



“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
March 25, 2014
Pages 3502 to 3811

1 APPEARANCES

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4

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1 --- Upon commencing at 9:15 a.m.

2

3 THE CHAIRPERSON: Good morning,
4 everyone. Welcome to Manitoba Hydro's societal issues
5 panel. Before we get started, I would like to advise
6 the parties about the -- about some recently re-posted
7 independent expert consultant reports.

8 As you are aware, the Board is following
9 a process for the review of commercially sensitive
10 information, or what we call CSI. When the independent
11 consultant submitted their reports, they were provided
12 to Manitoba Hydro to determine which portions required
13 redactions. Following this review, certain portions of
14 the reports were blacked out. Since that time the
15 Board has initiated a principle review process to -- to
16 determine if any of the redacted information should be
17 made publically available.

18 The Board and Manitoba Hydro reached a
19 consensus with respect to the reports of Knight
20 Piesold, the initial reports filed by La Capra, and the
21 report from Meyers Norris, MNP. Those reports, which
22 now contain fewer redactions, have been re-posted on
23 the NFAT website. The Board has not been able to reach
24 an agreement with Manitoba Hydro regarding Potomac
25 Economic's report to date, but has requested a third-

1 party review process to be initiated. Once the outcome
2 of this process is known it will be communicated to all
3 the parties.

4 I also want to mention that on Friday
5 last, Manitoba Hydro sought clarification of the
6 Board's requested undertaking to provide the
7 uncertainty analysis related to the revised high
8 capital cost scenario for both Keeyask and Conawapa.

9 The Board would like to further clarify
10 that the comparison should not assume any change to the
11 gas plant costs for the comparative analysis. So, Mr.
12 Wojczynski, I hope that provides the clarification that
13 was needed.

14 MR. ED WOJCZYNSKI: Yes. Thank you.

15 THE CHAIRPERSON: So with that, I'll
16 turn the microphone over to Mr. Hombach.

17 MR. SVEN HOMBACH: Yes, good morning,
18 Mr. Chairman. Good morning, panel members. And good
19 morning to the Intervenors and to Manitoba Hydro and
20 its First Nation partners. Today's session is reserved
21 for Manitoba Hydro's panel dealing with societal
22 issues. Mr. Chairman, that presentation includes a
23 presentation by Manitoba Hydro's four (4) First Nation
24 partners in the development of Keeyask. And I would
25 suggest that you call upon the panel now. I'm advised

1 that they have been sworn in.

2 I understand that today they're being
3 represented by Mr. Bedford. Mr. Bedford...?

4

5 MANITOBA HYDRO PANEL 6:

6 KAREN ANDERSON, Unsworn

7 TED BLAND, Unsworn

8 NORMAN BRANDSON, Unsworn (Qual.)

9 JANE KIDD-HANTSCHER, Unsworn

10 SHAWNA PACHAL, Unsworn

11 IAN PAGE, Previously Sworn

12 MARV SHAFFER, Unsworn (Qual.)

13 VICTOR SPENCE, Unsworn

14 ED WOJCZYNSKI, Previously Sworn

15

16 EXAMINATION-IN-CHIEF BY MR. DOUGLAS BEDFORD:

17 MR. DOUGLAS BEDFORD: Again, good
18 morning, members of the Public Utilities Board. My
19 name is Doug Bedford. I am employed in the legal
20 department of Manitoba Hydro. And my purpose here
21 today and for the next two (2) days is to represent
22 Manitoba Hydro at this hearing.

23 I'm going to introduce you to each of
24 the persons sitting beside me in the first row and
25 behind me in the second row. I will then return and

1 give each of those whom you have not yet met at this
2 hearing an opportunity to tell you very briefly about
3 themselves, and why they have been selected to testify
4 here.

5 I will have a short series of questions
6 for two (2) of the gentlemen in the second row who are
7 testifying as expert consultant witnesses giving
8 opinion evidence. And then we will turn this over to
9 the entry, I think, of at least one (1) exhibit in the
10 hearing. And we'll have the new witnesses sworn in,
11 and then they can do their presentations for you. And
12 I think that will use up the balance of this morning.

13 So to my very far left, Mr. Victor
14 Spence is here for the next several days representing
15 the Cree Nation Partners. The Cree Nation Partners is
16 a partnership formed over a decade ago by Tataskweyak
17 Cree Nation, and Mr. Spence is, in addition, a member
18 of Tataskweyak Cree Nation and War Lake First Nation.

19 And I'm pleased to tell you, although
20 she is now sitting behind you because she's in the
21 public gallery, that the Chief of War Lake First Nation
22 is in the public gallery today, Ms. Betsy Kennedy. Mr.
23 Spence is currently the manager of future development
24 for particularly Tataskweyak Cree Nation.

25 Next to Mr. Spence sits Ms. Karen

1 Anderson. Ms. Anderson is a member of Fox Lake Cree
2 Nation. She is currently the director of operations --
3 excuse me -- of the Fox Lake Cree Nation negotiation's
4 office. I know that Ms. Anderson, for many, many years
5 has been committed to advancing the interests and
6 concerns of the members of Fox Lake Cree Nation.

7 Next to Ms. Anderson is Mr. Ted Bland.
8 Mr. Bland is currently a senior negotiator for York
9 Factory First Nation. He is also a member of the York
10 Factory First Nation, and he has served in the past as
11 the chief for his people at York Factory First Nation.

12 Next to Mr. Bland is Ms. Shawna Pachal.
13 Ms. Pachal has had a lengthy career at Manitoba Hydro,
14 and she is currently the division manager in the power
15 projects division. Mr. Wojczynski, I know that you
16 have met in previous weeks. It will be difficult for
17 you to see him, or her -- him at the moment, but
18 directly behind me is Dr. Marv Shaffer. Dr. Shaffer
19 has lived for a number of years in British Columbia,
20 and I will have more questions from him regarding his
21 background, but he is trained in economics and he
22 consults in the field, and teaches, as well.

23 Next to Mr. Shaffer is Ms. Jane Kidd-
24 Hantscher. Ms. Kidd-Hantscher has worked at Manitoba
25 Hydro for a number of years, and for a decade now her

1 primary responsibility at Manitoba Hydro has been the
2 implementation of my employer's partnership
3 arrangements, both with the Nisichawayasihk Cree Nation
4 with respect to the Wuskwatim project, and now with our
5 four (4) First Nation partners on the Keeyask project.

6 Next to Ms. Kidd-Hantscher sits Mr.
7 Norman Brandson. Mr. Brandson currently makes a living
8 as a consultant on environment resource and governance
9 matters, but Mr. Brandson had a very lengthy career in
10 the civil service here in Manitoba, completing that
11 lengthy career as a Deputy Minister of several
12 different departments.

13 Next to Mr. Brandson is Mr. Ian Page,
14 whom you have met on pervious weeks. Sitting next to
15 Mr. Page is Mr. Brad Regehr. Mr. Regehr is a lawyer.
16 He is a partner with the Winnipeg law firm of D'Arcy &
17 Deacon. And he has for many years represented, among
18 others, York Factory First Nation.

19 Sitting next to Mr. Regehr is Mr. Jack
20 London. Mr. London like to recall far too often that
21 once upon a time he taught me at law school. But Mr.
22 London now is a -- a partner -- or associated rather,
23 with the Winnipeg firm of Pitblado, and he has for
24 many, many years represented Fox Lake Cree Nation.

25 And, finally, sitting next to Mr. London

1 is Mr. Bob Roddick. Mr. Roddick is also a lawyer. He
2 hails from Alberta, but he has wisely chosen to
3 represent clients in the Province of Manitoba. And he
4 has for many years represented the Cree Nation
5 partners, whom I remind you is a partnership of
6 Tataskweyak Cree Nation and War Lake First Nation.

7 Now, I would like to return and will
8 have each of the witnesses, whom you have not before
9 this morning met, say a little bit about themselves.
10 Mr. Victor Spence, we will begin with you.

11

12 (BRIEF PAUSE)

13

14 MR. VICTOR SPENCE: Yeah, my name is
15 Victor Spence. I'm from Tataskweyak Cree Nation, and I
16 am here on behalf of our partner -- the partnership,
17 Tataskweyak Cree Nation and War Lake. I've been
18 involved under Tataskweyak both as a councillor and
19 development worker, and also in regards to Keeyask.
20 Our Tataskweyak relationship has given me the
21 opportunity to work with the federal government, the
22 provincial government, and Manitoba Hydro extensively
23 in regards to development within our resource area.

24

25 (BRIEF PAUSE)

1 MR. VICTOR SPENCE: I always find it
2 hard to -- to speak of me. I am here on behalf of our
3 nation, our members. We always say that we are here to
4 talk about and speak about the rights of our nation.
5 And I -- I don't want to -- really want to go into
6 talking about me. But for thirty-five (35) years I've
7 been involved with Hydro relations, both as a -- a
8 relationship that is based on the unique position that
9 Tataskweyak is in, in relation to Hydro electric
10 development. But I will get into that a little later.

11

12 (BRIEF PAUSE)

13

14 MS. KAREN ANDERSON: Good morning. My
15 name is Karen Anderson. For myself I have a back -- an
16 education background in social sciences and finance.
17 My work experience has mainly been with our First
18 Nation, but I have an interest in advocating for all
19 our First Nation ins -- issues in the north. I've
20 worked at a local level and regional level.

21 I've seen the community experience Hydro
22 not only from a positive aspect, but the negative
23 issues. I lived through that as a child, and growing
24 up. We've -- you know, we had a negative history with
25 Hydro, but I've seen that also evolve into a positive

1 history. And I've always been advocating for our --
2 our members. And so coming here today, I -- I continue
3 that advoca -- advocating for us, Fox Lake Cree Nation.
4 Thank you.

5 MR. TED BLAND: Good morning. My name
6 is Ted Bland. I'm here to represent York Factory.
7 I've been a councillor for one (1) year, back in 2005,
8 chief for two (2) years, 2006 to 2008. Shortly after
9 my term as chief I became a senior negotiator for close
10 to six (6) years in April. I've also worked on the
11 JKDA as a senior negotiator, as well as the direct
12 negotiated contracts. I'm a hunter. I'm a fisherman.
13 And I'm also a land resource user. Thank you.

14 MS. SHAWNA PACHAL: Good morning. My
15 name's Shawna Pachal. As Doug mentioned, I'm the
16 division manager of the Power Projects Development
17 Division. I have a bachelor of science degree and a
18 masters in business administration from the University
19 of Manitoba.

20 As Doug mentioned, I've had a lengthy
21 career. I've been with Hydro for twenty-nine (29)
22 years. I'd like to remind people I started when I was
23 5 though. Prior to my current position, I've held
24 various technical and management positions at Hydro as
25 a laboratory supervisor, a safety and occupational

1 health officer, the executive assistant to a vice-
2 president, quality improvement coordinator, manager of
3 corporate strategic planning, manager of generation
4 strategic relations, the manager of Keeyask
5 preconstruction, and the manager of future generation
6 partnerships prior to my -- my current role.

7 Which, as the division manager for the
8 Power Projects Development Division, I have
9 responsibility for the overall management of the
10 business enterprise planning phase of new hydro
11 generation, which includes preliminary engineering,
12 environmental assessments, and the licensing and
13 regulatory approvals which are required in order to
14 commit to construction.

15 Our division also oversees the
16 negotiation and implementation of the partnership
17 arrangements that align the considerations of the in
18 vicinity First Nations and Aboriginal communities. And
19 we also look after keeping an up-to-date inventory of
20 all of Manitoba Hydro's long-term hydraulic options.

21 In my testimony, I'll be providing
22 evidence on policy matters as they relate to the
23 benefits associated with the projects in the Preferred
24 Development Plan along with details regarding our
25 environmental assessment processes and our adverse

1 effects arrangements.

2 MS. JANE KIDD-HANTSCHER: Good morning,
3 Mr. Chairman, members of the Board, counsels,
4 Intervenors, Elders and leaders from our First Nation
5 partners, ladies and gentlemen. My name is Jane Kidd-
6 Hantscher. And as Doug indicated, I'm Manitoba Hydro's
7 partnership implementation supervisor.

8 I have an honours undergraduate degree
9 in communications from the University of North Dakota
10 and a masters in public administration degree from the
11 University of Manitoba. I've been employed with Hydro
12 and Centra Gas for over twenty (20) years and have been
13 in this position, as Doug indicated, for nearly a
14 decade. Prior to assuming the role that I'm currently
15 in, I held various positions within both organizations
16 in human resources, corporate planning, and operations.

17 As the partnership implementation
18 supervisor, I am directly responsible for managing the
19 Corporation's business relationship with its First
20 Nation partners on new development projects,
21 specifically Wuskwatim and Keeyask. And in my
22 testimony for the next few days, I will provide
23 evidence on these partnerships specifically related to
24 governance and benefits. Thank you.

25 MR. DOUGLAS BEDFORD: Dr. Shaffer, I

1 know from reading your resume that you have for some
2 thirty (30) years now been a consultant and have
3 undertaken a vast variety of engagements for both the
4 Federal Government, a number of provincial governments,
5 including our own in Manitoba, but primarily the
6 Province of British Columbia, all of them in the fields
7 of energy, economics, and transportation.

8 Have I summarized that reasonably
9 accurately?

10 DR. MARVIN SHAFFER: Yes. I've
11 consulted as well for First Nations, MGOs, and
12 nonprofit organizations, and -- and in areas outside.
13 I -- I primarily consult in the areas of energy
14 transportation and natural resources but in other
15 areas, as well.

16 MR. DOUGLAS BEDFORD: And for a period
17 of time, you worked within the Provincial Government in
18 British Columbia as head of its Crown Corporation
19 secretariate and its Chief Executive Officer of the
20 British Columbia transportation financing authority.

21 Is that accurate?

22 DR. MARVIN SHAFFER: That's correct.

23 MR. DOUGLAS BEDFORD: And over the
24 years you have also worked and continued to do so, I
25 gather, as an adjunct professor in the Public Policy

1 Program at Simon Fraser University in British Columbia.

2 Your particular areas of interest upon which you
3 lecture being multiple account benefit cost analysis.

4 Is that correct?

5 DR. MARVIN SHAFFER: That's correct.

6 MR. DOUGLAS BEDFORD: I would be remiss
7 if I did not note that you have also had the pleasure
8 of teaching in Australia at the University of
9 Queensland and also the University of Tasmania.

10 Is that accurate?

11 DR. MARVIN SHAFFER: That's correct.

12 MR. DOUGLAS BEDFORD: And for those
13 with a -- a keen interest to do so, I have observed
14 that your resume attaches a long list of the various
15 assignments that you have undertaken in the consulting
16 field.

17 Have I got that accurate?

18 DR. MARVIN SHAFFER: Yes.

19 MR. DOUGLAS BEDFORD: And finally, I
20 note, with pleasure, that you were born in Winnipeg,
21 Manitoba, a long, long time ago?

22 DR. MARVIN SHAFFER: Thank you for
23 that.

24 MR. DOUGLAS BEDFORD: And before I ask
25 the Chair of the Public Utilities Board of Manitoba to

1 accept that you are qualified to speak under oath today
2 on the field of multiple accounts analysis, is there
3 anything else that you perhaps think I've overlooked in
4 reviewing your qualifications that you would like to
5 tell us all now?

6 DR. MARVIN SHAFFER: Only to mention
7 that I received my BA honours in economics at McGill
8 University and my PhD at the University of British
9 Columbia. And I've appeared as an expert witness
10 before the BC Utilities Commission, the Clean Energy
11 Commission here in Manitoba, the Ontario Energy Board,
12 and the National Energy Board, as well as some panels
13 established under the Canadian Environmental Assessment
14 Act.

15 MR. DOUGLAS BEDFORD: Thank you. Mr.
16 Gosselin, can I ask you to please accept that Mr. --
17 Dr. Shaffer, rather, is qualified to testify here
18 today?

19 MR. SVEN HOMBACH: Mr. Chairman, I
20 would suggest we canvass Intervenorors as to whether or
21 not there are any objections before the panel make its
22 ruling.

23 THE CHAIRPERSON: So why don't we start
24 with Me. Williams, please.

25

1 QUALIFICATION OF WITNESSES:

2 MR. BYRON WILLIAMS: Mr. Chair, first
3 of all we certainly, on behalf of CAC (Manitoba)
4 welcome Chief Kennedy, and Elder Spence, and Ms.
5 Anderson, and former Chief Bland. We just have, if we
6 might, a -- a couple questions for Dr. Shaffer.

7 Dr. Shaffer, I'm hidden behind a pillar,
8 but I assure you that I'm in the same -- same room as
9 you are, sir. In addition to your work for Manitoba
10 Hydro in this current NFAT, would I be correct in
11 suggesting that you did a -- a report for the Clean
12 Environment Commission in the Wuskwatim proceeding for
13 Manitoba Hydro?

14 DR. MARVIN SHAFFER: That's correct.

15 MR. BYRON WILLIAMS: And, sir, would
16 you have also have done earlier work for Manitoba Hydro
17 in the 1990s in terms of your analytic approach?

18 DR. MARVIN SHAFFER: Yes, though in the
19 earlier days I wasn't using the multiple account
20 approach. But certainly in terms of the basic
21 principles of benefit cost analysis, yes.

22 MR. BYRON WILLIAMS: And would that
23 have been with regard to the Conawapa project, sir, or
24 the Limestone project?

25 DR. MARVIN SHAFFER: I recall the

1 Limestone project appearing before -- I think at the
2 time it was the National Energy Board for an export
3 licence application. And I certainly have done work in
4 relation to the Conawapa project.

5 MR. BYRON WILLIAMS: Okay. And, sir,
6 just finally for my client, were you the primary author
7 of -- of Chapter 13 of the NFAT business case?

8 DR. MARVIN SHAFFER: Yes.

9 MR. BYRON WILLIAMS: Okay. Thank you.
10 Mr. Chair, CAC (Manitoba) has no objections to the
11 qualifications of the witness as expressed.

12 THE CHAIRPERSON: Thank you, Mr.
13 Williams. And, Mr. Gange, please?

14 MR. WILLIAM GANGE: Green Action Centre
15 has no objection.

16 THE CHAIRPERSON: Thank you, Mr. Gange.
17 Me. Hacault, s'il vous plait.

18 MR. ANTOINE HACAULT: MIPUG has no
19 objections.

20 THE CHAIRPERSON: Merci, Me. Hacault.
21 Mr. Orle, please.

22 MR. GEORGE ORLE: MKO has no objection
23 to the qualification as an expert.

24 THE CHAIRPERSON: Thank you, Mr. Orle.
25 Ms. Saunders...?

1 MS. JESSICA SAUNDERS: MMF has no
2 objection.

3 THE CHAIRPERSON: Thank you.

4

5 (BRIEF PAUSE)

6

7 THE CHAIRPERSON: Me. Monnin, s'il vous
8 plait.

9 MR. CHRISTIAN MONNIN: Merci, Mr.
10 President. The independent experts and consultants
11 have no objections.

12 THE CHAIRPERSON: Merci, Me. Monnin.

13

14 (BRIEF PAUSE)

15

16 THE CHAIRPERSON: Yes, the panel is
17 prepared to accept Dr. Shaffer as an expert witness for
18 the purposes of examining multiple account analysis.
19 Thank you.

20 MR. DOUGLAS BEDFORD: Merci. Mr.
21 Brandson, turning to your resume, I see and please
22 confirm for me that you are currently engaged in a
23 private practice as a consultant with two (2) different
24 firms, and N2B Environmental Resource and Governance
25 Consultancy and EarthWISE Environmental Governance

1 International Consultants.

2 MR. NORMAN BRANDSON: Yes, that's
3 correct.

4 MR. DOUGLAS BEDFORD: And prior to
5 engaging in a private practice in the consulting world,
6 I see through adding up the number of years on your
7 resume that you had a lengthy career in the civil
8 service in the province of Manitoba, thirty-one (31)
9 years, and you concluded that career with six (6) years
10 as a Deputy Minister, laterally the Deputy Minister of
11 water stewardship in this province from 2003 to 2005,
12 Deputy Minister of Manitoba conservation from 1999 to
13 2003, and a full decade as the Deputy Minister of
14 Manitoba Environment through the 1990s.

15 Have I summarized that?

16 MR. NORMAN BRANDSON: Yes, you have.

17 MR. DOUGLAS BEDFORD: And as is
18 generally the case with many Deputy Ministers, before
19 you were a Deputy Minister you were an assistant Deputy
20 Minister, also in departments related to environmental
21 management and legislation in this province, correct?

22 MR. NORMAN BRANDSON: That's correct,
23 yes.

24 MR. DOUGLAS BEDFORD: You're here, I
25 know, to testify today on the subject of sustainable

1 development and the legislation in Manitoba with
2 respect to sustainable development, and I noticed with
3 interest that in the past you served as an advisory
4 participant on the Board of Directors of the
5 International Institute for Sustainable Development.

6 Is that accurate?

7 MR. NORMAN BRANDSON: Yes, it is.

8 MR. DOUGLAS BEDFORD: And I observed
9 that you have not confined your working life to the
10 geographic boundaries of the province of Manitoba or,
11 indeed, of Canada. That you have had occasion over
12 your career to work abroad internationally, and I was
13 particularly observant of the fact that you were a
14 contributor -- contributor on sustainable development
15 issues to a part of Africa. I have in mind
16 specifically with respect to the Canada Manitoba
17 partnership project with the northwest province of
18 South Africa in the years 2000 to 2002.

19 Is that accurate?

20 MR. NORMAN BRANDSON: Yes, it is. And
21 -- and just to clarify, northwest province in South
22 Africa is partnered, or twined, with the province of
23 Manitoba so there's an ongoing relationship between the
24 two (2) jurisdictions.

25 MR. DOUGLAS BEDFORD: And because it's

1 absent from your CV, I can't conclude by observing that
2 you were born in Winnipeg. I'll hopefully speculate
3 that you were. And I'll conclude that probably as long
4 ago as Dr. Shaffer was.

5 Is there anything else that you would
6 like this panel and these Intervenors at the Public
7 Utilities Board to know about your experience with
8 respect to sustainable development that's pertinent to
9 your testimony here today?

10 MR. NORMAN BRANDSON: No, but I will
11 confirm that I was born in Winnipeg.

12 MR. DOUGLAS BEDFORD: Thank you. And I
13 ask, and I'm sure we'll hear from the Intervenor's
14 counsel momentarily, but I do ask, Mr. Gosselin, that
15 you qualify Mr. Brandson to testify here today on the
16 subject of sustainable development and the legislation
17 pertinent to sustainable development in the province of
18 Manitoba.

19 THE CHAIRPERSON: I'll call on the
20 Intervenors, please. I will start with Mr. Williams,
21 please.

22 MR. BYRON WILLIAMS: Mr. Chair, before
23 I do, if I could perhaps get some clarification from my
24 -- My Learned Friend on behalf of Manitoba Hydro in
25 terms of the -- the expertise for -- for Mr. Brandson.

1 And -- and specifically, I -- I take it, you're not
2 suggesting that he has expert -- or are you suggesting
3 he has expertise in the interpretation of the -- the
4 legislation? I'm just trying to understand exactly
5 what the qualification is.

6 MR. DOUGLAS BEDFORD: He certainly has
7 expertise in the history and development and
8 implementation of the legislation. I think, in life,
9 if one is implementing legislation you have to have
10 some ability to interpret it. We are not, however,
11 presenting Mr. Brandson as a lawyer. He is an engineer
12 by training.

13 MR. BYRON WILLIAMS: And just a couple
14 of questions for Mr. Brandson, if -- if I might.

15 Mr. Brandson, in -- in your role as a
16 senior public official you are familiar with the
17 classes of development under the Environment Act, those
18 being Classes 1, 2, and 3, sir?

19 MR. NORMAN BRANDSON: Yes, I am.

20 MR. BYRON WILLIAMS: And during the --
21 the -- your tenure with the province, do you ever
22 recall a Class 3 development ever being denied?

23 MR. NORMAN BRANDSON: No, I don't
24 recall such a case. No.

25 MR. BYRON WILLIAMS: We -- we thank Mr.

1 Bedford for his clarification and acknowledging that
2 Mr. Brandson has exp -- expertise in the history,
3 development, and implementation of the Sustainable
4 Development Act, but that it -- he is not being
5 proffered as a expert in its interpretation. We accept
6 his qualifications.

7 THE CHAIRPERSON: Thank you, Me.
8 Williams. Mr. Gange, please.

9 MR. WILLIAM GANGE: Green Action Centre
10 accepts Mr. Brandson's qualifications.

11 THE CHAIRPERSON: Thank you, Mr. Gange.
12 Me. Hacault, sil vous plait.

13 MR. ANTOINE HACAULT: MIPUG also
14 accepts the qualifications as clarified by the exchange
15 between Mr. Bedford and Mr. Williams.

16 THE CHAIRPERSON: Merci, Me. Hacault.
17 Mr. Orle, please.

18 MR. GEORGE ORLE: MKO accepts the
19 qualification as an expert.

20 THE CHAIRPERSON: Thank you, Mr. Orle.
21 Ms. Saunders, please.

22 MS. JESSICA SAUNDERS: The MMF accepts
23 the clarifications -- sorry, the qualifications as
24 clarified. Thanks.

25 THE CHAIRPERSON: Me. Monnin, sil vous

1 plait.

2 MR. CHRISTIAN MONNIN: Merci, Mr.

3 President. No objections.

4

5 (BRIEF PAUSE)

6

7 THE CHAIRPERSON: For the benefit of

8 the panel, I wonder if you could clarify or explain the

9 Class 3 section of the Sustainable Development Act?

10 Could -- could you -- could one (1) of you explain that

11 one (1) to the panel?

12 MR. DOUGLAS BEDFORD: The classes of

13 development come from the Environment Act, not the

14 Sustainable Development Act. And they're all defined

15 in a regulation. So going by memory, certainly a

16 generating station is such a -- a size and expense and

17 magnitude that it's a Class 3 development.

18 Not all transmission lines are Class 3

19 developments, but very large ones above -- and I think

20 the threshold is 250 kilovolts, but I can stand to be

21 corrected. They, too, are Class 3 developments. And I

22 would myself have to look at the regulation to give you

23 practical examples of Class 2 and Class 1.

24 The level of -- of approval required

25 changes as well. The Minister of Conservation has to

1 approve a Class 3 development. My recollection is that
2 the director of the conservation branch can approve a
3 Class 2 development and a Class 1. But I -- again, I
4 may stand to be corrected. Even though we lawyers
5 pretend that we are the experts in interpreting
6 legislation, I choose to believe that we have no
7 greater skills than any other person who can read and
8 write.

9 THE CHAIRPERSON: Okay, the panel is
10 prepared to accept Dr. Brandson as expert witness in
11 relation to sustainable development, and also with
12 respect to the history, development, and implementation
13 of the Sustainable Development Act. Thank you.

14 MR. DOUGLAS BEDFORD: Merci. Mr.
15 Simonsen, if we could now swear in those witnesses who
16 have not been sworn before. And when that's done we
17 can turn to the exhibits.

18

19 MANITOBA HYDRO PANEL 6 CONTINUED:

20 KAREN ANDERSON, Sworn

21 TED BLAND, Sworn

22 NORMAN BRANDSON, Sworn (Qual.)

23 JANE KIDD-HANTSCHER, Affirmed

24 SHAWNA PACHAL, Affirmed

25 IAN PAGE, Previously Sworn

1 MARV SHAFFER, Sworn (Qual.)

2 VICTOR SPENCE, Sworn

3 ED WOJCZYNSKI, Previously Sworn

4

5 CONTINUED EXAMINATION-IN-CHIEF BY MR. DOUGLAS BEDFORD:

6 MR. DOUGLAS BEDFORD: Turning now to
7 exhibits. I confirm for the record that prior to today
8 my client filed what has now been entered as Manitoba
9 Hydro Exhibit number 128. One two eight is a very
10 short document. It is an addendum to a lengthy report
11 prepared by the firm of Deloitte with respect to the
12 experience of training and employment on the Wuskwatim
13 project.

14 And I note that that report was prepared
15 not solely for Manitoba Hydro but for the partnership
16 which owns the Wuskwatim project, which is Manitoba
17 Hydro and the Nisichawayasihk Cree Nation and a
18 numbered company, which is the general partner.

19 For our purposes today, the next exhibit
20 being filed by Manitoba Hydro will be known as Manitoba
21 Hydro number 129, and it is the paper copy of the
22 presentation that you will view this morning.

23

24 --- EXHIBIT NO. MH-129: Paper copy of panel 6
25 presentation

1 MR. DOUGLAS BEDFORD: The presentation
2 will be delivered by, as I recall, six (6) or five (5)
3 different individuals, but it breaks into seven (7)
4 parts. And I will endeavour as we transition from one
5 (1) speaker to the next, to identify on the record
6 where we are with respect to the presentation.

7 When Mr. Spence is about to begin his
8 remarks, he wants to make use of a map showing the
9 location of the home where he comes from where the
10 Tataskweyak Cree Nation is located, and we'll have that
11 entered at that time and copies distributed for people
12 to see. Mr. Simonsen tells me we'll also be able to
13 see the map on the monitor.

14 And you will also be treated this
15 morning to a handsome video, and we will mark that as
16 an exhibit when it comes time for you to enjoy the
17 video. So we are now ready to begin.

18

19 (BRIEF PAUSE)

20

21 MR. DOUGLAS BEDFORD: Over three (3)
22 weeks you've experienced Mr. Wojczynski. He confuses
23 me at times, as well. And now for something completely
24 different which is Mr. Wojczynski, and he will start
25 the testimony this morning.

1 MR. ED WOJCZYNSKI: Doug and I enjoy
2 our banter.

3

4 (BRIEF PAUSE)

5

6 MR. DOUGLAS BEDFORD: As I -- I
7 promised, now that we're at the Power Point
8 presentation, we are using Exhibit Number 129, and Mr.
9 Wojczynski's remarks are with respect to the very first
10 page with real content, which is numbered page 2 for
11 those with paper copies.

12 MR. ED WOJCZYNSKI: Good morning, Mr.
13 Chair, panel, and all the other participants. Before I
14 get started on behalf of Manitoba Hydro and on behalf
15 of the whole NFAT team, I want to say that I'm honoured
16 that we have our First Nation partners here, both on
17 the panel and as part of our audience, including Chief
18 Kennedy.

19 And I also want to say that we're
20 pleased that -- that you, the panel, have concurred
21 that -- that -- of the importance of our partners being
22 in this process by accepting them being --
23 participating this way, so thank you for that.

24 This is our last full panel that we'll
25 be presenting, and it does a number of things. First

1 of all, it deals with societal issues that are in the
2 terms of reference and part of the scope of this
3 exercise, the macro-environmental and the socioeconomic
4 which we'll start with, then also the Manitoba
5 government related issues that are in the terms of
6 reference, particularly the Sustainable Development Act
7 principles.

8 And then as Dr. Hunt -- I think the term
9 he used perhaps was, We need to have a real economic
10 analysis that is more than just looking strictly
11 narrowly at Manitoba Hydro. That that is -- we -- the
12 social benefit cost analysis. I termed it here,
13 socioeconomic benefit cost analysis. Given the terms
14 of reference it seemed inappropriate labelling.

15 And lastly, as the concluding panel,
16 I'll be presenting an integration of all the various
17 perspectives we're talking about, and Manitoba Hydro's
18 overall conclusion at this point, recognizing of course
19 that more evidence is going to be led, and we're going
20 to have -- provide an update and present the updated
21 info -- the additional updated information and
22 conclusions on April 4th.

23 So -- but -- but we'll be presenting as
24 the -- the end of this set of presentations our overall
25 integration and conclusion. You will recall when we

1 started off this exercise a number of weeks ago that we
2 outlined all the perspectives that will be brought
3 forward, and are part of the evaluation and decision
4 process.

5 And what I've just highlighted for you
6 here in, I guess it's orange, are the new pieces of
7 evidence that have not been -- been brought forward in
8 any significant way, and is the job of this panel, as
9 well as the -- of course the social benefit analysis
10 and the integration.

11 So with that, I will hand this over to
12 Ms. Karen Anderson, who will be leading off on behalf
13 of the First Nation partners.

14 MS. KAREN ANDERSON: Thank you.

15

16 (BRIEF PAUSE)

17

18 MS. KAREN ANDERSON: So I welcome the
19 opportunity to come and speak to the panel today, to
20 the Board, on behalf of Fox Lake Cree Nation chief &
21 council and other members. Thank you again.

22 Mr. Chair, members of the Board, and all
23 present here today, my name is Karen Anderson, and I'm
24 a member of the Fox Lake Cree Nation, a mother, a
25 granny, and a survivor of the 1960s, 1970s, and '80s

1 Hydro construction in our traditional territory.

2 Currently, I'm the Director of Operation
3 and Adverse Effects Advisor for the Fox Lake Cree
4 Nation negotiations office. Projects like Wuskwatim,
5 Keeyask, and potentially Conawapa move us into a new
6 era where we can strengthen our communities and do
7 business in ways that we could have not done without
8 those avenues.

9 We have taken control of our own lives
10 and our future. We are beginning to do something that
11 outside agencies and governments have not been able to
12 do, and that is to empower our people. And we have
13 done that on our own and through our partnership by
14 providing training and employment, negotiating and
15 implementing business contracts such as direct
16 negotiated contracts, or DNCs.

17 We are being part of, for the first time
18 ever, the Environmental Assessment process and having
19 our research, traditional knowledge, and wide -- wide-
20 spread community participation instrumental in not only
21 the filing of the statutory requirements of an
22 Environmental Impact Statement, but one that addresses
23 the real issues of the impacted First Nations by
24 managing and implementing our Keeyask Adverse Effects
25 Agreement and having a crucial role in monitoring

1 environmental impacts.

2 We are experiencing, for the first time,
3 the pride of ownership and we look forward to reaping
4 our share of profits from both Keeyask and Conawapa so
5 that as a community we are be -- we are able to begin
6 planning for and implementing the divisions of the
7 community. We will use that income to assist us in
8 living mino pimatisiwin, which simply translated means
9 to live life well.

10 We have strived to ensure that all of
11 our members were well informed of the planning and
12 approval of the Keeyask project, and we are continuing
13 to do so on Conawapa. We are proud of the role we have
14 -- we've played in the development process of the two
15 (2) projects so far. And we are proud of the
16 relationships we have built. And we are pleased that
17 Fox Lake will continue to be involved in the governance
18 of these projects to learn from them and to protect our
19 interests.

20 My comments today cannot be fully
21 appreciated without a real understanding by this Board
22 of how -- of how our lives have been affected by past
23 Hydro electric development. It has improvis --
24 impoverished us in ways that are more than just
25 economic and has contributed to a sense of

1 powerlessness as multiple projects were constructed
2 around us. It has contributed to a degradation of our
3 -- the Fox Lake people's emotional, physical, and
4 spiritual well being.

5 The arrogant and collonial and immoral
6 manner in which the past development has occurred not
7 only ignored our presence and our rights, but del --
8 deliberately devalued our rights on us. So it is probl
9 -- it is problematic that so called experts external to
10 our First Nations who have their own compet --
11 competitive positions to advance reference the
12 devastations of the past as though they have just
13 discovered them themselves.

14 My people have lived through horrible
15 and challenging circumstances and have survived. We
16 will interpret and tell our own history. We don't --
17 we -- we do not need no Columbus-like announcement that
18 others have discovered our history and -- with the
19 intent of using it to advance their own positions.
20 This is disheartening.

21 The Fox Lake Cree and our ancestors have
22 resided in the nower -- nower -- excuse me, in the
23 Lower Nelson River for generations before contact with
24 the Europeans. Here the lands and waters sustained our
25 communities and provided for all our needs to ensure

1 our survival and well being. We hunted game for food
2 and used our resources to make products to assist on
3 our daily lives.

4 For generations our people have lived
5 along side and maintained relationships with European
6 settlers. Our people continue to live at and utilize
7 important -- important cultural sites including at
8 Kettle Rapids in the newly established rail town of
9 Gillam, and along the Bay line.

10 Although government policies intended to
11 restrict and control our people were implemented in
12 Canada, Fox Lake people managed to live a relative --
13 relatively good life and people continue to be self-
14 sufficient and self-supporting. Our people maintain
15 their social cohesiveness, which served as an
16 insulating mechanism as it were. In short, our people
17 were resilient. In 1966, Manitoba created a local
18 government district of Gillam, after which Fox Lake
19 people were considered by the government to be
20 squatters on our own land.

21 The homes of our families were bulldozed
22 and our families were displaced and moved without
23 permission -- without our permission. And
24 even in some circumsta -- instances, without our prior
25 knowledge, these and similar events were profoundly

1 disempowering and marginalizing.

2 In 1967, without informi -- information
3 provided to or consultation with us, the water -- water
4 power reserve was identified, and the area extended
5 from Norway House to Hudson Bay, culminating in the
6 Water Power Act of 1967. And then, if all of that had
7 not been enough, came the dams: Kettle, Long Spruce,
8 and Limestone. Everything got consider -- considerably
9 worse.

10 In none of those instances, even
11 Limestone, were we consulted or thought about in any
12 significant way, let alone becoming part of the
13 negotiations and partnership in the planning,
14 development, and construction of the dams. So until
15 then, hydro development, meant to Fox Lake being
16 displaced and removed from our homes and homeland,
17 restrictions on the land with regard to hunting,
18 gathering, and fishing on -- on which we were not
19 consulted on and with no access to traditional areas.

20 There were alcohol and drug-related
21 issues, harmful crime and justice issues,
22 discrimination and racism at the personal employment
23 and service level in the non-First -- First Nation
24 community and from government. Our women experienced
25 unspeakable abuse and violation. Our children

1 experienced discrimination within the school and within
2 recre -- recreational activities in the community.

3 But this time, we, the Fox Lake Cree
4 Nation, are asserting our voice, showing our strength
5 and resilience. We haven't endured enough to destroy our
6 people, but we have survived as a people and will be
7 part of the development and use of the resources in our
8 traditional territories.

9 There will be no hydro development in
10 the future without our consent. And the notion we
11 believe hydro development to be inevitable --
12 inevitable is simply not true. You have to remember
13 that until this point in time we have been ignored.
14 And, yes, hydro development proceeded without any --
15 any regard for -- for how we felt.

16 It is hard for our community to forget
17 that feeling and sense of hopelessness and it is unfair
18 for outsiders to judge our people and make assumptions
19 about how we feel.

20 Let me speak now for a few minutes about
21 Keeyask and Conawapa in particular. We would never say
22 that in having negotiated the Keeyask partnership we
23 achieved all of our goals or that the terms of the
24 limited partnership or our adverse effects agreement
25 are fully consistent with all of the things we might

1 have -- we might like to have included or, for that
2 matter, that all of the potential impacts on our lives
3 will have been defended, mitigated, or compensated.

4 The agreements are not perfect. We
5 would have liked to have more resources and programs in
6 the agreements. But most importantly, the trade-outs
7 have been thoughtful and our people have been given
8 full opportunity to express themselves on the details -
9 - on the details and the desirability -- desirability
10 of the terms of the Keeyask project, and also will be
11 the case with Conawapa.

12 There are considerable benefits to
13 negotiations of the JKDA produced and will produce for
14 Fox Lake in terms of capacity building, economic
15 rewards, the assurance that we will be an informed
16 people with regard to the development, and we will
17 participate in the governance of the project.

18 It would take many hours for me to
19 describe every benefit we see as forthcoming, all of
20 which, in our view, communitively outweigh what we see
21 as negative effects.

22 So let me summarize what we anticipate
23 those benefits are and for which, of course, we are
24 investing our funds by way of capital contributions to
25 the Keeyask partnership. Our career income earning

1 ability has been facilitated and -- and improved by the
2 training programs in which our membership participated
3 extensively throughout the years, and the members that
4 are members have experienced, are experienced, or will
5 experience as the development of the project continues
6 and gathers steam.

7 In that same context, under the terms of
8 the JKDA, Fox Lake has been awarded approximately 20
9 percent of the value of the DNCs, which have been made
10 available to the Cree Nations without public tender. I
11 want to empha -- emphasize that the terms, mechanics,
12 and outcomes established through negotiations with
13 Manitoba Hydro, the province, and the unions for the
14 training and employment programs, and the awarding of
15 the DNCs were and are not prefect, but they were
16 methologies -- methodologies and outcomes in the
17 development of what we -- of which we participated.

18 We negotiated and our members approved.
19 Throughout the negotiations we won some and loss some.
20 But in those processes, and in operation --
21 operationalizing the employment and business
22 opportunities, the -- the ability of our people to be
23 employed and to do business now and in the future has
24 been positively affected.

25 Of course, we will also benefit as an

1 equity partner from the income opportunity we have in
2 the profits of Keeyask. I know that our contractual
3 and business arrangements with Hydro -- Manitoba Hydro
4 are not the subject of this hearing, but I do want to
5 say that two (2) potential investment streams are
6 available to the Cree Nations who are partners.

7 Depending on the circumstances, we will
8 chose to participate at the time the last turbine goes
9 into service -- service, and we anti up our investment
10 funds. We look forward to the stream of income not
11 only because of the programming it will allow but
12 because these will be our funds resulting from our
13 investment and our efforts. I know we will not be
14 obligated to other levels of government or institutions
15 in the determination of the use of these -- of those
16 funds.

17 Lastly one (1) of -- one (1) of the
18 benefits we have achieved is -- is our internal
19 assessment with that -- which -- excuse me, which led
20 to the approval of the partnership by our membership,
21 which is our Adverse Effects Agreement. Each of the
22 Cree Nations separately negotiated a Keeyask Adverse
23 Effects Agreement with Manitoba Hydro. This was
24 approved by our membership in the referendum process.

25 Because Fox Lake is downstream of the

1 Keeyask project, the environmental impact of the
2 Keeyask project on Fox Lake traditional territory,
3 unlike what it will be with the case of Conawapa which
4 will be built in our resource management area, this
5 will not be as significant as the environmental impacts
6 on other Cree Nations upstream from the Keeyask
7 project.

8 However, because of Fox Lake's presence
9 in and near Gillam, the impact from the influx of
10 workers will be quite substantial once again, and it
11 has been identified as a significant adverse effect
12 that needs to be, and is being, addressed.

13 Much that should be said about our
14 Adverse Effects Agreement was a subject of the
15 environmental assessment being done by the Clean
16 Environment Com -- Commission in its recent hearings at
17 which we testified. Understand that this is not the
18 purpose of this hearing to redo that mandate, so I'll
19 be concise in dealing with these issues.

20 So I see that the -- that the written
21 evidence of some witnesses is simply repeating
22 information and opinions disclosed at that hearing.
23 Let me say that all of the mitigation programs have a
24 focus on healing and strengthening the Fox Lake people,
25 and on strengthening Fox Lake's culture, language, and

1 heritage.

2 These -- these programs include a youth
3 wilderness traditions program, the Cree language
4 program, grave-side restoration program, alternative
5 justice program, a crisis centre and wellness coun --
6 counselling program, lateral violence and a where-do-
7 we-go-from-here program, and lastly a resource users
8 access program.

9 Fox Lake will receive the funding for
10 and will administer all the offsetting programs. We'll
11 -- we are required to provide annual budgets and annual
12 reports to our members, and to Manitoba Hydro to ensure
13 that the funds for the offsetting programs are used
14 only for those programs.

15 However, we have the ability to re-
16 allocate funding between programs, discontinue
17 programs, and create new programs to address our
18 adverse effects. The challenge that people have to
19 remember is that given the history I have described, we
20 have much healing to do and therefore our community
21 struggles with, Where do we start?

22 There is much development currently
23 occurring in our homeland or our backyard, and we are
24 working with adjusting the current influx of workers,
25 and we will have our programs underway for all our

1 members to benefit.

2 Other initiatives agreed to in our
3 processes of negotiations include the Harmonized Gillam
4 Development initiative which requires Fox Lake,
5 Manitoba Hydro, the Province of Manitoba, and the Town
6 of Gillam to participate in discussions which
7 acknowledge the political margini -- marginalization of
8 Fox Lake people in Gillam, unhealthy race -- racial
9 relations in the area.

10 A number of guiding principles were
11 agreed to by which the parties collectively would work
12 together over time to mitigate these inappropriate
13 relationships and build a more harmonious environment
14 in Gillam, where so many of our members reside.

15 Finally, before some short remarks on
16 Conawapa I want to address the process through which
17 our members authorize our chief and council to sign the
18 JKDA. Fox Lake entered into a process of negotiations
19 sometime after TCN had negotiated a bilateral agreement
20 in principle which ultimately formed the basis for and
21 set the boundaries on subsequent events.

22 Our Keeyask negotiations office together
23 with our lawyers participated in -- participated fully
24 and conscientiously in all of the negotiations.
25 Throughout that whole process, Fox Lake mained --

1 maintained the Keeyask Advisory Committee, which was
2 comprised of a number of Fox Lake members. They met
3 consistently with our technical people and lawyers or
4 independently of them, received status reports and
5 information and offered their perspectives, positive
6 and negative, as representatives of the community.

7 In addition, throughout the entire
8 process regular information centre -- sessions were
9 held with our members at band meetings and at specially
10 called community meetings. We also formed core groups
11 of our resource users and Elders who participated in
12 the environmental assessment process and the
13 recommendations flowing from it.

14 All major developments were communicated
15 to the membership throughout the process period. I
16 note that a number of different chief and councils were
17 elected and served during that period. Our partish --
18 our participation on projects was, to my knowledge,
19 never once a negative issue in those elections.

20 Once terms of the JKDA had been finally
21 settled we held referender (sic) for our members after
22 yet more community consultation. All of the complexity
23 of the agreements were highlighted in those
24 consultations. Presentations were taken on several
25 road trips to various locations in Manitoba where our

1 members reside.

2 Of course, opponents and critics of the
3 concept or individual terms were also welcome at the
4 meetings so that all points of view might be heard and
5 taken into account. The ratification and referenda
6 (sic) process then was conducted in accordance with the
7 -- provisions of the JKDA. Overall, 99 -- 91.9 percent
8 of the voters voting favoured the JKDA. Ninety-three
9 point three of voters voting favoured the adverse
10 effects agreement.

11 Mr. Chair and members of the Board, I
12 have one (1) last point to make with regard to the
13 approvals of the JKDA given by the Fox Lake membership.
14 Not every Fox Lake member took advantage of the
15 consultations. Not every Fox Lake member voted. And
16 not every Fox Lake member believes that we did enough
17 as a community to investigate, analyze, and protect our
18 environment. To expect such unanimity would be an
19 impossible fantasy.

20 But I do want to affirm that we, at Fox
21 Lake, valued and encouraged debate and critical
22 descent. We always try to find consensus and we get as
23 close as we can to a consensus when we -- when we can.
24 We did so in our approval of Fox Lake entry into the
25 Keeyask partnership. In fact, after many decades of my

1 own experience, it is my view that, to the extent that
2 some people did not choose to vote in the referenda
3 (sic) at Fox Lake, we would consider that may -- there
4 may be two (2) reasons for the abstention.

5 One (1) would be that the member did not
6 care one way or the other. And the other would be that
7 the member was not objecting to the outcome, leaving it
8 instead to the leadership of our community, which --
9 which had been interested with a duty to do so to the
10 best that could be done for the community.

11 Lastly, Mr. Chair and members of the
12 Board, one (1) final comment on Manitoba Hydro's
13 Preferred Development Plan. You have heard me speak
14 extensively about Keeyask because there has been an
15 extensive history related to our participation.

16 Our members have not yet had the
17 opportunity to be fully informed and consulted on all
18 aspects of Conawapa. There are many matters yet to be
19 negotiated with Manitoba Hydro beyond the -- beyond the
20 key terms of agreement referenced in IR/PUB/MH-11-499.

21 I will not read it here, but I commend
22 it to your close attention. That agreement grew out of
23 promises and a 2004 Memorandum of Understanding about
24 Conawapa between the Province of Manitoba, Manitoba
25 Hydro, and the Fox Lake Cree Nation. It will be some

1 time before matters are finalized. Fox Lake must
2 complete its discussions with Manitoba Hydro, and Hydro
3 then has to consult with four (4) other Cree Nations in
4 the vicinity.

5 However, as is evident, Fox Lake Cree
6 Nation -- excuse me -- Fox Lake Chief and council
7 signed a krey term -- key terms agreement regarding
8 Conawapa after negotiations between -- between them and
9 Manitoba Hydro's senior executives. The agreement was
10 then approved by the Manitoba Hydro Board.

11 We see Manitoba Hydro's Preferred
12 Development Plan, which includes Keeyask in 2017,
13 Conawapa in 2026, and a 750 megawatt line as an
14 essential and vital to our interest. Hydro power is
15 one (1) stone -- a cornerstone of our plan to live mino
16 pimatisiwin where our people can enjoy and maintain our
17 land-based pursuits, as well as enjoying and pursuing
18 opportunities that the non-First Nation community takes
19 for granted.

20 Because Conawapa will be built in our
21 resource management area, the approval and development
22 of Conawapa is of huge importance to us and to our
23 future generations. We very much hope that this Board
24 will recommend the Preferred Development Plan to the
25 Minister. Ekosi. Thank you.

1 THE CHAIRPERSON: Thank you very much
2 for your comments and the panel has no questions to
3 address to you, so. But thank you very much for those
4 comments.

5 MR. TED BLAND: Good morning. My name
6 is Ted Bland and I'm representing York Factory. I'd
7 like to thank you for giving us the opportunity to
8 speak to you today. I am the senior negotiator for
9 York Factory future development, and a member of the
10 York Factory First Nation. In our language we call
11 ourselves Ininu (phonetic). We are also known as Cree.
12 Our ancestral lands are the vast region of the lower
13 Nelson and Hays Rivers and -- and the Hudson Bay coast.

14 I have travelled here from my home
15 community of York Landing, or as we say in our language
16 Kawechiwasik, located on the south shore of Split Lake
17 on the Nelson River, upriver from the proposed site of
18 the Keeyask generation project. York Factory First
19 Nation is a partner in the Keeyask generation project.
20 As you know, Keeyask is a very -- a key part of
21 Manitoba Hydro's Preferred Development Plan.

22 I want to speak to you briefly about how
23 and why York Factory came to our decision to support
24 Keeyask. Councillor Gordon Wastesicoot from our First
25 Nation made a presentation to you on February 27th. He

1 explained how our community was relocated from York
2 Factory and the Hudson Bay coast to York Landing in
3 1957. Right after we arrived in York Landing
4 construction began on the Kelsey Dam located on the
5 Nelson River, just upriver from our community.

6 Following Kelsey, more dams were built
7 on the Nelson: the Kettle, Long Spruce, and Limestone.
8 Outflows from Lake Winnipeg were regulated in the
9 1970s, changing the water levels, flows, and ice
10 conditions on the Nelson River and Split Lake. Also in
11 the 1970s, the Churchill River was diverted into the
12 Burntwood and the Nelson, further affecting the waters
13 of Split Lake.

14 Damming and water regulation caused
15 devastating changes to our world: erosion; siltation;
16 unclean water; destruction of fish and animal habitat;
17 unsafe navigation of ice; impacts on trapping, fishing;
18 impacts on our culture, customs and traditions.

19 The dams on the lower Nelson River has
20 generated billions of dollars for Manitoba Hydro and
21 the Manitoba government. The people of Manitoba have
22 benefited from the revenues that flow to the Manitoba
23 government from low electricity rates, and from the
24 employment and business income. The Ininu who live
25 along the regulated waterways have seen few benefits

1 from these dams, but we live with the environmental
2 damage they have caused.

3 As Councillor Wastesicoot said in his
4 presentation, we've been living with Hydro development
5 for over a half a century, and for all those years we
6 saw few if any lasting benefits. We have seen poverty,
7 chronic unemployment, lack of education, while the
8 people of Manitoba have benefited and continue to
9 benefit from the electricity produced by the Nelson
10 River.

11 Despite major changes to the land and
12 waters of northern Manitoba caused by hydro
13 development, we continue to go out on the land, river,
14 and lakes as we have for thousands of years. We
15 harvest fish, animals, and plants, continuing the
16 traditions and customs of our people, and applying the
17 knowledge that has been passed on from generation to
18 generation, but it is difficult.

19 Counsellor Gordon Wastesicoot could also
20 tell you how York Landing is physically isolated from
21 the outside world. There is no all-weather road. We
22 travel by ferry and boat in the summer, by ice road in
23 the winter, and by plane all year round. This
24 isolation means that there are major challenges to
25 access healthcare, social services, education,

1 employment, and business opportunities.

2 York Factory has taken a long view that
3 further development of hydro electric projects in
4 northern Manitoba can only proceed with the direct
5 involvement of the First Nation people directly
6 affected. York Factory has also determined that any
7 future hydro developments within our ancestral lands
8 must advance our community and economic interests.

9 As I said, York Factory is a partner in
10 Keeyask. The terms of the partnership are outlined in
11 the Joint Keeyask Development Agreement. We have
12 negotiated the terms of the JKDA over many years. We
13 have many, many meetings with our members. We spoke
14 with each other about the project, what it means to us
15 as individuals and as people, what it means for our
16 children and generations not yet born.

17 We discussed the potential environmental
18 and social impacts of Keeyask, and the potential
19 benefits of the project. We made our decision with
20 open eyes, understanding the environmental and social
21 changes Keeyask will bring. We chose to support
22 Keeyask because we believe it's the best interest of
23 our nation.

24 Before Chief and Council signed the JKDA
25 and our Adverse Effects Agreement, we held a vote in

1 our commun -- of our members; 87 percent of the ballots
2 cast supported Chief & Council singing the agreements.
3 While this was a strong majority of voters, we
4 recognize the choice was not unanimous. Others voted
5 yes and did so with mixed feelings. It is important to
6 acknowledge and respect the perspectives of all of our
7 members.

8 As we move forward, we continue to work
9 together to heal our community. We will work with our
10 community and partners to reconcile our participation
11 in Keeyask with our relationships and obligations to
12 the natural and spirit world, and to the generations to
13 come. If we do not, our Elders and our teachings will
14 tell us we will not survive as a people.

15 York Factory examined Keeyask for many
16 years. We completed our own studies of this project
17 effects. We wrote our own evaluation report called,
18 Kipekiskwaywinan, which means 'Our Voices' in Cree.
19 Kipekiskwaywinan tells a story of how we came to
20 support Keeyask. It is an honest account and explains
21 in the words of our people how we have been harmed by
22 past hydro development. It explains why we chose to
23 support Keeyask. It outlines our hopes and our
24 expectations. I strongly encourage you to read it.
25 And this is our document here, so please take the time

1 to read it.

2 The benefits of the Keeyask project
3 include training and employment opportunities that
4 would not otherwise be available to our community. We
5 will also be -- there will also be financial benefits
6 from business opportunities and investment income. The
7 increased capacity and income will empower York Factory
8 to improve our communities' socioeconomic conditions,
9 which will ultimately benefit generations to come.

10 York Factory First Nation chose to
11 support Keeyask, not just so our people could benefit
12 from employment, business, and investments
13 opportunities. York Factory chose to become a partner
14 so we could have a voice in how the project is
15 developed and managed. We want to be on the inside and
16 influence the project.

17 As In -- Ininimowin it is essential that
18 we care for Askiy, which is our Cree word for the whole
19 of the land, water, plants, people, and animals, and
20 all the creatures.

21 If Keeyask is approved and goes forward
22 we will continue to work with our partners applying our
23 values, principles, and perspectives to development and
24 operation of the project. York Factory will also work
25 with our partners to heal, rebuild, and strengthen

1 trustworthy relationships through processes, programs,
2 and decision-making throughout the life of the Keeyask
3 project and partnership.

4 We have entered into the partnership
5 insisting on a long-term ongoing commitment to healing,
6 reconciliation, mutual respect, and self-determination.
7 We intend to sustain our Cree values, customs, and
8 traditions in the process.

9 The planning and negotiation of Keeyask
10 has been a long process, more than twelve (12) years.
11 Members are patient -- or impatient to realize the
12 benefits from the -- the Hydro development. But we
13 know that Keeyask will not solve all the challenges and
14 obstacles we face as a community.

15 The Keeyask project also presents new
16 problems and challenges. The benefits do not come
17 without consequences; we know that. But we are ready
18 for those challenges to take and opportunities before
19 us. Thank you.

20

21 (BRIEF PAUSE)

22

23 MR. DOUGLAS BEDFORD: Mr. Spence is
24 going to refer to a map, which I did give Mr. Simonsen
25 before we commenced this morning. So this would be an

1 appropriate time, Mr. Simonsen, if we can enter the map
2 that's being presented by Cree Nation partners as
3 Exhibit MH number 130. And I'll ask one (1) of my
4 colleagues to hand out paper copies. Thank you.

5

6 --- EXHIBIT NO. MH-130: Map

7

8 MR. VICTOR SPENCE: Thank you.

9 MR. DOUGLAS BEDFORD: Victor, if we'll

10 -- we'll just -- a moment while the maps are
11 distributed. And once you see that that's been
12 completed please begin.

13

14 (BRIEF PAUSE)

15

16 THE CHAIRPERSON: Mr. Spence, I believe
17 everybody has a copy.

18 MR. VICTOR SPENCE: Good morning,
19 panel, ladies and gentleman. My name is Victor Spence.
20 I'm here to -- on behalf of the Cree Nation partners,
21 Tataskweyak Cree Nation and War Lake First Nation.

22 We're here to talk about the socio-
23 economics and the opportunity that we -- we arrive from
24 development within our immediate resource area. I've
25 been involved with Manitoba Hydro hydro-electric

1 development for the last thirty (30) years of my life.

2 There has been many battles along the way.

3 I'm here -- a relationship bor -- based
4 on respect and our nations and members' rights --
5 rights given from Kichimanitou in regards to our
6 placement on Askiy.

7 We are people of the land. We are
8 hunters and we are gatherers. We also have rights
9 under 1992 Constitution, Section 35. We have rights
10 based on treaties. We have rights that we have fought
11 hard for under a modern day treaty with the federal
12 government, the provincial government, and Manitoba
13 Hydro in relation to development and impacts on us as
14 people.

15 We've heard of the CRD, Churchill River
16 Diversion, back in 1977; LWR, Lake Winnipeg Regulation.
17 There's two (2) systems: Lake Winnipeg, the Nelson
18 River, Kichesippi. And then there was the -- the
19 Churchill River Diversion.

20 In order to taste those waters our
21 people had to travel and make many portages. And we
22 enjoyed the bounties of that river. Our fathers, our
23 grandfathers work hard. They enjoyed the bounties of
24 that system. Nelson River, where our people choose to
25 live back in the '17, '16, '14, as far back as we can

1 remember that time allows memory to be. After that, we
2 say millennia.

3 The LWR/CRD, we are right at the
4 confluence, TCN, Split Lake. We are affected by both
5 systems. It changed how we use the lands and the
6 waters. We are proud people, very proud. In 1957,
7 they built Kelsey, the first development. I was born a
8 year before that, 1956.

9 In 1977, there was a referendum among
10 the nations of the five (5) nations, the Northern Flood
11 Agreement: York Factory, Split Lake, Norway House,
12 Cross Lake, and Nelson House, the Northern Flood
13 Agreement.

14 The waters were released that spring,
15 '77. That was the first time our members saw so much
16 water on top of the ice that spring. I was married
17 that April. And it changed our way of -- our
18 perspective on Mother Earth. There was a reason TCN
19 members, our forefathers, choose Split Lake. It was
20 bountiful; beavers, muskrats, fish, birds, migratory
21 birds. The land was beautiful, pristine; development
22 changed that.

23 We negotiated agreements with Manitoba
24 Hydro. The 1977 agreement and then we had the 1992
25 agreement which is basically implementing the 1977

1 agreement. After that we had the 1996 agreement, and
2 then we have the 1998 agreement, 19 -- 2008, the
3 adverse effects agreement, and the JKDA, Joint Gull
4 (sic) Development Agreement.

5 The path that our members choose was not
6 an easy decision to make. It was made jointly with our
7 Elders, our members, and with our children in mind to
8 provide hope. You all watch news, Kattawapiskak in
9 Ontario, where a Chief passed it in regards to -- to
10 deal with housing and other needs of the people -- her
11 people. We, too, as a nation have quite a story to
12 tell of need, of treaty rights not honoured.

13 We came upon a vision that Manitoba
14 Hydro had, that we could jointly walk together to
15 develop a new development, Keeyask. We were given the
16 opportunity to assess this development, how it could
17 help us as people. Not just on the economic side of
18 how much free power, or how much power that will be
19 generated from this development, but how it could hep
20 us as people to deal with housing, education, health
21 care, to take care of our Elders.

22 The treaty rights promise to our Elders
23 are being eroded, constantly attacked by government.
24 They create laws and enact acts that somehow diminishes
25 the meanings of the words in our agreements. We had an

1 opportunity under Keeyask. Again, I take the
2 opportunity to thank -- maybe I'm to name a -- an
3 individual, the former CEO and President, for having a
4 vision to involve the Nations in this new development;
5 a vision of walking together.

6 It is the wish of this Tataskweyak Cree
7 Nation that this vi -- vision be continued, not
8 obstructed. I have a whole text here that I could
9 read, but the words of my people are in my heart. It
10 hurts many times when we chose as people a path where
11 somehow there are others that seems to question how an
12 Indian should think, how an Aboriginal should talk and
13 make choices for their own people.

14 We chose as a nation, a sovereign
15 nation, a members of a nation. We are not merely
16 objects within the hydro operational system. We are
17 people. We cry. We feel pain. We have needs to
18 better housing, better education, better healthcare
19 services for our people, our Elders, our youth.

20 That is why TCN choose the path it did
21 in regards to do this development. If it was based on
22 economics, solos -- just solely on economic, we would
23 have said, No, to Keeyask or any development, but it
24 gave more. It provides hope. An opportunity to say,
25 We are involved. We continue to be involved. There's

1 a new vision.

2 The path that we walk together as four
3 (4) Nations on this development is really caring,
4 caring for our people. And we also understand that we
5 are spiritual in the sense of we believe that all
6 things are alive as our forefathers has instilled in
7 us; the trees, the animals have spirits. They must be
8 respected, or else we will -- we will be cursed.

9 We need to have a ceremony in terms of a
10 healing ceremony; that has to be recognized and
11 respected by the non-Aboriginal society. We need
12 healing in our communities. Our people have rights to
13 choose yes to development, or no to development; that
14 was given. That opportunity was provided. Excuse me.
15 We had over two thousand (2,000) meetings to deal with
16 the path we choose in relation to Keeyask development.

17 In closing, I'm -- I refer to the
18 Northern -- Northern Flood Agreement, the 1977
19 agreement. The 1992 agreement, modern day treaties
20 with Canada federal government, provincial government,
21 and the Developer, the Corporation, Manitoba Hydro. I
22 spoke on Keeyask at Tataskweyak that support Keeyask
23 development.

24 We took part in it. We participated in
25 it. And in our 1992 agreement, modern day treaty, it

1 speaks about Conawapa. As a nation, currently 75
2 percent of the development, hydro electric development,
3 would -- that provides energy and income that the
4 southerners enjoy comes from our resource management
5 area, our territory.

6 The 1992 agreement -- agreement provides
7 us a -- an opportunity and gives us rights. A right to
8 be involved and consulted through -- and participate
9 meaningfully on Conawapa. No one, no one will take
10 that right away from TCN, not Manitoba Hydro, not the
11 governments, no one. We stand firm on that right. We
12 will be there until -- unless we are taken seriously on
13 Conawapa, we will -- we will be there, because it's --
14 it's governed by the 1992 agreement, a modern day
15 treaty.

16 At this time we do not understand. We
17 are not at the table in regards to Manitoba on
18 Conawapa. I am fairly certain that we will be provided
19 that opportunity and as these come forward months come,
20 years come, we will be there. But we will be there in
21 the sense it'll be a meaningful process. With that,
22 TCN supports the PDP, Preferred Development Plan of
23 Manitoba Hydro. And we look forward to the challenges
24 and the path.

25 With that, I would like to point to the

1 map.

2

3 (BRIEF PAUSE)

4

5 MR. VICTOR SPENCE: As you can see, the
6 four (4) nations that are at the -- at the partnership,
7 Tataskweyak, War Lake, Fox Lake, and York Factory are
8 within this immediate vicinity of the development of
9 Hydro. The next two (2) are going to be there within
10 that, Conawapa. We're all affected.

11 Again, in closing, I'd -- I'll say that
12 Tataskweyak supports the -- the Preferred Development
13 Plan. Ekosi.

14

15 (BRIEF PAUSE)

16

17 THE CHAIRPERSON: Thank you very much,
18 Mr. Spence. The panel has no questions. I'm looking
19 at the clock and I wonder if it would be an appropriate
20 time to take a break? I would suggest that we take
21 fifteen (15) for coffee and then we'll see you at five
22 after 11:00.

23 MR. DOUGLAS BEDFORD: Thank you. I
24 have one (1) matter, Mr. Gosselin, that will take less
25 than a minute. I was remiss this morning in not

1 drawing your attention and that of your colleagues to
2 yet another individual who's in the public gallery this
3 morning. Mr. Joe Keeper has been observing proceedings
4 this morning.

5 Those of you who don't know Mr. Keeper
6 and his history in this province, I can summarize very
7 quickly by telling you he was a central figure in the
8 negotiation of the Northern Flood Agreement in the
9 1970s. He was a founding member of the Manitoba Metis
10 Federation and of the Manitoba Indian Brotherhood.

11 I have had the pleasure of working with
12 Mr. Keeper for a number of years. I know that he is a
13 very modest man and he's no doubt slightly embarrassed
14 that I've drawn people's attention to his presence
15 here. But one (1) aspect of your hearing is about
16 Northern Manitoba and development in Northern Manitoba,
17 and a man of his stature deserves to be recognized at a
18 proceeding such as this given the nature of some of the
19 evidence that you're hearing.

20 So, thank you for allowing me a moment
21 to draw your attention to Mr. Keeper's presence. And
22 we should proceed with our break. Thank you.

23

24 --- Upon recessing at 10:52 a.m.

25 --- Upon resuming at 11:11 a.m.

1 MR. DOUGLAS BEDFORD: As we can all
2 see, you have surmounted your insurmountable
3 difficulty. We are now going to show a video that was
4 made for the Keeyask Project essentially by our Cree
5 Nation partners. The video takes approximately twenty
6 (20) minutes.

7 For the benefit of those who are not
8 aware of it, I understand that we are going to trespass
9 modestly on the lunch hour and we will run until 12:30.
10 That will allow my witnesses to put in virtually all of
11 the evidence that we had planned for the morning.
12 Because of events that we opened with this morning we
13 will require, I believe, thirty (30) minutes after
14 lunch to complete testimony and it will be Dr. Shaffer
15 this afternoon immediately after lunch.

16 And Mr. Wojczynski concludes our
17 evidence in direct, and he'll follow for a short period
18 of time Dr. Shaffer's evidence. But when the video is
19 complete, we will hear from Ms. Pachal, from Mr.
20 Wojczynski, and try and conclude with Mr. -- well, Mr.
21 Page briefly and then Mr. Brandson, and then break for
22 lunch at 12:30. Thank you.

23 The video which you are about to see
24 will be marked on the record as Exhibit MH-131, and I
25 am dependent, I believe, on someone else to actually

1 start the video.

2

3 --- EXHIBIT NO. MH-131: Video

4

5 (VIDEO PLAYED)

6 (VIDEO CONCLUDED)

7

8 CONTINUED BY MR. DOUGLAS BEDFORD:

9 MR. DOUGLAS BEDFORD: We would now like
10 to return to Exhibit MH-129, the second part of it. So
11 it's Exhibit 129-2. And this is the presentation that
12 was filed, I believe, yesterday. And it's now Ms.
13 Shawna Pachal's turn to take us through her particular
14 area of interest.

15 MS. SHAWNA PACHAL: Thank you, Doug.
16 I'm excited to be here today. It's always a tough act
17 to follow my Cree partners and their video. And I've -
18 - in -- in respect of the time, I've dramatically
19 shortened my presentation. So I'm going to just try
20 and focus on the highlights. And hopefully, if people
21 have any questions or things that I've missed, they'll
22 -- they'll ask.

23 So I'll be talking about the Preferred
24 Development Plan, our overall approach, the benefits,
25 our environmental assessment process, and our adverse

1 effects agreements.

2 So Manitoba Hydro, as you've heard,
3 prior to Wuskwatim planned and developed projects in a
4 much different way than we do today. Our past
5 projects, while in line with contemporary practices of
6 the time and consistent with government requirements,
7 involved much less consultation than would be
8 considered acceptable today and considerable --
9 considerably less upfront planning with respect to
10 environmental concerns.

11 And as a result, environmental effects
12 were not always fully understood in advance. And
13 related avoidance, mitigation, and enhancement measures
14 were not always identified and implemented in advance
15 of project construction, and nor were they typically
16 included in the capital project estimates.

17 The planning and development processes
18 for today's projects are very different, as you've
19 heard many times this morning. The project planning
20 process involves early and extensive engagement with
21 communities in the vicinities of these projects,
22 particularly the Aboriginal communities. And there is
23 a concerted effort to prevent and reduce as much as
24 possible potential impacts through improved project
25 design and implementation of project mitigation and

1 community-based programming.

2 Efforts are also made to enhance project
3 benefits as much as possible, especially for local
4 communities, through measures like income oppor --
5 opportunities, training, employment, and business
6 opportunities.

7 The cost for all of these activities are
8 estimated, and they are incorporated into our long-term
9 capital costs estimates so that the financial
10 implications of a project are well understood upfront,
11 as well as its environmental and social implications.

12 Manitoba Hydro takes very seriously the
13 need to develop strong working relationships with
14 Aboriginal communities affected by our developments,
15 both past and present. For example, both Hydro and the
16 lower Nelson Cree Nations who will be affected by
17 future generation projects in the Preferred Development
18 Plan are working hard to develop a stronger
19 relationship based on trust and respect and the desire
20 or the 750 megawatt interconnection, may afford the opp
21 to develop these projects in a mutually beneficial
22 manner. There is no doubt this is a challenge as
23 you've heard from our partners, given their experience
24 with previous hydroelectric development.

25 I'm going to talk a little bit about

1 some of the benefits associated with the projects in
2 our Preferred Development Plan, both the generation and
3 the transmission. First of all, I want to start by
4 talking about business opportunities.

5 Throughout project negotiations,
6 Manitoba Hydro and our partners work to identify
7 specific business opportunities that match their
8 communities' capacities and interest so that they can
9 develop the business capacity that serves them long
10 term.

11 The scope of work involved in project
12 DNCs further build on the capacity of community
13 businesses, and the experience and capacity gained from
14 carrying out the contract should enable the partner
15 businesses involved to compete for similar contracts on
16 other projects while Keeyask and Cona -- Conawapa are
17 underway, and then after they are complete.

18 Most DNCs are carried out as joint
19 ventures between a partner First Nation owned business
20 and a non First Nation owned business with extensive
21 experience and a solid track record. A qualification
22 system has been agreed to that ensures that these
23 contracts are just not flow-throughs, but that the
24 First Nations have a meaningful role as 50/50
25 shareholders with non partner -- non First Nation

1 partners.

2 To the extent that the joint venture can
3 perform well and generate profits, businesses could
4 expand their equity base, invest in capital projects,
5 or choose to grow. The DNCs allow for direct member
6 hiring from the partner First Nations as a special
7 measure agreed to in the op -- within the operation of
8 the Burntwood Nelson Agreement, which governs the
9 hiring of our northern generation projects. This
10 ensures that members do not have to compete with any
11 other individuals to access these jobs on the
12 generation projects.

13 In the case of Wuskwatim, a total of two
14 hundred and twenty-nine (229) Nisichawayasihk Cree
15 Nation members were hired to work on direct negotiated
16 contracts, the DNCs, throughout the duration of the
17 project. As individuals could be hired more than once,
18 this represented a total of four hundred and twenty-
19 four (424) Nisichawayasihk Cree Nation hires on the
20 various contracts.

21 For Keeyask, based on July 2007 dollars,
22 there are business opportunities through direct
23 negotiated contracts for a minimum aggregate dollar
24 value of 203 million for qualified partner First Nation
25 business or joint venture partnerships. For Keeyask,

1 contractors such as the general civil contractor are
2 provided with information about Keeyask Cree Nation
3 businesses which could result in potential
4 subcontracting opportunities being made available via
5 an open tendering process.

6 Discussions are currently underway
7 regarding Conawapa business opportunities. Manitoba
8 Hydro is still considering its approach in this regard
9 in light of Wuskwatim and Keeyask experiences, and we
10 are continually learning and improving.

11 Transmission business opportunities have
12 the same desired result as those of generation
13 projects. There is a desire to ensure that the end
14 result is local employment and capacity building. The
15 type and amount of construction and clearing work is
16 influenced by factors such as location, terrain, and
17 type of line. As a result of that, the business
18 opportunities for each transmission project can vary,
19 and we look at those on a case-by-case basis.

20 Transmission projects, like the North-
21 South upgrades, opportunity for business development in
22 the form of tendered contracts and direct negotiated
23 contracts for qualified Aboriginal businesses or joint
24 venture partnerships. Upon determination of the final
25 routes, the resulting opportunities will be made

1 available.

2 In terms of training opportunities.

3 With regard to training, there is both pre-project
4 training and on-the-job training for generation
5 projects. The goal of the pre-project training program
6 is to build capacity within the First Nations and the
7 Aboriginal communities at large so members are job
8 ready when construction starts.

9 There has already been a \$60 million
10 pre-project training initiative that trained over two
11 thousand (2,000) norther Aboriginal residents for
12 employment on Wuskwatim, Keeyask, and within other
13 industries. The participating First Nations and
14 Aboriginal organizations in this initiative were
15 Nisichawayasihk Cree Nation, Tataskweyak Cree Nation,
16 York Factory First Nation, Fox Lake Cree Nation, the
17 Manitoba Metis Federation, and MKO.

18 The training began in 2001 and spanned
19 nearly a decade. Members of these First Nations and
20 Aboriginal organizations received educational upgrading
21 and training for designated and non-designated trades,
22 as well as construction support occ -- occupations.
23 What was unique about this training initiative was that
24 it was designed, developed, and implemented by the
25 First Nations and the Aboriginal organizations

1 themselves, and it was one (1) of the largest
2 initiatives of its kind ever in Canada.

3 It is expected that the Conawapa project
4 will also have a pre-project training program that
5 focusses on continued training in designated trades and
6 Manitoba Hydro will be working with the First Nations
7 in the vicinity of the project to identify the training
8 opportunities. On-the-job training programs provide
9 further training opportunities during the construction
10 project.

11 Under the various contracts northern
12 Aboriginal folks will be able to develop varied
13 employment skills in different areas including
14 management training, apprenticeship, and general
15 labour. Hours of actual work experience can be
16 attributed towards their provincial certification
17 requirements.

18 And as the partner First Nations reside
19 within the first hiring tier of the Burntwood/Nelson
20 agreement, they have first preference for on-the-job
21 training opportunities, and the on-the-job training is
22 a fundamental component of Keeyask and Conawapa's
23 overall employment framework.

24 Transmission projects may take place
25 over a long distance and because of that, the amount of

1 training and employment available in one (1) area is
2 somewhat limited. These training opportunities are
3 driven by similar factors as I described under business
4 opportunities. Recent training opportunities
5 associated with transmission have included heavy
6 equipment operator training, as well as on-the-job
7 training. And in addition, Manitoba Hydro will be
8 offering tower assembly training in the near future.
9 And it's expected that these types of opportunities
10 would be made available on projects like the North-
11 South Upgrade and 750 megawatt interconnections.

12 In terms of employment, the Corporation
13 has an overall objective of maximizing employment of
14 northern Aboriginal residents. Construction of the
15 Keeyask and Conawapa generating station is projected to
16 require over nine thousand (9,000) direct person years
17 of employment. There'll be a range of opportunities in
18 both the designated, non-designated, and support
19 occupations.

20 On the Wuskwatim project Aboriginal
21 workers made up 40 percent of the project's total six
22 thousand (6,000) hires. In terms of the level of work
23 almost half of the Aboriginal hires were carpenters,
24 iron workers, electricians, equipment operators, and
25 other skilled trades. Although Conawapa's government

1 structure is still -- or Conawapa is still to be
2 determined, we will have similar employment objectives
3 related to Conawapa.

4 Manitoba Hydro and the First Nations are
5 focussed on increasing the number of members employed
6 in the Corporation's ongoing operations as well. Under
7 the Keeyask Agreement there is a twenty (20) year
8 target of a hundred and eighty-two (182) jobs
9 consisting of a hundred (100) TCN members, ten (10) War
10 Lake members, thirty-six (36) York Factory members, and
11 thirty-six (36) Fox Lake members. And that's within
12 our operational jobs workforce. So we have about
13 sixty-four hundred (6,400) employees. And those are a
14 hundred and eighty-two jobs (182) within the overall
15 workforce.

16 This target of a hundred and eighty-two
17 (182) has a twenty (20) year time frame. And Hydro and
18 the partners work under something called the
19 Operational Jobs Working Groups. An initial five (5)
20 year work plan was developed, and is currently being
21 implemented. Hydro reimburses the reasonable costs of
22 each First Nation partner to participate in this
23 initiative, and over the twenty (20) year period, a
24 total of \$20 million has been allocated to this
25 initiative for the ongoing jobs training.

1 Generally speaking, transmission
2 construction employment will be driven by the
3 transmission line agreement, which dictates that all
4 non-supervisory staff for the project must be new
5 hires. Hiring preference -- preferences are put into
6 each northern contract, and will vary dependent upon
7 location of the project and the resulting contract.

8 For northern projects, first preference
9 hiring would be Northern Aboriginals. There is
10 currently no policy for the south, and these are
11 managed on a case-by-case basis. However, typically,
12 Manitoba Hydro looks to create opportunities for local
13 residents and businesses on these transmission
14 projects.

15 And the last main area of the benefits
16 opportunities, I want to talk a little bit about income
17 opportunities. The Keeyask Hydro Power Limited
18 Partnership will own the generation project under the
19 terms outlined in the JKDA. Hydro and the general
20 partner will own 75 percent of the partnership, and the
21 First Nations, through their respective entities, will
22 have the opportunity to own up to the remaining 25
23 percent.

24 The 25 percent common equity is divided
25 as follows: 15 percent for the Cree Nation partners; 5

1 percent for each of York Factory and Fox Lake. The
2 potential ownership will generate future income streams
3 for these communities.

4 Keeyask provides for two (2) investment
5 options for the Keeyask Cree Nations: common and
6 preferred. As a common unit partner the First Nation
7 would receive annual distributions based on its
8 proportionate share of distributable cash after equity
9 loan repayments.

10 A First Nation may alternatively elect
11 to invest in the partnership as a preferred unit holder
12 to limit its risk and be eligible to receive
13 distributions based on adjusted gross revenue. The
14 partner First Nations, not Manitoba Hydro, will manage
15 the use of these income distributions received from
16 their investment entity's interest in Keeyask.

17 Although the ownership structure has not
18 been finalized for Conawapa, Manitoba Hydro is
19 committed to providing the First Nations in the
20 vicinity of the project with long-term sustainable
21 benefits which will include some form of a project
22 income benefit.

23 In terms of transmission, Manitoba Hydro
24 has the authority under the Act to structure
25 transmission arrangements. We've used that authority

1 to structure those arrangements in the best interests
2 of Manitoba ratepayers, and as such Manitoba Hydro
3 retains 100 percent ownership of all transmission
4 assets in Manitoba.

5 In terms of governance of the generation
6 projects, Hydro is commi -- committed to meaningful and
7 long-term participation of the in-vicinity First
8 Nations in all phases of the generation projects:
9 planning, construction, and operations.

10 The Keeyask project, as was the
11 Wuskwatim project, is an innovative model for First
12 Nation and corporate Partnership and has been
13 specifically and locally designed to ensure the partner
14 First Nations have a ongoing role in the governance of
15 the project. The partner First Nations will also play
16 a major role in the Environmental Protection Plans,
17 programs which include ongoing monitoring programs that
18 incorporate the use of Aboriginal traditional
19 knowledge.

20 I want to talk a little bit now about
21 the planning and environmental assessment process.
22 Working with stakeholders, we approach the planning and
23 environmental assessment process as a means to plan and
24 design the best projects possible. Ultimately, the
25 overall goal for planning and environmental assessment

1 processes is to plan an assess the project in a way
2 that leads to the best possible plan, environmentally
3 and socially, based on rigorous and understandable
4 methods.

5 In the case of both Keeyask and
6 Conawapa, this is being accomplished through western
7 scientific studies and Aboriginal traditional
8 knowledge. Both ways of knowing are valued equally
9 throughout the process that involves assessing the
10 project in two (2) ways, one (1) based on the EIS
11 guidelines issued by regulators and another based on
12 the Cree world view.

13 Both assessments are considered in the
14 planning process, including the development of
15 mitigation measures, and both are filed with regulators
16 for their consideration.

17 In terms of public engagement, we've had
18 a comprehensive program that has sought input from all
19 potentially affected and interested First Nations
20 communities and organizations throughout Manitoba. The
21 outcomes of this program were used to inform the key
22 topics of study in the environmental assessments, the
23 potential effects of the project, and the nature of
24 mitigation measures.

25 Transmission projects, like the Keeyask

1 Transmission Project and the 750 Megawatt
2 Interconnection Project, take a similar approach. A
3 comprehensive site selection and environmental
4 assessment process is implemented by Manitoba Hydro to
5 determine an optimal route for transmission lines based
6 on a variety of possible options.

7 This process involves extensive public
8 engagement over a large study area as planners work
9 with those potentially affected by the line to find a
10 route that balances environmental, social, and economic
11 factors. Particular efforts are made to route the
12 project in a manner that infor -- avoids important and
13 sensitive areas based on scientific studies and the
14 knowledge of Aboriginal and other local users in the
15 area.

16 In all cases, the final environmental
17 assessments focus heavily on the potential implication
18 -- implications of these projects to people, water, and
19 land. The nature and extent of any project effects
20 varies depending on the project, its location, the
21 local environment, and does differ between generation
22 and transmission projects within the Preferred
23 Development Plan.

24 Throughout the planning and assessment
25 process efforts are made to understand the implications

1 of a project for people, how they may benefit from the
2 project and how they may be impacted. Typically, a
3 comprehensive socio-economic assessment is undertaken
4 that includes a consideration of potential effects to a
5 wide range of topics linked to the economy, community
6 infrastructures, services, personal, family, and
7 community life, as well as heritage resources.

8 Economic effects are most often linked
9 to how the project is implemented, available income
10 opportunities, training, employment preferences, and
11 business opportunities and how they may be enhanced to
12 offer the greatest possible benefit. When considering
13 the potential adverse effects of a project to people
14 key areas of focus include: resource use, community
15 infrastructure and services, public safety, health, and
16 heritage resources.

17 Efforts are made to understand possible
18 project effects and to determine whether they can be
19 avoided or minimized through changes to project design
20 or mitigated and are offset through project-specific
21 measures.

22 Most major developments, like those in
23 the -- in the proposed Preferred Development Plan do
24 have an affect on resource use, domestic, commercial,
25 and recreational. In northern Manitoba, where both

1 Keeyask and Conawapa are proposed, resource-use
2 activities primarily including hunting, trapping,
3 fishing, and gathering and are linked to the exercise
4 of customs, practices, and traditions integral to
5 Aboriginal culture and identity.

6 In the case of Keeyask, domestic
7 resource-use activities have been identified throughout
8 the project area and the ability to continue practising
9 these activities is being accommodated through a number
10 of mitigation and offsetting measures.

11 Lost income associated with commercial
12 activities, for example, losses experienced by
13 commercial trappers and fishers, will be paid directly
14 to individual commercial resource users for both
15 Keeyask transmission and generation projects.

16 In the case of Keeyask, it is
17 anticipated that commercial losses will be experienced
18 in four (4) trap lines, and by a single fisher who
19 operates a small, local operation downstream of
20 Keeyask. It is anticipated that the nature of the
21 effects experienced, and the types of mitigation and
22 offsetting measures implemented for resource use will
23 be similar for the Conawapa generation project.

24 In the case of the interconnection
25 project, resource-use activities include common

1 resource harvesting, like forestry and mining,
2 agricultural development, commercial tourism, and
3 domestic use. Route selection considers domestic and
4 commercial resource use in selecting a route that
5 minimizes affects on people and the environment.
6 Environmental assessment is conducted on the final
7 route selected, and appropriate mitigation measures
8 specified.

9 Mitigation measures could include
10 compensation for commercial losses, landowner
11 compensation under the Landowner Compensation Policy,
12 and appropriate access management measures to protect
13 wildlife populations.

14 Like all major developments with large
15 construction workforce, public safety, especially in
16 Gillam, has emerged as a major concern during the
17 course of our Keeyask environmental assessment process.
18 This was -- concern was linked to the presence of a
19 large well-paid workforce that will be resident at the
20 Keeyask camp, and the potential for some of those
21 members of the workforce to interact inappropriately
22 with local residents. These concerns were compounded
23 by the likelihood of cumulative effects with other
24 potential future projects in the Gillam area.

25 It is impossible to accurately predict

1 the nature and number of any negative occurrences, so a
2 decision was made to focus planning efforts on the
3 implementation of measures at the camp and in Gillam to
4 prevent such occurrences, and to respond to them
5 quickly. These measures include the availability of a
6 recreational facility including a licenced lounge at
7 the campsite, transportation to and from the site to
8 discourage personal vehicle use, on-site employee
9 counselling including access to drug and alcohol and
10 financial counselling, and cultural awareness training
11 for all workers that is designed and delivered by local
12 Cree Nations.

13 In Gillam, Karen mentioned a worker
14 interaction committee has been established with
15 representatives from the Town of Gillam, Fox Lake,
16 Manitoba Hydro, and relevant service organizations
17 including the health authority and the RCMP. This
18 committee is working to determine appropriate
19 community-based measures that can be implemented to
20 prevent and respond to issues or concerns about any
21 major occurrences.

22 While public safety is also a concern in
23 southern Manitoba, and will be considered as part of
24 assessing the 750 megawatt interconnection project,
25 it's of less concern than it is in northern Manitoba

1 because work typically takes place over a shorter time
2 period and with a considerably smaller workforce.

3 Finally, the potential effects of a
4 project to health are considered in the context of
5 undertaking the assessment process. Health is affected
6 by a number of factors, and determinates of health
7 approach that consider things such as income, housing,
8 the availability of country foods, and the presence or
9 absence of disease is undertaken as part of our project
10 planning.

11 Consideration is also given to available
12 health programming in local communities, and the
13 ability of service providers to respond to any -- any
14 incremental changes brought on by the new developments.
15 During the course of Keeyask planning, a concern was
16 raised about the ability of service providers in the
17 local Gillam area to respond to possible concerns
18 related to an increase in such things as accidents,
19 addictions, and infectious diseases, and basic health
20 services.

21 Again, a concern about the potential for
22 cumulative effects, and other possible future
23 developments was also raised. To address these
24 concerns, on-site counselling and a twenty-four (24)
25 hour EMS service are available at the camp. Manitoba

1 Hydro is working directly with the northern regional
2 health authority to help them plan for the influx of
3 workers into the region as a result of the upcoming
4 developments.

5 Given the size and nature of the
6 construction workforce associated with the 750 megawatt
7 interconnection project, it is anticipated at this time
8 that available health services in southern Manitoba
9 will be able to accommodate any temporary increase in
10 construction workers.

11 Keeyask and Conawapa also have the
12 potential to affect health through an accumulation in
13 methyl mercury in fish in the reservoir as a result of
14 flooding. This is especially the case for Keeyask,
15 given the extent of the flooding. Here it is
16 anticipated that mercury levels in fish will increase
17 and peak within five (5) to seven (7) years following
18 impoundment. They will gradually decrease to pre-
19 project levels, roughly over the first thirty (30)
20 years of project operation.

21 Levels of mercury will vary by fish
22 species. Those higher in the food chain are more prone
23 to the accumulation of methyl mercury, and consumers
24 will need to exercise caution in their intake. To
25 address this concern, a multilateral group on mercury

1 and human health was formed as part of the Keeyask EIS
2 assessment process that involved Manitoba Hydro, the
3 Keeyask Cree Nations, and international experts in
4 assessing potential human health risks associated with
5 mercury in fish consumption.

6 They have recommended that we implement
7 strategies and programs that are expected to allow
8 residents the opportunity to continue safely eating
9 fish throughout the course of the Keeyask project.
10 While the assessment for Conawapa is not yet complete,
11 it's anticipated that mercury will -- will be much less
12 of a concern, given the limited amount of project
13 flooding and the low levels of vegetation within the
14 areas to be flooded.

15 Heritage resources are another area of
16 concern. They provide direct evidence of people's
17 spiritual, physical, and emotional relationship and
18 connection to the -- an area. Tangible heritage
19 resources, that is the physical objects that represent
20 heritage, are protected under Manitoba's Heritage
21 Resources Act, and are an important component of the
22 environmental assessment process for new generation and
23 transmission projects.

24 Extensive programs are undertaken to
25 identify heritage resources that a project may disturb

1 during construction, or in the case of a generate -- of
2 generating through flooding. These programs identify
3 sites that will be salvaged or monitored to enable the
4 long-term preservation of the artifacts.

5 For each of the projects in the
6 Preferred Development Plan, a Heritage Resources --
7 Resource Protection Plan is drafted to safeguard
8 heritage resources, and to appropriately manage human
9 remains that may be discovered or disturbed during the
10 development of a project.

11 I want to talk a little bit about some
12 of the environmental aspects now, quickly.
13 Understanding the effects to the aquatic environment is
14 especially important for generation projects, and is a
15 key focus of the assessments for both Keeyask and
16 Conawapa. Aquatic studies on both project areas have
17 been underway for over a decade, with special attention
18 being paid to sensitive species and habitats.

19 In the case of Keeyask, this has meant a
20 particular focus on lake sturgeon, a specie that has
21 experienced substantial declines in the last hundred
22 years throughout the region as a result of over
23 exploitation and, to a lesser extent, hydroelectric
24 development. In particular, sturgeon populations in
25 the Kelsey to Kettle reach of the river are very low,

1 and the current low numbers are limiting the potential
2 for recovery. And in some areas, notably Stevens Lake,
3 it is unlikely that the population presently is self-
4 sustaining.

5 To address this existing condition, and
6 the possible incremental effects of Keeyask, the
7 partnership has committed to a large scale sturgeon
8 stocking program to bring back a self-sustaining
9 population of sturgeon in this reach of the river. In
10 addition to this stocking program, efforts will be
11 taken to provide habitat for all stages of sturgeon in
12 this reach of the river as part of Keeyask development.

13 As a result of these measures, sturgeon
14 populations in this stretch of the river will be
15 enhanced, and the overall effect of the project will be
16 positive for this important species. In other words,
17 we expect sturgeon will be better off with the Keeyask
18 project than without it.

19 In all cases, long-term monitoring
20 programs will be in place to determine the actual
21 project effects and to assess the effectiveness of
22 mitigation measures and the need for any adaptive
23 management measures. The EIS for Conawapa also
24 includes -- will include a comprehensive assessment for
25 the aquatic environment.

1 Potential effects to the aquatic
2 environment are also considered as part of transmission
3 projects, including for the Keeyask transmission
4 project and the 750 megawatt interconnection. Because
5 these projects are not physically located within
6 waterways, their effects in this regard are quite
7 limited and, in most cases, negligible.

8 To understand our project's impact on
9 the terrestrial environment, the assessment teams begin
10 with the smallest components of the land environment,
11 such as soils, invertebrates, and individual plants and
12 work from here to understand broad concepts, like
13 ecosystem diversity, interactions and long-term
14 ecosystem health. These concepts are used to
15 understand potential changes in wetlands, terrestrial
16 plant communities and long-term habitat changes for
17 important species, like caribou and moose, furbur --
18 fur-bearers and various bird species, including
19 waterfowl, raptors, and songbirds.

20 In the case of Keeyask, particular
21 attention has been paid to understanding the potential
22 effects of the project on the four (4) different
23 caribou herds that use the Keeyask region.

24 In the case of transmission projects,
25 considerable effort is spent to understand and mitigate

1 potential terrestrial effects given the linear nature
2 of these projects and the potential for long line
3 lengths to fragment important habitat types that lead
4 to population change.

5 Consideration is also given to the
6 possibility of bird wire strikes. And devices, such as
7 bird diverters, are a common mitigation approach.
8 Vegetation management plans consider ways to mini --
9 minimize habitat damage by appropriate methods to
10 maintain low shrub vegetation.

11 In addition, where possible, winter
12 construction will also help to mitigate impacts to
13 vegetation and habitat. In many cases, it's possible
14 to route the lines in such a way that effects to
15 sensitive or important species or habitats can be
16 minimized, for example, routing to avoid disturbances
17 to important caribou calving areas.

18 While moose and caribou are key species
19 considered in northern projects, for the 750 megawatt
20 interconnection project it appears that elk will be the
21 population that will be given the most consideration in
22 the route selection process.

23 And finally, on terms of adverse effects
24 agreements, through the course of project planning
25 efforts are made to identify appropriate avoidance

1 mitigating -- mitigation or offsetting measures to
2 eliminate, reduce, or manage potential adverse effects
3 in some circumstances. And depending on the nature of
4 the residual adverse effects, compensation may be
5 provided to address residual adverse effects that
6 cannot be mitigated.

7 In the case of the Keeyask generation
8 project, Hydro and each of the Keeyask partners have
9 negotiated adverse effects agreements to address
10 unavoidable residual adverse effects. The adverse
11 effects agreements were signed in 2009 prior to the
12 construction of the project and, as you've heard, were
13 validated through separate community referendum
14 processes. This represents a departure from past
15 projects that were built first and compensation and
16 mitigation measures were determined after the fact.

17 Typically, comparable adverse effects
18 agreements are not negotiated for transmission projects
19 because transmission impacts can be either avoided or
20 minimized during the project's routing and assessment
21 process. Any effects that are not avoided through
22 routing can typically be managed through the
23 implementation of project-related mitigation measures
24 and associated monitoring of these measures.

25 Much attention is being paid to planning

1 for the Preferred Development Plan in a manner that
2 maximizes benefits to local communities and that avoids
3 or minimizes adverse effects. These projects are being
4 planned and will be undertaken in a responsible and
5 proactive manner.

6 The Preferred Development Plan provides
7 particular benefits for northern Aboriginal communities
8 and residents in a region where opportunities for
9 economic development have traditionally been limited.

10 Detailed and thorough environmental
11 assessments are undertaken for all developments in the
12 Preferred Development Plan, and the outcomes of these
13 processes will be rigorously tested through federal and
14 provincial environmental review processes. For
15 example, we just finished the CEC process for Keeyask,
16 a thirty-eight (38) day hearing that included testimony
17 from many experts and had several rounds of Information
18 Requests.

19 Manitoba Hydro's committed to working
20 within vicinity communities to use the planning and
21 assessment processes for their most important purpose,
22 to plan these projects in the best possible way.

23 And to conclude -- I just want to
24 conclude on a personal note. I've spent the last
25 thirteen (13) years of my career at Manitoba Hydro

1 working on these various projects. I believe that for
2 -- for myself that these are -- the Preferred
3 Development Plan is the right choice. It's the right
4 choice for my daughter, and for future generations.
5 Thank you.

6 MR. DOUGLAS BEDFORD: Mr. Wojczynski
7 will now carry us till 12:30. He's aware, of course,
8 that he has fifteen (15) minutes in which to do that,
9 and he'll be working from Exhibit 129, again with the
10 third part of it, 129-3.

11 THE CHAIRPERSON: Before you start out,
12 I have a few questions I wanted to -- to --

13 MR. DOUGLAS BEDFORD: Certainly.

14 THE CHAIRPERSON: -- clarify -- get
15 clarified, if you don't mind. You talked very quickly
16 about the income stream that would flow to the
17 partnership for Keeyask. Could you go over that again
18 very quickly, please?

19 MS. SHAWNA PACHAL: Yeah, absolutely.

20

21 (BRIEF PAUSE)

22

23 MS. SHAWNA PACHAL: So Hydro and the
24 general partner will own at least 75 percent of the
25 partnership, or potentially more if the First Nation

1 partners don't take up the opportunity to own the other
2 25 percent. The 25 percent common -- the ownership
3 equity is divided as follows: 15 percent for the Cree
4 Nation partners, 5 percent for each of York and Fox,
5 and the idea is that this potential ownership will
6 generate future income streams for each of the
7 communities.

8 THE CHAIRPERSON: So the income stream
9 is what I'm interested in. How -- how will that work?
10 I mean, you had some references to the income stream.
11 Could you --

12 MS. SHAWNA PACHAL: Well, there's two
13 (2) different -- there's two (2) different options.
14 There is the investment options. There is the
15 preferred option, or the common option.

16 As a common unit partner, the First
17 Nation receives annual distributions based on its
18 proportionate share of distributable cash after their
19 equity loan repayments, or the First Nation may
20 alternatively elect to invest in the partnership as a
21 preferred unit partner to limit its risk but be
22 eligible to receive distributions based on adjusted
23 gross revenue.

24

25 (BRIEF PAUSE)

1 DR. HUGH GRANT: Yeah, I was curious
2 about the term 'adjusted gross revenue'. How -- how is
3 that calculated for a hydro generating station?

4 MS. JANE KIDD-HANTSCHER: If I could
5 just have one (1) moment, please.

6

7 (BRIEF PAUSE)

8

9 THE CHAIRPERSON: If another panel will
10 be going over -- over that issue, we can -- we can
11 defer that until we can have a more exhaustive
12 discussion.

13 Mr. Wojczynski, what do you think?

14 MR. ED WOJCZYNSKI: We could -- we
15 could leave that for a more full discussion, and me
16 just quickly do -- get through my presentation, if
17 that's what you prefer? We're happy to do it either
18 way.

19 THE CHAIRPERSON: Okay. Why don't --
20 why don't we do that later then. Okay, I have some
21 other questions. And -- and this is a reference that
22 you made about public health and being -- servicing
23 workers in southern Manitoba. Could -- did I hear that
24 right?

25 Like in other words, when you talked

1 about public health you indicated that you were -- you
2 were planning -- because of increased workers and so
3 on, you were planning -- you -- you expect demand on
4 local facilities, but you also -- I thought you -- I
5 heard you say that you expected some of that demand to
6 be addressed by southern Manitoba?

7 MS. SHAWNA PACHAL: No, what -- what I
8 had said, or -- or perhaps I misspoke but the intention
9 is -- we know that there's a -- the large influx of
10 workers in the north, so we -- we have to work with the
11 -- those agents -- the health agencies to ensure that
12 they're staffed appropriately, and we assist with
13 making sure all the right mechanisms and supports are
14 in place.

15 In the south, we don't -- the -- the
16 work -- it's primary -- it's transmission. The
17 workforces are very -- very small, and they move
18 around. And, so we don't really anticipate that
19 there'll be much pressure on the healthcare system
20 associated with that.

21 THE CHAIRPERSON: I get it. Now, the -
22 - the -- you indicated that the transmission lines are
23 not required to have an adverse effects agreement.

24 Could you explain why?

25 MS. SHAWNA PACHAL: Well, there -- it -

1 - from Manitoba Hydro's perspective there's a huge --
2 like quite a difference between building a generating
3 station and the impacts associated with a generating
4 station versus transmission. And so we do provide
5 adverse effects arrangements on generation, but on
6 transmission we take the approach, as I mentioned, is
7 that, first of all, because of the nature of
8 transmission we have the options to reroute.

9 So we have the options to -- where --
10 with the generating station you pretty much have to
11 build it where you have to build it. With
12 transmission, we can have a general route and then we
13 can work with communities and local resource users to
14 figure out where are the sensitive spots. Like, where
15 is a caribou calving area? Where is a -- an area where
16 people pick blueberries, or practice traditional
17 pursuits? So we can avoid most of the typical adverse
18 effects that you would see in generation on the
19 transmission side by -- by rerouting.

20 And then for other potential impacts
21 associated with transmission, then we go into sort of
22 monitoring to see what those are potentially. And we
23 look at some sort of offsetting programs and often work
24 with the communities to say, what would be an
25 appropriate offsetting program to deal with that, as

1 opposed to being adverse effects agreements.

2 THE CHAIRPERSON: Now, you know, the
3 discussion -- the -- the information you provided to
4 the panel with respect to public safety, public health,
5 heritage resources, water, land, and so on, obviously
6 the state of -- you're addressing these issues with
7 respect to Conawapa is not the same as -- as Keeyask?

8 Am I right? I mean, you're far more
9 advanced with Keeyask than you are with Conawapa?

10 MS. SHAWNA PACHAL: Correct.

11 THE CHAIRPERSON: And so are we to
12 assume that what -- what you indicated here will
13 necessarily apply to Conawapa, or is that sort of --
14 will be modified as you go along? I mean --

15 MS. SHAWNA PACHAL: Well, I can --

16 THE CHAIRPERSON: -- the -- the
17 arrangements you --

18 MS. SHAWNA PACHAL: -- I can tell you
19 there will be some form of an income opportunity. It's
20 under discussion what that looks like. There will be
21 training, employment, business opportunities; the same
22 environmental processes, principles, policies will
23 apply' adverse effects arrangements. So it -- it --
24 from a policy or principle perspective all the things
25 that we've done on Keeyask we would do on Conawapa.

1 We're hoping to learn -- take some lessons, learn from
2 Keeyask and from Wuskwatim, and make it even better for
3 Conawapa.

4

5 (BRIEF PAUSE)

6

7 THE CHAIRPERSON: Thank you.

8 MR. ED WOJCZYNSKI: Mr. Chair, I'm
9 prepared to do an expedited version of my presentation.
10 I think it would be appropriate given it fits with the
11 -- the topics from this morning.

12 Okay. So this -- the -- I'm going to
13 skip through a few of the overheads and -- and only
14 give a summary of the contents of this part of the
15 presentation. You just heard a -- a fairly detailed
16 discussion of the environmentalal -- macro -- the
17 environmental, macro-environmental, socio-economic, and
18 benefits side of the -- the Preferred Plan projects.

19 A part of the task for the NFAT and for
20 you as a panel is to do, at -- at a -- at a screening
21 level or a macro-environmental and at a socioeconomic,
22 a comparison of the -- the projects and plans in the
23 Preferred Plan with the other plans. And we do that by
24 focussing on the projects that -- and the technologies
25 that are available in the plans rather than each

1 detailed plan itself.

2 The -- so the focus on this will be the
3 socio-economic and the macro-environmental as a
4 comparison of the different resources. And the
5 resources we're talking about are, of course, the winds
6 in the Preferred Plan, natural gas, wind, and the two
7 (2) major transmission projects, the Manitoba-Minnesota
8 Transmission Project and the North-South upgrade.

9 DSM is also covered, but it's a bit of a
10 different animal than the others. DSM is composed of
11 many different small measures that are very different
12 from each other. So, generally, our conclusion is, and
13 not a surprising one for you, that DSM is -- is
14 positive from an environmental point of view; very
15 benign.

16 From a socio-economic point of view
17 there are some benefits, and jobs, and things, but it's
18 very hard to assess. And we haven't done an extensive
19 evaluation of that, in part because it's so unique to
20 each program, and in part because DSM is going to be in
21 all our plans. And, as Ms. Pachal indicated, our
22 future projects will also undertake a detailed
23 environmental assessment as well as Keeyask having
24 been.

25 I'll start off with the air parameter.

1 In a nutshell, Manitoba -- the hydro projects have very
2 low emissions of -- probably the lowest of any
3 generating resource. It's two (2) to three hundred
4 (300) times less than natural gas generation, depending
5 on whether you're talking about simple-cycle or
6 combined-cycle. That's quite a major reduction. It's
7 even more less than coal, but we're not even
8 considering coal at this point.

9 Wind generation is also a very low
10 greenhouse emitter, but still greater than -- than
11 hydro. Transmission has some GHGs associated with
12 change in land use, but pretty small compared to the
13 other numbers we're -- I just turned my mic off instead
14 of advancing the slide.

15 The land -- there's a significant amount
16 of land that is affected by -- by generation
17 development. In the case of hydro, the amount of land
18 that is affected, and primarily through flooding, is
19 significantly less in the way we are doing our projects
20 now compared to before. Ms. Pachal indicated how we've
21 changed and evolved our approach to planning our
22 projects.

23 So if you look at the hydro and the gas,
24 the gas projects themselves, if you look at the gas
25 turbine, it's a very, very small footprint: negligible.

1 However, one cannot logically and realistically compare
2 hydro and gas when -- and -- and only look at the
3 actual combustion turbine facility itself. You also
4 have to look at the fact that the hydro project comes
5 with its own fuel; that is the water. The -- the gas
6 turbine has to have a fuel: natural gas.

7 So you have to look at the upstream
8 impacts as well for the natural gas you -- you consume,
9 and that there is a substantial amount of land
10 impacted. As a matter of fact, when you add it all up,
11 that -- that ends up being greater than for the hydro
12 project when you do it on an energy equivalent basis.

13 Wind has a relative -- has a -- a very
14 small footprint. And there's a fair bit of land that
15 is affected, but -- but a lot of that effect, certainly
16 in Manitoba at least, is agricultural land which
17 fundamentally can still be utilized for agriculture and
18 -- and is somewhat offset by the fact they have
19 arrangements with the land owners.

20 Water is, as Ms. Pachal indicated, one
21 (1) of the prominent issues you have -- you have to
22 consider with hydro. There is a decline in water qual
23 -- quality associated with suspended solids. That's
24 mainly due to erosion of the soil material. That's
25 something that is very actively considered, and over

1 ten (10) to fifteen (15) years that recovers.

2 On the natural gas side, there is a -- a
3 bit of surprise, perhaps. But when you think about the
4 upstream end of natural gas, you -- first of all there
5 is -- particularly with the increased use of fracking
6 there's large quantities of -- of water consumed in the
7 pro -- in the production of the -- of the gas. And
8 secondly, there are issues associated with the impacts
9 of the fracking on water. Again, that isn't something
10 that happens in Manitoba, but it's certainly something
11 associated with natural gas generation.

12 Flora, the plant life and whatnot, the
13 effect from the hydro side is mainly the amount of
14 wetlands that are flooded in one (1) way or another, or
15 affected by diking. And it's a less than 1 percent of
16 the total wetland in the study area is affected. If
17 you look at gas, again, you have the upstream impact on
18 the local ecosystem, including wetlands and boreal
19 forest.

20 And I add in here that we -- that
21 there's climate change impacts, and we get that --
22 through that indirectly by talking about the CO2
23 emissions, which we did in the -- one of the first
24 slides. But I think something we need to keep in mind,
25 in a broader consideration, when we're looking at

1 whether it's flora, fauna, is that one (1) of the
2 largest threats to the environment is due to climate
3 change. And that includes the same flora and fauna
4 that we are addressing here in the local Keeyask and
5 Conawapa area. A prominent issue, as Ms. Pachal
6 indicated for Keeyask and for Conawapa, are sturgeon.
7 Caribou; I won't go into those. She
8 just finished talking about it. With Gas, there isn't
9 any effect in Manitoba, but there would be in Alberta.
10 As a matter of fact, the federal Species at Risk Act
11 has listed the boreal woodland caribou in the area that
12 there's gas production in there and have cited the oil
13 and gas production as being a major issue for them.
14 Transmission; there is no effect, obviously, on lake
15 sturgeon and not in the US transmission line, the MMTU
16 (sic). The North-South Upgrade would traverse the
17 caribou habitat areas and there will be monitoring and
18 mitigation for those.

19 Training and employment; that was
20 touched on already. That's -- there's -- if you build
21 the hydro projects, there are major employment during
22 construction. If you look at the gas generation and
23 you do it on a per-energy equivalent, there's about ten
24 (10) times as many jobs on a per-megawatt hour basis of
25 capability from hydro versus gas.

1 Wind has -- if you construct wind
2 generation, obviously there's some jobs there as well,
3 but they're relatively smaller. They also are all
4 focussed in the south, whereas with the hydro
5 generation you tend to get jobs focussed in the north
6 where there's a higher degree of unemployment.
7 Transmission would also involve some jobs.

8 Local business opportunities, Ms. Pachal
9 dealt with those. There was the two hundred (200) for
10 Keeyask, the \$200 million for these direct negotiated
11 contracts. There are also the other contracting employ
12 -- opportunities on the generation projects, and also
13 on transmission.

14 Gas; there would be some degree of
15 business opportunity but much less. And in southern
16 Manitoba, wind; there would be some opportunities in
17 the south as well.

18 Personal, family, community life; a
19 prominent issue. We heard from Ms. Anderson this
20 morning, was the -- the worker interaction issue was
21 one (1). And -- and Ms. Pachal mentioned the
22 methylmercury issue. Those are both something we've
23 paid a lot of attention to with our partners and are
24 dealing with in the Gas side. There would be some
25 issue with that but not to the same degree.

1 Wind; there is, to some degree, turbine
2 noise and related potential health effects. I think
3 I'll skip the infrastructure one for now. Resource use
4 is another prominent area. Obviously, when we expand
5 the waterway through the flooding we put in dikes,
6 roads, that -- that that has an impact on the shoreline
7 and on the -- the access to those resources that are in
8 that area. We, again, work closely with our partners
9 with the adverse effects agreements, with offsetting
10 programs, and we will be doing the same thing with
11 Conawapa.

12 Again, with Gas, there would be in the -
13 - in the Alberta kind of area where the gas is produced
14 there will be issues; not -- not in Manitoba. But
15 again, there is the climate change effects that would
16 affect resource users generally in Manitoba as well.

17 So just to summarize for each of the
18 technologies or types of projects: DSM we view as very
19 attractive from a macro-environmental perspective. We
20 don't question that whatsoever. Socio-economic
21 benefits are not so clear. There probably are some,
22 but it's probably not as big an issue. And again, it's
23 going to be in all our plans, including the Preferred
24 Plan.

25 Natural gas; an advantage in natural

1 gas, you locate it close to the load source, relatively
2 speaking. You put it in southern Manitoba. We do have
3 pipelines that are running through southern Manitoba.
4 There is transmission. You'd have to expand the
5 transmission, but there would be much less transmission
6 with natural gas than you do with hydro. Of course
7 then there's less -- but there's also less employment
8 benefits, less training benefits, there's large amounts
9 of CO2, and there would be some effects to the land,
10 water, fauna in the production area of the natural gas
11 itself.

12 Transmission; as Ms. Pachal indicated,
13 there's a lot of opportunity to minimize those effects
14 through the route selection process and the processes
15 with the potentially affected local people. Again,
16 there'll be monitoring programs, mitigation, and there
17 would be some business and employment opportunities.

18 Wind; low -- low GHGs, some environment
19 effects on birds and bats and the turbine noise issue I
20 mentioned. They'd be built in southern Manitoba where
21 there would be some jobs there, not as many as the
22 hydro projects. And, again, they'd be in the south, so
23 there would be much less in terms of socio-economic
24 benefits to Manitobans.

25 Hydro; I don't want to go through the

1 full detail again here. We've reduced the
2 environmental impacts compared to previous projects,
3 one (1) of the benefits of working with our partners.
4 We've got adverse effects agreements, and will have
5 them for Conawapa. We will have monitoring and
6 mitigation. We'll use adapt -- what's called adaptive
7 management, so if -- surprising -- surprises come up,
8 we will deal with them, and adapt and deal with those -
9 - those surprises.

10 There will be a lot of benefits from the
11 economic development throughout Manitoba, and
12 particularly for the northern and Aboriginal
13 communities, and these are the -- the areas of the
14 province where there's high unemployment and the
15 communities have historically faced the socioeconomic
16 challenges that were mentioned this morning, and we're
17 all aware of.

18 The construction of the hydro will have
19 about ten (10) times as many jobs as the equivalent on
20 the gas side, and three hundred (300) times less
21 greenhouse gases emitted, and we conclude, Manitoba
22 Hydro, that overall, the hydro is the best source of
23 electricity from a macroeconomic and socioeconomic
24 perspective. Thank you.

25

1 (BRIEF PAUSE)

2

3 MS. MARILYN KAPITANY: Mr. Wojczynski,
4 when you were talking about the jobs that are going to
5 be created, are those construction jobs solely, or are
6 those construction and then maintenance long-stream?
7 And could you just compare some of the options in terms
8 of how the jobs in the -- the future will compare to
9 the ones in the shorter term when projects are being
10 constructed?

11 MR. ED WOJCZYNSKI: Yeah. Yeah. The -
12 - these jobs I was referring to were the construction
13 jobs. On the hydro side, there will be much -- a much
14 smaller number of jobs, and there aren't many jobs on
15 the gas side on an operational side either.

16 On -- on the wind side, I don't have an
17 exact number, and we could get that for you. The --
18 the wind actually does have an ongoing maintenance
19 component to it that's not trivial, and so there are
20 some jobs, but there -- but there's not a huge number,
21 but if you would like -- I don't have them readily
22 available, but we could come back with them if -- if
23 you prefer?

24 MS. MARILYN KAPITANY: Sure. That
25 would be great. Thank you.

1 MR. ED WOJCZYNSKI: Okay.

2 DR. HUGH GRANT: I'll be very brief.

3 Could you just explain -- I was quite surprised that
4 the greenhouse gas effects of it -- of hydro is
5 significantly less than wind. When you talk about life
6 cycle, does that mean from construction through to
7 destruction, and --

8 MR. ED WOJCZYNSKI: Yeah, life cycle is
9 over the whole life of each facility, and then we
10 essentially divide it or levelize it by the amount of
11 energy over its life, so that accounts for the
12 different periods of life for the different
13 technologies, and it includes, amongst other things,
14 let's talk about the hydro project to start with. The
15 amount of concrete and cement, it's quite -- cement --
16 creating cement creates greenhouse gases. That's
17 included.

18 The -- the diesel trucks used, for
19 example, and the heavy equipment that's used. Any land
20 that you've cleared for the project, whether it's the
21 road or along the reservoir, so the fact you've taken
22 trees out of the carbon cycle, that's included, and the
23 -- there's a relatively small component which I'm going
24 to mention, but is often being brought up in -- by
25 people, and that is the emissions from the reservoirs.

1 Canadian reservoirs -- actually I'll say North American
2 reservoirs produce very, very, very few emissions.

3 What has reached some -- given some --
4 and that is included in here, but it's very small. The
5 reason that issue has been given some prominence is
6 some -- there are some dams and reservoirs in the
7 equatorial regions that have low output, vast amounts
8 of flooding, and they have a lot of material, and --
9 and those -- some of those have had relatively high
10 amounts, but these projects have very, very few
11 emissions, like, from the reservoirs themselves.

12 From the wind, for instance, it's --
13 again, it's the steel. There's a lot of steel. That -
14 - there's greenhouse gases for that. There's also some
15 greenery taken out of action, as well, and there's even
16 -- it's a bit surprising, and people aren't normally
17 aware, there's a good chunk of concrete underneath each
18 wind turbine to keep it stable, so all of those are
19 accounted for.

20 DR. HUGH GRANT: Because it comes a --
21 wind is five (5) times more in this calculation. Is
22 that in ri --

23 MR. ED WOJCZYNSKI: Yes, and these
24 numbers were not calculated by us, but by the Pembina
25 Institute, and -- and they -- they -- one (1) of their

1 expertise is doing this, and I think there was -- some
2 people have -- may have -- some people may -- may view
3 us as having gone to the Pembina Institute and gone to
4 somebody who has a bias of some kind.

5 I can guarantee the Pembina Institute,
6 which is environmentally oriented, has no bias against
7 wind, and they double check their numbers.

8 THE CHAIRPERSON: Okay. The panel has
9 exhausted its questions for the time being. Given that
10 it's lunch now I propose that we take a half hour
11 lunch. I just want to put everybody on notice that the
12 panel is prepared to sit beyond 4:30. We want to make
13 sure that we address all of the -- all of the witnesses
14 -- all the Intervenors have an opportunity to question
15 the witnesses and we're prepared to sit beyond 4:30 to
16 make sure that happens today.

17 So for those of you who have childcare
18 issues, you better make other arrangements, because
19 we're going to sit until we complete the schedule.
20 Thank you.

21

22 --- Upon recessing at 12:42 p.m.

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

24

25 THE CHAIRPERSON: Good afternoon. I

1 believe that we're ready to resume the proceedings.

2

3 CONTINUED BY MR. DOUGLAS BEDFORD:

4 MR. DOUGLAS BEDFORD: We'll pick up
5 with Mr. Page. And Mr. Page is working from the same
6 presentation, Exhibit 129, except the fourth part of it
7 with the cover page that bears his name.

8 Mr. Page...?

9

10 (BRIEF PAUSE)

11

12 MR. IAN PAGE: Good afternoon. I have
13 a very brief presentation on the economic impact
14 analysis that was filed as Appendix 2.3 of the original
15 application. So what I'm going to go through is sort
16 of -- of the economic impact analysis that was done on
17 the Preferred Development Plan in terms of employment,
18 direct, indirect, and induced.

19 And what those mean are: Direct are
20 people actually on -- on the job site; labour directly
21 related to the project. Indirect is labour associated
22 with support industry for those projects. And induced
23 is the -- is the employment and other effects that are
24 related to -- to the additional income available from
25 the direct and indirect that flows back through the

1 economy. And we'll talk about labour income, tax
2 revenue, and domestic product throughout part of this.

3 So the methodology, we use Manitoba
4 Bureau of Statistics; they have an input/output model.
5 So we get the -- to work with the -- the engineers and
6 do a detailed assessment of -- of the particular jobs
7 required for the particular functions, which goods and
8 services are. And -- and the engineers also give us an
9 indication of what jurisdiction they expect the -- the
10 expenditures to happen within.

11 So if it's say -- say a purchase of a
12 turbine or a generator they can tell us that there is
13 not going to be a supplier in Manitoba or even in
14 Canada for -- for a project for items such as that, and
15 then that -- and that information is then fed into the
16 model.

17 So when we do that model, we'll -- we'll
18 see that anything that -- so of all the expenditures
19 related to the project will then determine how much is
20 Manitoba. And -- and by deduction anything that's not
21 spent in Manitoba is -- is a leakage from the Manitoba
22 economy.

23 So that model does -- to give us the
24 idea of -- of how much of the -- of the expenditures
25 are retained within Manitoba, and how much are retained

1 within the rest of Canada, and then the balance would
2 be for the rest of the world.

3 So the Preferred Development Plan is --
4 this chart shows the -- the actual expected benefits in
5 terms of employment and other effects. So we can see
6 nineteen thousand two hundred (19,200) construction
7 jobs. There was question earlier about what the
8 relative O&M jobs are. You can see they're quite
9 small; about three hundred (300) on an annual basis,
10 whereas the nineteen thousand two hundred (19,200) is
11 for the -- is for the duration of the construction
12 period, so they're -- not quite equivalence.

13 Provincial and local taxes; so this
14 would be things like payroll taxes, PST, various taxes,
15 employment -- various employment taxes, and so forth.
16 So about half a billion dollars in provincial and local
17 taxes during the construction period, and about \$2
18 million annually.

19 Provincial GDP; we're adding about \$2
20 billion during the construction period to the Manitoba
21 economy, about 15 million annually. And labour income
22 is about \$1.5 billion during construction and again
23 about 13 million annually.

24 THE CHAIRPERSON: Mr. Page, the -- the
25 capital taxes would not be part of this, would they?

1 MR. IAN PAGE: No. No, I should have
2 mentioned that, yeah. Capital taxes, you know, we're
3 looking at PST, sort of expenditure-related taxes, so -
4 - so PST, then there would be labour taxes. So payroll
5 tax, income tax that -- that the workers would pay in,
6 and -- and so forth.

7 But the -- yeah, the -- the good -- the
8 large ones like the water rentals, provincial guarantee
9 fee, and capital tax are -- are excluded from this.
10 And -- and Dr. Shaffer will talk about those a bit
11 later.

12 So just to get a sense of the -- the
13 relative scale on these, these -- these are the direct
14 and indirect employment per -- per project. So you see
15 over eighty-three hundred (8,300) total -- total person
16 years of employment for Keeyask, and over nine thousand
17 (9,000) for -- for Conawapa. And then numbers in the
18 five (5) to six hundred (600) range for the various
19 transmission projects.

20 And just for -- just for -- sort of to
21 scale things, the direct jobs related to Keeyask are
22 about forty-six hundred (4,600), so a little over half
23 of that, and -- and Conawapa is almost fifty-one
24 hundred (5,100). So again, a little over half of -- of
25 these totals would be direct employment versus the

1 indirect and -- and induced.

2 And -- and again, just for comparison
3 purposes, this is for the Preferred Development Plan.

4 To put the -- some -- a -- a gas turbine in -- in
5 respect of -- we'd be looking at in nature of about a
6 hundred and seventy (170) direct jobs in Manitoba, and
7 six hundred (600) in the rest of Canada. And for a
8 combined cycle the numbers would be about five hundred
9 (500) in Can -- in Manitoba, and sixteen hundred
10 (1,600) in Canada.

11 So you can see -- I -- in scale, the --
12 the hydraulic generation has a lot more local
13 employment. And I think that's actually all I was
14 going to talk about that.

15 So if there's any questions?

16 DR. HUGH GRANT: I just had one (1)
17 comment and one (1) question, because I don't doubt for
18 a minute the magnitude of these numbers; I just
19 question using input/output tables to derive them,
20 because I don't understand how you can measure dire --
21 indirect and induced effects of a -- of a -- a large
22 construction project in the North based on existing
23 data on the construction industry in Manitoba.

24 MR. IAN PAGE: It -- it is -- it is a
25 challenge, because it's -- the model is based on -- on

1 the entire Manitoba economy. The impacts that we see
2 specifically on -- in the North are going to be a lot
3 larger. And -- and Dr. Shaffer, again, will speak to
4 that. The model does reflect a past history of
5 experiences, so -- so the Wuskwatim history and the --
6 and the Limestone history are -- are known. What --
7 what isn't factored in the model is -- is all the
8 additional efforts that we've made in terms of training
9 to try to capture a larger portion of the jobs within
10 Manitoba versus Canada.

11 So it -- it's -- it's based on sort of
12 historical experience, so all the stuff that Ms. Pachal
13 spoke about this morning, that won't be factored in
14 there. So if we were to do an update after Keeyask
15 when we're looking forward again, presumably we'd --
16 we'd show a higher experience and -- and a higher
17 proportion of Manitoba jobs versus external.

18 DR. HUGH GRANT: Yes, my -- my -- I
19 would not have used the Manitoba input/output table. I
20 think it would have been done better just estimating
21 things yourself.

22 My question was, I think the tie plan
23 study said in fact that you underestimated the impact.
24 Because, you know, you're measuring the initial
25 injection as spending into the Manitoba economy, things

1 that you treated as 100 percent imports actually had
2 some local content to them.

3 Is that --

4 MR. IAN PAGE: That -- yes, that was
5 their -- their view. They used a Stats Canada model
6 which had a -- shows a higher portion of -- or maybe to
7 put it the other way, a reduced leakage in -- from Man
8 -- from the Manitoba economy than -- than the Manitoba
9 Bureau of Statistics model does. And the Manitoba
10 model we think is -- does a better job of -- although
11 it may be conservative, as I mentioned, with the -- the
12 efforts that -- on training and so forth, but it does
13 reflect a sort of more current knowledge of -- of local
14 -- local industry that -- than does Stats Canada model.

15 For -- for example, when we built
16 Limestone, cement was -- was produced in -- in
17 Manitoba. It's no -- it -- now it has to come from
18 Edmonton. Limestone had Manitoba steel in it. Again,
19 that has to be imported. And so all of those sort of
20 current things that -- that we're aware of and -- and
21 the -- and the Manitoba Bureau of Statistics can
22 reflect, and Stats Canada, just seems to lag a bit
23 behind in capturing some of those changes to the
24 economy.

25 DR. HUGH GRANT: I thought the

1 distinction they were making is that say you have to
2 import cement from Edmonton --

3 MR. IAN PAGE: Yeah.

4 DR. HUGH GRANT: -- that if they're
5 carried on a Manitoba truck then -- then it's
6 generating some local benefits that you're -- you know
7 --

8 MR. IAN PAGE: Yeah, I -- I recognize
9 that they -- they made that statement, but the -- the
10 model does reflect that -- that local portion in the
11 calculations.

12 DR. HUGH GRANT: Okay. Thank you.

13 THE CHAIRPERSON: At construction peak
14 how many jobs are we talking of? I mean, if you look
15 at the period of peak construction for the transmission
16 line and the Keeyask Project, what's the maximum number
17 of jobs at any one (1) point in time, do you know?

18

19 (BRIEF PAUSE)

20

21 MR. IAN PAGE: It'll just take us a
22 minute to find that. I had the total person years, but
23 not the direct -- direct and indirect, but not the peak
24 employment, yeah, which I think is what you're looking
25 for.

1 THE CHAIRPERSON: Yeah, but in --
2 person years would be useful, as well.

3 MR. IAN PAGE: Pardon?

4 THE CHAIRPERSON: Person-year
5 employment would be useful, as well.

6 MR. IAN PAGE: Okay. For Keeyask, it
7 was forty-six hundred and eleven (4,611) direct --
8 direct person years of employment, and Conawapa is five
9 thousand seventy (5,070). So a little over half of the
10 total employment was -- was direct.

11 DR. HUGH GRANT: Could I just follow up
12 on that on just one (1) point. Would these be net
13 jobs? This is just the total jobs created, but is this
14 necessarily --

15 MR. IAN PAGE: This is -- yeah, and Dr.
16 Shaffer will talk a bit more about that after. But,
17 yeah, this is -- this is looking at sort of drawing a
18 box around the Keeyask Project and not -- not looking
19 at if somebody gets a job from in -- somebody in
20 southern Manitoba gets a job on the Keeyask site, what
21 happens to their job down here, and the lag it takes to
22 fill that, and so forth. That's -- so it's -- it is
23 strictly a gross.

24 And -- and Dr. Shaffer will talk more on
25 -- on the net side.

1 MS. SHAWNA PACHAL: We have an EIS on
2 that -- the peak number. We're just looking it up. So
3 if they want to start the next presentation, we'll have
4 it sent to us by the time that's done.

5 THE CHAIRPERSON: Good idea. Let's
6 keep -- let's keep going, please.

7 MR. NORMAN BRANDSON: Good afternoon.
8 I'm going to begin my presentation with a very brief
9 recap of the origins of sustainable development in
10 Canada. Manitoba played a prominent role in setting
11 this movement in motion, and it's had a significant
12 subsequent impact here over the past twenty-five (25)
13 years. I will then again, briefly, describe how the
14 successive provincial government administrations of
15 Premiers Filmon, Doer, and Selinger have dealt with
16 this concept.

17 The issue of sustainable development as
18 it relates to the terms of reference for the present
19 NFAT review will be addressed. The commitment of
20 Manitoba Hydro to sustainable development would be --
21 will be described. And finally, I'll outline how
22 Manitoba Hydro's proposal before the Board aligns with
23 the principles of sustainable development as contained
24 the Manitoba Sustainable Development Act.

25 The United Nations World Commission on

1 environment and development chaired by Madam Brundtland
2 coined the term 'sustainable development' in its 1987
3 report, 'Our Common Future'. Its guiding premise is
4 that the environment and the economy are not two (2)
5 separate realms; they're intimately related. Its
6 definition is development that meets the needs of the
7 present without compromising the ability of future
8 generations to meet their own needs.

9 The concept coming at a time of
10 increasing friction between globalization and
11 environmental degradation had an instant and widespread
12 impact. The Canadian Council of Resource and
13 Environment ministers formed a multi-sectoral task
14 force chaired by the Manitoba Minister of Environment
15 to prepare Canada's response to the Brundtland Report.

16 They produced in 1987 the so-called
17 Green Report. It made a number of recommendations
18 designed at integrating these two (2) formerly
19 compartmentalized landscapes of environment and
20 economy. Its recommendations included that governments
21 integrate socio-economic and environmental
22 considerations and other decision making, that industry
23 adopt and implement environmental principles as part of
24 doing business, that multi-sectoral roundtables be
25 established in each jurisdiction to advise governments

1 on environment economy integration, and that Canada
2 should support environmentally sound economic
3 development both at home and abroad.

4 The Manitoba Government enthusiastically
5 adopted all the recommendations. To implement them, it
6 appointed a roundtable, it added a section on
7 environmental considerations to cabinet submissions,
8 and initiated state of environment reporting. However,
9 before the NDP Government of Premier Pawley could fully
10 flesh out a vision of sustainable development, he was
11 defeated. The Conservative administration of Premier
12 Filmon took office in 1988.

13 The new Government identified
14 sustainable development as one (1) of its flagship
15 issues. It immediately set about putting in place the
16 infrastructure to promote and support sustainable
17 development. It co-founded, with the Federal
18 Government, the International Institute for Sustainable
19 Development. It successfully offered to permanently
20 house the secretariat for the Canadian Council of
21 Ministers of Environment in Winnipeg, where it still
22 remains. Government appointed a multi-sectoral
23 roundtable and charged it with conducting public
24 consultation on sustainable development strategies for
25 all major areas of the Manitoba economy.

1 These twelve (12) strategies both
2 contributed to and popularized the growing sustainable
3 development vocabulary, and it began to solidify the
4 Government's sustainable development model. That model
5 included legislation. A white paper was released to
6 initiate public dialogue. And this process proved to
7 be a longer one than government had anticipated.

8 One (1) of the -- the difficulties that
9 was encountered, and it -- it persists to this day, is
10 that although there is general agreement on the broad
11 components of sustainable development, some require
12 value judgments about which there is no consensus and
13 are open to a variety of interpretations.

14 In the Manitoba Sustainable Development
15 Act passed in 1997, the Government opted for
16 Brundtland's broad definition of 'sustainable
17 development' elaborated through a series of principles
18 and guidelines. By that time, the language of
19 sustainability was fairly well articulated. A Manitoba
20 statute contains wording recognizable in virtually all
21 sustainable development legislation in Canada.

22 As with any acts of the legislature,
23 wording was carefully chosen. None of the principles
24 or guidelines is prescriptive. Words and phrases such
25 as 'should' rather than 'shall', 'encouraging" and

1 'facilitating' and 'take into account' describe how the
2 principles and guidelines are to be considered. There
3 is no suggestion that these are criteria to be used in
4 decision-making, but rather that they are factors to be
5 considered in development planning, and considering
6 them, opportunities will be recognized to enhance
7 sustainability. There's no compliance regime in the
8 Manitoba Sustainable Development Act.

9 Looking at these broad components of
10 sustainability as part of economic development has
11 resulted in progress towards sustainability. However,
12 Government also has the responsibility to determine if
13 there's a consensus on defining and quantifying some of
14 these components, so they -- they can be applied
15 through a policy or legislation.

16 To this end, the consultation on
17 sustainable development implementation, or COSDI was
18 the acronym used and is still used, was launched in
19 1997. Recommendations were developed through a
20 comprehensive and inclusive public consultation
21 process. The keystone recommendation was that the
22 province adopts a wide area and municipal planning
23 regime that incorporates sustainable development at a
24 high level independent of, but guiding, individual
25 development decision.

1 Before it had time to consider and act
2 upon the COSDI recommendations, the Filmon Government
3 was replaced by the NDP administration of Premier Doer
4 in October of 1999. As you probably know, it's quite
5 unusual for a new government to adopt without
6 alteration the policies of its predecessor. In effect,
7 though, this is what occurred with respect to
8 sustainable development.

9 A sustainable development strategy paper
10 was released in June of 2000 in which the new
11 government accepted the COSDI report, initiated the
12 East Side Planning Process as the first pilot of wide-
13 area planning. It enhanced the functions of the
14 roundtable, it appointed an Aboriginal resources
15 council, and committed to the integration of
16 sustainable development strategies into the day-to-day
17 operations of the newly created Department of
18 Conservation.

19 In 2001, a sustainable development code
20 of practice was implemented, designed to further
21 clarify the broad components of sustainability for
22 consideration in public sector decisions and
23 activities. A little more specific in some respects
24 than the principles and guidelines -- for example, the
25 use of Aboriginal traditional knowledge was encouraged

1 -- the code remained directive rather than
2 prescriptive.

3 In spite of progress towards
4 sustainability there remained, both inside and outside
5 government, a search for clarity and consensus if it
6 could be achieved on specific policies or legal
7 instruments that could be applied to assist this
8 progress. In areas where there is broad agreement,
9 this has indeed occurred. Sometimes it's happened
10 almost incidentally without overt ties to
11 sustainability. For example, public involvement and
12 transparency of decision making has improved
13 enormously, reinforcing one (1) of the attributes of
14 sustainability, openness, while evolving for a variety
15 of reasons.

16 In other cases, the province has
17 articulated its strategy to achieve sustainability in a
18 particular sector in fairly concrete measurable terms.
19 The provincial clean energy strategy is an example.
20 Where broad themes that ought to pervade to support
21 sustainability can be quantified, the province has
22 developed policies, for example, with respect to
23 Aboriginal training, employment, and business
24 development targets.

25 The terms of reference issued by the

1 province to the Public Utilities Board NFAT panel makes
2 reference to sustainable development and its
3 relationship to the panel's review. The words of the
4 terms of reference issued by government, much like its
5 legislation, are understandably carefully chosen.

6 A review of the key words concerning
7 sustainable development in the context of government's
8 approach, that has been remarkably consistent over the
9 past twenty-five (25) years, I believe, reinforces the
10 clarity of the wording. The panel is directed in its
11 assessment of the needs and timing of the proposal, and
12 the proposal as compared to alternatives, to take into
13 consideration the alignment of the plan and
14 alternatives to the principles of sustainable
15 development.

16 The key words, in my view, are: take
17 into consideration, alignment, and principles. 'Take
18 into consideration' and 'alignment', taken together, is
19 clearly not prescriptive. It is the principles to
20 which the panel is to consider alignment, not the
21 principles and objectives. This means an examination
22 at a high level, a general or a macro rather than micro
23 level.

24 And all this makes sense in -- in the
25 Manitoba context. Where it could, the government has -

1 - has developed policies that define in more detail
2 particular attributes to sustainability, guiding the
3 public sector in directions that reinforce conditions
4 conducive to sustainability. For those components
5 where the precise means of application is unclear, that
6 they've been considered so that case specific
7 opportunities for application can be identified if they
8 exist is sufficient.

9 Manitoba Hydro has embraced sustainable
10 development and acted to integrate the concept into its
11 daily operations, as well as future planning and
12 development. Hydro has had a sustainable development
13 code of practice in place since 2003. The code
14 consists of thirteen (13) principles, each of which is
15 articulated in the context of the Corporation's
16 business. They have been derived from the principles
17 and guidelines contained in the Manitoba Sustainable
18 Development Act.

19 The Corporation reports annually on its
20 progress on sustainability issues. Measurable
21 indicators of some quantifiable aspects of
22 sustainability have been developed and are tracked in
23 the report, and opportunities to expand this menu are
24 being sought.

25 Hydro has a well-developed environmental

1 management system, and subscribes and adheres to the
2 International Standards Organization 14000 series. The
3 Corporation is an active participant in international
4 forums, keeping current with global sustainability
5 issues while acting locally.

6 The environmental impact statement of
7 the Keeyask partners devoted Chapter 9 to documenting
8 the alignment of the project with sustainable
9 development legislation, and with Manitoba Hydro's
10 sustainable development code of practice.

11 How then does the proposal before the
12 panel align with the principles of sustainable
13 development contained in the Manitoba Sustainable
14 Development Act?

15 I -- I won't repeat in detail here the
16 documentation that's already before the panel, but I'd
17 like to identify just a few highlights under each
18 principle. Principle 1 is the integration of
19 environmental and economic decisions. As documented in
20 the NFAT submission, and identifying its Preferred
21 Development Plan -- Plan, Hydro screened sixteen (16)
22 resource options against fifteen (15) characteristics
23 divided into four (4) categories: technical,
24 environmental, social and policy, and economic.

25 A melding of environmental, social, and

1 economic concerns was thus incorporated at the earliest
2 stage of planning. The needs assessment cast a wide
3 net that included clearly articulated assumptions for
4 load growth, domestic and export, demand-side
5 management, and existing resources. As options were
6 reduced, the multiple account cost benefit analysis was
7 applied to take into consideration consequences not
8 reflected in a simple accounting of revenues and
9 expenditures.

10 Principle 2, stewardship. Consideration
11 of the potential impact on future generations loomed
12 large in the thinking of the Keeyask/Cree partners.
13 Throughout the decade long process of developing the
14 partnership measures were agreed upon designed to
15 minimize the impacts and maximize the benefits to
16 future generations.

17 For example, a considerably smaller
18 project than the maximum technically feasible design
19 was agreed upon to greatly reduce flooding.
20 Environmental effects agreements were concluded that
21 ensure ongoing future benefits to the communities. The
22 development of renewable hydro power minimizes
23 greenhouse emissions to the benefit of present and
24 future generations.

25 Principle 3, shared responsibility and

1 understanding. The Keeyask partnership is founded on
2 respecting the culture, customs, and world view of the
3 Tataskweyak Cree Nation, the War Lake First Nation, the
4 York Factory First Nation, and the Fox Lake First
5 Nation. Aboriginal traditional knowledge had a
6 significant role in the environmental assessment of the
7 Keeyask Project and will continue to loom large in the
8 various plans that will govern the operation of future
9 facilities.

10 Ways to help alleviate the current
11 economic disparity between northern and southern
12 Manitoba have been factored into the plan. To the
13 wider Manitoba public, Hydro has provided numerous
14 opportunities to be informed about the development of
15 its plans and to make their views known. As a Manitoba
16 Crown Corporation, all Manitobans are its partners.

17 Principle 4, prevention. An initial
18 guiding principle in the planning process was to focus
19 on river systems currently managed for hydro-electric
20 developments. The size of the Keeyask proposal and the
21 preliminary design for the Conawapa development have
22 both been reduced from technically feasible maximum in
23 order to avoid and reduce potential adverse
24 environmental and social effects due to reservoir
25 flooding. Recognizing that predictive science is not

1 infallible, the principle of adaptive management will
2 be applied to Keeyask and Conawapa projects.

3 Principle 5, conservation and
4 enhancement. The construction of the projects is
5 governed by strict rules to minimize the disruption to
6 terrestrial and aquatic habitat due to construction
7 activities. Lake sturgeon has received considerable
8 attention related to the Keeyask Project. The goal is
9 to enhance the local population through a stocking
10 program. Efforts will be closely monitored and
11 adaptive measures taken if necessary. And
12 opportunities to enhance fish habitat will also be
13 implemented.

14 Principle 6, rehabilitation and
15 reclamation. All construction-related disturbance not
16 associated with the operation of the hydro-electric
17 plants at Keeyask and Conawapa will be re-vegetated and
18 returned as closely as possible to pre-development
19 conditions. Adaptive management measures again will be
20 implemented to deal with any unforeseen effects.

21 And finally, and in conclusion,
22 Principle 7, global responsibility. By developing
23 renewable hydro-electric power, Manitoba Hydro will be,
24 through export sales, replacing future greenhouse gas
25 emitting fossil fuel -- fuel power plants. This will

1 contribute to the long-term mitigation of effects of
2 climate change, the most serious global
3 intergenerational issue of our time. Once the power is
4 required to meet Manitoba needs, it will contribute to
5 the province's stated goal of a fossil fuel free
6 Manitoba economy. Thank you.

7

8

(BRIEF PAUSE)

9

10 MS. MARILYN KAPITANY: Mr. Brandson,
11 can you explain how a forebay clearing in -- how it
12 works in relation to rehab and restoration?

13 MR. NORMAN BRANDSON: I don't think I -
14 - I have mentioned it under rehab and restoration, but
15 I -- I guess I would include it more as a -- a very
16 serious mitigation measure. It doesn't, to me, fit
17 under the vocabulary of rehabilitation and -- and
18 restoration other than perhaps rendering the -- the
19 reservoir somewhat more akin to the original aquatic
20 environment that existed prior to flooding.

21 But personally, I -- I wouldn't classify
22 it as rehabilitation as such. The original impact is
23 the flooding and you're trying to reduce the impacts
24 that that has.

25 MS. MARILYN KAPITANY: Thank you.

1 That's what I thought too, but I just wondered.

2 THE CHAIRPERSON: Thank you, Mr.

3 Brandson. I guess, the other question -- you know, I'm
4 glad that you went through the history of the evolution
5 of sustainable development policy in Canada. But I'm
6 interested in knowing -- you know, we're talking about
7 a project that's a number of years out in the future,
8 where's the policy going and is the project aligned
9 with future evolution of -- of a policy in this area?

10 Could you -- could you talk about that
11 briefly?

12 MR. NORMAN BRANDSON: First of all, I'm
13 sure others will be addressing that as -- as well
14 during these -- these hearings. I think where -- where
15 the policy is heading is -- is a continued striving to
16 reach some consensus on what admittedly, in many cases,
17 are -- I guess I'll say vague terms.

18 I mean, in -- in a conceptual sense, I
19 think most of us understand sustainability and -- and
20 some of these broad principles that are stated here.
21 The difficulty is -- is getting a handle -- I mean,
22 intergenerational effects would -- you know, what
23 specifically do we need to do, or not do, and how much
24 of it? And -- and what effects are we talking about?
25 What opportunities might or might not be precluded?

1 You know, as you know, there -- there are some who
2 would advocate that simply having a strong and healthy
3 economy today will be sufficient to put future
4 generations in a position to deal with whatever comes
5 along. They'll be able to afford the technology and we
6 will have the wealth to develop all sorts of
7 technological solutions, and -- and so on.

8 So my view is that -- that -- and it's
9 not -- I'm -- I'm sorry it's not a very helpful
10 definition of -- of where I see sustainable development
11 going, because it -- it doesn't answer the question of,
12 Well, what precisely would some of these definitions
13 be?

14 But I think that's where we're heading,
15 to -- to continue to seek more consensus on -- on what
16 all this means in a measurable way, so that -- that we
17 -- we can -- as -- as has been done in some cases -- I
18 mean, a very simple example that's been on the table
19 probably before they started talking about sustainable
20 development is sustainable yield in forestry. I mean,
21 there -- there's something that's a numerical,
22 calculable number that relates to sustainability in a
23 very particular sector, in a very narrow sense.

24 But as -- as we get into this broader
25 sort of global sense of sustainability -- so that's

1 really what we're talking about. We're not just
2 talking about sustainability of 'A' or 'B', but
3 sustainability of -- of our ongoing economy and social
4 interrelationships and so on. And certainly in my
5 view, and -- and I think it's -- it's shared quite
6 widely -- is we're not there yet by a longshot.

7 But having said that, and I -- and I
8 think I said it somewhere here, and -- and I've been
9 involved in, sort of, a good fortune really to be
10 involved in the discussion about sustainable
11 development right from the early days. I -- I worked
12 for Gerard Lecuyer who was the minister who chaired the
13 Canadian Council of Resource and Environmental
14 Minister's task force that wrote Canada's response.

15 And -- and although we've -- we've -- I
16 wouldn't say applied -- we've considered a lot of these
17 general things, and -- and specific things that we do,
18 we haven't done it in a prescriptive way, but it has
19 opened up opportunities and -- and revealed
20 opportunities. And if you look at the big picture --
21 and again I -- I reference some of the -- the progress,
22 things like transparency, equity; I mean, they're --
23 they're big projects.

24 We don't consider any longer without
25 looking at equity issues. We did, you know, thirty

1 (30) -- thirty (30) years ago, but today we don't. So
2 -- so some of the -- the sustainability attributes are
3 -- are working their way into the system, and if you
4 look at a longer view and -- and more of a macro view,
5 personally I -- I'm quite optimistic about the progress
6 we've made so far, and that we're going to make more
7 progress in the future.

8

9 (BRIEF PAUSE)

10

11 MS. SHAWNA PACHAL: We can respond to
12 your question now. For Keeyask, assuming an in-service
13 date of 2019 and construction start of 2014, we have a
14 peak con -- peak direct employment at about sixteen
15 hundred (1,600) in around 2016/2017. For the Keeyask
16 transmission project, it's about two hundred (200).

17 The peak for Conawapa is about twenty-
18 one hundred (2,100); just for the generation. We
19 haven't figured out transmission yet relation -- in
20 relation to that. And assuming a construction start
21 date of Conawapa about 2018, if we're assuming an -- an
22 in-service date of 2026, we'd be looking about
23 2022/2023-ish for a peak; something like that.

24 THE CHAIRPERSON: Thank you. Thank you
25 for that. Next, I guess?

1 CONTINUED BY MR. DOUGLAS BEDFORD:

2 MR. DOUGLAS BEDFORD: We'll turn now to
3 Dr. Shaffer, and we are at Exhibit 129, the sixth part,
4 129-6.

5 DR. MARVIN SHAFFER: Thank you. As
6 mentioned earlier, I'm a consulting economist, and I
7 teach in the public policy program at Simon Fraser
8 University where I -- specifically I teach a course in
9 benefit cost analysis. And I was responsible for the
10 multiple account benefit cost analysis that's presented
11 in Chapter 13 of the NFAT submissions.

12 Benefit cost analysis is a technique
13 that economists use to assess projects, or in this case
14 plans, from the point of view of society as a whole; in
15 other words, taking into account the consequences to
16 everyone who is affected, and trying to assess the
17 significance of those consequences based on the values
18 that those affected hold; the tradeoffs they'd
19 willingly make, in economic language, their willingness
20 to pay or give up things in order to acquire the
21 benefits and -- and the maximum compensation they would
22 require to -- to offset the negative, or to supply
23 labour and other inputs.

24 Multiple account benefit cost analysis
25 is a variation of that traditional benefit cost method

1 that recognizes that not all consequences can be
2 monetized necessarily, and also that distributional
3 consequences are important in decision making.

4 So in effect it's a disaggregated
5 benefit cost analysis that tries to capture the same
6 scope and the same -- with the same purpose, but not
7 necessarily to simply reduce it all to a bottom line,
8 but rather a matrix of -- of consequences to the
9 different stakeholders and parties that are affected.
10 And this analysis was done to assist the panel. In --
11 in addressing the terms of reference, it asked for the
12 consideration of the overall socio-economic benefit to
13 Manitobans; in the language of economists, the overall
14 social net benefits to Manitobans.

15 A standard approach in benefit cost
16 analysis is to start with what -- basically the private
17 benefits and costs -- the benefits and costs that
18 accrue to the project sponsors or proponents in terms
19 of the revenues they expect to receive, and the
20 expenditures they would incur, and then make a series
21 of adjustments where those revenues don't fully reflect
22 the -- the benefits to, in this case, Manitobans; or
23 the expenditures don't fully reflect or take into
24 account all of the costs, and one makes a series of
25 adjustments for that.

1 And that's basically the approach that
2 was taken in this analysis where I started with what's
3 called 'the market evaluation'; in other words, the
4 valuation of the outputs and the inputs at market
5 prices, which is basically Manitoba Hydro's incremental
6 revenues from their surplus sales revenues, and the
7 incremental expenditures that they incur in order to
8 provide the power needed for domestic requirements and
9 -- and to produce the -- the surplus available for
10 export.

11 And -- and then the series of
12 adjustments or other considerations follow the -- the
13 set of accounts outlined in -- in this slide -- the
14 valuation accounts where, under the 'Manitoba Hydro
15 Customers' I should point out, and -- and this is or
16 can be confusing, the -- the market valuation account
17 basically captures the long-term cost to customers.

18 But we tried to capture in this account
19 was a distributional question, which is a different
20 question. It's not just what is the best from an
21 overall long-run resource point of view; but how does
22 the rates affect customers in the short versus long-
23 term? When I say "short", I really mean short to
24 medium versus long-term. So we looked at the
25 cumulative rates to the short-term/medium-term impact

1 and the -- the longer-term consequence.

2 We also, in the customer account,
3 recognized that while all of the plans that -- that we
4 analyzed meet Manitoba Hydro's reliability criteria,
5 they're not all the same in terms of the reliability
6 they -- they provide. And so there's a difference to
7 the quality of supply, in -- in effect, and that's got
8 to do with the -- the load-carrying capability and the
9 expected loss of load under contingent circumstances
10 that can arise.

11 The Manitoba Government account is
12 looking at the question: Well, what -- what do the
13 different plans mean to taxpayers, to the Manitoba
14 Government? Because embedded in Manitoba Hydro's
15 expenditures are a significant amount of payments to
16 government. And the question there is: What is the --
17 the net -- the incremental revenue to Government,
18 revenues that are not offset by incremental costs?
19 They appear as a cost to Manitoba Hydro, but there's a
20 corresponding benefit to taxpayers. And that's what's
21 taken into account in that Manitoba Government account.

22 In terms of the economy -- and this can
23 be a fairly confusing area for people not familiar with
24 benefit cost analysis. We have to spend lecture after
25 lecture with our students saying: Jobs are not

1 benefits. Jobs are costs. You have to pay people to
2 work, and most people have alternative opportunities;
3 in other words, there is an opportunity cost, a minimum
4 amount they'd have to receive to willingly provide
5 their labour to a particular project.

6 So what we are looking at here is not
7 the total number of jobs that might be created by a
8 project, but rather the net benefits those jobs might
9 provide, depending on where those jobs are, who takes
10 up those jobs, and what their alternative employment
11 prospects or alternative activities would be; in other
12 words, what's the net benefit accruing from the
13 economic activity generated by the project. And that's
14 what we look at in the Manitoba economy account.

15 In the environment, a wide range of
16 areas here. There a mission impacts where we would
17 look at the external cost. In the case of GHGs, we --
18 we're looking at the social cost of carbon, and we'll
19 talk about the various estimates around that, less the
20 carbon charges that Manitoba assume they will have to
21 pay in respect of any GHG emissions in the future.
22 Criteria air contaminate damage costs, which are the --
23 the particulate and NOx emissions associated with
24 thermal plants.

25 And then there's a full array of

1 biophysical impacts. The purpose of the benefit cost
2 analysis isn't to repeat an environmental assessment,
3 but rather to try to assess to what extent there are
4 significant residual impacts that haven't been
5 compensated, that -- that are in effect external costs
6 not reflected in the planning and expenditures of -- of
7 the projects themselves.

8 Similarly, in the social area, there's
9 community impacts. A very similar question is what are
10 the residual effects? Are there external costs? Are
11 they of significant nature residual after all of the
12 mitigation and compensation efforts?

13 Also, the social account looks at
14 certain distributional aspects. Are there particulars
15 parties? In this case there are. The -- the Manitoba
16 Hydro's Keeyask partners who have particular interests
17 and positive and negative effects associated with the
18 project and are there more general social consequences
19 that haven't been taken into account.

20 And one (1) area that's addressed in
21 this is a bequest value, because of the value of the
22 assets remaining at the end of the planning period. We
23 take a residual asset value into account, but there's a
24 lot of reasons to believe that -- that Manitobans may
25 value that higher than what a discounted present value

1 of those future assets would be.

2 And finally, the analysis, particularly
3 the monetized aspect of it, was done for reference case
4 set of assumptions. In the risk account, call it, we
5 asked the question: Are there differences in the risk
6 profiles of a significant nature that might cause you
7 to want to choose a different option regardless of its
8 expected net benefits?

9 I hesitate to put this slide up, the
10 discount rate. I understand everybody's interested in
11 the discount rate. I can only say I understand there's
12 a few economists here, and I'm sure we'll get more than
13 a few opinions.

14 What I can tell you is in benefit cost
15 analysis it is very standard to use what's called a
16 weighted average opportunity cost of capital for the
17 discount rate, in other words, to weight the future
18 consequences, the future revenues or costs to calculate
19 their equivalent present value. And that weighted
20 average opportunity cost of capital is trying to
21 capture the consequences for society, in other words,
22 to what extent do you displace -- displacing investment
23 by your investments, to what extent are you attracting
24 more savings, to what extent are you attracting more
25 foreign investment or foreign borrowing and what are

1 their respective costs.

2 And using that approach and relying on
3 recent studies of -- of what that would be, I've
4 applied a 6 percent real discount rate in monetizing or
5 calculating the monetized present value of benefits or
6 costs in the material in Chapter 13.

7 I did want to say -- and -- and there is
8 no one (1) right discount rate. There are different
9 discount rates for different purposes and from the
10 perspective of different parties. In Manitoba Hydro's
11 analysis it used a discount rate reflecting its cost of
12 capital, not the social cost of capital from, you know,
13 the point of view of society as a whole, the cost of
14 capital it faces in terms of its interest charges, its
15 debt guarantee fees, and a sufficient return on equity
16 to be able to maintain its financial targets. And
17 that's its WACC and it's somewhat different than the 6
18 percent rate. I believe it's -- five point four (5.4)
19 is what Manitoba Hydro is now currently using.

20 And it's also different from what's
21 called a social time preference rate, which in the
22 financial analysis was used to weight and provide a
23 levelized indicator of the rate consequences over time,
24 where what you're trying to do is -- is apply the
25 tradeoff people would make between costs incurred now

1 and in the future. I suspect we'll come back to that.

2 In the Chapter 13, in the initial work
3 we analysed four (4) plans, a Preferred Development
4 Plan, a plan with a smaller tie, Keeyask and a smaller
5 tie, a plan with Keeyask and no interconnection, as
6 well as an All Gas Plan meeting domestic requirements
7 as they emerge without any new interconnection or
8 sales.

9 And just moving to the next slide. The
10 reason for those plans is that they were designed to
11 ask the key questions, which is we have plans with and
12 without Keeyask; in other words, is it better to meet
13 domestic load as it grows with gas-fired thermal or
14 Keeyask? And we have plans with and without new
15 interconnections, to ask the question: If Keeyask is a
16 preferred method of meeting domestic requirements, is
17 it preferred to do that in conjunction with new
18 interconnection and sales opportunities? And that's
19 essentially why those plans, leading plans at the time,
20 were selected for analysis.

21 In terms of the -- the assumptions,
22 sources and key points, I'll just try to -- I'll --
23 I'll go through it quickly now and if you have
24 questions, I'm sure they -- they will come up. The
25 market valuation account is basically the analysis of

1 the alternative plans from the point of view of
2 Manitoba Hydro and its project partners. And I relied
3 on the incremental revenues, export revenues, and
4 expenditures, capital and operating system operation
5 expenditures that resource planning developed for those
6 plans.

7 I also relied on their estimate of the
8 residual asset value based on their projections of what
9 the assets remaining at the end of the planning period
10 beyond 2047 would provide, discounted back to 2047.

11 In the Manitoba Hydro customer count I
12 relied on the financial analysis that Manitoba Hydro
13 undertook to estimate rate consequences, cumulative
14 rate consequences to 2032 and to 2062, the short to
15 medium versus the long-term effects. I also relied on
16 a reliability study in the appendix to, I believe,
17 Chapter 13 to address the question: Are there
18 differences in the -- in the reliability offered by the
19 different Plans that we analysed?

20 The Manitoba government account. I did
21 want to emphasize, this wasn't -- and -- and in many
22 respects this analysis was done conservatively. This
23 wasn't trying to identify all of the revenues that the
24 Manitoba government might real -- might see as a result
25 of this project and the economic activity associated

1 with it. It was trying to identify those incremental
2 revenues not offset by incremental costs, revenues they
3 wouldn't otherwise receive, revenues that aren't there
4 to offset either costs or risks it's incurring.

5 And, therefore, it was confined in the
6 Manitoba government account to solely considering water
7 rentals, as well as capital taxes. It didn't include,
8 for example, the very sizable debt guarantee fees
9 because those fees are in some respect there to
10 recognize the -- the debt guarantee that the government
11 is providing, and there are -- there are costs or risks
12 associated with that.

13 It didn't include the assumed carbon
14 charges or coal taxes because those are, indeed, part
15 of what would otherwise be an environmental
16 externality, some payment for the carbon emissions. It
17 didn't include the economic impact estimated sales
18 taxes, and -- and the like, worker income taxes, on the
19 assumption that for the most part, with the exception
20 we'll talk about in just one (1) second, economic
21 activity -- people are working, and if they wouldn't be
22 paying taxes on this project they'd be paying taxes on
23 other projects. And to the extent you attract people
24 into the province who will be paying taxes, they
25 require incremental services. So to be conservative,

1 we didn't include those either.

2 The Manitoba economy account, as I
3 mentioned earlier, what we were trying to estimate
4 again conservatively was what economists call the
5 economic rents, the difference between the wages paid
6 in the project that are built into Manitoba Hydro's
7 expenditures and the opportunity cost of the workers,
8 the value, the wages they might have otherwise have
9 earned, or the value of the activities they might have
10 otherwise engaged in, and that's what we looked at.

11 It did dif -- we made assumptions based
12 on employment conditions where employment condition --
13 employment created in northern Manitoba filled by
14 northern Manitobans would provide greater net benefits
15 and employ -- other employment created in the province
16 because of the markedly different employment
17 opportunities and circumstances of the workers there.

18 We didn't include any net benefit for
19 the in migrants which is a sizable estimate of the
20 workforce because this was trying to take a Manitoba
21 point of view. And we included just a fairly modest
22 net benefit for all other Manitobans, recognizing that
23 for the most part they have alternative employment
24 prospects though there would be net benefits from the
25 high-wage jobs these projects could provide.

1 On the environment. With respect to GHG
2 emissions, what we estimated included in the net
3 benefits or net costs were the emissions in Manitoba.
4 We looked at the difference between estimates of the
5 social cost to carbon based on recent Canadian and US
6 studies, and conservative estimates at that, versus the
7 carbon charges that were assumed and already taken into
8 account in the Manitoba Hydro expenditures.

9 With respect to criteria air
10 contaminates, we looked at European studies of -- of
11 damage which are basically health costs associated with
12 a particulate and NOx emissions. They're relatively
13 small but we included estimates of -- of those costs.

14 With respect to biophysical impacts. As
15 I said before, what we looked at and tried not to
16 repeat, there's better experts here and you've heard a
17 lot of material on it today, with some understanding of
18 what residual effects remain, and whether, you know,
19 those residual effects have been in some respects
20 minimized or offset by the -- the benefit agreements
21 and the compensation agreements, and other measures,
22 and that's what's provided in the report.

23 In the social area, too, very similar,
24 we're trying to look at what residual, if any,
25 significant effects remain. And -- and both in the

1 social and the environment, we recognize that there
2 will be non-monetised consequences and, in some
3 respects, those provide the trade-offs to the extent --
4 those will be examined in detail in -- in environmental
5 hearings, but at the end of the day, they -- they
6 provide some measure of the tradeoff, and one has to
7 judge whether the monetised net benefit offsets
8 whatever non-monetised factors you -- you have.

9 And in the risk account, what we looked
10 at in chapter 13 is basically -- and I -- I'm not sure
11 if you've already gone through it -- the S-curve
12 analysis looking at the different performance of the
13 different plans under varying assumptions about capital
14 cost, export prices and interest rates.

15 In the interest of time, I'm not going
16 to try to run through all of the -- or I'll go through
17 very quickly the -- the reference scenario results.
18 These are the results based on the -- the original ref
19 -- reference case set of assumptions.

20 And you'll see in the market valuation,
21 this is expressed not in terms of the net costs, but
22 rather the net benefit, what -- what advantage is there
23 all relative to the Preferred Development Plan, and
24 you'll see the small tie had some modest net benefit,
25 in other words, less net cost to -- to meet domestic

1 load. Both the -- the Keeyask without the new
2 interconnection and the All Gas had significantly more
3 net costs, in other words, a -- a net cost as compared
4 to the Preferred Plan.

5 In terms of the customer account, again,
6 you probably would have discussed this earlier. The
7 Preferred Development Plan shows higher cumulative rate
8 increases in the first twenty (20) years and lower over
9 the long term.

10 In terms of reliability, the Preferred
11 Development Plan offers greater load-carrying
12 capability than the others and less expected loss of
13 unserved energy due to contingent circumstances, and
14 greater ability to -- to manage drought.

15 I should say, in -- in the report you
16 will see some estimates of the magnitude of that, it's
17 not insignificant, in the order of \$100 million of
18 reliability benefit of the Preferred Plan over, for
19 example, the All Gas, but that wasn't included in the
20 overall monetised net benefit because of potential
21 uncertainty about how to measure the cost of unserved
22 load, depending on the exact characteristics of the
23 unserved load; when it takes place, the duration, with
24 what advance notice, and the like.

25 You'll see in the Government account,

1 the Preferred Development Plan is significantly more
2 beneficial than the others. And -- and that's because
3 imbedded in the expenditures in the Preferred
4 Development Plan are a lot of capital taxes and water
5 rentals that aren't there to the same extent in the
6 other Plans.

7 Similarly, under the Manitoba economy,
8 you'll see there are net benefits of the Preferred
9 Development Plan relative to the others, and that's
10 because of the, not only the greater amount of
11 employment, but the greater amount of employment
12 located in regions where the employment opportunities
13 are least.

14 GHGs, just monetised the GHG emissions
15 within Manitoba and the Preferred Development Plan has
16 the -- the least and -- and, therefore, their net costs
17 associated with the other Plans relative to that,
18 particularly the All Gas Plan.

19 We didn't monetise, but the Preferred
20 Development Plan also has benefits in terms of its
21 impacts on GHG emissions globally because of the
22 displacement of thermal generation in other
23 jurisdictions.

24 We didn't monetise that because while we
25 think there's a value to that, we weren't sure what

1 willingness to pay there would be among Manitobans to
2 reduce emissions in other jurisdictions.

3 Just continuing on the next page, with
4 respect to CAC criteria air contaminants, NOx and
5 particulates, there are, again, relatively small but
6 some -- some costs associated with that in the other
7 Plans relative to the Preferred Development Plan.

8 And with respect to the residual
9 biophysical, certainly, you've heard today there's been
10 tremendous efforts, both in the original design but
11 also in the planning, implementation, mitigation,
12 monitoring, compensation, other arrangement, to -- to
13 minimize that and to offset that.

14 There could be some non-monetized
15 residual effects remaining, but in a very large sense,
16 at least for the people in the immediate vicinity, a
17 large part of that has been internalized in the
18 expenditures, and plans, and benefits sharing
19 arrangements that are -- that are -- have been
20 developed for this project.

21 In social, there are net returns to the
22 partner, which is really a distributional effect that
23 some of that market evaluation is occurring to the --
24 the project partners.

25 Wide range of community impacts, again,

1 look through the project planning. All efforts have
2 been made to -- to minimize those, to minimize the
3 residual consequences associated with that.

4 Resource of impacts on Manitoba
5 generally, as I mentioned earlier, there could well be
6 values that Manitobans hold in respect to the type of
7 development. There could also be what we've called a
8 bequest value, which is some willingness to pay for
9 those assets that are being left at -- at the end of
10 the planning period that goes beyond the discounted
11 present value of those residual assets we took into
12 account.

13 You see the overall monetised net
14 benefit is -- for the Preferred Development Plan in --
15 with this reference case set of assumptions done at the
16 time of the filing is significantly greater than the
17 small tie, greater than Keeyask/Gas, and -- and greater
18 still than the All Gas.

19 Since the filing was made we've done
20 some sensitivity analysis. And that sensitivity
21 analysis was done in part to deal with questions that
22 no doubt were going to come up, because there's new
23 capital cost estimates now available. It's not shown
24 on this slide, but it's also dealing with the fact that
25 Wisconsin Power Service is not expected to be investing

1 in the transmission lines, so changes in the Preferred
2 Development Plan, changes with respect to that. And
3 the analysis was extended to include two (2) other
4 contending plans to look at how they would perform,
5 basically a plan like the Preferred Development Plan
6 but with Conawapa deferred to 2031 and a plan like the
7 Preferred Development Plan in terms of a large
8 interconnection, but without Conawapa, but rather
9 followed by -- by gas. And that's Plan 6 and Plan 12.

10 And here the results -- and -- and they
11 -- they are different than the reference case results I
12 went through before. You will see that the Preferred
13 Development Plan in terms of the monetised net benefits
14 still exhibits the -- the greatest net benefits in
15 terms of what was monetised. But Plans 6 and 12, which
16 are the -- the two (2) large interconnection plans, one
17 with a deferred Conawapa, one with gas following
18 Keeyask, have, for all intents and purposes, very
19 similar monetised net benefits and are preferred from a
20 market valuation point of view, in other words,
21 preferred in terms of the next expenditures Manitoba
22 Hydro and its project partners would -- would incur.

23 And you still see the Preferred
24 Development Plan providing greater benefits for
25 government in terms of the economy, in terms of the

1 environment, though in some of those to a lesser extent
2 than before.

3 The key findings, and -- and I think
4 this holds from -- from the very first analysis through
5 to the sensitivity analysis, it is advantageous to
6 develop Keeyask as opposed to gas to meet domestic
7 load. And it's more advantageous to do that with a --
8 a new interconnection.

9 The advantage increases as one moves
10 from a Manitoba -- narrow Manitoba Hydro to a broader
11 social point of view and that's because of -- of the
12 large amount of expenditures Manitoba Hydro's incurring
13 that are effectively not reso -- real resource costs,
14 but rather transfers to government, because of the GHG
15 benefits, because of the employment benefits.

16 In terms of key distributional issues,
17 with the Preferred Development Plan you do have to
18 consider the fact that there is some short-term pain
19 for long-term gain, that the cumulative rate increases
20 would be greater in -- in the first twenty (20) years,
21 but much less over the longer term. And in terms of
22 non-monetised, as I mentioned before, though Manitoba
23 Hydro's analysis and assessment considers those to be
24 minimized, to -- as -- certainly as much as possible
25 and the -- the residual effects will be limited both in

1 scope and in duration, they still remain as a non-
2 monetised effect.

3 There are, as well, I should mention,
4 non-monetised effects that favour the -- the Preferred
5 Development Plan in terms of reliability, GHG effects
6 globally, and -- and some of the social advantages of
7 this plan in terms of the opportunities it provides
8 where they're sorely needed.

9 Uncertainty and risk. The S-curve
10 analysis indicates upside and downside risk for all of
11 the plans, though I think it's fair to say that the
12 Preferred Development Plan has the greatest upside but
13 also the greatest downside risk of -- of all of the
14 other plans.

15 All of the other ones, including those
16 two (2) new ones that I introduced in the latest
17 analysis are fairly similar in the sense they have
18 relatively low downside risks. The ones with the large
19 interconnections have the greatest upside risk. The
20 All Gas has the least upside risk -- upside potential,
21 I should say.

22 The overall conclusions. From -- from
23 this analysis and -- and I think it is the qualitative
24 conclusions that's important in these analyses. We can
25 get all tripped up over numbers but the numbers are

1 really meant to be indicative of -- of relative
2 significance. The analysis does support the
3 development of the Keeyask generating station as
4 compared to the All Gas option to meet, and that's true
5 from a Manitoba Hydro point of view and it gets even
6 more pronounced as you move to a social perspective.

7 Again, as I said earlier, there are
8 greater net benefits with a new interconnection than
9 without. The Preferred Development Plan offers the
10 greatest monetised net benefits, but not necessarily
11 from a Manitoba Hydro perspective relative to those two
12 (2) other large interconnection plans I mentioned, and
13 -- and not necessarily from a customer perspective in
14 the short to medium term.

15 And as to the question of deferring
16 Conawapa or no Conawapa, these will be important
17 considerations potentially in the future. They are
18 clearly competitive plans in terms of offering net
19 benefits that are comparable without some of the
20 adverse consequences of the Preferred Development Plan.

21 And -- and that's, I apologize, a very
22 quick overview of fairly dense material.

23

24 (BRIEF PAUSE)

25

1 DR. HUGH GRANT: I just have -- I'm
2 going to say one (1) thing and then I won't speak again
3 throughout the entire hearings. And I'm not going to
4 speak about discount rates, but I actually think --
5 well, I will actually.

6 I think the rate you use is pretty high,
7 and in that sense is probably appropriate because it's
8 bias against the Preferred Development Plan in that
9 respect, so it's a cautious kind of approach. But I
10 asked a question a week ago or so, and after going
11 through Chapter 13 my question was: I don't see the
12 true social cost benefit analysis here, but I think I'm
13 clear now, is -- is what you're calling overall
14 monetised net benefit would be that residents of
15 Manitoba need a social cost benefit? Okay.

16 And so the important component here are
17 these capital taxes and water rights which when you do
18 the market valuation are treated as a cost to Manitoba
19 Hydro but when you do a proper -- proper -- the overall
20 social perspective they're not a true cost because
21 they're just an income transfer. Is that...

22 DR. MARVIN SHAFFER: That -- that's
23 clearly a main component. Just going back to your
24 first comment. The monetised net benefit would be very
25 comparable to what would be done in a traditional

1 benefit cost. And -- and I'm just cautious of just
2 right -- jumping right to that number without the
3 disaggregation and the mention of the distributional
4 and non monetised effects because there are criticisms
5 of benefit cost analysis that you can't adequately take
6 into account all effects in -- in one (1) bottom line
7 number.

8 So while I agree with you it's a very
9 important number, it provides the -- in a sense what we
10 can, I think, reasonably measure and -- and I -- I
11 would agree with you that we've done this
12 conservatively. The only difference between what maybe
13 you asked for a couple of weeks ago, or -- and what I
14 presented is I -- I presented it in a disaggregated
15 way.

16 And -- and as far as the discount rate
17 goes, you're quite right. There's a lot of research
18 lately that's arguing for lower discounts to be used,
19 but I think this is a reasonable rate to use in terms
20 of traditional benefit costs of weighted average
21 opportunity cost of capital, and we'll hear people
22 arguing for higher and lower, and it really depends on
23 what weight you want to assign to future consequences.

24 DR. HUGH GRANT: Okay. Just to follow
25 up on one (1) thing, and -- and it was really picking

1 up on a comment in the La Capra report. I think it was
2 La Capra. I understand that there's no do-nothing
3 scenario. So in other words, what we're considering is
4 a net present value in a relative sense of these
5 different plans.

6 But I think for me right off the bat it
7 was just to say: Does the Preferred Development Plan
8 have a net present value greater than zero? Right.
9 And -- and so I think La Capra's saying when you --
10 when you drop out these -- if you did sort of a market
11 valuation, in a sense, and dropped out these income
12 transfers, then, in fact, they're actually positive,
13 right, so -- and it gives you some sort of assurance
14 then that these projects are really worth doing. Then
15 we worry about the distributional aspects, but...

16 So I under -- I understand why you do it
17 in the relative sense, but it just sort of gives
18 comfort to know that these are actually profitable
19 investments, in a social sense, and then we can sort of
20 talk about how the benefits should be distributed.

21 I guess that's what I was having trouble
22 finding in the initial report.

23 DR. MARVIN SHAFFER: If -- if I could
24 just make one (1) comment, too. It is important to
25 recognize all of these plans, and this is why there's

1 no do-nothing, truly do-nothing option, have as a basic
2 requirement that they -- they have to be capable of
3 meeting Manitoba Hydro's load and load growth. And so
4 they're -- although it's not monetised, there is the --
5 the value of meeting that load that you would have to
6 add to get, I guess, what you're -- you're trying to
7 get at is a total rate of return on the project.

8 But in some respects, the differences in
9 the plans are the -- the rate of return, the -- the
10 positive return from going from, let's say, an All Gas
11 to hydro, and then going from a hydro to hydro with
12 interconnection and sales.

13 THE CHAIRPERSON: Are you in a position
14 to comment at all about the negative or the positive
15 consequences of taking money from the pocket of the
16 ratepayer and putting it to the pocket of the taxpayer?

17 You know, the -- you take money from one
18 (1) pocket and put it in the other pocket, they --

19 DR. MARVIN SHAFFER: You mean in terms
20 of the capital tax and water rental policy?

21 THE CHAIRPERSON: That's right.

22 DR. MARVIN SHAFFER: I -- I do have
23 views on that, but I don't know if it's appropriate to
24 -- to address them. It's certainly nothing to do with,
25 you know, in -- in other jurisdictions. My own view

1 is, you know, I think we all agree that conservation is
2 -- is important. And -- and if conservation's
3 important, prices have to be important. And tax policy
4 is a way of -- of addressing that.

5 So I -- I guess I would say two (2)
6 things. One (1) is, I wouldn't necessarily agree with
7 those who suggest we should elimi -- and I hear this --
8 I'm going to talk about British Columbia where I find
9 where people say, Oh, we should reduce taxes to reduce
10 rates. That would be appropriate if rates were way out
11 of line with the marginal cost of new supply, but
12 they're clearly not in Manitoba and British Columbia
13 and Quebec.

14 But I would say if there are concerns
15 about distributional rate consequences, like short-term
16 versus longer term effects and you've got a long-term
17 benefit but a short-term problem, there is a fair bit
18 of room there for government to deal with that through
19 its taxation policies. In other words, it -- it could
20 in its -- move forward the recovery of -- of the taxes
21 it wants in order to -- to align better with the long-
22 term benefits of these projects. So there's
23 opportunity there.

24

25

(BRIEF PAUSE)

1 THE CHAIRPERSON: Following up on that
2 just to explore that a little bit further, to the
3 extent that you captured the effects, the positive, or
4 pardon me, the monetised and non-monetised effects of
5 the Preferred Development Plan and the other
6 alternatives, the balance sheet benefits of the money
7 accruing to the government would be captured in the
8 total calculations, would they?

9 DR. MARVIN SHAFFER: The -- the
10 benefits to government by -- by which we mean the --
11 the revenues that they wouldn't otherwise received. In
12 other words, if -- if Keeyask and Conawapa didn't go
13 ahead the government wouldn't receive the capital taxes
14 associated with that, nor the water rentals associated
15 with the production from those plants. And those
16 aren't taxes that are trying to recover some specific
17 costs that government's incurring to support those
18 projects.

19 So, yes, the -- the -- at the bottom
20 line, recognizes those as transfers to government, not
21 real resource costs. So they are captured in the -- in
22 the bottom line, not in the market valuation, not from
23 the point of view of Manitoba Hydro itself and its
24 partners who have to pay those, they're expenditures,
25 but we make the adjustment by recognizing those aren't

1 real social costs. Those are, in fact, offsetting
2 benefits to taxpayers.

3 THE CHAIRPERSON: Thank you very much.
4 In terms of timing, I'm looking at the clock. How much
5 time do we need to do the next presentation, Mr.
6 Wojczynski?

7 MR. ED WOJCZYNSKI: This is the last
8 presentation, and it's twenty (20) to twenty-five (25)
9 minutes, assuming there aren't lengthy questions. And
10 questions are very welcome. I'm just being a
11 timekeeper.

12 THE CHAIRPERSON: Please. We're
13 waiting with bated breath.

14 MR. ED WOJCZYNSKI: Okay. Before we
15 actually get into the presentation, I thought I'd like
16 to expand on the discussion of water rentals, not so
17 much water rentals, the capital tax and water rentals,
18 sorry, that was just had in the questioning.

19 And this is an issue that was explored
20 in the interrogatory process and we dealt with there,
21 and I think I'd like to draw it out here.

22 There may be an impression that over the
23 long term where we have previously -- and I will again
24 now, and Dr. Shaffer just did, talk about the net
25 present value of the transfers to the Province being a

1 societal benefit.

2 I'd like to just ex -- emphasize that
3 tho -- those NPVs do not come from Manitoba tax --
4 ratepayers. That is not a transfer. That NPV amount
5 is not a transfer from ratepayers to taxpayers. Those
6 NPVs over the life of the projects come from the export
7 market.

8 However, there is this distributional
9 issue. In the short run, when you have slightly higher
10 rates in the, say, Preferred Plan or the 750 Plans
11 compared to, say, the All Gas Plan, when you have
12 somewhat higher rates, then some of those water rental
13 capital taxes are coming from the ratepayers.

14 But when you look over the life of the
15 project, that -- those NPV numbers that we present,
16 those are all coming -- in the end, are netted from the
17 export market, not ratepayers.

18 And we did have a number of
19 interrogatories in that process as well, and we can
20 expand on that if you like, but I just -- I just want
21 to make sure that was clear.

22 THE CHAIRPERSON: Let's leave that one
23 to -- to -- let's leave that one for the time being.

24 MR. ED WOJCZYNSKI: Yeah, I -- I could
25 explain using the NPV, but that's another discussion,

1 perhaps, and so moving on to the last presentation out
2 of our four (4) weeks, so I'm sure everybody in the
3 room is glad this is the last presentation in these
4 four (4) weeks and, of course, I'm stuck giving the
5 last one again, but I'm glad to do that.

6 So what this is doing is integrating and
7 summarizing at the highest level the information from
8 the last four (4) weeks and, to a fair degree, trying
9 to put in one (1) place the most recent information on
10 the economic updates recognizing and -- and our
11 conclusions -- recognizing, as we've talked earlier, on
12 April 4th that there will have been undertakings and
13 further exhibits on both the economics and particularly
14 on the financials, and on that day we'll be going
15 through those results and then presenting any new
16 aspects of the conclusions, but, so what I'm presenting
17 now is the summary conclusion given everything we have
18 -- we have had so far.

19 This table, I think you've seen versions
20 of this as we've gone along, and what it is, it's the -
21 - the -- the market valuation or the cor -- the
22 corporate benefits, the same values that Ms. Flynn and
23 I have been talking about the last few weeks.

24 And it's -- it's the 2014 NPV with the
25 most recent capital costs that are being updated with

1 the WPS sale finalized and the -- the investment
2 removed from the transmission, and with all the 2013
3 cost information, and using the 5.4 percent discount
4 rate.

5 We have the four (4) columns and there's
6 each of the levels of DSM and, just to remind you, you
7 -- you only -- with this table, you -- you have to look
8 at the -- the column and stay within the column going
9 up and down. You can't go across the rows to compare
10 numbers.

11 And what I'll -- what I'm going to just
12 jump to is Level 2 DSM. We've got all four (4) levels
13 here. As you will recall from the economics, we
14 concluded Level 2 was the appropriate -- the economic
15 level from a TRC test, and that we probably aren't
16 going to do all of Level 2 DSM, but I think for this
17 discussion we'll just stick with Level 2 DSM, and we've
18 done it with and without the pipeline load.

19 And you see in here that the Preferred
20 Plan passes the NPV test but -- but not by large
21 amounts, only \$45 million, but it is positive. So we
22 passed that NPV test, and if you've got a positive
23 number what that says is you should be going ahead.
24 But we have to look at all the others, of course.

25 Plan 5, which we have explored

1 previously, is the Keeyask19/Gas/750 with the WPS sale.
2 You've seen that number before, 410 million, so it's --
3 actually in that comparison they've got a larger number
4 than the Preferred Plan. What you have not seen before
5 is the Plan 6 number of three eighty-six (386). We had
6 indicated we were going to provide it. I am hereby
7 providing it. And there will be exhibits -- pardon me
8 -- yeah, exhibits provided by Hydro probably later on
9 this afternoon that give the cash flows and the
10 capacity energy tables for that. So -- and then we --
11 if you look at the pipeline load added in for 5 and 14
12 you see there's a slight modification to those numbers.

13 So I'm just going to move on from that
14 and just focus on the Level 2 DSM without the pipeline
15 load, just to be able to have a -- one (1) set of
16 numbers, and we're probably looking at a load that is
17 somewhat higher than that down the road than we're
18 going to use, but it's close enough and maybe even a
19 bit conservative by doing that.

20 This is the same numbers for Level 2 DSM
21 without the pipeline, and just presenting it in this
22 chart, and you've seen this chart before so I'm just --
23 just showing you where we're starting from.

24 This is the one now -- we have a few
25 things on here. First of all, the dark blue again is

1 the same corporate numbers, and the light blue is --
2 what we have done here is we have the -- and we've
3 presented this before in the economics panel. What --
4 the light blue is -- is how much return on equity we
5 have embedded in our WACC calculation. And we have an
6 overhead that explains that but I'll just do it
7 verbally now.

8 When we get a -- let's say a zero when
9 we do our NPV at WACC, what that -- that is saying that
10 there is -- 25 percent of our WACC is based on -- on
11 equity which has a 3 percent premium on the borrowing
12 rate. So what we do is we take the 5.4 percent
13 discount rate, we recalculate it to 4.65 percent
14 discount rate, which is our cost of -- Manitoba Hydro's
15 cost of borrowing including the debt guarantee fee, and
16 we calculate the difference, and those are these
17 numbers we see here: 737, 742, 1319.

18 That is the return on equity above
19 borrowing that we get for each one (1) of those plans
20 in addition to the -- the net benefit that's the dark
21 blue numbers. So those add up -- the -- the equity
22 available to Manitoba Hydro for each one of these plans
23 compared to All Gas are these numbers here, 1.1
24 billion, 1.2 billion, and 1.4 billion, and that's above
25 the All Gas Plan.

1 If you go to the bottom half, it's
2 exactly the same plans and information but adding in,
3 on the green, adding in the capital tax and the water
4 rental similar to what Dr. Shaffer did in his social
5 benefit cost analysis. And -- and then we have in the
6 red, we have the provincial guarantee fee, the debt
7 guarantee fee. And we have separated those.

8 Rather than just have one (1) lump sum,
9 we've kept them separate because on the provincial
10 guarantee we realize there's a bit of an issue that
11 Manitoba Hydro is getting a service for that; the
12 province typically isn't getting -- having a cost, but
13 there is ultimately some residual risk. So rather --
14 so we let the -- the reader choose to include the debt
15 guarantee fee in their thinking, or just go to the
16 capital tax and water rental, which clearly is a pure
17 tax.

18 And what we did with these is add -- WPA
19 had suggested in -- excuse me one (1) second. On page
20 52 of their -- of the MPA report, and commenting on
21 these capital taxes and guarantee fees, they say:

22 "The time value of money for
23 governments is very low, or,
24 arguably, for governments the time
25 value of money should be equal to its

1 weighted average real cost of debt,
2 which should be substantially less
3 than 6 percent."

4 So what we have used here is the 4.65
5 percent, which is actually not the government's cost of
6 debt, it's Manitoba Hydro's cost of debt, but we
7 thought that that would be perhaps the most appropriate
8 way to show what that benefit it. So if you add all of
9 those together the two (2) plans with the 750 megawatt
10 tie-line but no WPS and with Keeyask/Gas give us around
11 about \$2.3 billion all together benefit to Manitoba
12 Hydro, a return on equity, and transfers to the
13 province. If you go for the Preferred Plan it goes up
14 to \$3.7 billion.

15 So moving on, this is exactly the same
16 table Mr. -- Dr. Shaffer's presented. I'm not going to
17 go -- walk you through it. Obviously, you've just seen
18 it, he just presented it. I included it in here
19 because what we're trying to do with this last
20 conclusions presentation is pull together the pertinent
21 information that's available at this point for you to
22 consider. So I am not going to run through this again.
23 It's here for a -- a summary package.

24 This overhead, this has been addressed
25 in the original submission in Chapter 14 to a fair

1 degree. We haven't been talking about it, so I -- we
2 thought it was time to bring this up again. When we do
3 the economic evaluations, we do the financial
4 evaluations, and we do the social benefit cost
5 evaluations, they're all based on certain assumptions.
6 And there are some assumptions, or data, that we don't
7 include in the evaluations, which would enhance the --
8 the attractiveness of the plans compared to -- to what
9 we are dem -- showing you.

10 The first is you -- you've heard quite a
11 bit about there are additional export contracts that
12 are under negotiation or will be, and we fully expect
13 we will get at least some of those, and so the benefits
14 will increase relative to what you've seen.

15 Secondly, as Dr. Jacobson presented last
16 week, the 750 megawatt interconnection capability under
17 more recent studies has been firmly shown to be 883
18 megawatts export and import at no additional cost, for
19 the same cost we've been talking about. And the -- it
20 could be, and likely will be, upgraded to 1,100
21 megawatts with no cost to Manitoba. There -- there
22 would be some cost in the US and whether we'd have to
23 participate in that or not is a -- a second issue. But
24 there's a lot of -- but we'd get another 133 megawatts
25 of import/export capacity that actually should be on

1 our analysis, which would be -- which would be
2 noticeable.

3 The next one is -- is one that Mr.
4 Cormie talked about in his evidence recently and that
5 is, if we have a new interconnection which accesses
6 Wisconsin, which isn't a market we've had good access
7 to, that increases, roughly doubles the number of
8 market players we would interact with and provide us
9 some competitive edge that we haven't had so far and
10 effectively would increase our overall export market
11 price compared to what we are using now as a forecast.

12 Fourthly, as we have talked about in
13 this submission, is Manitoba Hydro right now is
14 assuming that we would look after, I believe it was --
15 it was over 50 percent, 60 percent of the transmission
16 costs in the US either through investment or through
17 other means, and our expectation is that that will be
18 transferred to other players as we go along in the
19 negotiations and the cost to us would reduce and the
20 benefits would increase.

21 Lastly, and -- is that the inter -- our
22 modelling of the interconnections understates what the
23 operational benefits would be from expanding the
24 interconnections. We don't have a solid number that we
25 can give, but it'd certainly be in the -- the many

1 multiple tens of millions of dollars and could be
2 elucidated but I don't think I'll go through the
3 details. We're already running out of time today.

4 So moving on, Manitoba Hydro's
5 perspective is the conclusion is that we should proceed
6 down Path -- what we've called Pathway 5. What that
7 would mean is starting construction this July on
8 Keeyask and proceeding with the 750 interconnection.
9 And if I can give you a piece of news that if need be
10 Ms. Pachal can expand on, and that is that I had
11 indicated earlier that on April 4th, or by April 4th --

12 DR. HUGH GRANT: Can I interrupt?

13 MR. ED WOJCZYNSKI: Oh, sorry.

14 DR. HUGH GRANT: I don't want to mess
15 your -- I know we're coming to the grand conclusion,
16 but I'm under some distress here.

17 MR. ED WOJCZYNSKI: Sorry.

18 DR. HUGH GRANT: Could we take a break?
19 Then I could come back and give this my full attention.

20 MR. ED WOJCZYNSKI: Yes, I -- I
21 appreciate and understand that problem and I'm glad I'm
22 not the only one who wants to deal with these issues.

23 DR. HUGH GRANT: Meet you there.

24 THE CHAIRPERSON: Okay. Let's -- let's
25 take ten (10) minutes.

1

2 --- Upon recessing at 2:48 p.m.

3 --- Upon resuming at 3:02 p.m.

4

5 THE CHAIRPERSON: I believe we're ready
6 to resume the proceedings. I think you're on slide 7.

7 MR. ED WOJCZYNSKI: Yes, I'm on slide
8 7. Thank you, Mr. Chair.

9 I was just going to give some good news
10 and -- and that good news is not that we're having a
11 break, although that was good news, that I had
12 indicated a few times over the last three (3) weeks
13 that on -- by April 4th or before, Manitoba Hydro would
14 be in regular discussions with DFO, and CEAA, and the
15 other federal agencies, and that, on April 4th, we have
16 to make a commitment to the general civil contractor
17 whether or not they should proceed with, excuse me,
18 proceed with the major purchases of equipment, the
19 hundred million dollars of heavy equipment that we've
20 talked about, and take other steps to prepare for a
21 early July construction start.

22 And that was, to a high degree,
23 predicated on the confidence Manitoba Hydro has that
24 the federal licensing and authorization process could
25 yield us permits and authorization in time for an early

1 construction start.

2 And it's not that we have a guarantee
3 that they'll give us the authorizations or that they'll
4 be done in time, but that we think that -- that, based
5 on the interactions with the Federal Government, that
6 the schedule is doable for that time frame.

7 And there have been ongoing discussions.
8 I'm not party to them, but Ms. Pachal -- Pachel is and
9 her staff. And right now, the -- the -- we have at
10 this point sufficient confidence that that schedule is
11 doable for us to proceed. And I expect that, unless
12 something happens between now and April 4th, the
13 indication we provide to the general civil contractor
14 would be to proceed. But we will finalize that and let
15 you know once a firm decision has been made on that.

16 So just carrying on with the
17 implementation. That was item 1. Item 2 we've talked
18 about quite extensively. We will annually review the
19 DSM plans. We are going to expand the DSM, exactly how
20 much and the timing and all the programs.

21 Thirdly, when we say, "Monitor Conawapa
22 economics and in-service date," by that, as I -- as --
23 as Ms. Flynn and I talked about previously, that we
24 have an annual power resource planning process. We'll
25 have -- it will be informed by the progress on the

1 negotiations that Mr. Cormie's doing, by load growth,
2 by DSM, by everything else that comes up as we normally
3 do. We -- we have a regular rigorous process for that
4 that is reviewed by our Executive Committee and,
5 ultimately, our board.

6 And by early 2018, if we want to go for
7 2026 Conawapa, that's when we would have our decision
8 and start construction. On the other hand, it's quite
9 feasible that would be delayed a year or two (2) or
10 whatever, and that will be part of our -- our annual
11 process of reviewing.

12 The outcomes in Pathway 5 are -- are, we
13 have multiple possibilities. If eco -- if the
14 monitoring of the economics and all of the other
15 factors is positive with Conawapa we would proceed with
16 it. And there could be an in-service date of 2026,
17 could be something even up to 2031, as Mr. Cormie
18 talked about, and -- and we'd proceed with the WPS
19 sale. And that is what we've labelled "Plan 14."

20 On the other hand, this Pathway 5
21 implementation, if, for whatever reason, it's decided
22 Conawapa shall not proceed, or at least not in the
23 foreseeable time frame, then we have two (2) outcomes
24 for that. One (1) is that Manitoba Hydro and WPS
25 mutually agree, as Mr. Cormie testified, that, yes, the

1 WPS sale can be met from new hydro out of Keeyask and
2 we don't need Conawapa, and that's called Plan 5.

3 On the other hand, if Manitoba Hydro
4 decides, or WPS decides, no, we don't want to carry on
5 with the WP sale -- WPS sale, then we go into Plan 6.
6 And that's some of the flexibility we've talked about.

7 I should add, what's not down here is,
8 if we do not get a positive outcome on the 750 megawatt
9 interconnection approval, either from the Canadian NEB,
10 from the environmental process, or from the US
11 approvals, then we -- then the WPS sale would not be
12 proceeding, and -- and that would change Pathway 5 as
13 well. As a matter of fact, we'd be right out of
14 Pathway 5, and we'd be flipping to another pathway.

15 The last comment I'll make on here is
16 that if Conawapa doesn't proceed and we end up with
17 Pathway 5 or 6, both are attractive plans as well, as
18 we've just looked at in terms of the numbers.

19 Whoops. Let me see. Oh, hang on.
20 Okay, something's frozen here. It's a good thing we
21 have MBAs helping engineers run computers.

22 What I'm now going to just do is
23 quickly, in our concluding presentation, address some
24 of the important issues that have been raised, and very
25 legitimately raised.

1 Capital costs can go up. Wuskwatim's
2 capital cost went up, and so here we are with -- with
3 Keeyask and with Conawapa, and we were asked questions
4 last week, and we have undertakings. What if the costs
5 increased up above our -- our new reference cost?

6 First of all, as Mr. Bowen and others
7 have testified, we have our Conawapa cost estimates --
8 pardon me -- Keeyask costs estimates that we have right
9 now are in vastly better shape and more confidence than
10 anything we had for Wuskwatim.

11 80 percent of the Keeyask contracts are
12 committed, either completed or committed. Wuskwatim,
13 essentially, we had none.

14 The Keeyask infrastructure project is
15 nearly complete. With Wuskwatim, we had not started
16 anything, and it was a huge source of delay and cost
17 increase.

18 Keeyask engineering, environmental,
19 Aboriginal arrangements are -- are essentially or
20 nearly complete for Keeyask. On Wuskwatim, when we
21 finish the NFAT process, we had to then to finish the
22 environmental process and the negotiations with -- with
23 NCN. We have all of that, essentially, in place here
24 today for Keeyask. Admittedly, Conawapa is further
25 down the road. The general civil contract is lead by

1 Bechtel, one (1) of the world's largest contractors,
2 the one that built Limestone on time and within budget.

3

4 We have learned in our whole contracting
5 approach and our estimating, we've learned not just
6 from Wuskwatim, but Pointe du Bois and many other
7 Canadian projects that have happened over the last few
8 years.

9 And our enhanced estimating methodology
10 encompasses this -- the new international understanding
11 that large infrastructure projects tend to have higher
12 costs ultimately, so what we and others are doing, and
13 we've testified to this, our new estimate -- one (1) of
14 the reasons it went up as much as it did was to have a
15 sust -- an expanded understand -- incorporation of
16 systemic risks, which are -- deal with this tendency
17 for the cost overrun, and that is now built into these
18 new estimates.

19 So our new estimate -- reference
20 estimate -- for Keeyask has \$590 million in for
21 contingency and reserve, and that's in base dollars.
22 If you go include interest and escalation, that's \$735
23 million that's available to deal with cost increases
24 above our point estimate. This is -- when you work it
25 out, this is 14 percent of the remaining cost to be

1 spent. We have in -- and an additional 14 percent to
2 cover cost increases.

3 If you look at Wuskwatim from the point
4 of the GCC award, the costs increased around 10 percent
5 from that point on to the final cost. Wuskwatim only
6 had a \$56 million base contingency and no reserve in
7 it. So the -- the conclusion from this is if we get,
8 with Wuskwatim, a cost -- pardon me -- if we get, with
9 Keeyask, a cost estimate, that on a proportional basis,
10 is equivalent to what happened in -- in Wuskwatim, then
11 the contingency and reserve that we have now in the
12 expanded estimate will cover that, and our reference
13 cost estimate would not have to change.

14 Carrying on with that. If by -- if it
15 does happen that the Keeyask costs increase, let's say
16 due to a general economy of lots of construction
17 happening, you wouldn't just see Keeyask costs
18 increase. You would see other hydro plant costs
19 increase. You would see the gas capital costs
20 increase. You would see the wind capital costs
21 increase, everything else being equal.

22 If instead it's not due to heavy
23 construction market and high commodity prices, if it's
24 something unique to Keeyask, you know, we -- our plans
25 weren't good enough, there's something -- something

1 that we just can't expect right now, and it's something
2 unique to Keeyask, then Keeyask would expect -- exhibit
3 that cost increase in any of the plans we have, not
4 just the 750 megawatt interconnection plans. It would
5 be in there, for example, in Plan 2, where we only have
6 Keeyask for domestic load, and it would also occur if
7 we had a -- a delayed in-service date for Keeyask.

8 Lastly, there was concern expressed, and
9 this -- this Boar -- this Board quite reasonably and
10 understandably does not want to expose Manitoba Hydro
11 and Manitoba to a situation where we build Keeyask and
12 Conawapa, and we have these high capital costs occur
13 for both Keeyask and Conawapa.

14 If, as I testified last week, if we have
15 a -- a situation where we're building Keeyask, and the
16 costs in Keeyask go to the high capital cost that's in
17 the new estimates, we will know that, and we will have
18 a -- a near certainty on what the costs will be before
19 or by we make -- when we make the decision on Conawapa,
20 and unless something else changes, like high export
21 prices and high CO2 price, unless there's some
22 offsetting change, we would expect that Conawapa would
23 not proceed on that basis.

24 So there -- the -- we -- we don't see a
25 scenario where everything else stays the same, but both

1 Keeyask and Conawapa go to high cost estimates and
2 we're exposed to that. We -- we would be exposed in
3 that world to Keeyask high cost, but we would not
4 proceed with Conawapa.

5 So moving on, another issue that does
6 arise is, Well, we've got some uncertainties. They're
7 -- why not -- why not just push things back? We've got
8 some more DSM now, more than we expected when we did
9 the submission, so why don't we just wait a few years,
10 come back, and look at things then?

11 First of all, deferring -- well, I'll go
12 to the first thing. We have a window of opportunity.
13 If we now decide to throw away the six (6) years we
14 spent working with our US counterparties and not pursue
15 the Keeyask now, and thus throw away the
16 interconnection opportunity, and we want to come back
17 four (4) years or six (6) years from now, whatever, the
18 likely situation is we would not have the confluence of
19 events that -- and circumstances that we are now in
20 that would allow us to -- to have this interconnection
21 infrastructure as an option.

22 Right now -- and I won't elaborate.
23 We've talked a lot about this. We've got -- the
24 utilities are in a structural situation, moving away
25 from coal. They're moving to a lot of gas. They're

1 worried about overexposure to that. They're willing
2 and interested to develop an interconnection.
3 Regulators and governments and MISO are favourably
4 inclined to that.

5 We have our projects ready to go, or
6 nearly ready -- I'm talking about Keeyask, at least --
7 supported by our First Nation partners. You heard that
8 earlier today. And we're in a low interest rate
9 environment, so we see this as a window of an
10 opportunity that likely would not be here five (5)
11 years from now, and I'll add to that what -- what Mr.
12 Cormie said. Our counterparties in the states, if we
13 walked away from this now, they would have a lot of
14 distrust that -- about entering into a prolonged
15 process with us again to -- to redo it, so that would
16 be another issue railing against having that option
17 later.

18 But there's a more fundamental issue.
19 By deferring the decision, that does not eliminate
20 uncertainty. Most uncertainties would stay uncertain.
21 People have talked about uncertainty in load growth
22 ever since I started studying power resource planning,
23 and that was, I hate to say it, back in 1976. That has
24 been a big uncertainty all the way through. Fuel costs
25 have been a big uncertainty. Capital costs have all

1 the way through, interests and escalation.

2 So those uncertainties won't go away,
3 and you heard some of our experts say something on the
4 same line, Dr. Borison and -- and our other expert
5 consultant, Brattle. Some uncertainties do diminish,
6 absolutely, and I think the best example is we've got
7 the impacts of shale gas are still evolving. There are
8 disputes or -- whether the replacement rate for the
9 shale gas facilities, whether their -- their new shale
10 gas is going to have enough of challenges to keep up
11 with the high replacement rate for shale gas wells,
12 what's the impact of that. What's the impact to LNG?

13 I see that the US just approved another
14 major LNG plant for export to Asia. What will the
15 impacts of that be? They're included in the -- in the
16 forecast, but there's all kinds of uncertainty, so the
17 natural gas price factor will still be uncertain,
18 although perhaps not as uncertain as now.

19 And then there'll be new uncertainties.
20 Think of the Black Swans and everything, that there
21 will be the unknown unknowns, that there's always
22 something new that comes up. So deferring does not
23 eliminate uncertainty.

24 The last comment I'll make is that in
25 uncertain times, one (1) of the things that's good from

1 a strategic point of view is to keep your options open,
2 and the interconnection infrastructure provides a lot
3 of flexibility and a lot of options.

4 Another issue is we have -- the team
5 from Hydro has talked, I think, passionately about the
6 work we have done with Keeyask and with Conawapa with
7 our partners. And -- and I think there -- there -- we
8 -- if we're not careful, we may give a sense that we
9 are so wedded to these projects that we can't say no to
10 them anymore. We've spent a billion dollars on
11 Keeyask. How can Manitoba Hydro stop when you've spent
12 a billion dollars already? That question must have
13 gone through some people's minds.

14 And I can only emphasize that you're --
15 the people from Hydro, a lot of them, including myself,
16 we're talking about engineers and accountants, we're
17 driven by -- and MBAs, we're driven by metrics,
18 customer reliability, security, our economics, the
19 financial, the social benefit cost, metrics on
20 environment and socioeconomic.

21 We don't just do something because we
22 happened to have been doing it in the past and want to
23 carry on. Let me give you some examples, concrete
24 examples.

25 Limestone. We had started construction

1 on Limestone. We had built the cofferdam, and we are
2 proc -- ready to proceed with the general civil
3 contract. We are in the river already, and we -- and
4 conditions change, circumstances change. We stopped
5 Limestone for over ten (10) years, I recall, and then
6 when circumstances again became favourable, we built it
7 and it was a very successful project.

8 Conawapa. We had it as a committed
9 project. We had approval from PUB. We had signed
10 contracts with Ontario. We were plunging ahead with
11 it. We had built the road already. We were planning -
12 - putting some infrastructure in place. The -- the
13 circumstances changed, the major recession in Ontario.
14 The sale fell through. We stopped.

15 Pointe du Bois, more recently, we were -
16 - and I was the project manager. We were proceeding
17 full-speed with the Pointe du Bois powerhouse, and as
18 we got new cost estimates and we looked at them and we
19 did the numbers, we said, No, it doesn't make sense
20 anymore, and middle -- midstream, we stopped working on
21 it, changed our -- all our approval requests
22 environmentally and shelved the project, although kept
23 on with what we had to do for dam safety, but the
24 powerhouse we've stopped, and we -- and we say 2030,
25 maybe, maybe not. We'll see what it looks like then.

1 We're not just hydro builders. We built
2 280 megawatts of gas in 2002, because the numbers told
3 us it made sense. The same with 258 megawatts of wind,
4 the numbers told us it made sense. Recently, we
5 extended the diversity exchange, which pushed back the
6 date for new generation. We've just increased DSM, or
7 say we're planning to, two (2) to four (4) times,
8 because the numbers tell us to.

9 Now -- and this is just to reinforce.
10 When our capital costs went up in the last month and
11 two (2), we went back to our executive and our Board
12 and said, Here are the numbers, and the Company made a
13 decision on the metrics that it still makes sense. It
14 wasn't just momentum.

15 Intergenerational equity. Oh, sorry,
16 want me to go back? Oh, sorry, I thought you were
17 going to ask a question.

18 Intergeneration. We did have a
19 discussion on it last week, and so I won't spend as
20 much time on it. I -- I'd like to emphasize that in
21 the last panel, when this issue was raised, what --
22 what -- I think as -- as a supplementary thing, is that
23 there will be slightly higher rate increases, you know,
24 or -- for the current generation with the, say, the
25 Preferred Plan compared to, say, an All Gas Plan.

1 But that same generation is getting many
2 benefits, and I'm talking about the same things we've
3 talked about this morning, whether it's employment, the
4 economy, reliability, energy security, transfers to the
5 province, all of those things. It's this current
6 generation that will experience that slight increase in
7 -- in the rates that will be getting these other
8 benefits.

9 And I know they're not quid pro quo, but
10 it's -- but from an intergenerational equity situation,
11 I think it's quite relevant.

12 Secondly, in the short term, we
13 realistically, as our vice president, Mr. Rainkie,
14 indicated, we wouldn't change our rates in -- in the
15 short term for one (1) plan or the other. We have a --
16 we have the rate strategy and rate approach we'll take,
17 and realistically, in the short term in the next few
18 years, the rates will not differ between the plans.

19 In the medium term, there will be a
20 slightly higher rate compared to the All Gas Plan. In
21 the long term, we see them coming down much lower, and
22 we think the overall balance is fair.

23 Second last, Manitobans are benefiting
24 today from the same kind of investments done in the
25 past, so this generation is getting the benefit of this

1 kind of approach.

2 And lastly, we fully expect, even with
3 the higher cost, that the Manitobans and Manitoba
4 ratepayers are going to continue to ben -- enjoy the
5 low rates in the future.

6 Energy security and capacity
7 reliability, another one (1) of these societal
8 benefits, and Dr. Shaffer didn't include a dollar value
9 in his analysis partly because some of our work was
10 premature, and -- and we have, as we testified earlier,
11 \$100 million of reliability benefit from a capacity
12 point of view for Manitoba customers, not export
13 customers.

14 I was asked that day about energy
15 security. Do we have a dollar value? And, as I
16 indicated, No, we don't, and that it's harder to
17 estimate that compared to capacity, and I didn't have a
18 -- a reliable way of coming up with a number.

19 But we've given it some serious
20 consideration since that time, and our conclusion is
21 actually -- would be significantly more than the \$100
22 million for capacity reliability, and the reason is,
23 capa -- customer supply interruptions during energy
24 shortages would tend to be less likely to happen than
25 capacity ones, but when they happen, they will be

1 extended, not for hours -- weeks, days and months,
2 because if we're into maximum imports and running our
3 thermal to the max and we've got a -- and we have less
4 water, or there's something else, there's nothing left
5 for us to do, and we would have advance warning, so we
6 would have to look -- are there some customers who
7 would be easier to shed load for a few weeks or months
8 or the year?

9 But that is very unpopular with our
10 industrial customers. Can you imagine us shutting down
11 the pipeline so no oil and gas flows to Eastern Canada?
12 I mean, where do we turn? So we think the -- the --
13 and I -- I'm sure my -- our MIPUG friends would agree
14 that this would not be a desirable outcome.

15 So we actually view the energy security
16 as being significantly more valuable than the capacity
17 reliability, and in our view, the best way to deal with
18 these uncertainties and provide that is through this
19 expanded interconnection.

20 We're -- this is just a repeat of the
21 energy security graph that we talked about before. I
22 won't just talk -- it's just a reminder of what -- what
23 I'm referring to. I'm not going to go through this.
24 One (1) of the big issues in us looking at this -- one
25 (1) of the -- the wedge issues between the All -- the

1 Gas Plans and the Hydro Plans is CO2, is climate
2 change, and -- in our -- in the social benefit cost
3 analysis, Mr. Shaff -- Dr. Shaffer just presented, he
4 put a dollar value on the CO2 emissions in Manitoba,
5 and it was appreciable. What he did not do because he
6 was doing it from a strictly Manitoba perspective, is
7 the Hydro Plan vastly reduces the emissions in the US.

8 From a global point of view, that, from
9 our point -- from Manitoba Hydro's perspective, from a
10 societal perspective, is very important, and it's
11 something that should be given some weight.

12 We're not saying that Manitoba and
13 Manitobans should sacrifice themselves for the benefit
14 of everybody else in North America, but here we have a
15 plan which passes the NPV test and has this additional
16 benefit of having a significant reduction in global
17 greenhouse gasses, which is -- acknowledges being one
18 (1) of the most, if the -- not -- not the most pressing
19 environmental issue in the world today.

20

21 (BRIEF PAUSE)

22

23 MR. ED WOJCZYNSKI: So just beginning
24 to wrap up here, when we're talking about the exports
25 and the interconnection, the window of opportunity is

1 the interconnection. We'll be able to get export
2 contracts down the road. It's the interconnection.
3 This is a piece of strategic infrastructure for
4 Manitoba.

5 We've talked about the benefits of the
6 interconnection and the transmission, which is
7 virtually permanent. Once you have a transmission line
8 like that, you keep it, and the -- the towers get old,
9 or the insulators, you replace them. You keep that
10 thing, and it has all the benefits, which I'm not going
11 to repeat, because we've certainly talked about them.

12 What I will say is throughout North
13 America, we're seeing -- and Europe, and elsewhere,
14 everybody has recognized the importance of enhancing
15 interconnections for all the ben -- reasons we've been
16 talking about. This is a definite trend, particular
17 with increased emphasis on renewables like wind and
18 solar.

19 Doing transmission now versus later,
20 populations are growing both here and in the States,
21 and it's getting harder and harder to get transmission
22 right-of-ways. And lastly, I -- I think it is not an
23 exaggeration to compare another major inter -- inter --
24 interconnection to the US as something akin to what
25 we've done with the Floodway in Manitoba, pipelines,

1 TransCanada Highway, the railways is a fundamental
2 piece of infrastructure that's a major benefit to
3 society.

4 So overall conclusions, just pulling it
5 all together. The 750 megawatt interconnection plans
6 have been demonstrated as the most economic of all the
7 feasible plans. I have to tell you, Manitoba Hydro
8 wishes we had the 250 megawatt tie as an option. It's
9 a beautiful little option. It has less equity, less
10 cash investment required, but -- and it shows to be
11 economic if we could get that plan, but as you've heard
12 from us, it's not feasible. We wish it was feasible.

13 So the 750 plan is the most economic of
14 all the ones that are feasible. The Keeyask/Gas Plan
15 provides signif -- it passes the WACC NPV test
16 significantly. There are one (1) -- 1.1 billion
17 corporate benefits if you included the embedded return.
18 If you look at it from a provincial point of view, over
19 \$2 billion. Dr. Shaffer just showed a \$.9 billion
20 social benefit compared to the All Gas, and we've got
21 all the other benefits that we haven't included in
22 those values.

23 If you now look at the Keeyask/Conawapa
24 Plan, it also meets or exceeds the NPV test. Not quite
25 as well as the 750 Plan, but it has major benefits from

1 a corporate, and much larger benefits when you include
2 the whole provincial benefits, and it has a -- a social
3 benefit cost that's higher than the All Gas Plan as
4 well, and it has all those other benefits we've talked
5 about.

6 So just to -- final one (1), I promise
7 you, for -- Dr. Shaffer did this at the end of his, and
8 on day one (1), I presented to you what I saw on behalf
9 of Manitoba Hydro were the questions. We've updated
10 those. So from Manitoba Hydro's point of view, the
11 four (4) questions and answers.

12 Should -- what should the long-term
13 electrical future in Manitoba be, should it be gas or
14 hydro, recognizing DSM will be done in all of those?
15 And if wind is economic, we will do wind, but if you're
16 -- when you're choosing fundamentally between gas or
17 hydro, our view, quite strongly, it should be hydro,
18 and Keeyask would be the logical option at this point.

19 Should we do an interconnection?
20 Clearly, in our view, we've demonstrated the 750
21 megawatt interconnection would be valuable to pursue.
22 For that, you do need to advance Keeyask a few years
23 and proceed with at least the MP sale.

24 Should we go ahead with the WPS sale?
25 In our view, if we do proceed with Conawapa, then we

1 should proceed with it. If we don't proceed with
2 Conawapa, well, a decision will be made at that time
3 whether the WPS 308 makes sense or not.

4 Should Conawapa be pursued? Our view is
5 that when you look at all the factors, Conawapa is
6 justified, but given that a decision is not required
7 until 2018, that commitment will not have to be made
8 now, and we will monitor quite stringently the whole
9 situation, and the decision will be made in the future.
10 Thank you.

11 THE CHAIRPERSON: Before I ask the
12 panel if they have any questions, I'd like to stand
13 down for a minute, please? Okay.

14

15 (BRIEF PAUSE)

16

17 THE CHAIRPERSON: Okay. I believe that
18 we are ready to resume the proceedings, so I'll turn
19 the microphone over to Mr. Bel.

20 MR. RICHARD BEL: Mr. Wojczynski, what
21 would be the trigger for Conawapa? If it wasn't the
22 three-o-eight (308) sale, because its in Keeyask, or it
23 could be, what magnitude of sale would trigger, in your
24 mind, back-of-envelope?

25

1 (BRIEF PAUSE)

2

3 MR. ED WOJCZYNSKI: That's obviously
4 not an easy answer to question -- it's -- it's not an
5 easy question to answer.

6 If we -- we have the WPS sale signed, if
7 we assumed right now that we went Level 2 DSM, and we
8 had pipeline load something like we've talked about,
9 and we didn't have any dramatic changes in the load
10 forecast, just the ones we've already talked about, and
11 we had a sale with Saskatchewan that was -- I'd just
12 pick a number out of the air, this is not -- I'm not
13 giving you some confidential piece of information, a
14 300 megawatt sale, and with NSP if -- we've had three
15 (3) -- 500 or 375, or 325 megawatt sales with them for
16 a long time, and they are -- they're -- it's just
17 coming into the time frame where it's in their planning
18 horizon, where they're all going to start considering
19 it, so if we had a couple of hundred megawatts with
20 Saskatchewan, and I got -- and anything from NSP, I
21 would say that would be probably enough to trigger it.

22 But that's the back of the envelope
23 answering your question. In reality, it all depends on
24 what happened to gas prices? What happened to export
25 prices? How -- what will the rates be in those new

1 contracts? One (1) thing you can be guaranteed, they
2 won't be the forecast. Your forecasts are never 100
3 percent right, so will they be -- how -- how are they -
4 - with relative to the forecast? What happens to
5 Keeyask capital costs, because that'll tell us
6 Conawapa?

7 So it -- it's going to be all those
8 factors mixed in together, and we'll do the economic
9 evaluations. The same -- the things you've been seeing
10 here the last four (4) weeks, we'll redo all of those
11 and look at them, and that's what it'll tell us.

12 DR. HUGH GRANT: Could I just ask, on
13 your slide about energy security and capacity
14 reliability, could you remind me how you put a dollar
15 amount on the reliability argument?

16 MR. ED WOJCZYNSKI: Yes. On the
17 reliability evaluation, there's two (2) parts to it.
18 First, you have to have an estimate of how much
19 interruption will there be to customer supply? And we
20 use the reliability evaluation techniques, engineering
21 ones that are well-tested and used everywhere, and --
22 to determine -- using that, determine how many gigawatt
23 hours, or -- of energy are not supplied due to
24 interruption.

25 So that's step one (1). Step two (2) is

1 you -- in this analysis, we didn't make an assumption
2 who was getting interrupted. We didn't assume that,
3 Well, we're only going to interrupt residential
4 customers, or only industrial customers, or only
5 commercial customers. We assumed it was pro rata
6 across the whole customer base.

7 And third, Manitoba Hydro had -- had
8 contracted in 2002 for Professor Roy Billinton and
9 others from the University of Saskatchewan who are some
10 of the -- were some of the world leaders in this
11 research, and I happened to do my Master with them on
12 this topic, but it -- but it -- they were recognized as
13 being that, and to develop numbers based on the
14 Manitoba customer mix using national information on
15 what the different customer sectors would cost.

16 And there has been cost information on
17 various kinds of industrial customers, residential
18 customers, commercial sector, large stores or whatever,
19 so they developed the number, and that was originally
20 developed more for use in the Bipole III work, but it's
21 just as applicable to this work.

22

23 (BRIEF PAUSE)

24

25 THE CHAIRPERSON: Thank you, Mr.

1 Wojczynski. I don't think we have any more questions
2 for the time being, so I believe that we're pretty
3 ready to turn the microphone over to Mr. Williams. I
4 guess we should probably stand down for a minute or two
5 (2). Mr. Williams, do you want to move up to the
6 front?

7 MR. BYRON WILLIAMS: I'd love to move
8 up, but I believe My learned Friend, Ms. -- Mr.
9 Hombach, should take precedent. He's all -- he's both
10 smarter and much taller.

11 MR. SVEN HOMBACH: I'm not sure about
12 that, Mr. Chairman, but the rest of the understanding
13 is correct. I -- I would be going first. And -- and
14 Mr. Chairman, I'm happy to continue until about 4:30,
15 unless anybody needs a break at this point, although I
16 understand Mr. Bedford has to address an issue as well.

17 MR. DOUGLAS BEDFORD: I've been asked
18 to place on the record a -- a couple of documents which
19 relate to evidence given in preceding weeks, so if I
20 may do that now, it'll take about five (5) seconds.

21 So I will enter Manitoba Hydro Exhibit
22 104-6, which bears the title: DSM analysis economic
23 summary tables Plan 6, DSM Level 2.

24

25 --- EXHIBIT NO. MH-104-6: DSM analysis economic

1 summary tables, Plan 6-DSM
2 Level 2

3

4 MR. DOUGLAS BEDFORD: And the second
5 exhibit will be entitled MH Exhibit 104-7, and it's
6 another series of rather tedious looking tables
7 entitled: Supply and demand tables, DSM analysis Plan
8 6-DSM Level 2.

9

10 --- EXHIBIT NO. MH-104-7: Supply and demand tables,
11 DSM analysis Plan 6-DSM
12 Level 2

13

14 MR. DOUGLAS BEDFORD: Mr. Wojczynski
15 assures me that these tables relate to evidence that he
16 gave a -- a short while ago, so I withdraw my
17 impertinent reference to them as tedious, and before
18 Mr. Hombach begins his work, I'll be guided by you, Mr.
19 Gosselin, but a question was asked this morning that
20 Ms. Kidd-Hantscher was on the verge of answering, and
21 it was deferred till later. And the question, of
22 course, was a -- a request for an explanation of the
23 term 'adjusted gross revenue' in the context of the
24 Keeyask partnership.

25 So we don't have to answer that now, but

1 she's ready to answer it, if people wish.

2 THE CHAIRPERSON: Let's do it now,
3 please.

4

5 CONTINUED BY MR. DOUGLAS BEDFORD:

6 MR. DOUGLAS BEDFORD: Thank you.

7 MS. JANE KIDD-HANTSCHER: So this
8 morning, when the question was asked, I was just
9 quickly trying to find the IR reference, because there
10 was a very good explanation, so if you would happen to
11 have CAC (Manitoba Hydro) 2018, that is the one that I
12 was looking for, and I can just quickly walk through.

13 The definition of 'adjusted gross
14 revenue' is revenue received by the partnership less
15 carrying costs, so amortization and interest, on
16 preconstruction capital costs, and then also less the
17 future capital upgrade costs, as well as operating
18 costs.

19 So if you were -- I have -- here is the
20 IR in front of us. So what I just explained, if you
21 look on the Keeyask partnership revenue, this is for
22 the year '22/'23, so it's the revenue. Then there's an
23 adjustment for the marketing risk fee, and this is
24 under the power purchase agreement. So you end up with
25 a -- a net revenue of 284 million, and then these are

1 the lessons that I just described, the amortization,
2 operating and admin, and the interest, and that leaves
3 you with a adjusted gross revenue amount.

4 And then if you follow through to the
5 bottom of the page, in terms of the -- it -- it takes
6 you through to where the distribution is calculated and
7 how it's calculated. So in this case, it's indicating
8 that for that year, you would have adjusted gross
9 revenue of between zero and \$250 million, so ver --
10 therefore, the calculation would be the two hundred and
11 forty-seven (247) times the point eight (.8) times two
12 point three seven (2.37), which would give you the
13 4.685 million for the preferred distribution.

14 So that's the complete calculation,
15 which includes the definition.

16 THE CHAIRPERSON: The partnership
17 revenue in this case is based on what? Is it based on
18 export? Is it based on a combination of export and
19 domestic?

20

21 (BRIEF PAUSE)

22

23 MS. JANE KIDD-HANTSCHER: It's a
24 combination of on and off-peak energy. It --

25 MR. ED WOJCZYNSKI: On and off-peak

1 export energy, yeah.

2

3 (BRIEF PAUSE)

4

5 THE CHAIRPERSON: Are we completed with
6 the initiative matters? Can we proceed to Mr. Williams
7 now? Mr. Hombach...?

8 MR. SVEN HOMBACH: It would be -- it
9 would be me examining first, Mr. Chairman, today.

10 THE CHAIRPERSON: Oh, I'm sorry.

11

12 CROSS-EXAMINATION BY MR. SVEN HOMBACH:

13 MR. SVEN HOMBACH: I -- I will
14 endeavour to be short, but I will not be that short.
15 And thank you, Mr. Chairman, and welcome to Manitoba
16 Hydro's panel. For those of you that I have not had
17 the opportunity to -- to meet, my name is Sven Hombach.
18 I'm serving as counsel to the Public Utilities Board in
19 this hearing, together with my co-counsel Bob Peters.

20 And there's an understanding by the
21 panel that we will be sitting late tonight to make up
22 some of the lost time. I'm currently under
23 instructions to keep going till six o'clock. That
24 said, I will not do that without calling for a break.
25 I think I'd be a -- a very unpopular person. And Mr.

1 Wojczynski, you had the opportunity to give the last
2 presentation. I have to actually go after you and keep
3 people here late, so.

4 Yeah. I appreciate the position that
5 I'm in. I would like to establish a few things, and
6 that is something that we've repeated with the Manitoba
7 Hydro panels that have testified before. That is, even
8 though I might direct my questions to a specific person
9 on the panel, I'm trying to elicit Manitoba Hydro's
10 best evidence, so by all means, if you believe that
11 somebody else is more appropriate to answer that
12 question, or if you need to check with people in the
13 back row, go ahead.

14 I also appreciate that the PUB panel's
15 role is to assess Manitoba Hydro's Preferred
16 Development Plan and Manitoba Hydro's First Nations
17 partners and Keeyask are present here today. To the
18 extent Manitoba Hydro wishes to defer to some of those
19 witnesses that were sworn this morning, I will leave
20 that up to Manitoba Hydro, but otherwise my questions
21 will be directed to Hydro the corporation.

22 I also will not be trying to adduce any
23 CSIs, so if there are any questions the answer to which
24 would entail the release of commercially sensitive
25 information, I fully expect Mr. Bedford to have his

1 finger on the buzzer, and I don't expect you to answer
2 it on the public record. I -- I take it that's all
3 understood?

4 Thank you. Now, before I get started, I
5 will be making repeated reference today to a Board
6 counsel's book of documents that's been provided to
7 Manitoba Hydro, and has been made Exhibit PUB-58-5.
8 That's Board counsel book of documents Volume V. But -
9 - it's Exhibit PUB-58-5, Board counsel document Volume
10 V.

11

12 --- EXHIBIT NO. PUB-58-5: Board counsel book of
13 documents Volume V

14

15 CONTINUED BY MR. SVEN HOMBACH:

16 MR. SVEN HOMBACH: But before we
17 actually go there, Mr. Wojczynski, I'm wondering if I
18 could refer you back to page 17 of the presentation
19 that you just gave, and Ms. Villegas, if it's possible
20 to put that up on the screen? I'm not sure what the
21 number is on the PDF document, but it's the third last
22 slide in Mr. Wojczynski's presentation.

23 Looking at the slide, Mr. Wojczynski, I
24 remain somewhat confused -- that's not the right slide.
25 It might be one (1) -- one (1) further down. That's

1 the one.

2 Sitting here today on March 25th, 2014,
3 are you in a position to tell the panel whether
4 currently Manitoba Hydro's Preferred Development Plan
5 involves the construction of Conawapa, or involves the
6 construction of gas following Keeyask?

7 MR. ED WOJCZYNSKI: I've attempted to
8 explain this before, and I'll -- I will try again, and
9 hopefully it -- it's clear.

10 Our Preferred Development Plan is a 750
11 megawatt interconnection Keeyask 2019, and Conawapa
12 early, and right now, 2026, but potentially later than
13 that. That is our Preferred Plan, but as part of our
14 Preferred Plan, we have inherent flexibility in it,
15 that if that is not ultimately, with all the
16 monitoring, found to continue to be justified, that we
17 would drop Conawapa and proceed with something else.
18 Presumably, it would be gas, and potentially at -- at
19 some later date.

20 MR. SVEN HOMBACH: So it follows, then,
21 from your answer, Mr. Wojczynski, does it not, that
22 Manitoba Hydro intends to keep spending money on an
23 annual basis to protect the 2026 in-service date for
24 Conawapa?

25 MR. ED WOJCZYNSKI: Yes. In the

1 forthcoming year, or the -- let me talk about '14/'15,
2 which we're already well into. Whether we go with the
3 All Gas Plan or whether we go with the Keeyask Plan,
4 our -- our contracts, our arrangements with staff, our
5 arrangements with consultants, our arrangements with
6 First Nations is we've already got a process in place
7 for Conawapa, it -- and that we would be carrying on
8 with it for this year, and we're talking about a cost
9 of probably in the order, on a -- a forward-going
10 basis, something like \$50 million.

11 If something dramatic happened and we
12 decided to -- to stop protecting Conawapa, then some of
13 that would still be spent, but not all of it. But
14 right now, our plan is to carry on for this year.

15 Next year, when we do our annual power
16 resource plan, we will reevaluate everything, and we
17 will make a decision based on what we see then as to
18 whether we continue protecting Conawapa or whether we
19 push it back and slow down the protection for it.

20 So -- so one (1) possibility is if
21 everything every year when we look at things, they're
22 very positive, then we would carry on and protect up to
23 the January 18th time, and per -- and then make a
24 decision then, or we would slow it down, one (1) or the
25 other.

1 MR. SVEN HOMBACH: Okay. And perhaps I
2 could ask Ms. Villegas to put up Manitoba Hydro Exhibit
3 98 for a moment?

4

5 (BRIEF PAUSE)

6

7 MR. SVEN HOMBACH: And go to page 9 of
8 that document, page 9 in the PDF. Sorry, scroll down
9 one (1) page, please.

10

11 (BRIEF PAUSE)

12

13 MR. SVEN HOMBACH: And go to the next
14 page, the one that shows the expenses for Conawapa.

15

16 (BRIEF PAUSE)

17

18 MR. SVEN HOMBACH: That shows the --
19 the current expenditures for Conawapa, but there's also
20 in the -- in the document, a list that shows the annual
21 projected expenditures to protect the in-service date,
22 and I may have that page reference wrong, but I'll
23 continue going on, and perhaps we'll find it.

24

25 Now, getting back to your answer, that
you're going to reevaluate after one (1) year, and that

1 you're currently likely looking at a 2026 in-service
2 date, at what point do you expect a definitive yes or
3 no decision on Conawapa?

4 MS. DONNA WILSON: Assuming that we
5 continue to decide protecting 2026, and I did -- I
6 don't believe I said that's likely. I said that's the
7 -- that's the early date. It's the earliest date we
8 can protect, and it's the date we are currently
9 protecting. I -- I don't believe I've ever
10 characterized it as the most likely date we would
11 ultimately continue to protect for. That -- that will
12 depend on the circumstances, so.

13 But aside from that qualifier, these
14 would be the expenditures we're looking at right now,
15 yes.

16

17 (BRIEF PAUSE)

18

19 MR. ED WOJCZYNSKI: I'm sorry, I got
20 distracted by the first -- my -- my qualifier and
21 forgot to answer your question. Should I -- should I
22 answer your question now?

23 MR. SVEN HOMBACH: Yes, please.

24 MR. ED WOJCZYNSKI: My apologies for
25 that. I see -- taken that qualifier and assuming it is

1 2026, we continue to protect, for the absolute decision
2 has to be made December -- well, January 2018, because
3 that's when we have to commit it and proceed.

4 It would be very unlikely that we would
5 be at the stage now in -- in -- say in January '18, in
6 that -- in that we -- that the lead up to that would
7 not have given us an indication that was not economic
8 to do, and that then we would be in '18 and have spent
9 all that money. If -- if there were indications -- if
10 there were indications earlier that the export
11 negotiations aren't going well, or Keeyask capital
12 costs went up significantly or whatever, then we would
13 have slowed down the work and would not have spent all
14 that money by then, so.

15 But -- but the hard and fast decision
16 would have to be January 2018.

17 MR. SVEN HOMBACH: And correct me if
18 I'm wrong, but the approximate amount spent on Conawapa
19 to date is in the vicinity of 400 million?

20 MR. ED WOJCZYNSKI: Yes, and I believe
21 that includes interest too.

22 MR. SVEN HOMBACH: Okay. And -- and
23 looking at the slide in front of you, which is page 9
24 of the capital expenditure forecast, CEF13, that's
25 Manitoba Hydro Exhibit 98, you said a definitive

1 decision would likely have to be made by 2018?

2 MR. ED WOJCZYNSKI: January.

3 MR. SVEN HOMBACH: Okay. So the annual
4 expenditures projected for Conawapa in the CEF, which
5 are found in the fifth line from the top, would that
6 include the 2018 expenditure of \$240.6 million before a
7 definitive -- def -- decision is made?

8 MR. ED WOJCZYNSKI: Yeah. That would
9 be -- if -- if I'm not mistaken, this is all in fiscal
10 year ending, so that would be -- '18 would be 2017/'18,
11 and so it -- it would include those expenditures.

12 MR. SVEN HOMBACH: So very grossly
13 rounded, then, you're looking at spending an additional
14 600 million, approximately, before a decision has
15 crystalized?

16 MR. ED WOJCZYNSKI: Well, first of all,
17 there's interest in there, and you said, "600 million."
18 I'm just -- I need new glasses. Do you have the...
19 No, that's not the right one. Six hundred million
20 (600,000,000), if you look at '14, that's '13/'14, so
21 that -- that money will already have been spent,
22 because as a matter of fact, as of one (1) week from
23 now, that will have already been spent. So then you're
24 looking at fift -- '14/'15, where there's \$70 million,
25 and regardless of our plan, we'll -- we'll -- by the

1 time we make any decisions arising out of the NFAT
2 process, we'll already be into that. So part of '15
3 money would already have been spent. So I'm -- I'm not
4 -- I'm not sure how you get 600 million.

5 If you look at '16, that's 125 million,
6 '17, call it another 100 million. That's two hundred
7 and twenty-five (225), and then you've got all of '18,
8 that's 460 million there. So you're -- you're -- those
9 are quite substantial sums, and if that's the point in
10 time we're talking about, if we had indications that
11 Conawapa was not going to be justified, we would have -
12 - we would have slowed that down.

13 MR. SVEN HOMBACH: So if you don't slow
14 it down, you're looking a sunk cost, then, of
15 approximately 860 million at that point?

16 MR. ED WOJCZYNSKI: Subject to check if
17 we do spend all of that money, and including interest
18 during construction.

19 MR. SVEN HOMBACH: And if --

20 MR. ED WOJCZYNSKI: And -- and
21 including the dollars that are sunk already.

22 MR. SVEN HOMBACH: And if the
23 development does get slowed down, what percentage of
24 this amount would you be expecting to shave off?

25 MR. ED WOJCZYNSKI: Well, it depends on

1 when we slow it down. If after next year, in summer of
2 '15, spring/summer of '15, if we had indic -- negative
3 indications then, we would stop at -- I'm having to
4 just ballpark here, but I'm looking at this, we would
5 stop after -- there's the -- you know, there's \$70
6 million for '14/'15. We would have spent that and a --
7 a portion of what's in '16. So we could -- we could
8 call that a \$100 million for now. It would be a -- an
9 additional \$100 million. We could stop there, or we
10 would be carrying on. So at any point after that,
11 realistically.

12 MR. SVEN HOMBACH: So hypothetically
13 speaking, if you were going to stuff money on
14 protecting the in-service date at this point, how much
15 would that push back the eventual in-service date if
16 you resumed development?

17 Is it a linear relationship where if you
18 don't spend money one (1) year, that needs to be tacked
19 on and pushes back the date the one (1) year?

20 MR. ED WOJCZYNSKI: Almost, and let me
21 explain. We are in the middle of environmental
22 studies, and Ms. Pachal can speak to that better than I
23 can.

24 We are in a process, we are engaged with
25 the First Nations, some of them here, and if you just

1 tomorrow, or let's say July, said, Don't spend one (1)
2 more dollar, and you cancelled all the process
3 agreements, cancelled all the contracts, laid off all
4 the staff we have working on it, then -- and then you,
5 one (1) year later said, Oh, let's start again, you
6 would have lost more than a year, because you'll have
7 to restart processes and whatnot.

8 So, it -- it's -- it's more than linear.
9 Perhaps I can expand that. If you -- if you delayed it
10 for five (5) years, I would suggest pretty well all --
11 most of the environmental studies would be -- have to
12 be repeated -- not all of them, and you'd have to redo
13 all of the -- the processes with the First Nations and
14 other communities, and you'd have to redo some of the
15 engineering as well.

16 So it also depends how -- how many
17 years, but it -- it's not just a linear thing, no.

18 MR. SVEN HOMBACH: Does the
19 Keeyask/Gas scenario that you included in your most
20 recent economic evaluation include these costs to
21 protect Conawapa at all? Are those factored out?

22 MR. ED WOJCZYNSKI: When we did the
23 plans -- the fifteen (15) plans -- each one (1) of
24 those, we assumed after June -- let's say July of this
25 summer -- that we would not spend more money or

1 undertake on -- on the other plans.

2 Now that was sort of like a pure plan,
3 not accounting for protecting other options. When we
4 presented to this panel and this process what we called
5 "the -- the optionality analysis" and that's in the --
6 it's provided also in our in -- IR process, that was a
7 more realistic analysis of what would happen where we
8 would have for -- in the All Gas Plan, realistically,
9 you're not making a commitment to only build gas
10 forever and nothing else.

11 So in that plan, you would probably
12 protect one (1) or other of, or both of, Keeyask and
13 Conawapa and there would be additional dollars in the
14 All Gas Plan. We don't have them in the Plan 1. We
15 did in the optionality analysis.

16 Similarly, in the Keeyask Gas Plan in
17 the optionality analysis, we continued protecting
18 Conawapa for a few years until we chose to go Conawapa
19 or Gas. So that optionality analysis is a realistic
20 view of how the world would evolve.

21 The fifteen (15) plans were done more
22 pure, so you could get an understanding of what was
23 happening.

24 MR. SVEN HOMBACH: Ms. Villegas, could
25 you put up Manitoba Hydro Exhibit 90, please?

1

2

(BRIEF PAUSE)

3

4

MR. SVEN HOMBACH: And scroll to the
bottom of the page. Mr. Wojczynski, in -- in Manitoba
Hydro Exhibit 90, Manitoba Hydro indicated that it
would be filing finan -- new financial analysis on
March 24th. Now, correct me if I'm wrong, but that has
not been filed yet, has it?

10

MR. ED WOJCZYNSKI: No, it hasn't, and
I have to be honest about it. I -- I don't know what
the current status is on the financial plans.

13

MR. SVEN HOMBACH: Would you please be
--

15

MR. ED WOJCZYNSKI: I was focussed
yesterday on getting this presentation ready.

17

MR. SVEN HOMBACH: -- in a position to
provide an update to the panel by tomorrow morning as
to the anticipated filing date?

20

MR. ED WOJCZYNSKI: We will get an
update on that for tomorrow morning, yes.

22

MR. SVEN HOMBACH: Thank you.

23

MR. ED WOJCZYNSKI: Yes, the
undertaking is to provide an update on Wednesday -- no,
Tuesday morning of the plans -- Wednesday morning --

1 Wednesday morning, for when the financial analyses will
2 be available.

3

4 --- UNDERTAKING NO. 57: Manitoba Hydro to indicate
5 on Wednesday morning when
6 the financial analyses will
7 be available

8

9 MR. SVEN HOMBACH: My next line of
10 questions is likely directed at Mr. Brandson. There
11 was some discussion about the principles of sustainable
12 development and the history, but I -- I wanted to
13 actually take the panel to the actual principles of
14 sustainable development and -- and see if we can get a
15 little more clarity.

16 And, Ms. Villegas, if I could ask you to
17 put up PUB Exhibit 58-5 and flip to page 375.

18 Now, Mr. Brandson, these are the actual
19 principles of development set out in the Sustainable
20 Development Act that you were talking about earlier,
21 correct?

22 MR. NORMAN BRANDSON: Yes, that's
23 correct.

24 MR. SVEN HOMBACH: And you testified
25 about the integration of environmental decisions as

1 well as economic decisions under sustainable
2 development. And I believe your evidence was that the
3 intention of the principles was to -- to recognize that
4 you cannot fully desegregate the environmental
5 decisions from the economic decisions.

6 Am I paraphrasing it correctly?

7 MR. NORMAN BRANDSON: I think that's a
8 correct characterization. They're intimately
9 connected, yes.

10 MR. SVEN HOMBACH: So when this panel's
11 being asked to assess compliance of the plan or whether
12 or not the plan is aligned with the principles of
13 sustainable development it has to consider it both from
14 the economic and the environmental perspective?

15 MR. NORMAN BRANDSON: Yes.

16 MR. SVEN HOMBACH: And turning our
17 attentions for a moment to section 2 of the principles
18 that's labelled, "Stewardship," the way I am reading
19 those, those are really enshrining principles of
20 intergenerational equity that the Board usually
21 considers.

22 Is that a fair characterization?

23 MR. NORMAN BRANDSON: Yes, it is.

24 MR. SVEN HOMBACH: And section 3 that's
25 labelled, "Shared Responsibility and Understanding,"

1 that discusses in the fourth line under section 3.1 a
2 spirit of partnership and open cooperation. And would
3 it be fair to paraphrase this as saying, if possible,
4 one should avoid a situation where there is winners and
5 losers?

6 MR. NORMAN BRANDSON: I think this
7 section contains several concepts. I know when -- when
8 this was discussed, when the white paper was current
9 leading up to this legislation, and -- and then some of
10 the individual sector strategies were being developed,
11 one (1) of the concepts of this was to bring home the
12 fact that -- that all of us are -- are responsible.
13 All of us have a role to play in terms of sustainable
14 development in terms of the things we do on a day-to-
15 day basis.

16 There was an element of, I guess, kind
17 of citizen responsibility here in this particular
18 section, and -- and as I recall, quite a strong element
19 of that at the time. And -- and can you recharacterize
20 that again? You had a particular phrase, and...?

21 MR. SVEN HOMBACH: I had characteri --
22 or I had tried to paraphrase it as saying it -- it aims
23 to avoid situations in development where you've got
24 distinct winners and you've got distinct losers.

25

1 (BRIEF PAUSE)

2

3 MR. NORMAN BRANDSON: I think in
4 general terms that's not unfair. Although, having said
5 that, there's -- that's not a -- what I'd call a
6 universally applicable deci -- outcome. In other
7 words, you may strive for that, but there may be
8 situations in which you can't achieve it.

9 MR. SVEN HOMBACH: And you indicated
10 before that compliance with them isn't mandatory.
11 These are ambitious principles, but they're not
12 necessarily -- compliance isn't necessarily mandatory?

13 MR. NORMAN BRANDSON: That's correct.
14 And -- and where elements of these principles can be
15 better defined and -- and can be made mandatory, I
16 think government acts to do just that.

17 MR. SVEN HOMBACH: Okay. Now turning
18 to section 4 just underneath, the section that's
19 labelled "Prevention," is it fair to characterize this
20 as trying to enshrine what environmental lawyers refer
21 to as the precautionary principle? If there is a risk,
22 you should be avoiding it and you should be mindful of
23 risks that you don't necessarily fully understand?

24 MR. ED WOJCZYNSKI: If I could just
25 comment for a second. I think prevention is much more

1 than the precautionary principle. Precautionary
2 principle is when you've got uncertainty as to what an
3 environmental impact will be, or -- or some other
4 impact. And just the fact that it's uncertain means
5 you shouldn't do something to address it. I think
6 prevention is much broader because it includes where
7 you know things will happen and you should try and
8 prevent them.

9 MR. SVEN HOMBACH: Thank you for that
10 clarification.

11 Mr. Brandson, do you have anything to
12 add?

13 MR. NORMAN BRANDSON: Only to say that
14 when you speak of the precautionary principle, I've,
15 over the course of the years, heard probably a dozen or
16 more formulations of the precautionary principle, so
17 it's -- there -- there are different formulations of
18 it.

19 As I recall, the original precautionary
20 principle was -- was stated with respect to climate
21 change, and it had words to the effect that we
22 shouldn't simply, because absolute scientific certainty
23 does not exist, fail to take actions in situations
24 where the consequences may be extremely significant,
25 words to that effect.

1 MR. SVEN HOMBACH: Okay. And turning
2 to Sections 5 and 6 of the principles. Section 5 is
3 labelled, "Conservation and enhancement." And that
4 really deals with the protection of the environment.

5 Is that a fair paraphrase?

6 MR. NORMAN BRANDSON: Protection of the
7 environment and -- and, I guess, wise resource use.
8 And the two (2) are related but not necessarily
9 identical.

10 MR. SVEN HOMBACH: And section 6, that
11 deals with fixing what is already broken, or in other
12 ways remediating environmental problems that have
13 already occurred?

14 MR. NORMAN BRANDSON: Yes.

15 MR. SVEN HOMBACH: And Section 7, it's
16 labelled, "Global responsibility," and refers to the
17 principle of thinking globally, acting locally. Now,
18 in your understanding, for example, with respect to
19 greenhouse gases, would that mean you do not just look
20 at emissions in Manitoba, you look at them in North
21 America, or at least within the entire MISO area,
22 including Manitoba?

23 MR. NORMAN BRANDSON: I -- I think it's
24 broad enough that it could encompass that, yes.

25 MR. SVEN HOMBACH: So turning then to

1 the actual socioeconomic analysis that Manitoba Hydro
2 has performed, and I'm -- I'm not sure who the most
3 appropriate person is to address these questions.
4 Manitoba Hydro has done two (2) things, has it not?
5 It's conducted an economic impact analysis and it's
6 conducted a multiple account benefit cost analysis?

7 MR. ED WOJCZYNSKI: Yes.

8 MR. SVEN HOMBACH: And --

9 MS. SHAWNA PACHAL: Well, and it's also
10 include -- done an extensive environmental assessment
11 which includes a socioeconomic assessment in that
12 context, as well.

13 MR. SVEN HOMBACH: Okay, thank you for
14 that, Ms. Pachal.

15 And Manitoba Hydro actually indicated in
16 response to an Information Request submitted by CAC, it
17 was CAC/MH I-156a, that economic impact analysis and
18 multiple account benefit cost analysis are not
19 accomplishing the same thing.

20 And if you had to give me a Coles Notes
21 version of what the distinction is would you be able to
22 do that?

23 DR. MARVIN SHAFFER: I -- I could try.

24 MR. SVEN HOMBACH: Thank you.

25 DR. MARVIN SHAFFER: Economic impact

1 analysis is trying to estimate the total number of jobs
2 and economic activity and, in some cases, taxes that
3 are associated with the expenditures, typically
4 associated with the expenditures on a particular
5 project. So it's trying to trace, if you like, the
6 demand for labour or the demand for other goods and
7 services throughout the economy.

8 That's important information. It tells
9 you something about the scale of activity and its
10 ramifications in an economy, but it doesn't necessarily
11 tell you what the net benefits of that activity are.
12 In the multiple account benefit cost analysis, or any
13 benefit cost analysis for that matter, the focus is
14 more on the net benefits, not just how many jobs might
15 be generated, but rather what is nature of the benefits
16 that those jobs provide measured by the difference
17 between what the workers receive and what they'd have
18 to receive to be no worse off. In other words, they're
19 giving up their time. They might be giving up other
20 jobs. They might be giving up other activities. And
21 so it is -- it is different.

22 One (1) is dealing with net benefits,
23 and -- and the other, if you like, is dealing with
24 gross effects.

25 MR. SVEN HOMBACH: Okay. And -- and,

1 Dr. Shaffer, I believe you testified this morning that
2 you were the primary author of Chapter 13 in the NFAT
3 filing?

4 DR. MARVIN SHAFFER: That's correct.

5 MR. SVEN HOMBACH: Were you the primary
6 author of the Economic Impact Assessment in Appendix
7 2.3?

8 DR. MARVIN SHAFFER: No. I -- I didn't
9 have any involvement in that.

10

11 (BRIEF PAUSE)

12

13 MR. SVEN HOMBACH: I'd like to take the
14 parties to that Economic Impact Assessment. And that's
15 found at Tab 3, page 47 of the book of documents.

16

17 (BRIEF PAUSE)

18

19 MR. SVEN HOMBACH: On that page we see
20 an Economic Impact Assessment for the Preferred
21 Development Plan. And perhaps Manitoba Hydro can
22 clarify, this particular filing, does that still assume
23 a transmission line investment by Wisconsin Public
24 Service?

25 MR. IAN PAGE: It -- it makes no

1 assumption whatsoever on the -- in the investment,
2 because it -- it doesn't include -- it's number of
3 jobs.

4 MR. SVEN HOMBACH: Okay. So --

5 MR. IAN PAGE: Or -- or tax revenue.

6 MR. SVEN HOMBACH: -- so this is simply
7 based on assuming that Keeyask will be constructed,
8 Conawapa will be constructed, and the ancillary
9 transmission infrastructure will be constructed?

10 MR. IAN PAGE: That's correct.

11 MR. SVEN HOMBACH: But it doesn't make
12 any assumptions as to how it's being paid for?

13 MR. IAN PAGE: It doesn't need to, no.

14 MR. SVEN HOMBACH: And this particular
15 model is the Manitoba Bureau of Statistics model that
16 Hydro has chosen?

17 MR. IAN PAGE: Yes.

18 MR. SVEN HOMBACH: Can you indicate to
19 the panel on why Manitoba Hydro chose this model as
20 opposed to the Stats Can model?

21 MR. IAN PAGE: As I've mentioned
22 earlier today, the -- the Stats Canada model, our --
23 our view is that it doesn't have as good a knowledge of
24 some of the specific local effects that -- that the
25 Manitoba Bureau of Statistics has familiar with --

1 familiarity with. And -- and I made mention this
2 morning things like cement no longer being manufactured
3 in Manitoba.

4 MR. SVEN HOMBACH: So when you're
5 discussing local effects, and -- and pardon me for
6 interrupting you, you're really talking about what is
7 called leakages?

8 MR. IAN PAGE: Yes, the -- the --
9 Manitoba has -- does have a fairly leaky economy. We
10 have, relative to a lot of other provinces, a lower --
11 a lower level of manufacturing base here. So that --
12 that's something that's very specific to Manitoba that
13 we have to recognize. And that's -- and that's
14 inherent in the Manitoba Bureau of Statistics model.

15 MR. SVEN HOMBACH: Okay. And -- and
16 what we're looking at on the page in front of us, or --
17 the top table, those are the impacts assumed in
18 Manitoba. The middle one is the impact assumed in the
19 rest of Canada.

20 And the bottom one (1) combines those
21 two (2)?

22 MR. IAN PAGE: That's correct.

23 MR. SVEN HOMBACH: And if I'm reading
24 the table correctly, it appears that the rest of
25 Canada, meaning the non-Manitoba economic benefits

1 would be about twice as high as the Manitoba benefits
2 using this model?

3 MR. IAN PAGE: Yes, and that's -- and
4 that's, as I mentioned, is a function of the high --
5 high amount of leakage in the Manitoba economy.

6 MR. SVEN HOMBACH: Right.

7 MR. IAN PAGE: Where a lot of the
8 products that used to be manufactured here no longer
9 are. So they have to outsourced -- or sourced from
10 outside of Manitoba.

11 MR. SVEN HOMBACH: So in Manitoba
12 Hydro's view, this assumption is reasonably accurate?

13 MR. IAN PAGE: You know, we'd like it
14 to be -- like to have less leakage, but that's --
15 that's our assumption as to, yeah, an accurate
16 depiction of the -- the Manitoba economy and its
17 capabilities.

18

19 (BRIEF PAUSE)

20

21 MR. SVEN HOMBACH: I take it Manitoba
22 Hydro has had a chance to review the TyPlan report
23 dealing with socioeconomic issues?

24 MR. IAN PAGE: Yes, we have.

25 MR. SVEN HOMBACH: And if I can refer

1 you to page 50 of Board counsel's book of documents.

2

3 (BRIEF PAUSE)

4

5 MR. SVEN HOMBACH: There's a section
6 that's highlighted about halfway down the page that
7 discusses that:

8 "Usually one makes the assumption
9 that the direct benefits are incurred
10 in the jurisdiction where the project
11 is actually located."

12 And it's my understanding that that's
13 the underpinning of the Stats Can Model, is it not?

14

15 (BRIEF PAUSE)

16

17 MR. IAN PAGE: Yes, and I -- I believe
18 that the two (2) models have a similar mechanism. It's
19 just a matter of what the assumptions and multipliers
20 are inherent in each one that's different.

21 MR. SVEN HOMBACH: Now, for appendix
22 2.3, Manitoba Hydro appears to have done three (3)
23 analyses. It's done one (1) for the Preferred
24 Development Plan. It's found on page 47 of Board
25 counsel book of documents. One (1) for Keeyask found

1 on page 48, and then one (1) for Conawapa on page 49.

2 What I do not see here is any analysis
3 of a gas scenario, either on its own under the All Gas
4 Plan or under a Keeyask Gas Plan.

5

6 (BRIEF PAUSE)

7

8 MR. IAN PAGE: We'll just have to look
9 for it. We did -- there was a -- it was filed on an
10 interrogatory, the impacts for gas.

11 MR. SVEN HOMBACH: Okay, perhaps we can
12 continue on while you're looking for it and, by all
13 means, if you can find the location, I would appreciate
14 it.

15 Now, the Manitoba Bureau of Statistics
16 model appears to lump in indirect and induced jobs. Is
17 that just a function of the model; that it doesn't draw
18 an actual distinction between those two (2), Mr. Page?

19 MR. IAN PAGE: I believe that's
20 correct; that it doesn't make that distinction.

21 MR. SVEN HOMBACH: And -- and just to -
22 - to recap for the panel, direct jobs would be those
23 people directly employed on the project, correct?

24 MR. IAN PAGE: Yes, that's correct.

25 MR. SVEN HOMBACH: Indirect jobs would

1 be subcontractors or suppliers to the project?

2 MR. IAN PAGE: Ones that -- I don't
3 want to just say subcontractors because we could have
4 subcontractors on site. It would be a -- a company,
5 say, that manufactures one (1) of the components is
6 then shipped up to site and then used on site.

7 So it's -- so it's -- they're not --
8 they're not directly employed on site, but -- so you
9 can't just make the distinction: contractors or
10 subcontractors but...

11 MR. SVEN HOMBACH: And induced jobs
12 would be things like people running a cafe in the
13 community or just people making more money as a result
14 of those working on the project having more disposable
15 income?

16 MR. IAN PAGE: Yeah, yes, it's recogni
17 -- yes, it's recognizing that there's that additional
18 level of income that's then -- then available to flow
19 through the economy. So it could be -- yeah, it could
20 be spent in the local restaurant or it could be spent
21 in any number of other ways.

22 As far as the question on the -- on the
23 gas that was filed, MMF question MH-2-040a.

24 MR. SVEN HOMBACH: Sorry, can you
25 indicate that number again?

1 MR. IAN PAGE: MMF/MH 2-040a, and it
2 had single cycle and a combined cycle gas turbine to
3 it.

4 MR. SVEN HOMBACH: Thank you. Now, Mr.
5 Page, I'd like to turn your attention back to page 47
6 of Board counsel's book of documents, the economic
7 impact analysis for the Preferred Development Plan.
8 And let's scroll down to the bottom of the page.

9 The GDP assumptions under this model
10 that we see for Keeyask/Conawapa, the north-south
11 upgrade and the 750 megawatt interconnection, it
12 indicates on the table that those numbers are in
13 millions.

14 Is that actually correct?

15 MR. IAN PAGE: No, it should be
16 thousands. I Caught it in the presentation, but I
17 didn't -- didn't catch it in the original filing.

18 MR. SVEN HOMBACH: And the same then
19 holds true for the other two (2) pages where it also
20 states those are in millions?

21 MR. IAN PAGE: That's -- that's
22 correct. We're not that big.

23

24 (BRIEF PAUSE)

25

1 MR. SVEN HOMBACH: And these numbers
2 that we're looking at, Mr. Page, are these net numbers
3 or are these gross numbers?

4 MR. IAN PAGE: These -- these are gross
5 numbers.

6 MR. SVEN HOMBACH: So let's turn back
7 to the issue of leakages that you already mentioned.
8 Leakages can occur both in terms of jobs or in terms of
9 supplies that are actually used in the development of
10 those projects, can they not?

11 MR. IAN PAGE: That's correct, and
12 that's one of the main thrusts of Ms. Pachal's work on
13 -- on trading and so forth is to try to minimize that
14 amount of leakage on the labour side.

15 MR. SVEN HOMBACH: And I turn your
16 attention to page 62 of Board counsel's book of
17 documents for a moment.

18 That just indicates that in Manitoba
19 Hydro's NFAT filing in Chapter 13, Table 13.5 sets out
20 gross wages for workers on the project and -- and Table
21 13.6 shows the estimated net benefit to Manitoba
22 workers netting out the wages earned by non Manitobans?

23 DR. MARVIN SHAFFER: The net benefits
24 goes beyond netting out the wages to non Manitobans.
25 The net benefits is a different concept than just

1 looking at the gross total wages. It's looking at the
2 wages, less the opportunity cost of the workers. In
3 other words, what the workers might otherwise have been
4 earning in other employment, or the value of what they
5 might otherwise have been doing.

6 So in -- in Chapter 13, if we start with
7 the gross wages -- well, the -- the employment and the
8 gross wages, and we have to estimate what proportion of
9 the wages would accrue to Manitobans, firstly, and then
10 for the Manitobans we estimate what proportion go to
11 northern Aboriginal Manitobans versus other Manitobans,
12 and we recognize that they're significantly greater net
13 benefits for the northern Aboriginal Manitobans than
14 other Manitobans because of the -- the markedly
15 different labour market and other opportunities that
16 they have.

17 MR. SVEN HOMBACH: So when you say
18 'markedly different benefits,' Dr. Shaffer, are you
19 saying that there's higher unemployment within the
20 northern context so the net benefits on a percentage
21 basis would be bigger --

22 DR. MARVIN SHAFFER: That's correct.

23 MR. SVEN HOMBACH: -- compared to the
24 south?

25 DR. MARVIN SHAFFER: That's correct.

1 Much higher.

2 MR. SVEN HOMBACH: And, Dr. Shaffer, on
3 that topic I'd like to take you to page 178 of Board
4 counsel's book of documents. That shows Table 13.5,
5 the gross wages. Now, there's a distinction drawn on
6 this table between northern Manitoba and southern
7 Manitoba.

8 Was that -- was that your doing, Dr.
9 Shaffer?

10 DR. MARVIN SHAFFER: That -- no, the --
11 that was the data that was provided to me by Manitoba
12 Hydro based on the different projects that the
13 different plans contained and their best estimate of
14 where the labour was likely to be sourced.

15 MR. SVEN HOMBACH: Okay. So that
16 distinction between northern Manitoba and southern
17 Manitoba, what's actually included in northern
18 Manitoba? Does it include northern Aboriginals as well
19 as northern residents, or also people moving to the
20 north?

21 DR. MARVIN SHAFFER: It includes the
22 wages that are paid for labour provided in northern
23 Manitoba, and -- and that would be the wages paid to
24 people who are immigrants from out of Manitoba. It
25 would include the wages paid to northern Aboriginals in

1 northern Manitoba, and it would be the labour -- or the
2 wages paid to other Manitobans for work in northern
3 Manitoba.

4 MR. SVEN HOMBACH: So this then shows
5 where the work is being done, not where the workers are
6 from?

7 DR. MARVIN SHAFFER: That's correct.
8 And then we have to make some assumptions about for
9 work being conducted in southern Manitoba, where the
10 workers likely to come from. And similarly for the --
11 the work and the wages paid for work in northern
12 Manitoba, where the workers likely to come from.

13 MR. SVEN HOMBACH: Okay. Now, this
14 particular table that still shows black lining was
15 flagged by Manitoba Hydro in February.

16 What was the reason for the increase and
17 projected wages for the Preferred Development Plan, and
18 why is it actually going up only very slightly for
19 Keeyask and Gas but quite a bit more for the Preferred
20 Development Plan?

21 DR. MARVIN SHAFFER: I'd have to confer
22 with -- the people within Manitoba Hydro provided me
23 this information, but there were some revisions to the
24 estimates that were made with respect to the employment
25 and those wages, and so we endeavour to provide the

1 latest information to you.

2 When you say they were -- you know, I --
3 I can try to find out the exact reasons for those
4 changes, but those were based on the reviews of the
5 data and some, I think, initial errors in the estimates
6 I was provided originally.

7 MR. SVEN HOMBACH: So we can do this by
8 way of Undertaking from Manitoba Hydro to advise as to
9 the underlying reasons for the changes filed in
10 February 2014.

11 MR. ED WOJCZYNSKI: Yes, we will do
12 that.

13 MR. SVEN HOMBACH: Perhaps, Mr.
14 Wojczynski, if we could have a second part to that
15 Undertaking. Could Manitoba Hydro advise why there
16 appears to be a disproportionate increase to southern
17 Manitoba jobs, or southern Manitoba salaries, compared
18 to northern Manitoba.

19 MR. ED WOJCZYNSKI: We will include
20 that in the explanation.

21 MR. SVEN HOMBACH: Thank you.

22

23 --- UNDERTAKING NO. 58: Manitoba Hydro to indicate
24 the underlying reasons for
25 the changes filed in

1 February 2014; and to
2 advise why there appears to
3 be a disproportionate
4 increase to southern
5 Manitoba jobs, or southern
6 Manitoba salaries, compared
7 to northern Manitoba
8

9 THE CHAIRPERSON: Mr. Hombach, we've
10 been at it for about an hour and a half. I wonder if
11 it would be an appropriate time to take a few minutes
12 break. Let's take ten (10) minutes. My intention is
13 to go at least to six o'clock, but we'll consult on
14 that topic while we break.

15 MR. SVEN HOMBACH: Certainly. I'll go
16 for as long as the panel would like me to, but I'll aim
17 to finish up today at 6:00.

18 THE CHAIRPERSON: So ten (10) minutes,
19 please.
20

21 --- Upon recessing at 4:30 p.m.

22 --- Upon resuming at 4:45 p.m.
23

24 THE CHAIRPERSON: I believe all the
25 players are here, so we can resume the proceedings.

1 MR. SVEN HOMBACH: Yes, thank you, Mr.
2 Chairman.

3

4 CONTINUED BY MR. SVEN HOMBACH:

5 MR. SVEN HOMBACH: Now, there was a
6 question by the Chairman earlier this afternoon about
7 the jobs on an annual basis. And perhaps I can refer
8 the Hydro panel to page 175 of the Board counsel book
9 of documents.

10 Figure 13.5 from the revised Chapter 13
11 that was filed in February provides a breakdown of
12 annual employment for project construction. And, first
13 of all, I'd like to confirm that -- whether these are
14 only direct jobs or whether this includes indirect and
15 induced adduced jobs?

16 DR. MARVIN SHAFFER: These are -- table
17 -- Figure 13.5 is only direct jobs for project
18 construction.

19 MR. SVEN HOMBACH: So that includes
20 Manitoba Hydro employees and contractors working on the
21 project?

22 DR. MARVIN SHAFFER: Yes.

23 MR. SVEN HOMBACH: And would it include
24 subcontractors working for the contractors?

25 DR. MARVIN SHAFFER: It -- it wouldn't

1 include the -- the indirect effects, meaning the
2 workers who are producing goods and services, to be
3 provided to the contractors. But it would include the
4 workers on the -- the main contracts working on the
5 project -- directly working on the project.

6 MR. SVEN HOMBACH: Okay. And these --

7 DR. MARVIN SHAFFER: You know, there --
8 there can be some boundary issues here about what's
9 direct and what's indirect, but, basically, we're
10 trying to include in direct all of the workers who are
11 working on the project for the principal contractors.

12 MR. SVEN HOMBACH: So what this chart
13 shows then is that there's a significant job spike for
14 construction with the Preferred Development Plan and
15 then by about 2027/2028 it levels off significantly.

16 And then there's some additional
17 construction jobs starting at about 2040, correct?

18 DR. MARVIN SHAFFER: That's correct.

19 MR. SVEN HOMBACH: And is that just --
20 what are those 2040 and -- and later jobs?

21 DR. MARVIN SHAFFER: Well, all -- all
22 of the plans were -- were created, if you like,
23 designed so that they would be capable of meeting
24 Manitoba Hydro's load. And just to be able to get to
25 the end of that planning period, the assumption was

1 made that gas plants would be constructed as required
2 to meet the load at the end of the planning period.

3 MR. SVEN HOMBACH: So what we're
4 looking at towards the end of the planning period,
5 those are all jobs for gas construction?

6 DR. MARVIN SHAFFER: I believe so.
7 There --

8 MR. SVEN HOMBACH: And --

9 DR. MARVIN SHAFFER: -- there could be
10 -- I'd have to check, there could be some major
11 maintenance but I don't believe so. I believe they're
12 construction on gas plants at the end of the planning
13 period. And that's just an assumption to be able to
14 have a consistent plan that can meet the -- the load
15 growth.

16 MR. SVEN HOMBACH: And the chart
17 indicates that the 'Y' axis is in person years, but
18 what that really means is that by about 2018 you expect
19 to have about seventeen hundred and fifty (1,750)
20 people working on the project? Am I reading it
21 correctly?

22 DR. MARVIN SHAFFER: On the projects.
23 I -- I don't -- could you repeat the number again
24 'cause I see it's...

25 MR. SVEN HOMBACH: Sorry, about fifteen

1 hundred (1,500) and --

2 DR. MARVIN SHAFFER: Yes.

3 MR. SVEN HOMBACH: -- fifty (50) person
4 years.

5 DR. MARVIN SHAFFER: It seems to peak
6 at just -- just over fifteen hundred (1,500).

7 MR. SVEN HOMBACH: And -- and perhaps
8 you can define the concept of person year. What
9 exactly constitutes a person year?

10 DR. MARVIN SHAFFER: A person year
11 would be employment -- full-time employment over the
12 course of a year. And --

13 MR. SVEN HOMBACH: Does this --

14 DR. MARVIN SHAFFER: -- and, so what it
15 would do, it would take some seasonal work perhaps, or
16 part-time work and consider those part of a person
17 year. They would...

18 MR. SVEN HOMBACH: So whether you've
19 got somebody making thirty thousand dollars (\$30,000)
20 or a hundred thousand dollars (\$100,000), each of those
21 persons would constitute one (1) person year of
22 employment? There's no weighting for salary?

23 DR. MARVIN SHAFFER: There's no
24 weighting for salary on this table.

25 MR. SVEN HOMBACH: Okay. How many --

1 DR. MARVIN SHAFFER: There is obviously
2 in the table that shows the total project wages.

3 MR. SVEN HOMBACH: And how many hours
4 constitute a person year?

5 MS. JANE KIDD-HANTSCHER: Two thousand
6 (2,000).

7 MR. SVEN HOMBACH: Thank you.

8

9 (BRIEF PAUSE)

10

11 MS. JANE KIDD-HANTSCHER: Two thousand
12 (2,000).

13 THE CHAIRPERSON: I'm surprised there's
14 not another peak on that -- that top graph. It's --
15 sorry, the top line there regarding your Preferred Plan
16 again in '23/'24. This is showing a peak which I
17 believe is probably related to Keeyask, but why
18 wouldn't there be another peak in the early '20s
19 related to Conawapa?

20 DR. MARVIN SHAFFER: Well, there is
21 that bump in the 2020 to 2021 period where you're
22 getting the peak work force in -- in Conawapa. Of
23 course, in the earlier years you're getting not just
24 Keeyask but you're -- you're getting the
25 interconnection as well.

1 CONTINUED BY MR. SVEN HOMBACH:

2 MR. SVEN HOMBACH: And if we could flip
3 over one (1) page to page 176 of the book of documents,
4 Figure 13.6, that shows O&M jobs, operations and
5 maintenance jobs that are being projected.

6 And -- and first of all, are these
7 cumulative numbers, or are the operation and
8 maintenance jobs expected to increase on an annual
9 basis out to about 2040?

10 DR. MARVIN SHAFFER: Those are the
11 total number of jobs in those years in those plans.

12 MR. SVEN HOMBACH: So the Preferred
13 Development Plan shows operational jobs peaking to
14 about fifty (50) by about 2018.

15 That would be the in-service date of
16 Keeyask?

17 DR. MARVIN SHAFFER: Correct.

18 MR. SVEN HOMBACH: And it then shows
19 then going up to about a hundred and twenty-five (125)
20 by about 2025/'26; that's the in-service date of
21 Conawapa?

22 DR. MARVIN SHAFFER: That's correct.

23 MR. SVEN HOMBACH: And then it flat
24 lines for a long period of time 'cause there wouldn't
25 be new construction?

1 DR. MARVIN SHAFFER: It's not just
2 const -- it wouldn't be new projects that needed the
3 operations and maintenance until at the very end of the
4 planning period you start to build gas plants, which is
5 what is assumed in that plan, to -- to meet the growing
6 load at 2040 or 2041.

7 MR. SVEN HOMBACH: Right. So the
8 upward swing that we start seeing in 2040, that's the
9 construction of new gas facilities at that time?

10 DR. MARVIN SHAFFER: Not -- in this
11 case the operations and maintenance.

12 MR. SVEN HOMBACH: Sorry, thank you.
13 And what is the reason for the very incremental
14 increase with the Keeyask/Gas Plans and the All Gas
15 Plan? Is it the gradual ramping up of new gas turbines
16 as needed?

17 DR. MARVIN SHAFFER: That's correct.
18 You're just adding gas turbines on a regular basis
19 after Keeyask and the K22/Gas Plan and -- and of course
20 right from the outset in the All Gas Plan. And so
21 every bump is -- is basically another increment of
22 capacity coming on stream.

23 MR. SVEN HOMBACH: Okay. Now, when we
24 looked at Figure 13.5, I believe you indicated that the
25 -- the maximum number of drops per year would be about

1 fifteen hundred and fifty (1,550) for construction?

2 DR. MARVIN SHAFFER: I -- I believe
3 that's correct. I don't have the table in front of me
4 that has the actual numbers corresponding to this
5 graph, but I'm -- it's basically very close to that
6 number.

7 MR. SVEN HOMBACH: And perhaps I could
8 turn your attention to page 180 of the book of
9 documents. And let's scroll down to line 17.

10 Now, when Manitoba Hydro filed to the
11 NFAT on August 16, 2013, it assumed that for the
12 northern projects 70 percent of the construction
13 positions would be filled by Manitobans. And in the
14 February revision that was revised quite significantly
15 to about 40 to 45 percent.

16 What changed?

17 DR. MARVIN SHAFFER: I think it was
18 just a reassessment of labour market conditions, and
19 part -- possibly based on new information coming out of
20 Wuskwatim. As I'm sure you're aware, there's very
21 tight labour markets for a lot of the skills that are
22 needed in these projects. And those were the
23 assumptions that were made based on discussions with
24 project management personnel in -- in Manitoba Hydro.

25 I would say these -- these revisions,

1 again, were conservative. Because the way in which we
2 did our analysis, we assumed no net benefit associated
3 with the out of province workers. So to some extent
4 they're -- they're a conservative representation of --
5 of the potential net benefits from the employment
6 generated in -- in the north.

7 MR. SVEN HOMBACH: So when you --

8 MR. ED WOJCZYNSKI: I might add that
9 the -- the decrease in the northern part is -- is in --
10 in -- to some degree, at least, counting for the kind
11 of trends that Mr. Bowen was testifying in terms of the
12 construction market. So it was accounting for some of
13 those things too.

14 MR. SVEN HOMBACH: So then picking up
15 on the theme of shortages, has Manitoba Hydro broken
16 this down into individual roles and reached an
17 assessment on which types of jobs would primarily be
18 coming out of province?

19

20 (BRIEF PAUSE)

21

22 MR. ED WOJCZYNSKI: (a) We did not
23 utilize the carpenter versus electrician versus heavy
24 equipment op. We didn't go into those roles
25 specifically when doing this update.

1 Secondly, this update was, in good part,
2 influenced by the availability of the Economic Impact
3 Assessment from the Bureau of Statistics, which gave an
4 -- an estimate of in province/out of province. So that
5 was an influential input into this. That was not
6 available earlier.

7 MR. SVEN HOMBACH: And even at a -- a
8 slightly broader level, Mr. Wojczynski, has there been
9 any assessment about -- as to whether it's
10 disproportionately skilled trades that would be coming
11 from outside Manitoba as opposed to untrained
12 positions, or anything like that?

13 MR. ED WOJCZYNSKI: Manitoba Hydro has
14 given considerations to those things. That wasn't part
15 of the input that was provided to Dr. Shaffer in terms
16 of specific numbers though. But Manitoba Hydro is --
17 is very aware of the different skilled trades and
18 availability in Manitoba.

19 And that was some of the information
20 that our construction people used when they developed
21 these new estimates and considered making the camps --
22 I -- I hesitate to call them luxury camps, but high
23 quality camps and providing other amenities that would
24 be attractive to workers because of the awareness of --
25 of some of the more skilled trades, the difficulty of

1 finding them in Manitoba.

2 So they -- there -- they did look at
3 that on a role-by-role basis, but that wasn't the input
4 we provided to Dr. Shaffer.

5 MR. SVEN HOMBACH: But it's input that
6 Manitoba Hydro obtained?

7 MR. ED WOJCZYNSKI: Sorry, could you
8 repeat the question.

9 MR. SVEN HOMBACH: But is it input that
10 Manitoba Hydro obtained? Do you provide -- or did you
11 prepare that analysis?

12 MR. ED WOJCZYNSKI: The analysis I'm
13 referring to is what the construction people were
14 considering when they developed their new construction
15 cost estimates. And ultimately, when Manitoba Hydro
16 adopted the numbers out of the economic impact
17 assessment it was part of the background that caused us
18 to think that this lower number was probably
19 reasonable.

20 MR. SVEN HOMBACH: But Manitoba Hydro
21 did not obtain or conduct a labour market analysis or
22 has a written report on that issue?

23 MR. ED WOJCZYNSKI: I will have to
24 check that. But my understand -- subject to check, we
25 did not obtain a formal labour market analysis of the

1 kind you're -- that I -- that you're referring to, but
2 we did do a general analysis, without having a specific
3 report like you're talking about of, what is the
4 situation in the -- in the labour market.

5 MR. SVEN HOMBACH: Okay. Perhaps
6 Manitoba Hydro can undertake to -- to confirm this, and
7 if it has commissioned or obtained a report, to file
8 it.

9 MR. ED WOJCZYNSKI: I will take that
10 undertaking to confirm that we do not have a formal
11 labour market analysis of that kind, although we did do
12 a general analysis on that. But we'll come back with a
13 clarification on that.

14 MR. SVEN HOMBACH: There was a second
15 part to that undertaking, too --

16 MR. ED WOJCZYNSKI: Oh.

17 MR. SVEN HOMBACH: -- which was to file
18 the analysis --

19 MR. ED WOJCZYNSKI: Oh, sorry.

20 MR. SVEN HOMBACH: -- that is
21 available.

22 MR. ED WOJCZYNSKI: And if we have an
23 analysis of the kind you're talking about, we will
24 provide that.

25 Okay, two (2) parts. A) confirm that

1 Manitoba Hydro did not have a formal labour market
2 analysis that -- that broke it down, the construction
3 jobs by very specific roles; second, b) if we did do
4 such -- if we did do an analysis of that with that
5 breakdown, we will provide it.

6

7 --- UNDERTAKING NO. 59: A) confirm that Manitoba
8 Hydro did not have a formal
9 labour market analysis that
10 broke it down, the
11 construction jobs by very
12 specific roles; second, b)
13 if we did do such an
14 analysis of that with that
15 breakdown, we will provide
16 it.

17

18 CONTINUED BY MR. SVEN HOMBACH:

19 MR. SVEN HOMBACH: Thank you. So
20 staying then on the topic of jobs, Mr. Wojczynski or
21 Dr. Shaffer, line 19 on the page that we're looking at,
22 page 180, also indicates that of the 40 to 45 percent
23 of Manitoba construction positions, about half would be
24 filled by northern Aboriginals.

25 That's still Manitoba Hydro's most

1 recent estimate?

2 DR. MARVIN SHAFFER: I -- I actually
3 was looking at that and would like to check that and
4 get back to you tomorrow on that. And the reason I say
5 that, we were changing quite a number of numbers in the
6 -- in the series of revisions in the labour market.
7 And again, in the interest of being conservative,
8 because bear in mind the -- the larger the percentage
9 of norther Aboriginal employment, the greater the net
10 benefit to the -- the Preferred Plan.

11 I was just checking my other notes. And
12 I -- I thought that we were using a number of 37.5
13 percent, not 50 percent there. And -- and that would
14 bring the Aboriginal -- northern Aboriginal share of
15 the workers of the total workforce to the low end of
16 the range that was provided in the Keeyask EIS.

17 Now, one (1) of the things I said
18 earlier was, I think it's important not to get too
19 stuck on the number. Because these numbers are very
20 uncertain, it will depend on a variety of factors.

21 We know that Manitoba Hydro and its
22 partners in this project will be doing everything they
23 can to -- to maximize that percentage. And if they
24 achieve more, there'll be greater net benefits. So I
25 think it would be important to -- to read those numbers

1 in that light.

2 They could be somewhat less than what's
3 shown on that page and they -- efforts will be made to
4 increase that.

5 MR. SVEN HOMBACH: So the -- the
6 current estimate that's indicated on page 181, perhaps
7 we can get that on screen.

8 DR. MARVIN SHAFFER: I want to check the
9 50 percent. And that would carry over to the 20 to
10 22.5 percent on page 181 of your document.

11 MR. SVEN HOMBACH: So perhaps we can
12 make that a formal undertaking, for Manitoba Hydro to
13 advise what percentage of construction jobs it believes
14 will be filled with northern Manitobans; both, in terms
15 of the percentage of total Manitoba jobs, and in terms
16 of the overall percentage.

17 DR. MARVIN SHAFFER: Yes. I -- I have
18 a set numbers that were provided in a -- in a revised
19 response to the PUB/IR-245. And I just want to make
20 sure that they are the most -- the latest estimates
21 that we have, but I will check with folks and get back
22 to you in the morning.

23 MR. SVEN HOMBACH: Thank you.

24

25 --- UNDERTAKING NO. 60: For Manitoba Hydro to what

1 percentage of construction
2 jobs it believes will be
3 filled with northern
4 Manitobans; both, in terms
5 of the percentage of total
6 Manitoba jobs, and in terms
7 of the overall percentage.
8

9 CONTINUED BY MR. SVEN HOMBACH:

10 MR. SVEN HOMBACH: Let's turn over to
11 page 182 --

12 MR. ED WOJCZYNSKI: Can I just make a
13 small comment. The -- these employment numbers that
14 we're talking about were pre the most recent cost
15 estimates. The reason one of the -- the cost of this
16 went up and hurt the economics, obviously, is that the
17 major cost is employment, but the increased employment
18 of the higher cost estimates has not been captured in
19 this work. It's -- that -- that is much too recent, so
20 -- so the -- these numbers are very conservative in
21 that sense.

22 MR. SVEN HOMBACH: Perhaps, you can
23 clarify the -- the increased cost estimate as result of
24 labours. Is that primarily attributable to more people
25 being required or to the average salary being higher

1 than anticipated?

2 MR. ED WOJCZYNSKI: Subject to check,
3 it's more -- more people required, more hours required,
4 rather than a higher wage. Although, the way -- it's
5 possible the wages went up, as well, but I -- I believe
6 it is more to do with total number of hours for
7 everything being higher.

8 MR. BYRON WILLIAMS: Mr. Chair, it's
9 Mr. Williams here, the short guy in the back. If -- if
10 I could be so rude as to -- to interrupt us for one (1)
11 second, just because we're up tomorrow.

12 We weren't sure if we caught Dr.
13 Shaffer's reference to the IR. Is it 2-45 or second
14 round 245? And that would just -- and I apologize very
15 much, Mr. Hombach, for interrupting.

16 DR. MARVIN SHAFFER: 245.

17 MR. BYRON WILLIAMS: Second round?

18 DR. MARVIN SHAFFER: No, I've got I-
19 245.

20 MR. BYRON WILLIAMS: First round, okay,
21 and I apologize very much for interrupting.

22

23 CONTINUED BY MR. SVEN HOMBACH:

24 MR. SVEN HOMBACH: Let's flip to page
25 182 of Board counsel's book of documents. Table 13.6

1 at the bottom of that page. That shows the net benefit
2 and, Dr. Shaffer, what we were looking at before in
3 Table 13.5 were the gross jobs. What we're looking at
4 here are the net jobs, correct?

5 DR. MARVIN SHAFFER: Well, --

6 MR. SVEN HOMBACH: Page 182.

7 DR. MARVIN SHAFFER: Yes, it's not the
8 net jobs, per se. It's the net benefits expressed in
9 dollars.

10 MR. SVEN HOMBACH: So you -- you pre-
11 empted my next question, so these are not total jobs,
12 these are dollars?

13 DR. MARVIN SHAFFER: That's correct.

14 MR. SVEN HOMBACH: And what unit is
15 this; is this hundreds of thousands?

16 DR. MARVIN SHAFFER: I believe this is
17 in millions.

18 MR. SVEN HOMBACH: Millions? Okay.
19 Has Manitoba Hydro prepared or does it have the numbers
20 to provide a similar table, in terms of net person
21 years of employment rather than millions?

22 DR. MARVIN SHAFFER: The difficulty --
23 I -- I'm not sure what you're asking for when you say
24 the "net employment".

25 MR. SVEN HOMBACH: Per -- perhaps, we

1 can take this in two (2) parts. These net benefits, I
2 understand from your earlier testimony, that excludes
3 benefits that accrue outside Manitoba, or what is known
4 as leakages, correct?

5 DR. MARVIN SHAFFER: It excludes that,
6 but it also only includes a portion of the wages that
7 go to Manitoban workers. So as I said earlier, it
8 would include 15 percent of the wages being paid to
9 Manitobans generally. And it includes 50 percent of
10 the wages being paid to northern Aboriginal workers.

11 And in the -- in the Chapter 13, you'll
12 see references to some studies that look at the -- the
13 opportunity costs of labour, and it's roughly based on
14 that.

15 It also -- I also want to make clear,
16 these are rough estimates. They're -- they're a best
17 judgment as to what -- for example, the -- the earnings
18 would have been for people who would otherwise be
19 working. You know, and by and large over the long haul
20 the people working on this project and the trades that
21 they're talking about would otherwise be working.

22 In Northern Manitoba it's different. A
23 smaller percentage of the workers would otherwise have
24 comparable employment opportunities and that's why
25 there's that much higher net benefit associated with --

1 with their wages. It's -- it's the way in which
2 economists would look at the net benefits in a benefit
3 cost analysis as distinct from an economic impact
4 study.

5

6 (BRIEF PAUSE)

7

8 MR. SVEN HOMBACH: The -- the analysis
9 as to the percentages, was that performed by you, or
10 were you relying on external data?

11 DR. MARVIN SHAFFER: It was -- I -- I
12 took the information on wages and the location of the
13 jobs from Manitoba Hydro and then I applied my best
14 judgments to these net benefits per dollar of wage.

15 MR. SVEN HOMBACH: So -- so explain the
16 following, please, in line 9, which is visible on the
17 screen right now, it looks like the overall percentage
18 of total gross wages paid actually hasn't changed that
19 much. But if we look at the numbers in Table 13.6,
20 there's a significant reduction in the net benefit for
21 northern Manitoba for the Preferred Development Plan?

22 DR. MARVIN SHAFFER: That's correct.

23 MR. SVEN HOMBACH: And a significant
24 increase for southern Manitoba. Can you explain the
25 change?

1 DR. MARVIN SHAFFER: Well, let's start
2 with the northern Manitoba. There's a reduction --
3 there's a reduction in the net benefit because we're
4 assuming a much higher proportion of the workers are
5 coming from out of province. And for purposes of this
6 analysis, we didn't attribute any net benefit to
7 Manitobans for workers coming in out of the province.

8 And the increase in the net benefit for
9 the southern Manitoba workers I think relates to the
10 increase in the wages that -- that were assumed in the
11 revised estimates.

12 MR. SVEN HOMBACH: So going back to
13 this distinction between direct, indirect, and induced
14 benefits, if -- if you're -- if you have a skills
15 trade, or somebody working for the contractor that
16 lives in Quebec, or lives in Ontario, and commutes onto
17 the site, they're going to pay their income taxes
18 outside Manitoba, correct?

19 DR. MARVIN SHAFFER: They -- they --
20 well, they may pay some of them to Manitoba. I'm not
21 sure of the tax provisions for migrant workers, but
22 they may pay some to Manitoba.

23 MR. SVEN HOMBACH: But -- but you might
24 be losing -- you might be losing some of the tax
25 revenue to government?

1 DR. MARVIN SHAFFER: Yes. I -- you
2 know, I suppose what you're saying is I should have
3 increased the benefits for the Preferred Development
4 Plan. And what I've been trying to say in several
5 remarks now is -- is we took a conservative approach.

6 And with respect to immigrants, the
7 assumption was, yes, they may be paying some taxes, and
8 certainly there'd be some sales taxes associated with
9 their purchases of good and services in the province.
10 But, there is correspondingly, particularly those who
11 move in a more permanent way, there's correspondingly
12 increased government costs associated with the
13 increased population that -- that that can give rise
14 to.

15 MR. SVEN HOMBACH: Are you making the
16 assumption that most of the non-Manitoba jobs are going
17 to be fly-in jobs where people get flown to the work
18 camp, work there for a while, and then fly back to
19 where they're from?

20 DR. MARVIN SHAFFER: I didn't go into
21 that level of detail. And I would leave it to the
22 construction managers to -- to tell you what proportion
23 would -- would move into fly in/fly out camps.

24 For the operating jobs, of course, it's
25 different yet again. But it was -- it was an

1 assumption saying from a Manitoba point of view, first
2 of all, the -- the principle net benefit to those
3 workers would be the wages they received less the
4 minimum amount they would have to be paid in order to
5 attract them to the -- the job. In other words, the
6 minimum compensation they would need in order to work
7 there.

8 Bearing in mind, they're giving up other
9 work opportunities and it is a difficult work
10 environment for them, especially if -- if it was fly
11 in/fly out. And so you'd have to make a -- an
12 assumption about that. As far as the -- the income
13 taxes they pay, or the sales taxes they pay, again,
14 being conservative, I didn't include that as net
15 benefits of -- of their work in the province.

16 MR. SVEN HOMBACH: And these are just
17 direct jobs, right, there's no induced jobs component
18 here?

19 DR. MARVIN SHAFFER: That's correct.

20 MR. SVEN HOMBACH: Okay. So for
21 purposes of the economic impact assessment, you'd have
22 to assume that if someone's working in Manitoba but
23 just lives on the camp and then flies back, that
24 presumably would be reduced, if any, amount of induced
25 benefits 'cause they wouldn't be spending their money

1 in Manitoba?

2 DR. MARVIN SHAFFER: Well, there
3 certainly would be reduced impacts. I wouldn't use the
4 word 'benefit' for any of the indirect and -- and
5 induced effects, but there'd be reduced impacts.

6

7 (BRIEF PAUSE)

8

9 MR. SVEN HOMBACH: So we've discussed
10 leakages as they pertain to jobs. I'd like to spend a
11 few minutes to address leakages as they actually
12 pertain to supplies.

13 Now, you're aware that MNP, or Meyers
14 Norris Penny, has -- has filed a report that deals with
15 environmental issues, and has addressed supplies of
16 some materials in their report?

17 MR. ED WOJCZYNSKI: Aware of that.

18 MR. SVEN HOMBACH: And I'd like to take
19 you to just a few excerpts of the MNP report, because
20 this is not a pop quiz. Let's put the information in
21 front of you. Let's go to page 69 of the book of
22 documents. And scroll to the bottom. MNP discusses
23 that the steel would most likely come from China.

24 Now, is -- is that Manitoba Hydro's
25 understanding?

1 MR. ED WOJCZYNSKI: I'm afraid I'm not
2 able to answer that. We -- we could get Mr. Barnlund
3 or do that as an undertaking. I -- I don't believe
4 there's anybody in the panel. I know, Ian, if by
5 chance --

6 MR. IAN PAGE: Actually -- yeah.

7 MR. ED WOJCZYNSKI: -- okay. Mr.
8 Page...

9 MR. IAN PAGE: I confirm that all of
10 the steel projects -- products assumed in -- in Keeyask
11 are assumed to be purchased within Canada.

12 MR. SVEN HOMBACH: And I might be
13 touching on CSI but is there any type of local content
14 requirement in the contracts, or are you just -- what
15 are you basing that assumption on?

16 MR. IAN PAGE: I'm basing that on the -
17 - on the information that we actually gave to -- or
18 provided to Manitoba Bureau of Statistics. Now, that's
19 where we -- now our model -- or we provide -- to where
20 the items are purchased.

21 So we maybe purchase at Gateway Canada.
22 Their -- their model would then go -- take the further
23 step and -- and do an assessment as to where it was
24 actually sourced, so that's -- that's -- I guess there
25 was a little bit of a misunderstanding in the TyPlan

1 report that we were looking at where things were
2 actually sourced from.

3 But we -- we look at where it's
4 purchased from, and Manitoba Bureau of Statistics will
5 then determine -- make that determination in their
6 model as to where it's likely to be purchased. And I
7 don't have that information.

8 MR. SVEN HOMBACH: Okay. And, Mr.
9 Page, you indicated that you're assuming that it's
10 sourced from Canada but you're not sure --

11 MR. IAN PAGE: I'm saying -- I'm saying
12 -- sorry, I meant to say it was purchased within --
13 from Canada.

14 MR. SVEN HOMBACH: But you're not
15 suggesting that it's purchased within Manitoba.

16 MR. IAN PAGE: No. No, none of the
17 steel products were shown as --

18 MR. SVEN HOMBACH: And --

19 MR. IAN PAGE: -- from Manitoba.

20 MR. SVEN HOMBACH: -- and the same with
21 cement. You're not assuming that cement is supplied
22 from Manitoba?

23 MR. IAN PAGE: That's -- that's
24 correct.

25 MR. SVEN HOMBACH: Or that the turbines

1 are supplied from Manitoba?

2 MR. IAN PAGE: Absolutely not, no.

3

4 (BRIEF PAUSE)

5

6 MR. SVEN HOMBACH: And just to clarify,
7 when you said you're assuming that the -- the steel is
8 purchased from Canada, you're -- you're making the
9 assumption that it's steel manufacturers in Canada?

10 MR. IAN PAGE: I'm saying that we
11 purchased it from a -- from a Canadian supplier is --
12 is the assumption. And where that -- and our -- our
13 people -- our construction people don't then go beyond
14 that and say, Well, there -- well, the person in -- in
15 Toronto or -- or southern Ontario, or wherever, or
16 Alberta would have turned around and bought it --
17 bought it from some other place. We would -- we don't
18 -- we don't go that far in our analysis. We let
19 Manitoba Bureau of Statistics do that for us.

20 MR. SVEN HOMBACH: So have you actually
21 provided Manitoba Bureau of Statistics with specific
22 data for this project, or are they just making a
23 general assumption based on --

24 MR. IAN PAGE: We -- we --

25 MR. SVEN HOMBACH: -- similar sized

1 construction projects?

2 MR. IAN PAGE: -- no, we -- we do a
3 detailed -- there's probably about forty (40) line
4 items here. I've got of different -- different
5 components as to whether they're -- where they're going
6 to be sourced within -- and when I say "sourced" I mean
7 purchased -- purchased from a Manitoba supplier or
8 purchased from -- from a Canadian supplier, or
9 purchased directly from -- from somebody outside of
10 Canada.

11

12 (BRIEF PAUSE)

13

14 MR. SVEN HOMBACH: Let's deal then with
15 the multiple account benefit cost analysis. But -- but
16 before we go there and, Dr. Shaffer, this is a question
17 that might be addressed to you: The -- the economic
18 impact assessment doesn't draw a distinction between
19 different accounts, right? It's just limited to
20 direct, indirect, and induced jobs, but it doesn't
21 necessarily break it down further or allocate the
22 benefits between different groups?

23 MR. IAN PAGE: The -- the economic
24 impact analysis just identifies Manitoba, the rest of
25 Canada and rest of world.

1

2

(BRIEF PAUSE)

3

4

MR. SVEN HOMBACH: And for the multiple
account benefit cost analysis, you actually have a bit
of a breakdown that deals with the different accounts.
And there -- there's somewhat of a proxy for -- for
actual stakeholders in the -- in the plan.

9

Is that fair to say?

10

DR. MARVIN SHAFFER: Yes. It -- it
wouldn't be so much breaking down the different types
of jobs as between direct and indirect and induced, for
example. That's all contained -- whatever -- whatever
benefits we -- we ascribe to the employment is all
contained in that economic activity account. The other
accounts are dealing with other interests or
stakeholders, as you say.

18

MR. SVEN HOMBACH: So let's just
refresh our memory and go to a listing of the accounts
for a moment. Those can be found at page 156 of Board
counsel's book of documents, Tab 9.

22

DR. MARVIN SHAFFER: Yes.

23

MR. SVEN HOMBACH: So you indicate that
the market valuation account deals with Manitoba Hydro
and its project partners?

1 DR. MARVIN SHAFFER: That's correct.

2 MR. SVEN HOMBACH: But that doesn't
3 deal with Manitoba Hydro ratepayers. That deals with
4 the utility itself and its partners, correct?

5 DR. MARVIN SHAFFER: Yes. So it does
6 deal with ratepayers in -- in one respect. That what
7 we're looking at is a net cost of meeting domestic
8 requirements. You know, you really pick that up in
9 that account.

10 So, you know, Manitoba Hydro is --
11 because its rates are set on a cost recovery basis,
12 more or less, obviously what happens in that account
13 affects customers.

14 And so in the customer account we're
15 looking at different things. As I said earlier, we're
16 looking at those things that aren't included in the net
17 costs of -- of meeting Manitoba's supply -- or
18 requirements, the load, I should say. We're looking at
19 rate impacts in the short versus longer term and we're
20 looking at differences in reliability, at least in a
21 non-monetized sense in -- in this analysis.

22 MR. SVEN HOMBACH: You indicated that
23 the Manitoba Hydro customer account, that deals with
24 distributional aspects over time?

25 DR. MARVIN SHAFFER: That's -- that's

1 what we tried to -- to provide information on in that
2 account. That's correct.

3 MR. SVEN HOMBACH: But it doesn't deal
4 with, for example, different classes of customers or
5 low income versus high income customers. It doesn't go
6 to that level of distinguishing?

7 DR. MARVIN SHAFFER: No, it does not.

8 MR. SVEN HOMBACH: And the Manitoba
9 government, that deals with net tax benefits, you
10 explained earlier today?

11 DR. MARVIN SHAFFER: That's correct.

12 MR. SVEN HOMBACH: And I -- I actually
13 read your book from cover to cover, Dr. Shaffer, and I
14 -- I have to say it was interesting. But I did note
15 that you call it a taxpayer account in your book, and
16 it's called a Manitoba government account here.

17 And I -- I am wondering whether you're
18 assuming that the interest of taxpayers and government
19 are necessarily aligned and what you're basing that on.

20 DR. MARVIN SHAFFER: It sounds like a
21 political question. There -- for -- for all intents
22 and purposes, they're aligned here. I realize that
23 some people view government as distinct from
24 themselves, but what we're talking about are net
25 revenues accruing to government, and, therefore, to the

1 potential benefit of taxpayers.

2 And so there's no -- there's no -- you
3 shouldn't take any significance to my calling it
4 Manitoba government here and taxpayers in -- in the
5 book. Could it -- I think in many cases, I just go
6 government/taxpayers when I try to deal with this.

7 MR. SVEN HOMBACH: So different names
8 in concept?

9 DR. MARVIN SHAFFER: That's correct.
10 And -- and the benefit cost concept is trying to
11 distinguish those expenditures that Manitoba Hydro is
12 incurring because of real resource costs; whether it's
13 labour, supply, steel, concrete and the like and those
14 expenditures it's incurring that are, in effect, just
15 transfers to government. They're not paying for a
16 service. They're not paying to -- to -- for any
17 particular cost. They are just a net benefit to the
18 government and, I would say, and therefore taxpayers,
19 at least potentially.

20 MR. SVEN HOMBACH: At the Manitoba
21 economy account, that really would be capturing what
22 you'd be capturing with Manitoba impacts -- economic
23 impact analysis.

24 DR. MARVIN SHAFFER: It relates to the
25 impact analysis, but it's much narrower. It's not --

1 it -- it's -- you're quite right. This is a -- the
2 economic impact studies look at the broader
3 consequences to the economy in terms of demand for
4 labour, demand for goods and services, both directly,
5 indirectly and induced.

6 This is looking at -- and if I can use
7 some economic jargon, but it sounds like you're an
8 expert now, it should be no problem. I -- I'll call it
9 producer surplus, or economic rent. In other words,
10 the question is: Manitoba Hydro's expenditures include
11 expenditures on labour. And -- and let's just star --
12 stop there. And that's a cost to Manitoba Hydro.

13 But from a social point of view, the
14 question is: Well, to what extent are those costs
15 providing a benefit to some other party, an external
16 benefit, if you like? While they would be providing a
17 benefit, if the wages Manitoba Hydro is paying exceeds
18 the true cost of that supply -- I'm using 'true' but I
19 - 'cause I wanted to avoid the jargon of opportunity
20 cost - but the fact that workers need to be paid
21 something to attract them to this work.

22 And -- and, so, what's captured in a
23 benefit cost analysis like this is the difference
24 between the wages that are paid - part of the market
25 valuation, part of the cost of the project - and the

1 opportunity cost of the labour; in other words, the
2 minimum amount they'd have to receive to willingly to
3 work on the job. That's a net benefit from an economic
4 point of view and that's different, much different from
5 an economic impact study that's looking at gross levels
6 of activity which -- which has, obviously, some
7 attractiveness to it, but that isn't what we're looking
8 at here.

9 MR. SVEN HOMBACH: Leaving aside the
10 environment account for just a -- a moment. You're --
11 you're aware that the Public Utilities Board and the
12 NFAT panel are being asked to assess the socioeconomic
13 impacts and benefit of the plan of alternatives to
14 northern and Aboriginal communities. So, there is a --
15 a breakdown at a more granular level than just
16 Manitoba.

17 And, looking at this table in front of
18 us I -- I see the Manitoba economy account, and I see a
19 social account, and under the social account here it
20 ini -- indicates that that takes into account benefits
21 to project partners.

22 How does the Manitoba economy account
23 and the social account connect? Do you have to remove
24 a benefit from one of them to then include it in the
25 other, or is there risk of double counting?

1 DR. MARVIN SHAFFER: There -- there
2 would be a risk of double counting if in that social
3 account, where we're talk about the -- the net benefits
4 to the project partners, which was done qualitatively I
5 should point out there. If we try to add that as a --
6 as a part of the net benefits overall and we didn't.
7 In fact, if you look at the -- the text in Chapter 13,
8 I'm -- I'm quite certain it states this is a
9 distributional. It -- it's just highlighting an
10 important distributional aspect of this particular
11 project.

12 MR. SVEN HOMBACH: On that subject of
13 distributional issues and I'm -- I'm glad that I'm
14 neglecting to turn on the microphone as well. It's now
15 equitably distributed. I'd like to turn you to page 31
16 of the book of documents, please, and take 2.

17 DR. MARVIN SHAFFER: Page 32 did you
18 say?

19 MR. SVEN HOMBACH: Page 31.

20 DR. MARVIN SHAFFER: Thirty-one (31).

21 MR. SVEN HOMBACH: And I'd like to
22 change the discussion a little bit, from the high level
23 account, to the potential actual stakeholders that the
24 panel may have to take into consideration in grappling
25 with the distributional impacts.

1 Now, this is a chart that's -- that's
2 prepared by PUB advisors. It's not a Manitoba Hydro
3 document. I'm not impugning it to Manitoba Hydro.
4 But, Dr. Shaffer, you -- you've got to account --
5 you've got an account that deals with Manitoba Hydro
6 ratepayers, correct?

7 DR. MARVIN SHAFFER: I'd say two (2)
8 accounts that deal with Manitoba Hydro ratepayers.

9 MR. SVEN HOMBACH: But the Manitoba
10 Hydro account and then the ratepayer account that deals
11 with --

12 DR. MARVIN SHAFFER: Yes.

13 MR. SVEN HOMBACH: -- impacts over
14 time. There's sub groups for ratepayers. Some
15 ratepayers might be disproportionately affected, for
16 example, by -- by changes in rates.

17 Are you prepared to accept that?

18 DR. MARVIN SHAFFER: Yes. Though what
19 we're talking about here is the differences and the
20 rate implications of the different plans, which are lim
21 -- more -- much more limited than the fact that there
22 will be rate increases.

23 MR. SVEN HOMBACH: All right. There's
24 Manitoba Hydro and its employees and, for example,
25 let's say we were to compare a scenario where Manitoba

1 Hydro builds a capital-intensive plan and -- or,
2 alternatively, a plan where a significant amount of
3 power is imported.

4 That would change the benefits to
5 Manitoba Hydro employees and their salaries.

6 MR. MARVIN SHAFFER: It might change
7 the size of the pool of workers in Manitoba Hydro. I'm
8 not as willing to agree that it would change their
9 social welfare over the longer term.

10 If we're talking about skilled workers
11 in an environment where they're increasingly in demand
12 throughout western Canada, it might -- it certainly
13 might affect the size of the -- the workforce at
14 Manitoba Hydro.

15 MR. SVEN HOMBACH: So that's something
16 you'd lump in with construction employment more
17 generally, as we've discussed it already.

18 DR. MARVIN SHAFFER: Well, I would look
19 at it in the same way I looked at construction
20 employment.

21 MR. SVEN HOMBACH: And we've already
22 discussed taxpayers and the Manitoba government and you
23 gave a fairly diplomatic answer on to what extent
24 interests are aligned --

25 DR. MARVIN SHAFFER: I -- I -- I think,

1 stripping away the -- you know, some political
2 interests, I would say that they're one and the same in
3 -- in this analysis.

4 MR. SVEN HOMBACH: And then there's --
5 there's Manitobans and, again, there could be a
6 breakdown into northern Manitobans and southern
7 Manitobans and Aboriginal Manitobans as a sub group
8 that the panel is being asked to look at, correct?

9 DR. MARVIN SHAFFER: Yes.

10 MR. SVEN HOMBACH: And even within the
11 Aboriginal group, one could presumably draw a
12 distinction between the First Nations partners and
13 Aboriginal groups that aren't Manitoba Hydro partners.

14 DR. MARVIN SHAFFER: You could, yes.

15 MR. SVEN HOMBACH: Then there's
16 Canadians more generally. If you've got Canadian
17 impacts that aren't crystalized in Manitoba but are
18 accrued outside of Canada and other provinces, that
19 would be a Canadian benefit.

20 DR. MARVIN SHAFFER: There could be
21 Canadian interests, clearly.

22 MR. SVEN HOMBACH: Am I missing
23 anything on that list that's sticking out to you?

24 DR. MARVIN SHAFFER: Well, we could
25 break this down in different ways. We could talk about

1 the -- the interests of -- of future generations versus
2 current generations.

3 You know, you -- you can cut this a
4 number of different ways. This would be one (1) way to
5 try to look at different stakeholder interests, yes.

6 MR. SVEN HOMBACH: Same as a -- a
7 timing component that has to be there --

8 DR. MARVIN SHAFFER: There could be,
9 yes.

10 MR. SVEN HOMBACH: Okay. So on that
11 note then, I'd actually like to deal with Aboriginal
12 benefits because that is something that the -- the NFAT
13 panel is being asked to look at, and I assume my
14 questions will be directed now to the Manitoba Hydro
15 panel rather than to you, Dr. Shaffer, because I'll be
16 getting into specific numbers.

17 Now, in terms of the categories of
18 benefits, there's jobs to Aboriginal groups, correct?
19 It -- it would help if you say "yes" or "no" just for
20 the transcript. It makes it easier for the reporter.

21 MS. SHAWNA PACHAL: Yes.

22 MR. SVEN HOMBACH: There's payments
23 under the Joint Keeyask Development Agreement?

24 MS. SHAWNA PACHAL: Yes.

25 MR. SVEN HOMBACH: There's the direct

1 contracting opportunities?

2 MS. SHAWNA PACHAL: Yes.

3 MR. SVEN HOMBACH: There's the
4 Aboriginal training initiative?

5 MS. SHAWNA PACHAL: And on-the-job
6 training.

7 MR. SVEN HOMBACH: Correct, and there's
8 arguably the Adverse Effects Agreement.

9 Would you count that as well?

10 MS. SHAWNA PACHAL: As a payment?

11 MR. SVEN HOMBACH: Well, as a benefit.
12 I'm speaking about benefits, not just direct payment.

13 MS. SHAWNA PACHAL: It's not a benefit.

14

15 MR. SVEN HOMBACH: Okay. And I'll get
16 into that issue as well. We may have to do that in the
17 morning. We've already dealt with jobs so far and
18 there's currently an Undertaking on the record to
19 provide more of a breakdown as for the direct jobs.

20 But, Ms. Pachal, there -- the Joint
21 Keeyask Development Agreement has a target, does it
22 not, of six hundred and thirty (630) person years for -
23 - of employment for its partners?

24 MS. SHAWNA PACHAL: Yes. On
25 construction.

1 MR. SVEN HOMBACH: That is a target,
2 though; that is not a -- a commitment.

3 MS. SHAWNA PACHAL: Well, I would say
4 it's a target and we've -- we're working towards it and
5 there's a -- we've agreed that if we didn't meet the
6 target we would provide additional monies into the
7 operational jobs training fund. And I believe, subject
8 to check, it's \$2 million. But -- so it -- it is a
9 target, but where -- there is a penalty if we don't
10 achieve it.

11 MR. ED WOJCZYNSKI: I'd also like to
12 add, it's a target, but it's not like a target we say,
13 Oh, we'd like to do this. It's a target that's built
14 into the contract that we have a commitment to doing
15 and there's a penalty if we don't meet it. So it's --
16 it's -- there's different kinds of targets. It's a
17 pretty strong target. It's a commitment.

18 MS. SHAWNA PACHAL: Well, and the other
19 reason, in retrospect -- you know, this came up a
20 number of times at the CEC. And in retrospect it's not
21 -- I -- I would probably call it something else,
22 because a target, kind of like it's my weight loss
23 program, when you reach a certain amount you stop,
24 right. Whereas with this, the intention isn't to stop
25 at six hundred and thirty (630). The intention is

1 that's what we want to go. We'll be thrilled if we can
2 make -- make that higher.

3 But we -- it was between Manitoba Hydro
4 and its partners that we thought that was a realistic
5 objective and we hope to do better. And we definitely
6 aren't stopping at six hundred and thirty (630).

7 MS. JANE KIDD-HANTSCHER: I'd -- I'd
8 also like -- just like to add that that -- the
9 calculation of that person year is not the same as the
10 two thousand (2,000) that we indicated earlier. It's -
11 - it's defined in the Development Agreement because it
12 is a contractual obligation.

13 MR. SVEN HOMBACH: And remind me,
14 that's six hundred and thirty (630) person years out of
15 how many anticipate for Keeyask; how many person years
16 total construction employment?

17

18 (BRIEF PAUSE)

19

20 MS. JANE KIDD-HANTSCHER: The target --
21 or the projection of Keeyask person years is four
22 thousand, two hundred and eighteen (4,218). However,
23 that's the distinction I was just trying to make, that
24 the six hundred and thirty (630) doesn't correspond
25 perfectly to the forty-two eighteen (4,218).

1 It's a confusing topic, because the --
2 as we talked about earlier this afternoon, the person
3 year calculation is based on two thousand (2,000)
4 hours. You cut that -- you take the total number of
5 per -- hours worked divided by two thousand (2,000).
6 That will give you the total hours worked. That is not
7 the same calculation that is in the Development
8 Agreement perfectly with respect to the six hundred and
9 thirty (630) targets. So it's very -- you need to not
10 mix the two (2).

11 MR. SVEN HOMBACH: So appreciating that
12 this panel does not need to cover what was possibly
13 covered in front of the Clean Environment Commission in
14 detail, can Manitoba Hydro provide an undertaking to
15 file a written explanation of that distinction at a
16 high level, in matrix format if necessary?

17 MS. JANE KIDD-HANTSCHER: Yes, we can
18 do that.

19

20 --- UNDERTAKING NO. 61: Manitoba Hydro to file
21 written explanation of
22 distinction in matrix
23 format

24

25 CONTINUED BY MR. SVEN HOMBACH:

1 MR. SVEN HOMBACH: Thank you. And
2 let's go to page 106 of Board counsel's book of
3 documents. The chart in the middle of the page, Figure
4 3-28, was filed in response to PUB/Manitoba Hydro
5 Information Request 2-423c.

6 That shows the estimated Aboriginal
7 construction employment for Keeyask, does it not?

8 MS. SHAWNA PACHAL: Correct.

9 MR. SVEN HOMBACH: And are the -- the
10 six hundred and thirty (630) person years of -- of
11 target employment under the Joint Keeyask Development
12 Agreement, are those included in these numbers?

13 MS. SHAWNA PACHAL: Yes, they would be.

14 MR. SVEN HOMBACH: But this is an
15 overall estimate of Aboriginal workforce participation
16 on the construction of Keeyask?

17 MS. SHAWNA PACHAL: Correct.

18

19 (BRIEF PAUSE)

20

21 MR. SVEN HOMBACH: Let's deal then with
22 the issue, if we may, of partnership income. And I
23 believe it was either you, Ms. Pachal or Mr Wojczynski,
24 who discussed the -- the equity sharing and the -- the
25 partnership agreement, the arrangements for Keeyask.

1 Now, there are two (2) options, are
2 there not? The -- Manitoba Hydro's partners can either
3 have an equity stake or they can become eligible for
4 preferred dividend distributions?

5 MS. JANE KIDD-HANTSCHER: Yes. It's
6 either common or preferred options for investment.

7 MR. SVEN HOMBACH: And earlier today,
8 Manitoba Hydro was on the record saying the equity
9 stake can be up to 25 percent, correct?

10 MS. JANE KIDD-HANTSCHER: On the common
11 option, correct.

12 MR. SVEN HOMBACH: And under the
13 preferred option, that the limit is 2.5 percent, is it
14 not?

15 MS. JANE KIDD-HANTSCHER: Correct.

16 MR. SVEN HOMBACH: Have any of the four
17 (4) partners to date exercised the common option?

18 MS. JANE KIDD-HANTSCHER: All of the
19 partners have common shares at this point.

20 MR. SVEN HOMBACH: Okay, let me take
21 you to page 81 of Board counsel's book of documents.
22 That is a chart that was filed in response to
23 CAC/Manitoba Hydro Information Request II-19a. And
24 perhaps explain what we are looking at here.

25 This is an estimate of distributions to

1 Manitoba Hydro's partners for Keeyask, is it not?

2 MS. JANE KIDD-HANTSCHER: It is an
3 estimate for the Keeyask partners as well as a partner
4 on Wuskwatim NCN. That would be the top line.

5 MR. SVEN HOMBACH: So the KCN's prefer
6 distributions before repayments, that would be dealing
7 with Keeyask.

8 The NCNs, that's dealing with Wuskwatim?

9 MS. JANE KIDD-HANTSCHER: Yes. And in
10 NCNs it's the -- the share of net income, correct. So
11 if looking at the KCNs, it's the second line, preferred
12 distributions before repayments.

13 MR. SVEN HOMBACH: Okay. And we've got
14 three (3) different examples there. And the top one
15 deals with reference economics, reference revenue, and
16 reference capital cost.

17 Now, reference revenue, is that the ref
18 case for export prices?

19

20 (BRIEF PAUSE)

21

22 MR. ED WOJCZYNSKI: The first reference
23 is for energy prices. The second is discount rates.
24 And the third is capital cost. So all three (3) of
25 these would be reference -- reference energy prices.

1 MR. SVEN HOMBACH: And the unit on
2 these numbers is what? Is it millions of dollars, Mr.
3 Wojczynski?

4 MR. ED WOJCZYNSKI: It must be.

5 MR. SVEN HOMBACH: Now, this chart
6 refers to KCN's preferred distributions. It doesn't
7 refer to common distributions. So perhaps you can
8 clarify how Manitoba Hydro's answer, that everybody has
9 equity -- has an equity stake, corresponds to this
10 chart which indicates that there will be preferred
11 distributions?

12

13 (BRIEF PAUSE)

14

15 MR. ED WOJCZYNSKI: Yeah, the -- when
16 the -- the IFF made the assumption that at final
17 closing the First Nations would choose the preferred
18 option, not the common options, they -- they don't have
19 to do a final landing on the common or preferred at
20 this time. Their choice would come later.

21 MR. SVEN HOMBACH: Again, just to clear
22 up the confusion, has anybody made the choice to date,
23 or is -- are you still assuming?

24 MR. ED WOJCZYNSKI: No one has made a
25 choice because they don't need to make a choice for

1 many years.

2 MR. SVEN HOMBACH: Okay. So -- so
3 assuming that the choice will be made to stick with
4 preferred distributions, what this is showing is that
5 under a ref/ref/ref scenario those distributions would
6 be in the vicinity of \$5 million per year to the
7 partner starting in 2022?

8 MS. JANE KIDD-HANTSCHER: That's
9 correct.

10 MR. SVEN HOMBACH: And if discount
11 rates are higher, that increases to 7 million per year?

12

13 (BRIEF PAUSE)

14

15 MR. SVEN HOMBACH: Or is the middle
16 chart the scenario with higher export prices?

17 MR. ED WOJCZYNSKI: I -- I think you're
18 -- rather than discount rate, I think we're talking
19 about interest rate. When we do re -- when we do the
20 economics, we use discount rate for the economic
21 indicator; but when they do the financial analysis,
22 they break it down into the things like interest rate
23 and inflation and exchange rate -- things -- those kind
24 of things.

25 But -- so it's really -- in this one,

1 they would have been doing by interest rate, not
2 discount rate.

3 MR. SVEN HOMBACH: So the middle table
4 that we're looking at is a high interest rate scenario
5 or a high export price scenario, Mr. Wojczynski?

6 MR. ED WOJCZYNSKI: Well, it must be --
7 you know, they must have used a different nomenclature.
8 I suspect this is high export price even though
9 normally if you go to the way the economics is
10 indicated, the order of the ref/ref is lower.

11 It must be -- this must be export
12 prices, not interest rates. It's the only thing that
13 makes sense.

14 MR. SVEN HOMBACH: Perhaps Manitoba
15 Hydro can undertake to clarify that a little more.

16 MR. ED WOJCZYNSKI: Let -- let us
17 assume that these are energy prices for the second ref
18 -- oh, it actually says, "revenue." Yeah, it says,
19 "revenue." If I had read more carefully, I would have
20 seen it right away. My apologies.

21 So it is definitely the export revenue
22 that's high.

23 MR. SVEN HOMBACH: Okay. And the
24 bottom scenario deals with low export prices then?

25 MR. ED WOJCZYNSKI: Yes.

1 MR. SVEN HOMBACH: And under that
2 scenario, the partners would get about \$3 million per
3 year.

4 MR. ED WOJCZYNSKI: Yes.

5

6 (BRIEF PAUSE)

7

8 MR. SVEN HOMBACH: When will the
9 partners have to make the choice as to whether or not
10 they go with the preferred distribution route or the
11 common equity route?

12 MR. ED WOJCZYNSKI: Final closing,
13 which is at the end of construction.

14 MR. SVEN HOMBACH: So 2018, in other
15 words?

16 MR. ED WOJCZYNSKI: Sorry, I thought I
17 had it on; 2018 is when construction starts. Actually,
18 2026. Oh, sorry, I got my projects mixed up. It's
19 been a long day. This is Keeyask we're talking about.

20

21 (BRIEF PAUSE)

22

23 MR. ED WOJCZYNSKI: So, just to be
24 clear, we're talking about Keeyask. Construction
25 starts 2014 and the final closing would be at the in-

1 service date of 2019. And that's when they would have
2 to make their decision on preferred versus common.

3

4 (BRIEF PAUSE)

5

6 MR. SVEN HOMBACH: Is Manitoba Hydro in
7 a position to provide a similar table where we have an
8 undertaking to indicate what the distributions would be
9 under common equity scenario?

10 We might be treading into CSI here, I
11 appreciate that.

12 MR. ED WOJCZYNSKI: We'll have to take
13 that under advisement.

14 MR. SVEN HOMBACH: Would you be in a
15 position tomorrow to advise whether that's an
16 undertaking you can fulfill?

17 MR. ED WOJCZYNSKI: We will advise
18 tomorrow morning.

19 MR. SVEN HOMBACH: And what -- what I
20 likely would seek, Mr. Wojczynski, is a situation that
21 shows different percentages of equity stake, up to the
22 maximum of 25 percent.

23 MR. ED WOJCZYNSKI: That is part of
24 what we'll take under advisement.

25 MR. SVEN HOMBACH: Mr. Chairman, it's a

1 quarter to 6:00. I'm prepared to keep going for
2 fifteen (15) minutes if you'd like me to, or if you'd
3 like to break, now would be an opportune time -- time
4 to do so as well.

5 THE CHAIRPERSON: Let's keep going,
6 please.

7

8 CONTINUED BY MR. SVEN HOMBACH:

9 MR. SVEN HOMBACH: Now, the second
10 benefit that we discussed was the directly negotiated
11 contracts.

12 And in the NFAT filing, Manitoba Hydro
13 indicated that there would be a value of approximately
14 200 million to those, correct?

15 MS. SHAWNA PACHAL: That's correct.

16 MR. SVEN HOMBACH: And since that time,
17 Manitoba Hydro has been on the record with a new
18 number, which I believe was 390 million.

19 Is that correct?

20 MS. SHAWNA PACHAL: Just let me check
21 my notes. I have something on that.

22

23 (BRIEF PAUSE)

24

25 MR. SVEN HOMBACH: Ms. Pachal, if it

1 helps you, I can refer you to page 94 of Board
2 counsel's book of documents which is a transcript
3 excerpt of Mr. Bowen's testimony. Bottom of the page,
4 line 23/24.

5

6 (BRIEF PAUSE)

7

8 MR. ED WOJCZYNSKI: The three ninety
9 (390) are committed purchase orders for the direct
10 negotiated contracts.

11

12 (BRIEF PAUSE)

13

14 MR. SVEN HOMBACH: So sorry, that
15 number has already been crystalized? These are
16 contracts that are in place?

17 MR. ED WOJCZYNSKI: They -- they've
18 been...

19

20 (BRIEF PAUSE)

21

22 MR. ED WOJCZYNSKI: This might be
23 something that would be better that we do a double
24 check and get back to you on.

25 MR. SVEN HOMBACH: Certainly. What I

1 would suggest, Mr. Wojczynski, is I have a few more
2 questions...

3

4 (BRIEF PAUSE)

5

6 MS. SHAWNA PACHAL: I'm trying to
7 clarify the distinction between the 203 million and the
8 three hundred and ninety (390). So the 203 million in
9 the Joint Keeyask Development Agreement is a minimum
10 aggregated value. So it wasn't really an estimate. At
11 the time it was a roughly aggregated value of -- of the
12 con -- of the contracts when we initially started
13 talking about business opportunities with our partners.

14 So at that time our construction people
15 didn't have a tonne of information about the project
16 and the details of the project at that time. So using
17 that 203 million as an estimate and comparing against
18 the 390, it doesn't -- you're not really comparing
19 apples and oranges. So we had rough, sort of ballpark
20 numbers to help our partners decide.

21 So, for example, we said, Well, we'll
22 have catering contracts, or we'll have road contracts,
23 and -- and so on. And we had to give people a sense of
24 what would be the values of those contracts. And then
25 our partners went away and amongst them decided who

1 would want which contracts and so that it would be
2 divided up based the proportion -- their proportions of
3 the project. And they worked it out.

4 And so when we agreed to those and what
5 those contracts were, the best information at the time,
6 which was this aggregate value, was 203 million. But
7 to say it was an estimate, we -- we always knew it was
8 sort of a ballpark and -- to give people sort of a
9 quantum, like -- is the road -- so they could divide up
10 the contracts, is the road worth five (5) times what
11 the catering is worth, so it could be equitable when
12 they were dividing it up.

13 So trying to compare them is like
14 comparing apples and oranges.

15 MR. SVEN HOMBACH: So the new number
16 then is the 390 million?

17 MS. SHAWNA PACHAL: That is correct.

18 MR. SVEN HOMBACH: Okay. And let me
19 take you to page 93 of Board counsel's document, Ms.
20 Pachal. That is a table that Manitoba Hydro filed in
21 response to a PUB/Manitoba Hydro Information Request
22 II-499b. And it's a list off the DNC contracts.

23 Is that list still currently accurate?

24

25 (BRIEF PAUSE)

1 MS. SHAWNA PACHAL: I think the list of
2 the contracts, what they are and the allocation to the
3 KCN, remains mostly accurate. There's been some
4 adjustments. I think this is filed in December. And
5 then the ones that -- the ones that have -- the
6 contracts that have or haven't been negotiated, the --
7 the last five (5) that are showing not having been
8 negotiated yet, I would have to check with my
9 construction colleagues to see where they're at on the
10 negotiates on that since December. I don't know if
11 those have all been negotiated yet. As of December
12 2013, when they filed the answer, those five (5)
13 weren't negotiated yet.

14 MR. SVEN HOMBACH: Are there any other
15 contracts that should be added to this list?

16 MS. SHAWNA PACHAL: I believe this is
17 the list directly out of the Schedule 13.1 of the Joint
18 Keeyask Development Agreement. I believe there have
19 been some adjustments and changes, so I -- I will
20 undertake to get an updated list on -- of this -- of
21 this table for you tomorrow morning.

22 MR. SVEN HOMBACH: And -- and, Ms.
23 Pachal, what I actually would also like is part of that
24 undertaking is a breakdown as to the value attributed
25 to each of the contracts. Presumably, the total of

1 these contracts would add up to the 390 million.

2 I'd like to see how much money is
3 allocated to each of them.

4 MS. SHAWNA PACHAL: I'll have to check
5 to see if that's public information at this point, but
6 let me -- let me do my best on that.

7 MR. SVEN HOMBACH: And if it is not, if
8 it has be filed as CSI, perhaps a redacted revision can
9 be filed on the public record and the actual numbers
10 can be provided by way of a CSI undertaking?

11 MS. SHAWNA PACHAL: Sure.

12 MR. SVEN HOMBACH: Yes. Ms. Pachal?

13 MS. SHAWNA PACHAL: I am undertaking to
14 update the answer the to CAC/MH II-231a, page 23, the
15 table from the Joint Keeyask Development Agreement
16 Schedule 13.1 -- oh, sorry, I -- it's actually PUB/MH
17 II-499b. And I'm undertaking to update the DNC table,
18 which is an update of Schedule 13.1 from the Joint
19 Keeyask Development Agreement, and if possible, provide
20 the -- the values for those that add up to 390 million.

21

22 --- UNDERTAKING NO. 62: Manitoba Hydro to update
23 the DNC table and, if
24 possible, provide the
25 values for those that add

1 up to 390 million

2

3 CONTINUED BY MR. SVEN HOMBACH:

4 MR. SVEN HOMBACH: Now, Ms. Pachal, for
5 a company to be eligible on those contracts, does it
6 have to be a Northern Aboriginal contractor?

7 MS. SHAWNA PACHAL: The direct
8 negotiated contracts are all allocated to our First
9 Nation partners.

10 MR. SVEN HOMBACH: And -- and just to
11 clarify what that means, does that mean the contracts
12 are with the First Nations directly, or with private
13 contractors that are owned or controlled or managed by
14 members of those First Nation partners?

15 MS. SHAWNA PACHAL: I think I explained
16 before, it could be the First Nation itself, or it
17 oftentimes -- I think in most cases, the First Nations
18 have partnered with a company that is a qualified and
19 expert in that area. And then they form a joint
20 venture, 50/50 ownership.

21 And we have some qualification pieces
22 that are agreed to with our partners that must be met
23 to ensure it's not just a flowthrough, where the First
24 Nation is just collecting money on the contract. It
25 has to be a genuine joint venture so that there's

1 capacity building and employment ass -- associated with
2 the contract.

3 MR. SVEN HOMBACH: Is the other point
4 that follows from that there is -- that there's some
5 type of restriction on subcontracting to companies that
6 wouldn't meet the definitions that have to be met to be
7 eligible for these directly negotiated contracts?

8 MS. SHAWNA PACHAL: Well, it's my
9 understanding that these contracts are with the First
10 Nations or the joint ventures. And there's a -- an
11 entire qualification process that these companies go
12 through in order for Manitoba Hydro to award the
13 contract the -- those individual or partner First
14 Nations.

15 MR. SVEN HOMBACH: Let's turn to page
16 91 of Board counsel's book of documents for a moment.
17 That is a response to an undertaking filed by the
18 Manitoba Metis Federation. It's MMF/Manitoba Hydro II-
19 37b. And it indicates that Manitoba Hydro asks vendors
20 to self-declare as Northern Aboriginal contractors.

21 And what I gather from your response,
22 Ms. Pachal, is that applies to contracts outside the
23 directly negotiated contracts group that we just
24 discussed, right? This is for openly tendered
25 contracts?

1 MS. SHAWNA PACHAL: Well, under the
2 Northern purchasing policy there may, in fact, be
3 instances where we do, do direct negotiated contracts.
4 So I'm not quite sure I'm following you.

5 MR. SVEN HOMBACH: What I'm getting at,
6 Ms. Pachal, is aside from the 390 million indirectly
7 negotiated contracts, are there any other contract
8 guarantees, or is there any other type of preferential
9 treatment awarded to Northern Aboriginal contractors,
10 either through directly negotiated contracts or through
11 preferential bidding?

12

13 (BRIEF PAUSE)

14

15 MS. SHAWNA PACHAL: So there is a
16 opportunities for our partners to participate in
17 additional subcontracts, or supplemental contracts,
18 over and above the -- the ones that we've identified.
19 There's also opportunities with the general civil
20 contract, in terms of subcontracts, for the Aboriginal
21 businesses, or Northern Aboriginal businesses, to take
22 advantage of those opportunities.

23 I don't believe any of those are done as
24 directly negotiated contracts. They'd be done as open
25 tenders. And just let me check on one (1) thing.

1 (BRIEF PAUSE)

2

3 MS. SHAWNA PACHAL: So we're making
4 efforts to encourage -- set up meetings between the
5 general civil contractor and our partners so that our
6 part -- the general civil contractor can be made more
7 aware of the capacity of our partners and the potential
8 business capacity that they have. So that -- and we
9 also have a corporate commitment to increasing the
10 participation of Manitoba Northern and Northern
11 Aboriginal residents or companies.

12 And so we make that -- in terms of with
13 our general civil contractor we've made them aware that
14 that's one (1) of our objectives.

15 MR. SVEN HOMBACH: So there's no
16 preferential treatment or guarantee of contracts, per
17 se, but you are facilitating, for lack of a better
18 word?

19 MS. SHAWNA PACHAL: That's correct.

20 MR. SVEN HOMBACH: Mr. Chairman, I note
21 it is six o'clock. I am moving onto another topic, so
22 if this is an opportune time to adjourn?

23 THE CHAIRPERSON: It is an opportune
24 time to adjourn. So I want to thank everyone who
25 contributed today. I'm guessing there are no other

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1 administrative matters to attend to? I'm looking to
2 the Intervenors. If there's any -- no hands are up.

3 Mr. Hombach, have you got anything else
4 that you...

5 MR. SVEN HOMBACH: Nothing at this
6 time, Mr. Chairman.

7 THE CHAIRPERSON: Thank you very much,
8 everyone, for your contributions today. Have a good
9 evening. We'll see you tomorrow morning at nine
10 o'clock sharp. Thank you.

11

12 (PANEL RETIRES)

13

14 --- Upon adjourning at 6:01 p.m.

15

16

17

18 Certified Correct,

19

20

21

22 _____

23 Cheryl Lavigne, Ms.

24

25

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