience in the
2 electricity industry?

3 MR. WILLIAM HARPER: Just over thirty
4 (30) I'd say, yes.

5 MR. BYRON WILLIAMS: You've worked for
6 five (5) years at the start of the -- your career with
7 the Ontario Ministry of Energy as an economist in the
8 Strategic Planning and Analysis Group?

9 MR. WILLIAM HARPER: Yes, that's
10 correct.

11 MR. BYRON WILLIAMS: And for the next
12 one thousand (1,000) years of your life, or from 1980
13 through 2000, you were employed by Ontario Hydro and
14 its successor company, Hydro One?

15 MR. WILLIAM HARPER: That -- that is
16 correct, yes.

17 MR. BYRON WILLIAMS: And while at
18 Ontario Hydro, your responsibilities included Ontario
19 Hydro's wholesale rates and its regulation of the pro -
20 - province's municipal electric utilities?

21 MR. WILLIAM HARPER: Yes.

22 MR. BYRON WILLIAMS: And you were
23 responsible for the coordination of the Company's
24 overall participation in public review processes?

25 MR. WILLIAM HARPER: That -- that is

1 correct, yes.

2 MR. BYRON WILLIAMS: And you have
3 testified, sir, before the Ontario Energy Board on
4 rates and regulatory matters on numerous occasions?

5 MR. WILLIAM HARPER: Yes, I have.

6 MR. BYRON WILLIAMS: You've testified
7 before the Ontario Environmental Assessment Board with
8 respect to Ontario Hydro's demand supply plan?

9 MR. WILLIAM HARPER: Yes, I did.

10 MR. BYRON WILLIAMS: And since joining
11 ESC in 2000, you have provided support to Intervenors
12 in regulatory proceedings in British Columbia,
13 Manitoba, Ontario and Quebec, sir?

14 MR. WILLIAM HARPER: Yes, I have.

15 MR. BYRON WILLIAMS: And those
16 proceedings have been related to rates, revenue
17 requirements, industry restructuring and resource
18 planning?

19 MR. WILLIAM HARPER: That is correct.

20 MR. BYRON WILLIAMS: In addition, you
21 have testified as an expert witness before the Manitoba
22 Clean Environment Commission, the Manitoba Public
23 Utilities Board, and the Quebec Regie de L'Energie?

24 MR. WILLIAM HARPER: Yes, yes, I have.

25 MR. BYRON WILLIAMS: And with specific

1 resul -- regard to resource planning, you've appeared
2 as an expert witness before the Regie with respect to
3 Hydro Quebec's distributions 2001 and 2004 supply
4 plans?

5 MR. WILLIAM HARPER: Yes, I did.

6 MR. BYRON WILLIAMS: You appeared
7 before Manitoba's Clean Environment Commission, with
8 the respect to the Need For and Alternatives to the
9 Wuskwatim project?

10 MR. WILLIAM HARPER: Yes, I did.

11 MR. BYRON WILLIAMS: You have assisted
12 clients in British Columbia with their participation
13 and public reviews undertaken by the BCUC of integrated
14 resource plans prepared by BC Hydro and FortisBC?

15 MR. WILLIAM HARPER: Yes, I have.

16 MR. BYRON WILLIAMS: Similarly, you
17 have assisted clients in Ontario with their
18 participation in the OEB review of the Ontario Power
19 Authority's Integrated Resource Plan in 2007?

20 MR. WILLIAM HARPER: Yes, I did.

21 MR. BYRON WILLIAMS: I apologize for
22 the length of the presentation, sir, but we have three
23 (3) witnesses. CAC would ask that Dr. Gotham be
24 qualified as an expert in utility and market
25 operations, utility and market operations, system

1 planning, and load forecasting, and that Dr. Simpson,
2 based upon his accepted expertise in applied
3 microeconomics and applied econometrics, be found
4 qualified to present the opinions found in his
5 evidence, and that Dr. -- excuse me -- Mr. Harper be
6 qualified with expertise in regulatory economics and
7 the economic evaluation of supply and resource
8 planning.

9 THE CHAIRPERSON: Thank you, Mr.
10 Williams. I'll canvass with Intervenors now, starting
11 with Me. Hacaault, s'il vous plait.

12 MR. ANTOINE HACAULT: Merci, M.
13 President. MIPUG has no objections to the
14 qualifications of these witnesses as set out by Mr.
15 Williams.

16 THE CHAIRPERSON: Thank you. Mr.
17 Shefman, please?

18 MR. COREY SHEFMAN: Thank you, Mr.
19 Chairman. The MMF has no objection to the
20 qualification of the witnesses.

21 THE CHAIRPERSON: Thank you, Mr.
22 Shefman. M. Monnin...?

23 MR. CHRISTIAN MONNIN: Merci, M.
24 President, we have no objections.

25 THE CHAIRPERSON: Merci. Ms. Ramage,

1 please.

2 MS. PATTI RAMAGE: I have a few
3 questions -- I have a few questions for the witnesses,
4 beginning with Dr. Gotham. Sir, you work for -- if
5 I've got it right -- the State Utility Forecasting
6 Group at Purdue University, correct?

7 DR. DOUGLAS GOTHAM: That is correct.

8 MS. PATTI RAMAGE: And I can refer to
9 that as SUFG, is that right?

10 DR. DOUGLAS GOTHAM: That -- that's
11 fine

12 MS. PATTI RAMAGE: Okay. And SUFG does
13 the long-term forecast for the State of Indiana.

14 Is that correct?

15 DR. DOUGLAS GOTHAM: That is correct.

16 MS. PATTI RAMAGE: And I heard -- in
17 your evidence you referred a number of times, you said,
18 We do the long-term twenty (20) year forecast, or we do
19 policy analysis.

20 Can you tell me exactly what your role
21 is in the production of the State of Indiana forecast?

22 DR. DOUGLAS GOTHAM: I have -- my role
23 has -- has been quite varied over time, starting out as
24 -- as a forecasting analyst, where I was involved in
25 updating and maintaining the forecasting modelling

1 system itself. And -- and so re-estimating the models,
2 putting in the new data sets, running the models,
3 examining them to -- the output to make sure that the
4 output made sense.

5 And then over time was moved into the
6 associate director position, where I was still involved
7 more at the higher level, in terms of the forecast
8 production, but I also had some other responsibilities
9 in terms of -- more in terms of working with the
10 various stakeholders in Indiana and maintaining those
11 relationships.

12 And since 2005 I've been the director of
13 the Forecasting Group. I'm less involved in the day-
14 to-day maintenance of the forecast, although I am still
15 -- consult with the -- the analysts that do the -- the
16 actual hands-on work in terms of the development of the
17 models and -- and making sure that the models, when we
18 re-estimate them, that -- that they make sense.

19 MS. PATTI RAMAGE: How many are in your
20 group?

21 DR. DOUGLAS GOTHAM: We -- right now we
22 have, including myself, five (5) full-time employees,
23 and we just hired one (1) of those to help with the --
24 the new work for MISO, and we're in the process of
25 trying to hire another full-time employee. And then we

1 have a half- time administrative assistant, and also
2 anywhere from three (3) to five (5) graduate
3 assistants. And we have some -- some faculty members
4 that we have -- that we can -- we rely on as well.

5 MS. PATTI RAMAGE: And I'm sorry --
6 sorry if I'm asking you to repeat yourself, 'cause you
7 may have said this, but do you have statistical or
8 econometric training?

9 DR. DOUGLAS GOTHAM: Not formally, no.

10 MS. PATTI RAMAGE: And I also heard you
11 say -- or Mr. Williams, I think, said it, that SUFG is
12 going to be producing a forecast for MISO, and I -- I
13 thought I heard that was for retail rates.

14 Is that correct?

15 DR. DOUGLAS GOTHAM: That -- no. We
16 will be using, as one of the inputs to the forecasting
17 model, a retail rate for the individual states, a
18 average retail rate as a driver for the forecasting
19 models, which we're developing econometric models at
20 the state level for the fifteen (15) states in MISO.
21 And one of those drivers will be regulated retail
22 rates.

23 In order to develop those -- those
24 forecasts of regulatory -- regulated -- of retail rates
25 -- average retail rates at the state level, we are

1 going to be developing a second set of econometric
2 models. These econometric models are going to be
3 driven primarily by EIA's price forecast.

4 But EIA's price forecasts aren't at the
5 state level. They're at a larger regional level, so we
6 want to find a way -- we're finding a way to -- to
7 break those regional forecasts down to individual state
8 level forecasts because not all of the states' prices
9 change at the same rate as other states within the
10 census region.

11 MS. PATTI RAMAGE: So the forecast
12 though that is being produced at the -- at the end of
13 the day, what product are you forecasting?

14 DR. DOUGLAS GOTHAM: We are forecasting
15 energy and peak demand for what MISO refers to as their
16 local resource zones, which are certain regions within
17 the MISO footprint that are essentially planned as --
18 as individual regions within that.

19

20 (BRIEF PAUSE)

21

22 MS. PATTI RAMAGE: And, Dr. Simpson,
23 you're an economics professor at the University of
24 Manitoba, correct?

25 DR. WAYNE SIMPSON: Yes.

1 MS. PATTI RAMAGE: And you've been
2 teaching economics for most of your career?

3 DR. WAYNE SIMPSON: At the University
4 of Manitoba since 1979, right.

5 MS. PATTI RAMAGE: Do you have any
6 direct experience in preparing an electricity load
7 forecast for a utility?

8 DR. WAYNE SIMPSON: No.

9 MS. PATTI RAMAGE: Have you done a
10 natural gas load forecast?

11 DR. WAYNE SIMPSON: No.

12 MS. PATTI RAMAGE: Have you been
13 involved in the preparation of a Power Resource Plan?

14 DR. WAYNE SIMPSON: No.

15 MS. PATTI RAMAGE: Have you conducted a
16 risk analysis assessment of an energy utility?

17 DR. WAYNE SIMPSON: Yes, in the sense
18 that I reviewed the independent report from Kubursi
19 Magee, which related to risk analysis for Hydro.

20 MS. PATTI RAMAGE: You -- you reviewed
21 the report that was filed by Drs. Kubursi and Magee at
22 the 2010 GRA, correct? But you weren't a witness at
23 that time?

24 DR. WAYNE SIMPSON: I didn't -- I was
25 not a witness. I provided background information and

1 advice to -- to Mr. Williams.

2 MS. PATTI RAMAGE: And I heard Mr.
3 Williams reference a background paper that -- where you
4 expressed a concern.

5 That paper was never filed in the 2010
6 GRA, correct?

7 DR. WAYNE SIMPSON: I don't believe so.
8 I could stand corrected, but I don't believe so.

9 MS. PATTI RAMAGE: So the -- the
10 opinions expressed in that paper have never been
11 tested.

12 Is that correct?

13 DR. WAYNE SIMPSON: Only tested in the
14 sense that there were some modifications made to the --
15 to the Kubursi Magee report on the basis of the
16 information in that background paper.

17 MS. PATTI RAMAGE: That information was
18 information, you'd agree --

19 DR. WAYNE SIMPSON: On methodology.

20 MS. PATTI RAMAGE: -- that a number of
21 intervenors expressed the same views?

22 DR. WAYNE SIMPSON: I think I was more
23 specific than others, but I -- I take that point, yes.

24 MS. PATTI RAMAGE: Are you able to
25 point to any publications you have written or courses

1 taught where the focus has been on uncertainty or risk
2 analysis?

3 DR. WAYNE SIMPSON: I have some papers
4 with Rob Sproule where I looked at -- we looked at the
5 behaviour of individuals under risk. And risk analysis
6 is at least indirectly a part of discussions of
7 microeconomics, where I've taught a couple of courses.
8 It's not directly a topic in econometric courses, where
9 I'd taught more extensively and the undergraduate and
10 graduate level, but certainly the -- the skills that
11 are developed there and that I teach are -- are
12 relevant to these questions -- applicable to these
13 questions.

14 MS. PATTI RAMAGE: None of these relate
15 to electric utility resource planning though.

16 Is that correct?

17 DR. WAYNE SIMPSON: I wouldn't say
18 that's an example I would typically draw on in -- in
19 teaching or -- or that I have written on in terms of my
20 research, no.

21 MS. PATTI RAMAGE: And am I correct
22 that you were responsible for producing Part 2 of
23 Exhibit 5 -- of Exhibit 65, I'm sorry, which is the
24 load forecasting for the NFAT, and you produced all of
25 Exhibit 69, which is the -- what is it...

1 DR. WAYNE SIMPSON: Risk analysis.

2 MS. PATTI RAMAGE: Yeah, the risk

3 analysis. Yes.

4 DR. WAYNE SIMPSON: Yes.

5 MS. PATTI RAMAGE: That's correct?

6 DR. WAYNE SIMPSON: Yes.

7 MS. PATTI RAMAGE: Okay. And, Dr.

8 Harper, we'll old friends.

9 MR. WILLIAM HARPER: Or Mr. Harper.

10 MS. PATTI RAMAGE: Or -- sorry. There

11 have been so many doctors here and none of them can

12 help me with my arm, but... I -- I have no questions

13 for Mr. Harper. I -- he has been here many times, so

14 no further questions. But we do have a submission to

15 make and I don't know if you'd prefer -- I'm not sure

16 if there's anyone else to -- to canvass first?

17 THE CHAIRPERSON: Sorry, there is Mr.

18 Peters. I have a few questions I wanted to ask Dr.

19 Gotham in particular.

20 I just wanted to make sure that the

21 State Utility Forecasting Group is funded by whom?

22 DR. DOUGLAS GOTHAM: Our primary

23 funding comes from the Indiana Utility Regulatory

24 Commission. That's the -- the Indiana Utility

25 Regulatory Commission is required by state law to fund

1 a forecasting group at one (1) of the public
2 universities in the State of Indiana. Purdue has the
3 job. The university has the contract with the
4 regulatory commission and we are employees of the
5 university who then go and essentially perform the
6 duties required in that contract. That's their -- our
7 primary source of funding.

8 We also have funding as of February from
9 MISO to do load forecasts. I am funded in part for the
10 work I do for EISPC. So I get -- there's -- there's
11 funding from that source, as well. So it -- our
12 primary for funding has always been the Indiana Utility
13 Regulatory Commission, but there are other sources of
14 funding, as well.

15 THE CHAIRPERSON: Now you know that
16 Manitoba Hydro is associated with MISO, and I guess the
17 question I had is whether or not the load forecasting
18 work you're doing with -- with -- for MISO extends to
19 the load forecast for Manitoba Hydro?

20 DR. DOUGLAS GOTHAM: In their request
21 for proposals, which came out last fall, they requested
22 separate budgets for what they call their market
23 footprint, which does not include Manitoba, and their
24 reliability footprint, which does.

25 We provided estimates of what the cost

1 would be in our proposal for both of those. MISO
2 elected to go with their market footprint, so it does
3 not include Manitoba.

4 THE CHAIRPERSON: Just a -- a question
5 that I have, and it's with respect to the current work
6 that MISO is doing to -- to survey the resource
7 adequacy in the capital -- capacity utilization in MISO
8 related to the fifteen (15), sixteen (16) -- yeah, the
9 fifteen (15), sixteen (16) time frame.

10 Are you involved in that?

11 DR. DOUGLAS GOTHAM: Not directly.

12 THE CHAIRPERSON: Okay. I have no
13 further questions, so let's hear a submission from
14 Manitoba Hydro.

15 MR. BYRON WILLIAMS: Mr. Chair, just
16 before Hydro does, there may be one (1) factual
17 correction that -- just before Hydro makes its
18 submission.

19 Dr. Gotham and Dr. Simpson, would it be
20 fair to say that CAC Exhibit 65 in its entirety
21 represents both of your opinions, sir?

22 DR. DOUGLAS GOTHAM: Yes.

23 DR. WAYNE SIMPSON: Yes, we -- we both
24 have reviewed all parts of the document and agree to
25 it.

1 MR. BYRON WILLIAMS: And you've
2 exchanged drafts and exchanged comments on all parts of
3 the document?

4 DR. WAYNE SIMPSON: Yes.

5 DR. DOUGLAS GOTHAM: Yes.

6 MR. BYRON WILLIAMS: Thank you.

7 MS. PATTI RAMAGE: It may be useful if
8 -- Diana, could you bring up Manitoba/CAC Simpson and
9 Gotham 32?

10

11 (BRIEF PAUSE)

12

13 MS. PATTI RAMAGE: And while Diana is
14 doing that, I can start the submission, because it --
15 it works into it. I can say that Manitoba Hydro has no
16 objection to the qualifications of either Mr. Harper or
17 Dr. Gotham as -- as submitted by Mr. Williams.

18 Manitoba Hydro also accepts Dr. Simpson
19 as an expert in econometrics and microeconomics, as
20 described. We do not, however, accept Dr. Simpson as
21 an expert in the practical application of those
22 disciplines for the purpose of electric load
23 forecasting and risk analysis associated with power
24 resource planning of electric -- of electricity
25 systems, and question his ability to opine on those

1 topics in the reports filed.

2 While they are -- following one (1) up
3 on Mr. Williams's question, while Dr. Gotham and Dr.
4 Simpson are jointly responsible for the report and it's
5 conclusions, it does indicate in the response that Dr.
6 Gotham was the primary author of Part 1, and Dr.
7 Simpson the primary author of Part 2.

8 We believe that the -- there's a
9 significant limitation with respect to the evidence of
10 Dr. Simpson. He is critiquing Manitoba Hydros lord for
11 -- load forecast in Part 2, but has never been involved
12 in the preparation of an electric load forecast, nor a
13 gas load -- load forecast, for that matter.

14 He hasn't worked in an environment where
15 it was necessary to rely on or monitor load forecast
16 results. Similarly, Dr. Simpson hasn't prepared a
17 power resource plan, nor has he worked with one, nor
18 does he have the industry experience to fully
19 appreciate the key variables in a power resource plan,
20 their correlation or the risks associated with changes
21 to those variables.

22 It's Manitoba Hydro's submission that
23 Dr. Simpson has not conducted a risk assessment of an
24 energy utility, nor a risk analysis of resource
25 alternatives in the energy sector. Manitoba Hydro does

1 not believe a review of the Kubursi/Magee Report
2 constitutes conduct of an assessment.

3 And while we don't question Dr.
4 Simpson's theoretical knowledge of econometrics or
5 economics, we think it's critical to demonstrate
6 practical application of that skill set in the very
7 complex world of -- of the energy industry in order to
8 qualify as an expert before this Board.

9 Now -- and I have to be careful here,
10 because I didn't hear Mr. Williams ask that he be
11 qualified as an expert in these topics, but the fact
12 is, he's opining on the topics and that's the area of
13 concern. We believe to opine on the topics, you have
14 to have the expertise, and that expertise is required -
15 - is acquired by working in the industry for an
16 electric utility, or as a consultant with a history of
17 providing services to industry participants.

18 But without that practical experience,
19 you really aren't in a position to opine on what meets
20 industry standards, what are acceptable practices, what
21 are the practical impacts of using certain processes,
22 what has worked, and what hasn't worked.

23 And without that practical experience,
24 we have serious concerns with accept -- expect -- of
25 accepting expert -- expert-type reports on the topic

1 matters. And as indicated in the response to Manitoba
2 Hydro CAC 32 Part 2 of the load forecasting report,
3 what's produced by Dr. Simpson, and we believe that
4 report should be read with caution, because lack of
5 practical experience -- without that practical
6 experience, we just -- we're of the view that it's not
7 appropriate to -- to provide that opinion-based
8 evidence.

9 Similarly in a risk review, without that
10 practical experience, we have concerns with that --
11 with reliance on that type of evidence, and it's
12 Manitoba Hydro's view that we have to take those kind
13 of reports with caution.

14 THE CHAIRPERSON: Thank you, Ms.
15 Ramage. Mr. Williams, would you comment, please?

16 MR. BYRON WILLIAMS: Yeah. I -- I do
17 just want to ask one (1) fact-based question before we
18 do so. Dr. Gotham, in terms of the prefiled expert
19 report of you and Dr. Simpson, you are fully familiar
20 with the analysis that took part in Part 2 of that
21 paper?

22 DR. DOUGLAS GOTHAM: Yes, I am.

23 MR. BYRON WILLIAMS: And sir, you --
24 apart from your Indiana experience, you contributed as
25 well, sir, to the analysis that underwent all parts of

1 Part 2 based upon your lengthy experience in the state
2 of Indiana and more broadly? Would that be fair, sir?

3 DR. DOUGLAS GOTHAM: Yes.

4 MR. BYRON WILLIAMS: And in the course
5 of doing so, you benefited, I would suggest to you,
6 sir, greatly from the econometric and microeconomic
7 skills that Dr. Simpson brought to that analysis?

8 DR. DOUGLAS GOTHAM: That would be a
9 fair statement.

10 MR. BYRON WILLIAMS: And sir, in terms
11 of the load forecast, Dr. Simpson's credentials stand
12 on their own. The skill set that -- that he has
13 developed and demonstrated to this Board on numerous
14 occasions in terms of high level econometric analysis,
15 high level microeconomic analysis, is applicable in a
16 variety of -- of areas.

17 He has demonstrated that ably in -- with
18 regard to risk with regard to Manitoba Public
19 Insurance. He's demonstrated ably in the outcome of
20 the -- the 2010/'11 GRA, where it's -- it's common
21 knowledge that the cross-examination undertaken by CAC
22 (Manitoba) resulted in material downward revisions in
23 the risk estimates of Drs. Kubursi and -- and Magee in
24 the range of billions of dollars, and it is common
25 knowledge that that was the work of Dr. Simpson.

1 We -- we fully and well understand why
2 Manitoba Hydro would be concerned that Dr. Simpson's
3 risk analysis would be accepted. We would submit
4 though, it's not because of his -- their concerns about
5 his skills. It's their concern about the content of
6 his analysis.

7 Our client is confident that the skills
8 Dr. Simpson has demonstrated, both before this Board,
9 in regular appearances, in his academic work, in his
10 writing, is fully applicable, and his analysis is a
11 basic portfolio theory analysis. It is -- which is
12 fully within the skill set that he has ably
13 demonstrated over many years. Just one (1) second.

14

15 (BRIEF PAUSE)

16

17 MR. BYRON WILLIAMS: We have no further
18 submissions.

19 THE CHAIRPERSON: Thank you. I believe
20 that it would be appropriate for the panel to stand
21 down, so that we can discuss this matter and come back
22 with a decision. We'll do so as quickly as possible,
23 but it's probably a right time to take a break at the
24 same time. So why don't we take ten (10) minutes so
25 that everybody could have a coffee and so on.

1 MS. PATTI RAMAGE: Mr. Chair, before
2 the break, Manitoba Hydro would just like one (1)
3 point, with respect to Mr. William's comments. And
4 because these panel members were not here we would just
5 like to go on the record to say, it is not common
6 knowledge why the Board -- which parties the Board
7 particularly listened to in making its decisions. The
8 Board's decisions speak for themselves, and we don't
9 think it's appropriate for any party to -- to claim
10 that any portion of a decision is a result of any
11 particular individual's efforts.

12 MR. BYRON WILLIAMS: With respect, Mr.
13 Chair, My Learned Friend, misheard me. Under cross-
14 examination by Ms. -- by myself, Drs. Kubursi and Magee
15 agreed to redo the regression analysis. It is common
16 knowledge that as a result of that redone regression
17 analysis, as a result of the work of Dr. Simpson, there
18 were substantial changes to their estimates ranging
19 upwards of -- in the billions of dollars.

20 I was not referring to the finding of
21 the Board. I was referring to the revisions to the
22 evidence of Doctors Kubursi and Magee, because of CAC
23 (Manitoba)'s cross-examination, which flowed from Dr.
24 Simpson's insight.

25 MS. PATTI RAMAGE: And that could

1 equally be said with Mr. Cormie's meetings with those
2 gentlemen. And I don't claim to have common knowledge
3 of why they did what they did.

4 THE CHAIRPERSON: With that, we'll
5 stand down. Thank you.

6

7 --- Upon recessing at 2:30 p.m.

8 --- Upon resuming at 2:45 p.m.

9

10 THE CHAIRPERSON: Okay. The panel has
11 had the opportunity to deliberate on the issues that
12 are before it and has agreed that it'll accept the --
13 Mr. Harper, Dr. Simpson, and Dr. Gotham for the areas
14 of expertise that have been outlined by Mr. Williams.
15 So with that, we will proceed with the -- our schedule
16 for today.

17 So, Mr. Williams, please?

18

19 EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: Thank you. And,
21 Dr. Gotham, I wonder if you can turn to CAC Exhibit 65
22 and lead off. And -- and just for the benefit of the
23 record, I would ask that the witnesses, as they switch
24 from page to page, try and note the page change, so
25 that we -- we don't have Mr. Simonsen chastising me.

1 So if we can remember that, that would be great.

2 DR. DOUGLAS GOTHAM: Thank you. I --
3 and I would invite questions as I go along, so please
4 feel free to interrupt the -- the presentation here.
5 I'm going to the -- the second slide, the outline.
6 This is the outline of the presentation that Dr.
7 Simpson and I will be giving:

8 Looking first at standard forecasting
9 approaches for load forecasting. Followed by a review
10 of the Manitoba Hydro load forecast, the -- the
11 modelling structure itself as well as the assumptions
12 going into it. Following that will be a response to
13 the Manitoba Hydro's rebuttal of the evidence and a
14 treatment of -- of new developments that have happened
15 over the course of the hearing, followed by a summary
16 and conclusion.

17 Slide 3 lists, on a very basic level,
18 standard forecasting approaches. Top down approaches
19 are essentially a way of looking at the -- the load
20 forecast from a system-wide basis or from a group of
21 customers, like the residential customers. Bottom up
22 forecast is built from the individual customer level,
23 or the individual device level, and then summed up
24 across that. Hybrid approaches are a blending of those
25 two (2) approaches. I'll have a little bit more detail

1 on the specifics of different types of approaches.

2 Slide 4.

3

4 (BRIEF PAUSE)

5

6 DR. DOUGLAS GOTHAM: Trend analysis,
7 also referred to as a linear trend or a simple
8 regression analysis. This relies on the historical
9 load itself to project the future load and does not
10 take into account any of the causal factors that affect
11 electricity usage.

12 So it doesn't take into account things
13 like population growth. It doesn't take into account
14 things like gross domestic product. It doesn't take
15 into account personal income and -- and various other
16 factors that may affect electricity usage.

17 Advantage of -- of the trend analysis is
18 that it's easy to do. The problem is that it's
19 generally inaccurate. The trend analysis were probably
20 the -- the most common method of forecasting through
21 the '50s, '60s, and into the '70s.

22 In the 1970s, we saw a general failure
23 of trend analysis to capture significant changes that
24 were happening in the electric industry. The -- one
25 (1) of the things that we saw in Indiana -- one (1) of

1 the reasons the State Utility Forecasting Group was
2 formed was because of a failure of those trend analysis
3 forecasts.

4 Indiana was experiencing in the -- in
5 the '50s, '60s, and early '70s rapid growth in
6 electricity usage on the order of 6 to 8 percent per
7 year, and they were using trend analysis forecasts that
8 worked fine as long as we continue to see growth at 6
9 to 8 percent per year. In the mid-'70s we saw -- we
10 had the energy crisis. It was followed in the early
11 '70s -- or early '80s by the Rust Belt recession
12 referred to, which hit the midwest particularly hard,
13 including Indiana, which has a high -- heavy
14 manufacturing base.

15 And the forecast at the time, using
16 those trend analysis, kept assuming that once we get
17 through this we're going to get back to the 6 to 8
18 percent. Well, we didn't and -- but the utilities kept
19 building new generation in order to meet that expected
20 6 to 8 percent growth.

21 So trend analysis kind of died out in
22 the '70s, for the most part, in terms of a forecasting
23 method, largely replaced at the time with econometric
24 forecasts. And in -- in MISO's white paper in terms of
25 acceptable and unacceptable levels -- methods of

1 forecasting, they list trend analysis as an
2 unacceptable method.

3 The -- the other type of top down
4 forecast that I'm talking about today is econometric
5 forecasts. Econometric forecasts estimate the
6 historical relationship between the load and the
7 various factors that affect it, as I mentioned earlier,
8 things like population, personal income, gross domestic
9 product.

10 And so you -- you look at what is --
11 what the history has been in terms of the relationship
12 between those various factors and the load, and come up
13 with a mathematical model that explains history as well
14 as you can. And then you use that -- that
15 relationship, that mathematical relationship you've
16 developed, combined with projections of those factors
17 to determine what the future load is going to be.

18 Econometric forecasting generally gives
19 you improved accuracy. The downside to econometric
20 forecasts is if you have situations that may be
21 changing the historical relationship -- and a good
22 example of this is efficiency standards -- that may
23 affect the relationship between population and -- and
24 electricity load, for instance. Econometric models
25 have -- have some difficulty in capturing that. There

1 are things you can do to try to capture that, but it's
2 not easy. And I will -- and I should mention here that
3 MISO does consider econometric forecasting to be an
4 acceptable method.

5 Switching to the bottom-up approaches,
6 there -- one method of -- of forecasting is survey
7 based, or also known as informed opinion forecasts.
8 And in this case, you use information regarding certain
9 customer's future plans as the basis for the forecast.
10 So you go out and you -- you survey your customers.
11 Find out whether or not they plan on adding new loads,
12 adding new facilities, and then base your forecasts in
13 order to -- to meet what your customers tell you they
14 plan on doing.

15 The nice thing about a survey-based
16 forecast is it does account for expected fundamental
17 changes in demand, especially from large users. So if
18 you know you have a new manufacturing facility that's
19 coming in next year, you can model that directly and --
20 and be certain that you've captured that load.

21 The problem with survey-based forecasts
22 is they tend to be inaccurate in the long term, largely
23 because customers generally don't have that good of a
24 handle on where they'll be ten (10) years from now.
25 Most -- if you look at customers who've gone bankrupt

1 in the last five (5) years, very few of them if you
2 talk to them in 2000 were expecting to go bankrupt at
3 that time period.

4 And also you've got new customers that
5 may come in ten (10) years from now that you don't --
6 you haven't been talking to because you don't know
7 about them. So you can't capture that kind of increase
8 down the road that's likely to happen.

9 Another problem is it generally lacks
10 transparency. Those conversations are usually held
11 between the utility and the large customers without --
12 with the understanding that the utility is not going to
13 be sharing that information publically because that
14 would put the customers at a potential disadvantage if
15 their competitors knew what their plans were. And MISO
16 considers this method to be unacceptable.

17 And another bottom up approach is the
18 end-use model. In this case, total load is built up
19 from the individual device level. So essentially the
20 end-use model tracks the number of devices, looking --
21 taking into account their -- the various ages of the
22 devices, the efficiency levels of the devices, and then
23 going forward as you go in -- farther and farther into
24 the forecast, it models the addition of new devices, as
25 well as the per -- replacement of existing devices.

1 So some of the devices that are in
2 existence will assume to fail largely based on their
3 age. If they're failed, the model will then decide, Do
4 I repair it or do I replace it? And if I replace it do
5 I replace it with a high efficiency option, or a
6 standard efficiency option?

7 And the same thing goes true with new
8 loads. Is it going to be a high efficiency option? Is
9 it going to be a standard efficiency option?

10 The nice thing about that is that you
11 can directly model changing energy efficiency
12 standards. And, so if the -- the standard on -- on
13 lighting has changed so that only high efficiency
14 lights are allowed, the model given -- in the year that
15 that standard comes into play, the model will only
16 allow -- be allowed to select the high efficiency
17 lighting, so it'll directly capture that.

18 It also will capture the competition
19 between different methods of -- of producing that end
20 use. So a end use model can look at space heating, for
21 instance, and -- and model the competition between
22 natural gas and electricity. And on the electricity
23 side it can look at direct resistive heating versus a
24 heat pump.

25 The problem with end-use models: very

1 data intensive. And in some cases it doesn't capture
2 changes in customer behaviour very well. If there are
3 things driving the end use that -- the customer
4 decision besides pure economics, then you've got to
5 find a way to model that -- those -- those other
6 decision making factors within the -- the framework of
7 the end-use model. MISO considers this to be an
8 acceptable method.

9 A hybrid model employees facets of both
10 the top down and bottom up approaches. Most common,
11 and this is becoming more and more popular over the
12 last few years, is what's referred to as the
13 statistically adjusted end-use model. So it -- it uses
14 an econometric formulation within the framework of the
15 end-use model and it does a better job of capturing
16 those non-economic factors that -- that go into
17 customer decision making process.

18 So if their des -- if they're making a
19 decision not just because it's the cheapest option,
20 because they want to be green or because they want to
21 buy local or whatever it is, the econometric
22 formulation is -- it do -- with it be -- embedded
23 within the statistically adjusted end-use model, will
24 help capture those types of decision making effects.

25 The -- the downside to this is increased

1 model complexity. The end-use model itself is -- is
2 very data intensive and complex with statis --
3 statistically adjusted end-use model is even more so.
4 And then MISO considers this, again, a -- also to be an
5 acceptable method of forecasting.

6 MR. BYRON WILLIAMS: Dr. Gotham, before
7 you turn it over to Dr. Simpson, can you just briefly
8 describe the approach that you use in -- in Indiana,
9 taking into account both your primary tools and also
10 validation checks that you employ.

11 DR. WILLIAM GOTHAM: Certainly. We
12 model each of eight (8) different utilities within the
13 state of Indiana. And for each one of those eight (8)
14 utilities, we separate them into residential,
15 commercial and industrial classifications.

16 For our industrial models, we use an
17 econometric approach. For the residential and
18 commercial models, we have both end-use and econometric
19 models. And so when we run a forecast, we'll run both
20 sets of those models.

21 For several years now, going back to the
22 '90's, we've used the end-use model for the commercial
23 sector as our primary forecast method, although we'll
24 run end -- the econometric model and check to see
25 whether or not it's consistent with what's going on

1 elsewhere, what the difference is between the end-use
2 model and the econometric model, why are they
3 different. The reason we use the end-use mo -- we've
4 used the end-use model over the econometric is that we
5 found that it does a better a job.

6 On the residential side, starting with
7 our 2011 forecast, we switched from an econ -- the
8 econometric model to the end-use model. And the
9 primary reason we've made that switch was because of
10 the upcoming federal efficiency standards on lighting,
11 which we felt the end-use model would do a better job
12 of capturing than the econometric model.

13 THE CHAIRPERSON: Could you repeat the
14 methodology you use for industrial?

15 DR. DOUGLAS GOTHAM: Industrial my --
16 the -- our industrial model is an econometric
17 formulation and it's what is referred to as a CLEM
18 model, Capital, Labour, Energy, and Materials. And so,
19 it's uses as the primary driver, manufacturing output,
20 and we divide that up into industry types. And so,
21 automobile parts and manufacturing would be an industry
22 type. Primary metals, so making iron, steel and
23 aluminum would be another industry type. Chemicals,
24 and so forth.

25 And each one of those has a -- an

1 econometric formulation that will choose the method the
2 -- it will choose between cap -- using capital, using
3 labour, using energy, or using materials to meet those
4 -- that projected output from those -- those sectors.

5 THE CHAIRPERSON: And how -- how do you
6 capture a new entrant, a large new entrant, in a model
7 like that?

8 DR. DOUGLAS GOTHAM: The -- the capture
9 is to -- to some degree the capture is going to come
10 from the -- the input projections in terms of
11 manufacturing output. So we get our -- our projections
12 from Indiana University School of Business and they
13 project how much production is going to happen in those
14 various industries.

15 We have, in the past, -- and this goes
16 back to the '90's -- we have made adjustments to those
17 models, based on specific knowledge we had at the time.
18 We had a -- two new steel processing facilities that
19 are very electric energy intensive coming in. And so
20 we made adjustments essentially to the inputs of -- in
21 term -- of the -- the I should say -- the input driver,
22 the -- the manufacturing output, to reflect the
23 increase in that. So we -- you still did it within the
24 framework of the econometric model, but we adjusted the
25 inputs to reflect the increasing output that was going

1 to happen because of that -- those new facilities.

2 MR. BYRON WILLIAMS: And just to
3 confirm before we turn it over to Dr. Simpson, for the
4 residential and commercial, you would run both the end-
5 use analysis and the econometric.

6 But the primary mechanism right now is
7 the end-use analysis?

8 DR. DOUGLAS GOTHAM: That -- that is
9 correct. We run -- we run both sets whenever we do a
10 forecast, and we -- as of the -- the last two (2)
11 forecasts, our -- we have used both -- on the
12 residential and commercial side, used the end-use model
13 for the model that we report.

14 MR. BYRON WILLIAMS: Dr. Simpson, over
15 to you, please.

16 MS. MARILYN KAPITANY: Just before you
17 do that, could I just ask one (1) question, Dr. Gotham?
18 You mentioned that the econometric model has good
19 accuracy, but it doesn't account for things that change
20 historical relationships.

21 We heard a lot yesterday about
22 structural change happening in the indus -- in -- in
23 the energy industry where there are some game-changing
24 technologies coming on.

25 How would you capture those kind of

1 things?

2 DR. DOUGLAS GOTHAM: There are things
3 you can do within a -- an econometric model to try to -
4 - to try to capture those things. One (1) of them is
5 adjusting your input assumptions, and another one is
6 using what we refer to as a dummy variable, where
7 you're putting in a -- a variable that essentially has
8 no value until a certain time period, when you expect
9 that change to occur. And then that -- then that --
10 that variable essentially kicks in and -- and then
11 affects the -- the forecast going forward.

12 But all of those things are kind of
13 workarounds, and one (1) of the reasons why I mentioned
14 that that's an issue with the econometric model. So
15 it's kind of -- the model doesn't do it well, but there
16 are things you can try to do to -- to get the model to
17 go in the direction you want it to.

18 MS. MARILYN KAPITANY: So you watch the
19 trends, and then you adjust your model accordingly?

20 DR. DOUGLAS GOTHAM: We have, yes.

21 MS. MARILYN KAPITANY: Thank you.

22

23 CONTINUED BY MR. BYRON WILLIAMS:

24 MR. BYRON WILLIAMS: Just to follow up
25 on Board member Kapitany's question, Dr. Gotham, would

1 it be fair to say that you would run also different
2 scenarios for forecasting exercises?

3 DR. DOUGLAS GOTHAM: Yes. We do -- we
4 always -- for our -- for our primary forecast, we run -
5 - we always run at least a base case and a low and a
6 high scenario. And then for various other analysis
7 we've done, we -- we'll do other types of scenarios
8 where we're looking at some specific issue.

9 MR. BYRON WILLIAMS: And for your most
10 recent forecast in Indiana, can you tell us what the
11 low forecast scenario was?

12 DR. DOUGLAS GOTHAM: I don't remember
13 the specific results of that analysis. The way we do
14 our low and our high forecasts are essentially through
15 low and high assumptions, in terms of those economic
16 drivers.

17 So I -- I mentioned we get our forecast
18 from Indiana University's business school. They
19 provide alternative low- and high-growth economic
20 projections that we'll put into our model, and then
21 we'll run those projections through our modelling
22 system. That's the -- the standard way we've done our
23 -- our low and our high scenarios for our traditional
24 forecast.

25 MR. BYRON WILLIAMS: Finally, might you

1 have run a zero load growth scenario as a load scenario
2 for the most recent forecast, or is that -- you're not
3 sure, sir?

4 DR. DOUGLAS GOTHAM: That's not
5 something that we would have done, a zero load growth
6 forecast, because the primary thing we're looking at is
7 what is the forecast.

8 MR. BYRON WILLIAMS: Right.

9 DR. DOUGLAS GOTHAM: And so we don't
10 override the output of the forecast as a scenario.

11 MR. BYRON WILLIAMS: Thank you.

12

13 (BRIEF PAUSE)

14

15 DR. WAYNE SIMPSON: Okay. Well, thank
16 you for giving the opportunity to present, and I'd like
17 to say I've -- I've enjoyed very much, you know,
18 working with Dr. Gotham and his considerable skill set
19 in developing this load forecasting report.

20 What I was asked to do was look at the
21 Hydro forecast as it occurs in the NFAT. And I'd first
22 like to say, as I say in the report, or the Part 2 of
23 the report, and this is something I did write alone,
24 which is that a lot of things are said about the load
25 forecast in the Elenchus report, and I don't intend to

1 repeat those things.

2 They've made some significant points
3 about the lack of sufficient attention to alternative
4 population and economic growth scenarios, alternative
5 energy sources, and so on. And I won't have much to
6 say about that.

7 What I do is focus on some of the
8 limitations of the forecasting methodology, some of it
9 covering old ground in the sense of the -- of the
10 comments I made about the Kubursi/Magee Report which
11 didn't get into the record, so I guess I can make them
12 for the first time now.

13 And also, more particularly, because
14 here I think we can say some things about how the
15 forecast is biassed, talk about the consideration on
16 the -- of the prices, electricity, the rates on -- on
17 the load forecast.

18 So first, some of the general issues.
19 The -- as Dr. Gotham said, the Hydro load forecast is a
20 hybrid model. It uses different approaches, some of
21 them acceptable under the MISO standard and some not.
22 And to some extent, we can contrast this with a unified
23 approach. I think the unified approach that one would
24 focus on and certainly that is my area of expertise
25 would be an econometric approach.

1 And there are certainly advantages to
2 using a hybrid model in the sense that you aren't
3 wedded to econometric model. And Dr. Gotham has
4 alluded to that in discussing the advantages, for
5 example, of using end-use modelling in certain
6 circumstances. It is more complex, and that introduces
7 some new questions, and I have three (3) of them, I
8 guess.

9 They are -- one (1) is the complexity of
10 assessment. The blend of approaches in the hybrid
11 model makes assessment complex. I was asked to look at
12 within sample reliability, which is one (1) of your
13 measures at least in the short-term stage of -- of
14 forecasting accuracy. That's more easily done with the
15 unified econometric approach, somewhat more difficult
16 with a hybrid model, especially a hybrid model that
17 uses, in fact, quite a wide variety of techniques.

18 Secondly, the clarity of the different
19 methods. Asked whether the NFAT load forecasting
20 methodology is clear. Dr. Gotham and I found it
21 difficult to understand the methodology, exactly what
22 was being done at various points and the -- the
23 justification for the different methods that were used
24 as comparison to alternatives, so by the individual
25 components of this hybrid forecast justified compared

1 to standard alternatives and considering a more unified
2 approach that is an econometric approach. Again,
3 unclear from the NFAT and the load forecasts in there
4 and how they are described and presented.

5 So first -- the first element is the
6 residential load forecast. And I'll have more to say
7 in terms of the price impacts, focussing on this
8 sector, later because I think it's the one we can -- we
9 have the most evidence on.

10 The load forecast is a consensus
11 population forecast from the independent population
12 forecasts that are commissioned by Manitoba Hydro which
13 feeds into a household forecast based on some estimate
14 of the size of households, and then a residential
15 households load forecast based on an estimate of the
16 percentage share of electric heating in those
17 households.

18 So down the right-hand side we have a
19 couple of areas where there are estimates being
20 introduced. The size of household, there's an average
21 -- an old average being used. And this has been
22 discussed, I see, in the -- in the testimony at some
23 length. The obvious comparator would be some sort of a
24 regression approach which would introduce some
25 structural factors, some causal factors into the

1 analysis and say, is the size of the household changing
2 over time, are there demographic and economic factors
3 that are driving this, indeed, are there trends
4 because, I mean, one (1) of the components of
5 econometric analysis could be a trend analysis, so it
6 kind of sup -- supercedes the old trend analysis
7 approach that Dr. Gotham discussed.

8 And certainly in the case of Indiana,
9 Dr. Gotham can speak to this more, there -- there was
10 actually a headship model used to estimate the -- the
11 size of -- the average size of households.

12 Taking the average size of households
13 and the population you get an estimate of households.
14 Then you look at the percentage electric heating share
15 again. Here we have a five (5) year moving average
16 used. This is a pretty simple time series model --
17 modelling approach. This is a part of time series
18 modelling. A more general approach would be an
19 autoregressive integrated moving average model; that's
20 a standard time series approach that's still widely
21 used. But more than that, you know, again we could
22 have econometric modelling.

23 And it's not clear in these cases
24 whether these alternatives were tried and rejected.
25 And if they were rejected, on what basis they were

1 rejected.

2 So the question here is whether some
3 sort of top down econometric approach might, in fact,
4 do a better job of -- of developing a residential load
5 forecast, whether there are these systematic
6 demographic and economic factors that would explain
7 things like household size and electric heating share
8 better than the models that are being introduced.

9 And there are some pretty standard
10 methods of comparing forecasts based on different
11 methods that could be used to see which -- which models
12 do the best. And I would note that, for example, as
13 Dr. Gotham has discussed in the Indiana case, the sort
14 of parallel running of end use and econometric models,
15 because while they find right now, for example, that
16 the end use models are doing better both in terms of
17 their forecasting accuracy and maybe the capability to
18 do certain things, who knows when the econometric
19 models will -- will have a resurgence and -- and do
20 better as well.

21 And if you keep different competing
22 models open you, of course, have a better opportunity
23 to make those kinds of assessments. You know,
24 economists talk a lot about competition and the virtues
25 of competition. I think in this case drawing a -- an

1 analogy from that to -- to econometrics, model
2 competition is generally a good thing. If you get
3 stuck in a stayed model where you aren't systematic in
4 comparing the -- the model with potential alternatives,
5 and I think largely in this case alternative
6 econometric models, then you have -- you have poton --
7 potential for errors in your forecasting.

8 The general service mass market does use
9 a -- a regression model. Oh, yeah, sorry. The general
10 service mass market -- it's confusing. There's two (2)
11 screens doing different things.

12 A regression model, here the -- there
13 have been various changes to the specification. What's
14 hard to understand is what statistical criteria are
15 being used to decide what specification is the best.
16 In other words, what's the best model, the question of
17 model selection. What is the justification for the
18 model being used? And is that justification related to
19 the reliability of the forecast?

20 Not only is there competition among
21 different types of models, say end use models versus
22 econometric models, but there's also typically
23 competition between different type of econometric
24 models. The modern standard, certainly in economics
25 and empirical work in economics is that a variety of

1 econometric models are positive that are consistent, or
2 plausibly consistent with the -- with the problem being
3 addressed, the model being specified.

4 And the econ -- the models are then
5 selected on the basis of specific criteria, whether
6 those criteria are the significance of coefficients,
7 the overall significance of the regression, or other
8 information criteria, other more sophisticated tests,
9 the point is that there's model competition even when
10 you go to an econometric model within different models
11 and justifying that the model you have is the best one.

12 And that's a continuing process, a year-
13 to-year process because, of course, variables that
14 aren't important at one (1) point in time but you think
15 might be relevant to the problem could have -- could
16 become important at other stages as -- as circumstances
17 change. And that's something you're trying to capture.

18 The other element of the GSMM forecast
19 is the electricity utilization. Again here there's a
20 simply time series moving average process versus more
21 complex time series models, but also against
22 econometric models. And it's not clear whether
23 systematic effects, such as prices and incomes would
24 matter here. As well, there's no -- there's no testing
25 going on competing -- against competing models of an

1 econometric variety.

2 MR. BYRON WILLIAMS: Dr. Simpson,
3 you're just leaving slide 12. And lest I be chastised
4 by Dr. -- or Mr. Simonsen, we're moving on to --

5 DR. WAYNE SIMPSON: Thank you.

6 MR. BYRON WILLIAMS: -- we're moving on
7 to slide 13.

8 DR. WAYNE SIMPSON: The top customer
9 forecast here is simply an assessment from Hydro's
10 experts, informed opinion, in -- in Dr. Gotham's terms.
11 It's not the MISO standard. There's a consistent
12 upward bias. And here the question is: If you have a
13 consistent upward bias, what competing model might do a
14 better job?

15 The obvious competitor would be some
16 sort of econometric model. And I don't see any
17 introduction of a competing model to justify the use of
18 the -- of the top customer forecast methodology that
19 Hydro uses, or to assess the reliability of one (1)
20 model versus another.

21 Again, model competition, standard
22 selection criteria would be a good thing.

23 Trend versus volatility. Next slide,
24 sorry. The -- Hydro discusses a lot about weather, but
25 my impression from this discussion is it's largely

1 about heating/cooling days and what I would call short-
2 term volatility.

3 We're looking at a fairly long-term
4 assessment here, assessments of thirty (30) to seventy-
5 eight (78) years. And I would think what's more
6 important is the trends in things like heating and
7 cooling days, or what we typically now call climate
8 change but, also, the influence of other long-term
9 factors: population growth, GDP growth.

10 These are things that Elenchus has
11 discussed at length in terms of the alternative
12 scenarios that might be explored, and the one that I'm
13 going to talk a little bit about, energy price, in
14 particular, the electricity price.

15 And it's not clear how the alternative
16 population/GDP scenarios affect the comparison of
17 plans. This is the Elenchus argument. But it's also
18 the case that price effects have not been considered at
19 all. And as an economist, it seems to me I've got to
20 say something about prices in this context.

21 Electricity is a -- is a fairly standard
22 good. Consumers need it and buy it in significant
23 quantities, and I think are probably relatively well
24 informed about how it impacts on their budgets. And on
25 Wednesday, Mr. Stevens and I talked a little bit about

1 it across different kinds of households.

2 The discussion here is really just about
3 what we would call the average representative
4 household, but the -- the basic ideas of consumer
5 demand in terms of the theory and the evidence are
6 appropriate to this kind of analysis.

7 And the factors that are involved in
8 that consumer demand traditionally are income, which is
9 captured with the GDP; population or simply the
10 analysis of demand in per capita terms, which I adjust
11 for population; the price of electricity, which I've
12 bolded because I'm going to talk a fair amount about it
13 in the rest of my presentation; and then the prices of
14 close substitutes and complements, other energy prices,
15 the whole question of fuel substitution which I think
16 is quite important, especially when we're looking at
17 the kinds of changes in the prices of electricity that
18 are actually likely to occur over the next thirty (30)
19 years.

20 The trouble there is I don't see a lot
21 of evidence that allows me to say a great deal about
22 this, and I'm not going to stray into things that I
23 don't feel I can -- I can make any specific comments
24 about except to say that these things likely matter.
25 And if they -- if alternative fuel sources get cheaper

1 and electricity gets more expensive, you're going to
2 likely see a fair amount of fuel switching of one (1)
3 form or another.

4 And then other factors like weather.
5 But again, in the context of the long-term weather
6 changes because we're looking at the annual load
7 forecasts over a -- a lengthy period of time.

8 The Hydro -- the NFAT admits that prices
9 matter. And I've simply taken from chapter 3 the
10 following quote, which I'll read:

11 "There are also linkages between
12 electricity prices and demand. Lower
13 priced power prices tend to spur
14 demand and reduce the incentive for
15 efficiency which over time puts
16 upward pressure on prices. Higher
17 power prices, on the other hand, tend
18 to do the opposite, spurring new
19 supply and depressing demand, which
20 in turn moderates those high power
21 prices over time."

22 Prices matter. The demand as well as
23 supply down -- demand curve slope downward. These are
24 the -- this is kind of the gospel of -- of first-year
25 economics, if not the rest of the discipline.

1 But, in fact, there's no consideration
2 of prices in the 2012 or 2013 load forecast. There is
3 some consideration in the subsequent interrogatories,
4 but I think it's fair to say that it assumes a fairly
5 limited commu -- consumer response, and one that I
6 would argue is not consistent with what I see in the
7 literature from other jurisdictions where they have had
8 a chance, where prices have varied considerably, to see
9 how consumers respond.

10 So I want to make a couple of points.
11 One (1) point is that the projected real rates -- rate
12 increases in electricity prices are substantial over
13 time.

14 And Mr. Stevens and I produced a graph
15 on Wednesday afternoon that in fact illustrated this,
16 looking at the nominal growth in prices of 4 percent
17 and the real growth of 2 percent, assuming inflation
18 rates of 2 percent, which are consistent with the Bank
19 of Canada's target inflation rate.

20 And again, in the NFAT, Appendix D:

21 "The real electricity price is
22 forecast to increase by 1.7 percent
23 in 2013/'14, and then increase by 2
24 percent per year through the rest of
25 the forecast period"

1 which implies a cumulative increase of
2 around 80 percent, actually a little over 80 percent,
3 in electricity prices above general price inflation
4 over thirty (30) years.

5 So what's the impact of this? I mean,
6 the basic argument is that an economist would expect
7 that there would be a significant consumer response to
8 this. That over time, given the options, that
9 consumers would use less, they'd conserve, which would
10 make conservationists happy, I guess. They would use
11 alternative energy sources, fuel switching, depending
12 on what's happening to other fuel prices, and take
13 advantage of new technologies that will arise over the
14 next thirty (30) years, some of which we can't foresee.

15 And the point is that consumers have
16 options and will react, and they will react like they
17 have in other jurisdictions.

18 The second point is that there will be a
19 consumer response over time. And the response is
20 typically encapsulated in what is called the own price
21 elasticity of demand which measures in a unit-free
22 sense so we can transport it across different
23 situations, the percentage change in the consumption of
24 electricity that arises from a 1 percent change in the
25 price of electricity.

1 This is the standard measure that's used
2 across economics. And one (1) of its virtues is that
3 it can be used in the kinds of 'what if' scenarios that
4 economists and forecasters use. That is to say we can
5 say, What if prices increase, as they are here, by 80
6 percent over time, what is the likely consumer response
7 given what the literature tells us are the likely range
8 of outcomes for the own price elasticity.

9 In the NFAT, the -- the implication is
10 that the effect of the price increases on consumer
11 demand will be zero. In your interrogatories, I think
12 the implication is that they will be small. It would
13 be difficult, certainly not impossible, to tease out
14 estimates of the price elasticity of demand for
15 electricity in Manitoba.

16 We have information on consumption. We
17 have information on prices and an analysis could be
18 done. It's not one (1) of the -- a place that an
19 economist looking for a publication in a peer-reviewed
20 journal would look because there's been fairly limited
21 variation in the real price of electricity. And what
22 economists would look for, what they would call a good
23 identification strategy, would be situations, and one
24 (1) example is Indiana, where Dr. Gotham can speak more
25 to the -- to the details, where there has been a sharp

1 increase or, in some cases, a sharp decrease in prices
2 and they've been able to measure consumer responses
3 over a period of time.

4 We suspect that, in the short-term, less
5 will happen than the long term, all right. So in the
6 long term, elasticity will be -- be larger because
7 consumers will be more able to absorb what the impact
8 is and will be more able to figure out what the
9 responses are either through their own analysis or
10 through what other people say is a better way of going
11 about dealing with the rising price effects.

12 What I have done is I've taken,
13 essentially, a meta-analysis that has looked at peer-
14 reviewed studies, and this is from the E3 (phonetic)
15 network online. And it says:

16 "Based on a review of these surveys,
17 peer-reviewed journal articles, the
18 numbers that come out most often are
19 zero point two (0.2) for the short-
20 run and zero point seven (0.7) for
21 the long-run."

22 And basically, we are dealing with the
23 long-run here. We're dealing with a forecast that's
24 looking out thirty (30) years. That's -- that's a
25 pretty long run. I mean, Cain's view was, in the long-

1 run, we're all dead. I don't want to say we'll be dead
2 in thirty (30) years, but in thirty (30) years we'll
3 all be a lot older.

4 So I choose something closer to the top
5 end of this range, the long-run end. And I choose zero
6 point five (0.5) to illustrate, which is a little bit
7 more conservative.

8 If I remember correctly, the evidence
9 for Indiana, for example, found elasticity estimate.
10 I'm not sure whether they characterized it as short
11 term or long term of zero point four (0.4). So zero
12 point four (0.4), zero point seven (0.7), zero point
13 five (0.5) seems like a reasonable figure to use.

14 And then the third thing I tried to do
15 is illustrate that the response to the load forecast in
16 subsequent investment decisions is significant. So I
17 choose from the literature this .5 long-run price
18 elasticity estimate. Take the 80 percent price
19 increase over thirty (30) years, and get a 40 percent
20 reduction in load. It's half as large. But that's
21 pretty substantial because if you look at Hydro's
22 residential forecast it's 1.6 percent load growth per
23 year. One two -- .2 percent due to population, .4
24 percent load growth due to usage, and a ratio of 3:1.
25 Population growth is three (3) times as important as

1 usage growth in their -- in their forecast.

2 This leads to a load growth of 60
3 percent over thirty (30) years; 45 percent due to
4 population, 15 percent due to -- to usage, the 3:1
5 ratio. Without price effects. There are no price
6 effects in here.

7 But what you see in the -- the price
8 effects, if you take an elasticity estimate of point
9 five (.5), are pretty big. Forty (40) percent
10 reduction in load. Well, a 40 percent reduction in
11 load is more than the 50 -- 15 percent increase in
12 usage that they predict and leads actually to -- to a
13 25 percent decline in usage over thirty (30) years,
14 coupled with a -- a 45 percent increase due to
15 population, if you accept the population forecast in
16 the NFAT, and the overall increase in load is 20
17 percent, not 60 percent.

18 So the effect of thinking about the
19 price effects consistent with the kind of evidence that
20 is in the literature is that it reduces the forecast by
21 a factor of two-thirds.

22 So in Chapter 12, the NFAT projects load
23 growth of -- what I've put here is 7.9 gigawatt hours.
24 I'm sorry, I -- I did get the number right in the
25 report but I don't want to say my eyes are failing me

1 but I misread the comma as a decimal. It's 7.9
2 thousand gigawatt hours. These don't matter 'cause
3 I've been consistent in my -- my visual problems.
4 To -- that -- that's 7.9 thousand
5 gigawatt hours to 2031/'32. One-third of that is
6 residential because residential is only one-third of
7 load growth. That's 2.63 thousand gigawatt hours. And
8 the -- if the price effect reduces load growth by a
9 factor of two-thirds, that's 1.76 thousand gigawatt
10 hours. I don't know what that means in terms of
11 electricity. It seems like a lot of electricity.

12 But it reduces load growth using their
13 figures by four point two (4.2) years. If we look at
14 the 2013 load forecast, also in Chapter 12, just to get
15 a sense of the -- of the size of this, the import of
16 this which is what I'm trying to do, the forecast
17 revisions there in 2013 reduce load growth by three (3)
18 years, and they defer need for new resources by one (1)
19 year.

20 But we've got reductions in load growth
21 of four point two (4.2) years based on the NFAT figures
22 because a year of load growth is 420 gigawatt hours,
23 from the NFAT. So taking these figures, the
24 residential price response alone, which is a third of
25 load, would defer resources by one (1) plus years using

1 the NFAT's own figures on what the implication is of
2 this size of reduction in load growth.

3 If we add in the general service mass
4 market and the top customers, which constitute two-
5 thirds of load, and we think that they may be as
6 sensitive to price as the consumers, there arguably is
7 less evidence on this -- on the producer side than
8 there is on the consumer side, but that would suggest
9 that the reduction in resources would be in the order
10 of -- resources needed would be in the order of three
11 (3) to four (4) years.

12 That is to say, the need for new
13 capacity based on the NFAT's own figures could be
14 deferred as much as three (3) to four (4) years simply
15 by building in the price effects using the kinds of
16 responses that we observe in the peer-reviewed
17 literature.

18 MR. BYRON WILLIAMS: Dr. Simpson,
19 before you leave this slide, just because we have a
20 typographical or eyesight error on this page, you're
21 referring to slide 20 of CAC Exhibit 65, and --

22 DR. WAYNE SIMPSON: Yes.

23 MR. BYRON WILLIAMS: -- what you're
24 telling us on the first line is the figure of 7.9
25 gigawatt hours is -- should be seven thousand nine

1 hundred (7,900)?

2 DR. WAYNE SIMPSON: Seventy-nine
3 hundred (7,900), right.

4 MR. BYRON WILLIAMS: Okay. And then
5 the next line, when we see the two point six three
6 (2.63) that should be two thousand six hundred and
7 thirty (2,630)?

8 DR. WAYNE SIMPSON: Right.

9 MR. BYRON WILLIAMS: And likewise on
10 the third line, the one point seven six (1.76), we
11 should move the decimal point over three (3) to the
12 right.

13 DR. WAYNE SIMPSON: Seventeen hundred
14 and sixty (1,760), yeah. So those should all be
15 written -- read as thousands of gigawatt hours.

16 MR. BYRON WILLIAMS: And you'll move to
17 slide 21 now?

18 DR. WAYNE SIMPSON: Right. And then
19 finally I was asked to look at load forecast
20 reliability. And I -- I find it difficult to assess
21 the hybrid approach that Hydro has used, compared with,
22 say, an econometric approach, where within sample
23 reliability pops up with our squared statistics. And
24 there's other measures of -- of forecasting reliability
25 that can be used. I don't think it's impossible to

1 evaluate the forecasting reliability of a hybrid
2 approach with modern replication methods, but that has
3 not been done. And in any case, I think the beyond
4 sample reliability is far more important; in other
5 words, looking over the thirty (30) year relia --
6 horizon and looking instead at the reliability of the
7 projections for population, for income and the
8 sensitivity of load forecast to these projections. And
9 this is something that Elenchus report and their
10 testimony to you has -- has covered. And I -- I simply
11 point out that it's -- it's there in their report and
12 testimony.

13 But it should also depend on the
14 projections for prices, the not inconsiderable 2
15 percent increases in real electricity prices per annum,
16 which, if ignored, could inflate the load forecast and
17 new system requirements significantly. And I've
18 suggested it could exaggerate the needs for new
19 electricity by as much three (3) to four (4) years.

20

21 (BRIEF PAUSE)

22

23 DR. DOUGLAS GOTHAM: So we're on slide
24 22, the title slide for the rebuttal evidence in new
25 development section, and switching to slide 23. And

1 this section focuses mostly on looking at the -- the
2 Manitoba Hydro rebuttal and our responses to it.

3 Page 3 states that the evidence of
4 Elenchus and Dr. Simpson and Gotham focus their review
5 on Manitoba load growth over the last ten (10) years.
6 We feel that this statement is erroneous and at least
7 in our case, we did not focus at all on load growth in
8 the last ten (10) years. We focussed on issues
9 associated with the methodology itself, the
10 assumptions, and the transparency of the model. At no
11 point did we focus our evidence on Hydro's recent load
12 growth. So I think Hydro has erroneously lumped us in
13 with Elenchus when it comes to this comment.

14 Slide 24, on page 5 of the rebuttal, in
15 response to our concern over the projected load growth.
16 In light of other forecasts, Hydro presented an
17 outdated table from the North American Electric
18 Reliability Corporation, NERC, that had generally
19 higher forecasts than the most recent version. Not
20 higher for all of them, but generally higher. As --
21 and the -- that -- an updated version of that has been
22 filed in the hearing. I would note that -- that
23 updated version, the 2013 NERC report, does indicate
24 that load forecasts have been declining steadily over
25 the last decade.

1 Slide 25, page 8 of the rebuttal,
2 provides the historical number of people per household,
3 which I've got up here on the slide.

4 And on slide 26, Hydro states that this
5 trend is clearly demonstrated in overall decline in
6 levelization of people per household to around two
7 point seven-nine (2.79). We would submit that that
8 levelization from that graph is not clear to us. What
9 is clear is that it changes over time in response to
10 something, some phenomena or -- or phenomenon or
11 phenomena out there affecting that, which is why we
12 state that a more analytically sound approach is
13 appropriate than just assuming that the last value will
14 hold true forever.

15 Slide 27, page 13, and this was in
16 response to a -- a -- in their rebuttal, referring to
17 an issue with Elenchus. Tho -- through the econometric
18 model used to create the general service mass market
19 forecast, Manitoba Hydro has found a significant
20 relationship between customer growth and the
21 residential basic sector and growth in GDP to customer
22 growth in the general service mass market sector and
23 forecast using this relationship.

24 We would like to point out that since
25 the number of residential customers is also an inpoint

1 -- input not just to the residential forecast, but the
2 -- to the general service mass market forecast, this
3 means it's even more important to have a reasonably
4 good, analytically sound method of projecting the
5 number of residential customers.

6 Slide 28. In referring to the average
7 use per dwelling on pages 10 and 11, paragraphs
8 labelled 2 and 3 in the rebuttal indicate that the
9 percentage of dwelling using electricity for space and
10 water heating is expected to increase based on current
11 trends.

12 It's our belief that while that is the -
13 - the past trends, in terms of electricity price and
14 natural gas, and having years of low, stable
15 electricity prices, and a -- a fairly recent period of
16 high gas prices, up until the last couple of years,
17 would tend to drive more electricity space heat --
18 space and water heating. However, that's not going to
19 be the case in the future as electricity prices rise,
20 as we've heard in this hearing.

21 And I would note that in MH-87, slide
22 82, indicates that Manitoba Hydro will be considering
23 DSM initiatives involving fuel switching. So that may
24 drive some additional fuel switching. But we expect
25 that prices alone will start to -- to change the -- the

1 way customers decide to heat their home when they make
2 that decision.

3 Slide 29, referring to the growth in top
4 consumers. On page 13 Dr. Simpson and Gotham discount
5 Manitoba Hydro's use of informed opinion and time
6 series and its forecast of top consumers on the basis
7 that such approaches are deemed unacceptable under
8 MISO's list of forecasting methods.

9 They then attempt to defend the use of
10 in -- informed opinion forecast in the short-term, but
11 do not address the use of a linear trend for the long-
12 term, which is also a non-acceptable method.
13 Furthermore, the section 2.3.5.2, which addresses an
14 Elenchus concern, does not address any of our criticism
15 in terms of the -- the long-term load -- top customer
16 load growth.

17 Slide 30, page 14. This assessment is
18 based upon only the most recent five (5) year period
19 and is dominated by the unexpected closure of one (1)
20 top consumer and by the recent economic downturn.
21 Again, I would like to point out that this is one (1)
22 of the problems with using informed opinion forecasts.
23 The fact that you had a closure of one (1) top consumer
24 and that it was unexpected shows that you can't
25 anticipate everything that's going to happen in the

1 future to -- to capture those kind of things.

2 Slide 31, referring to price elasticity,
3 page 19. Manitoba Hydro has among the lowest
4 electricity prices in North America, as outlined in
5 Manitoba Hydro's response to PUB/MH-1-256. Electricity
6 prices have increased slowly or at close to the rate of
7 inflation. As a result, the effective price changes on
8 cust -- on customers' use of electricity would have
9 been largely overwhelmed by the effect of other factors
10 that affect demand for electricity, such as population
11 increases, economic growth, improvements in residential
12 construction, appliance efficiency, and the underlying
13 random year-to-year variation in low -- in load.

14 I would agree with this in the past. I
15 would say -- state that this -- this is -- no longer
16 will be true when you start to see the expected rate
17 increases in the future. And so Manitoba Hydro will
18 not have low electricity prices forever and it will not
19 be the -- overwhelmed by the effect of those other
20 factors.

21 Slide 32, continuing on price
22 elasticity, page 19. In -- in 2012, the model
23 incorporating the price of gas price -- gas to price of
24 electricity ratio predicted a decline in the percentage
25 of new electric heat customers to the total number of

1 new customers, while the price of natural gas continued
2 to fall. However, the actual market penetration of
3 electric heat billed homes increased in 2011 and 2012.
4 This is a case where we really don't know enough about
5 the model that they were using to be able to say
6 whether or not their model was truly appropriate.

7 One (1) of the things that -- that we've
8 seen in looking at price elasticity is customer
9 behaviour doesn't always change the first year prices
10 change. So we've looked at lagged prices, so the
11 relationship between last year's prices and this year's
12 electricity consumption. Or -- or in this -- in this
13 case in terms of their choices for space heat or using
14 moving averages. And we don't know whether or not
15 those things were considered.

16 Slide 33, page 20. As well, price
17 increases on higher starting prices which results in a
18 greater absolute expense to a consumer may result in
19 higher price elasticity than in jurisdictions with low
20 and stable electricity prices. This is entirely
21 possible, but it could also result in a lower price
22 elasticity if the starting price is high enough.

23 The starting price -- if the price of
24 electri -- electricity is very high, you, to a great
25 degree, already squeezed out any behaviour changes or

1 anything that the customers can do to reduce their --
2 their consumption. And they're already using pretty
3 much just essential loads at that point, so you're not
4 going to see a lot of price elasticity for very high
5 prices.

6 For very low prices, I would expect a
7 similar result in that an increase in price if price is
8 very -- if electricity is very, very cheap is probably
9 not going to be enough to -- to change things. But as
10 we're expecting here, we're going to be transitioning
11 from a low price to a higher price. As you get into
12 those higher prices in the future, you're not going to
13 have -- you're going -- you're going to start to get to
14 the point where people are going to hit that trigger
15 and make those changes. And --

16 DR. HUGH GRANT: Can I interrupt for a
17 moment?

18 DR. DOUGLAS GOTHAM: Yes.

19 DR. HUGH GRANT: I think we know that
20 price elasticity varies along a stable demand curve.
21 Would that be correct?

22 DR. DOUGLAS GOTHAM: I'm sorry, could
23 you repeat that, please?

24 DR. HUGH GRANT: Price elasticity is
25 different along a stable demand curve. Depending where

1 you are on a demand curve, the price elasticity
2 differs.

3 Would that be correct?

4 DR. DOUGLAS GOTHAM: Yes.

5 DR. HUGH GRANT: And so you're saying
6 now that at a high price, demand tends to be more
7 inelastic or elastic?

8 DR. DOUGLAS GOTHAM: At a very high
9 price, demand tends to be inelastic. At a very low
10 price, demand tends to be very inealstic. It's in
11 between where you start to see the elasticity.

12 DR. HUGH GRANT: You must have a -- an
13 oddly shaped demand curve.

14 DR. DOUGLAS GOTHAM: You have to think
15 in terms of long-term elasticities as opposed to short-
16 term elasticities.

17 DR. HUGH GRANT: I'm just asking along
18 a -- take a straight line, stable demand curve, point
19 in time, if you moved along it, the elasticity would
20 change, correct?

21 DR. DOUGLAS GOTHAM: That is -- yes.

22 DR. HUGH GRANT: And as I move to a
23 higher price, the elasticity would get greater or
24 smaller?

25 DR. DOUGLAS GOTHAM: I'm -- that's the

1 difference between a short-term elasticity and -- and a
2 long-term elasticity.

3 DR. HUGH GRANT: I'm just moving along
4 an existing demand curve.

5 DR. DOUGLAS GOTHAM: And that's -- and
6 in the long term, the demand curve is not a stable one
7 (1) spot. It changes.

8 DR. HUGH GRANT: Okay. I -- I would
9 think your -- in your response to this, you should
10 think about a change in a dema -- the shift of a demand
11 curve moving along a demand curve.

12 DR. DOUGLAS GOTHAM: Thank you, sir.

13 THE CHAIRPERSON: I'm trying to
14 reconcile the earlier long-term price elasticity of
15 point seven (.7) with the statement you just made about
16 a shift in elasticity as you get out to higher prices.

17 Do you have a -- like long term in --
18 long term when referring to point seven (.7) is what
19 time frame?

20 DR. DOUGLAS GOTHAM: For me, long-term
21 elasticity refers to a time frame that's long enough to
22 incorporate changes in -- not specifically to
23 behaviour, like, I'm going to adjust my thermostat, as
24 it is to changes in my purchase of -- of end-use -- or
25 electricity-using devices.

1 So it's long enough that I capture the
2 decision to use a higher-efficiency water heater
3 instead of a -- a standard-efficiency water heater, or
4 -- or the -- the change to increase the insulation
5 level in my home due to higher prices.

6 And so for those types of things we're -
7 - and what we focus is on is the years, the multiple
8 years situation. A short-term elasticity is more of a
9 behavioural change; turn -- turn my lights off, and --
10 or -- or change my thermostat setting in -- in my home.
11 And -- whereas long term captures more of the -- the
12 long term purchasing decisions that the person -- that
13 the customers make.

14

15 (BRIEF PAUSE)

16

17 DR. DOUGLAS GOTHAM: Moving to slide
18 34, in MH-87, slide 12, indicates that Manitoba Hydro
19 will consider incorporating price elasticity in the
20 next forecast, and I applaud them for that. I think
21 that's the right way to go.

22 Included in that slide were -- was an
23 estimated impact of 500 to 600 gigawatt hours that
24 represents an elasticity --I -- I shouldn't say of less
25 than; I -- I apologize -- of zero point zero (0.0) --

1 negative point zero five (.05) to zero point (0.) --
2 negative zero point zero five six (0.056), which is on
3 the low end of what we have seen in other
4 jurisdictions.

5 And I understand that these numbers are
6 not being proposed by Manitoba -- Manitoba Hydro.
7 They're just being used essentially as an example. It
8 -- it -- I think it's worth noting that if the
9 elasticity is higher you're going to see a greater
10 reduction. For instance, using a price elasticity of
11 minus zero point four (0.4), which was the price
12 elasticity that the Brattle Group embedded in their
13 export price model, that would indicate a load
14 reduction of about 4,000 gigawatt hours rather than
15 five hundred (500) to six hundred (600).

16

17 (BRIEF PAUSE)

18

19 DR. WAYNE SIMPSON: Without getting
20 into an academic discussion, as much as we might want
21 to, I think -- Dr. Grant made a point about the -- the
22 elasticity along a linear demand curve, which does
23 change. It gets bigger as you move up the curve,
24 right.

25 But I think what Dr. Gotham is referring

1 to is making sense of actual estimates of elasticity
2 where probably a variety of functional forms have been
3 tested, and -- and the estimates have been produced,
4 and there's no presumption there that the -- that the
5 demand curve is -- is linear.

6 But we're trying to make sense of
7 different estimates of elasticity for different
8 jurisdictions. I -- I don't know if there's a
9 literature that actually looks at the question of
10 whether the elasticity estimates are higher in the
11 intermediate range than they are at the top end and the
12 low end, but I think that was the nature of -- of his
13 comments. He wasn't postulating a linear demand curve,
14 or trying to work from that construct.

15 DR. HUGH GRANT: I'm just going to make
16 a simpler point. In deriving a price elasticity, the
17 absolute price matters. So the absolute price in
18 Manitoba tends to be lower than the absolute price in
19 Minnesota, or somewhere else. And so if you had (sic)
20 a same percentage increase in the price in the two (2)
21 regimes, ceteris paribus, I have less substitution
22 possibilities.

23 You know, the low -- because electricity
24 is so cheap here, that the 1 percent increase isn't
25 probably going to induce me to undertake a lot of

1 substitution choices. Where in a place where
2 electricity is of higher price, then suddenly the --
3 there's a lot of other substitutes that become quite
4 viable, and so that you expect a greater price
5 elasticity in that situation.

6 And, so I think -- I'm even going back
7 to slide 31. I think the point being made there, that
8 absolute price matters in terms of a price elasticity.
9 So taking -- yanking a price number out of another
10 jurisdiction and assuming it applies in Manitoba
11 probably would not be appropriate.

12 DR. WAYNE SIMPSON: Yes. But the what-
13 if scenario we're looking at is an 80 percent real
14 increase in electricity prices forecasted in the NFAT,
15 and they're, I think, choosing estimates that are
16 gleaned from jurisdictions with higher prices of
17 electricity would be appropriate. In other word -- and
18 in fact, ones from very low --

19 DR. HUGH GRANT: Maybe --

20 DR. WAYNE SIMPSON: -- prices elsewhere
21 would probably not be -- it would be less appropriate.

22 DR. HUGH GRANT: Maybe in twenty (20)
23 years.

24 DR. WAYNE SIMPSON: Well, we're looking
25 forward in -- in the load forecast, yes.

1 DR. DOUGLAS GOTHAM: Moving on to slide
2 35. On page 25, Manitoba agrees that a perfectly
3 accurate forecast is unattainable, and as such,
4 presents a forecast created to be a midpoint of the
5 potential range of variability. The expectation is
6 that there will be a 50 percent chance that actual
7 growth will be higher than the forecast, and a 50
8 percent chance that it will be lower.

9 And I agree entirely with the statement,
10 that a perfectly accurate forecast is unattainable, and
11 I think it's entirely appropriate to try to produce a
12 forecast that has a 50 percent chance that growth will
13 be higher and 50 percent that it'll be lower, but it is
14 our opinion that they have failed to -- to produce such
15 a forecast here, specifically with respect to the price
16 elasticity.

17 In order for that statement to be true,
18 there would have to be an equal probability that the
19 price elasticity would be positive as there is that the
20 rest of the price elasticity would be negative. That
21 means that there's a equal chance that an increase in
22 price would result in more consumption as opposed to
23 less consumption in order for that to be a true 50/50
24 forecast without any price elasticity.

25 DR. HUGH GRANT: Could I ask you if you

1 -- have you read Stevens and Simpson, the paper
2 presented two (2) days ago?

3 DR. DOUGLAS GOTHAM: I have not.

4 DR. HUGH GRANT: I'm just going to
5 suggest, sorry to belabour this point, we only have
6 till 5:00, but in Model B of the evidence presented a
7 couple days ago, in -- in my calculation, using their
8 numbers, a 2 percent price increase amongst high-income
9 families leads to a 3.3 percent increase in total
10 electricity consumption, which would imply an upward
11 sloping demand curve and -- and -- so.

12 Mine might be wrong, but it -- it'd be
13 worth checking.

14 DR. WAYNE SIMPSON: I -- I have read
15 Stevens and Simpson, so I -- so I'd like to respond.
16 The -- the problem here is that that's not consumption.
17 That's percentage share of expenditure.

18 DR. HUGH GRANT: Over a fixed income?

19 DR. WAYNE SIMPSON: That's right. But
20 -- well, over an inco -- over an income range, because
21 the -- the hou -- household range, they have income
22 there is quite large, but --

23 DR. HUGH GRANT: But of average
24 consumers, or?

25 DR. WAYNE SIMPSON: But that doesn't --

1 that -- that doesn't imply that the demand curve slopes
2 upward. That implies that if -- if the price goes up,
3 that the reduction in consumption is not enough to
4 offset the price increase so that your actual
5 expenditure goes up.

6 DR. HUGH GRANT: Okay. We'll -- we'll
7 discuss this at a later time.

8 DR. WAYNE SIMPSON: Who's -- who's
9 buying the beer?

10 DR. DOUGLAS GOTHAM: So the -- the
11 summary for the load forecast discussion is that we
12 feel that Hydro's forecasting methodology lacks clarity
13 and consistency, which makes it difficult to evaluate.
14 We feel that Hydro relies on nonstandard methods for
15 some components, and overly simplistic assumptions for
16 others, for instance, that the number of customers per
17 household will not change through time, and the lack of
18 price elasticity introduces an upward bias in the
19 forecast.

20 MR. BYRON WILLIAMS: Dr. -- Dr. Gotham,
21 I -- I hope we've escaped without further questions on
22 price elasticity for the -- the moment. I -- I think
23 we can get you to turn to your discussion of export
24 revenues, although I'm not -- we're always happy to
25 answer questions from the panel.

1 DR. HUGH GRANT: I wonder if we could
2 just finish the discussion, at least the questions I
3 have.

4 MR. BYRON WILLIAMS: Please feel
5 welcome.

6 DR. HUGH GRANT: Thank you, Mr.
7 Chairman. I -- I take, I think, the key points here,
8 and one (1) would be that it would have been useful to
9 run some different demographic and economic scenarios.
10 I'm -- I'm less convinced on -- it's unfortunate that
11 there weren't some better efforts to estimate price
12 elasticities and income elasticities in the model, but
13 I'm kind of inclined to accept the view that Hydro has,
14 that these are probably pretty inelastic in a lot of
15 ways, and we can debate that on and on.

16 But I think the main concern we had --
17 sorry, I had and I think some panel members had, and it
18 was in the Elenchus report as well as what Hydro had
19 done, is that this whole nature of forecasting and the
20 sort of conservative nature of econometrics, where
21 you're taking the experience of the recent past and
22 trying to forecast in the -- into the future.

23 And I'm just coming back to panel member
24 Kapitany's point is that what we've been facing, and
25 especially yesterday, was talk about game-changing

1 technologies. So how -- you know, and -- and we can't
2 treat these as complete uncertainties, but how in the
3 world are we supposed to -- to deal with these things
4 in terms of load forecast?

5 And so it seems like what you presented
6 to us is, Let's -- let's do a load forecast assuming
7 the world's not going to change, you know, the -- all
8 these relationships are going to be the same, and this
9 will be demand. And what's really facing the panel as
10 an issue is, What's the likelihood of this game-
11 changing technology coming along and throwing all this
12 stuff out the window?

13 And so the only thing -- I guess my
14 question, and I should probably pose it that way, is in
15 terms of forecasting and economic results.

16 One (1) thing that Mr. Dunsky did
17 yesterday was to take, for example, the rate of decline
18 in the price of solar technology, and just project
19 those forward, and assuming, then, that that rate of
20 inviddid -- innovation's going to maintain itself, and
21 then using that as a way of forecasting, when, in fact,
22 off-grid type of technology might come in, and then the
23 idea that we should be building that sort of thing into
24 a load forecast.

25 Is that done in the kind of forecasting

1 models you've seen, and should it be, and can it be?

2 DR. DOUGLAS GOTHAM: I -- I would say
3 attempts have been made to do that, and I think it
4 should be. It's not easy, and it's -- it's easy to
5 either overcount or undercount when you come to the --
6 the impact of -- of the game -- game-changing
7 technologies that will -- may take -- take folks off
8 the grid, for instance, the -- the idea that -- that
9 customers will self-generate.

10 And it's a -- it's an issue that we face
11 in Indiana, because ten (10) years ago, we were in your
12 shoes. We had, in the early 2000s, the fourth or fifth
13 lowest electricity prices of any state in the -- in the
14 union, and we're now in the mid-twenties (20s), and we
15 are seeing customers, particularly some of our large
16 industrial customers, looking at the option of self-
17 generating rather than buying from their local utility.

18 And so how do you incorporate that into
19 a forecast? If you -- you're in the situation like we
20 are where we've actually seen some increase in self-
21 generation, an econometric model's going to capture
22 some of that -- that trend, but if you expect that to -
23 - to accelerate going forward, it's -- it's not unless
24 you force it to.

25 So it really comes to what adjustments

1 do you make, either to the model structure and the
2 model inputs, or even after the model has run, in order
3 to try to capture that stuff? And it -- and it
4 basically comes into trying to -- to put your thumb on
5 the mo -- on -- on the scales to the right level to
6 make that -- the forecast model come out in -- in the
7 direction that you feel is right.

8 DR. HUGH GRANT: Sir, my last point,
9 though, in the absence of doing some kind of projection
10 of -- of assuming that innovation will continue, at
11 least, so that prices of things like solar panels will
12 get cheaper and cheaper and cheaper and -- and off-grid
13 technology becomes more and more viable, in the absence
14 of doing that, then, you would agree that any load --
15 if you -- if you don't do that, your load forecast is
16 going to overestimate, systematically overestimate
17 demand.

18 DR. DOUGLAS GOTHAM: For -- for that
19 particular game-changing technology, yes. There are
20 potential game-changing technologies that would go in
21 the other direction, and I'm thinking in terms of, say,
22 plug-in vehicles.

23 DR. HUGH GRANT: Right. Okay.

24 MR. DOUGLAS GOTHAM: You know?

25 DR. HUGH GRANT: Good point. Thank

1 you.

2 DR. WAYNE SIMPSON: Just -- just to
3 comment on that, the estimates of consumer response
4 here are all inelastic. That is, they're less than one
5 (1). So the question is, how inelastic is consumer
6 demand?

7 In the Hydro reports, the -- you know,
8 not very responsive is basically no response at all.
9 Point oh-five (.05) is basically zero. I think point
10 five (.5) is reasonable in the light of what we've
11 observed elsewhere.

12 It probably is fairly limited in terms
13 of its horizon, but it -- it's limited in the sense
14 that, if there are game-changing technologies, and
15 they'll be driven not only by the prices of those
16 technologies, but the price of the alternative, which
17 is electricity. Then that'll -- that'll -- response is
18 going to go up, and that's going to increase that
19 perceived elasticity, unless you incorporate the prices
20 of other energies, which, as I said, there's less
21 information on that. It's harder to predict, and
22 that's why I -- I didn't do it.

23 But I think -- I think, in fact, from
24 what you've said, I'm being conservative, looking
25 forward in the sense that these -- these switches would

1 make the consumer more responsive rather than less.
2 With the exception, as -- as Dr. Gotham said, that
3 there are some other things to consider, too, like
4 electric vehicles. We don't know much about that
5 technology and how much it's going to penetrate either.

6 DR. HUGH GRANT: My last point, just to
7 end on a point of -- and I assume you're speaking as
8 Gotham and Simpson now, and not Stevens and Simpson,
9 and I'll leave it at that?

10 DR. WAYNE SIMPSON: Yes.

11 MR. BYRON WILLIAMS: And Board member
12 Grant, I didn't mean to preempt your questions. I
13 apologize if I gave that impression, so.

14 Dr. Goth -- Mr. Chair, does the panel
15 need a -- a break, or can -- would you like us to
16 proceed?

17 THE CHAIRPERSON: I'm trying to canvass
18 the panel members as you were speaking. So I just want
19 -- probably a good idea to take --

20 MR. BYRON WILLIAMS: A five (5) minute
21 --

22 THE CHAIRPERSON: -- a very quick
23 break, because we have limited time today, but let's
24 take a quick -- we've been sitting for over an hour
25 now, so.

1 --- Upon recessing at 4:03 p.m.

2 --- Upon resuming at 4:15 p.m.

3

4 THE CHAIRPERSON: I apologize for the
5 delay. I just wanted to mention before we start the
6 proceedings that tomorrow morning, we're slated to
7 begin at that -- ten o'clock, and accessing the
8 building may be a bit of an issue because of enhanced
9 security during weekends, so it, like -- you will have
10 to go to the front door of the building and likely have
11 to sign in. So -- and then the -- the elevator might
12 be a bit iffy, but there will be a security guard on
13 the main floor, and that individual will be able to
14 assist you if the elevator is out of commission.

15 But coming to this floor, somebody will
16 be here. So just bear with us, because it's unusual
17 for us to have proceedings on a Saturday, although it
18 may become a habit in the future. So -- so just bear
19 with us while we get through those logistical issues
20 tomorrow. So back to you, Mr. Williams.

21

22 CONTINUED BY MR. BYRON WILLIAMS:

23 MR. BYRON WILLIAMS: Yes. And -- and
24 thank you, and -- and, Dr. Gotham, before we turn to
25 export revenues, you've heard reference to the

1 discussion of Mr. -- Mr. Dunsky yesterday in terms of
2 grid parity and solar voltaic, and -- and other issues.

3 Can you characterize, based upon your
4 twenty-two (22) years of experience in this field, the
5 level of uncertainty you observe in -- in the
6 marketplace?

7 DR. DOUGLAS GOTHAM: Well, we see -- or
8 I guess I should speak for myself. I see a fairly high
9 degree of uncertainty. In -- in load forecasting,
10 there's always uncertainty, and there always has been,
11 but in the -- right now, it's -- it's probably higher
12 than it's been in the -- in the past.

13 I -- I mentioned that one (1) of the
14 factors leading up to the formation of my group was the
15 -- the switch between that very high rate of growth we
16 saw back in the '60s of 6 to 8 percent, and going --
17 and then going, forward not seeing that growth rate.
18 What we saw in the mid '70s and early '80s was
19 essentially a paradigm shift in the relationship
20 between the -- the economy and -- and electricity use
21 in Indiana.

22 We went from 6 to 8 percent per year to
23 two (2), two and a half (2 1/2), sometimes 3 percent a
24 year pretty consistently from the late '80s through the
25 mid 2000s. And the -- the drivers, to me, behind that,

1 were we were coming out of a period of -- of high
2 energy prices, with the oil embargos, the -- the energy
3 crisis of the '70s, followed by a significant
4 recession.

5 Right now, we are coming out of a period
6 of high energy prices followed by a very significant
7 recession, and I think we're -- we're in the middle of
8 that paradigm shift. So the next question is: Where
9 is the new normal? And we're getting to the point
10 where we're coming out of the recession. We may have
11 some -- a -- a better idea than we would have two (2)
12 years ago, but there's still significant uncertainty in
13 terms of what the new normal is for load growth and
14 that relationship between economic growth and load
15 growth.

16 MR. BYRON WILLIAMS: Thank you.
17 Perhaps we can turn to CAC Exhibit 66, please.

18 DR. DOUGLAS GOTHAM: Okay. I'm going
19 to speak about my review of the export price forecast,
20 going to slide 2. Due to the -- to its competitively
21 sensitive nature there wasn't -- was -- was very little
22 information available in regard to the actual export
23 price forecast that -- that Hydro was using and the
24 assumptions behind the forecast.

25 Thus, it was not possible for me to draw

1 definitive conclusions when I reviewed the -- the
2 export price forecast, so I focussed on aspects that
3 were available rather than crying about the stuff that
4 I didn't have. This is largely the supplemental
5 information that was included by Hydro in its NFAT
6 filing, as well as information that was provided
7 specifically regarding the Brattle Group export price
8 forecast. The other five (5) consultants that went
9 into the consensus forecast were not available.

10 Potential areas of concern that I saw in
11 the Hydro supplemental information was the issue of
12 whether or not transmission congestion was being
13 incorporated. Hydro is looking to sell into a -- a
14 region within MISO that has difficulty exporting power
15 to the rest of -- of MISO, because of -- of limitations
16 on the transmission system. So congestion occurs
17 between the Minnesota Hub area and the rest of MISO
18 that has -- can have a detrimental effect on the price
19 that they would be -- that Hydro would be receiving
20 when they sell power.

21 Another potential issue that I saw in
22 the supplemental information was the projected load
23 growth in the export region. And finally, the
24 inclusion of -- of carbon costs in the -- in the price
25 forecast.

1 Looking at transmission congestion, it
2 can be significant in that it shrinks the size of the
3 market essentially. If you can't get power out of the
4 Minnesota region, then the market largely, for the most
5 part, becomes just the Minnesota region, not all of
6 MISO.

7 It also reduces the price that Hydro
8 receives from the exported energy. There are a number
9 of public -- different public sources that indicate
10 that there is transmission congestion between the
11 Minnesota Hub and the rest of MISO. You see it if you
12 look at historical market prices. The -- the MISO
13 transmission planning process itself, what they refer
14 to as MTEP, is -- also indicates that there is
15 transmission congestion between Minnesota and the rest
16 of their system. MISO's independent market monitor's
17 state of the market report indicates that there is
18 congestion in that region, as well as the Federal
19 Energy Regulatory Commission.

20 One (1) of the things I did to look for
21 an additional indication of how often congestion is
22 affecting market prices was I looked at daily market
23 price indices published by Megawatt Daily that provide
24 prices for four (4) hubs in the MISO region: the
25 Minnesota, Michigan, Indiana, and Illinois hubs. And I

1 compared those individual daily hub -- hubs both for
2 on-peak and off-peak prices to see if there was a
3 substantial difference between the Minnesota Hub price
4 and the rest of the hubs. So if there is -- if the
5 Minnesota Hub price is below the -- the other two (2)
6 hubs, then there may be a -- a congestion issue.

7 That -- that could also be -- if the --
8 if the difference is small that could be explained
9 simply from transmission losses in trying to get power.
10 So there'll be a price difference there. And so I used
11 a threshold here of 10 percent. So anytime the one (1)
12 of the hub prices was either 10 percent higher than the
13 other three (3), or 10 percent lower than all the other
14 three (3), I flagged it.

15 And as this graph shows, for the -- the
16 time period analyzed here, April through December, over
17 35 percent of the time on the off-peak index, Minnesota
18 -- the Minnesota hub price was more than -- was at
19 least 10 percent less than any of the other three (3).
20 And that indicates to me that there is congestion
21 occurring at that because you wouldn't expect
22 transmission losses to create that big of a price
23 difference.

24 Looking at load growth, in the
25 supporting information Hydro provided load growth

1 forecasts that I feel may be inappropriate for the
2 region that they're selling into. They provided a US
3 national load growth projection from EIA of 0.9
4 percent.

5 If you look at that -- the -- the
6 specifics of that projection, if you look at the east
7 north central region, which includes Wisconsin, and the
8 west north central region, which includes Minnesota,
9 those projections are much lower for those regions.
10 And a higher load growth projection will result in
11 higher export prices.

12 Looking at carbon costs, their
13 supplemental information includes cost associated with
14 restrictions on carbon dioxide emission. There is
15 considerable uncertainty as to if, when, and to what
16 degree some form of carbon restriction will be posed on
17 the Midwest. And if they don't materialize, export
18 prices and revenues will be significantly reduced.

19 Now, as I mentioned, I'm looking here
20 specifically at their supplemental information. I
21 don't know whether or not that informat -- that
22 information -- or that -- those assumptions or some
23 assumption similar to it was included in the export
24 price forecast, with the exception of the -- the
25 Brattle Group, where some of that information is

1 available.

2 So I -- I'm just pointing out that if
3 the -- if the supplemental information is indicative of
4 what went into the export price forecast, I think there
5 are problems. If it's not, then I don't -- I -- then I
6 don't know.

7 Referring to the uncertainty of carbon
8 costs, you've heard Potomac refer to two (2) reference
9 prices, one with and one without carbon costs. They
10 and MNP estimated the likelihood of carbon pricing to
11 be 50/50. The inclusion of these carbon costs in the
12 individual consultant forecasts are not available, so I
13 don't know what was -- what was in their -- their
14 forecast.

15 And I'm not necessarily saying that
16 carbon costs won't happen. I don't know if we'll have
17 carbon costs, but if we don't and we're counting on it,
18 we've got problems.

19 THE CHAIRPERSON: Just to make sure the
20 record is correct, I don't know that Potomac estimated
21 50/50 on carbon pricing. I think they accepted MNP's
22 forecast as being what they would use for their
23 calculation. So maybe you know otherwise, Mr.
24 Williams, but I just want to make sure that the record
25 is clear because I don't know that Potomac provided us

1 with a clear estimate.

2 MR. BYRON WILLIAMS: Certainly, Mr.
3 Chair, we interpreted Potomac's evidence to say that
4 they had two (2) futures which they consider to have
5 equal likelihood, one (1) with a carbon future and one
6 (1) without a carbon future. But again, I -- I think
7 we'll -- we'll certainly take your guidance and go back
8 to the record.

9 THE CHAIRPERSON: Yeah, we'll have to
10 go back to the record. I think that my recollection is
11 they accepted MNP's, but --

12 DR. DOUGLAS GOTHAM: In -- in their --

13 THE CHAIRPERSON: -- disputed though,
14 but...

15 DR. DOUGLAS GOTHAM: In their -- their
16 report they actually had four (4) price trajectories:
17 two (2) with carbon, two (2) without. And they had a
18 20 percent likelihood on one (1) of the carbon futures,
19 a 30 percent likelihood on another one of the carbon
20 futures, and then a 20 and a 30 for the no carbon
21 futures.

22 So I think we can -- from the math
23 behind that --

24 THE CHAIRPERSON: That's agreed. We'll
25 go back to the record and clarify that point.

1 DR. DOUGLAS GOTHAM: Thank you. In
2 terms of the likelihood of -- of carbon restrictions,
3 from my experience, I think that the likelihood of the
4 Midwest region imposing their own carbon restrictions
5 is very small. Much of the Midwest is -- relies on an
6 industrial-based economy that needs competitive
7 electricity prices in order to be economically
8 competitive. If we lose those prices, as, you know, I
9 -- I mentioned we're kind of in the middle of the pack
10 now, if we impose our -- in Indiana at least, if we
11 impose a -- a cost on top of that, we're going to put
12 ourselves in a -- a competitive disadvantage. Our
13 former governor put an op-ed in the -- the Wall Street
14 Journal to the -- that effect, stating that his -- his
15 opposition to -- to our carbon cap and trade.

16 THE CHAIRPERSON: Was he a Republican?

17 DR. DOUGLAS GOTHAM: Yes. In -- in the
18 interest of full disclosure, he is now my boss, because
19 he's the president of Purdue University, so.

20 MR. BYRON WILLIAMS: Doc -- Dr. Gotham,
21 you're not necessarily accepting his characterization.
22 You're -- you're portraying the political cri --
23 climate, I'll suggest to you.

24 DR. DOUGLAS GOTHAM: Oh, yeah. I'm --
25 I'm not -- I'm not trying to -- to say whether or not I

1 think there should be a carbon tax or cap in trade.
2 I'm just looking at the -- the -- what -- what I see as
3 the -- the reality of the -- the opinions of -- in --
4 in the region.

5 So absent the Midwest taking it upon
6 themselves, what are -- what is the -- the factors
7 affecting whether or not the fed -- there will be
8 federal action? Which I think, if it's going to
9 happen, that's how it's going to happen.

10 As I'm sure you're -- you've been made
11 aware, the US Environmental Protection Agency is
12 expected to release proposed performance standards for
13 existing generation this summer. Those standards will
14 be an ini -- initially, they'll be the -- the proposed
15 standards. They'll go through a fairly lengthy comment
16 period, come up with finalized standards, which
17 probably won't happen until sometime next year, and
18 then that's when the court challenges will start to
19 take place, assuming Congress doesn't step in, in the
20 meantime and do something directly themselves.

21 They're currently -- there is little
22 indication that Congress will do something in the
23 current climate, the divided Congress we have doesn't
24 seem to be able to agree on much of anything, and
25 certainly not agreeing on -- in terms of doing

1 something in terms of a -- a climate legislation.

2 Furthermore, the Obama administration is
3 on the record as saying that they're not proposing a
4 carbon tax. I don't think until -- unless something
5 shakes out completely different, probably not until the
6 2016 election cycle, I don't think we're -- we're
7 likely to see much coming out of the -- the -- out --
8 out of Congress in terms of any type of Con -- climate
9 legislation.

10 So why are carbon costs important, and -
11 - and I must apologize to Mr. Williams. This is slide
12 11. So looking at the Brattle Group's base in low CO2
13 cases, and their low CO2 case is actually a no CO2
14 case, inclusion of moderate CO2 costs will result in an
15 increase of thirteen (13) to fourteen (\$14) per
16 megawatt hour in the export price. From the opposite
17 perspective of what -- what happens if they don't
18 happen, the price of exports would be about twenty (20)
19 to 25 percent lower, and that's based on both the --
20 the Brattle Group's modelling, as well as the Potomac
21 modelling.

22 Furthermore, La Capra indicated that the
23 results of having no costs for carbon are significant
24 with the Preferred Development Plan benefits versus
25 all-gas, dropping by about \$340 million. So carbon

1 costs matter, and whether or not they happen will have
2 a big impact on what those export prices -- export
3 prices will be and the revenue that would be received
4 from them.

5 The next thing I did after looking
6 through those -- those three (3) issues for the
7 supplemental information was to do a comparison of the
8 export price forecasts that I had available to me. In
9 this case, I'm looking specifically at three (3)
10 different sources. The one labelled MTEP-12 is the --
11 is the Midcontinent ISO's transmission planning process
12 from 2012, in which they per -- they published hourly
13 price information at various locations within their
14 system for three (3) different: 2017, 2022, and 2027.

15 I also looked at the Brattle report and
16 the Potomac report, essentially estimating these
17 numbers as best I could from the -- the graphs that
18 were in the report. I don't have the numbers behind
19 them, so.

20 And what I -- what -- the -- the first
21 one of these two (2) tables shows what they refer to as
22 their -- their base or reference or business-as-usual
23 case, but these -- these -- in some cases, these aren't
24 really directly comparable. For instance, the MTEP-12
25 does not have any carbon costs in their reference case.

1 So the bottom one looks at something
2 that I feel is -- while it's not a perfect match, is a
3 much more comparable set of -- of numbers, and you can
4 see that, in this case, the MTEP numbers and the
5 Brattle Group numbers are very close together, and the
6 Potomac numbers are slightly below that.

7 So this gives me at least some
8 confidence that we're -- that the Brattle Group numbers
9 are in the range of what we're seeing from other
10 sources.

11 I should note that the -- the -- some of
12 the assumptions, in terms of things like load growth
13 for the MTEP analysis, was more robust than what was in
14 the Brattle numbers, so that would create some
15 difference if they were on a truly equal basis, and
16 their pricing point was a little bit different, but I
17 don't think it's enough to be that -- that significant.

18 MR. BYRON WILLIAMS: Dr. Gotham, before
19 you leave this slide, just to make sure we -- when
20 we're looking at the -- the -- what you would charac --
21 appear to characterize as an apples-to-apples
22 comparison on the bottom, we're seeing basically the --
23 the no-carbon or -- or low-carbon scenarios in -- in
24 all three (3) situations.

25 DR. DOUGLAS GOTHAM: That is -- that is

1 correct, and -- and I'm not -- I didn't pick that in
2 order to somehow indicate that I think we should only
3 be looking at a no-carbon scenario. It's the one that
4 has the -- the most direct comparison between the three
5 (3).

6 The only -- of -- of the four (4)
7 scenarios that MISO included in the MTEP process, the
8 only one that includes carbon is kind of a kitchen sink
9 approach, where they throw in a bunch of other things
10 as well, and so it's not really a very comparable
11 numbers to use compared to the -- the Brattle or
12 Potomac numbers that do -- that also include carbon.
13 So I -- that -- the rea -- only reason for -- for
14 choosing that was because it was the most comparable
15 set.

16 So my, essentially, take-away from the
17 Brattle price forecast is I felt that the assumptions
18 in the Brattle forecast regarding congestion and load
19 growth in the export region are appropriate. I thought
20 they were -- that the congestion numbers they were
21 getting was -- it was similar to -- were similar to
22 what I was seeing in looking at the actual historical
23 market prices.

24 The load growth numbers that they
25 included in their model were similar to what EIA was

1 projecting at a regional basis rather than a national
2 basis. I'll note that the Brattle forecast does
3 include carbon costs that may or may not happen in the
4 future.

5 The Brattle forecast is consistently
6 above the Potomac forecast, but similar to the MISO
7 MTEP prices, especially when you consi -- compare
8 similar carbon assumptions.

9 So my take-away from that was that if
10 the Brattle forecast is actually representative of the
11 -- the consensus forecasts that -- that Hydro's using,
12 I feel that the forecast is in the range of reasonable.
13 If the foreca -- if the actual forecast is higher than
14 that, then there may be some cause for concern.

15 MR. BYRON WILLIAMS: Just before you
16 leave this slide, any -- any comments -- do you have
17 any comments about the relative transparency of the
18 Potomac information available versus the Brattle
19 information?

20 DR. DOUGLAS GOTHAM: Sure. The -- the
21 Potomac information was, I felt, was -- was --
22 certainly was more transparent than the Brattle
23 information. I thought Brattle was fairly transparent
24 in terms of the -- kind of the exogenous assumptions
25 that went into their model, what they assumed for

1 carbon, what they assumed for load growth, what they
2 used for price elasticity, and so forth.

3 There is very little, if any,
4 information about the model itself that's used, whereas
5 Potomac was -- was more open, in terms of what the --
6 the model itself was, so -- as well as the -- the
7 assumptions that went into it, the exogenous
8 assumptions.

9 MR. BYRON WILLIAMS: Thank you.

10 DR. DOUGLAS GOTHAM: So the next
11 section is looking at the rebuttal to the evidence.
12 And -- and page 97 it is -- the rebuttal indicates that
13 both Potomac and Gotham reports contain several
14 mischaracterizations.

15 And in this case, I think it's another
16 situation where Hydro may be lumping my analysis in
17 with -- with the -- the analysis of the independent
18 expert consultant. I don't think there are as -- there
19 -- there's very little in the rebuttal regarding what I
20 would consider any mischaracterizations, and I will go
21 to the -- the two (2) issues that I've -- I've located
22 here in -- in the up coming slides. They -- they state
23 that:

24 "The Gotham Report appears to assume
25 that the indicative macro level US

1 electric load growth statistics
2 outlined in Chapter 3 of the NFAT
3 filing were provided by Manitoba
4 Hydro to each price forecast
5 consultant as a required input."

6 And that is false. The report clearly
7 states that. I won't bore you by reading the -- the
8 citation from the quote essentially, but what this says
9 is we -- I stated up front, I don't know what's in
10 their forecast. And, so I'm only looking at this to
11 get an indication is -- if this is indicative, here are
12 the things to be concerned about. I'm not under the
13 assumption that those were -- that they were directed
14 to -- to use these -- that information.

15 Another section where they had issue
16 with our report refers to the -- the -- in the section
17 entitled 'Carbon price'. Looking at the carbon price -
18 - and they made the claim that the carbon price
19 embedded within the export price forecast is
20 reasonable, and that may or may not be true, but I
21 cannot make a determination based on the rebuttal
22 because it's -- it's too heavily redacted. I can't --
23 I don't know what's in there, so I can't -- I can't say
24 whether or not it -- it is reasonable or not.

25 On page 107, Hydro appears to take issue

1 with my use of such simple and subjective terms as
2 'significant' with regard to congestion. Yet, in their
3 own response to Information Requests, they use terms
4 such as 'minimal' and 'relatively minor' to indicate
5 the -- what -- the -- the impact of congestion. And I
6 don't really want to try to get into, I guess, a
7 semantic argument over whether it's significant or it's
8 minimal or relatively minor, but I don't believe that
9 the -- what we've seen has -- in his -- historically is
10 minimal or minor. And I certainly don't think that
11 what I've seen so far in 2014 is minimal or minor.

12 Looking at the -- the average weekly
13 price indices for those four (4) same hubs, this is
14 also from Megawatt Daily, for the year 2014, you've got
15 -- the first four (4) columns are the on-peak average
16 weekly indices, and you can see that Minnesota is the
17 lowest at fifty-one point seven seven dollars (\$51.77)
18 per megawatt hour, which is actually fairly high
19 compared to what we've seen, but we had a very extreme
20 winter that was -- put a lot of upward pressure on --
21 on prices in -- in MISO.

22 But to -- those numbers -- and this was
23 just on an average basis, are 12 to 27 percent lower
24 than -- on-peak than their counterparts. Off-peak it's
25 even more extreme. Minnesota being thirty-two dollars

1 and fifty-four (\$32.54) cents. That's 18 to 36 percent
2 lower off-peak than their counterparts.

3 And this is driven by the fact that you
4 can't get power out of Minnesota into those higher
5 priced regions when those -- when they're -- those
6 price differences occur. And so if you're in the --
7 the business of selling into the market, this was a
8 great winter to be in the business of selling into the
9 market, because the prices were high, but the folks
10 selling into Minnesota were not in a position to really
11 take advantage of those high prices, and so that --
12 this is the situation that -- that Hydro could see down
13 the -- down the road in those -- those periods when you
14 could really make some hay in the market. If
15 congestion stops that, you're not going to get the
16 revenue that you might otherwise.

17 Another recent development, and this was
18 just earlier this month, MISO released the results of
19 their 2014/2015 planning resource auction. So
20 essentially, in this case, utilities -- the -- the
21 utilities have a -- a planning resource requirement,
22 and they have to have a certain amount of -- of
23 resources available in -- in -- for the next year, and
24 a -- and then MISO takes bids and offers and determines
25 the -- the price at which those offers clear.

1 And the results show a much lower price
2 in zone 1, which is Minnesota, North Dakota, parts of -
3 - or in western Wisconsin, than they do in zones 2
4 though 7, which is the rest of the MISO central and
5 north area, and there's a -- a exhibit here...

6 MR. BYRON WILLIAMS: Diana, if you
7 could pull up, please, CAC Exhibit 67?

8 DR. DOUGLAS GOTHAM: And so this is --
9 this is from MISO's report on the planning resource
10 auction. I'll -- I'll draw your attention to the bul -
11 - the second bullet that says the auction produced
12 three (3) clearing prices. Local resource zone 1
13 cleared at three dollars and twenty-nine cents (\$3.29)
14 per megawatt-day. So essentially, if you're selling 1
15 megawatt of capacity for every day, you get three
16 dollars and twenty-nine cents (\$3.29) if you're selling
17 into that -- into that zone, which is the North Dakota,
18 Minnesota, western Wisconsin zone.

19 Zones 2 through 7 cleared at roughly
20 five (5) times that level, sixteen dollars and seventy-
21 five cents (\$16.75) per megawatt-day. The -- and zones
22 2 through 7 are the rest of the MISO north and central
23 regions. Zones 8 -- 8 through 9 cleared at almost that
24 level. That's the MISO south region.

25 The other points to be taken from here

1 is in that statement 1 on that second bullet, the
2 reason why the -- the price was low in -- in local
3 resource 1 was because of -- the capacity export limit
4 was binding. They couldn't get more capacity out of
5 that region to sell into the other regions, so the
6 price was depressed there relative to the rest of MISO.

7 MR. BYRON WILLIAMS: Dr. Gotham, I must
8 -- I'm not seeing that reference. I wonder if you can
9 just...

10 DR. DOUGLAS GOTHAM: Okay. It --
11 bullet 2 says the auction produced three (3) clearing
12 prices:

13 "Number 1) Local resource 1 cleared
14 at three dollars and twenty-nine
15 cents (\$3.29) per megawatt-day as its
16 zonal capacity export limit bound."

17 MR. BYRON WILLIAMS: Thank you.

18 DR. DOUGLAS GOTHAM: And so if we page
19 down one (1) slide, they give the -- the resource --
20 planning resource auction results, and you can see the
21 last row shows the auction clearing price of three
22 dollars and twenty-nine cents (\$3.29) in zone 1. I
23 find it particularly interesting that the row above
24 that shows the export limit from that zone into the
25 rest of them.

1 And you'll notice that one (1) of these
2 numbers is significantly smaller than the rest. The --
3 the zonal -- the export limit from zone 1 is only 286
4 megawatts compared to all the rest of them being in the
5 -- anywhere from one thousand three hundred and fifty
6 (1,350) up into the over four thousand (4,000) range.

7 So this is a indication here that there
8 is -- there are issues with getting power out of
9 Minnesota into the rest of -- of MISO. The -- there is
10 a -- the -- the last slide, we don't need to go there,
11 but the last slide does have a -- a list of acronyms,
12 so if you try to -- want to try to make sense of all
13 the LCRs and FRAPs and stuff like that, you're --
14 you're welcome to.

15 So if we could switch back to the
16 presentation. Thank you.

17 MR. BYRON WILLIAMS: And we're on slide
18 20?

19 DR. DOUGLAS GOTHAM: Right. And we're
20 switching to slide 21, reference to the -- the concept
21 of grid parity. You've heard discussion about grid
22 parity. Mr. Todd, from Elenchus, spoke about this, and
23 the concept of the domestic load forecast. But the
24 concept is also applicable to the export market, as
25 well.

1 If the -- the idea behind the grid
2 parity is that electricity prices increase and the cost
3 of customer-owned generation decreases, it becomes
4 economically competitive. Any further increases in
5 price to the customer will drive customers to generate
6 them -- for themselves.

7 You could see that happening, not only
8 in your domestic load forecast, but you could see that
9 happening in the export region. And it act --
10 essentially produces a cap on what the price in that
11 region could be, because if the price goes above that,
12 people will generate for themselves. So it's -- it's
13 another level of uncertainty when it comes to that --
14 that price forecast.

15 The level of the cap itself and when we
16 reach it really depends on the future cost of the
17 various self-generation options. So if photovoltaics
18 become cheaper, as -- as some believe they will, you
19 would -- you would start to see that impact. You could
20 also make the case for other technologies, fuel cells
21 and -- and things like that, which would allow
22 customers to generate for themselves.

23 In summary, the specific inputs and
24 results of the export price forecast are not public. I
25 feel there are some issues that -- that we need to be

1 aware of. The congestion issue may limit the amount of
2 energy that can be moved through the Minnesota region,
3 reducing prices.

4 The future load in the export region may
5 be lower than indicated by the supplemental
6 information. Now, I don't know whether or not that's
7 reflected in the -- the actual export price forecast or
8 not.

9 And then, finally, the existing timing
10 and magnitude of carbon costs represent a major source
11 of uncertainty.

12 MR. BYRON WILLIAMS: Mr. Chair, we're
13 ready to turn to another presentation. Just in terms
14 of -- I'm assigning some homework to ourselves in terms
15 of the Potomac carbon quotes. We will look at -- it's
16 not an undertaking, but March 31st, 2014, at page
17 4,389, page 4,459, page 4,460, 4,573, and 4,574. I'm -
18 - I'm told by brilliant researchers in the room other
19 than me, are the ones where those discussions take
20 place.

21

22 (BRIEF PAUSE)

23

24 MR. BYRON WILLIAMS: We're -- we're at
25 the -- the guidance of the Board. I'll indicate that

1 Mr. Harper estimates about an hour for his
2 presentation. I'm going to estimate about an hour and
3 fifteen (15) minutes, but in that range. So we'll --
4 we -- we are at the Board's -- whatever you -- you
5 direct us to do.

6 THE CHAIRPERSON: Well, we are time
7 constrained today, so we would -- we would be
8 adjourning, as I said earlier, at five o'clock. So my
9 inclination is to continue, but I think it'd be wise to
10 recess -- adjourn for the day right now.

11 And -- and hopefully you'll have a good
12 evening, those of you who are going to be resting. And
13 we'll see each other again tomorrow morning at ten
14 o'clock.

15 And a reminder -- I'm sorry, Mr.
16 Wojczynski -- Ms. Ramage, please?

17 MS. PATTI RAMAGE: Can we safely assume
18 then tomorrow begins at 10:00 and continues until we're
19 done? It'd be...

20 THE CHAIRPERSON: Until we drop, yes.

21 MS. PATTI RAMAGE: And Manitoba Hydro
22 has an exhibit that it can distribute. We can use the
23 last seven (7) minutes, if that's okay.

24 THE CHAIRPERSON: Yeah.

25 MS. PATTI RAMAGE: It's Manitoba Hydro

1 Exhibit 104. So it's more of that 104 economics
2 analysis. It's 14-2, supply and demand tables for Plan
3 14 and Plan 17.

4

5 --- EXHIBIT NO. MH-104: Supply and demand tables
6 for Plan 14 and Plan 17

7

8 MS. PATTI RAMAGE: And we will -- Plan
9 17, which -- the LCA hypothetical No New Generation
10 Plan.

11 THE CHAIRPERSON: Thank you. With
12 that, I think we're done. So we'll see each other at
13 ten o'clock tomorrow morning.

14

15 (PANEL RETIRES)

16

17 --- Upon adjourning at 4:53 p.m.

18

19

20 Certified correct,

21

22 _____

23 Cheryl Lavigne, Ms.

24

25

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