MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO

                GENERAL RATE APPLICATION

                2012/13 AND 2013/14

Before Board Panel:

            Regis Gosselin   - Board Chairman

            Raymond Lafond   - Board Member

            Larry Soldier   - Board Member

HELD AT:

            Public Utilities Board

            400, 330 Portage Avenue

            Winnipeg, Manitoba

            January 15, 2013

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 1                      APPEARANCES

 2  Bob Peters                      )Board Counsel

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 4  Patti Ramage                    )Manitoba Hydro

 5  Odette Fernandes                )

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 7  Byron Williams                  )CAC (Manitoba)

 8

 9  William Gange                   )GAC

10  Peter Miller                    )

11

12  Antoine Hacault                 )MIPUG

13

14  Michael Anderson (np)           )MKO

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16  Denise Pambrun   (np)           )City of Winnipeg

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11 TERRY MILES, Resumed

12 DAVID CORMIE, Resumed

13 MANFRED SCHULZ, Resumed

14 MICHEL MORIN, Sworn

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

2

3   THE CHAIRPERSON: Good morning. We're

4 off to somewhat of a late start. I like to start on

5 time, but in any case, everybody's in position so we'll

6 start. We have some guests this morning. Welcome.

7 But I will ask Mr. Hacault if you could please

8 introduce them and -- and tell us how the -- the order

9 will unfold.

10   MR. ANTOINE HACAULT: Thank you, Mr.

11 Chairman and members of the Board. There should have

12 been distributed to all parties copies of slides with

13 respect to two (2) of the presentations which will be

14 made this morning. I propose that the slides with the

15 first slide indicating, "Manitoba Industrial Power

16 Users Group," be marked as Exhibit 8 -- I believe

17 that's the numbering -- and that the next slide, which

18 starts with the first slide being, "Canexus Brandon

19 Sodium Chlorate Plant," would be marked as Exhibit 9 if

20 my numbering is correct.

21

22 --- EXHIBIT NO. MIPUG-8:   "Manitoba Industrial Power

23   Users Group" presentation

24   slides

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1 --- EXHIBIT NO. MIPUG-9:   "Canexus Brandon Sodium

2   Chlorate Plant"

3   presentation slides

4

5   MR. ANTOINE HACAULT: Next, Mr.

6 Chairman and members of the Board, I will introduce the

7 interim chair of Manitoba Power Industrial Users Group,

8 Mr. Bill Turner. And in his presentation, he will

9 identify all of the other presenters. There will be

10 three (3) presentations this morning. And -- and Mr.

11 Turner will be explaining those and the presenters who

12 will be providing information to this Board.

13   With that, Mr. Turner, can you begin,

14 please?

15

16 PRESENTATION BY MIPUG:

17   MR. BILL TURNER: Good morning, Mr.

18 Chairman and members of the Board. My name is Bill

19 Turner, and I am the interim chair of the Manitoba

20 Industrial Power Users Group and the recently retired

21 manager of Canexus Chemicals in Brandon.

22   With me today are Dale Bossons and Wayne

23 Yan of Canexus. Dale Bossons is a Brandon Canexus

24 plant manager, and Wayne Yan is the manager of

25 operational services out of our Calgary office.

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1   MR. ANTOINE HACAULT: Just to

2 interrupt, could you please identi -- identify

3 yourself, Dale and Wayne? Okay.

4   MR. BILL TURNER: Pardon me. I also

5 have Mr. Dave Forsyth beside me and Gavin Tobin from

6 Gerdau with me today. Did I pronounce that right?

7 Gerdau. He -- he coached me before I started, but

8 anyway.

9   Dave Forsyth is the regional energy

10 manager for Gerdau Long Steel North American. And

11 Gavin is the vice president and plant manager for the

12 Manitoba mill. Dave Forsyth and Gavin Tobin and I have

13 presented to this PUB a number of times in the past.

14 For the others, it's their first time before the Board.

15   I have been chairman of the Manitoba

16 Industrial Power Users Group since the year 2000.

17 Since retiring from Canexus in August 2012, the MIPUG

18 members asked if I would stay on as the interim chair

19 of MIPUG through the current initiatives underway. As

20 the interim chair, my responsibilities include

21 communicating the interests of MIPUG related to

22 electricity rates and rate setting.

23   MIPUG would like to welcome the new

24 Board and to thank them for the opportunity to address

25 those present in the hearing, including the other

3600

1 Intervenor groups and the Manitoba Hydro panel. We

2 will be happy to answer questions from the Board after

3 the presentations.

4   MIPUG is an association of major

5 industrial companies operating in Manitoba that belong

6 to the GSL, greater than 100 kV class and the GSL 30 to

7 100 kV class. Presently, MIPUG member companies and

8 their locations are as follows: Vale in Thompson;

9 Hudbay Minerals Inc. in Flin Flon; Tolko Industries in

10 The Pas; Canexus Chemicals in Brandon; Koch Fertilizer

11 Canada ULC in Brandon; ERCO Worldwide in Vernon; Gerdau

12 Long Steel North American, Manitoba mill in Selkirk;

13 Amsted Rail - Griffin Wheel Company here in Winnipeg;

14 Enbridge Pipelines Inc., Southern Manitoba and

15 TransCanada Keystone Pipeline, also in Southern --

16 Southern Manitoba.

17   Some of the background on MIPUG: MIPUG

18 members work together on issues of common concern

19 related to electricity supply and rates. MIPUG has

20 participated as an Intervenor in each of the Board's

21 reviews of Manitoba Hydro rates since 1988, as well as

22 the Board's review of Hydro's major capital projects in

23 1990.

24   The association's key concerns related

25 to electricity costs are stability and predictability

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 1 of rates, ongoing transparent regulation of Manitoba

 2 Hydro's rates and major capital spending, and ensuring

 3 rates for all customer classes reflect the fair cost to

 4 serve that class.

 5   In past presentations before the PUB, we

 6 have explained that the cost of power is very important

 7 to the operations and growth of member companies.

 8 MIPUG members compete in the global marketplace, and

 9 attractive, cost-based electricity rates allow industry

10 to remain competitive in Manitoba by offsetting some of

11 the geographic, climate, and other disadvantages faced

12 by industry in this province, including distance to

13 market and the strong Canadian dollar.

14   The recent change in available lower-

15 cost natural-gas-produced power in the US is making it

16 more difficult for some major Canadian and Manitoba

17 companies to be as competitive in the export of

18 finished goods.

19   Competition for MIPUG members is

20 internal to each company, as well as external. Most

21 MIPUG members have sister plants in other jurisdictions

22 that compete for capital investment. Businesses make

23 location and capital investment decisions based on cost

24 and predictability. Given the relative importance of

25 electricity to industry, both the actual price and the

3602

1 predictability of electrical costs are extremely

2 important. It is not just today's rates, but also

3 tomorrow's rates that are of interest to this industry.

4   Manitoba MIPUG grouping also contribute

5 to the economic growth of this province and the

6 communities. MIPUG companies are significant tribu --

7 contributors to the provincial economy. As I've noted,

8 nine (9) out of ten (10) MIPUG industries are located

9 outside of Winnipeg. In several instances, they are

10 the principle employer in the community.

11   MIPUG -- MIPUG completed an economic

12 impact assessment in the spring of 2012. Based on the

13 most recent data available from member companies, total

14 spending on salaries and benefits for employees at

15 MIPUG industries was 457 million annually, and another

16 72 million for contract labour. That re -- represents

17 approximately forty-three hundred (4,300) direct, full

18 time, high paying jobs and nearly thirteen hundred

19 (1,300) contract jobs. The average salary at a MIPUG

20 company ben -- before benefits is about ninety-one

21 thousand (91,000) per year, which is more than twice

22 the provincial average of forty-two thousand (42,000).

23   Further benefits accrue locally when

24 MIPUG industries undergo expansions. Expansions

25 provide local training opportunities which equip

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1 workers for other high-paying industrial jobs

2 throughout the province.

3   Municipal, provincial, and federal

4 governments benefit from MIPUG industries. Combined

5 MIPUG companies contributed an estimated 261 million to

6 their municipal governments, the Province of Manitoba,

7 and Canada in 2011.

8   MIPUG industries also contribute

9 directly to communities by donating to charities,

10 funding municipal infrastructure, supporting local

11 organizations and special events, and providing

12 scholarships and bursaries.

13   In addition to direct spending, MIPUG

14 industries bring numerous secondary economic benefits

15 to communities. MIPUG industries spend more than 260

16 million on goods and services in the province every

17 year. In addition, workers earning high industrial

18 wages help support the retail, hospitality, and service

19 sectors in their respective communities.

20   That is particularly significant in

21 northern regions, since areas of Northern Manitoba have

22 an unemployment rate nearly five (5) times as high as

23 Winnipeg. Industries such as Vale, Tolko, Hudbay, and

24 their subcontractors are either directly or indirectly

25 responsible for a significant percentage of the

3604

1 existing employment opportunities in the North.

2   Total gross expenditures in Manitoba as

3 a result of MIPUG industries is almost 4.2 billion,

4 while MIPUG industries contribute an estimated 2.3

5 billion to the province's GDP. You can find more

6 details regarding the economic impact of MIPUG in the

7 economic impact assessment filed to respond to

8 PUB/MIPUG-1-1A.

9   MIPUG companies' involvement in the

10 Manitoba economy reflects the benefits of competitive,

11 cost based rates and of clear and transparent

12 regulation. Without a stable and predictable regulated

13 rate environment, there is a risk that investments will

14 occur elsewhere, taking along hundreds of millions of

15 dollars in capital investment, reinvestment, and

16 upgrades for the associated construction, and permanent

17 high-paying jobs.

18   In the past, Manitoba has been a model

19 of transparent regulation and low rates. For many

20 years, Hydro, industry, and the PUB worked closely --

21 worked together successfully to help address major

22 issues of concern. For example, the Curtailable Rates

23 Program was developed in the early 1990s by joint

24 efforts of industry and Hydro and was supported by the

25 PUB.

 1   When I was at Canexus, this was one (1)

 2 of the major aspects of managing costs and load. In

 3 exchange for helping provide more reliable power to all

 4 Manitobans, Canexus was able to share in the benefits

 5 of the costs savings this program brought about.

 6   This did not come without costs for

 7 Canexus. We had to invest significant time and

 8 attention into having the necessary equipment,

 9 procedures, and staff training to know that when a

10 curtailment occurred, we could respond as required.

11 But this long-term investment has paid off for Canexus

12 and for Hydro's other customers.

13   In more recent times, however, there has

14 been some significant challenges for industry --

15 industrial power consumers in Manitoba. Starting in

16 about 2006, Manitoba Hydro started a program of

17 targeting industrial growth to discourage expansion in

18 Manitoba. This culm -- this culminated in a 2008 EIR

19 proposal which was ultimately rejected by this Board.

20 That EIR program sought to charge new or expanding

21 customers very high prices based on what Hydro thought

22 it could get from export markets in the future years.

23   As it turns out, Hydro was incorrect

24 about where export prices were going. But during the

25 years of uncertainty caused by that proposal, it is

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1 believed that a number of possible new customers or

2 expansions were scared away from Manitoba. Had those

3 loads been here today, we may have had more economic

4 development in Manitoba and better firm load to take

5 Hydro's power, rather than selling the power for the

6 low prices Hydro is currently receiving from the US

7 markets.

8   Industry in Manitoba has also been

9 challenged recently by steady power rate increases of

10 more than 35 percent since the year 2004. Throughout

11 this entire period, Hydro had produced cost of service

12 studies that show industry paying 10 percent or more

13 above its costs. Yet all rate changes were implemented

14 on an across-the-board basis.

15   At the same time, industries in other

16 juris -- jurisdictions are offered a much wider range

17 of ways to help manage their load and to participate in

18 alternate rate settings. There are minimal such offers

19 in Manitoba.

20   As a result, Manitoba's position with

21 respect to power cost has changed. For many MIPUG

22 members, Manitoba has been among the lowest-cost

23 producers for power. This is not true today. Hydro

24 will still indicate that its rates are among the lowest

25 published. However, with only a limited degree of

 1 participation in alternate program offerings in these

 2 other places, customers can achieve overall power costs

 3 lower than what is available in Manitoba in a number of

 4 locations in northern -- in North America.

 5   Industry in this province has also

 6 recently been exposed to fairly major rate uncertainty.

 7 Rate proposals from Hydro are communicated, but it's

 8 years before they are confirmed as final by the PUB.

 9 In one (1) case, a rate decrease was awarded but never

10 implemented. MIPUG is forced to invest significant

11 amounts in PUB hearings that are now much longer and

12 more costly than the -- than the routine GRAs that

13 happened before the year 2005.

14   In one (1) specific case, a rate program

15 that was intended to help keep industrial customers

16 operating during times of recession was later rescinded

17 by the PUB. In that example, the program let customers

18 avoid part of the demand ratchets when they dropped

19 their production and load back to -- due to the

20 recession at the time.

21   This helped keep the plants from closing

22 altogether. Customers still paid full price for all

23 energy consumed. The program helped industry keep

24 operating and help keep jobs in Manitoba but also

25 helped all other customers, as without these industrial

1 loads, Hydro would have had to dump that power into

2 very low-priced US markets. And everyone would be worse

3 off. The program was later changed by the PUB to turn

4 the concession into an effective loan that customers

5 had to pay back many years after the period of support.

6

7   In short, for a jurisdiction that

8 traditionally had predictable and reliable rates and

9 regulation and relatively low rates, recently, the

10 picture has not been as bright. The industrial

11 customers of Manitoba Hydro have been well served by

12 this utility and the PUB in the past. Hydro is a good

13 company to deal with and we would not want our comments

14 to be read as criticism of the professional and

15 competent staff we work with at Hydro.

16   I ask the Board to consider the

17 presentations made by MIPUG in light of the competitive

18 challenges faced by industrial power users in Manitoba

19 and to help us retain our competitive position in

20 Manitoba and in North America. Dedication to providing

21 reliable firm power at fair and reasonable rates,

22 ensuring rates reflect cost of service and developing

23 innov -- innovative rate options that benefit both

24 industry and Manitoba Hydro are important for the

25 future growth of large industry in Manitoba.

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 1   MIPUG's detailed position on the various

 2 issues in the GRA will be communicated by Mr. Hacault

 3 in our final argument. For today, the members wanted

 4 to relay to you the customer perspectives on Hydro's

 5 rate and regulation.

 6   I would now turn it over to Mr. Dave

 7 Forsyth, who will give -- prov -- provide information

 8 on the importance of cost-based predictable rates to

 9 their specific operation. Thank you.

10   MR. DAVE FORSYTH: Thanks, Mr. Turner.

11 Thank you, Mr. Chairman and members of the Board, for

12 allowing us to present the comments of Gerdau to you

13 today. I'm David Forsyth, the regional energy manager

14 responsible for the energy at Gerdau's Manitoba mill.

15 And here with me today is Gavin Tobin. Gavin is vice

16 president and general manager for Gerdau Manitoba.

17   Gerdau's steel mill in Selkirk is one

18 (1) of the largest manufacturers in the province. The

19 Manitoba mill started production in 1907, some one

20 hundred and six (106) years ago, and currently

21 employees five hundred and seventeen (517) people. In

22 addition to those jobs, the mill also attracted several

23 large downstream manufactures in the province, creating

24 valuable manufacturing jobs at Monteferro America, TC

25 Industries, Black Cat Blades, Bradley Steel Processors,

3610

1 and ERCO Blades -- ESKO Blades.

2   Including the Gerdau metallic raw

3 materials which is the scrap facility at the site,

4 there's eight hundred (800) jobs and families directly

5 involved with the plant. Additional collateral jobs in

6 Winnipeg support the plants operations and maintenance.

7   We are one (1) of the largest shippers

8 in the region, averaging over one hundred and fifty

9 (150) truckloads and thirty-five (35) railcars per

10 week. In 2011, Gerdau spent more than 49 million with

11 local suppliers and service companies and utilized the

12 equivalent of twenty-eight (28) full-time employees

13 through local contractors. Gerdau now has forty-five

14 thousand (45,000) employees in Canada, the US, and

15 twelve (12) unde -- other countries around the globe.

16   It's important to note that Gerdau's

17 size means more -- that more than one (1) facility can

18 produce the -- the same products that our customers

19 need. Gerdau's financial model looks at where these

20 products can be produced and delivered at the lowest

21 cost. Energy is one (1) of our key controllable costs

22 and is therefore a very important consideration in

23 Gerdau's production and investment decisions.

24   Gerdau's the largest recycler in the

25 province, processing scrap metal collected from

 1 throughout the region. We recycle approximately

 2 400,000 tonnes of scrap each year. We are extremely

 3 efficient at what we do, and we do it in an

 4 environmentally responsible manner. Making steel from

 5 scrap metal reduces 70 percent of the energy and 60

 6 percent of the emissions when compared to steel made by

 7 a steel mill making steel from iron ore.

 8   Gerdau also takes its social

 9 responsibility very seriously in Manitoba. With the

10 help of our employees, we support the Selkirk Hospice,

11 Safe Workers of Tomorrow, the food bank, Red River

12 Hamper toy drive, the Manitoba Heart and Stroke

13 Foundation, the Red River Cleanup Operation, Canadian

14 Museum of Humanity, and the Selkirk Fire Department.

15 And that's just to name a few.

16   Steel-making energy and investment:

17 Steel's an energy- and capital-intensive business. As

18 with any investment decision, Gerdau's management must

19 consider the long-term cost of doing business.

20   With regard to steel manufacturing,

21 electricity costs are second only to our scrap steel

22 costs and as such are a very important contributor to

23 the competitive cross-structure. Energy efficiency is

24 one (1) of the few tools at hand to help Manitoba

25 facility improve its competitiveness, and we have

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1 invested, heavily improving our costs and benefiting

2 the environment.

3   Our operations group actively manages

4 energy consumption, utilizing key performance

5 indicators that are measured across all plants

6 globally. Low cost, stable, and reliable electricity

7 is essential to Gerdau's operations in Manitoba. While

8 energy costs in Manitoba are generally favourable our

9 increasing labour costs, high transportation costs, and

10 fuel costs are items that consume some of the advantage

11 offered by lower-cost electricity.

12   Recent rate increases have been

13 substantial. As Bill said earlier, the rates have

14 increased substantially since 2004. By April 2001 --

15 by April 1st, 2013, with the current Application,

16 Hydro's rates will be up almost 35 percent for

17 industrial customers. Between January 2012, when we

18 received word that a 1 percent rate decrease was to be

19 implemented, to April 2013 the rates will increase over

20 9 percent in just a fifteen (15) month period.

21   This recent rate uncertainly has

22 resulted in budget variances for the plant. Certainty

23 in cost provides the plant with confidence when making

24 investment decisions.

25   Mr. Turner spoke earlier about the

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1 program Manitoba Hydro developed during the economic

2 downturn in 2008. The Gerdau Manitoba plant was faced

3 with dramatically falling orders. We undertook

4 initiatives to keep people employed using the -- the

5 Manitoba Work Share Program, and we initiated plans to

6 run the mill more efficiently at a reduced rate.

7   The reduced load at the plant increased

8 the average cost of electricity by 40 percent due to

9 the demand charge being a very large component of our

10 rate. This became a major issue for continued

11 operation and we discussed this with Manitoba Hydro.

12   Manitoba Hydro was also concerned, as a

13 plant shutdown would mean a large reduction in Hydro

14 revenues. Other customers were also voicing concern,

15 so Manitoba Hydro developed the Demand Billing

16 Concession Program, which we considered to be a win/win

17 outcome. The program would offer relief only after a

18 customer had seen an increase of 10 percent to their

19 bill. We were very disappointed when the previous

20 Board ordered repayment of the concession long after

21 the period had passed, creating another episode of

22 uncertainty for the plant.

23   Managing costs in Manitoba: Gerdau

24 ranks delivered electricity costs at all facilities

25 every month on a corporate scorecard. Historically,

1 the Manitoba mill had the lowest costs in the North

2 American fleet. In 2012 this changed, as the Manitoba

3 mill moved up to the fifth lowest costs of eighteen

4 (18) plants with electric arc furnaces.

5   At most of our other North American fac

6 -- facilities, we have the opportunity to reduce costs

7 through demand response programs, interruptible

8 contracts, or responding to market signals that incent

9 customer behaviour and pri -- provide benefits to all

10 ratepayers.

11   At the facilities that are located in

12 regulated jurisdictions like Manitoba, we participate

13 in interruptible rate contracts where they are offered.

14 We were in discussion with Manitoba Hydro to subscribe

15 to the Curtailable Rate Program that Manitoba Hydro is

16 proposing in this proceeding to lower the limit of

17 Option A megawatts.

18   As a result, there is no other feasible

19 option available to us or Manitoba Hydro. We have a

20 highly responsive load at the Selkirk plant that could

21 be providing benefit to all ratepayers on the Manitoba

22 system.

23   We have worked with utilities, regional

24 transmission organizations, provinces, and states to

25 deve -- to development the rules that allow fair

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1 participation by our type of load. We recommend this

2 Board advise Manitoba Hydro to explore other

3 opportunities in demand response, such as economic

4 demand response or price response of demand response

5 and expanding the interruptible contracts.

6   In summation, regulations should achieve

7 firm, low cost, stable power rates that are necessary

8 to maintain investment and jobs in the province. Rate

9 stability uncertainty is one (1) of Gerdau's key inputs

10 when making long-term investment decisions.

11   Gerdau hereby requests that the Public

12 Utilities Board reconsider the contemplated increases

13 in this application. Further, the industrial class

14 have been paying above the measured cost of service for

15 a very long time. Gerdau requests the rates reflect

16 the cost of service for our customer class.

17   During these continuing difficult

18 economic times, costs have to be reduced, not

19 increased, as they cannot be passed along to customers.

20 Thank you.

21   MR. BILL TURNER: I would like to turn

22 it over now to Mr. Dale Bossons from Canexus.

23   MR. DALE BOSSONS: Thank you, Mr.

24 Turner. Mr. Chairman, Board members, thank you for

25 giving us the time to talk today. My name is Dale

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1 Bossons, I am the plant manager with Canexus in the

2 Brandon facility. And next to me is Wayne Yan, the

3 manager of our operational services with Canexus.

4   This is the first time I've had an

5 opportunity to talk to this Board, so one (1) of the

6 things I thought I would do, because I am aware that

7 you are new Board members, is tell you a little bit

8 about we are, who Canexus is.

9   Canexus, we are a Canadian chemical

10 manufacturing company. We have our facilities located

11 throughout Canada as well as into Brazil. The Brandon

12 sodium chlorate plant is the flagship of Canexus's

13 facilities. It's the largest sodium chlorate plant and

14 low-cost producer in North America and represents a

15 significant investment to our company.

16   We operate our facilities and our

17 company based on the Responsible Care Philosophy.

18 Responsible Care is the values and ethics under which

19 Canexus operates all of its facilities. It's

20 administered by the Chemistry Industry Association of

21 Canada, and it's basically a set of principles that we

22 use to guide the way we manage our business in a very

23 sustainable manner. And the Brandon plant, of course,

24 is very involved in Responsible Care.

25   Responsible Care extends not only to

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1 environmental and safety aspects of our workers, but

2 also to social responsibility. We are very involved

3 with the community in Brandon, and we contribute money,

4 in terms of donations and social responsible causes, of

5 over a hundred and fifty thousand (150,000) to local

6 organizations in Brandon.

7   We have a very strong relationship with

8 our local community. And we have a payroll of over

9 $7.4 million at our facility alone. And our spending,

10 in terms of goods and services into the Province of

11 Manitoba, is an excess of $60 million, as well as over

12 $2 million in local taxes.

13   Canexus, as well as all other chlorate

14 producers, utilize an electrolytic process. Our whole

15 business is based on the consumption of electricity,

16 and electricity costs account for approximately 65 to

17 70 percent of our variable costs at the plant.

18   Salt, which is our other next raw

19 material, is the next largest variable cost that we,

20 have making up about 18 percent of our cost. And the

21 balance of our costs are the other supporting raw

22 materials that the plant utilizes. But just to

23 reemphasize again, electricity is the main raw material

24 that an electrochemical plant uses.

25   You can see a little process flow

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1 diagram that I included. Again, being aware that you

2 may not be completely familiar with what we do, it's a

3 relatively simple process. In other words, we take

4 salt. And the salt depending upon the plant that we

5 have within our company, it can be sea salt that's come

6 out of the ocean. Our salt is basically extracted from

7 the potash industry out of Saskatchewan.

8   That salt is brought in by railcars into

9 Brandon. We dissolve the salt, and we make brine or

10 salt water. We purify the salt. And then we run

11 electricity -- we run an electrical current just like a

12 battery -- through the brine solution. Through

13 electrolysis, we are able to extract and convert the

14 salt into the finished product that we end up with

15 eventually, which is sodium chlorate.

16   It's then dried and shipped off to our

17 customers. Our customers are not in Manitoba. Our

18 customers are located primarily in the US, but also in

19 eastern and Western Canada. So shipping of our

20 finished product is a significant expense and cost.

21 But traditionally, the low cost of electrical power in

22 Manitoba has compensated for those high transportation

23 costs and made it a very viable business for us.

24   Our business is, from an environmental

25 perspective, extremely benign. We're basically taking

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1 salt water, electricity, we're making our goods, our

2 final product. We have a very low environmental

3 footprint in our business, and we consider ourselves to

4 be a very sustainable, practical industry.

5   The raw materials, as I mentioned, salt.

6 The other raw materials we utilize are caustic

7 chlorine, hydrogen peroxide, and soda ash. All of

8 these raw materials have to be brought into the

9 province and brought into our plant. We are able to

10 get the -- our closest raw material, which, aside from

11 electricity, is salt, which is brought in from

12 Saskatchewan.

13   But you can see that little map that we

14 have on the -- of North America that I have as well,

15 and it just gives you an idea of where our raw

16 materials are coming from. They're coming from British

17 Columbia, Saskatchewan, and then down into the US. So,

18 again, it's that transportation cost of the raw

19 materials, as well as our final products out of the

20 plant.

21   Approximately thirty-three hundred

22 (3,300) rail cars are shipped a year out of Brandon.

23 And 50 percent of our customers are over 3,100

24 kilometres away. So the large distance to market does

25 create a significant disadvantage to us. However,

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1 electrical pricing traditionally in the past has

2 compensated for that competitive disadvantage that

3 we've had to deal with.

4   So just to summarize, chlora -- chlorate

5 competitiveness is determined by three (3) condi --

6 three (3) key considerations. And this goes with all

7 chlorate plants throughout North America. Number one

8 (1) is power pricing, stability, and availability.

9 Next is salt price and availability. And the third is

10 the transportation to markets.

11   And there have been chlorate plants

12 throughout North America, including plants within our

13 own organization, that have literally shut their doors

14 due to high power pricing. You reach a point, and it

15 is such a significant contributor to our variable costs

16 that you're just no longer able to make any money.

17   So in the past, Canexus has made a lot

18 of our business decisions based on Manitoba's

19 competitive power pricing. We've expanded the plant

20 numerous times. We've reinvested in the plant, and we

21 continue, to date, to reinvest in the Brandon facility.

22 However, going forward, we are very seriously beginning

23 to question those decisions now.

24   There was recently a Phase 8 that we had

25 proposed and we were very seriously looking at another

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1 expansion for the facility, but the economics are just

2 getting to the point now where the decision was made to

3 not proceed with that expansion. And it has been

4 shelved for the time being, and that's basically an

5 economic decision. And looking forward into the

6 future, as electrical pricing in Manitoba is just

7 forecast to increase, it makes it harder and harder to

8 justify capital expenditures into the facility.

9   As we look into the rest of North

10 America, you can see there's a comparison of

11 electricity prices for the key end markets. So it used

12 to be that it was -- Manitoba was -- was obviously the

13 place to produce electrochemicals. That is shifting,

14 and you can see power pricing is no longer as low as it

15 used to be compared to other jurisdictions.

16   In fact, now within Louisiana, we

17 actually relocated a plant from Louisiana up into

18 Brandon several years ago because it made more sense to

19 take the plant and relocate it to Manitoba. Today, we

20 would not make that decision, obviously, because that

21 plant would have been more competitive in its original

22 location.

23   So the importance of power pricing is

24 obviously critical to our facility. A 3.5 percent

25 price increase that is proposed for this year is going

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 1 to -- is equivalent to a $2 million increase in our

 2 costs for our plant alone.

 3   Going over the next five (5) years,

 4 annual price increases of 3.5 percent compounded is

 5 going to equate to a $24 million cost increase to our

 6 single plant alone in Brandon. This is extremely

 7 significant and obviously has major decision-making

 8 impacts on what we're going to do regarding future

 9 growth.

10   One (1) more subject to touch on is just

11 Canexus is one (1) of Hydro's largest DSM customers.

12 We are Hydro's largest single customer, our plant. And

13 we do have the ability, and we have in the past been

14 very anxious to participate in the Curtailable Rate

15 Program. We have the ability to supply Manitoba Hydro

16 with up to 168 megawatts of power on a short notice.

17   In other words, within five (5) minutes,

18 we can shed 168 megawatts worth of load to the Province

19 of Manitoba to assist them in their times of need. And

20 Canexus and Manitoba have worked very well together to

21 make this a win/win program for both parties. And it

22 is a program that we are very interested in seeing

23 continue into the future.

24   Canexus has a strong history of working

25 closely and cooperatively with Manitoba Hydro, and

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1 we've valued and appreciated that relationship. And we

2 want to make sure that, as we go forward, it makes good

3 economic sense for Canexus, as well as good social and

4 environmentally (sic) responsibility sense for the

5 company as well.

6   And I would just like to say I

7 appreciate the opportunity to present today. And if

8 you have any questions, we'd be happy to take them.

9

10 QUESTION PERIOD:

11   THE CHAIRPERSON: Thank you.

12   MR. RAYMOND LAFOND: Thank you. We had

13 -- we had three (3) days of hearings on depreciation,

14 so we're having a difficulty letting go of this

15 concept.

16   Essentially, I thank you very much for

17 your presentations, and I think somewhat enlightening.

18 Maybe a few minor questions to start. I guess one (1)

19 of the issues that did come out was the -- you said the

20 costly hearings, longer and longer all the time. But I

21 suspect every party's responsible for that, including

22 MIPUG, in terms of time taken during these days. So

23 that's a challenge we have as a Board.

24   The whole issue of competitiveness I do

25 understand quite well. I happen to be chair of the

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1 World Trade Centre Winnipeg and Centralia that occurred

2 recently and different things like that, so I'm quite

3 aware of that and believe in that. But that being

4 said, competitiveness in some of your cases is al -- is

5 also due to the salaries which are double the average

6 Manitoba salary. So that is also, I guess, something

7 that is within your control.

8   Now, in terms of electricity costs, the

9 question I have, I guess, for your -- or -- or for

10 discussion is: A lot of these future costs are due to

11 recently -- new, recently built plants and future

12 plants to be built and constructed, whereby the cost of

13 producing electricity is literally three (3), four (4),

14 and five (5) times as much as some of the older dams

15 were, like Limestone for instance. So that's a real

16 issue for residential consumers as well as industrial

17 consumers.

18   I don't know how you view that, because

19 it's a bit of a vicious circle. You need to expand in

20 order to accommodate your increasing needs and -- and

21 Manitobans' increasing needs, but expansion is at a

22 much higher rate than we can -- you know, the -- the

23 rate of electricity pro -- produced from future plants

24 is substantially higher than the cost of electricity

25 produced from existing plants.

3625

 1   So I don't know how you react to that.

 2   MR. BILL TURNER: They're all looking

 3 at me, so I guess I'll respond. I agree with your

 4 comments, Mr. Lafond. We've had an initial request to

 5 Manitoba Hydro. We wanted to be involved and

 6 understand some of the requests that they've had for --

 7 for capital initiative programs. We needed to

 8 understand it because, as you mentioned, in the

 9 industry we have to vie for money from each one (1) of

10 our respective companies. And everybody is in the same

11 boat. They're all asking for money. And it has to be

12 seriously looked at and the economics have to be

13 favourable to -- to get that money.

14   And this is one (1) of the questions we

15 -- we've asked Hydro is -- is: With the long-term

16 growth plans that are out there, we would like to

17 understand, as an industry group, the justifications

18 for trying to do as many of the expansions in a short

19 order of time as they proposed. We also understand

20 that it takes a lot longer to -- to build a dam and --

21 and get it going than it would for any one (1) of us

22 that's around the table to get our expansions on line.

23   It's more of a timing issue. We --

24 we've commented about the over-cost of power pricing

25 that we're seeing now just because of the -- the

1 availability of cheaper natural gas. Is that going to

2 be short term, long term? We don't know; I don't think

3 any of us know. And it's definitely affecting all of

4 us around the table as to -- as to what we can -- can

5 do and can't do, as far as expansions are concerned.

6   So we are working with Hydro to fully

7 understand the -- the needs of Manitoba Hydro. And

8 we've always been a group that have been for expansion

9 by Manitoba Hydro and for exports to other markets by

10 Manitoba Hydro, but not at the -- the sake of -- of

11 loss of domestic power loads. So we understand it. We

12 don't have all the answers, but we're trying to work

13 through it with -- with Manitoba Hydro. And, like I

14 said, we've had our first initial meeting, and -- and

15 we're open to sit down with them and again and talk

16 about it.

17   I don't know whether that answers your

18 question, but...

19   MR. RAYMOND LAFOND: If it did, I mean,

20 it would be easy. But that being said, I read

21 somewhere in a paper -- you handed it to us a short

22 while ago, or at least I guess Mr. Hacault did. It

23 indicated that in 2007 the load forecast by MIPUG users

24 was seven (7) point -- 7,255 gigawatts as opposed to

25 now being more like 5,000 gigawatts.

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 1   Do you know what has happened? Like

 2 that's a substantial decrease.

 3   MR. BILL TURNER: Yeah, I don't have

 4 all that information in front of me.

 5   MR. RAYMOND LAFOND: Okay. I guess the

 6 -- the cost of new projects, I've heard your answer,

 7 but I'm not sure how that relates to MIPUG members,

 8 because it cannot do anything else but increase the

 9 costs, because there is just -- we all know that

10 generation from new plants or future plants will be

11 three (3) to five (5) times more than it was, for

12 instance, from Limestone.

13   And -- and I think -- I think MIPUG has

14 to enlighten us a wee bit on that in the sense that a

15 big concern, I guess, for Manitoba is if these rates

16 increase and your industries leave because the rates

17 are too high, then the Manitobans are caught fix -- you

18 know, paying for the bill which you would have

19 otherwise had to pay for.

20   And I'm not sure how we relate to that,

21 how we get into long-term commitments from industrial

22 users as well as from Manitobans who cannot necessarily

23 leave as easily?

24   MR. ANTOINE HACAULT: Member Lafond,

25 the way that this hearing is proceeding, MIPUG has not

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1 yet had its opportunity to provide its formal evidence.

2 It's filed -- pre-filed evidence, but Mr. Bowman, I

3 believe, will be addressing a -- a lot of your

4 questions in -- in the formal evidence part.

5   We've heard some evidence, for example,

6 that -- and there may be some dispute about it, but

7 that Wuskwatim probably isn't needed for the domestic

8 load, I think the number was for like about nine (9)

9 years in the current circumstances. And it -- the --

10 although we don't allocate power to a particular

11 market, it -- it is extra power.

12   So those are all matters that we can

13 address in Mr. Bowman's evidence. And perhaps -- it

14 wasn't a question, it was a statement. But perhaps the

15 members of MIPUG can answer as to whether, in the

16 northern communities, they actually have a choice of

17 lowering wages from the current level to the Manitoba

18 average, even including the summer -- southern areas.

19   They may have some information to

20 provide this Board as to whether, in their particular

21 industries, they can actually -- that's a controllable

22 cost.

23   MR. DALE BOSSONS: I guess from

24 Canexus's perspective, obviously, our employees are

25 governed under -- it -- it's a unionized work force

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1 governed under a collective agreement. And wages are

2 negotiated, you know, through the collective bargaining

3 process. And it is not simply a matter of us having

4 necessarily control over that to roll back those wages.

5   You know, it's -- it's like any

6 negotiation process. Our employees, you know, have to

7 deal with us when that contract comes up. And the

8 negotiations are usually very fair, and the wage

9 increases are in line with the typical wage increases

10 seen throughout the rest of the province, et cetera.

11   So it's not something easily addressed,

12 to be honest with you.

13   MR. RAYMOND LAFOND: Yeah, I understand

14 that. However, I mean, you do have the possibility of

15 mak -- making comparisons with rates in your other

16 plants or competition's plants.

17   That information generally you do have,

18 and you can tell whether or not you're more than your

19 competition or less than your competition.

20   MR. DALE BOSSONS: It's on par.

21   MR. RAYMOND LAFOND: Thank you. So

22 we're going to be hearing from Dr. (sic) Bowman later

23 this week?

24   MR. ANTOINE HACAULT: I -- I believe

25 it's next week that Mr. Bowman of InterGroup is

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1 scheduled to provide his preven -- presentation to the

2 Board, and he'll be available for questioning by all

3 parties also. Thank you.

4   MR. RAYMOND LAFOND: Thank you. In --

5 in response to another question, I think question

6 number 6 it was, I did see that MIPUG was essentially

7 saying that Manitoba Hydro was not expensing enough

8 overhead to the capital programs; in other words, was

9 not capitalizing enough overheads.

10   Manitoba Hydro has had to reduce that

11 because IF -- of -- of the new accounting guidelines

12 through IFRS, which I'm quite sure all of you are also

13 bound to follow in the future. So I don't know how you

14 respond to that. We all need to follow the same

15 guidelines. We, I mean, Hydro, MIPUG, everyone in --

16 in every major company.

17   MR. ANTOINE HACAULT: Again, Mr.

18 Chairman, that will be part of Mr. Bowman's

19 presentation. He will be addressing that specific

20 issue and dealing with how Manitoba Hydro's practices

21 have changed and whether that's required.

22   MR. RAYMOND LAFOND: But my -- I guess

23 I'll be more precise in my question. MIPUG members are

24 moving to IFRS like everyone else, am I correct? I see

25 some...

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1   MR. BILL TURNER: Yes. Yes.

2   MR. RAYMOND LAFOND: Thank you. I

3 guess another issue was a fairly lengthy response to a

4 question in regards to -- I guess it was question

5 number 8, in regards to equity levels.

6   And Manitoba Hydro is now forecasting

7 its equity levels to move them from 25 percent to 10

8 percent over the next few years. In your companies, I

9 would suspect -- and please correct me if I'm wrong --

10 that you would see this as pretty tragic, because

11 you're certainly much closer to 50 percent than -- than

12 even to 25 percent, never mind 10 percent.

13   And you know as well as I do that it

14 creases -- that this increases the risk factors of

15 operation. So I don't know how you react to that,

16 because your recommendation is to -- is indicating that

17 there's plenty of retained earnings. And -- but that

18 plenty of retained earnings means only 10 percent in

19 the next few years as opposed to 25 percent now. To

20 me, that's a concern.

21   MR. ANTOINE HACAULT: Mr. Bowman,

22 again, will be addressing that. Thank you for raising

23 that concern. He'll be addressing it in the context of

24 a Crown-owned utility.

25   And I don't want to get into his

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1 evidence, but he -- he hopefully will be able to

2 address your question and concerns and contrast it

3 between private companies and how, in a rate-regulated

4 industry, Crown corporations specifically providing

5 cost of service to Manitobans, as to whether or not,

6 with all the number of different factors, this causes

7 various issues like inter-general -- inter-generation

8 equity, et cetera.

9   MR. RAYMOND LAFOND: Well, let me

10 approach this a wee bit differently. It seems to me

11 that whether it be new construction or -- or

12 replacements of aging dams, the -- these are all very

13 long-term projects. Is it thinkable for MIPUG members

14 to sit down with Hydro and essentially make long-term

15 commitments? And by "long term", I'm not talking of

16 two (2) to five (5) years, because it takes ten (10)

17 years to build a dam or a generation station.

18   Like -- like, for instance, a twenty

19 (20), twenty-five (25) year contract, whereby we can

20 foresee the amount of usage in the future by yourselves

21 and -- and at -- at prices which we were -- we would be

22 able to -- or Manitoba Hydro would be able to forecast

23 for you over the next twenty-five (25) years, based on

24 future costs which, again, would be substantially

25 higher than they currently are.

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1   So I'm not sure, is -- is that

2 thinkable?

3   MR. BILL TURNER: I'll -- I'll partly

4 an -- answer on my recent involvement with Canexus.

5 Most -- most of the pulp mills work with customers on

6 either a one (1) year contract, a three (3) year

7 contract, and so on. So -- and we're dealing with pulp

8 mills that are very vulnerable to imports from -- from

9 overseas markets.

10   So it would be difficult for -- for,

11 I'll say, the Canexus family, to -- to have long-term

12 contracts when they can't get them from their

13 customers, similar to what Hydro would be to get long-

14 term contracts from ourselves.

15   THE CHAIRPERSON: Just a follow-up

16 question to that. So, for example, if you were to

17 negotiate with Hydro, you would be doing one-offs with

18 Hydro, right? You wouldn't be negotiating collectively

19 with Hydro with respect to your power needs.

20   You -- you would be negotiating, each

21 company, individual with Hydro, or would you do it

22 collectively?

23   MR. BILL TURNER: Every contract is

24 individually with the companies.

25   THE CHAIRPERSON: So the development of

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1 a new program would be done with MIPUG? Or would it be

2 done with com -- individual companies? I mean, for

3 example, if Hydro was to come up with a new program to

4 address some of -- some of the concerns you've

5 expressed today about having some flexibility and so

6 on, is that done with you, traditionally been done with

7 MIPUG, or has it been done with individual operators?

8   MR. BILL TURNER: If I understand that

9 question properly, we all work off published rates in

10 Manitoba. So each -- each and every facility has a

11 contract that would be for a certain volume of power

12 coming into their facility.

13   MR. RAYMOND LAFOND: I think it was

14 Canexus that was talking about possible expansion that

15 was delayed at least, or if not, stopped.

16   Now, was this extension delayed or -- or

17 terminated simply because of electricity prices or

18 really because of lower demand due to the recession,

19 more particularly in the US?

20   MR. DAVE BOSSONS: It wasn't

21 specifically due to electricity prices. It was just

22 the economics for the project did not support the

23 project moving forward. And, of course, whenever

24 you're doing a economic analysis of any sort of project

25 or expansion, your costs are a key component. And as

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1 we forecast costs going forward with the projected rate

2 increases, that was just one (1) of the variables that

3 was worked into the -- into the ROI calculation.

4   So that -- that project, as it sits

5 today, is kind of -- it's been shelved temporarily.

6 But, you know, it's a typical example. There was time

7 when the economics based on variable cost of

8 electricity would have supported that project a lot

9 easier then it does today. And with price increases

10 projected at 3.5 to 4 percent, these sorts of future

11 growth projects we just don't believe are going to have

12 the economic justification anymore.

13   MR. RAYMOND LAFOND: But is the demand

14 decreasing or not increasing?

15   MR. DAVE BOSSONS: In terms of the pulp

16 market, our demand for our product is -- it's a very

17 stable market today in North America. There is an

18 increasing demand for exports. And we're at the point

19 now where it's -- a lot of it's based on the

20 competitiveness between the various companies. When

21 these contracts come up annually, which they're usual

22 annual contracts, it becomes a bidding process to see

23 who can get what customer.

24   So the market's stable. There's not a

25 lot of growth in it though. And there's no significant

3636

1 projected growth. But, you know, it is stable. The

2 export market seems to be growing though.

3   MR. RAYMOND LAFOND: Export out of

4 North America?

5   MR. DAVE BOSSONS: Out of Canada, out

6 of North America, yes.

7   MR. RAYMOND LAFOND: So -- so this

8 project, for instance, was not pursued, period; rather

9 than not pursue in Manitoba, but pursued somewhere

10 else?

11   MR. DAVE BOSSONS: It wasn't pursued --

12 we haven't pursued it anywhere else yet.

13   MR. RAYMOND LAFOND: Okay.

14   THE CHAIRPERSON: I'm sorry. What --

15 what do you use sodium chlorate for?

16   MR. DAVE BOSSONS: Sodium chlorate is

17 used to -- as a bleaching agent. So it makes paper

18 white. It takes it from brown to white.

19   MR. RAYMOND LAFOND: My -- my -- I

20 guess my final question is: If I heard you correctly,

21 your concern is about making sure that you're not

22 having to pay more than the cost of producing and

23 transmitting electricity to major industrial users,

24 which is different from the first question I had, in

25 terms of future costs, which would be much higher for

3637

1 additional generation. So -- so, again, I'll rephrase

2 that.

3   So your issue is to make sure that you

4 are not short -- charged more than cost, but not being

5 subsidized either. You're not asking for a

6 subsidization? In other words, lower than cost.

7   MR. BILL TURNER: That's correct.

8 That's correct.

9   MR. RAYMOND LAFOND: That's correct.

10 It's simply cost, not a matter of having to pay less

11 than cost?

12   MR. BILL TURNER: No.

13   MR. RAYMOND LAFOND: Which of course

14 we get into the new -- the -- the other discussion of

15 what is cost with future plans coming on, on stream.

16 Thank you.

17   THE CHAIRPERSON: I had some questions

18 in relation to MIPUG. And I just wanted to understand

19 how your association functions.

20   Now, if -- I expect that you would, when

21 you're taking a public position, you would take a

22 position based on unanimous consent of your members?

23 Or do you take a position that where one (1) member is

24 saying, I don't buy into this.

25   I'd just like to understand how that

1 works in your organization.

2   MR. BILL TURNER: Okay. All of the

3 members of MIPUG, we -- there's no initiation fees or

4 whatever to join. It's just a -- a common interest

5 group where electricity affects every single person

6 that -- that -- and company that is involved with our

7 organization.

8   So generally what we do is either have

9 telephone conferences or -- or face-to-face meetings,

10 discuss some of the issues that -- that might be

11 against or -- or problematic for some of our -- our

12 interim fellow members. Discuss it to come up with a -

13 - a common consensus. And it doesn't mean that

14 everyone becomes a winner, or everyone becomes a loser.

15 There's always going to be a -- a mix of -- of the

16 combination of all of that. But it's just to form a --

17 a group that -- that we can come, like today, and --

18 and present something as a group.

19   THE CHAIRPERSON: So if one (1) member

20 doesn't agree with the balance of the group, do you

21 take a position, or...?

22   MR. BILL TURNER: We -- we will -- we

23 will balance that out with -- with a, I guess, a common

24 response. But it may not mean that, like I say, every

25 -- every member of -- of the group is going to come out

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1 a winner or a loser.

2   THE CHAIRPERSON: Now, so your -- your

3 concerns are exclusively with power, or are you dealing

4 with, for example, there must be some rail issues that

5 affect all of you. I'm just wondering, are you

6 exclusively focussed on -- on energy?

7   MR. BILL TURNER: Historically, it has

8 been with energy.

9   MR. RAYMOND LAFOND: You -- you

10 indicated that there was no initiation fee or -- to be

11 a member of MIPUG. But there's got to be an annual fee

12 of some type to be able to pay for some consultants, I

13 would imagine, like Mr. Hacault? Unless he's doing it

14 on a volunteer basis.

15   MR. BILL TURNER: He hasn't told me

16 that. Basically, all the costs arrived out of

17 preparing for hearings like this or the general

18 meetings where we -- we actually hire InterGroup on our

19 behalf, the costs are compiled and each member then

20 pays a portion of that based on the amount of power

21 that that facility consumes.

22   MR. RAYMOND LAFOND: Thank you.

23   THE CHAIRPERSON: Now, I'm interested,

24 Mr. Bossons, as you talked about this -- the -- the

25 Curtailable Rate Program. And I'm -- I'm intrigued at

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 1 how you deal with it operationally.

 2   Could you explain that, please, to me?

 3   MR. DALE BOSSONS: Again, the nature of

 4 our process, think of it as -- as like a big battery, a

 5 reverse battery, electrolytic process. It -- it's very

 6 similar. So we have the ability to actually hit a

 7 button and shut the battery off and shed load almost

 8 instantaneously.

 9   Operationally, it definitely creates an

10 upset. I mean, when the guys have to hit the button and

11 drop load of that magnitude it, you know, it creates

12 hours of work for them where they're running around,

13 trying to balance things out, get things back under

14 control. It's not something we look forward to, but

15 it's something we have the ability to do, and it's

16 something that we're happy to participate in. But

17 there is an operational challenge and cost to it.

18   THE CHAIRPERSON: So, for example, if

19 you shut off for a few hours, you simply defer the

20 production to a later time. Is that fundamentally how

21 it works?

22   MR. DALE BOSSONS: Typically, you try -

23 - we try and run our facility at almost full load all

24 the time. So when that production is lost, we usually

25 cannot make it up. It's lost.

3641

1   MR. RAYMOND LAFOND: Full time, is that

2 twenty-four (24) hours a day, or eight (8) hours a day?

3   MR. DALE BOSSONS: Twenty-four (24)

4 hour -- twenty-four (24) hours a day, seven (7) days a

5 week, three hundred and sixty-five (365) days a year,

6 and at full load. We -- we -- when we -- when you

7 typically run, you run flat out.

8   THE CHAIRPERSON: Now, the other -- the

9 other aspect I wanted to talk with you about, from a --

10 from an operational standpoint, what have you done

11 internally to reduce your power consumption?

12   Could you describe some of the things

13 you've done over the last few years, by each of the

14 companies here?

15   MR. DALE BOSSONS: We typically are

16 continuously looking for various options to, you know,

17 obviously, improve process efficiency and power

18 efficiency is a major factor in that. Probably the --

19 the most significant recent project was the -- going to

20 a smaller gap size in the electrolytic cells, which

21 increased the efficiency of the cells.

22   But we have what we call a CIP process

23 within our organization, continuous improvement

24 process, where we're always looking for energy

25 efficiency and cost-competitive ways to reduce our

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1 operating costs. At the Canexus plant, probably the

2 narrow gap project, though, would have been the most

3 significant one (1) in the past few years.

4   MR. BILL TURNER: In the last several

5 years, that's been the most significant to Canexus.

6 Yes.

7   MR. DAVE FORSYTH: Yeah, some of the

8 projects that we've undertaken at Gerdau, we've had a

9 reheat furnace fibre veneer change-out in 2009. In

10 2008, we had a caster auto-torch upgrade. Prior to

11 that, 2007, a plant space heating upgrade that was a

12 hundred and ten thousand dollars ($110,000) for that.

13 Compressed-air system enhancements, that was over a

14 million dollars for that. That was a large power-

15 saving initiative. Ladle lid, we put that on in 2006

16 and a furnace shell.

17   So we've had -- those were over $3

18 million in projects we've done to save electricity and

19 natural gas.

20   MR. BILL TURNER: If -- if permitted,

21 I'll just add one (1) more on -- on Canexus's behalf.

22 Any of the major expansions that I was involved with,

23 we did have Manitoba Hydro work with us, looking for

24 more efficiency lighting, more efficiency motors on all

25 of our pumps, and that type of thing. So we have

 1 worked with Hydro there.

 2   We also had them work with -- we use a

 3 lot of compressed air. They were helping us redesign

 4 some of our control stratagems on compressors to reduce

 5 the energy input into the plant as well.

 6   THE CHAIRPERSON: I had the one (1) --

 7 one (1) question for Gerdau in relation to your opening

 8 comments. You indicated that you are the largest

 9 recycler in Manitoba.

10   And, I guess, are you recycling other

11 than steel? Are you...

12   MR. DAVE FORSYTH: No, it's steel.

13 Scrap steel.

14   THE CHAIRPERSON: So any other

15 byproducts other than steel would be shipped somewhere

16 else for -- to address? Is that...

17   MR. GAVIN TOBIN: We do have some

18 byproducts that we're shipping elsewhere. Aggregate,

19 mill scale, and -- and some dust.

20   MR. RAYMOND LAFOND: I -- I know Dr.

21 Bowman's going to have all these answers for you. And

22 -- and I'm very anxious to see all these ans --

23 responses. However, I guess I need to simply ask you

24 for a reaction in regards to this.

25   Current consumption of Manitobans and

1 industrial power users costs such. But as I indicated

2 earlier, new generation stations cost -- you know, the

3 cost of generation would be three (3) to five (5) times

4 more. Would you suggest that Manitoba simply not

5 accept new industries increasing their work load in

6 order to maintain their current prices? Because that

7 would go against, I guess, economic development, which

8 you're very proud of. How do you react to that?

9   In other words, yourselves and

10 Manitobans, current power users, have to pay for the

11 growth factor which is coming in and -- and share the

12 cost with -- with the new Manitobans or the growing

13 population and -- and the number of additional Manitoba

14 power users -- industrial power users.

15   MR. BILL TURNER: I'll add some

16 comments into that -- I think, basically, you are

17 correct. If -- if there's more generation, it's going

18 to cost money. Our philosophy as a -- as a group has

19 always been that we like to promote industrial growth

20 within Manitoba. It helps the GDP and so on.

21   I think what we're saying is that -- is

22 the timing correct for, I'll say, three (3) major dam

23 sites to go forward, or do you do it in stages and move

24 forward? And like I said before, we know that building

25 a dam is a slow process. But there are other

1 opportunities to -- to help alleviate some of the

2 immediate concerns for -- for increased power.

3   We've talked about the Curtailable Rate

4 Program. And we've commented that Hydro's cut back on

5 that. That's one (1) way that -- that plants can help

6 postpone some of that major development, is -- is

7 during those peak time frames, if there was some other

8 options for curtailable programs that plants like

9 Canexus and Gerdau could -- could be involved with,

10 that would alleviate -- not totally alleviate, but

11 postpone some of that major development and spread it

12 out until we see a change in the US economy that would

13 promote, then, higher export values.

14   MR. RAYMOND LAFOND: I appreciate your

15 comments. Thank you. Any other comments in this

16 regards?

17   THE CHAIRPERSON: I do have some

18 questions in relation to the comparison that you made

19 with respect to the rates available in other

20 jurisdictions. And I guess you've -- you've mentioned

21 that, at one (1) point, Manitoba was lowest, but now

22 there are some jurisdictions where that -- that are

23 lower.

24   Now, is that based on published rates?

25 I mean, the fact that some of the jurisdictions are

1 lower, are -- are they establishing rates through

2 special programs, or they have a -- a private rate

3 that's available to the -- to the production facility?

4 Are you -- are you able to comment on how that works?

5 For example, you've cited Louisiana. I'd like to know

6 what's available to -- to Louisiana producers that

7 isn't available say in Manitoba.

8   MR. WAYNE YAN: Okay. I'll take that

9 one. The day that Canexus presented -- those are

10 published rates, so anybody can go up -- pull up the

11 website and, you know, do some calculations if you know

12 the -- you know, make some assumption around demand

13 levels. And everything's available on the website and

14 you can calculate the -- the rates.

15   So those -- those are published rates.

16 And we will highlight that there are special programs

17 out there that give better deals, and those are

18 generally not publically available; specifically

19 through Entergy, that -- Louisiana, it is -- you go up

20 to the Entergy website, there's a special rate program

21 for electrochemical producers, companies like Canexus.

22   They introduced that program after we

23 relocated our plant from Louisiana to here. We

24 relocated our plant in 2003. I think that program was

25 rolled out in 2005. Now, they -- in -- in that

3647

1 document, it was very specific; it was -- they closed

2 it off for -- in 2008, so I'm sure, if we -- someone

3 wants to go in there and say, I'm investing today, you

4 -- will you allow us to go into that rates, and I think

5 that's probably negotiable.

6   So, I will -- I highlighted that one

7 because it is published, okay? It's specifically -- a

8 special program for electrochemical producers. Right

9 there, it's black and white, right at the top. So

10 that's a special -- current -- right now, they're --

11 that's the thirty dollar ($30) that we're talking about

12 today.

13   They basically don't charge any demand

14 costs, okay? It's all energy, and it fluctuates with -

15 - every month they publish the fuel-demand component.

16 It's available on the website all the time.

17   So the other thing we want to talk about

18 is Hydro Quebec price is -- it is their published

19 rates, okay? We know the aluminum smelters went in

20 there recently and they have special deals. Now, we're

21 -- we're not specific -- asking -- told to get into

22 that. That's -- you know, that's obv -- not

23 discussion. But what's in the document we prov --

24 we've -- we presented today, those are published rates.

25   MR. RAYMOND LAFOND: Can I pursue this?

3648

 1 In Louisiana, the electricity would be produced in --

 2 in most part by natural gas, correct?

 3   MR. WAYNE YAN: There are many

 4 producers in the southeastern US. It's a mix of coal

 5 and natural gas. A lot of them have -- those are --

 6 those that are capable have switched fuel to natural

 7 gas in the last year and a half, because such -- such

 8 favourable rates. Par -- predominantly, most are still

 9 coal-based -- coal-based generators, but a lot of them

10 are now natural gas, okay? And the pro -- hydro folks

11 would know, it's much faster to build hyd -- you know,

12 natural gas plants than coal plans than -- than

13 nuclear.

14   There's all pur -- all of them are still

15 pursuing nuclear plants in the southeast, so they --

16 they are shifting whenever -- whenever it's possible.

17   MR. RAYMOND LAFOND: Thank you. So --

18 so the lower price of thirty dollars ($30) could be

19 very temporary if it's mostly gas, for instance,

20 because the price could double or triple within the

21 next five (5) to ten (10) years?

22   MR. WAYNE YAN: Again, that -- we don't

23 know the details, but that is a published program that

24 they have. It's like the time-of-use programs that

25 they publish. I mean, sure, they can take it away at

1 any point they want, but that -- that program has been

2 in place since I believe 2005. So now, eight (8) years

3 later, it's still in place. I think they were part

4 doing that to -- to attract investments and to keep the

5 jobs in Louisiana.

6   MR. RAYMOND LAFOND: But, essentially,

7 for a major consumer like yourselves in major

8 investments in plants, you need some kind of assurance.

9 Yes, Manitoba Hydro projected electric rates with new

10 projects increased more than the inflation rate

11 somewhat; however, these thirty dollar ($30) rates

12 could increase by much more if the price of gas went

13 up, which would not offer stability for -- for a

14 company like yourself.

15   Am I correct?

16   MR. WAYNE YAN: We should highlight

17 that -- that thirty dollar ($30) program went in 2005

18 before the natural gas price dropped. I -- I'm -- I'm

19 not a hundred percent certain, but I think they did

20 that to main -- retain companies from moving away.

21 Like we -- they probably -- maybe use us as -- Canexus

22 is one (1) example, where we move a plant away and the

23 other thing -- I mean, Dale mentioned we can shut down

24 these plants very quickly to curtail power. We have

25 moved these plants around before. They're -- they're -

3650

1 - in compare -- to other heavy chemical industries,

2 these plants are relatively easier to move than other

3 plants.

4   So just for us, we shut down our

5 Bruderheim Alberta facilities -- facility three (3)

6 years ago, because of high power price. Those sales

7 now are -- some of our, you know, Prazel (phonetic)

8 facility, some of them we moved to Brandon, so they are

9 relatively easy to move from -- from a moving re --

10 perspective.

11   MR. RAYMOND LAFOND: Thank you very

12 much.

13   MR. ANTOINE HACAULT: Mr. Forsyth, did

14 you have some comments on that, too?

15   MR. DAVE FORSYTH: Yes, we -- we have -

16 - as I mentioned, the Manitoba rates are the fifth

17 lowest in the North American fleet now, and those are

18 in jurisdictions where there are opportunities for us

19 to participate in interruptible contracts, which are

20 published tariffs. One (1) of those plants is actually

21 in ERCOT, where there are multiple programs that we can

22 participate in, where we offer demand-response products

23 back into the market and we get credit for that.

24   And we also have the opportunity to

25 avoid this -- the price spikes, because it's a -- an

3651

1 open market there. When the price does go high, we

2 curtail, and take our operations down so that we avoid

3 those prices.

4   So there are different programs

5 available in these different juri -- jurisdictions. So

6 even if the gas prices do go up, we still have some

7 cushion or ability to -- to manage those costs.

8   THE CHAIRPERSON: Okay. I think that's

9 all the questions from the panel, so I appreciate it

10 very much coming to -- to visit with us today. I -- I

11 was very interested to hear some of the information

12 about your companies, because we -- it gives us an

13 opportunity to understand who the users are and so on.

14   So -- and thanks very much for outlining

15 the issues that you have with respect to electricity

16 rates. And I know you're all busy, so I'll le -- so

17 we're adjourned as far as you're concerned.

18   We're going to take a break now for ten

19 (10) minutes and then we'll -- we'll continue with the

20 proceedings. So thank you very much for attending

21 today. Very much appreciated.

22   MR. BILL TURNER: Thank you for

23 listening to us.

24

25   (PRESENTATION CONCLUDED)

3652

1 --- Upon recessing at 10:15 a.m.

2 --- Upon resuming at 10:32 a.m.

3

4   THE CHAIRPERSON: I believe we're in a

5 position to start. I wonder -- I believe we have some

6 documents to acknowledge.

7   Ms. Ramage...?

8   MS. PATTI RAMAGE: Yes, thank you. We

9 have three (3) responses to undertakings to file this

10 morning. The first is Undertaking 58 where Manitoba

11 Hydro is giving its status of expenditures and its

12 projection regarding it, will spend $34 million. I

13 believe that was DSM expenditures in the 2012/'13 test

14 year.

15   In any event, that was Undertaking 58

16 and we're suggesting it be filed as Manitoba Hydro

17 Exhibit 71.

18

19 --- EXHIBIT NO. MH-71:   Response to Undertaking 58

20

21   MS. PATTI RAMAGE: The next one is

22 Manitoba Hydro Undertaking 61, to be filed as Exhibit

23 72.

24

25 --- EXHIBIT NO. MH-72:   Response to Undertaking 61

3653

1   MS. PATTI RAMAGE: I'm not sure if I

2 got the last one right. That was Undertaking 58 as 71.

3 This one is Undertaking 61 as 72, and that's an update

4 on the total of electric utility DSM expenditures in

5 the test years.

6   And lastly, we have Manitoba Hydro

7 Undertaking number 72, and that's the payback for

8 converting from an electric water tank to a side-vent

9 natural gas (phonetic). And we're suggesting

10 Undertaking 72 be marked as Manitoba Hydro Exhibit 73.

11

12 --- EXHIBIT NO. MH-73:   Response to Undertaking 72

13

14   MR. RAYMOND LAFOND: Can I ask a

15 question on Exhibit 93 -- 73? What is the life

16 expectancy of a water -- a gas water heater versus an

17 electric water heater, just very approximate figures?

18   MS. PATTI RAMAGE: Unfortunately, Mr.

19 Lafond, I don't think we have anyone here from our DSM

20 side. Mr. Peters did indicate to me that they're -- he

21 expected that he would be recalling Ms. Morrison, so

22 that's something we can certainly look into, or have

23 her address when she's back.

24   MR. RAYMOND LAFOND: That is fine. I

25 thought you'd all know this by heart.

3654

1   THE CHAIRPERSON: So thank you for --

2 for those -- those -- the responses to the

3 undertakings. Before we continue, I'd like to mention

4 that we a visitor to -- here today. Her name is Mrs.

5 Wendy Warnock, of Digi-Tran. She's all the way --

6 she's here all the way from Calgary, so welcome to

7 Winnipeg, Ms. Warnock. We don't reserve the same

8 welcome for the Flames, but -- but you are welcome.

9   Now, I would like to turn the microphone

10 over to Mr. Williams. Mr. Williams, you -- your

11 presence was missed yesterday. It wasn't quite the

12 same hearing without you in the room, so I'm glad

13 you're back. And please let us know if you need

14 breaks, given -- given your health conditions.

15

16 MANITOBA HYDRO PANEL 2 - REVENUE REQUIREMENT, RESUMED:

17   VINCE WARDEN, Resumed

18   DARREN RAINKIE, Resumed

19   TERRY MILES, Resumed

20   DAVID CORMIE, Resumed

21   MANFRED SCHULZ, Resumed

22

23   MR. BYRON WILLIAMS: Thank you very

24 much, Mr. Chair. And good morning, members of the

25 panel. Just in terms of our exhibits, and I'm sure Pro

3655

1 -- Professor Miller will be glaring daggers at me for

2 the paper that I've pro -- proffered just this morning,

3 and there will be more in the afternoon, sadly.

4   But there -- we have a document,

5 "Supporting Materials, Part 1 - CAC (Manitoba), January

6 15th, 2013." And it -- it should be a fairly thick,

7 two (2) sided document, which I would suggest be marked

8 as CAC Exhibit 12.

9

10 --- EXHIBIT NO. CAC-12:   Document, "Supporting

11   Materials, Part 1 - CAC

12   (Manitoba), January 15th,

13   2013"

14

15   MR. BYRON WILLIAMS: And that -- that

16 document contains either material on the record, or --

17 or -- of this proceeding, or past proceedings. There

18 also is an excerpt from a report from KEMA, K-E-M-A;

19 for the reporter, "Leveraging Network Utility Asset

20 Management Practices."

21   And that is a document not on the record

22 of this proceeding, although I discussed it with Mr.

23 Warden in the prior general rate -- rate application.

24 And I would suggest that be marked as CAC Exhibit 13.

25

3656

1 --- EXHIBIT NO. CAC-13:   Excerpt from report,

2   "Leveraging Network Utility

3   Asset Management Practices"

4

5   MR. BYRON WILLIAMS: And, finally,

6 there should be a one (1) page document which I would

7 not suggest be marked as an exhibit. It's just called,

8 "Prior -- Prior --" Geez. It's the analogy. And just

9 -- I don't think it's properly an exhibit. It's just

10 to help people follow along, if Mr. Warden is prepared

11 to -- to follow along.

12   And, Mr. Chairman, I did want to thank

13 the generous donors of Fisherman's Friends, Halls,

14 something with codeine, which I'm really enjoying. And

15 so I'm -- I'm truly grateful for that.

16   And there is one (1) sad thing that --

17 that our cli -- our client would note for today, or

18 hopefully it's today. This may be the -- the last time

19 that we have the opportunity to cross-examine Mr.

20 Warden. And, unless I take longer than -- than the

21 day, I guess that's possible. And -- and, certainly,

22 on behalf of our clients, they do applaud his devotion

23 to Manitoba Hydro. He's been an effective advocate for

24 them. And they wish him very well in his future

25 endeavours.

 1   MR. VINCE WARDEN: Thank you very much,

 2 Mr. Peters (sic). I -- I truly appreciate those

 3 comments. Did I say Mr. Peters? Not off to a good

 4 start. Mr. -- Mr. Williams, thank you.

 5   MR. BYRON WILLIAMS: Mr. Peters could

 6 only look so good, Mr. Warden.

 7

 8 CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

 9   MR. BYRON WILLIAMS: And I'm not sure

10 who the first questions go to. I suspect it's -- they

11 may be to Mr. Miles or Mr. Cormie.

12   But in terms of CAC-12, and directing

13 your attention to page 1, which at the top should --

14 should have -- you -- you might see some messy

15 printing, "CAC Pre-ask 5."

16   Mr. Miles, is that you, or is that Mr. -

17 - Mr. Cormie?

18   MR. TERRY MILES: Probably start with

19 me. Thanks.

20   MR. BYRON WILLIAMS: And Mr. -- Mr.

21 Miles, you were here last Friday when we -- I finished

22 up with a bit of a discussion with the prior panel in

23 terms of load forecasting. And I just have a few

24 questions, in terms of the forecast of average versus -

25 - average or the expected average export price. And so

3658

1 I'm not sure if you're the person or not, but we'll --

2 we'll start off with -- with you.

3   And just as we look at this table, Mr.

4 Miles, you'll see that it -- it purports to be a

5 comparison of domestic and export volume and price

6 forecasts, agreed?

7   MR. TERRY MILES: I think I prefer to

8 refer to it as not price forecasts, but averaging of

9 revenue in those particular years, because that's

10 essentially what it is. It's the revenues divided by

11 the volume of generation --

12   MR. BYRON WILLIAMS: Okay.

13   MR. TERRY MILES: -- and I think

14 averaging of revenues is a more appropriate denotation

15 of what's on this chart.

16   MR. BYRON WILLIAMS: And in terms of --

17 but implicit in it would be -- would be Manitoba

18 Hydro's expectations or forecasts, in terms of average

19 revenue, agreed?

20   MR. TERRY MILES: That's correct.

21   MR. BYRON WILLIAMS: And if we -- if we

22 look to the -- the columns on the left-hand side, we

23 see it looks at matters such as hydraulic generation,

24 the volumes; US exports, the volumes; US exports, the

25 average price; as well as Canadian exports and domestic

3659

1 sales, agreed?

2   MR. TERRY MILES: Yes.

3   MR. BYRON WILLIAMS: And I'd like to

4 direct your attention to the expectations, in terms of

5 average price for US exports, Mr. Miles. And let's

6 start with the 2011/2012 -- 2012 -- year.

7   Am I correct in suggesting to you that

8 in -- the expectation in IFF09 was that the -- the

9 average price would be in the -- per megawatt hour for

10 US exports would be in the range of sixty-four dollars

11 and eighty cents ($64.80)?

12   MR. TERRY MILES: Yeah, I see the

13 number in the -- in the table under IFF09, sixty-four

14 eighty (64.80). So that represents the -- again, the

15 total sales in that year divided by the -- so the total

16 revenues that year divided by the total generation that

17 was sold to the US, yes.

18   MR. BYRON WILLIAMS: And that was the

19 expectation presented in IFF09 for the 2011/'12 year,

20 sir?

21   MR. TERRY MILES: That's correct.

22   MR. BYRON WILLIAMS: And if we turn to

23 the actuals for that year, sir, we -- we can agree that

24 the actuals were thirty-one dollars and twenty-three

25 cents ($31.23), correct?

3660

1   MR. TERRY MILES: Yes.

2

3   (BRIEF PAUSE)

4

5   MR. TERRY MILES: I -- I would just add

6 to that, in terms of the -- the volume of generation in

7 that year too, we had, I think -- I believe Mr. Cormie

8 can correct me if I'm incorrect, but that we had an

9 above-average water year that year. So we would have

10 had some surplus generation that likely would have gone

11 out in off-peak hours. So that would have added

12 additional revenues. But proportionately, that would

13 have likely been less, because there would have been a

14 larger proportion of off-peak generation.

15   It would have been a lesser proportion

16 of off-peak generation in the original forecast from

17 the 2009/'10 forecast versus the actuals. And that

18 does happen. We see different quantities of generation

19 when we see the actuals happen.

20   MR. BYRON WILLIAMS: And I certainly

21 thank you for that -- that helpful answer, sir. But

22 you're certainly not suggesting that the difference

23 between the average price expe -- expectation in IFF09

24 versus the actuals was primarily driven by a difference

25 in volume?

3661

 1   MR. TERRY MILES: No, I don't believe

 2 that's the case.

 3   MR. BYRON WILLIAMS: And, indeed, you

 4 would agree that it was drastically lower prices that -

 5 - that was a major determinant of the variation from

 6 the expectation in IFF09 as compared to the actual?

 7   MR. TERRY MILES: Yes. It's the

 8 decline in -- decline in the prices in the export

 9 market due to the economic downturn that we are

10 experiencing, yes.

11   MR. BYRON WILLIAMS: Now, sir, just --

12 just -- and -- and I do acknowledge your comments in --

13 in terms of -- you didn't catch my cold, did you, Mr.

14 Miles?

15   MR. TERRY MILES: I sure hope not.

16   MR. BYRON WILLIAMS: I'll let you

17 get...

18

19   (BRIEF PAUSE)

20

21   MR. BYRON WILLIAMS: And -- and, if I

22 look at that '11/'12 year, acknowledging that there was

23 a somewhat of a higher volume, would I be correct in

24 suggesting to you that the actual average price was

25 over 50 percent lower than the expectation built into

1 IFF09? I could do the math for you, if you -- if you'd

2 like, Mr. Miles.

3   MR. TERRY MILES: I think that looks

4 about -- looks about right.

5   MR. BYRON WILLIAMS: And again, Mr.

6 Miles, if we could move to the 2012/'13 year, again

7 focussing on US exports. And -- and let us acknowledge

8 again that in terms of hydraulic gen -- generation, the

9 -- the volume is expected to be a little higher than

10 originally anticipated in IFF09.

11   Can we agree on that?

12   MR. TERRY MILES: Yes.

13   MR. BYRON WILLIAMS: And if we look to

14 the average price expectation built into IFF09, we see

15 a expected result in the range of sixty-five dollars

16 and ninety-one cents ($65.91) per megawatt hour,

17 correct?

18   MR. TERRY MILES: Yes.

19   MR. BYRON WILLIAMS: And if we look to

20 the most recent expectation set out in IFF12, we see

21 that it is some thirty-five dollars ($35) per megawatt

22 hour lower, at thirty dollars and eighty-three cents

23 ($30.83), correct?

24   MR. TERRY MILES: Correct.

25   MR. BYRON WILLIAMS: And recognizing

3663

1 again that there is a bit higher volume built into

2 IFF12, the primary dri -- driver of that would be the

3 drastic decline of forecast price as compared to

4 revised forecast, agreed?

5   MR. TERRY MILES: Yeah, that would be

6 the decline in the price. Yes.

7   MR. BYRON WILLIAMS: And the -- the --

8 the decline in the average price expectation between

9 IFF09 and IFF12, you'll agree with me as well, is,

10 again, over 50 percent?

11   MR. TERRY MILES: Yes, that's about

12 right.

13   MR. BYRON WILLIAMS: Now, just, Mr.

14 Miles, in terms of staying in that '12/'13 year for

15 just one (1) second, if you'll address your -- your

16 mind to the forecast -- or -- excuse me -- to the

17 expectation of average price built into IFF10-2, you'll

18 agree with me for the '12/'13 year, it was fifty-eight

19 point six-two (58.62) cents per megawatt hour?

20   MR. TERRY MILES: Yes, I see that here.

21   MR. BYRON WILLIAMS: And again, the

22 revised expectation just two (2) years later is some

23 twenty-seven dollars and seventy-nine cents ($27.79)

24 per megawatt hour lower, correct?

25   MR. TERRY MILES: Yes, that's correct.

3664

 1   MR. BYRON WILLIAMS: And again, I can

 2 do the math, but you would agree that conservatively,

 3 that's a more than 45 percent difference, sir?

 4   MR. TERRY MILES: That -- that sounds

 5 in the order of the number, yes.

 6   MR. BYRON WILLIAMS: Mr. Miles, if we

 7 can look out to the 2016/'17 year, and let's stay with

 8 hydraulic generation at the top.

 9   First of all -- first of all, if we were

10 to compare the expected volume of hydraulic generation,

11 in terms of gigawatt hours, for IFF09 versus that for

12 IFF12, you'll agree with me that the expected volume

13 for IFF09, is -- is modestly higher?

14   MR. TERRY MILES: It's modestly higher.

15 I would say it's similar, yes.

16   MR. BYRON WILLIAMS: So if we're

17 looking for a difference, in terms of the average

18 price, in terms of US exports between IFF09 and IFF12

19 for the 2016/'17, we'll be looking almost exclusively

20 at price and not at volume, sir?

21

22   (BRIEF PAUSE)

23

24   MR. TERRY MILES: No, I would agree

25 that that's primarily price, yes.

3665

1

2   (BRIEF PAUSE)

3

4   MR. BYRON WILLIAMS: And without

5 getting into any commercially sensitive details, would

6 any of that be a difference in the NSP contract, sir,

7 versus the term sheet?

8   MR. DAVID CORMIE: No, that's all the

9 effectives of opportunity sale prices, Mr. Williams.

10   MR. BYRON WILLIAMS: Thank you, Mr.

11 Cormie. And -- and Mr. Miles, so if we -- if we were

12 to look at the expectation of average price built into

13 IFF09, we -- we see an expectation in the -- of ninety-

14 one dollars and seventy-two cents ($91.72) per megawatt

15 hour, correct?

16   MR. TERRY MILES: That's correct.

17   MR. BYRON WILLIAMS: And as compared to

18 the revised expectation of fifty (50) -- for IFF12 of

19 fifty-three dollars and -- and twenty-seven cents

20 ($53.27), correct?

21   MR. TERRY MILES: That's correct.

22   MR. BYRON WILLIAMS: And you'll agree,

23 subject to check, that that's a more than thirty-eight

24 dollars ($38) per megawatt difference, proportionately

25 more than a 40 percent difference, correct, sir?

3666

1   MR. TERRY MILES: That's correct.

2   MR. BYRON WILLIAMS: And Mr. Cormie,

3 just to make sure I -- I understand this. While the

4 expectation for IFF12 would -- would contain the

5 impacts of the NSF -- NSP sale starting in 2015, your

6 evidence is that the difference, in terms of

7 expectation, is -- the dominate driver is changes in

8 the ex -- expectations, in terms of the spot market?

9

10   (BRIEF PAUSE)

11

12   MR. DAVID CORMIE: Mr. Williams, I'm

13 thinking that when IFF08 -- 09 was prepared, that would

14 have been in the summer of 2009. And I believe in the

15 summer of 2009 we hadn't yet signed the -- the NSP sale

16 agreement, and there -- there -- the assumptions that

17 we had in the IFF about the prices for NSP were still

18 based on the term sheet and not based on the final

19 contract.

20   So you may be right. There may be some

21 effect of the difference between the term sheet and the

22 final price in there. But I -- but I -- I believe that

23 the majority of the price change between IFF09 and

24 IFF12 is associated with spot market sale prices.

25 There would be a slight adjustment to the price due to

3667

1 the changes in the pricing of the NSP sale agreement.

2   MR. BYRON WILLIAMS: And, Mr. Cormie, I

3 thank you for that. And -- and just for the sake of

4 precision, in terms of the slight adjustment from the

5 term sheet to the agreement, without getting into

6 anything confidential, that would be a downward

7 adjustment, in terms of the price expectation?

8   MR. DAVID CORMIE: Yes, for that year.

9 Yeah.

10

11   (BRIEF PAUSE)

12

13   MR. BYRON WILLIAMS: And just to go

14 back one (1) year in time, to 2015/'16, and looking at

15 the difference in average price between IFF09 and

16 IFF12, Mr. Miles, we can agree that the expected volume

17 of hydraulic generation would not be a material factor,

18 in that it was -- the expectations in both IFFs were --

19 were fairly close?

20   MR. TERRY MILES: That's correct.

21   MR. BYRON WILLIAMS: And we can agree,

22 as well, that the primary difference between the

23 average price expected out of -- in IFF09 versus that

24 expected in IFF12 would relate to the spot market,

25 correct?

3668

1   (BRIEF PAUSE)

2

3   MR. TERRY MILES: Yeah, they would be

4 the opportunity sale price, yes.

5   MR. BYRON WILLIAMS: I'm not sure -- I

6 just have one (1) question in terms of the domestic

7 sales average price, and I'm not sure who that goes to.

8   But if we were to look at the 2013/'14

9 year, the Hydro panel will agree with me that in IFF09

10 the average price, in terms of dollars per megawatt

11 hour, was expected to be fifty-three dollars and sixty-

12 nine cents ($53.69)?

13   MR. DARREN RAINKIE: That's what this

14 calculation is providing, Mr. Williams.

15   MR. BYRON WILLIAMS: So that's

16 agreement, Mr. Rainkie?

17   MR. DARREN RAINKIE: Yes, on a

18 temporary basis, until you get to your next question.

19   MR. BYRON WILLIAMS: So it's

20 provisional agreement, Mr. Rainkie? Maybe -- maybe

21 that should be our operating premise from now on, sir.

22   MR. DARREN RAINKIE: I think we're

23 going to have some fun today, Mr. Williams.

24   MR. BYRON WILLIAMS: Mr. -- Mr.

25 Rainkie, when we look for the 2013 -- you're making me

3669

1 feel better, I've got to tell you.

2

3   (BRIEF PAUSE)

4

5   MR. BYRON WILLIAMS: And, Mr. Rainkie,

6 when -- when we look at the expected volume for

7 domestic sales in IFF09 versus IFF12, for the 2013/'14

8 year, can we agree that the expected volume in IFF09

9 was -- was about 3,000 gigawatt hours higher?

10   MR. DARREN RAINKIE: Yes, Mr. Williams.

11   MR. BYRON WILLIAMS: So, Mr. Rainkie,

12 if we go down to the average price per megawatt hour

13 for the '13/'14 year anticipated in IFF12, you'll

14 provisionally agree with me that it -- it is portrayed

15 by Manitoba Hydro in its response as sixty-three

16 dollars and eight cents ($63.08)?

17   MR. DARREN RAINKIE: Yes, I'll agree

18 with you straight out, that's the calculation, Mr.

19 Williams.

20   MR. BYRON WILLIAMS: And, Mr. Rainkie,

21 taking the lesson that I learned from Mr. Miles, am I

22 right in suggesting to you that if the volumes in IFF12

23 are lower than the volumes in IFF09, that -- that would

24 suggest that -- that the increase in average price for

25 the '13/'14 year between the expectation in IFF09

3670

 1 versus the expectation in IFF12 is driven entirely by

 2 higher prices?

 3   MR. DARREN RAINKIE: That's -- I'm not

 4 sure about, Mr. Williams. When I look at IFF10-2, 11-

 5 2, and 12, with similar volumes, we get a very similar

 6 average price per megawatt. But I'm just trying to

 7 remember back to IFF09, which seems like a -- a distant

 8 memory now, why there would be such a radical

 9 difference between, for instance, the fifty-three

10 dollars and sixty-nine cents ($53.69) and the -- and

11 the sixty-three o-eight (63.08). I think the -- that's

12 the column that you're in.

13   This is a -- the reason I talked to Mr.

14 Peters about this as being a -- an output calculation

15 is we're taking revenue divided by volumes, not the

16 assumptions that went into the IFF. But I'm -- I'm

17 struggling with why that would be such a dramatically

18 different number, other than if it's a volume effect,

19 because I -- I think the rate increases in IFF09 were

20 perhaps -- were fairly similar to IFF12. So I'm

21 struggling with why that would be such a -- a large

22 differential.

23   It's not like our rate increase requests

24 have -- have differed that much between those -- those

25 IFFs. But I'm -- I'm struggling to remember what

3671

 1 exactly was in IFF09. I'm not sure I'm helping you,

 2 Mr. Williams.

 3   MR. BYRON WILLIAMS: Not yet, Mr.

 4 Rainkie. But it -- it's a fair answer, so I shall not

 5 criticize you for that.

 6   Mr. Rainkie, would it -- would it be too

 7 much work to find out why?

 8   MR. DARREN RAINKIE: No, I think we

 9 should, just so the record's clear, Mr. Williams. I

10 think that's the responsible thing to do.

11   MR. BYRON WILLIAMS: So -- so you would

12 undertake to provide a provisional explanation for the

13 -- the difference between the average price for the

14 2013/'14 year built into IFF09 versus the difference --

15 versus the expectation built into IFF12 with regard to

16 domestic sale average price?

17   MR. DARREN RAINKIE: I'll just alter

18 that. I'll provide you a precise answer, Mr. Williams,

19 not a provisional one.

20   MR. BYRON WILLIAMS: I thank you for

21 that, sir.

22

23 --- UNDERTAKING NO. 78:   Manitoba Hydro to provide

24   an explanation for the

25   difference between the

 1   average price for the

 2   2013/'14 year built into

 3   IFF09 versus expectation

 4   built into IFF12 with

 5   regard to domestic sale

 6   average price

 7

 8   CONTINUED BY MR. BYRON WILLIAMS:

 9   MR. BYRON WILLIAMS: Turning to page 2

10   of CAC Exhibit 12 -- Mr. Miles, this may be you again -

11   - you'll see the response to First Round Information

12   Request CAC/Manitoba Hydro 31(a) is presented, sir?

13   MR. DARREN RAINKIE: I see that. I

14   think this is Mr. Cormie's domain.

15   MR. BYRON WILLIAMS: I apologize, Mr.

16   Cormie. The -- and, Mr. Cormie, I really want to just

17   focus on the 2011/'12 year which the -- the table that

18   appears at the -- at the bottom of -- of this response.

19   And can we agree that in IFF10-2, Manitoba Hydro was

20   forecasting, in Can -- in Canadian dollars, an -- an

21   average price for the spot market of thirty-eight

22   dollars and eighty-two cents ($38.82) per megawatt

23   hour, sir?

24   MR. DAVID CORMIE: Yes, I see that --

25   that number there, yes.

3673

1   MR. BYRON WILLIAMS: And, Mr. Cormie,

2 just moving two (2) columns to the left, you'll agree

3 with me that the actual average price in -- in the spot

4 market, as measured in Canadian dollars, was twenty

5 dollars and sixty-five cents ($20.65) per megawatt

6 hour?

7

8   (BRIEF PAUSE)

9

10   MR. DAVID CORMIE: Yes, I see that, Mr.

11 Peters. But you'll also notice, as you go from IFF10-2

12 to the actual, that the actual -- the short-term

13 bilateral contracts have been separated out, and the

14 average of those two (2) values would be in the range

15 of twenty-two dollars ($22). Or -- but it -- but

16 you're right, the -- the average of those two (2) is

17 significantly lower than the thirty-eight eighty-two

18 (38.82) that was in the forecast.

19   MR. BYRON WILLIAMS: And I thank you

20 for that clarity, Mr. -- Mr. Cormie, and -- and I

21 apologize for the imprecision of my question. So we

22 can -- if we're looking for the forecast in 10-2 of

23 thirty-eight point eight-two (38.82), we can compare

24 that to the actuals just a year or -- or a bit later of

25 -- and say that, in the -- in that marketplace, it was

1 about twenty-two dollars ($22) per megawatt hour?

2

3   (BRIEF PAUSE)

4

5   MR. DAVID CORMIE: Well, I think that

6 same point goes -- applies to the dependable, Mr.

7 Williams, because in the forecast we had 2,800 gigawatt

8 hours at fifty-five seventy-eight (55.78), and the

9 actual came in at thirty-seven forty-two (3,742) at

10 forty-six seventy-nine (46.79).

11   And -- and so I think you have to take

12 the -- you have to -- you have to take out the --

13 adjust for the -- the change in the dependable as well.

14 And I'd have to do that calculation, Mr. Williams, in

15 order to come up with a fair comparison of actual

16 versus the thirty-eight eighty-two (38.82).

17   The fifty-five seventy-eight (55.78) are

18 the fixed price firm contracts that are in the

19 dependable line. We also have some -- we have one (1)

20 contract that is at market price in the dependable, and

21 that tends to move the average down from fifty-five

22 seventy-eight (55.78) down to forty-six seventy-nine

23 (46.79).

24   And -- so you -- I think you have to do

25 the weighted average of the -- of -- of that

3675

1 calculation in order to get a fair comparison to

2 thirty-eight eighty-two (38.82). You just can't look

3 at the short-term bilateral and spot markets.

4   MR. RAYMOND LAFOND: I'm sorry, that

5 was firm price versus what?

6   MR. DAVID CORMIE: Under the -- we have

7 one (1) dependable contract where the energy is at

8 market price, the one (1) that does seasonal diversity

9 contracts. So that -- that explains why the dependable

10 price is not as forecasted at fifty-five seventy-eight

11 (55.78), because it's being -- the dependable actual

12 price is being watered down by some market-price sales.

13   And so you have to make that adjustment

14 to come up with a fair comparison. So I can't agree

15 that the -- that twenty-two (22) is the right number,

16 Mr. Williams. I -- I would -- I would think that it's

17 in the twenty (20) range, but I -- I can't -- I can't,

18 at this time, agree without doing the math on that.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21   MR. BYRON WILLIAMS: Okay. And -- and

22 just so I understand, Mr. Cormie, in terms of the

23 short-term bilateral and the smart -- spot -- spot

24 market in its forecast in 10-2, Hydro was estimating

25 sales of sixty (60) -- 6,200 gigawatt hours roughly,

3676

1 and the actual sales within that marketplace were --

2 were -- and the actuals were about 6,500 gigawatt

3 hours, agreed?

4

5   (BRIEF PAUSE)

6

7   MR. DAVID CORMIE: Well, I think it --

8 it's probably another nine hundred (900) more than

9 that, Mr. Williams, because you'll notice that the

10 dependable volume has gone from twenty-eight (28) --

11 twenty-eight fourteen (2,814) to thirty-seven (37).

12   So there's -- there's 900 gigawatt hours

13 that went at market prices under the -- under the

14 capacity that's available under the dependable sale

15 contract. So you have to take the nine hundred (900)

16 and add it to the -- did you say sixty (60) --

17   MR. BYRON WILLIAMS: Sixty-five-o-two

18 (6,502).

19   MR. DAVID CORMIE: Sixty-five hundred

20 (6,500). So, you know, it -- it's that -- it's that

21 total that -- probably in -- in the 7,000 gigawatt hour

22 range that has to be compared -- that -- for which the

23 average price has to be calculated and then compared to

24 the thirty-eight eighty-two (38.82).

25   MR. BYRON WILLIAMS: And, Mr. Cormie,

3677

1 how difficult is that math?

2   MR. DAVID CORMIE: It's not difficult.

3   MR. BYRON WILLIAMS: A lawyer couldn't

4 do it, but an engineer could, sir?

5   MR. DAVID CORMIE: You might need some

6 advice, Mr. Williams. And I'll undertake to provide

7 you that number after lunch.

8   MR. BYRON WILLIAMS: And the

9 undertaking is to provide a comparable number to the

10 spot market forecast presented in 10-2 in terms of the

11 actuals for the 2011/'12 year, agreed?

12   MR. DAVID CORMIE: I agree.

13

14 --- UNDERTAKING NO. 79:   Manitoba Hydro to provide a

15   comparable number to the

16   spot market forecast

17   presented in IFF10-2 in

18   terms of the actuals for

19   the 2011/'12 year

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22   MR. BYRON WILLIAMS: Turning to page 3

23 in CAC Exhibit 12, I have some questions about capital

24 expenditures, and I'm not sure who the -- who that --

25 they are directed to. Mr. Warden is looking at me.

3678

1   MR. VINCE WARDEN: I'll attempt to

2 answer your questions, Mr. Williams, and Mr. Rainkie

3 can certainly assist.

4   MR. BYRON WILLIAMS: You can call me

5 Mr. Peters if it makes things easier, Mr. Warden.

6   Just, Mr. Warden, before we get into the

7 actual numbers, if -- if I were to -- to look at the --

8 the for -- the progress of project costs in -- in

9 dollars for -- for any of these items, would I be

10 correct in suggesting to you that the -- the CEF or the

11 IFF showed dollars as spent including in -- inflation,

12 which means that if a project is moved forward in time,

13 the costs will tend to increase to reflect the fact

14 that the dollars are being spent in later years, and

15 inflation will increase them?

16   MR. VINCE WARDEN: Yes, Mr. Peters,

17 that is a correct -- I did it again. It's a good thing

18 this is my last appearance. Mr. Peters obviously made

19 an impression on me. Sorry, Mr. Williams.

20   But your -- your assumption is correct

21 with respect to deferring the in-service date will

22 result in higher cost due -- due to escalation in -- in

23 the price, as well as another year of capitalized

24 interest on expenditures incurred.

25   MR. BYRON WILLIAMS: And would I also

3679

1 be correct, sir, in suggesting that even if the in-

2 service date does not change, but if the inflation used

3 in the CE -- CEF changes from -- from a previous

4 estimate, then the quoted cost would change as well?

5   MR. VINCE WARDEN: Yes, not only the

6 inflation, but any component cost of that estimate. So

7 if we had an increase in -- in labour costs, for

8 example, that would also be reflected in any updated

9 estimate that was prepared. So all the components

10 would be subject to review when the CEF is -- is

11 updated.

12   MR. BYRON WILLIAMS: So, Mr. Warden,

13 just before we get through this -- this information, I

14 did want to get -- get -- and I'm interested in changes

15 between IFF -- or CEF09 and CEF12. Mr. Warden, I don't

16 know if you need anything to refresh your memory, in

17 terms of when deferral -- when -- when the dates of --

18 of -- where -- where in-service dates were deferred. I

19 don't have it in the materials, but I know one (1) --

20 one (1) source for that is CAC-1-51.

21   But, Mr. Warden, am I correct in

22 suggesting to you that if I were to -- to compare

23 CEF09 versus CEF12, the in-service date for Conawapa

24 would be -- would be about two (2) years later?

25   MR. VINCE WARDEN: Yes, I agree with

3680

1 that.

2   MR. BYRON WILLIAMS: And would I be

3 correct in suggesting to you that the in-service date

4 for Keeyask had about an eleven (11) month deferral,

5 sir?

6   MR. VINCE WARDEN: Yes, I'm informed

7 that's correct.

8   MR. BYRON WILLIAMS: I'm doing pretty

9 well, Mr. Warden. Would -- am I correct in suggesting

10 that there was no deferral of the in-service date for

11 Bipole 3?

12   MR. VINCE WARDEN: Between CEF09 and

13 CEF12, no, there was no deferral of Bipole 3.

14   MR. BYRON WILLIAMS: And in terms of

15 Wuskwatim, am I correct in suggesting that there would

16 have been an in-service deferral of the first unit by

17 about six (6) months?

18   MR. VINCE WARDEN: Yes.

19

20   (BRIEF PAUSE)

21

22   MR. BYRON WILLIAMS: And, Mr. Warden, I

23 know it's a stretch to go back to 2008 or 2009 in your

24 memory, but would I be correct in suggesting to you

25 that there was a slowdown in the North American

3681

1 marketplace in -- in 2008/2009?

2   MR. VINCE WARDEN: Very definitely,

3 yes.

4   MR. BYRON WILLIAMS: And it would be

5 fair to say that recovery in North America has not be

6 robust, agreed?

7   MR. VINCE WARDEN: Agreed.

8   MR. BYRON WILLIAMS: Now, Mr. Warden,

9 if I look to -- let's start at the bottom, with

10 Keeyask, recognizing that there had been an eleven (11)

11 month deferral, we can agree that the -- the

12 expectation in terms of the capital costs associated

13 with -- with Keeyask built into CEF09 was around $4.6

14 billion?

15   MR. VINCE WARDEN: Yes.

16   MR. BYRON WILLIAMS: And in CEF12, it

17 is Manitoba Hydro's expectation that it will be about

18 6.2 billion, agreed?

19   MR. VINCE WARDEN: That is the capital

20 expenditure forecast in CEF12, yes, 6.2 billion.

21   MR. BYRON WILLIAMS: About 35 percent

22 higher, sir?

23   MR. VINCE WARDEN: Yes.

24   MR. BYRON WILLIAMS: And when we look -

25 - go up one (1) line to Conawapa, recognizing that

3682

1 there has been a two (2) year deferral in the in-

2 service date, can we agree that in CEF09 the

3 expectation that Manitoba Hydro presented was 6.3

4 billion, sir?

5   MR. VINCE WARDEN: Yes.

6   MR. BYRON WILLIAMS: And when we look

7 to CEF12, we see a -- a figure that is about $3.9

8 billion higher at $10.2 billion, correct?

9   MR. VINCE WARDEN: I see that, yes.

10   MR. BYRON WILLIAMS: About 60 percent

11 higher, sir?

12

13   (BRIEF PAUSE)

14

15   MR. BYRON WILLIAMS: Sixty-one (61)?

16   MR. VINCE WARDEN: Yes, I'll go along

17 with that.

18   MR. BYRON WILLIAMS: See, lawyers can't

19 perform complicated calculations, sir, but the simpler

20 ones we're okay with.

21   MR. VINCE WARDEN: We didn't need a --

22 we didn't need an engineer for that.

23   MR. RAYMOND LAFOND: Just an adding

24 machine.

25   MR. BYRON WILLIAMS: Mr. Lafond, I did

3683

1 it in my head. No, I'm teasing.

2   MR. RAYMOND LAFOND: Congratulations.

3

4 CONTINUED BY MR. BYRON WILLIAMS:

5   MR. BYRON WILLIAMS: In -- and if we

6 focus on CEF09 for Bipole 3, Mr. Warden, the

7 Corporation's estimate for that was about 2.2 -- $2.3

8 billion, sir?

9   MR. VINCE WARDEN: Yes.

10   MR. BYRON WILLIAMS: And by CEF12, it

11 was about a billion dollars higher at 3.3 billion?

12   MR. VINCE WARDEN: Correct.

13   MR. BYRON WILLIAMS: About 45 percent,

14 sir, subject to check?

15   MR. VINCE WARDEN: Yes.

16   MR. BYRON WILLIAMS: And focussing on

17 the Wuskwatim generating station line, leaving aside

18 transmission, and recognizing a -- a modest deferral of

19 in-service time, we can agree that in CEF09 the -- the

20 expectation of the capital expenditure associated with

21 the generating station was about 1.275 billion, sir?

22   MR. VINCE WARDEN: Yes.

23   MR. BYRON WILLIAMS: And in CEF12, it

24 is about 1.4 billion, or some 174 million, higher,

25 agreed?

3684

 1   MR. VINCE WARDEN: Yes.

 2   MR. BYRON WILLIAMS: About a 13.6

 3 percent increase, sir?

 4   MR. VINCE WARDEN: Yes.

 5   MR. BYRON WILLIAMS: And if we looked

 6 for the Wuskwatim total project, taking in transmission

 7 as well, you would agree with me, subject to check,

 8 that again, there's been a total project increase of

 9 roughly 13 percent between --

10   MR. VINCE WARDEN: Yes, I agree with

11 that.

12   MR. BYRON WILLIAMS: -- between CEF09

13 and CEF12, sir?

14   MR. VINCE WARDEN: Agreed.

15   MR. BYRON WILLIAMS: Now, in -- in

16 terms of projects that went down in cost, and

17 recognizing that these -- this is not a full list of --

18 of capital projects, I guess the one (1) that we can

19 find on this page would be the Herblet Lake

20 transmission, sir, which I'll suggest to you went down

21 between CEF09 and CEF12?

22   MR. VINCE WARDEN: Yes, Mr. Williams.

23 I see that. I'm not -- I can't really answer, though,

24 whether that was due to a change in -- in concept, a

25 change in design, that may have contributed to that

1 decrease.

2   MR. BYRON WILLIAMS: Sir, if -- if I

3 suggested to you, based upon the Corporation's response

4 to CAC-1-51D, that the decrease was -- was -- could be

5 attributed to favourable contract bids for clearing the

6 right-of-way and construction of transmission line.

7   Would you accept that, subject to check?

8   MR. VINCE WARDEN: Yes, I'll accept

9 that.

10

11   (BRIEF PAUSE)

12

13   MR. DAVID CORMIE: Mr. Williams, while

14 you're having a bit of a break there, I've done the

15 complex calculation you requested on page 2 of your

16 exhibit, and my initial estimate of twenty-two dollars

17 ($22) a megawatt hour is confirmed. If -- if you

18 assume that the forecast dependable gigawatt hours and

19 rate stayed constant, and the additional energy sold

20 under the dependable actual was at market price, the

21 calculation works out to twenty-one dollars and ninety

22 cents ($21.90) and you can -- that's comparable to the

23 thirty-eight eighty-two (38.82).

24   MR. BYRON WILLIAMS: Mr. Cormie, I

25 thank you for your prompt response. And just, if we

1 can flip back to page 2 for a second then.

2   Mr. Cormie, you've had some discussion

3 with My Friend Mr. Peters, so I don't want to dwell on

4 it in burdensome detail, but if we look at a -- a

5 variance between the IFF10-2 forecast in the range of

6 thirty-eight (38), thirty-nine dollars ($39) and the --

7 the actuals for '11/'12 of -- of twenty-two doll --

8 dollars ($22) per -- per megawatt in the -- in the spot

9 market, to what do you attribute that significant

10 difference?

11   MR. DAVID CORMIE: You know, the

12 forecast IFF10-2 was prepared assuming 6,200 gigawatt

13 hours of opportunity sales. And that was before we

14 knew that the flood of the -- the 2011 flood was taking

15 event -- was going to occur, and actual sales were in

16 the 7,400 gigawatt hour range. So a significant

17 additional volume because of the flood of 2011.

18   And as Mr. Miles indicated earlier, all

19 the incremental energy would go out at off-peak prices

20 and that would dr -- tend to drive down the average.

21 So, there are -- are price effects because of the --

22 the market was softer, but also -- also the volume

23 effect.

24   And, so, if the average is twenty-one

25 (21), you know, that -- the off-peak energy would have

3687

1 gone -- you know, probably in the range of ten (10) --

2 you know, ten dollars ($10) a megawatt hour. So, that

3 -- that really drives the average price down because of

4 the significant increase in volume. But, clearly, the

5 market was weaker as well.

6   MR. BYRON WILLIAMS: And -- and in

7 terms of the relative weight that we would attribute to

8 the volume effect versus the softening of the market

9 effect, Mr. Cormie, would I be accurate in suggesting

10 to you that the -- the stronger driver was the -- the

11 softening of the market? As compared to expectation.

12   MR. DAVID CORMIE: Yes, I -- I would

13 agree with that.

14   MR. BYRON WILLIAMS: Mr. Warden, back

15 to you and back to page 3 and the review of -- of

16 project costs.

17   Mr. Warden, in terms of the Conawapa,

18 Keeyask, and Wuskwatim, we've agreed that there has

19 between -- we've agreed that between CEF09 and CEF12,

20 there has been some effect from the deferral of the in-

21 service date?

22   MR. VINCE WARDEN: Yes, Mr. Williams.

23 And just to correct the record on that point, we've

24 doubled checked the -- the deferrals -- dates -- dates

25 of projected in-service for Conawapa, it was actually a

3688

1 three (3) year deferral between CEF09 and CEF12. So,

2 originally it -- or not originally, but in CEF09, the

3 in-service date for Conawapa was projected to be 2022,

4 whereas in CEF12 it's 2025.

5   Similarly with Wuskwatim, we talked

6 about a -- an approximate six (6) month deferral. To

7 be totally accurate, it was actually a nine (9) month

8 deferral, from September of 2011 in CEF09 to June of

9 2012 for the first unit in CEF12.

10   MR. BYRON WILLIAMS: Thank you for

11 that. And so, sir, in terms of the -- the changes from

12 CEF09 to CEF12, would it be possible to segreg --

13 segregate out the impact of the deferral of in-service

14 date versus other impacts?

15   MR. VINCE WARDEN: Yes, absolutely. We

16 can do that. We'll do that as -- as an undertaking.

17   MR. BYRON WILLIAMS: And -- and so with

18 regard to the Conawapa Generating Station, the Keeyask

19 Generating Station, and the Wuskwatim total project?

20   MR. VINCE WARDEN: Yes. Now, with

21 respect to Wuskwatim, we do have an outstanding

22 undertaking explaining the progression of cost

23 increases, or estimated increases, as depicted on -- on

24 page 3 here. So that's -- that undertaking will be

25 submitted shortly.

3689

1 --- UNDERTAKING NO. 80:   Manitoba Hydro to segregate

2   out the impact of the

3   deferral of in-service date

4   versus other impacts for

5   Conawapa, Keeyask, and

6   Wuskwatim

7

8   MR. VINCE WARDEN: And subject to

9 confirmation, I believe we also have one on Keeyask and

10 Conawapa, but we -- I'm not sure we -- it was the --

11 the undertaking was taken quite in the same way, but we

12 will segregate the amount that was due to the in-

13 service deferral versus other components.

14

15 CONTINUED BY MR. BYRON WILLIAMS:

16   MR. BYRON WILLIAMS: Okay. And that

17 will be -- what I'm hearing from you, Mr. Warden, is

18 that rather than provide two (2) undertakings, you'll -

19 - you're -- you're going to amend the other one?

20   MR. VINCE WARDEN: Yes. Well, we'll --

21 we'll compare the -- exactly what we undertook to

22 provide, and we'll make sure that your questions are --

23 are included, are answered in that undertaking.

24

25   (BRIEF PAUSE)

3690

 1   MR. BYRON WILLIAMS: Mr. Rainkie, I've

 2 missed you. I'd like to direct your attention to CAC

 3 Exhibit 12, page 4.

 4   And you'll agree with me, subject to

 5 check, that this is the Corporation's response to

 6 CAC/Manitoba Hydro Pre-ask 3, found in Manitoba Hydro

 7 Exhibit 22, sir?

 8   MR. DARREN RAINKIE: Yes, I recognize

 9 it.

10   MR. BYRON WILLIAMS: And what -- what

11 we're doing on -- on page 4, sir, as -- is looking at -

12 - is starting with the assumption that the consumer in

13 question is utilizing 2,000 kilowatt hours per month,

14 and comparing what their total bill would be on -- in

15 April 1st, 2009, versus their total bill April 1st,

16 2013, assuming Manitoba Hydro's rate application is

17 accepted, sir, correct?

18   MR. DARREN RAINKIE: Yes, that's my --

19 I'm not a specialist on the cost of service rate design

20 world, but that's my understanding of what this -- what

21 this Information Request is.

22   MR. BYRON WILLIAMS: And just on the

23 extreme right-hand of this table, we have an inflation

24 index. And you'll agree with me that whereas the pre-

25 ask calculated inflation at 107 percent over that four

3691

1 (4) year period, Manitoba Hydro calculates it at 108

2 percent, correct?

3   MR. DARREN RAINKIE: That's right. You

4 can see that in the response underneath the request.

5   MR. BYRON WILLIAMS: And, sir, if -- if

6 we looked at the total bill for this consumer as of

7 April 1st, 2009, assuming 2,000 kilowatt hours, and in

8 terms of monthly residential consumption, that bill at

9 that snapshot of time would have been one hundred and

10 thirty-two dollars and forty cents ($132.40)?

11   MR. DARREN RAINKIE: Yeah, that's what

12 this is indicating, Mr. Williams.

13   MR. BYRON WILLIAMS: And as we go down

14 to the April 1st, 2013, we see the total bill would

15 have been -- would -- assuming Hydro's rate increase is

16 granted, would be out one hundred and fifty dollars and

17 eighty-nine cents ($150.89) per month, agreed?

18   MR. DARREN RAINKIE: That's also how I

19 read this, Mr. Williams.

20   MR. BYRON WILLIAMS: And you'll agree,

21 subject to check, that this consumer, all other things

22 being equal, would have seen their -- their monthly

23 residential bill rise by about eighteen dollars and --

24 and fifty cents ($18.50) a month, agreed? And that's

25 over the four (4) year period from April 1st, '09, to

3692

1 April 1st, 2013?

2   MR. DARREN RAINKIE: Yes, I think your

3 calcula -- calculations are correct, Mr. Williams.

4   MR. BYRON WILLIAMS: And on an annual

5 basis, sir, if we took that eighteen forty-nine (18.49)

6 or eighteen fifty (18.50) and times it by twelve (12),

7 for this consumer it would be a total annual increase

8 in the range of two hundred and twenty-one (221), or

9 two hundred and twenty-two dollars ($222), subject to

10 check?

11   MR. DARREN RAINKIE: I'll go with your

12 math for now and -- subject to check, and we'll

13 continue on.

14   MR. BYRON WILLIAMS: And the -- the

15 cumulative increase from the April 1st, '09, through

16 April 1st, '13, would be about 14 percent, as -- as

17 compared to inflation of 8 percent, sir, agreed?

18   MR. DARREN RAINKIE: For the snapshot

19 of time, of course. We've had this discussion, I

20 think, last -- last hearing, Mr. Williams. So maybe

21 I'll get it off my chest right now and we can continue

22 on, is that if you were to do this type of calculation

23 going back to 1990 over the very long run, I think our

24 rates are probably still lower than CPI over that time

25 frame.

3693

1   So the -- it's not so much we -- we've

2   confirmed that we agree with the cal -- your arith --

3   arithmetic calculations on this sheet, but we've

4   debated before whether you do this for two (2) or three

5   (3) years or whether you do this over time. And, of

6   course, we have a very long-run perspective at Manitoba

7   Hydro. And if we were to do this calculation back

8   twenty (20) years, it would be a much more favourable

9   comparison than what you have here.

10   But -- so I think I just wanted to, you

11   know, make sure that's clear on the record, this is a

12   snapshot in time. We -- we have a very long-run

13   business. And as Mr. Warden eloquently talked about

14   yesterday, we are very patient in -- in moving towards

15   our financial targets. We do planning over a very long

16   time horizon, and I think we look at rate changes over

17   a very long time horizon as well.

18   MR. BYRON WILLIAMS: I thank you for

19   that, Mr. Rainkie. And we could also agree that I

20   could have probably made it look worse if I would have

21   went back to 2004/'05, agreed? I would have caught a

22   couple of 5 percent rate increases in there, sir?

23   MR. DARREN RAINKIE: Yes, and I suppose

24   that's my point. If we went back even further, because

25   we had a period of time, I think it was seven (7)

1 years, where we didn't have a residential rate

2 increase. And I forget what the industrial time frame

3 was. It might have been as -- longer than that. You

4 would -- if you went back over an even longer period of

5 time, you would see that our -- our rates are probably,

6 over twenty (20) years, just at inflation, so.

7   MR. BYRON WILLIAMS: So -- so, Mr.

8 Rainkie, if we can turn to page 6. I want to -- I want

9 to end this disagreement between you and I, in terms of

10 length of time, and quit looking at the past and look

11 to the future, sir.

12   And -- and, indeed, sir, to --

13 recognizing that built into the IFF is -- is not -- let

14 me back up. Recognizing that you're only seeking rate

15 increases for the 2012/'13 and '13/'14 year, but that

16 within the IFF there are indicated rate increases of

17 3.95 percent beyond 2013/'14.

18   We can agree with that, in terms of

19 what's in the IFF, sir?

20   MR. DARREN RAINKIE: Yes, they're

21 indicative. They're not requests at this point. And

22 circumstances may change, as we've noted on the top of

23 page 7, I think, of -- of your document.

24   MR. BYRON WILLIAMS: And circumstances

25 indeed, sir, can change. Capital costs can rise, and

3695

 1 export revenues can drop and -- and things could get

 2 worse.

 3   MR. DARREN RAINKIE: Things could get

 4 worse, things could get better. I'm always hopeful.

 5 I'm not a pessimistic person by nature. So, you know

 6 it's just that -- I understand what you're trying to do

 7 in this calculation. And we put the caveats on page 7,

 8 so I think that the Board understands that.

 9   MR. BYRON WILLIAMS: And I thank you

10 for that, Mr. Rainkie. Let's just look at -- let's

11 just neither be a pep -- pessimist or an optimist, but

12 look at the best estimate Manitoba Hydro currently has.

13   And if we again look at -- towards the

14 bottom of page 6, in small printing, we -- we'll see

15 that again we're looking at that outlook for Mani --

16 for a Hyd -- a residential monthly bill for a consumer

17 averaging 2,000 kilowatt hours per month for the time

18 period between 2013/'14 and 2020/'21?

19   MR. DARREN RAINKIE: Yes, I agree with

20 that.

21   MR. BYRON WILLIAMS: And we can agree,

22 subject to check, that over that time period, Hydro's

23 best estimate of inflation is about 14 percent?

24   MR. DARREN RAINKIE: Yes. I think, in

25 confirming this Information Request, we agree to that.

3696

1   MR. BYRON WILLIAMS: And we see the --

2 recognize again that this is based upon an indicated

3 rate, we see the monthly bill rising from one fifty

4 eighty-nine (150.89) to close to two hundred dollars

5 ($200) a month, agreed, sir?

6   MR. DARREN RAINKIE: Yes, around one

7 ninety-nine (199) per month.

8   MR. BYRON WILLIAMS: And an

9 accumulative increase of about 32 percent?

10   MR. DARREN RAINKIE: Yes,

11 mathematically, that follows, Mr. Williams.

12   MR. BYRON WILLIAMS: And just

13 mathematically, Mr. Rainkie, if I was to take that

14 difference in the monthly bill, would you agree,

15 subject to check, it's about forty-seven dollars and

16 ninety-six cents ($47.96)?

17   MR. DARREN RAINKIE: Your calculator

18 has been working overtime, but I think that's correct,

19 Mr. Williams.

20   MR. BYRON WILLIAMS: And again, subject

21 to -- to check, sir, if I looked over the course of a

22 year, that would be an increase in the range of five

23 hundred and seventy-five ($575) for that consumer,

24 assuming all other things being equal?

25   MR. DARREN RAINKIE: Yes, I think that

 1 math works as well, Mr. Williams.

 2   MR. BYRON WILLIAMS: Mr. Rainkie, we

 3 don't need to do the same math for the consumer using

 4 800 kilowatt hours a month, but can we agree that the

 5 cumulative increase for that consumer would be about 30

 6 percent between 2013/'14 and 2020/'21?

 7   MR. DARREN RAINKIE: Yes, that's what

 8 the upper part of this -- sorry, not undertaking --

 9 pre-ask is telling us.

10   MR. BOB PETERS: And, Mr. Rainkie, if

11 you're uncomfortable answering this question because

12 it's more Ms. Morrison's field, it's not a -- it's not

13 a problem for me.

14   But would I be correct in suggesting

15 that, in terms of Hydro's load forecast for residential

16 customers, notwithstanding cumulative increases

17 significantly above inflation, that Hydro's load

18 forecasts do not forecast or predict a dampening effect

19 upon individual consumption from these price increases?

20   And if you can't answer it, Mr. Rainkie,

21 that's...

22   MR. VINCE WARDEN: Well, Mr. Williams,

23 I think what we see in the load forecast is an average

24 annual increase in the range of 1.6 percent per year,

25 which is very similar to the -- the load growth over

3698

1 the past ten (10) years.

2   So I would agree that we -- we don't see

3 a dampening effect associated with the price increases

4 that are forecast in the -- in the IFF. Again, though,

5 reiterating the comment that this is a -- a forecast

6 only and indicative rate -- rate increases and subject

7 to -- to change in the future, of course.

8   MR. BYRON WILLIAMS: Mr. Warden, I -- I

9 thank you for that. And Mr. Rainkie and I had a

10 discussion about being a pessimist or an optimist.

11   Mr. Warden, you'll recall in the -- the

12 previous general rate application, based upon IFF09,

13 Manitoba Hydro presented a -- an outlook speaking of a

14 -- a decade of investment and then a decade of returns?

15   MR. VINCE WARDEN: Yes.

16   MR. BYRON WILLIAMS: And those -- that

17 decade of returns was anticipated to -- to take place

18 in the twenty (20) -- in the -- the 2020 decade, sir?

19   MR. VINCE WARDEN: Yes. Although, as

20 we agreed earlier or discussed earlier, there has been

21 a -- a three (3) year shift in -- in the in-service

22 date of -- of Conawapa, and that in itself shifts the

23 time frame under which our -- our returns will be

24 received.

25   So Conawapa doesn't come in until

3699

1 2025/'26, which is towards the end of the twenty (20)

2 year financial forecast. So the -- the return has been

3 shifted beyond that twenty (20) years somewhat, but the

4 principle is still the same. We still have this period

5 of investment followed by a period of returns. That

6 principle is still -- still valid.

7   It may not fit neatly into the decades

8 that we have previously in our IFF09, but the principle

9 is sound -- still sound.

10   MR. BYRON WILLIAMS: And the -- the

11 indicated rate increase in IFF12 goes all the way out

12 to 2031, indeed, does it, sir?

13   MR. VINCE WARDEN: Yes, 2031/'32 is the

14 last year of the twenty (20) year financial outlook.

15 But as I indicated, the -- the major investment, or one

16 (1) of the major investments, over that period of time

17 is Conawapa, which doesn't come in until towards the

18 end -- the first unit doesn't come in towards the end

19 of the twenty (20) year period.

20   MR. BYRON WILLIAMS: So the ratepayer

21 today can look forward to two (2) decades of

22 investment, based upon Hydro's best estimate, as

23 compared to one (1) in IFF09?

24   MR. VINCE WARDEN: Well, the -- there's

25 been a shift, as I indicated. So whereas in IFF09, as

1 I indicated, it was more neatly fit into the decade of

2 investment, decade of returns. The -- the decade -- or

3 the period of investment is going to stretch longer now

4 because of the deferral of -- of Conawapa.

5   MR. BYRON WILLIAMS: Out to at least

6 2031, sir?

7   MR. VINCE WARDEN: Well, no -- no.

8 Once we put Conawapa in service -- so the fir -- well,

9 the first unit of Conawapa comes in '25/'26 now, and

10 the -- and the next units will be shortly thereafter.

11 But not right to the end of '31/'32.

12   MR. BYRON WILLIAMS: Sir, I -- I

13 misspoke. I was speaking of the indicated 3.95 percent

14 rate increases.

15   MR. VINCE WARDEN: Yes, the twenty (20)

16 year financial outlook does have 3.95 percent increases

17 for eighteen (18) of the those twenty (20) years.

18 Again, indicative only though.

19   MR. BYRON WILLIAMS: Mr. Schulz, I have

20 a few questions -- they're not hard ones -- in terms of

21 the -- the bond rating information. So if you could

22 turn to page 8 of CAC Exhibit 12.

23   MR. MANFRED SCHULZ: I have that. And

24 I'm pleased to be here, Mr. Williams.

25   MR. BYRON WILLIAMS: It's always a

3701

 1 pleasure to talk with you, Mr. Schulz, as -- as the

 2 other witnesses.

 3   Mr. Schulz, just I -- you'll agree, if

 4 you can take a -- a quick flip through to -- up to page

 5 14, that I provided to you with excerpts from Appendix

 6 34 of -- of this proceeding relating to presentations

 7 made by Manitoba Hydro, the most recent presentations

 8 made by Manitoba Hydro, to Moody's, Standard & Poor's,

 9 and DBRS, agreed?

10   MR. MANFRED SCHULZ: I agree.

11   MR. BYRON WILLIAMS: And, again, it's -

12 - it's just a few small questions, Mr. Schulz. But --

13 and the Moody's report presentation, we can agree, was

14 made in May of 2012, correct?

15   MR. MANFRED SCHULZ: Agreed.

16   MR. BYRON WILLIAMS: And the Standard &

17 Poor's presentation was made in May of 2012 as well,

18 correct?

19   MR. MANFRED SCHULZ: Agreed.

20   MR. BYRON WILLIAMS: And the DBRS

21 presentation was made in August of 2012, agreed?

22   MR. MANFRED SCHULZ: Yes.

23   MR. BYRON WILLIAMS: And, Mr. Schulz,

24 directing your attention to page 9 of CAC Exhibit 12,

25 you'll see a heading, "Power Sale Agreement," sir?

3702

1   MR. MANFRED SCHULZ: Yes.

2   MR. BYRON WILLIAMS: And, subject to

3 check, you'll agree that this is an excerpt from the

4 presentation made to Moody's Investor Service in May of

5 2012?

6   MR. MANFRED SCHULZ: Agreed.

7   MR. BYRON WILLIAMS: And, sir, the --

8 the -- the element that caught my client's eye was the

9 third white square, in terms of a sug -- the suggestion

10 that there was a 500 megawatt sale to Wisconsin Public

11 Service, starting in 2018 and running for fifteen (15)

12 years.

13   Do you see that reference, sir?

14   MR. MANFRED SCHULZ: I do.

15   MR. BYRON WILLIAMS: And just in -- in

16 terms of this, Mr. Schulz, if -- if I were to kind of

17 add the range of -- in terms of megawatts, between the

18 three (3) sales as presented here, I would see between

19 1,125 megawatts and 1,250 megawatts?

20   MR. MANFRED SCHULZ: I would agree.

21

22   (BRIEF PAUSE)

23

24   MR. BYRON WILLIAMS: Now, Mr. Schulz

25 and Mr. Cormie, I'm sure your memory of the sales is

3703

1 more accurate than mine, but am I correct in suggesting

2 to you that the -- the sale as presented to Wisconsin

3 Public Service overstates the actual sale by about 400

4 megawatts?

5   MR. DAVID CORMIE: Not rea -- really,

6 Mr. Williams. I participated in these calls and, you

7 know, the bullet creates the opportunity to talk about

8 progress on the term sheet, which is a 500 megawatt

9 term sheet. The term sheet is actually up to 500

10 megawatts, so under that term sheet any capacity can be

11 sold.

12   The term sheet anticipates deliveries as

13 early as 2018, but not necessarily. So, you know, I --

14 I would agree when you look at that slide saying that

15 we have contracts, that -- that could be misleading.

16 It -- that -- that just creates the -- the opportunity

17 for -- for me to present to the rating agency the

18 status of our negotiations with Moody's and -- and I

19 would have indicated to them that we're -- that we are

20 negotiating under a term sheet. And as you'll notice

21 on -- on the next several presentations, that the other

22 rating agencies, we talk about the -- the hundred

23 megawatts that we've already contracted for and that

24 we're still working on the balance.

25   And so, you know, I think in -- you're -

3704

1 - you're correct, when you compare these slides to one

2 another and you take the net face value there could be

3 that confusion. But -- but we do spend a lot of time

4 making sure that -- that these companies understand the

5 details, and it's not just, There's the bullet and

6 let's move onto the next one (1). I -- I -- you know,

7 my part on the -- on the call might go on for half an

8 hour as we go through these one (1) by one (1).

9   MR. BYRON WILLIAMS: I find it hard to

10 believe you'd ever talk for half an hour, Mr. Cormie.

11   But -- but in terms of the actual sale,

12 just so I understand, we're talking, starting in

13 2020/'21 right now, and a volume of a -- a 100

14 megawatts, sir?

15   MR. DAVID CORMIE: The -- there is an

16 existing sale that we've con -- that we actually have

17 signed. It's the hundred megawatts that uses existing

18 transmission service that goes from '21, and power

19 deliveries end in '27.

20   We are continuing to negotiate for the -

21 - the next tranche of -- of power. That will start in

22 2020 with the in-service date of the -- of the new

23 transmission line and potentially go to 2040, and that

24 would be another 200 megawatts on top of the existing

25 hundred.

3705

1   The -- the reason we haven't finalized

2 that power sale agreement because it is conditional on

3 building new transmission, and -- and the work that

4 we're doing now is to finalize the cost of that new

5 transmission. And our expectation is that -- that once

6 we've got the transmission costs worked out in those

7 arrangements, that there will be another two hundred

8 (200).

9   So in -- in total there'll be 300

10 megawatts of contracted power under the 500 megawatt

11 term sheet, starting in 2020 and going to 2040.

12   MR. BYRON WILLIAMS: Okay. And -- I

13 think -- and certainly you had a bit of a discussion on

14 that with My Friend Mr. Peters. If I just flip over to

15 page 12 of CAC Exhibit 9, again, I -- I see the -- Mr.

16 Schulz, this was the excerpt from the presentation to

17 Standard & Poor's, agreed?

18   MR. MANFRED SCHULZ: Agreed.

19   MR. BOB PETERS: And so here we -- we

20 have the same reference to the 500 megawatt sale to

21 Wisconsin Public Service, but suggesting it's starting

22 in 2021 as compared to 2018?

23   MR. DAVID CORMIE: That's what it

24 indicates, yes.

25   MR. BYRON WILLIAMS: And then if we

3706

 1 flip over just a couple pages, we'll see the excerpt

 2 from the presentation to DBRS. And here, you'll agree,

 3 we see the -- the presen -- the sale to Wisconsin

 4 Public Service presented as a 100 megawatt sale,

 5 although part of a 500 megawatt term sheet sale,

 6 starting in '20/'21, agreed?

 7   MR. DAVID CORMIE: Yes.

 8   MR. BYRON WILLIAMS: Mr. Cormie, or --

 9 or Mr. Schulz, in terms of the difference in

10 presentation, was it just -- what, if any, rationale

11 underlies -- underlies it?

12   MR. DAVID CORMIE: You know, I -- I

13 believe, Mr. Williams, that -- that these are the

14 presentations that are made to the rating and -- and

15 they're not necessarily the same presentation. This is

16 -- this is the DBRS presentation. This is the Moody's

17 presentation.

18   And so we're not taking -- taking the

19 slides from the Moody's presentation and then revising

20 them to, you know, for the -- for the DBRS

21 presentation. This is the presentation that we

22 probably gave them last year, and we're just -- we're

23 just updating it. And -- and so this is probably just

24 a reflection of -- of how it was presented over time,

25 not a revision from the beginning of May to the end of

1 May to the -- to August. So I suspect that's the --

2 that's the --

3   MR. BYRON WILLIAMS: Yeah, and -- and

4 so, sir, that's one (1) of my questions, is: If we

5 look at the progression, you're suggesting to me it's

6 not a reflection in terms of the changes of

7 expectations of Manitoba Hydro?

8   MR. DAVID CORMIE: That's correct,

9 yeah.

10   MR. BYRON WILLIAMS: Mr. Cormie, based

11 -- and -- and again, I don't want to travel upon the

12 ground you travelled with My Friend Mr. Peters -- would

13 the most accurate representation be there's a contract

14 for a hundred and an expectation -- a hundred megawatts

15 and an expectation for an additional 200 megawatts?

16   MR. DAVID CORMIE: Yes.

17

18   (BRIEF PAUSE)

19

20   MR. BYRON WILLIAMS: Mr. Schulz, I'm --

21 I'm going to jump around in these, and -- and I just

22 want to direct your attention to page 22 of CAC Exhibit

23 12. And -- and you'll agree with me, subject to check,

24 that this is an excerpt from a present -- a report of

25 Moody's Investor Service, dated August 15th, 2012?

3708

 1   You can look at the left-hand side, sir,

 2 if you're looking for that certitude.

 3   MR. MANFRED SCHULZ: I agree.

 4   MR. BYRON WILLIAMS: Now, Mr. Schulz,

 5 on page 22 under the heading "Regulated Utility With

 6 Predominantly Low-cost Hydroelectric Generation," and

 7 this question can go to Mr. Cormie as well, in the

 8 third paragraph -- so, referring you to the paragraph

 9 that starts "Approximately 25 percent," and then you'll

10 see the third line, there's a sentence saying that:

11   "The new generation will be partially

12   underpinned by long term export

13   contracts with several US utilities.

14   MHEB has recently entered into ten

15   (10) to fifteen (15) year agreements,

16   aggregating 1,125 to 1,250 megawatts

17   with Northern State Power, Minnesota

18   Power, and Wisconsin Public Service."

19   Do you see that reference?

20   MR. DAVID CORMIE: Yes, I do.

21   MR. BYRON WILLIAMS: And, Mr. Cormie,

22 would I be correct in suggesting to you that -- that

23 even if we included the 200 megawatts from Wis --

24 potential from Wisconsin Public Service, that that

25 would somewhat overstate the -- the magnitude of the

 1 agreements?

 2   MR. VINCE WARDEN: Yes.

 3   MR. BYRON WILLIAMS: And, Mr. Schulz,

 4 just in terms of protocol, when one observes that, does

 5 one phone up Moody's and say it's a bit high?

 6   MR. MANFRED SCHULZ: In terms of

 7 protocols, when we receive these reports we review them

 8 for reasonableness, and then we provide commentary back

 9 to them. So that's the -- the normal protocol that we

10 follow in that circumstance.

11   Mr. VINCE WARDEN: Yeah, I think, Mr.

12 Williams, what they've done here is they've taken the -

13 - they've -- they've added together transactions that

14 don't necessarily overlap. So the -- the 500 megawatt

15 sale extension to NSP, you add to that the 350 megawatt

16 diversity, you get eight fifty (850). You add two

17 fifty (250) to the MP sale, that takes it up to eleven

18 hundred (1,100) hundred megawatts; to WPS, you get

19 twelve hundred (1,200), you know.

20   So they've -- they've -- you know,

21 they've -- the question is: Aggregate -- what -- what

22 are they aggregating? They're aggregating sales that

23 have -- that have occurred over different a time

24 period. So, you know, it's not -- it's -- it's not in

25 -- inaccurate, but -- in the way that we would like to

1 say it, but there are, you know, sales contracts. And

2 if you were to add in the full 500 megawatt sale to

3 WPS, you would even get higher than that.

4   So it's -- you know, it's not written in

5 the best way, but it is -- there are -- there are

6 contracts of that magnitude when you include the 850

7 megawatts that we signed from NSP, and the two-fifty

8 (250) to Minnesota Power, the one hundred (100) to WPS.

9 And -- and there's more contracts in the works.

10   MR. BYRON WILLIAMS: And I don't --

11 certainly don't wish to belabour it, but if we just

12 flip back to page 9 for a moment, Mr. Cormie, we --

13 that should be the power sales agreement with the 500

14 megawatts. We could just as easily achieve that eleven

15 twenty-five (1,125) to twelve fifty (1,250) by adding

16 this together, agreed?

17   MR. DAVID CORMIE: Well, what's not

18 shown on -- on those -- on that -- on that presentation

19 of ours is the 350 megawatt diversity agreement with

20 NSP, and --

21   MR. BYRON WILLIAMS: The renewal, sir?

22   MR. DAVID CORMIE: Yes.

23   MR. BYRON WILLIAMS: Mr. Schulz, at

24 page 15 of CAC Exhibit 12, you'll see an excerpt from

25 the Standard & Poor (sic) report, dated September 14th,

1 2012, sir?

2   MR. MANFRED SCHULZ: Yes, correct.

3   MR. BYRON WILLIAMS: And, Mr. Schulz, I

4 just want to direct your attention to the -- at the top

5 of this page, to the discussion of major rating

6 factors. And you'll agree with me, subject to check,

7 that in terms of the strengths of Manitoba Hydro,

8 Standard & Poor's identifies low cost hydraulic --

9 hydroelectric generation, government ownership and

10 support, a vertically integrated electricity monopoly,

11 a diversified customer base, and supportive regulation?

12   MR. MANFRED SCHULZ: You read that

13 well. I agree.

14   MR. BYRON WILLIAMS: And that's your

15 understanding of what they've identified as strengths,

16 sir?

17   MR. MANFRED SCHULZ: That's what they

18 have identified as their strengths based on this

19 report.

20   MR. BYRON WILLIAMS: And in terms of

21 weaknesses, you can comment on my reading, of course,

22 if you'd like, they identify a significant hyd --

23 hydrology risk explo -- exposure including lack of fuel

24 diversification, an aggressive financial policy, and

25 merchant risk to uncontracted electricity exports and

3712

1 trading activities, agreed?

2   MR. MANFRED SCHULZ: Agreed.

3   MR. BYRON WILLIAMS: And I don't know

4 if this goes to you or to Mr. Cormie.

5   My clients understand the strengths and

6 the first two (2) weaknesses. What is Manitoba Hydro's

7 understanding of what is meant by "merchant risk to

8 uncontracted electricity exports and trading

9 activities"? And I haven't provided the whole report,

10 so I apologize for that.

11   MR. MANFRED SCHULZ: If you could just

12 bear with us as we look for the...

13   MR. VINCE WARDEN: And maybe --

14   MR. BYRON WILLIAMS: It's --

15   MR. VINCE WARDEN: -- just as -- as

16 they're looking, if I can just comment briefly. As Mr.

17 Schulz indicated, we -- we do get these reports for

18 reading -- a draft report for reading, before they're

19 issued. And this is one that we -- I can definitely

20 recall objecting to and -- and trying to explain that

21 really we don't have that risk. There isn't a merchant

22 risk associated with this.

23   Likewise, with the aggressive financial

24 policy, I never really agreed with the wording of

25 "aggressive financial policy." Nevertheless, the --

3713

 1 the rating agencies seldom take our advice. You know,

 2 they -- they -- they listen politely and they continue

 3 with their own wording.

 4   So unless there is an error in fact,

 5 they seldom change the description that's -- that's in

 6 these reports. So I just thought I would provide that.

 7   MR. BYRON WILLIAMS: I appreciate that

 8 Mr. Warden. And, Mr. Cormie, if -- or -- or -- can

 9 Hydro, or someone from Hydro, can you convey -- to back

10 up.

11   Clearly, you would have discussed with

12 Standard & Poor's what they meant by "merchant risk to

13 uncontracted electricity exports." You would have had

14 that discussion?

15   MR. VINCE WARDEN: Yes.

16   MR. BYRON WILLIAMS: And what does

17 Manitoba Hydro understand Standard & Poor's to mean?

18

19   (BRIEF PAUSE)

20

21   MR. VINCE WARDEN: I don't believe they

22 have a real good understanding of the merchant

23 activities that we -- we take -- that we engage in, in

24 the export market. We tried to explain it to them. It

25 is -- it is somewhat complicated. And Mr. Cormie, as

1 he indicated, does participate in these meetings or

2 telephone discussions with the rating agencies.

3   So it's an area that perhaps we haven't

4 done as good a job as we could do in explaining what

5 our merchant activities are on the export market.

6 Hence, we don't agree with this statement. But

7 nevertheless, they -- they -- I cant really say way

8 they insist on -- on retaining this in their -- in

9 their report.

10   MR. BYRON WILLIAMS: And I see Mr.

11 Cormie's finger posed right by the mic. Mr. Cormie,

12 feel free to jump in. And, Mr. Chair, this would be a

13 good spot to break.

14   But Mr. Cormie, is there something you

15 want to add? I sense it.

16   MR. DAVID CORMIE: Well, you know, when

17 you -- if -- on face value uncontrac -- uncontracted

18 merchant risk is you -- you build a plant solely for

19 export. Manitoba Hydro's billing generating stations

20 to serve Manitoba load with the objective of keeping

21 rates low in the long run.

22   We advan -- we -- we are planning to

23 advance plans in order to take advantage of some

24 opportunities but we're -- our objective is not to

25 build for the export market. Our objective is to keep

3715

1 rates low for Manitoba customers.

2   And so I -- I, you know, I'm not sure we

3 are successful in -- in discussing with the rating

4 agencies to clarify that. But our goal is to serve the

5 domestic customer in a reliable and a low-cost manner

6 over the long run. And in order to do that, at times -

7 - and as -- as we've described many times, our

8 preferred development plan -- advances plan to -- to

9 take advantage of some of these opportunities and --

10 but -- but the objective is, how do we keep the rates

11 for the customers low over the long run? Lower than

12 they would otherwise be.

13   MR. BYRON WILLIAMS: And, just to --

14 thank you for the qualification, Mr. Cormie. Just in

15 terms of the -- and if I'm pushing too far you'll --

16 you'll push back.

17   But just in terms of the apprehended

18 risk of Standard & Poor's, in terms of uncontracted

19 electricity exports, would I be wrong in suggesting to

20 you that it is in part related to the unsold -- the

21 portion of the excess capacity that is -- is not sold

22 in firm contracts?

23

24   (BRIEF PAUSE)

25

3716

1   MR. DAVID CORMIE: Yeah, I -- I don't

2 know what they're -- they're thinking. It would be

3 presumption for me to -- to assume that. But we have

4 fully sold out the entire dependable output from

5 Keeyask. It's -- there's no uncontracted risk

6 associated with that. There's risk associated with the

7 price and volume associated with the surplus energy

8 that's coming off Keeyask.

9   With regard to Conawapa, we are -- we

10 are still working on those contracts that would be

11 dependent on Conawapa. And Manitoba Hydro will not

12 make a decision to build Conawapa unless we've got the

13 surplus contracted for and unless we have an

14 interconnection capable of getting that energy to

15 market. So, you know, we -- with regard to the firm --

16 the firm output of these stations, we will not proceed

17 unless we have contracts for -- for that -- for that

18 surplus power. And we're -- we're not making a

19 decision today to build Conawapa. We're -- it's in the

20 plans, but also part of those plans are to -- to get

21 the contracts to the point where they will support the

22 investment.

23   And so I -- again, I can't speak for the

24 -- for what the rating agency is saying, but I -- I can

25 speak to the fact that that's what we tell them. And -

 1 - and as Mr. Warden said, they don't always necessarily

 2 reflect that back in the -- in the ratings report.

 3   MR. BYRON WILLIAMS: Thank you. And,

 4 Mr. Chair and members of the panel, I'm prepared to

 5 stand down my questioning, and certainly if the panel

 6 has any quest --

 7   MR. RAYMOND LAFOND: I -- I have a

 8 brief question, and I heard Mr. Williams understood

 9 that very well, but I have a -- I -- I need to

10 understand what they meant by "aggressive financial

11 policy".

12   MR. VINCE WARDEN: Yes, it -- they're -

13 - they're referring to the fact that our financial

14 targets are weak relative -- or our financial ratios

15 are weak relative to other utilities.

16   MR. RAYMOND LAFOND: So equity of

17 ratios?

18   MR. VINCE WARDEN: Equity, interest

19 coverage primarily, and to a lesser extent capital

20 coverage.

21   MR. RAYMOND LAFOND: How about the

22 interest rate fluctuations?

23   MR. VINCE WARDEN: "Interest rate

24 fluctuations," I'm not quite sure what you mean by

25 that. The -- the --

3718

 1   MR. RAYMOND LAFOND: The fact that 15

 2 to 30 percent of your debt is on a floating rate, or

 3 variable rate.

 4   MR. VINCE WARDEN: Yeah, they never

 5 really expressed a -- a concern about that. You know,

 6 our floating-rate debt is probably -- well, it's

 7 aligned with other utilities of our size in terms of

 8 the floating rate debt in our portfolio.

 9   MR. RAYMOND LAFOND: Thank you.

10   THE CHAIRPERSON: Let's adjourn, and we

11 will see each other again at one o'clock. Thank you.

12

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

14 --- Upon resuming at 1:03 p.m.

15

16   MS. PATTI RAMAGE: Thank you, Mr.

17 Chairman. Two (2) announcements to make before we go.

18 The first is my daughter's eleventh birthday, and I

19 promised I'd show her her name on the transcript. So

20 happy birthday, Hayley.

21   MR. RAYMOND LAFOND: Happy birthday.

22   MS. PATTI RAMAGE: The second, perhaps

23 more pertinent to this Board, I thought -- and everyone

24 in the room would be interested to know that our

25 president, Scott Thomson, made an announcement this

 1 morning that with the retirement of Mr. Warden -- it's

 2 unfortunate he's not here, or maybe apropos -- our new

 3 vice president of Finance and Regulatory has been

 4 appointed effective January 31st. And I hope you'll

 5 all join me in congratulating Mr. Rainkie and...

 6

 7   (BRIEF PAUSE)

 8

 9   MR. DARREN RAINKIE: Thanks. Thanks,

10 everybody. I really look forward to working with the

11 Board and the Intervenors in the next few years. And

12 given our forecast, they look like they're relatively

13 challenging years, so.

14   MR. RAYMOND LAFOND: Higher position

15 needs higher wisdom, more wisdom.

16   MR. DARREN RAINKIE: You know, I don't

17 think I can hold a candle to Mr. Warden. He's the

18 grandmaster of this. So it's -- I can only hope that

19 we can aspire to -- or I can aspire to providing the

20 type of information and the -- the breadth of his

21 knowledge that he's displayed at these hearings over

22 the years.

23   THE CHAIRPERSON: Congratulations, Mr.

24 Rainkie, on behalf of the PUB and staff. I look

25 forward to working with you in the future years. And I

3720

1 guess steak and a fine bottle of wine tonight at the

2 Rainkie household, I hope.

3   MR. DARREN RAINKIE: Maybe after the

4 hearing's over, Mr. Chairman.

5   THE CHAIRPERSON: Well, perhaps I'll

6 have a glass of wine in your honour tonight.

7   MR. RAYMOND LAFOND: I'll have two (2).

8 Thank you.

9   THE CHAIRPERSON: Mr. Williams, over to

10 you.

11   MR. BYRON WILLIAMS: Merci. The -- I

12 will have some questions for Mr. Warden in about

13 fifteen (15) minutes or so. And congra --

14   MS. PATTI RAMAGE: Apparently he's

15 taken full advantage of this announcement. I'm not

16 sure.

17   THE CHAIRPERSON: I should have said

18 happy birthday to Hayley.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21   MR. BYRON WILLIAMS: Mr. Schulz -- by -

22 - by the way, congratulations, Mr. Rainkie.

23   Mr. Schulz, I -- I think we had the

24 Board rivetted in our discussion of bond rating

25 excerpts. And I -- I want to direct your attention to

3721

1 page 16 of CAC Exhibit 12, sir, which should -- should

2 reveal a excerpt from a Moody's Investors Service from

3 October 15th, 2009.

4   Do you have that, sir?

5   MR. MANFRED SCHULZ: I certainly do.

6   MR. BYRON WILLIAMS: And, Mr. Schulz,

7 there's going to be a couple things we look at, in

8 terms of this excerpt from the report. But I want to

9 direct your attention towards the bottom of page 16,

10 under "Recent developments," where you'll see that

11 there's some commentary from -- from Moody's, that the

12 Public Utilities Board had confirmed approval for a 2.9

13 percent increase in electricity rates after

14 conditionally approving a 4 percent increase for the

15 fiscal year 2010.

16   Do you see that, sir?

17   MR. MANFRED SCHULZ: I do.

18   MR. BYRON WILLIAMS: And in essence,

19 Moody's is discussing a downward revision of the

20 increase from 4 percent to 2.9 percent due to two (2)

21 factors, I would suggest to you: better-than-projected

22 financial results for Manitoba Hydro, as well as the

23 regulator's concerns about the impact of rate increases

24 on consumers during the economic downturn, agreed?

25   MR. MANFRED SCHULZ: That is what they

1 put into the record, yes.

2   MR. BYRON WILLIAMS: And, Mr. Schulz, I

3 would be correct in suggesting to you that,

4 notwithstanding a lower rate increase than Manitoba

5 Hydro might have anticipated, Moody's maintained the

6 stable outlook for the credit rating of Manitoba Hydro

7 via the Province of Manitoba?

8   MR. MANFRED SCHULZ: The rating did not

9 change as a function of this particular item, although

10 I will make the comment that there are a number of

11 rating factors that are at play, and this is just one

12 (1) of them that potentially is at -- as a

13 consideration. So, it's not surprising to me that this

14 would have had no rate impact.

15   MR. BYRON WILLIAMS: And I thank you

16 for that, Mr. Schulz. And, Mr. Schulz, I'm going to

17 come right back to you, but we could have -- Mr. -- Mr.

18 Warden, we're on page 16.

19   I was going to take advantage of your

20 absence, Mr. Warden, to address this question to the

21 new vice -- or the soon-to-be new vice president, but

22 I'll -- I'll pose it to you instead.

23   MR. VINCE WARDEN: Well, I'm sure he

24 could handle it.

25   MR. BYRON WILLIAMS: Well, I'll pose it

3723

1 to either of you. Mr -- Mr. Rainkie or Mr. Warden, let

2 us assume for the moment that the Manitoba Public

3 Utilities Board, in its wisdom, decided to grant

4 Manitoba Hydro a 3 percent rate increase effective

5 April 1st, 2013, as opposed to a 3.5 percent rate

6 increase. Let's take that assumption.

7   It is -- it's not the evidence of

8 Manitoba Hydro that a reduction in the sought after

9 rate of half a percentage point would materially affect

10 the credit worthiness of the corporation, is it?

11   MR. VINCE WARDEN: Mr. Williams, I

12 wonder, to answer that question, if I can take you back

13 to Exhibit number 15, just to show what the impact of a

14 -- of a half-percent reduction in the rate increase

15 requested, what impact that would have. If you -- if

16 you can -- can bear with me and go back to Exhibit

17 number 15 that we had filed, Manitoba Hydro Exhibit

18 number 15 filed earlier.

19   MR. BYRON WILLIAMS: Mr. Warden, I

20 don't have it with me, but I'll take your word for it

21 as we walk our way through it.

22   MR. RAYMOND LAFOND: Which page?

23

24 CONTINUED BY MR. BYRON WILLIAMS:

25   MR. BYRON WILLIAMS: I'm in a trusting

3724

1 mood today, sir.

2   MR. VINCE WARDEN: Thank you.

3

4   (BRIEF PAUSE)

5

6   MR. VINCE WARDEN: Yes. So I'm -- I'm

7 referring to page 9 of Exhibit number 15. And you'll -

8 - you'll see from that exhibit that assuming that we

9 have approval for the -- not only the three and a half

10 (3 1/2) percent rate increase requested, but that the

11 rate rollback monies are -- are restored, we're -- we

12 are looking at a bottom line net income for -- for the

13 two (2) years of 39 million in 2012/'13, 36 million in

14 the following fiscal year in 2013/'14.

15   So if we take a half of a percentage out

16 there, with 1 percent representing about $14 million,

17 if we reduce that further by -- in the order of $7 to

18 $8 million, you can see that our -- our net income is

19 vulnerable to slipping into a loss position.

20   And as you know, or as was reported from

21 the quarterly release, we are -- we are currently in a

22 bottom-line loss position of approximately $43 million.

23 Very -- there's a very high risk that we could be

24 facing a loss, even with the rate increases that have

25 been requested. So there's no room whatsoever for any

3725

1 -- any negative variances to -- to occur which would

2 affect this -- this financial forecast.

3   So if you were to reduce that rate

4 increase, as suggested, by -- by point five (.5)

5 percent, well, while it might seem insignificant on a

6 bottom-line basis, the point I'm making is that it is

7 actually very significant.

8   MR. BYRON WILLIAMS: So, Mr. Warden, as

9 I understand your answer, if the Board, in its wisdom,

10 chose to give Manitoba Hydro a 3 percent rate increase

11 as opposed to three point five (3.5), the walls of

12 Jericho would fall and the -- the debt -- the credit

13 rating would come tumbling down.

14   Is that your evidence, sir?

15   MR. VINCE WARDEN: Mr. Williams, I

16 wanted to make the Board aware and -- and I'm sure they

17 are, but I wanted to reinforce what I had said earlier

18 about the risks Manitoba Hydro faces and how vulnerable

19 we are to adverse events. I would consider the -- the

20 reduction in the rate increase requested by point give

21 (.5) to be an adverse event that may not result in the

22 walls of Jericho tumbling, but -- but it would be

23 significant and would be noted -- would be noted by the

24 rating agencies, for sure.

25   MR. RAYMOND LAFOND: And in summary,

 1 it's a -- it's an impact of about $7 million, correct?

 2   MR. VINCE WARDEN: One-half (1/2)

 3 percent would be about $7 million, yes.

 4   MR. MANFRED SCHULZ: And I would also

 5 note that if you reference the Standard & Poor's

 6 document for Manitoba Hydro Electric Board -- and I

 7 think it's on your page 15. It was page 2. But on

 8 page 3 of that very same document -- and you can find

 9 it in the appendix that we have that we filed. But in

10 there, Standard & Poor's says:

11   "Preliminary results for fiscal 2013

12   indicate that depressed export prices

13   and lower net income will put

14   pressure on the Utility's interest

15   coverage ratios."

16   So the impact associated with the -- the

17 income request, or the revenue requirement that Mr.

18 Warden is speaking to, will not quantify it in the

19 measure that you prescribed, in terms of the difference

20 between such and such. But it does indicate very

21 clearly that the credit rating agencies are looking

22 very carefully at net income and the revenue

23 requirement as an indicator as some of their

24 considerations for rating.

25

1 CONTINUED BY MR. BYRON WILLIAMS:

2   MR. BYRON WILLIAMS: Now, and let me

3 just follow up with you one (1) more question, Mr.

4 Warden, sir. You indicated the -- that a point five

5 (.5) reduction in the requested rate would be noted.

6   Is it your expectation, sir, that it --

7 there would be a corresponding decline in the credit

8 rating?

9   MR. VINCE WARDEN: In itself, no.

10   MR. BYRON WILLIAMS: Now, Mr. Schulz,

11 on page 17 of -- of CAC Exhibit 12, you'll see the

12 headline towards -- do you have that, Mr. Schulz?

13   MR. MANFRED SCHULZ: I do. I'm just

14 referencing, I guess, page 16. So it's dated October

15 15th, 2009.

16   MR. BYRON WILLIAMS: Okay. Yes, and I

17 apologize for that, Mr. Schulz. You'll agree with me

18 first of all that this appears to be from the same --

19 the same document dated October 15th, 2009?

20   MR. MANFRED SCHULZ: Yes.

21   MR. BYRON WILLIAMS: And I direct your

22 attention to the headline two -- two-thirds (2/3s) of

23 the way down to -- the page, "MHEB expects to continue

24 to meet its financial targets."

25   Do you see that, sir?

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1   MR. MANFRED SCHULZ: Yes.

2   MR. BYRON WILLIAMS: And directing your

3 attention in particular, sir, to the third-last line of

4 that paragraph, you'll see, I'll suggest to you, a

5 statement that:

6   "Despite the high level of planned

7   capital expenditures during the next

8   decade, much of which is expected to

9   be debt financed, MHEB expects to be

10   able to con -- to -- expects to be

11   able to continue to satisfy each of

12   its financial statements."

13   Do you see that, sir?

14   MR. MANFRED SCHULZ: Yes. It says:

15   "MHEB can -- expects to be able to

16   continue to satisfy each of its

17   financial targets."

18   MR. BYRON WILLIAMS: Sorry. Thank you

19 for that correction. So would -- would it be fair to

20 say, sir, that while recognizing the risk of a per --

21 poor hydrology year, Moody's expectation as of October

22 2009 would be that notwithstanding Manitoba Hydro's

23 high level of planned capital expenditures over the

24 next decade, the Corporation expected to be able to

25 continue to satisfy each of its financial targets?

 1   MR. MANFRED SCHULZ: That is indeed

 2 what they wrote in their report.

 3   MR. VINCE WARDEN: But I just might add

 4 though, it is open to some interpretation as to what

 5 the word "satisfy each of its financial targets" -- it

 6 doesn't say "meet" each of its financial targets, at

 7 least not in that sentence you just quoted, Mr.

 8 Williams.

 9   And -- and this is wha -- I think I

10 explained earlier how -- how much time we spend with

11 the rating agencies and going over our financial

12 targets and -- and showing them how, in fact, yes, our

13 financial targets will go through a period in which

14 there wil -- they will decline, but they do recover

15 over the -- over the very long term. And -- and we

16 show them graphs that -- that show that recovery.

17   And so I'm interpreting this to be that

18 be -- because we do recover, or at least our

19 projections show that recovery, we are satisfying our

20 financial targets over the long term. So I'm reading

21 something in here that isn't there. But, on the other

22 hand, I was present at the discussions with the rating

23 agencies, and I think I know what they mean by that.

24   MR. BYRON WILLIAMS: You should have

25 went to law school, Mr. Warden. The --

3730

1   MR. VINCE WARDEN: Maybe it's not too

2 late.

3   MR. DARREN RAINKIE: Mr. Williams, I

4 think the other thing to keep in mind, thi -- this was

5 in 2009. That would have been based on the forecasts

6 that were -- or the financial information that was

7 presented to the credit rating agencies back then.

8   I think if you look at our financial

9 targets, our actual financial targets on page 86 of our

10 annual report, and then you -- and if you also look at

11 IFF12 and the projections going forward, while the

12 rating agencies take a long view -- and we'll look at

13 the return that Mr. Warden mentions -- in the short

14 run, there's been a deterioration between 2009 and now

15 of our -- both our actual financial targets and the

16 projected financial targets, particularly the interest

17 coverage ratio that we've talked about in our evidence

18 thus far is hovering around, you know, somewhere

19 between one-zero-zero (1.00) and one (1) -- one point

20 one-o (1.10).

21   So this is a comment at a point in time.

22 But certainly, as they look at our new information,

23 those comments can change, obviously.

24   MR. BYRON WILLIAMS: Now, Mr. Rainkie -

25 - Mr. Rainkie, your evidence was it was a comment at a

3731

1 point in time. And your observation is that things

2 have deteriorated since then, agreed?

3   MR. DARREN RAINKIE: Yes, I think

4 generally, our forecast since 2009, our financial

5 ratios have deteriorated since then.

6   MR. RAYMOND LAFOND: Can -- can I

7 intervene and indicate that -- and ask how you

8 interpret the following sentence, which starts by,

9 "However," that was just read?

10

11 CONTINUED BY MR. BYRON WILLIAMS:

12   MR. BYRON WILLIAMS: So that would be

13 the last sentence of that paragraph.

14   MR. VINCE WARDEN: Yes, maybe I'll just

15 respond to that. So I think what Moody's is saying

16 here is that, as in all of our financial forecasts, we

17 do have a provision for draught. So if we do en --

18 encounter a drought equivalent to the worst on record,

19 we could -- we could be seeing a dip in our retained

20 earnings in the order of $1.6 billion.

21   So they're just re -- recognizing that

22 that could occur with -- if a drought -- if we did

23 experience a drought over the next number of years.

24   MR. BYRON WILLIAMS: Now, Mr. Warden,

25 I'm -- I'm reluctant to parse words with an aspiring

3732

1 lawyer as well as accountant such as yourself, sir.

2 But it is certainly -- certainly you'll agree with me

3 that in 2009 Manitoba Hydro's expectation was that it -

4 - it was planning to meet its financial targets for

5 much of the -- let me back up, sir.

6   Certainly, you'll agree with me that

7 it's open to interpretation that the expectation of

8 Moody's was that you were going to meet your financial

9 targets, and indeed the reference to the deterioration

10 due to hydrology would be the event that might knock

11 you off your targets, agreed?

12   MR. VINCE WARDEN: Not totally.

13 Certainly the reference to hydrology, I would agree

14 with. But in 2009, we -- we forecast during our -- our

15 period of -- our decade of investment, as we called it.

16 We wouldn't -- we wouldn't meet our financial targets

17 over that period of time.

18   MR. BYRON WILLIAMS: Now, I want to

19 turn to DBRS, a couple of statements from DBRS starting

20 at page 18. And, Mr. Schulz, it's open to you.

21 Directing your attention to the -- first of all, let us

22 agree that this is a report -- an excerpt from a

23 report, dated February 12th, 2009?

24   MR. MANFRED SCHULZ: Confirmed.

25   MR. BYRON WILLIAMS: And directing your

1 attention to the very last sentence, would it be fair

2 to say that DBRS in 2009 is emphasizing to Manitoba

3 Hydro the importance of completing large hydro

4 generation and transmissions projects on time and

5 within budget in order to maintain a subs -- stable

6 financial profile?

7   MR. MANFRED SCHULZ: The -- the quote

8 there at the bottom of that page is:

9   "Although debt balances will increase

10   over the medium term, leverage could

11   improve modestly from current levels

12   due to increased retained earnings.

13   In addition, completing the large

14   hydro generation and transmission

15   projects on time and within budget is

16   key to maintaining a stable financial

17   profile."

18   So that was their position February

19 12th, 2009.

20   MR. BYRON WILLIAMS: And an aspect of

21 that position was to tell you at Manitoba Hydro that a

22 key to maintaining a stable financial profile was to

23 complete large hydro generation and transmission

24 projects on time and within budget.

25   MR. MANFRED SCHULZ: That's certainly

1 what's stated there. But again, one (1) needs to keep

2 in mind that this is not the only deterministic factor

3 that goes into ratings, as indicated before. You know,

4 there are a number of factors that are at play. This

5 is one (1) factor that they had written down in their

6 rating report.

7   MR. BYRON WILLIAMS: Thank you for that

8 Mr. Schulz. And if we can turn to the nex -- next

9 page, you'll agree with me that, again, this is an

10 excerpt from a DBRS report, dated November 10th, 2010?

11   Agreed?

12   MR. MANFRED SCHULZ: I agree.

13   MR. BYRON WILLIAMS: And directing your

14 attention to the last sentence, just above "long-term

15 debt maturities," you'll see again, DBRS is offering

16 the -- the advice or the admin -- admonition that

17 completing large hydro-generation and transmission

18 projects on time and within budget is key to

19 maintaining a stable financial profile.

20   Agreed?

21   MR. MANFRED SCHULZ: I wouldn't agree

22 that they would consider it to be advice or admonition;

23 I just agreed to the fact that they had, once again,

24 quoted that -- that phrase.

25   MR. BYRON WILLIAMS: So, you attach no

3735

1 significance to it, sir?

2   MR. MANFRED SCHULZ: I attach

3 significance to the words; I didn't attach significance

4 to your characterization of it.

5   MR. BYRON WILLIAMS: And, again, if we

6 go to November 28th, 2011, the next page, an excerpt

7 from the DBRS report, just above "rating consideration

8 details," you'll agree with me -- the last sentence

9 there -- that again, there's a message from DBRS that

10 completing large hydro-generation and transmission

11 projects on time and on budget is key to maintaining a

12 stable financial profile?

13   Agreed?

14   MR. MANFRED SCHULZ: I agree that those

15 are the words they used in their report.

16   MR. BYRON WILLIAMS: And whether to you

17 or to other members of the Hydro panel, can we agree

18 that since C -- CEF09, as compared to today, there has

19 been a deterior -- an increase in the expected capital

20 costs associated with large capital projects, as well

21 as a significant -- in some cases such as Conawapa,

22 deferral of their anticipated in-service date?

23

24   MR. VINCE WARDEN: Yes, Mr. Williams.

25 We -- we reviewed that schedule earlier on -- on

 1 page...

 2   MR. BYRON WILLIAMS: Page 9, Mr. --

 3   MR. VINCE WARDEN: Page 3, I think,

 4 actually.

 5   MR. BYRON WILLIAMS: Indeed.

 6   MR. VINCE WARDEN: Yes. I -- I do note

 7 though that DBRS continued, even though they -- they

 8 saw that those increases in the capital expenditure

 9 forecast that we just reviewed on page 3, they -- they

10 made that statement in 2009 and again in 2011. So,

11 they carried that statement forward with -- with the

12 knowledge that the capital expenditure projects had

13 increased in terms of the -- the projected costs.

14   MR. BYRON WILLIAMS: And indeed, the --

15 the credit rating remains stable, sir, agreed?

16   MR. VINCE WARDEN: Yes. So far.

17   MR. BYRON WILLIAMS: Mr. Schluz,

18 directing your attention to page 22 of CAC Exhibit 12.

19 You'll agree with me, first of all, that it's an

20 excerpt from the Moody's Investor Service report of the

21 -- August 15th, 2012?

22   MR. MANFRED SCHULZ: I would confirm

23 this is from the MHEB report from Moody's, for August

24 15th, 2012. Yes.

25   MR. BYRON WILLIAMS: And directing your

1 attention to the -- to the top of page 22. You see a

2 statement, Mr. Schulz, that Manitoba Hydro -- or MHEB's

3 rating reflects the provinces guarantee of the MHEB

4 prom -- promissory note program. And -- and it goes on

5 to note that Manitoba Hydro and a similar entity, BC

6 Hydro, are unique among Moody's rated companies and are

7 not readably -- readily comparable to other regulated

8 utilities.

9   Do you see that, sir?

10   MR. MANFRED SCHULZ: I do.

11   MR. BYRON WILLIAMS: And am I correct

12 in suggesting to you, sir, that the unique nature from

13 the perspective of -- of Moody's, in terms of these two

14 (2) companies, is that both are 100 percent owned by

15 the respective provincial shareholder, and the

16 provincial shareholder owns virtually all of the

17 company's debts?

18   Agreed?

19   MR. MANFRED SCHULZ: I would agree that

20 that's a substantive element of that determination that

21 they've made in terms of coming to that conclusion.

22   MR. BYRON WILLIAMS: And we can also

23 note in -- in fairness, that there's a reference to

24 Hydro continuing to independently support its

25 outstanding debt and earn positive net income, agreed?

3738

 1   MR. MANFRED SCHULZ: I agree. I should

 2 also note that Moody's -- this is an interesting quote,

 3 because it -- it does speak to the challenges that are

 4 sometimes occurring with respect to any kind of

 5 benchmarking exercises, in terms of the context and how

 6 one (1) compares one (1) to the other, and -- and also

 7 how one (1) rating agency looks at these matters

 8 compared to others.

 9   So in this case Moody's has indicated

10 that the -- the strongest comparable would be BC Hydro.

11 You don't see that in any of the other credit rating

12 reports, in SMP and DBRS. So the caution I would put

13 to you is that the comment that you're making here is

14 not pertaining to all credit rating. These -- it

15 pertains to -- to Moody's, in this particular case, and

16 in many other situations, DBRS and others, they would

17 compare us to other regulated and -- and other Crown

18 corporation utilities as part of their exercise.

19   So just sort of as a -- a caution to the

20 -- the theme that I think is being put forth here.

21   MR. BYRON WILLIAMS: And accepting

22 those caveats, sir, what Moody's is telling us in terms

23 of its endorsement of a stable rating for Manitoba

24 Hydro really is that -- and if you want to go to rating

25 drivers on the next -- on the previous page, being page

3739

1 21, what it's telling us is that a central driver of

2 its rating of Manitoba Hydro is the explicit guarantee

3 of the Province of Manitoba?

4   MR. MANFRED SCHULZ: I think that's the

5 case for all of Moody's DBRS and SMP, that for the

6 long-term debt advances that are provided to Manitoba

7 Hydro, that the flow-through credit rating is

8 attributed to us from the -- the Province of Manitoba.

9   Further to the point though that you

10 made about the -- the BC and BC Hydro. I mean, it was

11 just very recently, for instance, that -- that Moody's

12 put BC Hydro and the Province of British Columbia on

13 negative outlook. In fact, that was dated just

14 December 12th. And so this, once again, highlights the

15 -- the concern and -- and the consideration that one

16 has to have with respect to not only what's happening

17 with the Utility, but with -- also with the province.

18   MR. BYRON WILLIAMS: Thank you for

19 that. Mr. Warden, these are probably questions for

20 you. They relate to a subject that we -- we've --

21 we've been -- a discussion we've been hadding -- having

22 since about 2008 on asset management.

23   I don't know if you recall any of those

24 discussions, Mr. Warden. Probably not that memorable.

25   MR. VINCE WARDEN: Yes, Mr. Williams, I

3740

1 -- I do recall.

2

3   (BRIEF PAUSE)

4

5   THE CHAIRPERSON: Mr. Schulz, just a --

6 a question. With respect to the negative outlook for

7 BC Hydro, did that include the province as well or just

8 BC Hydro?

9   MR. MANFRED SCHULZ: It was originating

10 out of the Province of British Columbia and then

11 shortly thereafter Moody's issued their credit rating

12 reports of their -- their outlooks for BC Hydro and I

13 think there are other associated crowns or -- or

14 associated entities that were similarly affected.

15   THE CHAIRPERSON: Thank you.

16

17   (BRIEF PAUSE)

18

19 CONTINUED BY MR. BYRON WILLIAMS:

20   MR. BYRON WILLIAMS: Mr. Warden, if --

21 if you could have at hand -- we're not going to go

22 there right away, but in CAC Exhibit 12, page 24, that

23 should be a transcript reference, sir?

24   MR. VINCE WARDEN: Yes. Thank you, Mr.

25 Williams. I have it here.

3741

 1   MR. BYRON WILLIAMS: And we're going to

 2   come to that in just a couple of minutes, Mr. Warden,

 3   so I also handed out -- I couldn't pronounce the word,

 4   but a one (1) pager with the word "analogy" at the top.

 5   Do you have that, Mr. Warden?

 6   MR. VINCE WARDEN: "Prioritization".

 7   MR. BYRON WILLIAMS: Very well -- well

 8   done, sir. So, Mr. Warden, we may be torturing this

 9   analogy, but I -- I'm going to ask you to assist me in

10   -- in working our way through it. So can you agree

11   that -- we'll start with the householder with an annual

12   budget for repairs and replacement. It's her

13   expectation that this budget must cover off both home

14   repairs and car repairs that will keep both in sound

15   working condition.

16   Can we agree to that, sir?

17   MR. VINCE WARDEN: Yes.

18   MR. BYRON WILLIAMS: And we'll -- we'll

19   also agree that this does not include renovations or

20   improvements which are another budget item, okay?

21   MR. VINCE WARDEN: Okay.

22   MR. BYRON WILLIAMS: And the

23   householder, I'll get you to agree for the purposes of

24   the analogy, does not want to incur additional debt --

25   in other words, go beyond budget -- un -- unless

1 absolutely necessary.

2   You're prepared to make that assumption,

3 sir?

4   MR. VINCE WARDEN: Yes.

5   MR. BYRON WILLIAMS: And I'll ask you

6 to assume as well that the householder's current budget

7 reflects the priorities she places on other

8 expenditures, for example food, clothes, and she does

9 not want to impact these unless absolutely necessary,

10 okay?

11   MR. VINCE WARDEN: Okay.

12   MR. BYRON WILLIAMS: And the

13 householder, I'll ask you to assume, is well that her

14 income is fixed unless she works overtime, which she

15 does not want to do un -- unless absolutely necessary.

16   So you're with me so far, Mr. Warden?

17   MR. VINCE WARDEN: Yes, I am.

18   MR. BYRON WILLIAMS: So let us assume

19 that the householder wishes to conduct an asset

20 condition assessment for her -- in terms of her

21 potential home repairs and car repairs.

22   Would you agree, sir, that with respect

23 to the house, she could make plans based on the

24 expected life of her furnace, of her shingles, her

25 water heater, et cetera, or she can hire a house

3743

1 inspector if she wants more details, a more accurate

2 assessment?

3   MR. VINCE WARDEN: Assuming she can

4 afford that in her budget, yes.

5   MR. BYRON WILLIAMS: And I -- in terms

6 of whether she makes that choice, presumably it would

7 depend on how old things are and how concerned she is

8 about whether the budget is accurate.

9   Fair enough?

10   MR. VINCE WARDEN: Yes.

11   MR. BYRON WILLIAMS: And, similarly,

12 Mr. Warden, she can plan for car-related repairs and

13 replacements, whether it's the brakes, the tires, the

14 muffler, either based on the manufacturer's suggested

15 timelines or she could go to her mechanic and ask for a

16 more detailed assessment.

17   That's conceivable, sir?

18   MR. VINCE WARDEN: Okay.

19   MR. BYRON WILLIAMS: Now, Mr. Warden,

20 let's assume that these assets will -- will yield a

21 list of suggested repairs and replacements.

22   Are you prepared to make that

23 assumption?

24   MR. VINCE WARDEN: Yes.

25   MR. BYRON WILLIAMS: And is it fair to

3744

1 say that if the -- the list and the costs associated

2 with that list is too long, she may need to prioritize?

3   MR. VINCE WARDEN: Yes, I agree.

4   MR. BYRON WILLIAMS: In doing so, it

5 would -- would it be fair to say that she can look at

6 the impact of not doing any of the suggested repairs,

7 i.e., the likelihood that something will go wrong, and

8 consequence if it does, and choose between the -- the

9 potential impacts?

10   MR. VINCE WARDEN: Yes.

11   MR. BYRON WILLIAMS: And in terms of

12 prioritization, she could make this call on her own, or

13 she could also go to expert advice -- for expert

14 advice, whether from a -- the mechanic or a -- the home

15 expert, agreed?

16   MR. VINCE WARDEN: Ye -- yes, she --

17 she could.

18   MR. BYRON WILLIAMS: And just looking

19 at the -- the housing example for just a moment, Mr.

20 Warden, in -- in looking at tradeoffs, she -- she might

21 ask herself whether the consequence of not painting the

22 exterior is less than the consequence of not replacing

23 the shingles.

24   That would assist with the

25 prioritization?

                                                          3745

 1   MR. VINCE WARDEN: I agree.

 2

 3   (BRIEF PAUSE)

 4

 5   MR. BYRON WILLIAMS: So, Mr. Warden, if

 6 -- if the funds are limited though, would it be fair to

 7 say that the house-holder herself has to decide how to

 8 prioritize between spending on the house and on the

 9 car?

10   MR. VINCE WARDEN: Yes, I agree with

11 that, as well.

12   MR. BYRON WILLIAMS: And would it also

13 be fair to say that it is only after the house-holder

14 has prioritized the projects and determined what

15 critical ones need to be done and what cannot be done

16 within the given budget, that she is in a position to

17 assess whether there is a real need to borrow, work

18 overtime, or dip into planned spending in other areas?

19   MR. VINCE WARDEN: Okay.

20   MR. BYRON WILLIAMS: Mr. Warden, can --

21 can I ask you to -- I just -- I wanted to see if we can

22 agree to some common ground, in terms of definitions.

23 Can we agree that if we use the term "asset management

24 process," that refers to the processes used by a

25 utility in managing its assets and that it could

3746

1 include inspection processes, maintenance processes,

2 asset condition assessments, as well as capital

3 expenditure, OM&A planning, and monitoring?

4   Would you like me to break that down,

5 Mr. Warden?

6   MR. VINCE WARDEN: Well, Mr. Williams,

7 for the purposes of our discussion, to move this along,

8 perhaps I'll just agree with your -- how you've defined

9 it. So please proceed.

10   MR. BYRON WILLIAMS: Can we agree, as

11 well, sir, that an asset condition assessment is one

12 (1) of the tools that is used to detect and quantify

13 the extent of asset degradation and to provide a means

14 of estimating remaining asset life based on its

15 condition?

16   MR. VINCE WARDEN: Yes, I -- I'm not

17 sure that an as -- asset condition assessment would

18 necessarily go into the same depth as we've discussed

19 for three (3) days here with respect to depreciation,

20 in terms of remaining life of -- of assets at the level

21 that we discussed.

22   But, you know, typically a condition

23 assessment would look at -- at remaining life, but

24 probably at a higher level.

25   MR. BYRON WILLIAMS: As compared to a

3747

1 depreciation study, can -- would I be correct in

2 suggesting that as asset con -- condition assessment

3 perhaps might be more granular in that it focusses on

4 the state of individual assets?

5

6   (BRIEF PAUSE)

7

8   MR. VINCE WARDEN: Ye -- yes, you know,

9 I -- I will agree with that. Certainly, the asset

10 condition assessments that we're -- we are doing at a

11 generating station, for example, are -- are very

12 granular and -- and looks at the lowest level of -- of

13 component, in terms of maintenance requirements for

14 that -- for that component.

15   So -- so, yes, I'll agree with that

16 statement.

17   MR. BYRON WILLIAMS: Mr. Warden, moving

18 away from the definitions, can we agree that while age

19 can provide some indication as to the condition of an

20 asset, age by itself is by no means a good indicator

21 for planning purposes?

22   MR. VINCE WARDEN: Yes, there's other -

23 - other elements that affect condition other than age.

24

25   (BRIEF PAUSE)

3748

 1   MR. BYRON WILLIAMS: Would it be fair

 2 to say that if utilities were to plan major

 3 maintenance, refurbishment, replacement activities

 4 solely on age, they would be at risk of spending monies

 5 -- spending money in areas were it is not most needed?

 6   MR. VINCE WARDEN: Yes. I'm not aware

 7 of any utilities that would base their -- their

 8 maintenance or replace -- replacement solely on age.

 9   MR. BYRON WILLIAMS: In your

10 experience, would it be fair to suggest that an asset

11 condition assessment may ultimately feed into an asset

12 management report, which would be a multi-year plan as

13 to how a utility plans to manage and main -- maintain

14 its assets, including priorities and annual spending?

15   MR. VINCE WARDEN: Yes, absolutely. I

16 agree with that.

17   MR. BYRON WILLIAMS: Mr. Warden, if you

18 can turn to CAC Exhibit -- I believe it's CAC Exhibit

19 12, the excerpt from the transcript. And -- and you'll

20 agree with me, subject to check, that this a transcript

21 from a discussion that you and I had in March of 2008?

22   MR. VINCE WARDEN: Yes.

23   MR. BYRON WILLIAMS: And -- and Mr.

24 Warden, if you don't recall this question, it's not in

25 the -- in these notes, so you don't have to answer it.

 1   But would it be fair to say that as

 2 backdrop to our discussion, I had provided you with

 3 excerpts from Ontario -- or Hydro One's -- Ontario

 4 Hydro One's review of asset management best practices,

 5 as well as an excerpt from an independent asset

 6 condition assessment?

 7   MR. VINCE WARDEN: Yes, Mr. Williams.

 8 I do -- I do recall you providing me with documents at

 9 that time.

10   MR. BYRON WILLIAMS: And in the course

11 of our discussion, drawing your attention to page 27,

12 or page 1,151 from the transcript, "27" in the top

13 right-hand corner, and the lines 4 to 14.

14   I'll suggest to you that at the time,

15 Mr. Warden, that -- I was, on behalf of CAC (Manitoba),

16 looking for an overarching kind of corporate strategy

17 document which pulled together the asset condition

18 assessments from each department, in terms of their

19 ranking and -- and value.

20   Do you recall that, sir?

21   MR. VINCE WARDEN: Yes.

22   MR. BYRON WILLIAMS: And -- and your

23 response at that time was that there's no formal

24 document that comes together at executive com --

25 committee but that each vie -- vice president would

3750

1 have their own documentation to support their request

2 for funds before executive committee.

3   MR. VINCE WARDEN: Yes, that's what I

4 said at the time.

5

6   (BRIEF PAUSE)

7

8   MR. BYRON WILLIAMS: And, Mr. Warden,

9 just to move on to page 1,153, "Page 29" in the top

10 right-hand corner, starting at line 8. Do you recall

11 we were having a discussion regarding the applied

12 maintenance planning system, or AMPS, A-M-P-S?

13   MR. VINCE WARDEN: Yes.

14   MR. BYRON WILLIAMS: And at that point

15 in time, AMPS was the main tool used to plan and

16 schedule maintenance tasks and inspections, agreed?

17   MR. VINCE WARDEN: In the power supply

18 side of our business, yes. For generating stations,

19 that's right.

20   MR. BYRON WILLIAMS: Yes, and thank you

21 for that clarification. And in our conversation back

22 in 2008, I was suggesting to you that AMPS, A-M-P-S,

23 was less than state of the art.

24   And you were agreeing, correct?

25   MR. VINCE WARDEN: Yes. Yes.

3751

 1   MR. BYRON WILLIAMS: And you stated it

 2 wou -- it is due for replacement, and that's what we're

 3 looking at doing right now.

 4   MR. VINCE WARDEN: Correct.

 5   MR. BYRON WILLIAMS: Agreed?

 6   MR. VINCE WARDEN: Correct.

 7   MR. BYRON WILLIAMS: Mr. Warden, if I

 8 could get you to turn to page 32 of -- of this

 9 document, CAC Exhibit 12.

10   Mr. Warden, you'll agree this appears to

11 be an excerpt from Board Order 116/08, page 101?

12   MR. VINCE WARDEN: Yes, it is.

13   MR. BYRON WILLIAMS: And directing your

14 attention to the last two (2) paragraphs, you can see

15 that, at the time, Manitoba Hydro was tying its

16 justification for the level and growth of OM&A

17 expenditures to the increased need for increased

18 maintenance and/or replacement of aging capital assets,

19 agreed?

20   MR. VINCE WARDEN: Yes, and that

21 continues to be the case today.

22   MR. BYRON WILLIAMS: And you'll see, as

23 well, in the last paragraph that one (1) observation

24 from the Public Utilities Board was that one (1) item

25 that is lacking was sufficient support for the level of

3752

1 maintenance and upgrades to the existing capital assets

2 of the Corporation, agreed? That's the first paragraph

3 -- second.

4   MR. VINCE WARDEN: Yes. The -- the

5 first sentence in the last paragraph, yes, I -- I note

6 that, yes.

7   MR. BYRON WILLIAMS: And -- and the

8 Board, in the rest of the paragraph, is taking note of

9 the advice of Mr. Harper, who provided evidence for CAC

10 (Manitoba), suggesting that, as a best practice,

11 Manitoba Hydro should undertake an asset condition

12 assessment.

13   Do you see that, sir?

14   MR. VINCE WARDEN: I do, Mr. Williams.

15 And this might be an appropriate juncture to comment

16 that the -- I think the reason we've been talking about

17 this for so long is that it is complicated. It -- it

18 is -- it is an undertaking. An asset condition

19 assessment, as referenced here at the bottom of the

20 page -- of your page 32, assumes that -- that this can

21 be a standalone document. But what we're finding is

22 that it -- it's -- it's extremely complicated to go

23 through this. And in fact, you know, the analogy that

24 you provided earlier of the -- of the homeowner is, at

25 one (1) extreme, you know, the very simplistic extreme,

3753

1 whereas at Manitoba Hydro, we have -- we -- we run a

2 very complicated business.

3   And what we're finding is that putting -

4 - pulling together a document as suggested here, a

5 single document entitled, "An Asset Condition

6 Assessment," just isn't possible. And as a matter of

7 fact, we've been undertaking to do this at the business

8 unit level. And even there, even at the business unit

9 level, it is very complicated.

10   We are a vertically integrated utility.

11 And I think some of the references that Mr. Harper and

12 others drew ref -- reference to earlier were utilities

13 that perhaps were in the generation business or in the

14 transmission business or -- or the distribution

15 business.

16   We are, as I mentioned, vertically --

17 vertically integrated. And each of those lines of

18 business are in the process of developing their asset

19 condition assessments, and some are much further along

20 than others. And some of that documentation has been

21 filed in this proceeding. So making good progress, but

22 we're still not there, in terms of having something

23 that we can say we're totally satisfied with, that we

24 can integrate with our -- with our planning cycle.

25   Good progress -- or reasonable progress.

1 I shouldn't say good progress, because it's taking

2 longer than we probably would have liked. When we look

3 back on -- on these endeavours, it always seems that

4 they take longer than they should. But, nevertheless,

5 we have made progress and -- and I am confident we are

6 on the right track with respect to this -- this issue.

7   MR. BYRON WILLIAMS: Now, Mr. Warden, I

8 thank you for that answer. We are going to do some

9 grinding away on this issue. And -- but I do want to

10 follow up on -- on your statement, and I -- I want to

11 divide it into two (2) parts.

12   First of all, one (1) of your arguments

13 or one (1) of -- one (1) element of your statement,

14 sir, was that you would distinguish Manitoba Hydro from

15 other utilities who have undergone asset condition

16 assessment undertakings, in that Manitoba Hydro, you

17 would say, is more vertically integrated?

18   MR. VINCE WARDEN: Yes. Manitoba Hydro

19 is a totally verti -- vertically integrated utility.

20   MR. BYRON WILLIAMS: Now, you're not

21 denying, though, sir, that -- okay, and then let's --

22 let's move to the second state. You -- you've

23 identified challenges even within business units,

24 correct?

25   MR. VINCE WARDEN: Yes. I -- I've

3755

1 stated, or -- or admitted, perhaps, that it's a much

2 more complicated undertaking than we originally

3 contemplated.

4   MR. BYRON WILLIAMS: You do not deny

5 that firms such as Hydro One in Ontario have conducted

6 extensive asset condition reports?

7   MR. VINCE WARDEN: They have, but it --

8 it's -- again, it's my understanding that utilities

9 such as Hydro One had -- have prepared those reports

10 over a very long time-frame. It's taken them very long

11 to get -- to get that stage and we're in that -- on

12 that path now.

13   MR. BYRON WILLIAMS: They're at least

14 half a decade ahead of you, sir?

15   MR. VINCE WARDEN: You know, I wouldn't

16 say that. No, in fact, definitely I wouldn't agree to

17 half a decade, but we're close to where we want to be;

18 we're not there yet.

19   MR. BYRON WILLIAMS: So, Mr. Warden, in

20 terms of what the Board ordered in Order 116/08,

21 recognizing it was subsequently varied -- I'll direct

22 your attention to page 35 in the top right-hand corner

23 and the number -- number 7 at the -- at the bottom, and

24 Manitoba Hydro was directed to file an asset condition

25 assessment report with the Board by a certain date,

 1 agree?

 2   MR. VINCE WARDEN: Yes. And -- and

 3 here again, this directive assumes that there -- there

 4 can be one (1) standalone asset condition assessment

 5 report that covers all of our assets, all of the

 6 operations of Manitoba Hydro. And I'm -- as I

 7 indicated earlier, it's more realistic to ex -- to --

 8 to have an asset condition assessment report for the

 9 different lines of our business.

10   And -- and we have filed -- we have

11 filed some documentation in this proceeding.

12   MR. BYRON WILLIAMS: And we'll

13 certainly come to that, Mr. Warden.

14   But there you are on executive

15 committee, Mr. Warden, or -- there Mr. Rainkie will be

16 on -- on executive committee. Let's assume you -- you

17 get to this date where you have asset condition reports

18 from the -- the big three (3): generation,

19 transmission, and distribution.

20   You'll agree with me that

21 notwithstanding Mr. Rainkie's ample abilities, that

22 making the call in terms of which to prior -- pri --

23 which expenditure to prioritize is a very difficult

24 proposition?

25   MR. BYRON WILLIAMS: It's -- it's

3757

1 something that we spend a lot of time, pri --

2 prioritizing our -- our expenditures. It -- it's part

3 of the job of -- of all levels of management to do that

4 though, not only the executive.

5   MR. BYRON WILLIAMS: And there you are

6 at the executive committee though, Mr. Warden, with the

7 zealous advocates from transmission, verus the zealous

8 advocates from distribution, versus the zealous

9 advocates at generation, and you don't have an

10 overarching document that -- that tries to translate

11 these advocacy eff -- efforts into a common language

12 where -- where you can reasonably compare the -- the

13 value of -- of each -- of each expenditure?

14   MR. VINCE WARDEN: Well -- well, just

15 because we don't have something that we can put on the

16 table and say, This is our asset condition assessment,

17 doesn't mean that we don't have ample documentation for

18 -- before executive committee to justify expenditures.

19   So, I believe Mr. Hall was testifying

20 earlier and he described how each pole -- each pole in

21 our system now is actually -- has -- has a -- has a

22 unique code so that he can identify each -- each pole

23 in the system so that those million poles, he -- he can

24 now -- has -- has a system that he can scan those poles

25 and determine which are the oldest, which are -- what

3758

1 condition they're in; they can do visual expend --

2 inspections of those poles.

3   So he will -- he will come before

4 executive committee with a -- with a -- a plea for more

5 funding for -- for poles as -- if we use that as an

6 example, based on the condition of those poles. But it

7 doesn't mean he -- he has a formal asset condition

8 report that he presents to us, but he -- he does

9 definitely present his case in a way that a executive

10 committee can -- can make informed decisions.

11   MR. BYRON WILLIAMS: Of course you use

12 the example of poles. If you would have used the

13 example of underground cable, that would be a

14 circumstance where the Corporation is not really

15 inspecting the underground cables, agreed?

16   MR. VINCE WARDEN: Well --

17   MR. BYRON WILLIAMS: We'll come to

18 that, Mr. Warden.

19   MR. VINCE WARDEN: -- there -- there

20 are still ways of assessing a condition of underground

21 cables.

22   MR. BYRON WILLIAMS: So, Mr. Warden,

23 recognize as well that there's a regulator that's got

24 to make a call in terms of the reasonableness of your

25 prioritizations in tight financial times. And it would

3759

1 be fair to say that there is no overarching document

2 that you have to share with the regulator?

3   MR. VINCE WARDEN: No, it's not fair to

4 say that. As I indicated, we have filed documents with

5 the regulator.

6   Overarching? I'm not sure we'll ever be

7 in a position where we have one (1) overarching

8 document. I guess we could put all the business units

9 together and bin -- bind them together into one (1)

10 document. But nevertheless, they're -- they're so di -

11 - such a difference between maintaining poles and

12 providing spare parts for our high voltage direct

13 current transmission facilities. So there's -- you

14 can't compare one (1) to the other, and putting them

15 together in the same document wouldn't really serve a

16 useful purpose.

17   But, nevertheless, we do have documents.

18 And we are producing documents that support our

19 position before the regulator.

20   MR. BYRON WILLIAMS: Now, Mr. Warden,

21 if we turn to page 39 of CAC Exhibit 12, you'll see an

22 excerpt from Board Order 150/08.

23   Do you see that, sir?

24   MR. VINCE WARDEN: Yes, I do.

25   MR. BYRON WILLIAMS: And back in '08,

3760

1 Manitoba Hydro, you'll agree with me, asked the Board

2 to vary the order, asking for an asset condition

3 assessment study until Manitoba Hydro had implemented a

4 new enterprise asset management system sometime in the

5 future?

6   Do you see that?

7   MR. VINCE WARDEN: Yes, I do.

8   MR. BYRON WILLIAMS: And you'll agree

9 with me that in Board Order 150/08, directing your

10 attention to page 41 at the bottom, that, rather than

11 being directed to provide a report by June 30th, 2009,

12 Manitoba Hydro was directed to provide a study outline.

13 And it was advised that a date would subsequently be

14 fixed for the said -- for the timeline for an asset

15 condition assessment report, agreed?

16   MR. VINCE WARDEN: Yes.

17

18   (BRIEF PAUSE)

19

20   MR. BYRON WILLIAMS: Now, Mr. Warden,

21 I'll direct your attention to page 43 of CAC Exhibit

22 12. And you'll agree, subject to check, that this is

23 an excerpt from the -- the 2010/'11 to 2011/'12 general

24 rate application?

25   MR. VINCE WARDEN: Yes, I'll accept

3761

1 that.

2

3   (BRIEF PAUSE)

4

5   MR. BYRON WILLIAMS: And directing your

6 attention specifically to page 46 at the bottom, Mr.

7 Warden, you'll agree to me that your information to me

8 in -- at page 5,172 of the transcript, was that

9 Manitoba Hydro would be, in April of 2012, be able to

10 provide the Public Utilities Board with the report that

11 presi -- provides an assessment of all of our

12 generation assets, and that that report would be

13 sufficient for the Public Utilities Board to be aware

14 of the condition of those assets and planned

15 maintenance activities over an ensuing twenty (20) year

16 period.

17   Agreed? Pages 46 and 47.

18   MR. VINCE WARDEN: Yes, I see that, Mr.

19 Williams.

20

21   (BRIEF PAUSE)

22

23   MR. BYRON WILLIAMS: And that was on

24 the generation side, Mr. Warden?

25   MR. VINCE WARDEN: Yes, we were talking

3762

1 about an asset management system that was going --

2 being worked on at the time with respect to generation.

3 Yes, yes, it was generation.

4   MR. BYRON WILLIAMS: And directing your

5 attention to page 48 of that transcript excerpt,

6 specifically lines 11 through 14. Manitoba Hydro was

7 telling us that following the implementation of its

8 asset investment planning tool for generation, the plan

9 would be to implement that or to use that for the

10 distribution systems.

11   Agreed?

12   MR. VINCE WARDEN: Yes.

13   MR. BYRON WILLIAMS: And your

14 expectation at that time was what -- that the same tool

15 would be applicable to distribution, as well?

16   MR. VINCE WARDEN: Well, it wouldn't be

17 -- and I'm just thinking with the benefit of experience

18 since that date in time -- it's -- it's not the

19 identical tool but it's similar software that would be

20 used for -- for distribution.

21   MR. BYRON WILLIAMS: Now, directing

22 your attention, Mr. Warden, to page 51 of CAC-12.

23 You'll see, sir, the response of Manitoba Hydro to PUB

24 Information Request 1-82b.

25   MR. VINCE WARDEN: Yes, I see that.

3763

1   (BRIEF PAUSE)

2

3   MR. BYRON WILLIAMS: And would it be

4   fair to say, Mr. Warden, that the asset condition

5   assessment for generation was not provided in April of

6   2012?

7

8   (BRIEF PAUSE)

9

10   MR. VINCE WARDEN: Yes, I think, Mr.

11 Williams, as I indicated earlier, we sometimes have

12 ambitious plans but we don't always meet those

13 deadlines. Exactly why we didn't file something in

14 April 2012 -- and I'm not certain that we -- we didn't;

15 I'd have to double check that -- I -- I don't -- we

16 typically don't ignore Board orders, of course, so

17 whether we filed something to say that would be

18 delayed, I'm not certain as I sit here.

19   MR. BYRON WILLIAMS: Now, focussing on

20 the bottom pa -- bottom of page 51. We see here a

21 reference to Generation South and Generation North

22 implementing asset investment program software, and

23 that the -- a suggestion that once all the required

24 input data is validated by Manitoba Hydro specialists,

25 the AIP tool will provide the basis for condition

3764

1 assessment reporting, as well as long-term capital

2 projects.

3   Do you see that, sir?

4

5   (BRIEF PAUSE)

6

7   MR. VINCE WARDEN: Yes, I do.

8   MR. BYRON WILLIAMS: And staying on

9 generation, Mr. Warden, if you can flip to the next

10 page, being fifty-two (52), you'll see a reference to

11 HVDC. And, Mr. Warden, I'm going to ask you to flip

12 one (1) more page to the top of page 53. And in the

13 second paragraph there, you'll see a reference to:

14   "Currently, HVDC is integrating

15   conditioment -- condition assessment

16   data into the new asset investment

17   planning software system."

18   Do you see that, sir?

19   MR. VINCE WARDEN: Yes.

20   MR. BYRON WILLIAMS: And you see two

21 (2) -- one (1) sentence down:

22   "The goal being to have sufficient

23   data loaded int -- in the AIP

24   software to assist in development of

25   the overall power supply asset

3765

1   condition report and long-term

2   capital plan."

3   Agreed?

4   MR. VINCE WARDEN: Yeah.

5   MR. BYRON WILLIAMS: And there's a

6 reference to:

7   "Timing for the work is consistent

8   with generation at south and north

9   milestone dates."

10   And, sir, leading to the natural

11 question: What -- what are the new milestone dates for

12 Generation South and North?

13   MR. VINCE WARDEN: Mr. Williams, I

14 should clarify that throughout this discussion, we --

15 we've been talking about actually two (2) separate

16 pieces of software. So the asset investment planning

17 software that's being referenced here is -- is separate

18 and distinct from the enterprise asset management

19 program that we -- we also referenced earlier.

20   So the -- the asset investment planning

21 software that's referenced on page 53 is in fact being

22 used currently. It's being used currently for

23 developing capital -- the capital plans, or assisting

24 in the development of the capital plans of Generation

25 North and South.

3766

1   The enterprise asset management is a

2 much larger project which is still in progress, close

3 to being completed, but it's -- it's a larger

4 development project that is more pertaining to the --

5 the maintenance -- maintenance systems. And so that's

6 the -- the breakdown of those very detailed component

7 parts that is -- that is part of the asset management

8 system that is used for scheduling maintenance and --

9 and making sure that we take the types of preventative

10 maintenance that is -- is cost-effective over the long

11 term.

12   So, just wanted to make that distinction

13 between -- between the -- in case there was any

14 confusion about the two (2) -- two (2) pieces of

15 software. I think your question was: When -- when is

16 that software going to be put in -- into service? And,

17 in fact, it is in service now.

18   MR. BYRON WILLIAMS: Let's make sure I

19 have your answer. In terms of distinguishing between

20 enterprise management and AIP, you're suggesting that

21 enterprise management relates to the -- the day-to-day

22 events of scheduling and coordinating maintenance,

23 whereas the AIP relates more to the long-term capital

24 plan?

25   MR. VINCE WARDEN: That's right.

3767

1   MR. BYRON WILLIAMS: And the overall

2 power smart asset condition report would presumably

3 have inputs both from enterprise management and the

4 AIP, sir?

5   MR. VINCE WARDEN: Yes. Those programs

6 are -- are designed such that information can be passed

7 one to the other.

8   MR. BYRON WILLIAMS: And for the

9 purposes of developing an asset condition report for

10 the generation business unit, it would indeed be

11 necessary to get input from -- from both?

12   MR. VINCE WARDEN: That's right.

13   MR. BYRON WILLIAMS: And you have

14 advised me that enterprise management is not yet

15 completed? Enterprise assessment management program is

16 not yet completed?

17   MR. VINCE WARDEN: Yes, that's --

18 that's the -- the larger of the two (2) projects, and

19 it's still in progress.

20   MR. RAYMOND LAFOND: Enterprise

21 management program, is that the same thing as equipment

22 health rating, referred to on page 51?

23

24   (BRIEF PAUSE)

25

3768

1   MR. VINCE WARDEN: Mr. Lafond, I'm not

2 as familiar with the equipment health rating system,

3 but I'm informed that that is something different --

4 that is something different, again, from the -- the two

5 (2) systems that we were discussing --

6

7 CONTINUED BY MR. BYRON WILLIAMS:

8   MR. BYRON WILLIAMS: Mr. Warden, that

9 sounds like HydroAMPS (sic)?

10   MR. VINCE WARDEN: Pardon me?

11   MR. BYRON WILLIAMS: Is that HydroAMPS

12 (sic)?

13   MR. VINCE WARDEN: You're on top of

14 this, Mr. Williams. That is -- that is, in fact,

15 HydroAMPS (sic), yes. That -- so that is the one (1)

16 that is being replaced with -- that's the system that's

17 been in -- in place for a number of -- number of years

18 that is being replaced with the enterprise asset

19 management system.

20   MR. BYRON WILLIAMS: I think you might

21 have misspoke there, Mr. Warden, if you were suggesting

22 that HydroAMPS (sic) was being replaced by enterprise

23 asset management. I'm going to suggest to you that

24 eventually the applied maintenance planning system, or

25 AMPS, will be replaced by enterprise asset management.

3769

 1   MR. VINCE WARDEN: You are correct. I

 2 -- I was thinking of the AMP system, not the Hydro AMP

 3 system. You're right.

 4   MR. BYRON WILLIAMS: So, Mr. Warden,

 5 let's just -- focussing on generation...

 6

 7   (BRIEF PAUSE)

 8

 9   MR. BYRON WILLIAMS: We have the old

10 applied maintenance planning system, or AMPS, that

11 ultimately will be replaced by enterprise asset

12 management program?

13   MR. VINCE WARDEN: That's correct, yes.

14   MR. BYRON WILLIAMS: And staying with

15 the enterprise asset management program, it is not yet

16 live, or whatever the fancy word computer people use?

17   MR. VINCE WARDEN: Not -- not fully in

18 service. It is being implemented in phases, and the --

19 the final phase is not yet in -- put into service.

20   MR. BYRON WILLIAMS: And, sir, what is

21 the expected in-service date for enterprise asset

22 management?

23

24   (BRIEF PAUSE)

25

 1   MR. VINCE WARDEN: Mr. Williams, rather

 2 than give a date that I'm not totally cer -- certain

 3 of, I -- I can take an undertaking if -- if -- that

 4 might be the preferable way to do that, because I -- it

 5 probably is a good idea that we have the exact date at

 6 this time. So I will do that.

 7   MR. BYRON WILLIAMS: Yeah, and I -- I

 8 thank you. And you're undertaking to identify when the

 9 enterprise asset management program is in place and re

10 -- in place of AMPS.

11   MR. VINCE WARDEN: Yes, and -- and it

12 might be useful if in -- since we are preparing an

13 undertaking, if we provide a summary of exactly what

14 the enterprise asset management system will do.

15   MR. RAYMOND LAFOND: And maybe how AIP

16 and EHR ties in with all this.

17   MR. VINCE WARDEN: We'll include that

18 as well, yes.

19

20 --- UNDERTAKING NO. 81:   Manitoba Hydro to identify

21   when the enterprise asset

22   management program is in

23   service in place AMPS, a

24   summary of exactly what the

25   enterprise asset management

3771

1   system will do, and how AIP

2   and EHR ties in; and, in

3   regards to Generation North

4   and South milestone dates,

5   indicate what the milestone

6   dates refer to and when

7   those milestone dates are

8

9   CONTINUED BY MR. BYRON WILLIAMS:

10   MR. BYRON WILLIAMS: And we've ag --

11 agreed, Mr. Warden, that to conduct an asset condition

12 assessment report for the generation side of the

13 equation, one (1) element that is necessary is the

14 enterprise asset management program?

15   MR. VINCE WARDEN: Yes.

16   MR. BYRON WILLIAMS: Now, flipping back

17 to page 51 of CAC-12, again to the bottom. And -- and

18 M. Lafond -- M. Lafond has referenced the asset invest

19 -- investment program.

20   And, Mr. Warden, do I understand your

21 evidence to be, in terms of the asset investment

22 program, or AIP, that it is in service but that the

23 required input data has not been validated by Manitoba

24 Hydro specialists?

25   MR. VINCE WARDEN: Yes.

3772

 1   MR. BYRON WILLIAMS: And going now back

 2   to the top of page 53, where we have, in the context of

 3   the HVDC, it would be accurate to -- to say that the

 4   HVDC is currently in the process of integrating

 5   condition assessment data into the new asset investment

 6   planning software system?

 7   MR. VINCE WARDEN: Yes.

 8   MR. BYRON WILLIAMS: And the reference

 9   at the bottom of the second paragraph, under, "Asset

10   Condition Reports," "to Generation South and North

11   milestone dates," Mr. Warden, and if you can't answer

12   it now I'd -- I'd like it as part of the undertaking,

13   is that referring to the Enterprise Asset Management

14   Program, the -- or the integration of condition

15   assessment data into the asset investment planning

16   software system?

17   MR. VINCE WARDEN: Sorry, Mr. Williams,

18   I'm not totally clear on your question. Would you just

19   repeat that.

20   MR. BYRON WILLIAMS: It wasn't a very

21   well asked question. I apologize for that. Under,

22   "Asset Condition Report," on page 53, the last sentence

23   says:

24   "Timing for this work is consistent

25   with Generation South and North

3773

1   milestone dates."

2   And, Mr. Warden, what I'm asking you is,

3 to what do those milestone dates refer and when are

4 those milestone dates? And you can do that by way of

5 undertaking.

6   MR. VINCE WARDEN: That would be best.

7 We'll -- we'll include that in the undertaking

8 previously taken.

9   MR. BYRON WILLIAMS: So in -- in -- the

10 addition to the undertaking would be with reference to

11 Generation North and South milestone dates to indicate

12 what the milestone dates refer to and -- and when those

13 milestone dates are.

14   Is that satisfactory, Mr. Warden?

15   MR. VINCE WARDEN: It is. Thank you.

16   MR. BYRON WILLIAMS: And, Mr. Warden,

17 at risk of clouding the record, we've also had a

18 discussion with regard to HydroAMPs, H-Y-D-R-O capital

19 A-M-P-S (sic).

20   MR. VINCE WARDEN: Yes, we have.

21   MR. BYRON WILLIAMS: And I would be

22 correct in suggesting to you that that program has been

23 up and running for a couple of years?

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

25   MR. BYRON WILLIAMS: Well, I'm not sure

3774

 1 if we've clouded the record, Mr. Warden, or cleared it

 2 up, but I think we're making -- making progress. I

 3 want to turn you to the issue of asset condition

 4 assessment with regard to transmission. And I'm cor --

 5 and page 53 of the material if you're looking for a

 6 reference.

 7   Mr. Warden, I'm -- I'm correct in

 8 suggesting to you that an RFP for consulting services

 9 was issued and a consultant was selected for this

10 purpose in January of 2012?

11   MR. VINCE WARDEN: Yes.

12   MR. BYRON WILLIAMS: And, Mr. Warden,

13 there's a suggestion that a transmission asset

14 condition report is expected to be completed by

15 December 31st, 2012.

16   Do you see that, sir?

17   MR. VINCE WARDEN: Sorry, Mr. Williams,

18 I was just getting some information to make sure I

19 could respond to your question, but I missed your

20 question, so.

21   MR. BYRON WILLIAMS: I should have been

22 watching, Mr. Warden. I apologize.

23   Was -- we were expecting a transmission

24 asset condition report as of December 31st, 2012,

25 agreed?

 1   MR. VINCE WARDEN: Yes. Yes, that's

 2 right. And that -- that was the question. I just

 3 wanted to clarify. My understanding is that that

 4 report is completed but has not been filed, or has not

 5 been reviewed by management at this point in time. At

 6 least I haven't seen it.

 7   MR. BYRON WILLIAMS: And will Manitoba

 8 Hydro be able to file that report in this proceeding?

 9   MR. VINCE WARDEN: Subject to check, on

10 that, Mr. Williams, I -- I'll say a tentative yes. Is

11 that qualified enough?

12   MR. BYRON WILLIAMS: Well -- well, how

13 about we do it this way out of fairness to you, Mr.

14 Warden: Will Manitoba Hydro undertake to review

15 whether that report can be filed, and undertake to

16 respond back if it cannot be filed?

17   MR. VINCE WARDEN: Yes, we'll do that,

18 Mr. Williams. Thank you.

19

20 --- UNDERTAKING NO. 82:   Manitoba Hydro to provide

21   transmission asset

22   condition report; and if it

23   cannot be file, to inform

24   Board

25

1 CONTINUED BY MR. BYRON WILLIAMS:

2   MR. BYRON WILLIAMS: And, of course, if

3 you're able to file it, you will?

4   MR. VINCE WARDEN: Yes.

5   MR. BYRON WILLIAMS: Now, Mr. Warden,

6 Manitoba Hydro for the transmission side of the

7 equation chose an external consultant?

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

9   MR. BYRON WILLIAMS: And for

10 distribution, was the bulk of the work done internally?

11   MR. VINCE WARDEN: Yes, it was.

12   MR. BYRON WILLIAMS: And for

13 generation, was the bulk of the work done internally?

14   MR. VINCE WARDEN: No. There were

15 consultants that were hired to assist with that

16 project; and we're talking there the enterprise asset

17 management project.

18   MR. BYRON WILLIAMS: So on the

19 transmission side, the ultimate report will be one

20 prepared by a consultant after review by Manitoba

21 Hydro?

22   MR. VINCE WARDEN: Well, you know,

23 without having the terms of reference for that

24 consultant before me -- you know, sometimes a

25 consultant will be hired to provide advice for -- on a

 1 short-term basis, and in this particular instance, I'm

 2 not sure just what role the consultant played.

 3   MR. BYRON WILLIAMS: Was there a

 4 difference in approach with regard to transmission as

 5 compared to distribution, in terms of the use of

 6 external consultants, Mr. Warden?

 7   MR. VINCE WARDEN: Well, there was a

 8 difference in approach in this instance, yes. The

 9 distribution condition assessment was prepared by

10 internal people. What advice they might have received

11 along the way, though -- and -- and that's why I

12 referred earlier to some short-term -- there may have

13 been some short-term consulting engagements associated

14 with distribution that I'm not totally familiar with.

15   MR. BYRON WILLIAMS: And on the

16 distribution side, would it be fair to say that Hydro

17 has filed in this proceeding a preliminary asset

18 condition report, but that still to come is the

19 development of a long-term capital plan and -- and

20 asset managent -- management structure for

21 distribution?

22   MR. VINCE WARDEN: Yes, that's fair to

23 say. I believe the condition report was filed as

24 Appendix 40. The capital plans flowing therefrom --

25 therefrom have not been filed at this point.

3778

 1   MR. VINCE WARDEN: Mr. Chair, I'm

 2 planning to turn to the distribution report. That

 3 document -- or an excerpt from it. That document has

 4 not been distributed. I have an additional exhibit.

 5 And I wonder if I -- I might, just for the purposes of

 6 -- of letting that document be distributed and -- and

 7 also to take a very brief break, if -- if that might be

 8 permissible, Mr. Chair? It's a bit early, but...

 9   THE CHAIRPERSON: Okay. Let's stand

10 down for five (5) minutes, then.

11

12 --- Upon recessing at 2:30 p.m.

13 --- Upon resuming at 2:43 p.m.

14

15   THE CHAIRPERSON: I believe we're ready

16 to commence. Ms. Ramage...?

17   MS. PATTI RAMAGE: Yes, thank you, Mr.

18 Chairman. You'll see we have yet another new face on

19 the Manitoba Hydro panel. In discussions with Mr.

20 Williams and seeing where he's going, we thought it

21 might be helpful to bring in Mr. Michel Monin -- Monin

22 -- sorry, Morin. That would be the Chief Justice.

23 Sorry. He would be good too, but nevertheless.

24   Michel Morin; he is the Distribution

25 Assess -- Asset Maintenance Manager for Manitoba Hydro.

3779

1 And seeing where Mr. Williams appears to be going, and

2 Mr. Hall was unavailable today, so in an attempt to

3 keep things moving we're suggesting he be sworn so that

4 we're not turning to our back row to be looking for

5 answers.

6

7   MICHEL MORIN, Sworn

8

9   THE CHAIRPERSON: Perhaps while Mr. --

10 Mr. Williams is -- is getting ready, we could ask a

11 ques -- I'd like to know, what's your role at Manitoba

12 Hydro, perhaps for the benefit of the panel, so we

13 understand where you fit in the hierarchy?

14   MR. MICHEL MORIN: Thank you, Mr.

15 Gosselin. My role is Distribution Asset Maintenance

16 Manager. We're sort of a centralized group to look at

17 maintenance and capital on the distribution side in

18 CS&D. So maintenance inspections, vegetation

19 management, and also some of our capital replacements.

20   THE CHAIRPERSON: Bienvenue. Mr.

21 Williams...?

22

23   MR. BYRON WILLIAMS: Thank you, members

24 of the panel, and I should note -- I should note that

25 Ms. Desorcy is -- is with us this afternoon and I thank

3780

1 her for her presence.

2   The -- the panel may have one (1) other

3 document on their table and I -- it should be

4 "Supporting Material, Part 2". And with the advice of

5 Mr. Simonsen, I believe that should be marked as CAC

6 Exhibit 14.

7

8 --- EXHIBIT NO. CAC-14:   Document, "Supporting

9   Material, Part 2"

10

11   MR. BYRON WILLIAMS: And, members of

12 the panel, I have one (1) question left to ask from

13 CAC-12 and then we're going to have a few on CAC-13,

14 which is the KEMA report, and then I expect we'll be

15 spending most of the rest of the day on CAC-14. There

16 is one (1) additional area that I -- I have for cross-

17 examination after that, which I do not believe we'll --

18 we'll get to today.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21   MR. BYRON WILLIAMS: Mr. Warden,

22 directing your attention to CAC Exhibit 12, page 49, at

23 the bottom, and page 50 at the top. This is back to

24 the -- directing your attention, in particular, page

25 49, line 23. This is back in the 2 -- 2010/'11-'11/'12

3781

1 GRA. And you can see a question from me suggesting to

2 you that:

3   "You can also understand how if it's

4   complex for Manitoba Hydro, for the

5   regulators seeking to test the

6   reasonableness and prudence of

7   expenditures it's also quite

8   complex."

9   Do you see that, sir?

10   MR. VINCE WARDEN: Yes, I do.

11   MR. BYRON WILLIAMS: And your

12 forthright answer on page 50 was that it was Manitoba

13 Hydro's responsibility to put its information into a

14 form that the regulator can accept and approve, such

15 that Manitoba Hydro's doing the right thing with

16 respect to the maintenance of its -- of its system.

17   Agreed?

18   MR. VINCE WARDEN: Yes, I'm not sure

19 that I -- my use of the word "approved" there was

20 totally correct. But, nevertheless, yes, I see the

21 statement you're referring to.

22   MR. BYRON WILLIAMS: And whether we put

23 in the word "approved" or not, Mr. Warden, what you are

24 saying there is, given the complexity of the

25 information coming from these different business units,

3782

1 and given the role of the Public Utility Board in

2 approving rates, it is incumbent upon Manitoba Hydro to

3 present this complex information in a manner in which

4 the Board can make an informed judgment.

5   Agreed?

6   MR. VINCE WARDEN: Yes, I -- I do agree

7 with that.

8   MR. BYRON WILLIAMS: Mr. Warden, I'd

9 ask you to turn to CAC Exhibit 13, which is an excerpt

10 from the KEMA report.

11

12   (BRIEF PAUSE)

13

14   MR. BYRON WILLIAMS: Do -- do you have

15 that, Mr. Warden?

16   MR. VINCE WARDEN: Yes -- yes, I have

17 it. Thank you.

18   MR. BYRON WILLIAMS: Mr. Peters, do you

19 need a copy? Like any good teacher, Mr. Warden, I'm

20 making sure all my pupils have their materials.

21   The -- and, Mr. Pet -- Mr. Peters -- Mr.

22 Warden, why -- why don't we both call each other Mr.

23 Peters and this...

24   MR. VINCE WARDEN: Well, I'm glad it's

25 not only me.

3783

1   MR. BYRON WILLIAMS: Mr. Warden, I

2 don't know if you recall having a brief discussion with

3 me about this report in the 2010/'11 General Rate

4 Application?

5   MR. VINCE WARDEN: Yes, I do recall

6 that.

7   MR. BYRON WILLIAMS: You were kind

8 enough to read the executive summary over a long

9 weekend?

10   MR. VINCE WARDEN: Yes, I did more than

11 read the executive summary, actually, yeah.

12   MR. BYRON WILLIAMS: And I thank you

13 for that, Mr. Warden. And we -- we won't spend long on

14 this report.

15   But it is common -- you'll agree it's

16 common be -- ground between you and I that this was a

17 report prepared for the Ontario Energy Board by KEMA,

18 focussed on the utility asset management practises for

19 regulatory purposes?

20   Can we agree on that, sir?

21   MR. VINCE WARDEN: Yes.

22

23   (BRIEF PAUSE)

24

25   MR. BYRON WILLIAMS: And, Mr. Warden,

3784

1 directing your attention to page 15 in the top right-

2 hand corner.

3

4   (BRIEF PAUSE)

5

6   MR. BYRON WILLIAMS: And under Section

7 2.1, and at the risk of giving you some ammunition for

8 -- for your argu -- argument, Mr. Warden, you'll see

9 that KEMA, in the first paragraph under Section 2.1, is

10 making the point that:

11   "Many network utilities are entering

12   a significant asset renewal phase and

13   that from both the perspective of

14   utilities and the regulators it is

15   increasingly essential -- essential

16   that they implement robust asset

17   management practises in order to

18   optimize asset replacement and future

19   operating costs."

20   Do you see that, sir?

21   MR. VINCE WARDEN: I do.

22   MR. BYRON WILLIAMS: And they go on, at

23 the end of that paragraph, to suggest that:

24   "The importance of adequate asset

25   management processes will be

3785

1   increasingly relevant in future years

2   to ensure that uneconomic investments

3   can be avoided without jeopardizing

4   overall network integrity."

5   MR. VINCE WARDEN: Yeah --

6   MR. BYRON WILLIAMS: That's what they

7   say?

8   MR. VINCE WARDEN: Yes.

9   MR. BYRON WILLIAMS: And, Mr. Warden,

10   those are statements that you can fully concur with?

11   MR. VINCE WARDEN: Yeah -- yes. And I

12   think we're all aware that this whole area of aging

13   infrastructure is getting attention in the public sec -

14   - throughout the public sector.

15   MR. BYRON WILLIAMS: And directing your

16   attention, sir, to the bottom of page 15, the last

17   paragraph, you'll see KEMA making the argument that:

18   "It is appropriate for regulators to

19   seek evidence of asset management cop

20   -- competence, when assessing

21   investment submissions from network

22   utilities, given that such

23   assessments provide assurance that

24   the utilities have understood and

25   prioritize their investment plans,

3786

 1   that their investment requirements

 2   are not over-stated, and that

 3   customer risk exposures are properly

 4   considered."

 5   Do you see that, sir?

 6   MR. VINCE WARDEN: Yes, I do.

 7   MR. BYRON WILLIAMS: And, again, you

 8 will -- that's a statement you can fully concur with?

 9   MR. VINCE WARDEN: It is.

10   MR. BYRON WILLIAMS: Now, at the bottom

11 of page 17, Mr. Warden, you'll see -- you'll -- sorry,

12 do you have that, Mr. Warden?

13   MR. VINCE WARDEN: Yes, yes I do.

14   MR. BYRON WILLIAMS: You'll see a

15 reference to asset management policy, and you'll see

16 KEMA suggesting that:

17   "An asset management policy document

18   is a requirement of any formal asset

19   management standard framework and

20   should contain information defining

21   the boundaries of the asset

22   management system and the portfolio

23   of assets required to ensure adequate

24   service delivery."

25   Do you see that, sir?

3787

1   MR. VINCE WARDEN: Yes.

2   MR. BYRON WILLIAMS: And also, you see

3 KEMA

4 arguing that such a document should be readily

5 available for regulatory scrutiny.

6   Agreed?

7   MR. VINCE WARDEN: Agreed.

8   MR. BYRON WILLIAMS: Now, Mr. Warden,

9 in terms of the -- the business units of Manitoba

10 Hydro, in terms of distribution, generation and

11 transmission, would -- if -- if I went looking for an

12 asset management policy document, as described by KE --

13 KEMA, would I find it?

14   MR. VINCE WARDEN: The asset management

15 policy should be something that overrides each of these

16 documents that we referred to.

17   Could you find it? You know, maybe I'll

18 let Mr. Morin speak to whether such a policy exists

19 within the distribution side of the business. I

20 certainly agree that it should be there, and it should

21 encompass such things as -- as when assets are replaced

22 due to reasons of -- of safety. You know, the primary

23 concern being safety, reliability, and environmental

24 considerations as well, as the -- as the -- the

25 financial economic impacts of -- of replacement of

3788

 1 assets.

 2   So, I -- I certainly agree that such a

 3 statement would be valuable and it should sit on front

 4 -- of each of the asset replacement or asset asses --

 5 assessment documents. But maybe I'll let Mr. Morin

 6 speak to whether such a statement exists with the

 7 distribution system.

 8   MR. BYRON WILLIAMS: Thank you, Mr.

 9 Warden.

10   MR. MICHEL MORIN: Hello, Mr. Williams.

11 On the distribution assets, we don't currently have a

12 policy on asset management strategy but we have a

13 policy for inspection of assets and maintenance. And

14 at the point of retirement, we're currently working on

15 sort of a -- an all -- like a comprehensive sort of

16 aging infrastructure retirement process based on those

17 inspections and maintenance practices.

18   MR. BYRON WILLIAMS: And -- and good

19 afternoon, Mr. Morin -- is that the proper way to say

20 that?

21   MR. MICHEL MORIN: Morin. Yeah --

22   MR. BYRON WILLIAMS: Morin?

23   MR. MICHEL MORIN: Yeah.

24   MR. BYRON WILLIAMS: And is that policy

25 P-348?

 1   (BRIEF PAUSE)

 2

 3   MR. MICHEL MORIN: We don't have all

 4   the policies in front of me. I'll just look it up.

 5   MR. BYRON WILLIAMS: You know, Mr.

 6   Morin, we'll -- we'll come -- come to that. No, go

 7   ahead.

 8   MR. MICHEL MORIN: I'm -- I'm so -- so

 9   close.

10

11   (BRIEF PAUSE)

12

13   MR. MICHEL MORIN: Hello. Sorry about

14   that. P-348 is a roadway lighting policy. There are

15   other policies for overhead inspection and underground

16   inspection and maintenance, so that -- that are not --

17   are different policies.

18   MR. BYRON WILLIAMS: And is -- is --

19   and than you for that, Mr. Morin. We'll come back to

20   you in a minute, Mr. Warden.

21   But as I understand your answer, Mr.

22   Morin, there are -- with regard to the various elements

23   of distribution, there are inspection policies. In --

24   in terms of a -- a formal asset management standard or

25   framework, am I correct in understanding you to say

3790

1 that that does not currently exist for the distribution

2 side?

3   MR. MICHEL MORIN: I guess, in response

4 to that, it would -- because there's such a -- a

5 variety of assets on the distribution side from poles

6 to conductors to roadway lighting, there's hundreds and

7 hundreds of different types of assets, so each one of

8 those assets has historically some type of replacement

9 guide or criteria, an all-encompassing one for

10 distribution. What you speak of is not yet developed,

11 but we're actually looking to kind of see how you can

12 integrate those decisions together.

13   MR. BYRON WILLIAMS: And does -- and I

14 don't want to put you farther than Mr. Hall or Mr.

15 Warden would -- would like you to go, but does

16 distribution have a time-frame for that, sir?

17   MR. MICHEL MORIN: We worked on this

18 report here over the last year and a half, and now the

19 next year and a half to two (2) years we're actually

20 continuing to progress on that. It's come a long way

21 actually in the last two (2) years, and even from some

22 of the evidence from before, and is continuing to

23 improve to get to where most utilities are moving

24 towards: a more integrated approach.

25   MR. BYRON WILLIAMS: And, Mr. Warden,

3791

 1 you cleverly de -- deferred the -- part of the answer

 2 to the distribution side. And recognizing your

 3 suggestion that, at the front of -- for each business

 4 unit, there should be a kind of a -- a common

 5 statement; to your knowledge, what is the -- the state

 6 of the -- the world in terms of generation and

 7 transmission?

 8   MR. VINCE WARDEN: With respect to the

 9 policy statements, Mr. Williams, I -- I don't have the

10 answer to that.

11   MR. BYRON WILLIAMS: Mr. Warden,

12 directing your attention to page 20 of CAC Exhibit 13.

13 Actually, Mr. Warden, I apologize, if I could back you

14 up one (1) page to page 19.

15   And certainly this statement -- you --

16 you see in the -- in the second paragraph a suggestion

17 by KEMA that:

18   "In order to model future asset

19   replacement volumes, it is

20   essentially that the entity maintains

21   accurate information about the assets

22   employed in terms of equipment type,

23   location, year of commissioning, et

24   cetera."

25   And first of all, to you, Mr. Warden, is

 1 that a statement that you can agree with?

 2   MR. VINCE WARDEN: It is.

 3   MR. BYRON WILLIAMS: And, Mr. Morin, in

 4 the real world of the -- the business unit, is --

 5 similarly, is -- is that a statement that you can agree

 6 with?

 7   MR. MICHEL MORIN: I would agree.

 8   MR. BYRON WILLIAMS: Mr. Warden, just a

 9 couple more from this -- this document. Directing your

10 attention to page 23, sir.

11   In the -- the second paragraph -- and

12 hopefully it's marked on the right-hand side with a

13 crooked line -- you'll see the statement by KEMA, that:

14   "In larger network utilities it is

15   unlikely that any single individual

16   will have sufficient knowledge to

17   optimize investment decisions across

18   the entire asset base, and,

19   therefore, robust processes and

20   systems are required."

21   Do you see that statement, first of all,

22 Mr. Warden?

23   MR. VINCE WARDEN: Yes, I do.

24   MR. BYRON WILLIAMS: And is -- is that

25 a statement that you can agree with?

3793

1

2   (BRIEF PAUSE)

3

4   MR. VINCE WARDEN: Yes, I'll agree with

5 that.

6   MR. BYRON WILLIAMS: Sorry, Mr. Warden,

7 Mr. -- Mr. Hacault made me -- made me laugh, which was

8 a poor choice on -- on my part.

9   Mr. Warden, if you could turn to page

10 24, and keep a page on 25, as well. And really, let's

11 focus on page 25, under the heading, "BSI Publically

12 Available Specification PAS [P-A-S] 55."

13   Would it be your understanding, Mr.

14 Warden, that over the last ten (10) or fifteen (15)

15 years within the United Kingdom, under the auspices of

16 the British Standards Institute, there has been a

17 framework for infrastructure asset management developed

18 and implemented?

19   MR. VINCE WARDEN: Mr. Williams, I -- I

20 rely on this report for that information, but based on

21 what's here, I can accept that.

22   MR. BYRON WILLIAMS: And it's described

23 -- and recognizing that your knowledge is limited, Mr.

24 Warden, but it's des -- it's described as a

25 specification for the optimized management of physical

3794

1 infrastructure assets by KEMA?

2   MR. VINCE WARDEN: Yes, that's how it's

3 described here.

4   MR. BYRON WILLIAMS: And going down

5 under the two (2) bullets, you'll see a description of

6 PAS, all capitalized, 55, providing a common framework

7 acro -- across twenty-one (21) di -- dimensions of good

8 asset management.

9   Do you see that reference, sir?

10   MR. VINCE WARDEN: Yes, I see the

11 reference.

12   MR. BYRON WILLIAMS: And just going to

13 the next paragraph. And then we'll -- we'll leave

14 this. You also see the -- the suggestion by KEMA, that

15 over the past three (3) years the majority of electri -

16 - electricity and gas network utilities in Great

17 Britain have developed and certified their asset

18 management systems in accordance with the PAS-55

19 standard.

20   Do you see that, sir?

21   MR. VINCE WARDEN: I see that, as well.

22   MR. BYRON WILLIAMS: And so, Mr. -- Mr.

23 Warden, in terms of Manitoba Hydro's asset management

24 practices, my -- my question to you is whether the

25 Utility has sought external verification or

 1 certification of its approaches?

 2   MR. VINCE WARDEN: Well, as we

 3 discussed earlier, we -- we have employed consultants

 4 for purposes of assisting with the implementation of

 5 the enterprise asset management system. So, these are

 6 system people, but typically, the system people come

 7 with knowledge of other -- what's happening in other

 8 jurisdictions.

 9   So, to that extent, yes, we are getting

10 external advice and guidance on -- on how we're

11 structuring our data.

12   MR. BYRON WILLIAMS: I thank you for

13 that, Mr. Warden. And I guess I was probing a little

14 deeper. Perhaps not at this point in time, but you

15 would acknowledge that there is the potential as -- as

16 the asset management processes at Manitoba Hydro

17 mature, to have an external audit or certification of

18 whether those practices meet generally accepted

19 standards, agreed?

20   MR. VINCE WARDEN: I think that is, Mr.

21 Williams, a consideration for the future. We would

22 have to assess whether there was value in that. I

23 think one (1) of the things I derived from reading this

24 KEMA report is that there is a -- a wide variety of

25 practices being followed around the world with respect

3796

1 to this issue. And I -- and I found -- I found it very

2 informative and useful, so I do thank you for providing

3 me with this.

4   But as to whether or not we ever reach

5 the stage where we want to implement standards, we --

6 we haven't reached that stage yet and -- and I think

7 that's a decision for the future.

8   MR. BYRON WILLIAMS: And I -- I thank

9 you for that. And, Mr. Warden, I also thank you for

10 your insight, you know, about the different approaches

11 in -- in different jurisdictions.

12   Certainly, based upon your reading of

13 KEMA, you -- you would agree that generally it's the --

14 the British standards or -- and approach that is

15 generally seen to be the leading approach, sir?

16   MR. VINCE WARDEN: That would appear to

17 be the case, yes.

18   MR. BYRON WILLIAMS: And there

19 certainly may be lessons that Manitoba Hydro can -- can

20 pull from that experience?

21   MR. VINCE WARDEN: I -- I would agree,

22 yes.

23   MR. BYRON WILLIAMS: Okay. Thank you

24 for that.

25   Mr. Morin, if I terribly mispronounce

3797

 1 your name you will chastise me and -- and not hurt my -

 2 - my feelings. Before we get to -- I'm going to ask

 3 you to turn to CAC Exhibit 14. And I'm sure you have

 4 the -- the full zillion page report, Mr. Morin. I've

 5 just provided some excerpts from this document.

 6   But before we go into the document

 7 itself, if I were seeking to define the Distribution

 8 Maintenance Planning System, or DMPS, would I be

 9 correct in suggesting to you that the DMPS is Hydro's

10 database application used to track assets and

11 prioritize distribution equipment maintenance?

12   MR. MICHEL MORIN: That is correct.

13   MR. BYRON WILLIAMS: And as Manitoba

14 Hydro seeks to centralize the management and analysis

15 of distribution asset condition information, a central

16 feature of that effort has been DMPS, which notionally

17 enables the capture of asset condition information

18 across the province.

19   Agreed?

20   MR. MICHEL MORIN: Agreed.

21   MR. BYRON WILLIAMS: And if I suggested

22 to you another term was "electronic Geographical

23 Information System," or eGIS, would I be correct in

24 suggesting to you that -- that eGIS are utilized to

25 store distribution asset data?

3798

1   MR. MICHEL MORIN: A -- A Small World

2 (phonetic) is our design tool for designing the lines

3 and equipment. DMPS is more of our asset registry. So

4 if you had to differentiate the two (2), that would be

5 the two (2) differences.

6   MR. BYRON WILLIAMS: Thank you. So

7 DMPS is the asset registry and eGIS -- I wonder if you

8 can rep -- repeat your description of it.

9   MR. MICHEL MORIN: eGIS is your

10 geospacial software which houses your assets in a sort

11 of geo -- geospacial format. DMPS and eGIS talk to

12 each other. So if it needs asset information it goes

13 to DMPS to get it, or vice versa; if DMPS needs

14 location information, it gets it from the geographic

15 software.

16   MR. BYRON WILLIAMS: Okay. And -- and

17 eGIS enable geospac -- the geospacial -- geospacial

18 view of distribution system assets and facilities and

19 electronic queries of asset data?

20   MR. MICHEL MORIN: Correct.

21

22   (BRIEF PAUSE)

23

24   MR. BYRON WILLIAMS: Mr. Morin, I can't

25 remember the actual title of the distribution asset

3799

1 condition assessment, but if I use those words we'll

2 know what I'm talking about.

3   And, in terms of the history of this

4 document, the original draft of this document was

5 completed in -- in April of 2012?

6   MR. MICHEL MORIN: Correct.

7   MR. BYRON WILLIAMS: And it went up to

8 executive committee and -- and got a -- received a few

9 comments and -- and was revised in August of 2012.

10   Agreed?

11   MR. MICHEL MORIN: Agreed.

12   MR. BYRON WILLIAMS: So, Mr. Morin,

13 would the material found in this document be a -- a

14 fair representation of Manitoba Hydro's current

15 knowledge of its distribution assets?

16   MR. MICHEL MORIN: The -- the report

17 would provide details on the distribution assets

18 outside of the stations and the eight (8) critical.

19 There's other assets that were not evaluated, just

20 'cause it's just the amount of volume of different size

21 and quantities, but this would be for assets outside of

22 the station fence and the eight (8) critical ones, yes.

23   MR. BYRON WILLIAMS: And just by way of

24 overview of the report, you mentioned the eight (8)

25 critical distribution assets; and those would include

3800

1 poles, overhead conductors, overhead transformers,

2 street lights, underground cable, duct lines, manholes,

3 and padmount transformers, sir?

4   MR. MICHEL MORIN: That is correct.

5   MR. BYRON WILLIAMS: And again, just at

6 a high level -- and we'll get into more detail as we

7 move along -- but would I be correct in suggesting to

8 you that the report attempts to document the quantity

9 of each asset type on the system and its value?

10   MR. MICHEL MORIN: Yes.

11   MR. BYRON WILLIAMS: And that it

12 classifies each asset category as to the proportion of

13 assets that are in acceptable health, fair or poor

14 health, and critical health?

15   MR. MICHEL MORIN: The report tries,

16 for planning purposes, to look at the existing

17 inventory, their condition, what we've seen in -- in

18 failure rates or degradation, and tries to sort of --

19 for kind of long-term planning, sort of, identify

20 groups of conditions based on volume, yeah.

21   MR. BYRON WILLIAMS: And so, what

22 you're telling me is that it -- it takes a picture of

23 where it thinks assets are today, and additionally it

24 tries to estimate or forecast the proportion of assets

25 for each category that will be in critical health out

1   twenty (20) years.

2   Agreed?

3   MR. MICHEL MORIN: That -- that is

4   correct. As kind of a follow-up for your comments

5   earlier about age. Like, we don't replace anything on

6   age, but age typically has a window of when degradation

7   sort of happens in a similar pattern. So, we're sort

8   of using age as our only known 'cause we're -- in

9   absence of assessment data twenty (20) years out,

10   you're sort of grouping them in age or types of

11   material.

12   And based on those types of -- of

13   degradation results we're seeing now, we're trying to

14   extrapolate that farther out to see where these assets

15   will be, in what condition, to sort of identify

16   possible replacement rates.

17   MR. BYRON WILLIAMS: And -- and what

18   you are telling me, Mr. Morin, is in terms of the eight

19   (8) assets, while Hydro may conduct inspections for two

20   (2) or three (3) of them, for the remainder, age is --

21   is a primary vehicle by which you estimate degradation?

22   MR. MICHEL MORIN: I guess that goes

23   back to the uniqueness of the distribution, just 'cause

24   there's millions of components. Like just poles along,

25   there's a million. Where looking at, sort of, other

3802

1 aspects like generation and transmission, here you have

2 underground cables, you know, sixty thousand (60,000)

3 street lights, it's very difficult to have an

4 assessment of each one (1) of those items. So by

5 lumping of them together that way, we're sort of

6 getting an idea of how they're kind of aging, in a --

7 in a sort of -- I don't know what the right word to use

8 is, but just getting a -- sort of a picture of how they

9 might degrade in the future.

10   MR. BYRON WILLIAMS: And, Mr. Morin,

11 just on that point and let -- let's go back to my

12 question one (1) ago, first of all -- and we can go

13 into this in more detail but for some of the assets,

14 such as poles, there are inspections?

15   MR. MICHEL MORIN: Correct. Actually,

16 on -- on poles, we could talk about poles --

17   MR. BYRON WILLIAMS: We could talk

18 about poles forever.

19   MR. MICHEL MORIN: Yeah, they're -- tho

20 -- those ones are on a -- on a routine inspection, once

21 every fifteen (15) years on distribution and once every

22 eight (8) to ten (10) on transmission. And through

23 those inspections we, one, understand the failure rates

24 and replace poles, and also to add preservatives to

25 prolong their life.

3803

 1   MR. BYRON WILLIAMS: And what you are

 2 telling me though in terms of some of the other assets,

 3 such as underground cable, is they're not inspected on

 4 the regular basis that poles are, sir?

 5   MR. MICHEL MORIN: Cor -- correct.

 6 Underground cable, we're -- since this report has been

 7 written, and you see some of the recommendations, we've

 8 already beginning act - started acting on some of those

 9 recommendations.

10   We have a working group working on

11 underground assets, and one (1) of them is underground

12 cables because they're a significant part of what you

13 see in -- in some of the future capital expenses, or

14 expenditures. And part of that review -- we've already

15 started talking to various vendors and other utility

16 contacts about inspections, and also some other life --

17 life extending processes. So we're -- we're looking at

18 doing some inspections in the future.

19   MR. BYRON WILLIAMS: And -- and just to

20 stay with underground cables for a minute, sir, what

21 you're again telling us is that at the time of the

22 writing of this report there was not a series of

23 inspections for underground cables analogous to the

24 inspections that you reference in terms of poles?

25   MR. MICHEL MORIN: Yeah. Typically,

3804

1 we're doing more of the equipment inspections, like the

2 pad mounts and switch gear. But the cables themselves,

3 we -- we ran some pilots a few years back, and now

4 we're bringing those -- the theme of those pilots back

5 because of the -- what we're starting to see with the -

6 - the change in the condition of the assets.

7   MR. BYRON WILLIAMS: And that's

8 helpful, sir. But just in terms of -- in fact, it's

9 very helpful. But just in terms of my question,

10 Manitoba Hydro was not conducting active investigation

11 or inspections of underground cable at the time this

12 report was written?

13   MR. MICHEL MORIN: Not that I'm aware

14 of on inspection of the actual cables. Determinations

15 and the equipment attached to them, yes.

16   MR. BYRON WILLIAMS: And to go back,

17 sir, to...

18

19   (BRIEF PAUSE)

20

21   MR. BYRON WILLIAMS: And to go back,

22 sir, to your comment about five (5) questions ago about

23 how some of the estimates from Manitoba Hydro were

24 driven by expectations of aging underground cable in

25 terms of the outlook twenty (20) years out, that was

3805

1 one (1) of those categories, agreed?

2   MR. MICHEL MORIN: Correct.

3   MR. BYRON WILLIAMS: And we'll get into

4 -- to more detail in a few minutes, Mr. Morin, but in

5 terms of the areas where the asset categories were over

6 the next twenty (20) years Hydro anticipates that

7 degradation will be most critical, am I correct in

8 suggesting to you that that would include underground

9 cables, wood poles and streetlights?

10   MR. MICHEL MORIN: That would be

11 correct.

12   MR. BYRON WILLIAMS: And again, at an

13 overview level, Mr. Morin, in terms of this report,

14 what Manitoba Hydro sought to do was to identify the

15 likelihood and consequence of asset failure by each

16 type of asset with consequences being based on

17 financial, reliability, safety and other criteria?

18   MR. MICHEL MORIN: Correct.

19   MR. BYRON WILLIAMS: And if one were to

20 look at your high priority recommendations, Mr. Morin,

21 it's not in the materials before the Board, but for

22 you, Mr. Morin, it's at page 29 of your report,

23 recommendation number 1 would be to enhance the asset

24 management strategy for the underground distribution

25 system, agreed?

3806

1   MR. MICHEL MORIN: Yes.

2   MR. BYRON WILLIAMS: Recommendation

3 number 2 would be the development of a long-term

4 capital investment plan to address the aging

5 infrastructure, agreed?

6   MR. MICHEL MORIN: Agreed.

7   MR. BYRON WILLIAMS: Recommendation

8 number 3 would be to enhance inspection and maintenance

9 processes for distribution assets?

10   MR. MICHEL MORIN: Yes.

11   MR. BYRON WILLIAMS: I'm going to skip

12 the streetlight integrity assessment and another

13 recommendation was to continue to implement detailed

14 asset inspections to further optimize asset life

15 cycles, agreed?

16   MR. MICHEL MORIN: Yes.

17

18   (BRIEF PAUSE)

19

20   MR. BYRON WILLIAMS: Now, Mr. Morin, if

21 we can turn to page 1 of CAC Exhibit 14, and -- and

22 you'll see a reference to inspection and maintenance

23 practices.

24   Do you see that, sir?

25   MR. MICHEL MORIN: Yes.

3807

 1   MR. BYRON WILLIAMS: And in terms of

 2 cables, would it be fair to say that an issue

 3 identified at the time of the writing of this report

 4 was that no inspection and maintenance practices exist

 5 for underground cables?

 6   MR. MICHEL MORIN: For the actual

 7 cables themselves, yeah, there was no inspection

 8 practices.

 9   MR. BYRON WILLIAMS: And, sir, that's

10 the category which over the next twenty (20) years

11 Manitoba Hydro is estimating $500 million in

12 expenditures?

13   MR. MICHEL MORIN: Historically cables

14 would be replaced on the amount of faults and outages

15 the cable would have. There's some newer technologies

16 now that allow you to actually maybe get a -- a health

17 index of the cable and that's what we're exploring.

18   We're -- previously you would have been

19 more your -- your faults and since we're just at the

20 beginning of seeing our cables starting to -- to change

21 in -- in activity as far as faults, prior to that, you

22 know, testing them ten (10) years ago, right now those

23 -- those cables have almost exceeded most industry

24 standards and still serving us -- serving the -- the

25 system.

3808

1   So right now we're looking at as the --

2   we can kind of predict the faults might increase, we

3   want to maybe look at this new technology and start

4   inspecting and -- and try to get a health on these

5   cables.

6   MR. BYRON WILLIAMS: Now in terms of

7   duct lines, sir, is it correct that at the time this

8   report was prepared that no inspection and maintenance

9   practices existed for duct lines?

10   MR. MICHEL MORIN: I don't know if

11 you're familiar with duct lines. They're a civil sort

12 of type structure underground. So they've been there

13 for, you know, eighty (80) years, some of them as long

14 as eighty (80) years, so without having any issues with

15 them there was no inspection practice to -- to be able

16 to inspect them other than if anything was notable with

17 -- as we were moving cables in and out of them if

18 something was noticed that we couldn't access any of

19 the conduit then we'd look further, but there was no

20 actual inspection process for duct lines.

21   MR. BYRON WILLIAMS: And focussing on

22 the ever popular Padmount transformers, within the City

23 of Winnipeg there was a -- a yearly security check,

24 correct?

25   MR. MICHEL MORIN: Actually, security

3809

1 checks happen throughout the province.

2   MR. BYRON WILLIAMS: Would it be fair

3 to say that outside the City of Winnipeg, at the time

4 of the writing of this report, this task is org -- was

5 organized at the location CSC level and was

6 inconsistent?

7   MR. MICHEL MORIN: I would think more,

8 that's on more the inspection and maintenance of the

9 padmounts. So security checks are more of a visual to

10 check to see if there's any corrosion, leaking, locks

11 in place for public safety.

12   Inspections are more you're operating

13 some of the switches, pulling some of the elbows.

14 That's what you might have seen that was maybe

15 inconsistent outside the City of Winnipeg.

16   MR. BYRON WILLIAMS: Okay. Thank you

17 for that clarification. Now you spoke of poles and in

18 terms of poles there's both the -- the integrated pole

19 management inspections completed every fifteen (15)

20 years or so, that's one (1) element of it, sir?

21   MR. MICHEL MORIN: Yes.

22   MR. BYRON WILLIAMS: And it's also fair

23 to say that poles are examined visually or are intended

24 to be examined visually every six (6) years as part of

25 circuit inspections by operational staff?

3810

1   MR. MICHEL MORIN: Correct.

2   MR. BYRON WILLIAMS: And at the time of

3 the writing of this report, these inspections had not

4 been consistently completed and data quality was a

5 concern?

6   MR. MICHEL MORIN: Yes.

7   MR. BYRON WILLIAMS: And in terms of

8 overhead conductors, would it be fair to say that they

9 were -- the intent was to examine them vis -- visually

10 every six (6) years as a part of circuit inspections?

11   MR. MICHEL MORIN: Yes. The -- the

12 conductors and the poles, it would be on the same sort

13 of inspection. We've recently implemented maintenance

14 plans because, as I said, we're talking again the sheer

15 volumes of millions of small aggregate little parts

16 going from Churchill to Emerson to either side of the

17 province.

18   We've since implemented a maintenance

19 plan, so every area has an actual plan, and we've taken

20 an inventory of poles, street lights, Padmount

21 transformers, those types of assets, created zones, and

22 then we started even implementing electronic data

23 collections. And now the inspector can be driving down

24 the road and seeing what he's -- what he's inspecting,

25 clicking on it, so there's no more paper so you're not

3811

1 transposing information.

2   On top of that, we started bringing in

3 people for training. So before, where people -- across

4 the province, you'd have eighteen (18) or eighty (80) -

5 - eighty (80) different perspectives on -- on sort of

6 what the condition of that is. So we've brought in

7 training now to certify the inspectors to try to

8 increase that accuracy and that quality of data, so

9 that's all been implemented recently and we're starting

10 to see some of the gains of that in a very short time.

11   MR. BYRON WILLIAMS: And -- and that's

12 nice to hear, sir. Now at the time of the writing of

13 the report in terms of overhead conductors, the concern

14 would be that these -- these inspect -- inspections had

15 not been consistently completed and there was a concern

16 with data quality.

17   MR. MICHEL MORIN: Correct, because we

18 didn't have the tools or data capture items that we

19 have now to -- to have the confidence that we're --

20 we're getting.

21   MR. BYRON WILLIAMS: And we'll go back

22 to poles just for a second. In terms of poles, it

23 would be fair to say that -- that, while Manitoba Hydro

24 now estimates that it has over a million poles, for

25 quite a long time its estimate was seven hundred

3812

1 thousand (700,000).

2   MR. MICHEL MORIN: That is correct.

3 Because this asset has been put in in little pieces

4 throughout the province from the '30s, you'd -- you

5 know, you build a line, a customer would want to be

6 added on. Five (5) years later, there could be ten

7 (10) poles; another fifteen (15) years later, another

8 four (4) poles or -- you know. So it was all built in

9 small little segments and it was never recorded, and

10 that goes back to recently when we started bar coding.

11   So we started bar coding these assets to

12 better understand the inventories so we can start to

13 have an asset management plan for such a large asset as

14 poles, and partway through the -- the project, we

15 realized that the seven hundred (700) wasn't close and

16 we're nearing a million.

17   So that allows you now to put a unique

18 identifier on that asset, which even though it's a --

19 it's a -- kind of like a Bic lighter when you compare

20 it to transmission or -- or generation, but the

21 aggregate is a fairly significant amount.

22   But now that we have a -- a bar code on

23 there, we can get year of manufacture, start tracking

24 failure rates, all of those things which are going to

25 allow us to, with confidence, you know, manage our

3813

1 capital spending or deferred capital based on more of a

2 -- of a document -- you know, a -- a -- I don't know

3 what the right word to use there, sorry -- more complex

4 analyticals -- analytical tools.

5   MR. BYRON WILLIAMS: Thank you for

6 that. And -- and let's just finish off with street

7 lights. At the time of the writing of this report,

8 tools to assess the condition of the low-grade

9 corrosion for direct buried and power squirrel --

10 power-screw installations had not been implemented?

11   MR. MICHEL MORIN: That is correct. We

12 canvassed -- we did several surveys with other

13 utilities. There was no real known -- I think

14 everyone's in the same boat with these below-grade

15 metal standards. We've since just recently done a

16 pilot to do some different inspections. We tried to do

17 some inspections with adding some protection, some --

18 putting some anodes on the standards to potentially

19 extend their service life once we've inspected them.

20 So this is new for -- for many utilities across North

21 America.

22   MR. BYRON WILLIAMS: Okay. Thank you

23 for that.

24

25   (BRIEF PAUSE)

3814

1   MR. BYRON WILLIAMS: Mr. Morin, I want

2 to talk cable and, first of all, we've agreed that, in

3 terms of Manitoba Hydro's preliminary estimate of the -

4 - the funding gap relating to distribution, the -- the

5 largest ticket item is cable, sir?

6

7   (BRIEF PAUSE)

8

9   MR. MICHEL MORIN: Yes.

10   MR. BYRON WILLIAMS: And directing your

11 attention to page 5 of CAC-14, Mr. Morin, and indeed

12 the very last line, would it be accurate to say at the

13 ti -- that at the time of the writing of this report

14 Manitoba Hydro had not established formal cable

15 condition assessment criteria?

16   MR. MICHEL MORIN: We had an assessment

17 criteria or replacement criteria based on failures

18 prior. So we wouldn't change any cable without it

19 having to have a performance issue.

20   What we're trying to do now with

21 inspections is to sort of predetermine where those

22 failures might occur to better understand because it's

23 the volume of assets moving through that degradation at

24 the same time.

25   MR. BYRON WILLIAMS: So previously,

 1 sir, you essentially drove the cable asset until it

 2 failed, and then -- then replaced it?

 3   MR. MICHEL MORIN: That is correct. It

 4 was a run to failure.

 5   MR. BYRON WILLIAMS: And just turning

 6 to the top of page 6, you'll see the suggestion on the

 7 very first line, that:

 8   "Manitoba Hydro does not have an

 9   established health condition rating

10   system in place for underground

11   distribution cable."

12   And that was correct at the time of the

13 writing of this report? I'm not sure I heard you.

14   MR. MICHEL MORIN: That is correct.

15   MR. BYRON WILLIAMS: Mr. Morin, if you

16 could distinguish for my clients and I what a formal

17 cable condition assessment criteria is versus an

18 established health condition rating system?

19   MR. MICHEL MORIN: If we were to pursue

20 these testing opportunities, it would be another data

21 set to be able to give an assessment of the cable.

22   MR. BYRON WILLIAMS: Which would be,

23 sir, the formal cable condition assessment criteria or

24 the established health condition rating system, and how

25 are they distinguished?

3816

1

2   (BRIEF PAUSE)

3

4   MR. MICHEL MORIN: Can you point to me

5 the two (2) areas where you're referencing in the

6 report so I can see the context? Thanks.

7   MR. BYRON WILLIAMS: Yes. And I

8 apologize for the confusion. At the bottom of page 5,

9 under Section 1.3, there's a reference to formal cable

10 condition assessment criteria. And then at the top of

11 page 6, and realize, Mr. Morin, I'm pulling from

12 different parts of the pa -- paper, under, "Asset

13 health," there's a re -- a reference to established

14 health condition rating system.

15   MR. MICHEL MORIN: I believe we're

16 referencing essentially the same thing.

17   MR. BYRON WILLIAMS: And what does it

18 do, sir?

19

20   (BRIEF PAUSE)

21

22   MR. MICHEL MORIN: I guess that would

23 create the framework of actually inventorying your

24 assets in different types of conditions.

25   MR. BYRON WILLIAMS: So at the time of

1 the wri -- writing of that report, that framework for

2 inventory and the assets had -- was not in place. Is -

3 - is it in place today, sir?

4   MR. MICHEL MORIN: No, we're continuing

5 to work on that with that newly formed underground

6 working group.

7   MR. BYRON WILLIAMS: And directing your

8 attention, sir, to page 52 -- excuse me, page 7, in the

9 top right-hand corner. Yeah, page 7 in the top right-

10 hand corner, under Section 1.61, you'll see a sentence

11 suggesting Manitoba Hydro has not established a formal

12 risk assessment process for cables.

13   And -- and a similar question, Mr.

14 Morin: How does the formal risk assessment process

15 differ from the formal cable condition assessment

16 criteria?

17

18   (BRIEF PAUSE)

19

20   MR. MICHEL MORIN: I guess that's more

21 related to the crilic -- criticality of the customers

22 and the -- and the network that the cables feed. Right

23 now, as you can see in the report, we don't change very

24 many cables. Manitoba Hydro has not done very much

25 cable replacement at all, so we haven't invested any

3818

1 money in -- in replacing cable. It's -- the majority

2 of it's on the first install.

3   So we're just coming to this for the --

4 it's -- it's new to our utility like many others, so

5 we're just coming to that first page of how -- how do

6 we want to handle it, how do we want to prioritize it,

7 and is there other tools to help us with that risk -- I

8 guess, risk based sort of assessment.

9

10   (BRIEF PAUSE)

11

12   MR. BYRON WILLIAMS: Now I know it's

13 not the -- the biggest volume of -- of cable, Mr.

14 Morin, but as a lawyer from the Public Interest Law

15 Centre, or PILC, I am very fond of PILC cables, and we

16 always like to get in a bit of advertising.

17   And in terms of the installation dates

18 for PILC cable, would I be correct in suggesting to you

19 that there is very limited data readily available for

20 PILC cable installation dates?

21   MR. MICHEL MORIN: Yeah, it's more

22 historical ranges rather than exact dates.

23   MR. BYRON WILLIAMS: And indeed,

24 although the life stan -- span of PILC cable is

25 estimated at seventy (70) years, the cable age and

3819

1 asset condition profile is currently unknown?

2

3   (BRIEF PAUSE)

4

5   MR. MICHEL MORIN: I believe we have

6 some records on some installation dates and some of

7 their older cables have had some failures. Part of

8 that working group is to look at all aspects of where

9 our data resides, if there's any old paper records or

10 anything and -- and that's one (1) where it encompasses

11 that underground asset management strategy to really

12 look at it from the beginning and see where we can find

13 some of this information.

14   MR. BYRON WILLIAMS: To the extent it

15 exists, I would be correct in suggesting to you it's --

16 it's not in the electronic database as much as in dusty

17 paper files?

18   MR. MICHEL MORIN: You know what, I

19 wouldn't know of -- exactly, but I would assume it

20 wouldn't as electronic as some of the other assets,

21 correct.

22

23   (BRIEF PAUSE)

24

25   MR. MICHEL MORIN: Talking with my

3820

1 counterpart behind me, he's saying a lot of the station

2 dates would sort of have a similar time of installation

3 when the stations were put in and those cables were

4 installed at relatively the same time. So there again,

5 the underground working groups going to be looking at

6 ways to try to gather that data for future planning

7 purposes.

8   MR. BYRON WILLIAMS: Okay, thank you

9 for that. And -- and if you could turn -- we'll --

10 we'll leave cable right away but turn to page 10, in

11 the top right-hand corner of CAC-14. Under item number

12 seven (7), would I be correct in suggesting to you that

13 little information on underground cable is captured in

14 the existing eG -- eGIS cable log object?

15

16   (BRIEF PAUSE)

17

18   MR. MICHEL MORIN: I think the -- the

19 type and the size of a majority of our cable is in the

20 eGIS. It's more the splice data that's missing.

21   MR. BYRON WILLIAMS: So what's missing

22 from eGIS is the collection of spi -- splice location

23 and the number of faults experienced on a section?

24   MR. MICHEL MORIN: Correct, just more

25 for maybe some background there. When the cable was

3821

 1 installed it was on reels and when the reel would run

 2 out you would put a quick kind of connection as you're

 3 in the trench and you continue on with the next reel

 4 and those splices wouldn't have been documented, or if

 5 someone in the middle of the night had a -- an outage,

 6 or that they were fixing a splice or on a weekend or --

 7 they would repair that splice and the outage was more

 8 assigned to the feeder not to the actual section of

 9 cable, because there's -- you can imagine how many

10 pieces of cable are in the ground, so the -- it was

11 never documented.

12   The underground working group has been

13 looking at the process of actually having the ability

14 to document those exact splices now that technology's

15 changing and part of that testing that we talked about,

16 underground cable, will actually identify how many

17 splices in a section.

18   So if you test it and you -- and you

19 create an asset data set for your underground cable,

20 you're able now to long-term find out which cables have

21 had how many -- how many splices in them.

22   So -- so we're moving towards that and -

23 - and with that testing it's going to gather that

24 information that we would have never had and actually

25 provide it to us.

3822

 1   MR. BYRON WILLIAMS: And, sir, just

 2 before I get back to thumping, which is an intriguing

 3 concept, in terms of the new technology, and I don't

 4 have a reference from the materials before you, but

 5 some of it with regard to underground cable relates to

 6 silicone injection?

 7   MR. MICHEL MORIN: That's correct, a

 8 new process that's coming to the industry. It's been

 9 tested now for a while and seeing some good results is

10 cable injection and what that is is an older style of

11 cable that is not used anymore, you're able to inject

12 it.

13   So rather than a -- a replacement where

14 you're disrupting a neighbourhood and digging up all of

15 that cable, you take both ends and you -- and you

16 basically push from one (1) end and -- and pull from

17 the other, it has suction, and you rejuvenate the cable

18 and they're starting to get some really lengthy results

19 out of that.

20   And that's hence what that working group

21 is piloting some -- back to that injection process,

22 which for overall expenses it defers replacement and it

23 extends the service life of your cable with minimal

24 impact to the customer.

25   MR. BYRON WILLIAMS: And -- and as I

3823

1 understand it, sir, in terms of that -- that -- the

2 sili -- silicone injection, and thank you for the help

3 with that, Manitoba Hydro conducted a pilot with regard

4 to the Waverley West area, which ended in 2008?

5   MR. MICHEL MORIN: I believe the pi --

6 the pilot was in Waverley Heights and -- and in the

7 Maples, and yeah, we did pilot it and there again,

8 we've been in discussions with the two (2) main vendors

9 over the last three (3) months and are looking to

10 reestablish that pilot. And part of the -- the asset

11 condition report talks about a heavy reliance on

12 injecting cables to prolong those assets rather than

13 switch to a more costly replacement.

14   MR. BYRON WILLIAMS: And, sir, just in

15 -- in terms of the Waverley Heights and Maples pilots,

16 those ended in 2008?

17

18   (BRIEF PAUSE)

19

20   MR. MICHEL MORIN: I think it was over

21 about a five (5) year period that they, you know,

22 performed that pilot in different areas of the city.

23   MR. BYRON WILLIAMS: And that was

24 between 2003 and 2008, sir?

25   MR. MICHEL MORIN: I'm presuming so.

 1 Yeah, I believe it's that window, yes.

 2   MR. BYRON WILLIAMS: And what you're --

 3 you've also told us is that that approach has been

 4 reinvigorated over the last three (3) months and there

 5 are discussions going on with two (2) leading vendors?

 6   MR. MICHEL MORIN: That's correct.

 7   MR. BYRON WILLIAMS: At page 9 of CAC

 8 Exhibit 14, I'm not sure that much turns on it, but I -

 9 - I have to ask you about -- Mr. Morin, I have to ask

10 you about thumping. And referring under medium

11 priority there's a reference to:

12   "Troubleshooting relying on thumping

13   and re-closing in -- in location XLPE

14   cable faults can result in premature

15   cable failure."

16   You see that reference, sir?

17   MR. MICHEL MORIN: Yes.

18   MR. BYRON WILLIAMS: And I'm presuming

19 that thumping is no longer a recommended practice?

20

21   (BRIEF PAUSE)

22

23   MR. MICHEL MORIN: Thumping is -- is a

24 way of identifying where the fault is. So when you

25 have an underground fault in a -- in a cable under a

 1 driveway or in a yard, what thumping does is it sends

 2 energy down the cable so that someone can identify

 3 where that fault is so you know where to dig up that

 4 yard or that driveway.

 5   The misuse of thumping potentially on --

 6 on how heavy you -- you push on that cable, you can

 7 cause further damage, so that's what it talks about. I

 8 don't know if it's completely not being used, but I

 9 know that there's been discussion on ensuring training

10 is done properly on it.

11   And re-closing was a -- we don't do

12 anymore. And that used to be -- before, you'd have a

13 fault. And so the -- the respondent would put in a

14 fuse to find out which section of cable because it was

15 difficult to find out which cable had faulted. So they

16 would basically close it in. And if it blew, then they

17 would know it was that section.

18   Well, that -- that jolt of a fault, like

19 a direct current, could potentially cause damage on the

20 cable. So now they use different test equipment not to

21 expose the -- the cable to that type of -- that type of

22 fault energy.

23   MR. BYRON WILLIAMS: In terms of the

24 re-closing and the cessation or end to it, when did

25 that take place, sir?

3826

 1   MR. MICHEL MORIN: You know what, I'm

 2 not sure, but it was several years ago.

 3   MR. BYRON WILLIAMS: And in terms of

 4 the advanced training in terms of proper thumping, is

 5 that a fairly recent event, as well?

 6   MR. MICHEL MORIN: You know what,

 7 that's not my background. I'd have to get back to you

 8 on that.

 9   MR. BYRON WILLIAMS: You don't need to,

10 sir. Mr. Morin, we're -- we're going to turn to the

11 thrilling subject of manholes, but -- but before we do,

12 near the start of our conversation you indicated that -

13 - that there had been some intensive efforts undertaken

14 by -- by your part of Hydro over the last couple years

15 with regard to the distribution asset condition

16 assessment?

17   MR. MICHEL MORIN: That's correct.

18   MR. BYRON WILLIAMS: And no doubt your

19 -- you and your colleagues are -- are fatigued by the -

20 - the efforts, Mr. Morin, but was it worth it?

21   MR. MICHEL MORIN: I think it's more

22 the other way. We're kind of energized on what --

23 because it was such a complex sort of undertaking at

24 the beginning. And now we're starting to see how we

25 can look at long-term planning of these assets,

 1 understanding the characteristics of having millions of

 2 small components and how to -- because it differs from

 3 using the same strategies you'd see in different lines

 4 of your business and -- and managing it that way.

 5   So I actually think the group's kind of

 6 moving along really well and -- and very excited about

 7 how it's going.

 8   MR. BYRON WILLIAMS: And it's nice to

 9 hear when anyone is -- is energized. And would it be

10 fair to say that you're optimistic about the

11 opportunities that may flow from it?

12   MR. MICHEL MORIN: I believe we're --

13 we are in -- right down where we will be, and where we

14 -- where we have been in the last few years has

15 continually moved forward, so very optimistic on how

16 we'll be looking at managing these assets in the future

17 and making decisions based on more data and analytical,

18 you know.

19   MR. BYRON WILLIAMS: Turning -- I may

20 suck the pessimism right out of you, sir. Turning to

21 page 11 and manholes. We -- we might have to change

22 that name, as well, but... I'm getting fatigued, Mr.

23 Chair, at the -- at the end of the day.

24   The -- the very first sentence, Mr.

25 Morin, at the time of the writing of this report it

1 would be fair to say that Manitoba Hydro had not

2 established a formal risk manhole assessment process?

3

4   (BRIEF PAUSE)

5

6   MR. MICHEL MORIN: That -- that would

7 be right. The -- there was a risk on sort of the --

8 the civil part of the manhole but not tied with sort of

9 how many circuits, how many different feeders were in

10 one (1) manhole to de -- you know, to -- to

11 differentiate maybe some risk on what those ca -- tho -

12 - those feeders would be feeding in a particular

13 manhole versus another.

14   There was some risk -- or some

15 assessment documentation on the civil and -- and that

16 type of replacement.

17   MR. BYRON WILLIAMS: Sir, turning your

18 attention to page 12, staying with manholes but

19 focussing on data, under "medium priority" to --

20 towards the bottom of the page, is it fair to say that

21 data on the manhole construction material, date, and

22 number of cir -- circuits contained within the duct

23 lines is not stored or -- let me strike that -- was not

24 stored and available within the eGIS application at the

25 time of the writing of the report?

3829

1   MR. MICHEL MORIN: I believe there was

2 efforts made to put the cable data, the amount of

3 circuits, and the manholes recently. The actual

4 construction type and those types of asset sort of data

5 information was not -- was not done for all the assets.

6

7   Part of that working group was to look

8 at using other resources to go back in old paper

9 records, and they're going to create asset management

10 strategies for -- like we are with poles and cables,

11 translate that to manholes, and -- and start from

12 there.

13   MR. BYRON WILLIAMS: And in terms of

14 the number of circuits, you said that effort to put it

15 into the eGIS application was done recently, correct?

16   MR. MICHEL MORIN: I'm not for sure on

17 it, but I know there were some efforts to -- to make

18 that electronic. I don't know what the rate of

19 completion was. Yeah, I'm not sure if it's complete,

20 but I know there was work done on -- on putting that

21 circuit data into eGIS.

22   MR. BYRON WILLIAMS: So it's ongoing?

23   MR. MICHEL MORIN: I believe so.

24

25   (BRIEF PAUSE)

3830

 1   MR. BYRON WILLIAMS: Turning to page 15

 2 of this report, Mr. Morin, and duct lines, under

 3 section 1.4, am I correct in suggesting to you that at

 4 the time of writing of this report, health index

 5 criteria had not been developed for duct line systems?

 6   MR. MICHEL MORIN: That's correct,

 7 other than just a -- sort of a civil engineering

 8 approach to the structural integrity of it. That would

 9 have been -- other than there was -- if there was a

10 performance issue or a failure, yeah, we didn't have

11 any assessment on that.

12   MR. BYRON WILLIAMS: Just flipping back

13 to page 14 for a second, sir, under section 1.1

14 Demographics, the first paragraph, the last sentence

15 suggests that:

16   "At the time of the writing of this

17   report, development of a specific age

18   profile of Manitoba Hydro's duct line

19   system was not currently possible as

20   the construction da -- date -- data

21   was not contained within eGIS."

22   Is that correct, sir?

23   MR. MICHEL MORIN: Yes.

24   MR. BYRON WILLIAMS: And turning to

25 page -- page 16 of CAC-14, in terms of duct lines, sir,

3831

1 and as Manitoba Hydro was attempting to construct both

2 a current asset health and a twenty (20) year

3 projection for existing assets in terms of their future

4 health, would it be fair to say that -- that that

5 effort was hindered because accurate age profile and

6 construction type data was not available for the duct

7 line systems?

8   MR. MICHEL MORIN: That -- that's

9 correct. This is just an estimate, so it -- it allowed

10 us -- when you look at the report as a whole, it

11 allowed us, you know, areas to focus on. And -- and

12 when you see the values of duct lines and -- and other

13 assets, it allows us to see by value, by risk where to

14 look.

15   And with duct lines, we used the ones

16 that were made out of clay tile, which are a very old

17 construction method, and using that as saying if -- you

18 know, it's just structural, and -- and some of these

19 structural assets might -- there's several --

20 construction might last for a lot longer yet because of

21 just their nature and where they are. So to go and

22 change them early, we would never do that based on age.

23 It would more just to -- to better understand

24 potentially our capital requirements in the future.

25 And this is just, like I said, the beginning of really

3832

 1 some of these asset assessments.

 2   MR. BYRON WILLIAMS: And thank you,

 3 that -- that's a very helpful answer. And before you -

 4 - you get to the, really, the re-investment strategy as

 5 it relates to duct line systems, you would want more

 6 accurate age profile and construction type data?

 7   MR. MICHEL MORIN: Prior to any

 8 replacement, you'd have the information required to

 9 make that decision. So, it would -- it would still be

10 based on condition. And, we could have new materials

11 degrade earlier than we thought, or older materials

12 last longer than we thought.

13   So, this is just used more as -- sort of

14 a place card to understand that there could be some

15 investment required. But, prior to any decisions on

16 replacement, all of those things would have be in pla -

17 - you know, have to be evaluated before -- before that

18 expenditure's made.

19

20   (BRIEF PAUSE)

21

22   MR. BYRON WILLIAMS: I said before, Mr.

23 Morin, we could talk about poles all day long, I've

24 been totally fascinated by the -- the pole discussion

25 in this hearing but I -- I fear my interest may not be

3833

1 shared by -- by others.

2   And really, in terms of where you want

3 to be, Manitoba Hydro's probably moved as fa -- in

4 terms of distribution, as far on poles as any of the --

5 as -- as other categories. More on poles than other

6 categories.

7   MR. MICHEL MORIN: I would agree. Our

8 poles are probably far advanced. Other utilities have

9 even asked us, you know, some of our strategies and

10 some of our practices for -- for some pole asset

11 management strategies of their own.

12   MR. BYRON WILLIAMS: Now, in terms of

13 page 22, of CAC Exhibit 14, under "medium priority."

14 Mr. Morin, you'll see a reference suggesting the need

15 to store IPM and pole inspection data in the same asset

16 database.

17   MR. MICHEL MORIN: Yes.

18   MR. BYRON WILLIAMS: And am I correct

19 in suggesting that at the time of the writing of this

20 report, they were not stored in the same asset

21 database?

22   MR. MICHEL MORIN: Yes, I believe they

23 are now. I think that was done this fall.

24   MR. BYRON WILLIAMS: Yes, I believe Mr.

25 Hall spoke of -- of that with me previously.

3834

1

2   (BRIEF PAUSE)

3

4   MR. BYRON WILLIAMS: We're going to

5 skip right over conductors. Mr. -- Mr. Morin, I'm sure

6 you regret that and I do want to chat with you in terms

7 of street lights, in -- in particular, starting at page

8 30.

9   Would I be correct in suggesting that at

10 the time of the writing of this report, Manitoba Hydro

11 had not cur -- had not established a formal risk

12 assessment process for street lights?

13   MR. MICHEL MORIN: What we would have

14 had in the past is more of a structural, sort of, risk

15 assessment. Not a -- you know, as with technology now

16 we're starting to understand the exact location of our

17 assets and -- and now tying that to speeds, zones,

18 where on the perimeter versus a residential, that type

19 of stuff. And once we create that, then we can attach

20 that to the assets to put more of a risk fac -- risk

21 factor based on where the location, it's not just the

22 structural integrity.

23   MR. BYRON WILLIAMS: Going back to page

24 29 of this report under section 1.4, line 2, would I be

25 correct in suggesting to you that at the time of the

3835

1 writing of the report, standard installation dates had

2 not been entered into the eGIS program prior to 2005,

3 so there were challenges in developing an accurate age

4 profile of the asset?

5   MR. MICHEL MORIN: That's correct.

6   MR. BYRON WILLIAMS: Now, Mr. Morin, I

7 -- I want to talk to you for just a couple of seconds

8 about run to failure. And I -- I wonder if you could

9 define that -- that concept for -- for me?

10   MR. MICHEL MORIN: When you look at a

11 different management strat -- strategies, run to

12 failure is one (1) where you do not do any type of

13 maintenance work. I guess maybe I should explain, a

14 lot of our distribution assets don't have replacement

15 parts like fuses or -- or different things. When

16 they're gone, they're gone, you'd get a new part.

17   So it's not like you can do a certain

18 type of maintenance and -- like you could on, let's

19 say, large transformers or a different type of

20 generation equipment. So run to fail would be, an

21 example, a transformer in someone's yard. We wouldn't

22 go out and change that transformer early. We would let

23 it go until it's reached its end of life and at the

24 point of its fault, we would then change it. The

25 impact is minimal. It might affect you as -- as one

3836

1 (1) customer, or maybe four (4) or five (5) homes.

2 It's -- it's very quickly to replace.

3   So the risk to not letting that run to

4 fail is very minimal, so that strategy works well for -

5 - for that type of asset. Other assets, you know, you

6 have to look at it differently, you can't wait to that

7 extent, you know, of risk.

8   MR. BYRON WILLIAMS: And within the

9 portfolio of eight (8) distribution assets, would I be

10 correct in suggesting to you that four (4) of them,

11 being Padmount transformers, overhead conductors,

12 overhead transformers, and streetlights are essentially

13 run to failure?

14   MR. MICHEL MORIN: I would agree with

15 the three (3) other than streetlights. Streetlights as

16 far as the -- the standard, we inspect the standard and

17 if the standard shows any sign of integrity issues then

18 it is changed. We don't wait for the standard to fall

19 down prior to changing.

20   MR. BYRON WILLIAMS: So of the eight

21 (8) there's the three (3), being Padmount transformers,

22 overhead conductors, and overhead transformers that are

23 run to failure?

24   MR. MICHEL MORIN: That's correct.

25   MR. BYRON WILLIAMS: Mr. Morin, if you

1 could turn back to page 3.

2   MR. MICHEL MORIN: You know, I'd want

3 to -- currently our -- our practice with cables is run

4 to failure. We don't replace cable until it's -- has a

5 -- had a performance issue, so.

6

7   (BRIEF PAUSE)

8

9   MR. BYRON WILLIAMS: And, Mr. Morin, is

10 that anticipated to be the practice in the future?

11   MR. MICHEL MORIN: As mentioned before,

12 we're looking at doing some testing and with better --

13 creating a data inventory, starting to look at the

14 actual performance of the cable and using injections

15 and other alternatives to defer replacement, so --

16 because what -- what typically happens, we're still on

17 our first install with a cable, so we've put in a lot

18 of cable in Manitoba and we've never really had to

19 replace it, just like a lot of our poles or other

20 assets.

21   So it's the first time it's coming due

22 for replacement, so to -- to look at cables and say,

23 Well, do we wait until there's multiple faults, there's

24 been a lot of cable put in in a very short period of

25 time and when it starts to hit that similar degradation

3838

1 pattern, you could be experiencing quite a bit of

2 reliability issues.

3   So to look at testing and trying to use

4 injections and potentially replacement programs in

5 strategic areas to mitigate that -- that reliability

6 impact.

7   MR. BYRON WILLIAMS: Now, apart from

8 the injections, are there any other technologies that's

9 -- with regard to cable that Manitoba Hydro will be

10 experimenting with?

11

12   (BRIEF PAUSE)

13

14   MR. MICHEL MORIN: No, just a -- the

15 injections, but also the testing. Like when you --

16 when you start seeing an increased amount of faults,

17 the cable in a su -- in a subdivision might be

18 installed all in the same vintage.

19   So when you start to see that

20 degradation you could have a -- very quickly end up

21 with kind of an unacceptable level of faults. So you

22 would replace where testing could you allow you to

23 maybe look at that area and say where normally you

24 might have went in and replaced a hundred percent

25 because it was all built at the same time and it's

3839

1 starting to experience faults. That testing might give

2 you some data saying leave 30 or 40 percent of it, or

3 leave 50 percent of it, only replace -- wholesale

4 replace 50.

5   So by using testing, we're hoping to be

6 able to potentially prolong even longer some of the

7 areas.

8   MR. BYRON WILLIAMS: Thank you. If I

9 could ask you, in terms of CAC-14, to turn to page 3.

10

11   (BRIEF PAUSE)

12

13   MR. BYRON WILLIAMS: Mr. Morin, in --

14 dominating this -- this page is a table titled,

15 "Ranking criteria." Do you see that, sir?

16   MR. MICHEL MORIN: Yes.

17   MR. BYRON WILLIAMS: And essentially

18 what Manitoba Hydro does is -- is for each of the

19 assets, whether it's cable or streetlights, et cetera,

20 provide the criteria by which it determined whether the

21 ranking was acceptable, fair to poor or critical,

22 agreed?

23   MR. MICHEL MORIN: Correct.

24   MR. BYRON WILLIAMS: And in terms of

25 the ranking criteria, am I correct in -- we've had this

3840

1 discussion with poles. So part of the information with

2 regard to poles would -- would flow from the actual

3 inspections; agreed?

4   MR. MICHEL MORIN: Correct. Now that

5 we've started bar coding, we can assign the

6 manufacturer year to that asset.

7   MR. BYRON WILLIAMS: And would it be

8 fair to say that in terms of the ranking criteria, we

9 could also say that the -- for manholes, the -- the

10 ranking criteria flow from inspection?

11   MR. MICHEL MORIN: Yeah, the -- well,

12 all of these assets are really based on -- on a

13 condition assessment when you look at this as more of a

14 predictability of how to kind of group a large amount

15 of these aggregate assets to sort of flow a capital

16 plan.

17   But when you look at poles -- using

18 poles example of less than fifty (50) years, we've

19 changed poles that have rotten at thirty-five (35)

20 years, whether there was a manufacturer defect on their

21 -- on their treatment. We have poles that are older

22 than seventy-five (75). We don't -- they're still in

23 service.

24   So these are just groupings as far as to

25 understand where you'd quantify them. There's

 1 definitely outliers. And none of them get changed

 2 based on a year. So it's all based on the actual

 3 condition at the time of replacement.

 4   So with the manholes, we didn't have any

 5 years that we could use to give, you're saying,

 6 manholes with only clay tile. We didn't how many. So

 7 you couldn't say clay tile -- these -- these clay tile

 8 ones would be in fair. And we'd presume that in twenty

 9 (20) years they'd move to critical based on kind of

10 historical potential failure characteristics. So

11 that's why that one's, you know, used.

12   But they're -- they all flow in that

13 same sort of manner before replacement.

14   MR. BYRON WILLIAMS: Well, in -- in

15 terms of cables, would it be fair to say that the

16 primary criteria used to rank the health of the asset

17 was the estimated age?

18   MR. MICHEL MORIN: I believe in cables

19 one (1) of the bigger ones there was the actual

20 materials and manufacturer. That XLPE is really the

21 one that's going to be causing a significant effect on

22 our system.

23   So that one is it's year, but it's sort

24 of an industry standard that they've only lasted so

25 long. We've actually exceeded the industry sort of

3842

1 results that have had -- our cable, I believe we've --

2 we've kind of met or exceeded some of the -- the

3 manufacturer's life. So we're -- we're tying that more

4 with that XLPE as more of a concern, the manufacturer.

5   MR. BYRON WILLIAMS: And in setting the

6 health criteria, you were -- you're relying upon the

7 man -- manufacturer's expectations to a large degree?

8   MR. MICHEL MORIN: No, not the

9 manufacturer's expectations; more an industry

10 experience from other utilities and the experience

11 they've had prior to those assets reaching end of life.

12

13   Going back to our poles, like a lot of

14 other utilities are in that forty (40) year range, and

15 we've managed to get seventy-five (75) years out of our

16 pole based on our climate, different things that have

17 allowed us to -- to maintain those assets a lot longer

18 than other jurisdictions.

19   MR. BYRON WILLIAMS: Thank you, Mr.

20 Morin.

21   Mr. Chair, I have one (1) additional

22 area, in -- including an additional exhibit to

23 distribute. I'm -- I'm going to guess it would take me

24 an hour and a half to -- or so to -- to complete. It's

25 -- I'm at the Chair's discretion. Speaking quite

1 frankly, I -- I'd be happy to distribute the exhibit

2 and then take the rest of the day off. But if the --

3 if the panel is desirous of me -- or would like me to

4 continue, I'm -- I'm prepared to do so.

5   THE CHAIRPERSON: No, I think that we'd

6 like to adjourn earlier rather than later, so I think

7 that we should probably address that document later.

8 But let's distribute that right now, if you don't mind.

9   MR. BYRON WILLIAMS: And you'd prefer I

10 not talk about manhole covers any more?

11   THE CHAIRPERSON: No. I did have some

12 questions that I wanted to ask in relation to some of

13 the earlier comments that Mr. Warden made in relation

14 to -- when we referred back to Exhibit 15, page 9, and

15 we talked about the -- the expected net income results

16 for the current year and next year, next financial

17 year.

18   And I can't exac -- recall exactly what

19 you said, but the question I had is in relation to the

20 expected financial results for '12/'13. Given that

21 we're now into the fourth quarter and you probably have

22 some inkling of what your results are for the third

23 quarter, are you -- are you tracking to -- to that

24 financial outcome, $39 million for the -- for the end

25 of the fiscal year?

3844

1   MR. VINCE WARDEN: Yes, reasonably

2 closely on a bottom-line basis. We do have some

3 largely offsetting variances, but to -- for the most

4 recent financial results that we have available and we

5 don't have the December results yet, but we have

6 November, and -- and November was -- was quite close --

7 quite close to our forecast.

8   THE CHAIRPERSON: So the December

9 results would be available approximately when?

10   MR. VINCE WARDEN: The middle of

11 February -- or they would be released the middle of

12 February.

13   MR. RAYMOND LAFOND: While Mr. Williams

14 distributes his new exhibits, I guess one (1) of the

15 questions that comes to my mind in listening to the

16 questions and their responses this afternoon, and I

17 guess with all of you realizing that -- and knowing

18 that capital assets are major in a hydro-electric

19 facility, I mean, this is -- this is the asset and --

20 and the -- and -- and certainly a major portion of the

21 costs to the consumer.

22   So, that being said, and hearing about

23 all the issues and the comments on -- with CAC Exhibit

24 14 and, more particularly, page 1 in terms of the

25 status of inspections and status of where things are at

1 and what we can expect over the next ten (10) to twenty

2 (20) years, I guess it needs to really be worked on.

3   Now, that being said, how does the

4 senior executive team and then the Board proceed to

5 look at its forecasts in this regards, and -- and, more

6 particularly, deciding on what needs to be done this

7 year and next year and in the next few years?

8   MR. VINCE WARDEN: Mr. Lafond, are --

9 are you referring to this Board or the Board at

10 Manitoba Hydro, or --

11   MR. RAYMOND LAFOND: The Board at

12 Manitoba Hydro, sorry.

13   MR. VINCE WARDEN: Okay. Well, we do

14 have the capital expenditure forecast which is an

15 integral part of the integrated financial forecast.

16 And that does indicate -- it lists the number of

17 specifically identified projects that is updated every

18 year.

19   So, every year we -- we refresh that

20 list of projects that we have been identified. In

21 addition to that, we have what we call the domestic

22 items. So that domestic item for every -- every

23 business unit is intended to cover the capital

24 expenditures necessary for the routine and recurring

25 type of capital. Along with serv -- customer service

3846

1 extensions.

2   So, although we have a load forecast, we

3 don't know specifically which customers are going to be

4 applying for service at any particular time. So, we --

5 we do the best we can to estimate that and the fact

6 that we're -- we're refreshing that forecast each and

7 every year, the -- the senior executives are able to

8 keep the Board apprised of what the -- our best

9 estimate is of -- of capital expenditures at any point

10 in time.

11   We also have a process just supporting

12 that -- we have a process that we refer to as the "C-P-

13 J" or capital expenditure process justification, C-P-J,

14 capital project justification, which for every project

15 -- every project over $2 million comes specifically to

16 executive committee for approval. So, we'll -- every

17 week pretty much, we look at capital expenditure

18 projects that are being proposed, supported by the CPJ

19 with all the justifications supporting that -- that

20 project.

21   And we can either approve it or send it

22 back for revision, cancel it all together or -- or ask

23 the proponent to look for other offsets in capital

24 projects, to come back with a prioritized list that

25 would -- that would allow us to keep within the bottom

3847

1 line forecast.

2   So, we don't -- we don't change the

3 bottom line capital expenditure forecast except for

4 once a year. We take that -- that forecast once a year

5 to the Board for approval and during that interim

6 period -- during the year, we'll look at the CPJ's I

7 referenced earlier and look for offsets and try and

8 prioritize within the approved capital expenditure

9 forecast. And to the extent that we're able to do

10 that, the bottom line of the forecast remains

11 unchanged.

12   To the extent we are unable to do that,

13 then we have to seek further approval of the Board.

14   MR. RAYMOND LAFOND: So, what your

15 Board, the Hydro Board sees is this document and

16 approves this document? "This document" being the

17 capital expenditure forecast, in this case CEF12?

18   MR. VINCE WARDEN: Yes, they see that

19 along with the companion document, the integrated

20 financial forecast. So, which we call our "IFF". So,

21 the IFF and the CEF are -- are two (2) -- two (2)

22 companion doc -- documents that they approve.

23   MR. RAYMOND LAFOND: So, this is what

24 the Hydro Board would approve in terms of capital

25 expenditures, the CEF12 and senior executive management

3848

 1 would approve any capital expenditure over $2 million?

 2   MR. VINCE WARDEN: Well, any cap --

 3 proposed capital expenditure over $2 million go --

 4 comes to executive committee for specific approval.

 5   MR. RAYMOND LAFOND: Yes.

 6   MR. VINCE WARDEN: And --

 7   MR. RAYMOND LAFOND: Sorry, that's what

 8 I meant.

 9   MR. VINCE WARDEN: Yes. And that is

10 either funded through the existing capital. So, we

11 don't change the bottom line, or if we are unable to

12 fund it with an existing capital, then it's

13 incorporated in the next update to the capital

14 expenditure forecast that the Board approves.

15   MR. RAYMOND LAFOND: And -- and in

16 cases like poles, for instance, which number about a

17 million of them, I guess the section responsible for

18 these would simply have an overall budget based on

19 previous year's experience. And say, Well we need --

20 like for instance, $2 million to replace poles this

21 year which is similar to the last three (3) or four (4)

22 years and there's some consensus that this is a proper

23 amount and a proper replacement program requirement

24 based on visual inspection, of course, and not just the

25 fact that it's got a certain age.

 1   Am I correct?

 2   MR. VINCE WARDEN: Essentially that's -

 3 - that's right. We have within the capital expenditure

 4 forecast, we have what we call base capital or

 5 sometimes refer to it as "sustaining capital" and

 6 that's about $500 million per year.

 7   MR. RAYMOND LAFOND: Okay.

 8   MR. VINCE WARDEN: And that would be

 9 used for such things as pole -- pole replacement.

10   MR. RAYMOND LAFOND: So, senior

11 executive management would approve, of course, the

12 sustaining capital and then the other capital items

13 would be mostly items over $2 million?

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

15 It would be items specifically identified projects over

16 $2 million.

17   MR. RAYMOND LAFOND: And senior

18 executive, including the CO would approve every single

19 one (1) of them, you know, every single proposed

20 expenditure, capital expenditure of over $2 million?

21   MR. VINCE WARDEN: Right. That's

22 right.

23   MR. RAYMOND LAFOND: Thank you.

24   MR. LARRY SOLDIER: In -- in the last

25 number of years, say, go back five (5) or ten (10)

3850

1 years, how many people were involved in the asset

2 condition assessment in your department, or in -- in

3 Hydro?

4   MR. MICHEL MORIN: On strictly this

5 distribution report or on Hydro as a whole?

6   MR. LARRY SOLDIER: Hydro as a whole.

7   MR. VINCE WARDEN: You know, we

8 wouldn't have people specifically dedicated to asset

9 condition assessment on a full-time basis. So that --

10 they'd be -- it would be -- people would be doing that

11 as part of their regular duties.

12   So having said that, it's becoming

13 increasingly important over the last number of years

14 and I -- I don't have a handle, though, on how many --

15 we -- we could estimate that. We wouldn't be tracking

16 that specifically, but we could come up with a -- an

17 estimate. Perhaps Mr. Morin can say -- can indicate

18 how many would be in customer service and distribution.

19   So, that would be the area that's mostly

20 involved in -- well, in fact, it's totally involved in

21 asset condition assessment for that business unit, so.

22   MR. MICHEL MORIN: Maybe -- can I get

23 clarification, were you meaning more on the planning of

24 the asset condition and -- and sort of long-term

25 planning, or the actual individuals in the field doing

 1 the assessments? I -- I'm not sure where you're

 2 looking at more off -- the office end, or more in the

 3 field component of actually assessing the assets in the

 4 -- out -- out in the field?

 5   MR. LARRY SOLDIER: I guess the concern

 6 we have, or -- as a Board is the growing bureaucracy of

 7 -- of Manitoba Hydro and all the additional staff that

 8 are being hired and adding pressure on the -- on the

 9 rates and whether or not the -- I guess the asset --

10 knowing the condition of the assets, which I know are

11 very valuable to -- to know what your condition of your

12 assets are, the work that is done to in -- to evaluate

13 each asset and determine whether or not that asset

14 needs a replacement and -- and maybe forecast what your

15 replacement of assets is going to be going forward,

16 whether or not it justifies adding on, say an entire

17 unit or -- and maybe overall from what -- what you guys

18 have done in the past and -- and is it -- are -- is

19 there a business case for it or -- okay, in order to

20 know the asset -- the condition of the asset that it's

21 going to cost us extra to put a -- a team together to

22 find out what that asset is worth and when it needs to

23 be replaced?

24   And I guess that -- that is a concern

25 from -- from my perspective, is -- is it -- the -- the

 1 cost of doing that, is it worthwhile and -- so that's

 2 kind of where I'm looking at it at a very high level in

 3 that sense.

 4   MR. VINCE WARDEN: I can maybe answer

 5 in a general way. For any expenditure that we

 6 undertake, including a program to assess the condition

 7 of assets, there would -- there would be a business

 8 case supporting that. And -- and when we look at that

 9 issue specifically, we would have to consider what the

10 implications are of asset failure.

11   So, what does that mean in terms of

12 system reliability and how much do we value system

13 reliability, how much do we value safety of -- so how

14 much do we -- what value do we assess -- or assign to

15 protection of the environment?

16   So, all of those things factor into the

17 decision to -- to replace an asset, including the

18 economics, of course, but it's fundamental though. The

19 -- the condition of our plant is fundamental to the

20 ongoing performance of the mandate at Manitoba Hydro.

21 We have to know what the condition of our assets are in

22 order to provide service that's safe and reliable.

23   MR. LARRY SOLDIER: And I know through

24 the testimonies you have -- the work is not finished

25 yet. And when the work is -- is finished, do you

3853

1 anticipate where you start lowering the -- the number

2 of people that are involved in that -- in that unit and

3 do you expect to see a benefit of where -- an economic

4 benefit of -- of knowing what the condition of your

5 assets are so that there's proper planning and -- and

6 so forth?

7   MR. MICHEL MORIN: I guess I -- I'm

8 looking at the overall approach asset management right

9 now with staff, like we're saying, from Churchill to

10 Emerson on both sides of the province, all in areas

11 geographic with certain perspectives on -- and the life

12 and conditions.

13   Centralizing it has -- has been to me an

14 investment that's yielded already many benefits. We've

15 already looked at the processes, ensured consistency so

16 we're understanding what we're changing in one (1) area

17 of the province is the same, bringing in best

18 practises.

19   So, the small group of asset management

20 kind of has -- has already made an impact on the masses

21 that are out in the field because you're sort of taking

22 that -- that individual decision making in each area

23 and putting it into sort of a consolidated centralized

24 approach.

25   And we're already seeing -- we're

3854

1 deferring certain replacements because in other areas

2 that might have felt that was a need based on other

3 areas of the province. Just like, as you said, how do

4 you prioritize?

5   Well, even with poles or cables there's

6 different views on prioritizing. So we've been able to

7 kind of instill that into the line so that we're more

8 in sync together, that we're changing assets more on a

9 -- on a centralized approach versus geographically

10 handing out budgets.

11   So like we talked about inspections, you

12 know, looking at the data we're getting, bringing it in

13 for training, those are all asset management strategies

14 that you might not have had come from each individual

15 geographic area. That centralized approach has done

16 it. It's increased productivity. We're getting

17 accurate data to make long-term plans.

18   So, in the absence of that centralized

19 approach you're leaving it up to maybe twenty (20),

20 thirty (30) areas to create their own. So if I look at

21 that investment, it's a very small group that manages

22 that centralize. That payback is very quick in what it

23 costs if you relied on having everyone do their own,

24 so.

25   And I would see -- the -- the one thing

3855

1 with the distribution, it's -- it's just in the early

2 stages of its first sort of wholesale change. And it -

3 - it's a fairly significant undertaking that we might

4 see over the next, you know, several decades, you know

5 what I mean. We're starting to hit some aging

6 infrastructure that that planning is invaluable when

7 you look at being able to better monitor and -- and

8 decide where to spend those dollars.

9   MR. LARRY SOLDIER: As part of that,

10 are you -- do you have any established benchmarks or

11 are you -- are you looking at benchmarks that could, I

12 guess, at some point in the future you can come back to

13 us and say in -- in 2013 we were at this level, and at

14 -- and now at 2016 we're -- we're -- it looks like

15 we're going to be -- exceed or meet our targets or --

16 and -- and lower our costs?

17   MR. MICHEL MORIN: It's a good point.

18 I guess when you're entering in an age of replacements,

19 it's tough to go backwards and say that we can be such

20 good asset managers that we're going to not have to

21 replace ad -- assets, you know, to go -- you know, as a

22 stat to go back.

23   What we're looking at is our reliability

24 and performa -- and safety indicators and say, How do

25 we maintain reliability for our customers? And as you

3856

1 -- I don't know if -- as you're aware, is our

2 reliability is starting to degrade. So part of that is

3 how far are we willing to let that degrade. And -- and

4 that's how I would see our benchmarks would be, where

5 is our reliability sitting against industry indexes.

6   MR. RAYMOND LAFOND: My colleague has

7 peaked my curiosity with his first question. And Mr.

8 Morin, when you said is your question regards the

9 number of employees in office versus in the field,

10 could you tell me.

11   In the distribution section having to do

12 with the -- the eight (8) categories of assets looked

13 at this afternoon by Mr. Williams, how many people in

14 office with the planning, the recording, et cetera,

15 versus those in the field doing inspection and those

16 actually doing the work of replacement?

17   MR. MICHEL MORIN: As far as the -- the

18 planning, there's different roles with hydro when you

19 talk planning. There's planning for capacity and --

20 and voltage quality. When you look at asset management

21 planning in our area, we're a very small group. You

22 know, we have myself as the manager, Garrett (phonetic)

23 behind me, as the asset management engineer.

24   And we've just come together. We have a

25 maintenance coordinator to sort of, like we talked

 1 about, consolidate how we do maintenance, inspections

 2 and data. So we're a handful of people in a

 3 centralized office. When you look at the distribution

 4 at a $10 billion asset, that's not a lot of firepower

 5 in a centralized when you look -- you know, that

 6 investment and what it's yielding, to me, is a -- is a

 7 benefit, you know, for what we're seeing.

 8   MR. RAYMOND LAFOND: So a handful in --

 9 in -- essentially in offices, and how many in the field

10 doing the visual inspection and other types of

11 inspections?

12   MR. MICHEL MORIN: When you look at

13 inspections, you'd have dozens doing inspections; when

14 it's overhead, dozens on the underground. As far as

15 people doing replacements, you'd be in the hundreds

16 when you look at people out there changing plant and --

17 and changing poles and -- and working on the system.

18 You know, it's -- it's a significant amount of people

19 out in the field.

20   MR. RAYMOND LAFOND: Can you give me an

21 -- can you give me an indication in your section, that

22 is, distribution assets, how many there would be?

23   MR. MICHEL MORIN: Right now, our

24 section is -- is quite a diverse group. We have I

25 think a total of twel -- or ten (10) -- ten (10) or

3858

1 eleven (11) people, and out of those people, three (3)

2 are in the forestry section that manage all of the

3 vegetation management programs across the province. So

4 they manage all of our vegetation.

5   We have a damage prevention coordinator

6 that works with damage prevention and contractors, so

7 we have quite a few centralized groups that manage

8 province-wide programs. We have our maintenance

9 coordinator, our capital -- overhead capital

10 coordinator, and myself and Garrett as our -- as our

11 engineer in our group. So it's a fairly small, and

12 it's more than just asset management; it ties a lot

13 into maintenance, because maintenance is in turn hoping

14 to improve the asset life cycle, and also reliability

15 when you look at the vegetation and -- and the effects

16 vegetation has on our system.

17   MR. RAYMOND LAFOND: I -- I can see

18 that management is a maintenance-type expense, but

19 replacing a pole is a -- is an asset that would be

20 capitalized, right?

21   MR. MICHEL MORIN: That's right.

22   MR. RAYMOND LAFOND: So I guess I'm --

23 I'm trying again with my question.

24   I heard a handful in offices, but in

25 terms of the inspection of these million poles and --

 1 and other assets, distribution assets, how many would

 2 there be, and how many would there be involved in the -

 3 - in the replacement of distribution assets, either

 4 major repairs or replacements like poles?

 5   MR. MICHEL MORIN: I'd have to take

 6 that as a take-away for -- for the exact number, 'cause

 7 there's -- we have construction forces, we have the

 8 areas -- the staff in each geographical area, and there

 9 are twenty-two (22) district service centres. So

10 there's quite a few people, and sometimes they work

11 part of their day on capital, part of their day on

12 maintenance. Other times, they're doing customer-

13 requested type work or building and then coming back to

14 maintenance. So to get that exact number would be --

15 I'd have to take it back to be -- we'd have to find

16 that out for you.

17   MR. RAYMOND LAFOND: So in other words,

18 these people could be doing other work for other

19 divisions, other types of assets than distribution

20 assets?

21   MR. MICHEL MORIN: The majority of the

22 -- the work in -- in -- other than in stations, it

23 would be -- we do some work for other business units,

24 but the majority of the -- the group in -- in CS&D is

25 doing distribution work. We do do some work for

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1 transmission and -- and some for station design, the

2 construction forces, but the majority of the work is

3 still more on the distribution assets.

4   MR. RAYMOND LAFOND: So I was asking

5 for strictly an overall number, not by division, et

6 cetera.

7

8   (BRIEF PAUSE)

9

10   MR. VINCE WARDEN: I wonder, Mr.

11 Lafond, if -- we probably should take this as -- as an

12 undertaking, but before we do, I just wonder if we

13 could be clear on exactly what it is you would like to

14 see.

15   MR. RAYMOND LAFOND: Well, essentially,

16 I was just curious in knowing the number of people

17 affected to the replacement, major repairs, inspection

18 of these assets we've been talking about this

19 afternoon. And I heard a handful in offices. Now, is

20 it -- and then another group would do the actual

21 inspections, and then those who do the replacement.

22   Now, really, I'm only -- I'm not looking

23 at numbers like a hundred and two point two (102.2)

24 full-time equivalency. Like are we talking around a

25 hundred and seventy-five (175) employees or around

1 three hundred and seventy-five (375) or around five

2 hundred (500)?

3   Like just -- I -- I'm not looking for a

4 very precise number, just having an indication of where

5 -- where it's all at, because I see the extent of these

6 assets, so I just would like to have an estimate of the

7 numbers of employees affected to these assets.

8   MR. VINCE WARDEN: So we have just over

9 six thousand (6,000) employees at Manitoba Hydro in

10 total. Approximately 40 percent are involved in

11 capital activities, so those are the -- do service

12 extensions and -- and major projects that we talked

13 about earlier.

14   So the -- the 60 percent of those people

15 in total would be involved in operating activities. So

16 the operating activities are the -- the type where we

17 maintain the system, where we provide service to

18 customers; administrative type functions.

19   So all of those functions are being

20 performed on the operating side of our business, but

21 the numbers that would be dedicated to asset

22 maintenance would -- we would have to go through every

23 division to be able to pick -- to ex -- exclude, or to

24 identify those people. And of course, you know, people

25 -- our people do a number of different functions and --

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1 and we would have to be looking at equivalent full-time

2 employees dedicated to -- or at least involved in that

3 activity.

4   So while it might seem like a simple

5 question on the surface, it's a little more complicated

6 to get something that's accurate and we can rely on.

7 And -- and we can do that as an undertaking if you --

8   MR. RAYMOND LAFOND: No, I'm not asking

9 for that, but of the sixty-three hundred (6,300)

10 employees, full--time equivalence, I image at the -- at

11 the end of March 31st, 2012, it indicated forty-six

12 hundred (4,600) in regular and sixteen ninety-three

13 (1,693) in construction. I had assumed that

14 construction was strictly the major projects and not

15 like the rep -- you know, the distribution assets, but

16 does that include these also, like replacing a pole?

17   MR. VINCE WARDEN: Yes.

18   MR. RAYMOND LAFOND: I see. That's

19 good enough. I don't -- I don't think we need an

20 undertaking. I just wanted to have an appreciation of

21 how Manitoba Hydro operates. Thank you.

22   THE CHAIRPERSON: Before we adjourn for

23 the day we should probably acknowledge this particular

24 document that's been distributed by -- on behalf of

25 CAC.

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1   Mr. Williams, would you -- could you get

2 that, please?

3   MR. BYRON WILLIAMS: Yes, it's the

4 "Supporting Materials, Part 3" and we would suggest it

5 be marked as CAC Exhibit 15.

6

7 --- EXHIBIT NO. CAC-15:   Document, "Supporting

8   Materials, Part 3"

9

10   THE CHAIRPERSON: I don't believe there

11 are any other matters to attend to before we adjourn,

12 so we will meet again tomorrow morning at nine o'clock.

13 And so have a good evening everyone.

14

15   (PANEL RETIRES)

16

17 --- Upon adjourning at 4:39 p.m.

18

19 Certified Correct

20

21

22 _____

23 Wendy Warnock, Ms.

24

25

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