First Session - Thirty-Ninth Legislature

of the

# Legislative Assembly of Manitoba

## Standing Committee on Crown Corporations

Chairperson Mr. Daryl Reid Constituency of Transcona

Vol. LIX No. 1 -7 p.m., Thursday, October 25, 2007

#### MANITOBA LEGISLATIVE ASSEMBLY Thirty-Ninth Legislature

Member	Constituency	Political Affiliation
ALLAN, Nancy, Hon.	St. Vital	N.D.P.
ALTEMEYER, Rob	Wolseley	N.D.P.
ASHTON, Steve, Hon.	Thompson	N.D.P.
BJORNSON, Peter, Hon.	Gimli	N.D.P.
BLADY, Sharon	Kirkfield Park	N.D.P.
BOROTSIK, Rick	Brandon West	P.C.
BRAUN, Erna	Rossmere	N.D.P.
BRICK, Marilyn	St. Norbert	N.D.P.
BRIESE, Stuart	Ste. Rose	P.C.
CALDWELL, Drew	Brandon East	N.D.P.
CHOMIAK, Dave, Hon.	Kildonan	N.D.P.
CULLEN, Cliff	Turtle Mountain	P.C.
DERKACH, Leonard	Russell	P.C.
DEWAR, Gregory	Selkirk	N.D.P.
DOER, Gary, Hon.	Concordia	N.D.P.
DRIEDGER, Myrna	Charleswood	P.C.
DYCK, Peter	Pembina	P.C.
EICHLER, Ralph	Lakeside	P.C.
FAURSCHOU, David	Portage la Prairie	P.C.
GERRARD, Jon, Hon.	River Heights	Lib.
GOERTZEN, Kelvin	Steinbach	P.C.
GRAYDON, Cliff	Emerson	P.C.
HAWRANIK, Gerald	Lac du Bonnet	P.C.
HICKES, George, Hon.	Point Douglas	N.D.P.
HOWARD, Jennifer	Fort Rouge	N.D.P.
IRVIN-ROSS, Kerri, Hon.	Fort Garry	N.D.P.
JENNISSEN, Gerard	Flin Flon	N.D.P.
JHA, Bidhu KORZENIOWSKI, Bannia	Radisson	N.D.P.
KORZENIOWSKI, Bonnie	St. James Inkster	N.D.P. Lib.
LAMOUREUX, Kevin LATHLIN, Oscar, Hon.	The Pas	N.D.P.
LEMIEUX, Ron, Hon.	La Verendrye	N.D.F. N.D.P.
MACKINTOSH, Gord, Hon.	St. Johns	N.D.F. N.D.P.
MAGUIRE, Larry	Arthur-Virden	P.C.
MALOWAY, Jim	Elmwood	N.D.P.
MARCELINO, Flor	Wellington	N.D.P.
MARTINDALE, Doug	Burrows	N.D.P.
McFADYEN, Hugh	Fort Whyte	P.C.
McGIFFORD, Diane, Hon.	Lord Roberts	N.D.P.
MELNICK, Christine, Hon.	Riel	N.D.P.
MITCHELSON, Bonnie	River East	P.C.
NEVAKSHONOFF, Tom	Interlake	N.D.P.
OSWALD, Theresa, Hon.	Seine River	N.D.P.
PEDERSEN, Blaine	Carman	P.C.
REID, Daryl	Transcona	N.D.P.
ROBINSON, Eric, Hon.	Rupertsland	N.D.P.
RONDEAU, Jim, Hon.	Assiniboia	N.D.P.
ROWAT, Leanne	Minnedosa	P.C.
SARAN, Mohinder	The Maples	N.D.P.
SCHULER, Ron	Springfield	P.C.
SELBY, Erin	Southdale	N.D.P.
SELINGER, Greg, Hon.	St. Boniface	N.D.P.
STEFANSON, Heather	Tuxedo	P.C.
STRUTHERS, Stan, Hon.	Dauphin-Roblin	N.D.P.
SWAN, Andrew	Minto	N.D.P.
TAILLIEU, Mavis	Morris	P.C.
WOWCHUK, Rosann, Hon.	Swan River	N.D.P.

### LEGISLATIVE ASSEMBLY OF MANITOBA THE STANDING COMMITTEE ON CROWN CORPORATIONS

Thursday, October 25, 2007

evening.

position?

Mr. Reid.

#### TIME – 7 p.m.

LOCATION - Winnipeg, Manitoba

CHAIRPERSON – Mr. Daryl Reid (Transcona)

VICE-CHAIRPERSON – Ms. Jennifer Howard (Fort Rouge)

#### ATTENDANCE – 11 QUORUM – 6

Members of the Committee present:

Hon. Messrs. Ashton, Selinger

Messrs. Cullen, Dewar, Faurschou, Mses. Howard, Marcelino, Messrs. McFadyen, Pedersen, Reid, Swan

Substitutions:

Mr. Jha for Mr. Dewar at 8:22 p.m.

#### **APPEARING:**

Mr. Kelvin Goertzen, MLA for Steinbach

Hon. Mr. Jon Gerrard, MLA for River Heights

Mr. Robert Brennan, President and Chief Executive Officer, Manitoba Hydro

#### MATTERS UNDER CONSIDERATION:

The Annual Report of the Manitoba Hydro-Electric Board for the year ended March 31, 2003

The Annual Report of the Manitoba Hydro-Electric Board for the year ended March 31, 2004

The Annual Report of the Manitoba Hydro-Electric Board for the year ended March 31, 2005

The Annual Report of the Manitoba Hydro-Electric Board for the year ended March 31, 2006

The Annual Report of the Manitoba Hydro-Electric Board for the year ended March 31, 2007

**Clerk Assistant:** Mr. Reid has been nominated. Are there any further nominations?

Corporations please come to order.

Hearing no other nominations, Mr. Reid, please take the Chair.

Mr. Gregory Dewar (Selkirk): I nominate

Clerk Assistant (Ms. Tamara Pomanski): Good

Your first item of business is the election of a Chairperson. Are there any nominations for this

Will the Standing Committee on

Mr. Chairperson: Thank you, everyone.

Our next item of business is the election of the Vice-Chairperson. Are there any nominations?

Mr. Dewar: I nominate Ms. Howard.

**Mr. Chairperson:** Ms. Howard has been nominated. Are there any further nominations?

Seeing none, Ms. Howard is the Vice-Chairperson of this committee.

This meeting has been called to consider the following reports: The Annual Report of Manitoba Hydro for the year ended March 31, 2003; The Annual Report for Manitoba Hydro for the year ended March 31, 2004; The Annual Report of Manitoba Hydro for the year ended March 31, 2005; The Annual Report of Manitoba Hydro for the year ended March 31, 2006; and The Annual Report of Manitoba Hydro for the year ended March 31, 2007.

Before we get started, are there any suggestions from the committee on how long we should be sitting this evening?

**Mr. Andrew Swan (Minto):** I suggest we sit until 10 o'clock, and then we re-examine at that time.

**Mr. Chairperson:** It's been proposed that we sit until 10 o'clock and re-examine.

**Mr. Kelvin Goertzen (Steinbach):** Well, I would propose that the committee be prepared to sit until midnight. I know that it would be longer than the committees often sit, but it's also been a very long

\* \* \*

time, I know, since this committee has met to examine the Hydro reports. So it's been an exceptionally long time, which, I think, would call for the ability to have a longer time than what might be normally called for questions.

Hon. Steve Ashton (Minister of Intergovernmental Affairs): I think we've evolved in committees in the last number of years to the point where we generally do this, whether it be for bills or for other reports, which simply would be a normal adjournment time, and, recognizing that this committee is not just having members in the Legislature here, but there are, obviously, the staff of Manitoba Hydro, so I think we have a proposal on the floor for 10 o'clock. It's predicated on the fact that there could be some extension, you know, perhaps if we were close to passing this current report. How many reports, Mr. Chairperson, I'll ask?

#### Mr. Chairperson: Five.

**Mr. Ashton:** Five reports. So I think we could assess again at 10. I don't think there's any suggestion that there wouldn't be some flexibility, but I do know there's even been some discussion amongst House leaders. I don't think there's actually been an agreement, but, certainly, the idea of going to midnight was not part of those discussions. So I think 10 o'clock is reasonable. It's consistent with what we do with these kinds of committees in other meetings as well.

Mr. Goertzen: I recognize the minister's point about the unusual proposal for the length of the meeting, but there's been an unusual delay in-between other Crown Corporations meetings. But I do, in a bipartisan spirit, want to see things move forward so that we can get answers to the questions that we have. What I might suggest, I know my honourable friend from Minto has suggested a 10 o'clock time to review, at that point, where we are in progress. I think that that's acceptable, with the understanding, I think, if we don't have a significant number of answers to the questions we propose, we might be looking, then, for another Crown Corporations Committee meeting to examine Hydro specifically in the very near future prior to the Legislature rising. So, with that proviso, I think we could proceed to review at 10 o'clock, with the possibility of looking to have another meeting in an expedient manner.

**Mr. Ashton:** Well, certainly, as the member knows, these are matters that are determined by the House leaders. In fact, the actual call is through the House itself. I'm Deputy House Leader, but I do know there

have been some ongoing discussions in terms of House leaders, and I'm sure that we can look at that.

I think the key element we're trying to do here is move directly into the presentation and allow for the questions, not necessarily to make any assumptions. I think the 10 o'clock time, we can look at that and we can certainly raise the issue at that time about a potential additional hearing through discussions with House leaders. I mean, that's how we ended up with this committee. I think the intent of everyone is to move through to the presentation as soon as possible.

Once again, the assessment at 10 o'clock can also include the committee discussion, subject to the House leaders about whether additional meetings are required. But, once again, that's something that's set by the House after discussions with House leaders. I'm not aware of any predetermined agenda on that.

It would be highly unusual too. I mean, usually you don't talk about additional committee hearings in any committee until you've determined whether, you know, what's happened with the current committee. You plan one committee ahead of time. My suggestion is, let's get into it. We will, certainly, if we follow through in terms of what's been proposed here, be able to review at 10 o'clock whether we need any additional time today. Any other discussion about additional meetings can, obviously, be referred to the House leaders.

**Hon. Jon Gerrard (River Heights):** In a tripartite spirit, from a Liberal perspective, we're comfortable with a 10 o'clock reassessment to see where we are with the potential that there may need to be an extension at that point.

**Mr. Goertzen:** I would take the effort to move this matter forward and not to enter into debate. I will take the Deputy House Leader's advice that we consider a meeting, and this committee consider the recommendation of a meeting, if necessary, at 10 p.m. Surely, that's been done before where this committee can recommend to House leaders that another meeting date be set in the very near future. I would suggest to the member that what's happened in the past hasn't worked, so there's certainly no danger in moving into something different because, clearly, we've had a difficult time getting meetings.

We will examine at 10 p.m. This committee could, if it doesn't want to extend the time, and it may well, but it could also, in conjunction with that, put forward a recommendation for a future meeting. **Mr. Ashton:** I stated, certainly, the view of our caucus. I appreciate the help of the Member for Steinbach, but I don't think it needs restating by the Member for Steinbach. I think, as the Member for River Heights talked about, that's what we talked about. We're going to recess again at 10 o'clock, and we can spend the next half an hour or hour trying to reinterpret what each of us said. Obviously, at 10 o'clock we're going to have this discussion. I would suggest, maybe, rather than anticipate it, we get right into the business of the committee. I'm sure at 10 o'clock these issues will come up again, and we'll have just as lively a discussion at that time.

**Mr. Chairperson:** Well, it sounds like there's agreement on the committee with respect to reviewing at 10 o'clock. Is that the will of the committee? [Agreed]

Then we'll proceed to the business at hand. Are there any suggestions to which order the committee wishes to consider the reports?

**Mr. Goertzen:** Perhaps starting with the oldest report first and moving to the more recent reports.

**Mr. Chairperson:** It's been proposed that we start with the 2003 Annual Report for Manitoba Hydro. Is that the will of the committee? [*Agreed*]

Does the honourable minister have an opening statement that he would wish to make? Perhaps he can introduce members from Manitoba Hydro that have joined us here this evening as well.

#### \* (19:10)

**Hon. Greg Selinger Minister of Finance):** I'd like to introduce the chairman of Manitoba Hydro Board, Vic Schroeder. I'd like to introduce the president and CEO, Bob Brennan. Bob, would you introduce your power supply mate behind you there?

Mr. Robert Brennan (President and Chief Executive Officer, Manitoba Hydro): That's Randy Ptosnick, who looks after all the electronic equipment that I can't seem to operate.

**Mr. Selinger:** With that, what I would like to do, actually, is dispense with an opening statement because I know members are anxious to hear from the president and CEO of Hydro. I'd like to recommend that we give Bob Brennan the opportunity to do a presentation and then proceed directly to questions.

Mr. Chairperson: I thank the minister for the opening statement.

Does the critic from the official opposition have an opening statement?

**Mr. Cliff Cullen (Turtle Mountain):** I'm certainly happy to be here tonight to review the operations of Manitoba Hydro. I know it's been a couple of years since this particular corporation has been before the Crown committee, so we'll look forward to your presentation and, certainly, getting into questions right away. Thank you.

**Mr. Chairperson:** I thank the critic for the official opposition for the opening statement.

Then we'll move to questions, I suppose. The floor is open if you want to proceed with questions, although it's been suggested that we have a presentation by Manitoba Hydro officials. Is that agreed? [Agreed]

I'll turn it over to you, Mr. Brennan, I imagine?

**Mr. Brennan:** Thank you very much, Mr. Chairman. I like the opportunity to review with you the operations of Manitoba Hydro. The presentation I've made up, I think, takes care of or at least addresses in some form most of the issues that I think the corporation is facing. There's a lot of risk to a company like Manitoba Hydro. I think, for the most part, we've managed those risks relatively well in the future. I'll go through it. I think I'll hit most items that you'll probably have some concern about and will probably allow you to go to other ones. I'll try to go through as fast as possible. If I'm going too fast or too slow, I presume you'll let me know.

This is a list of the items that I propose to talk about. We can go back to it after we're finished when we get into the question period.

A little bit about Manitoba Hydro. As you know, we're an electric and natural gas integrated electric utility. Our capital assets and service are over \$11 billion at the original cost. We are one of the larger energy utilities in Canada. Our generating megawatts of that is hydro. So, certainly, we're a hydro-dominated utility.

As of March 31, 2007, we had 5,600 employees, with 517,000 electric customers, of which 260,000 are natural gas customers as well. We export to over 30 electric wholesale customers in both the United States and Canada, and we have the lowest rates in North America.

Our revenue as of March 31 last year was \$2.1 billion, of which 1.632 was electricity and just

over \$500 million was gas. Our net income was \$122 million, and extra-provincial sales were almost \$600 million. Our retained earnings rose to \$1.4 billion. Our retained earnings would have been significantly higher had we not experienced that very serious drought three years ago.

This is a graph that indicates the interconnections we have, as well as where all our generating facilities are. The three major plants we have on the Nelson River, of course, are the ones that have been built more recently. The first plants built in the system are those close to Winnipeg along the Winnipeg River.

We have two thermal plants, one at Selkirk, which is powered by natural gas. It is a 132-megawatt plant. We have one other plant at Brandon that's thermal and that's powered by coal. We have four units at Brandon that are mothballed and are not in use. We also have one unit that we use for providing system reliability in the western part of the province, and we use it primarily in the wintertime.

We also have a gas combustion turbine out in Brandon, which is about 260 megawatts. Because it's a gas unit, the price can be relatively high on a unit basis. We try not to use it unless we have to. It is primarily used to make firm sales on revenue. Because we're a hydro plant or a hydro system, we plan for our system based on dependable flows, and we never know whether we're going to get dependable flows. We know that, for most times, we're going to have above dependable and, therefore, can sell it. But we can't sell it as a firm product because we really don't know what the water conditions are going to be.

The gas plant allows us to firm up that power that we'd otherwise sell as interruptible and make it firm. So I guess the real hope, from our perspective, is that we never have to operate it.

I should also mention the interconnection capability we have outside the province. We have 260 megawatts going into Ontario at the present time, 300 megawatts to Saskatchewan and 2,250 megawatts to the United States.

This is our hydraulic generation. The future is just a function of actual generation, and the green lines in the future are estimates based on pretty well average flows coming into our system. You can see that, in 2003-2004, we experienced a drought and our hydraulic generation went way down. You can also see that in 2006 we had a super year because of the higher hydraulic generation.

This is a net result of the hydraulic generation. You can see we had a significant loss in 2003-2004. That was all water related and caused us a great deal of concern. We bounced back two years later and pretty well recovered it, but had we not experienced that, our total equity would have been up to about \$1.8 billion instead of the 1.4 it is right now.

You can also see the green lines in the future and how they indicate that we've got a gradually-increasing net income as a result of modest rate increases every year that approximate 2.5 percent. Those rate increases are estimates and will be adjusted each year when we actually make the recommendation as to what kind of rate increase we should have. That will be based on actual conditions.

This is a graph that shows our net extra provincial sales. That primarily follows the hydraulic generation. It includes power purchased and water rentals, but it pretty well follows the other graph.

This is our capital expenditures. You can see they're going up rather dramatically. The green line in the future indicates our traditional capital expenditures that are related to maintaining the system on an ongoing basis or making sure that the system is in good shape, connecting new customers and the like.

The yellowy-type line is a major transmission and new generation that we're planning for in our system. So, in the short term, it includes Wuskwatim and, in the longer term, it includes costs associated with Conawapa, as well as a new transmission line from the north that I'm sure we'll be talking about.

The equity ratio. We have a target, and the target is a 25 percent equity in the company and 75 percent debt. As you can see, we're gradually getting there. If we didn't experience the drought in 2004, we wouldn't have any difficulty in achieving that.

#### \* (19:20)

A drought, a major drought of the worst on record would have a very significant financial impact on Manitoba Hydro. It is anywhere in the neighbourhood of \$2.2 million to \$2.5 million, if it was the very worst we ever experienced.

So there really is a need to have future rate increases that are modest and, certainly, we'd like to keep them below the rate of inflation. Interest coverage is the number of times interest is expressed. It's net income; it's actually cash flow so it's net income plus interest to interest. What we want to do with the interest coverage ratio is make sure it's at 1.2 or above.

This graph indicates in minutes how much the number of, the duration of customer outages, expressed in minutes and then the unit, costs to our customers along the bottom. We compare ourselves with other utilities across the country, and we do it based on a national organization. Because of competitive pressure, some utilities are dropping out. They don't really want other people to know just where they fit in in the sequence. But Manitoba Hydro, certainly, for the last 15, 20 years has always had the lowest outage rate as well as the lowest unit Most of the performance indicators for cost. Manitoba Hydro are pretty well the best in the country. Every now and then we do experience some blip in that, and it always causes me a little bit of an anguish.

This is a graph that we had that was done in January of 2007. It was made up by the U.S. Department of Energy and the Edison Electric Institute. This survey was done; we just picked it up. None of it is our numbers, but, as you can see, the average retail price for Manitoba Hydro is the lowest in the country. Subsequent to this being made up, some of the other utilities that are American would improve substantially because of the interest rate situation. Is that right? Or does it go the other way? I'll have to look at that.

The next one is a Manitoba Hydro survey. What we do is we approach other utilities and ask them, for a specific consumption rate, what their bills would be. Here this is a thousand kilowatt hours a month for a residential customer, and you can see that we're the lowest. I'll go through these quite fast because we're the lowest in them all.

The next one is 2,000 kilowatts a month, and this is more reflective of an electric heat customer, but you can see that once again we're the lowest.

When you get into commercial customers and large industrial customers, the spread between us and the other ones gets quite significant. This is a commercial customer with 10,000 kilowatt hours a month. You can see that the bill in Winnipeg was \$634.00 a month and, in the case of Ontario, it goes up over \$1,000.00.

This is a very large customer. It's a 50-megawatt-type load. With 31 million kilowatt hours a month, the actual bill is in thousands of dollars, so in Manitoba the bill would be almost a million dollars a month. You can see what it would be in other provinces.

This is a very, very large customer, but we have customers that are more than two times this size. This would clearly be in the top of 10 number of customers, closer to the top five.

A little bit about Bill 11, The Winter Heating Cost Control Act. We set aside, as a result of a bill that was passed in the Legislature, \$35 million. It's part of the Affordable Energy Fund. It approximated 5.9 percent of our gross extra-provincial revenue in 2006-07. The purpose of the fund is set out here, and here's how we allocated the money: It has not all been actually allocated in terms of specific programs at this point, but the bigger one, of course, as set out here, is a low-income community-based initiative. We've had some pilots and the pilots are working out quite well. We expect that to continue. The other programs, some of which have been allocated like the oil- and propane-heated residential program, and that is to allow oil and propane customers to take advantage of our Power Smart programs as well.

I've reviewed this issue with the committee before, but we have issues with the large industrial customers that come to Manitoba because of our low rates, don't create an awful lot in the way of jobs, but cost all consumers a lot of money because they're consuming energy that we could otherwise sell on the export market at a rate that's almost double what they're paying within the province. So we've tried to do something about that and we've come up with a rate that we've applied to the Public Utility Board with, and it's before them now.

Here's an example of what a new customer that came on to our system, a large industrial customer of 100 megawatts, the revenue we'd get from that customer would be \$22 million. If we had sold it on the export market, we would have gotten \$40 million. So it's cost all other customers \$18 million. So what we've done, it would cost almost all other customers at 2 percent a year. So what we've done is we agreed that for existing customers we would give them a base load; we came up with a formula to calculate that base load. We'd also do the same thing for any new customers coming to the province; we'd give them credit for the base load. We'd give them credit for a growth allowance, with that a three-year aggregate amount. We'd also give them an adjustment for any verified Power Smart savings that they did before the program started, and 50 percent of any energy that they saved as a result of or equipment that was required for environmental compliance. This is what the actual rates are, and, as you can see, they went up dramatically for those above that rate, which is above the base load.

A little bit about our exports. As you can see, the portion of our total generation that's exported to the U.S., Manitoba Hydro is the highest exporter when you express it as a percentage of our overall generation. I've got another graph that comes up later that shows in actual, real numbers that we are the largest exporter. It does vary by year, but we have been quite often in the last little while.

This is a graph that shows our on-peak export capability. It is the black line going across the graph, and you can see that the line before, the gray line in the middle there, which is based on actual results, quite often we had generation that was above the line, and we'd have to, because that's on-peak that line, we'd have to sell stuff off-peak and get a lower rate. The dip, of course, is the drought we had. In the future, you can see that if we had Wuskwatim we're below the line, so we can sell all of Wuskwatim power on-peak, and with the first unit of Conawapa, based on this forecast is 2021 coming in to service, we'd be able to sell the majority of that on-peak as well.

#### \* (19:30)

This is the exports by province, and this is the graph that shows Manitoba Hydro as having the largest exports. This was the calendar year of 2006.

Potential sales that we're looking at, and we have a fairly good list. There are various people in the United States that we're talking to, and certainly have an interest in buying power. The export capability into the States is quite high, and so we'd like to take advantage of that wherever we can. We have negotiated a sale of 375 megawatts to Xcel. This a sale that has been rolling over. The product has changed over the years, but this is the latest one we have coming. It starts in 2015, the same time as the existing one ends. This sale still has to be reviewed by the Minnesota Public Utilities Commission. Most resource decisions have to be made by U.S. utilities in the immediate future. Anything we sell them on a firm basis will displace any new construction they might have in their own resource area.

Ontario. They certainly have a large requirement for power. We certainly can't meet their entire demands, but they're interested in probably more than what we're really happy in trying to meet. But we are talking to them. We are looking at new transmission into Ontario to make that, and there have been different routing options to take care of that. We continue to export power into Ontario based on the existing transmission facilities.

Saskatchewan. We've been talking to them. They have a need for power as well. We've made an offer to them, and they're prepared to talk further about that offer.

New transmission bipole 3. From our point of view, right now, because we have so much power coming down the two existing transmission lines from the north, if anything-they're both in the same right of way. If we have some major catastrophe hitting those lines, it would cause us a great deal of difficulty, and we wouldn't be able to totally supply the load in the southern part of the province.

But we need a new transmission line. We need it as soon as possible. Certainly, there are benefits from loss reduction, but this is definitely a major concern in terms of getting one approved. I'm sure we'll have more discussions about that.

The Manitoba Hydro-Electric Board asked management to review alternatives to the east-side road. We took a look at that, and it took us an awful long time to go through there, much longer than I would've liked, but we considered all kinds of routes other than the east side. We looked at an Interlake route. They had various schemes to do that. The west-side route. We looked at gas-fired generation in the south, imports and the like, and, at the end of the day, the only viable alternative to the east-side route is a west-side route.

This is a summary of the bipole 3 from our perspective. At this point in time, in terms of both sides, whether it's the east side or the west side, we've only identified a corridor. It's a very, very large corridor. When we actually get into consultation, a shorter routing study area would be selected. The capital cost of the conversion equipment is relatively expensive, one going to a billion dollars. The capital cost of the line, depending on which route you took, is over a billion dollars, or \$671 million if it's on the east side.

This is just a map that shows generally where the boreal shield forest is.

All our new plants have been designed to minimize flooding and environmental impacts. What that basically means is we developed a plant, so we reduce the actual head behind the plant that reduces the output we are to get from the plant and increases the unit cost. We believe that that's a responsible thing to do, but it does increase the cost of power because, you know, the head's not there and the unit cost is–you're not going to have the same amount of generation coming out of the plant.

We do have an awful lot of undeveloped good sites. Manitoba Hydro has developed the plants based on descending order of cost. So we started the cheaper ones first and then gradually did more and more expensive ones. So, certainly, as you go along in the sequence, the cost of the plants goes up.

The next one we have based on the load forecast that's in our financial forecast is 2021. That looks like it's going to have to be reviewed with the current load forecast.

Conawapa is the next plant in our sequence at this point in time. We have been trying to protect an earlier in-service date for Gull-Keeyask and Cree that we can build faster than we can Conawapa, should there be a need.

This is a plant that just indicates the capital cost. The capital cost is based on the in-service dates of the-the longer it goes out, of course, the escalation would be higher and increase the cost of the plant. The area flooded, you can see. In the case of Wuskwatim, it's not very much at all. Conawapa's pretty well a run of the river operation as well. In the case of Gull, we've talked with the people in the four First Nations that we've talked to and talked about as possible partners on the plant, and they're pretty well in agreement with the 46 square kilometres. It is, for the most part, low areas.

Wuskwatim received our licence, and construction is under way at this point in time. We've almost completed building most of the infrastructure to start actual construction. We have a campsite being set out now with actual camps involved. We also have a road into the project as well that is virtually or almost complete. The current in-service date of 2012, 13 is what we're looking at, and we are looking at the possibility of advancing that by one year.

Gull, we're projecting an in-service date of 2018. We've been working with four bands: Tataskweyak which is Split Lake, War Lake, York Factory and Fox Lake. We're hoping to have an agreement with all First Nations by the end of this fiscal year.

As I mentioned Conawapa already, we're looking at an in-service date of 2021. It is by far the lowest-cost generation option that we're looking at. We started the consultations with the affected communities now.

A little bit about what Manitoba Hydro has been doing with First Nation communities. I'm personally quite proud of what we've been doing. But we've had, in terms of generation projects, they've participated in the planning for the projects. We've come up with a partnership in the case of Wuskwatim, and we're looking at it for Keeyask as well. We're able to come forward with a training fund that totals \$60 million; we've got 10 from the Province, \$30 million from the federal government and 20 from ourselves. The idea is to train people in various trades and allow them to be ready once construction starts on our facilities.

#### \* (19:40)

We're also trying to take some of the contracts and allow First Nations communities to actually bid on them. I should also talk a little bit about, and I don't know if it comes up or not, but what we've been doing within the company is to our terms of First Nations people as well. We've had various initiatives to attract First Nations people for employment at Manitoba Hydro. We're now at the point where we have about 13 percent of our total number of people on the payroll as being First Nations people, and in the north we're up to 40 percent. We're quite proud of that. We also have some initiatives whereby First Nations people can come in, work for a year, and then find what kind of avenue they might like to get trained in, whether it's electrical, mechanical, journeyman, lineman or electricians and the like. So that's working out relatively well for us as well.

Power Smart. Manitoba Hydro has one of the most aggressive energy conservation programs in the country. We've been in it since, I think, about 1990. We gradually got more aggressive and, of course, a lot of that is related to the export market prices. You know, the higher the export price, the more opportunity we have to save power within Manitoba, and sell it in the export market. But it's certainly been going well. As the export market prices go up, we can put more money into Power Smart.

These are just the various types of how we focus on what we want to do, which is actually change the marketplace. We do it through both technologies as well as practices to make standard products on the market. We have Power Smart programs for every type of customer. We have various programs to meet every type of customer's needs and all our programs are integrated with the federal government programs.

We've received a fair number of awards for our Power Smart activities. I guess I don't need to go through them all. It's more of a commercial here than anything, but we're quite proud of the fact that our Power Smart program is getting awards as well. They definitely lower electricity rates in Manitoba. Not only do they allow us to sell the power on the export market, but they also defer the need for new generation.

This is the actual participation by year. It's historical, but it shows how we've ramped it up dramatically.

We have a \$518-million investment proposed with targets of 1669 gigawatt hours and 86 million cubic meters of natural gas to save by 2017-18. The savings to date are set out here as well, and they are quite extensive as well. This just sets out what we've been doing, gas savings that to date represent the natural gas-that's a future target of 2017-18represents the natural gas needs of Portage, Steinbach and Dauphin, and it's one-third of the city of Winnipeg in the case of electricity.

A little bit about geothermal. Manitoba Hydro is the largest installer of geothermal or heat pumps in the country. We do it in excess of our share of the population. The amount we're putting in represents 20 to 30 percent of the Canadian activity, depending on the year. In total, over 35 geothermal heat pump systems have been installed since we started the program in 2000. I'm not sure I need to go through all that.

This is another commercial just sending out all the recognition that we've had about our program. Some of our merging our emerging energy technologies, we're looking at how we can serve our four communities that are still served by diesel generation. We're looking at how we can serve them in another way, and we're looking at all kinds of alternate energy forms.

We also looked with the City of Winnipeg at what we can do with the landfill gases at Brady Landfill site. There are three options that have been set out as to what we can do. The first one is a collector for gas. You collect the gas and start generating power with it. That's a relatively expensive one. Another one is to clean the gas and put it into the natural gas distribution system. Another one is to build a pipeline to the university for their direct use in their steam heating system. We're coming to a conclusion fairly soon as to what the best option is. That decision will be made by the City of Winnipeg, though.

Other emerging technologies. There are all kinds of them. There are various types of fuel cells. There are plug-in, hybrid electric vehicles and the like. Manitoba Hydro has plug-in, electric vehicles. There are not all that many manufacturers of them. The particular one we purchased from was in the United States. The technology changes continually and improves dramatically, and we've been experiencing some difficulty with the one we have. We're looking at totally converting it to a different type of battery that's more current.

The University of Manitoba has one as well. They got theirs modified by a different company than ours. They're not having the same sort of difficulty as we are. We're part of the chair in alternative energy, so we're getting the results of the benefits of what they're doing.

Some of the other things we're doing. We put in a hydrogen generator that's making hydrogen for our own use at Dorsey. That seems to be working reasonably well. We're getting all the kinks out that system. There's a new kinetic hydro turbine that going to be installed at Pointe du Bois. It just sits in the water. I don't know if I can answer many questions about it, but it's a relatively small unit, 60 kilowatts. As I understand it, the water just flows through it and generates power.

Wind. We have a 99-megawatt wind farm at St. Leon that's working. It's in its second year of commercial operation. It works very, very well. Certainly, at certain times it doesn't produce power, but, overall, it's doing quite well. We have an RFP that is now closed for 300 megawatts of power. We've got 84 different types of bids from 17 people that made proposals, and they are under evaluation now.

We are also researching a composite tower that is 20 metres taller than the existing ones. We've continued to work with the people that have been adversely affected by our previous projects, and we're trying to resolve any claims that are still outstanding. We have ongoing issues with First Nation communities as a result of high-water conditions and the like, but we are doing reasonably well in resolving them. We still have issues with Cross Lake. That's the one party to the Northern Flood Agreement that we've been experiencing difficulty with, as has Canada in Manitoba. I sort of get ahead of myself at times here, but I am now coming to the ones I just talked about. Overall, we spent \$600 million on mitigating and compensating impacts related to our previous projects.

#### \* (19:50)

I've talked about the Aboriginal employment in Manitoba. We've got the pre-placement training program that I previously talked about. We have various Aboriginal bursaries, scholarships and various types of awards to promote employment with Manitoba Hydro. We have the Northern Training Initiative that I already talked about. We have a culture and awareness training, and that's for all our employees. We also have an Aboriginal purchasing policy that has preferential purchasing guidelines in place. Sometimes, when we're working within a resource area of a particular First Nation, we are prepared to negotiate contracts with them, as long as the amount we can negotiate is relatively close to being within our estimate. We will go outside it, but only in extreme cases.

I already talked about that program. This is the pre-employment training issue, and 1300 people have participated in more than 3000 training experiences. I mentioned that the 12.5 percent overall of our people was-oh, this is a goal, 12.5 percent by March 2008. You're going to see later, in the next bottom part, that we've already exceeded it. We exceeded the corporate one as well.

A little bit about our new building; 690 000 square feet is what we are building for. We're trying to get a LEED gold rating for the building. The building's going to have a 60 percent energy reduction compared to the Model National Energy Code for Buildings. The majority of contracts have been awarded now. There's not many left at all. We were able to, probably, start off relatively well, and the first contracts we issued were relatively close to our estimates. As we've gotten the later estimates, though, the experience that everybody else is experiencing, Manitoba Hydro experienced as well, that forced us to change our budget by \$20 million. We also altered the completion date to May of 2008. Also, if we could set it up, we would like to arrange for tours for all MLAs to go through the building and just see it. We are quite proud of the building, and it's not even built. So, once it's built, we will be even prouder. I am sure that if we can arrange a date that is suitable for everybody, hopefully, you will be as impressed as we are.

As you know, the concrete is virtually at the end of being poured now and the outside glass is being installed. If you drive by it, you can see the glass on the building. Some are actual pictures of the building and other ones are schematics of what the building is going to be like. On the left-hand side, this is going to be an open walkway that will go right through the building. It's on an angle, and you will be able to go from the southwest part of the site right to the northeast corner, and it's on an angle like that. It's not quite as pronounced going from one corner to the other as I suggested, but it is on an angle. This is one of the atriums, and each atrium-they are on both sides of the building, and they are six stories high. I am probably not the best one to describe how this is part of the heating and cooling system, but you will get that on any tour you participate in. These pictures just show what the final product's like and where we are today.

Natural gas operations. I guess I would only like a couple of things to say about this. Most of the bill is the transportation and purchase price of natural gas, and natural gas changes all the time. The arrangement that we have now that's been approved by the Public Utility Board is that we change prices every February, May, August and November.

I don't really believe people have a good handle on what the price on natural gas is. It's up one month, down the next. You know, it's a function of whatever the market is and it causes us all kinds of problems. We haven't come up with a good alternate to the existing system. We thought we had one prior to– right after we purchased Centra Gas, the price of natural gas went out of sight. We decided that we shouldn't pass it all on to the customer. We came up with an averaging mode that we were left with a fair amount we hadn't recovered, and we amortized that over two years and let customers pay it over that period of time.

We're quite fortunate because at the same time that happened, the price of natural gas dropped and people were able to pay the extra and not even notice. This method I'm not really happy with, but we're going to have to develop some kind of an alternative and take it back to the Public Utilities Board.

This is just natural gas rate increases, and you can see that they go all over the place. This is the graph that I primarily like to show people. The 17 percent is what Manitoba Hydro can actually control in terms of natural gas bills. That is the actual distribution cost of natural gas within the province. Questions or comments?

**Mr. Chairperson:** Thank you, Mr. Brennan, for your presentation. The floor is now open for questions.

**Mr. Cullen:** Thank you very much for the presentation. It was quite thorough.

I just wondered if you did bring hard copies of that presentation that you could share with the committee.

Mr. Brennan: Yes, we have and we will do that.

**Mr. Cullen:** I just wonder if you could have those circulated at this time.

**Mr. Chairperson:** While copies of the presentation are being circulated to members of the committee, we'll proceed with questions.

**Mr. Hugh McFadyen (Fort Whyte):** Thank you, Mr. Brennan, for the presentation, and also Mr. Schroeder as well. Thank you for being here as well.

I want to just say that we certainly acknowledge the many good things that are going on today at Manitoba Hydro. We're pleased to see the presentation on some of the important things that have taken place in the past and the plans for the future, and I think it would be safe to say that we are very supportive of much of what's going on.

We certainly, as opposition, have questions and issues from time to time, but thank you for the presentation and for the straightforwardness and the candour of the presentation, as well as the support that we have received in the past from you and your staff with respect to issues that are relevant to our province's most important and largest Crown corporation.

I just wonder if, in terms of the focus of the questions and there are certainly lots of issues, important issues in front of us as a committee and in front of the corporation today, but not surprisingly I think you will know that we want to spend some time at least tonight on the issue of the third bipole transmission line. You'll be relieved to know that all

of our questions tonight are of a technical and not a political nature. So I know that you'll welcome that as will the remaining members of the committee.

I just wonder in starting off around the discussion of the proposed bipole 3, if we could just back up to the slide that was put on the screen with respect to the capital costs of the various major projects that are currently in the works.

Mr. Brennan: Is that the generation one?

**Mr. McFadyen:** I believe it was the slide outlining the capital costs of the major upcoming projects.

\* (20:00)

**Mr. Brennan:** The transmission line or the one on generation?

**Mr. McFadyen:** Yes. Sorry, it's the bipole 3 summary.

**Mr. Chairperson:** Gentlemen, if you could direct your comments through the Chair so we can recognize you for the purpose of *Hansard*, please.

**Mr. Selinger:** Just before we go any further, I'm perfectly comfortable with this line of approach, but more of your members did actually say we should start with the report of '03. I wondered if we want it to be more flexible than that and allow for more wide-ranging discussion on the understanding that we would come back and address some of those reports later on.

**Mr. McFadyen:** Yes, I just note that on page 29 of the '03 report there's reference to, and I quote: preliminary planning with respect to "a new high voltage direct current transmission line called Bipole III along the east side of Lake Winnipeg to ensure Manitoba's electrical delivery system reliability and security." Page 29 of that report. So I'd just like to pick up from that reference in that report and just post questions on that basis.

I think we're just awaiting the slide. The heading on it is bipole 3 summary.

Just in going through the estimates of the capital cost on the project and just noting that this is–I think that the project's described as the third largest from a capital perspective when you include both the lines and the converter stations associated with this project behind Gull and Conawapa in terms of the scale of the project.

Just in order to give us a better understanding of some of the assumptions and the estimates that are

on the screen, there is reference with respect to the east- and west-side lines second from the bottom line on capital cost of line. Just so we understand, that capital cost is the capital cost related only to the line itself. Is that correct? It doesn't include land acquisition?

Mr. Brennan: No. That would be an all-inclusive cost.

**Mr. McFadyen:** I'm asking because you had indicated previously that that number was in relation to the line only and that in addition to that there would be land acquisition. But you're saying now that that number is land acquisition as well as the hard capital costs of the line itself.

**Mr. Brennan:** Because it's a conceptual sort of thing, all the detailed design has not been done. It is a comprehensive cost for the whole line, including land.

**Mr. McFadyen:** And the capital cost of the converters at \$1,166,000,000, you had indicated previously, both in committee and on CJOB, that the west-side route would require moving ahead immediately with a new converter.

I just wonder if you can confirm that that converter cost of \$1.1-plus billion for the west side, does it—firstly, let me ask, does it include one converter or is there more than one converter, a northern and a southern converter, within that cost?

**Mr. Brennan:** Yes. What happens is the power is generated AC. It's converted to DC, transmitted down the line DC. At the south end it is then converted from DC to AC for distribution in our normal system. So it's conversion equipment at both ends.

**Mr. McFadyen:** And you had previously indicated that the west-side route required an immediate investment in the converter facilities. Is that correct, in order to make that route viable?

**Mr. Brennan:** The original proposal by Manitoba Hydro, if you go back to the 2003 report, was for only a line with no conversion equipment. The cost of building a line is, as you can see, just something that a chartered accountant has difficulty with. So, when we started, I think our engineering people, to ensure the reliability of our system, want to come at the corporation with a way that they could get it approved. We do have a serious risk with conversion equipment. I think that is a serious problem for us,

and it wouldn't take them very long to come back with a recommendation for converters.

Having said that, we know that whenever new generation is required, we definitely need the conversion equipment then. So, at this particular time, they'd be required for either Gull, which we can make a 2017-18 date, or 2021, where there's a good chance of moving ahead.

So conversion equipment, although the original proposal was only for a line, the conversion equipment would come very, very quickly thereafter, if not right away.

**Mr. McFadyen:** So, just to be clear on that point, the original proposal, which was an east-side line, didn't require new investment in conversion equipment in order to make that line usable. It didn't require it immediately. Is that correct?

**Mr. Brennan:** Yes. The idea was that we would use the conversion equipment already in place should the line go up. If anything happened with the conversion facilities, we'd be SOL.

**Mr. McFadyen:** So there was the ability to build the east-side line without conversion equipment, but you've indicated that it's desirable to build that equipment and that it would be necessary as the new generating capacity was coming on line. But you've indicated in committee and publicly on the issue of the west-side line that the west-side route, that the new conversion equipment is not optional; it's mandatory in order to make the west-side line viable. Is that correct?

Mr. Brennan: Yes, it is.

**Mr. McFadyen:** So the difference between the east and the west, with respect to conversion equipment, is that an east-side line, it's optional and delayable, the conversion investment, but a west-side line, it's required and immediate in terms of making the west-side line viable.

**Mr. Brennan:** It is, and it really was in 2003, because in 2003, of course, which was four years ago–and we can also build the east side faster–that there was a bigger span between when we'd need conversion equipment.

The conversion equipment right now is probably a bigger risk to the corporation than even the line. The real problem is not only do we have all our generation coming down from the north into that conversion station there's also an AC switch yard there and all kinds of stuff like that. There was a report or an internal analysis I guess would be a better way to say it, where they estimated the impact of anything happening to it, and it would cause a long time to put it back in service and everything up. So I guess the risk to the corporation of not putting in conversion equipment would be pretty severe. So I really think it's what's needed.

**Mr. McFadyen:** Just to be clear, that risk exists independent of the decision around east or west. Is that correct? The risk that you're referring to, it's not dependent on east or west. The rationale for building conversion equipment is based on risks that have nothing to do with the location of the line. Is that right?

Mr. Brennan: That is correct.

**Mr. McFadyen:** So the engineers that have advised us, which was very consistent with what you've said publicly, have said that the west-side route requires new conversion equipment in order to make that line usable, whereas the east-side route does not require it. But, as you have said, it's desirable, in order to mitigate other risks, to go ahead with the conversion project nonetheless. Is that right?

\* (20:10)

**Mr. Brennan:** Yes. In addition to that, conversion equipment would be required for new generation, which is required immediately after.

**Mr. McFadyen:** That new generation that would require the new conversion equipment is further down the road from a chronological perspective than the construction of the new bipole line. Is that right?

**Mr. Brennan:** I'm sure I'd get a recommendation pretty fast to build it once the commitment was made to a line.

**Mr. McFadyen:** I just want to come back on the issue of pricing, and one of the things that we're proud of as Manitobans and obviously, it's been a major, I think, asset for our province for decades, has been the low price of electricity here in Manitoba.

I just want to go back. You made reference in the presentation to Manitoba prices being in the range of about 5 cents per kilowatt hour. Is that correct in terms of the current pricing domestically?

Mr. Brennan: I believe that's correct.

**Mr. McFadyen:** The price that you would sell it externally is somewhat higher than that?

Mr. Brennan: That is correct.

**Mr. Chairperson:** It would be helpful if we could direct the comments, both, through the Chair if you wouldn't mind. It allows the *Hansard* folks to be able to record who was actually making the statements or asking the questions so, if you could help us with that, it would be appreciated.

Mr. McFadyen: Thanks, Mr. Chairman.

What is the price range per kilowatt hour currently for exports of hydro-electricity?

**Mr. Brennan:** It depends on the type of sale you make, but it's in the neighbourhood of 6 cents, 6 something, for firm power, and off-peak, you know, in peak times and if it's off-peak it will be dramatically less. So we try to sell all the power as much as we can in the peak time.

**Mr. McFadyen:** So if we're using a ballpark of 6 cents per kilowatt hour, and I'm not a mathematician or an accountant, but my understanding is that that would translate to roughly \$60 per megawatt hour, multiplying 6 cents by 1,000. Is that correct?

**Mr. Brennan:** That is correct, 60 to 70 cents is the range, but \$60 to \$70 would be a good area.

**Mr. McFadyen:** So that would be \$60 to \$70 per megawatt hour.

Mr. Brennan: I did it right for once.

Mr. Chairperson: Thank you.

Mr. Brennan: Yes, that is correct.

**Mr. McFadyen:** Can you indicate what is the expected life of the bipole 3 line?

**Mr. Brennan:** On average about 40 years. Some of the various components are less and some are longer.

**Mr. McFadyen:** Again, under the heading of rough calculations being done by a lawyer, I just want to ask: With 8,760 hours in a year at a price, a conservative price of \$50 per megawatt hour, that translates to roughly \$438,000 a year per megawatt of sales at that price. Does that sound about right to you?

Mr. Brennan: You went too fast for me.

**Mr. McFadyen:** My calculation of 24 hours in a day and 365 days in a year got me to 8,760 hours in a year and so, multiplying that by 50 megawatt hours, we're in the range of about \$438,000 per year, per megawatt.

**Mr. Brennan:** Certainly, your 8,000 number is right. I know that one and I'll take your word for the other.

**Mr. McFadyen:** Well, the \$50 was the number you just confirmed per megawatt hour. If it's 5 cents per kilowatt hour, it's \$50 per megawatt hour. Is that right?

**Mr. Brennan:** As the cost, maybe I better go back and make sure. Assuming that was the average cost we showed on the slide earlier, I would agree with that.

**Mr. McFadyen:** So, without getting too bogged down in mathematical calculations, it looks like about \$438,000 per year per megawatt if you multiply 8,700 hours times 50.

Does that sound about right in terms of the cost per megawatt?

Mr. Brennan: It seems reasonable.

**Mr. McFadyen:** So, if you're talking about 16 megawatts, you're talking about roughly \$7 million a year, just over \$7 million a year, in revenue attached to 16 megawatts of power. Is that right?

**Mr. Brennan:** I think my calculation was \$7 million a year. I'll confirm that for you, but I think it was.

**Mr. McFadyen:** Just to confirm that over the 40-year life of the line–and my understanding from past reports that 40 years is the low end in terms of the expected life–I think the past reports indicate 40 to 60 for a line. But at 40 years that would translate into about \$280 million with respect to 16 megawatts. Is that right?

**Mr. Brennan:** Our internal calculation of the value of the losses of 16 megawatts came to \$107 million in present value terms.

**Mr. McFadyen:** I'm not an expert on these things and so we're doing direct calculations: if it's \$7 million a year for 16 megawatts and we're talking about 40 years, not building in inflation and other factors, we're looking at about \$280 million nominally. The number would obviously be higher if you factored in inflation. Is that right?

**Mr. Brennan:** Conceptually, I would agree. A dollar 40 years from now, though, is not a very good dollar, like it would be worth peanuts. So I think present valuing would be more meaningful.

Mr. McFadyen: In fact, if present value would actually be to bring it to a higher number because of

the declining value of the–nominally, the number would be higher. Is that correct?

**Mr. Brennan:** No, it brings it down to \$107 million based on our calculations.

**Mr. McFadyen:** You indicated in the presentation you anticipate the price of electricity rising. That was indicated in one of your slides.

Do you anticipate the price of electricity staying flat at 5 cents or do you anticipate it's going to rise over the coming years?

**Mr. Brennan:** No, we assume that it will definitely rise. I don't really want to–I think you should maybe take my \$107 million. I think you've got a problem because you're assuming that it's being sold, you know, all 24 hours a day and it won't be. But, you know, conceptually I'll go along with you.

**Mr. McFadyen:** Thank you. Well, I guess a conceptual admission. I'm not sure what the difference is between a real admission and–

I mean, it's obviously the assumptions that go into the calculations are significant. We've got an assumption of rising prices going forward. Then we've got other assumptions going into the calculations.

Could you provide us with your calculations and assumptions as to how you reached your \$107 million conclusion?

**Mr. Brennan:** I think you'll find this a pretty hairy calculation. I asked for it from staff what the value would be, and that was the answer I got back. I imagine there are a lot of assumptions made as to how and everything like that. But we could tell you what we did.

\* (20:20)

**Mr. McFadyen:** Thank you. Just moving on to some of the other issues related to the converter equipment–sorry, the proposal for the west-side line. Can you just indicate in terms of the technology that's being used on that line? I want to just make sure I get the terminology right in terms of the capacity of the proposed new line, but can you indicate whether the new line will have the same or similar conductor cross section as the presently existing bipole 1 and 2?

**Mr. Brennan:** I don't have a damn clue. I don't have any at all. Those types of questions I'd have to get the answer to.

**Mr. McFadyen:** Is it the assumption based on the current cost estimates that it would be the same capacity as the existing two bipole lines, or are the assumptions going into your current capital estimates that the third, new line would be of a different capacity than the existing lines?

**Mr. Brennan:** I'm not 100 percent sure. I think it's a different type of a line. The existing one is two lines; this is only one line. So that would have some impact. The existing one is two actual lines coming down with two towers, like two towers beside each other, and so there are four lines in total, two lines in each tower. So this is only half that.

Mr. McFadyen: So, when you are-

#### **Committee Substitution**

**Mr. Chairperson:** I'll tell you what. Let's pause the committee for a second. We'll collect our thoughts. There's a substitution that I have to ask for the indulgence of the committee.

I'd like to make the following membership substitutions effective immediately for the Standing Committee on Crown Corporations, meeting October 25, 2007: for the government caucus, Mr. Jha for Mr. Dewar of Selkirk. It is for the information of the committee members.

\* \* \*

**Mr. Chairperson:** Now, with respect to the *Hansard*, it's very difficult for the Chair to recognize the individuals, for the purposes of our good folks at *Hansard*, behind me here to allow them to record the discussion that's ongoing. So I would appreciate all members of the committee directing their comments through the Chair to allow for that recognition of the individual making the comments, if you wouldn't mind. So I ask for co-operation of all committee members in that regard.

The floor is open for questions.

**Mr. McFadyen:** I appreciate if you can come back to us just on the issue of the capacity of the proposed bipole 3 in relation to the existing bipole lines.

Are the estimates that have been made publicly, both in terms of line capacity and line loss and budget, based on the assumption that the new line will be roughly identical to the existing bipole lines which currently run through the Interlake?

**Mr. Brennan:** No, it's not. I know the capability of the existing or the proposed line is 2,000 megawatts.

There's more power that can come down the two sets of lines than 2,000 megawatts.

**Mr. McFadyen:** The point I'm trying to get at is whether the new line is the same as, not the two of the existing lines combined, but roughly the same as one or the other of the two. In other words, are we looking at about a 50 percent increase in the current line capacity, in terms of the technology of the new line and its capacity, compared to the existing lines?

**Mr. Brennan:** I did it. I'll see if I can do two in a row. I really do apologize, Mr. Chairman.

It is more than 50 percent.

Mr. McFadyen: Is it 66 percent?

**Mr. Brennan:** I'm not 100 percent sure, but I think the other one in terms of the two sets of lines is around 3,600. I'll confirm that, Mr. McFadyen.

**Mr. McFadyen:** On the line-loss assumptions, there is an estimate provided at existing generating capacity of about 16 megawatts, and that's the differential between what an east-side line would have lost versus a west-side line, which is a longer route which you've acknowledged.

I wonder if you would just confirm first that the 16 megawatt differential between east and west in line loss assumes existing generating capacity.

**Mr. Brennan:** Yes, it does. We should maybe be clear on what the 16 megawatts of–it's a reduction in the savings that would occur in line losses. So, in the case of one on the east side, I believe the number's 92 megawatts; in the case of the west, it's 76, giving me 16 as the difference. So we are still getting 70 megawatts of savings.

**Mr. McFadyen:** So we save 76 versus 92 if we had gone east side, so I know we're talking about savings. We're talking about the difference in the savings between the two sides. That, again, assumes, as you've just said, existing generating capacity.

Can you just indicate what your estimate of the differential between the east and the west side, what it will be once the new generating capacity is on line? A I understand it, one of the reasons, not the only reason, but one of the reasons for the construction of bipole 3 is to accommodate the additional power that would be flowing south from the new generating stations.

**Mr. Brennan:** If we add Conawapa to the system the number goes up to 32 megawatts.

15

**Mr. McFadyen:** When Wuskwatim comes on line that will add load to the bipole lines.

What difference will that make to the differential?

**Mr. Brennan:** It won't add anything at all. Wuskwatim will come through the AC system and it won't go through the DC system.

**Mr. McFadyen:** Can you just explain for us laymen what that means in terms of the transmission of the power from Wuskwatim to its ultimate destination, what that means when you say AC rather than DC? Does that mean that it bypasses the two existing bipole lines and the proposed third bipole?

**Mr. Brennan:** The engineers at Manitoba Hydro will love me answering this question.

The AC system is the general transmission system we have in the whole province; like, all the major transmission lines are AC. Our export lines going out of the province are AC. We have a major line to the States, that's 500 kV; that is still AC. So the entire system is transmitted at AC with the exception of the lines from the north, which go long distances at DC. DC provides for less losses than AC. So Wuskwatim comes in and it will get into the northern collector system, comes down toward The Pas and that sort of thing and then gets into our entire system. I'm not sure if I explained that well or not.

**Mr. McFadyen:** Maybe well enough for now. I can't guarantee that we won't have more questions about that.

What will the addition of Gull, the extra generating capacity from Gull do to the line-loss differential between east side and west side?

**Mr. Brennan:** It will add another eight megawatts in terms of the loss you're talking about.

\* (20:30)

**Mr. McFadyen:** Is it correct, then, that once Conawapa and Gull are on-stream, we're looking at roughly, a differential of roughly 40 megawatts in line loss between east side and west side?

Mr. Brennan: I believe that number is correct.

**Mr. McFadyen:** Over the 40-year life of the bipole 3 project, what is your estimate of the revenue loss that would be attached to 40 megawatts of line loss?

**Mr. Brennan:** Appreciating the fact that we're going to have–I guess it would be 1250 plus another 630.

We'll have almost 2,000 megawatts of additional generation on the system.

But the line loss is-what was your question again? Sorry.

**Mr. McFadyen:** Just the estimate of the revenue that would be associated with 40 megawatts of power over the life of the project.

**Mr. Brennan:** Bringing it back right to 2017, it would be \$230 million.

**Mr. McFadyen:** Can you just, if you would undertake just to provide us with the assumptions that go into that financial calculation, as well as the calculation that was provided with respect to the 16-megawatt differential, that would be appreciated. Are you willing to do that?

**Mr. Brennan:** I don't see any problem. We can look at it. I think the assumptions would be the same for both.

**Mr. McFadyen:** Just backing up a little bit, I wonder if you can, just in terms of some historical context on the planning that's gone into bipole 3, I wonder if you can just indicate when the process of planning for a bipole 3 began. What was the impetus for the onset of planning with respect to bipole 3?

**Mr. Brennan:** Originally, the planning for bipole 3 was tied into new generation. So, when we looked at making the major sale to Ontario during the '80s, the late '80s, we needed to make the sale of both generation and transmission, in other words, a new DC line to get to Conawapa far down. So, up until we were proposing to build those two and the sale to Ontario got cancelled, we then eventually cancelled all the work on both and didn't do any more. We reintroduced the need for the line in about 2001.

**Mr. McFadyen:** In the course of the planning for a new bipole 3, every statement that's come from Manitoba Hydro, and every indication we've received and previous committees have received has been that the preferred route was the east-side route. Is that correct?

**Mr. Brennan:** That is correct. Most of our planning was based on the east side.

**Mr. McFadyen:** Going back to the early planning which commenced in the late 1980s in anticipation of an Ontario power sale, was the west-side option ever analysed as a possible route for the third bipole at that time?

**Mr. Brennan:** No, except during the process of working with the various committees, we were asked at that time to look at alternatives to the east side.

**Mr. McFadyen:** Was there extensive analysis of the west-side option at that time?

**Mr. Brennan:** I'm not sure how extensive it was. I can't remember the whole process because the process started and then we stopped it with the cancellation of the sale. So I'm not sure what the sequence was on there.

**Mr. McFadyen:** Do you have an estimate of the cost that has gone into the analysis of the east-side option from the late 1980s when it began up until present?

**Mr. Brennan:** I don't think I would because most of it would be regular duties and that sort of stuff. Some of it might have been accumulated.

**Mr. McFadyen:** When you examined both the westand east-side options at the time, what caused you to come to the view that the east side was the preferred option?

**Mr. Brennan:** I think a lot of it was based on the distance. It was significantly shorter.

**Mr. McFadyen:** Was the west side ever even considered remotely viable during that period of time?

**Mr. Brennan:** You see, so much has changed in terms of environmental considerations that Manitoba Hydro changed the way we've done all kinds of things over that period of time, like just the way we build dams. You know, we build dams and cause a fair amount of impact on people. We changed that so the cost of the plants went up dramatically, and we didn't get the same amount of output from those plants. But what made us change that was just the environmental considerations and the acceptance of people to what we were doing and just getting approval for it.

We knew that we would have a hard time getting Wuskwatim, as an example, approved if it involved a lot of flooding, I guess the same issues we've been talking about in the last year and a half, two years. There was clearly a lot of risk in coming down the east side. The real issue is whether we could mitigate that risk, and certainly there's very much of a difference of opinion as to whether we could or could not.

Mr. McFadyen: You indicated a couple of weeks ago, on CJOB radio, on the issue of support, that an

increasing number of First Nations on the east side were moving toward being supportive of an east-side transmission line. That was your position two weeks ago. Is that still your position?

**Mr. Brennan:** I think there's a good number of bands that have expressed an interest in supporting one. There's quite a bit of a qualification to that though. They also want to own the line in doing that, and we know for sure that there was strong opposition to it on the east side. But there certainly were some bands supporting it, for sure.

**Mr. McFadyen:** You had indicated in committee in November of 2005 that it was your view that there were more First Nations communities that were going to have to be dealt with with a west-side option than with an east-side option. I'm just wondering if your view has changed since that committee meeting two years ago.

**Mr. Brennan:** I think the latest information I got was the number of First Nation communities was approximately the same on both sides. That's, I think, the latest information I got.

**Mr. McFadyen:** Can you just indicate what concrete expressions of support you've received from the First Nations in the vicinity of the west-side route to date?

**Mr. Brennan:** We haven't got any, actually, but we haven't had any opposition to it either.

**Mr. McFadyen:** Do you think that there's a possibility that west-side First Nations might take the opening position that they would like ownership of the line going in the vicinity of their community? Do you think the odds of that are as good as that being the opening position of an east-side band?

\* (20:40)

**Mr. Brennan:** I have no idea, to be absolutely honest, so probably I shouldn't keep going, but I do think First Nation people are concerned. I said I was going to stop and kept on going. First Nation people, because of the conditions they have, are really interested in economic development. I think most of them, one way or the other, would be supportive on the basis that it may help them.

**Mr. McFadyen:** Just in terms of the proposed west-side route, I wonder if you can just indicate to us, and I don't know if it would help if we looked at the map of the province, or whether we put the map back up on the screen, but are you able to indicate just roughly what the proposed route will be of the proposed west-side bipole?

**Mr. Brennan:** We have identified a very, very wide corridor and what we do is go out–I continually ask the same question you do, and I really don't get an answer. The answer I get is that we are going to identify a real wide corridor, go and talk to people, find out what we should avoid, and in that whole wide corridor we'll find the best route. And so I don't think I could tell you where that was. I do know that it goes right around Lake Winnipegosis and goes out quite a way and then comes down south and then cuts in and will come to the east side of Winnipeg.

**Mr. McFadyen:** So, just to be clear on that point: the line originates at the Nelson River stations in northeastern Manitoba, so it originates, roughly, directly north of Kenora, Ontario, and it ends just a little bit east of Winnipeg. Is that right?

Mr. Brennan: It sounds right.

**Mr. McFadyen:** And would you be running the bipole 3 through Riding Mountain National Park?

Mr. Brennan: No, we certainly would not.

**Mr. McFadyen:** And would you run it west of Riding Mountain National Park?

**Mr. Brennan**: I think it would be east. I think the one I looked at, I thought it would be east. I just looked at the map, but once again, there's just a real wide corridor, so I don't really know what they would find to be the best, but I would have thought it would have been east.

**Mr. McFadyen:** And do you have any sense at this stage, appreciating that it would appear that there hasn't been a lot of thought or time put into analyzing the west-side option, whether it would traverse the Riding Mountain UNESCO Biosphere Reserve?

**Mr. Brennan:** If that's in the park, we would certainly avoid it. There are other parts of it to avoid, too. There's a series of parks there, and we would avoid those if we could at all. We would avoid almost anything that was sensitive in any way.

**Mr. McFadyen:** To that point then, you would be seeking to avoid Grass River Provincial Park?

Mr. Brennan: I would think so.

**Mr. McFadyen:** And you would be seeking to avoid the Cormorant provincial forest?

Mr. Brennan: I would think so, if we can.

**Mr. McFadyen:** And you would be seeking to avoid the Clearwater Lake Provincial Park?

#### Mr. Brennan: Yes.

**Mr. McFadyen:** You would be seeking to avoid the Porcupine Provincial Forest?

#### Mr. Brennan: Yes.

**Mr. McFadyen:** And you would be seeking to avoid the Swan-Pelican Provincial Forest?

**Mr. Brennan:** I can see where this is going. It's going to look like–yes.

**Mr. McFadyen:** And would you also be seeking to avoid the Duck Mountain Provincial Forest?

Mr. Brennan: Yes.

**Mr. McFadyen:** Would you also be seeking to avoid the Duck Mountain Provincial Park?

**Mr. Brennan:** Yes, I would think so. I think the initial intent would be to avoid them all.

**Mr. McFadyen:** Thank you. Given the anticipated line-loss difference due to the longer length, would the west-side line be compatible with the existing converter station at Dorsey?

Mr. Brennan: Could you repeat the question?

**Mr. McFadyen:** The anticipated line-loss difference due to the longer length, would the west-side line be compatible with the existing converter station at Dorsey?

Mr. Brennan: I wouldn't think so.

**Mr. McFadyen:** Of the 1.1 billion related to converter stations, how much would be in relation to the southern converter station, and how much in relation to the northern converter station?

**Mr. Brennan:** Just a guess, but I would say 50-50. I guess the cost of building in the north would be higher, but other than that, it's the same equipment only it does the opposite thing.

**Mr. McFadyen:** Would the northern converter station be required if you had used the east-side route for bipole 3?

**Mr. Brennan:** They're all going to be required because we have generation coming in right away anyway.

**Mr. McFadyen:** So the requirement is related to the future generation?

**Mr. Brennan:** Well, seeing as it's very, very close, it would do both.

**Mr. McFadyen:** You just indicated, in committee previously and on CJOB a couple of weeks ago, that the converter equipment would not have been necessary with the east-side line, but would be built in order to accommodate new generation. Is that correct, just to be clear on that point?

Mr. Brennan: Could you repeat the question for me?

**Mr. McFadyen:** Maybe just to go over it, on November 21, 2005, in committee, you had indicated that on the west-side line, and you say and I quote in response to a question about whether the conversion capacity would have to be built on the west side, you indicated in response to that: "Yes, it would." I'm just quoting now: "The one thing that we would require, we would require that immediately, that we built the west side option. So, on the east side, we are proposing to build it later. So there would be advancement costs with the west side which would be interest on the money for that period of time."

Is that still your understanding of what will happen in terms of the timing of the converter stations?

**Mr. Brennan:** The difference to that particular point, I think, the concept is the same except Conawapa is now required earlier.

**Mr. McFadyen:** On the issue of reliability, my understanding is that one of the reasons for proceeding with bipole 3 is to enhance reliability. I think we all agree that that's the right thing to do, and we agree that whether you go on the east or the west side you're enhancing reliability.

My understanding is if the existing two bipole lines were to go down, as they did some years ago in connection with a weather event, that with the concept of paralleling you would be able to essentially transfer the load on those lines to bipole 3. Is that a correct understanding?

**Mr. Brennan:** It's my understanding that because of the distances, if the distances were close to being the same, they could do that if the line went down. That would take care of the risk associated with the line. It would not take care of the risk associated with the conversion equipment. The risk associated with the conversion equipment is way greater. The impact of losing the converter station is way worse than the line.

Mr. McFadyen: So, just to confirm, I think, what you just said was that if the lines are roughly the

same length you could transfer the load on the existing bipoles 1 and 2 onto bipole 3. That would mitigate the risk of an outage with respect to bipoles 1 and 2.

\* (20:50)

**Mr. Brennan:** If you didn't have any conversion equipment in, that would be the case. You would still have the risk associated with the conversion equipment not being there, and you would also, of course, have to put it in when you put in generation. With those two caveats, I'd agree with you.

**Mr. McFadyen:** So, in the absence of new conversion technology, if bipoles 1 and 2 were to go down, if you had a third bipole line of roughly the same length, you could transfer the load from bipole 1 and 2 onto bipole 3 and that bipole 3 would have the capacity to handle that transfer of energy.

**Mr. Brennan:** That's my understanding, as well, appreciating they could still have the risk associated with no conversion equipment, and the impact of that of course would be way worse. You'd also need the conversion equipment as soon as you put in new generation. So you're talking a pretty short period of time. I think you can do that, though.

**Mr. McFadyen:** And the ability to transfer load from bipoles 1 and 2 is not the same if it's a longer bipole 3 line, is that correct?

**Mr. Brennan:** Were you just breathing? That was the wrong word, sorry. I thought you might want to say something there. No.

It's my understanding that's the case, that if it's a much longer–apparently you have to match the characteristics almost perfectly and a longer line wouldn't match those characteristics. So, back when we were having a hard time looking at absorbing the cost of these facilities into our system, and there's a long time between when we wanted the line in service and new generation, it was a better option at that point. Now it's less of an option for us.

**Mr. McFadyen:** And the reason for that is just the compression in the time frames by virtue of the delay in the commencement of work on bipole 3?

**Mr. Brennan:** Yes, the difference between the time, the length of service we could get the line in and the need for new generation.

**Mr. Chairperson:** Mr. McFadyen? Mr. Brennan, go ahead, to conclude.

**Mr. Brennan:** We also have this massive risk associated with it and the main risk is Dorsey, because up north we have two converter stations. Down south, we all have it coming into one.

**Mr. McFadyen:** So the added length of bipole 3 means that that line has less ability, or doesn't have the ability to take the transfer of power from bipoles 1 and 2 in the event that bipole 1 and 2 should go out of service for any reason.

**Mr. Brennan:** If the two lines were in service, that would be the case.

**Mr. McFadyen:** In the absence of the investment in the new converter equipment, the west-side option is less reliable than the east-side option? Is that right?

**Mr. Brennan:** No. The west-side option would be, under your particular scenario, the west-side option would be much more reliable because we'd have the conversion equipment right there and we wouldn't have to worry about transferring it over. So, I think, other than you have a longer line so then there's more risk associated with the line, but that's a separate issue.

But, no, I think there'd be more reliability with the west side just because you'd have the conversion equipment in, but that's under your scenario. I think really you need conversion equipment in both cases. Yes, you're going to put it in so soon after, you might as well get it all designed for the system.

**Mr. McFadyen:** So, just to come back to–let's call it my scenario, I guess, and maybe it's nobody else's scenario. But, in that scenario, because we're always operating with assumptions and scenarios, what you're saying is, in the absence of new conversion equipment, the west-side route would be less reliable than the shorter east-side route in terms of its ability to handle the load if bipoles 1 and 2 went down.

**Mr. Brennan:** I think so just because you have to transfer using the old equipment. But having said that, your scenario, your concept certainly was more acceptable once there was a long time between when we'd get the line in service and new generation was required.

**Mr. McFadyen:** What's the planned date for getting bipole 3 into service?

Mr. Brennan: 2017.

Mr. McFadyen: With the west-side route plus the new converter station, what you're saying is that a west-side route with the new converter technology would be as reliable as the east-side route with the new converter technology. Is that right?

**Mr. Brennan:** I think the fact you got a longer line would create some risk. So I would think, assuming all other things being equal, that the east side, just because it's shorter, you'd have more confidence in it.

**Mr. McFadyen:** Is reliability or risk a factor in pricing when you go to make export sales?

**Mr. Brennan:** I think it is. Manitoba Hydro is well recognized as a good, reliable supplier. Like, I think our company is pretty well received everywhere. It's something I'm pretty proud of.

**Mr. McFadyen:** So the more reliable the system, the better price you would get on the market for Manitoba Hydro power. Is that, as a general rule, correct?

**Mr. Brennan:** I don't know how I could talk to that because Manitoba Hydro's always been deemed to have, you know, a good reliable product. I think you have to have a reliable product if you're going to sell it to somebody else. I think that probably the biggest variable will be whatever the market is.

So, you know, I think you have to fit in the market and I think you have to have a reliable product. So I'm not sure I can really answer the question.

**Mr. McFadyen:** The argument for proceeding with a third bipole is, in part, based on increasing reliability. My understanding from advice we've been provided by your staff and by your prior comments is that increased reliability helps our negotiating position when we go to make export sales. Is that true?

**Mr. Brennan:** I think certainly there's a risk associated with having all our power coming down the two lines. I think people recognize that. But I don't think it's hurt us yet. It might in the future, but I don't think it has yet. I think, like, our reputation really is quite good.

**Mr. McFadyen:** There were comments made a couple of years ago with respect to Manitoba Hydro development by Robert Kennedy, Jr., who said that Manitoba Hydro contributes to greenhouse gas emissions and that hydro development, both in terms of generation and transmission capacity was damaging to the environment. At the time, you responded by suggesting that saying such a minute percentage of impact on the northern boreal forest

was a threat to those forests was an irresponsible exaggeration.

Are you still of the view that it's an irresponsible exaggeration to say that Manitoba Hydro development poses a threat to the boreal forest?

\* (21:00)

**Mr. Brennan:** I was probably a little excited at the time. I really believe that Manitoba Hydro would do everything possible to try to protect anything we did, and we'd try to do it with the least impact on the environment as we could possibly do.

I think opposition to what we do, there's a risk there, and the risk is really, really large. I think it depends on who you talk to as to what they think that risk is. Certainly, people within Manitoba Hydro think we can do almost anything, and I think we have to have people that temper that. I think we've got to be cautious, and we've got to deal with these types of risks, every year a little stronger than we have in the past, and there's a risk there.

Now, the real question is, can we mitigate those risks, people getting up in arms and trying to stop our development? And there is a big concern that that would happen on the east side. It could also happen on west side. We don't know at this point. Because we built transmission lines in the past, we think the past is an indication of the future, and it has changed dramatically.

So I'm not sure if I answered your question. I don't think we damage the environment all that much, I think today, and we're a very responsible company environmental-wise. But other people don't necessarily think so.

**Mr. McFadyen:** Can I just ask, in terms of impact on the environment, whether it's your view that the Wuskwatim project, would that have a greater impact on the environment than bipole 3 or a lesser impact on the environment than bipole 3?

**Mr. Brennan:** I don't know how I can make those comparisons. I don't think Wuskwatim has very much. I think if the people in the area are willing to accept it, then I think that's a good thing. I think we've done our job.

In the case of a transmission line, it's much harder to get everybody on side. Like when Manitoba Hydro was dealing with Ontario in terms of the transmission line to Ontario, it was getting pretty close to my cottage, and I was getting pretty upset. I really was. **Mr. McFadyen:** You'll recall that you and I talked about Hydro lines through Whittier Park at one point, so we know that people can get upset about power lines. But I just want to ask: When do you anticipate, what is the planned completion date for Conawapa?

**Mr. Brennan:** At this point it's 2021, and we're looking at the current load forecast. It looks like it'll have to be advanced.

**Mr. McFadyen:** What's the anticipated completion date for Gull?

**Mr. Brennan:** At this point the first plant we have in the sequence is Conawapa. So at this point we don't have one for Gull, but Gull we're able to build faster because we've done more preliminary work. If we had some kind of load forecast risk or something like that, we could build Gull, it looks like, for 2017-18.

**Mr. McFadyen:** So you're indicating that in the sequencing, you're intending to move ahead with Gull ahead of Conawapa.

**Mr. Brennan:** No. What I said was our plans are for Conawapa first, but we are protecting an earlier inservice date and that'll take care of any load forecast risks or anything like that. So we could juggle them, if you will.

I'd also like to say that we took care of the Whittier Park problem.

**Mr. McFadyen:** I know you did. I was meaning to give you credit for taking care of Whittier Park, and I know the Member for St. Boniface (Mr. Selinger) will appreciate that as well.

With Conawapa coming in 2021, is it the intent or would it have been the intent then, to have the new converter facilities essentially be ready and operational concurrently with the completion of Conawapa?

**Mr. Brennan:** That's what the plan would have been, but I'm positive I would have got a recommendation to advance it.

**Mr. McFadyen:** Where would that recommendation have come from?

Mr. Brennan: Our planning staff.

**Mr. McFadyen:** You're saying the plan was to have it completed concurrently with the completion of Conawapa as that's when the new generating capacity would be coming on-stream.

Mr. Brennan: What I'm saying is, I think we've taken longer than we originally intended to get the

line in service and I think, because of the risk associated with the conversion equipment, I would have had a recommendation to build conversion equipment, I think, shortly. There are various analyses planners have done within the company and they believe the risk of something happening to Dorsey is unreal, and the cost of something happening is really, really quite severe. Replacing some of the equipment could take an extended period of time and we'd have to deal with all kinds of problems there.

**Mr. McFadyen:** What would the completion date have been in the event that you were given approval to move ahead with the east-side line for bipole 3?

**Mr. Brennan:** A little while ago, it was two years earlier. Now I'm not sure how much, how long ago; yeah, I think it was 2015, we could have got it in.

**Mr. McFadyen:** So to confirm, the direction to go west versus east has delayed the completion by two years.

**Mr. Brennan:** Assuming that 2015 is still right–I'm not sure it is–but assuming that's right, it would be two years.

**Mr. McFadyen:** Given the original plan to complete the converter station investment concurrently with the completion of Conawapa in 2021 and the completion of bipole 3 originally with the intent of completing by 2015, but now moved back to 2017, can you just indicate whether the plans, prior to receiving the direction to go down the west side, would have been to have the new converter station prior to the direction to go down the west side. The new converter station, as I understand it, the plan would have been to complete for 2021, but because bipole 3 is going to come on-stream on the west side by 2017, has it moved the converter station plans up by four years?

**Mr. Brennan:** Well, that was when I mentioned that I thought I'd get a recommendation to advance it anyway, and the other qualifier to that would be, I think we're looking at Conawapa at least a year earlier.

**Mr. McFadyen:** So whether it's three or four years, what you're saying is that the converter station investment is moved up either three or four years depending on what the advice would have been?

**Mr. Brennan:** Assuming I didn't get a recommendation to advance it, you know, because of the risk associated with Dorsey.

**Mr. McFadyen:** To date, you haven't received such a recommendation.

\* (21:10)

**Mr. Brennan:** No, but I've been given analysis that indicates the risk of something happening is extremely high and, you know, the impact of something happening is extremely high. It's probably got a relatively low probability, but it's a real high risk and the length of time it would take us to restore it is really, really large as well. I was relatively surprised by the particular analysis I saw, and it did cause me a great deal of concern. I'm positive we would have got a recommendation to advance.

**Mr. McFadyen:** So this is a relatively recent analysis that was done then that has given rise to the concern about advancing the work on the converter station?

**Mr. Brennan:** It was all in this process of looking at other alternatives, so I think it was in the fall of '06 that I saw it. I guess that's relatively recently, within the last year, but it was during the process of looking at alternatives to the east side that I saw it.

**Mr. McFadyen:** In terms of the analysis that's been done to date, can you just indicate whether there's any comparison between either a west-side or an east-side bipole 3 project in terms of the impact on the environment and the Great Whale project that was proposed for Québec?

**Mr. Brennan:** Manitoba Hydro has not made any direct comparison.

**Mr. McFadyen:** Just from what you know about Manitoba Hydro projects, including transmission lines, would you anticipate that the environmental impact of a bipole 3 would be in any way equivalent to flooding an area the size of Rhode Island?

**Mr. Brennan:** The way you described it, I don't think so.

**Mr. McFadyen:** In your view, is there any comparison between Manitoba Hydro's electricity, let's say, in a scenario where you ran an east-side power line and South African blood diamonds?

**Mr. Brennan:** I don't know anything about that. I really don't.

**Mr. McFadyen:** Is there any term of the sale agreement with Xcel that relates to the location of bipole 3?

Mr. Brennan: No. There's not.

**Mr. McFadyen:** Has Xcel Energy ever raised with you concern about the location of bipole 3 in the context of it potentially impacting future sales?

**Mr. Brennan:** No. I think maybe I should just say what my concern would be with Xcel. I think Xcel would have a different type of concern. They just want to buy power, and if the power they're buying creates all kinds of problems for them, in other words, let's say we came down the west side or east side or whatever, and there was a great big fanfare over what we were doing and created all kinds of anguish for them, their regulators, you know, the environmentalists in the States got upset and went to Xcel and said, look, what are you guys doing buying this? That would be a major risk to us. It really would because Xcel doesn't care where they buy.

They're not like Manitoba Hydro just concerned about the costs they're passing on. They just take the power from another source, put it in their rate base, and charge the customer, and still get their return. Well, Manitoba Hydro's different. We're concerned about the cost.

They just say, we don't want to have anything to do with that. We'll just go to the next cheapest source and buy the power there. That would be the risk from my perspective. We've got to make sure we manage those environmental issues as best we can. That doesn't matter whether it's east side or west side.

I think there are people more concerned about the east side than the west side, for sure. There's no doubt about that. I forget who the–I meant to check today, and I didn't do it, but we got one environmental group when we were looking at it that fired all kinds of letters to us, and they were, you know, just coming in one after another. Those kinds of issues, if it got going, would create all kinds of problems for us. And that one started, but I don't know what happened to it after. But the letters are definitely coming in to me and the chairman.

**Mr. McFadyen:** Can you just indicate again, and I think it was touched on in the presentation, just in terms of the amount of forest that is going to be traversed by east- and west-side lines? My understanding, just to confirm what's on the slide, is there is more boreal forest traversed by the west-side route than by the east-side route.

**Mr. Brennan:** Now, I'm no expert in this for sure, but the boreal shield is the type of forest that I think we're supposed to avoid, although there is forest, as I understand it, in boreal plains.

**Mr. Selinger:** We have a slide that I think would be helpful in regard to this question. I'm just going to ask Randy to put that up so that we can make the distinction between the boreal shield and the boreal plains. I think Randy set it up there now.

I think if we look at this slide, we will see that on the west side there's 420 kilometres of boreal shield, whereas on the east side there's 770 kilometres of boreal shield. The next slide has a map that I think illustrates that as well. It would be useful I think for the committee to look at. When you look at that, you can see that the boreal shield is more extensive on the east side in terms of its northsouth coverage versus the boreal shield on the west side.

I think the boreal shield is the area that's of particular concern to those that are interested in protecting the boreal forest. So I would just draw the attention of members of the committee to those two slides that were presented to us earlier tonight.

**Mr. McFadyen:** Just to come back on a point, we're particularly concerned about the boreal shield and the difference in terms of the east side and west side in terms of the amount that is traversed. I know on the slide the difference is 420 on the west and 770 on the east of boreal shield. So we're talking about 350 kilometres of added boreal shield traversed on the east side versus the west side.

Then there's an added 410 kilometres on the west side of boreal plains which would be traversed, which is not going to be a factor on the east side. I'm stating what's on the slide, but just for the record, if you can just confirm that.

Mr. Brennan: Yes, I agree.

**Mr. McFadyen:** Can you, just back on the issue of consultation–and I'll ask one more question. I think the Member for River Heights (Mr. Gerrard)–well, maybe what I'll do now is, the Member for River Heights wanted to pose some questions, so I'll turn it over to the Member for River Heights and allow him to pose some questions. Then we'll come back. Thank you.

**Mr. Gerrard:** One of the things that I think, as I understand it, with the bipole 3, as designed, whether it was east or west, there would be less line loss than the existing lines–is that correct?– because of the new quality or improved technology.

\* (21:20)

**Mr. Brennan:** The real reason is, as I understand it because, you know, I'm not a real expert in this, but there is so much power coming down the existing lines that more power is lost, and, by having another line you spread that out, and the losses are not as great. So, in the case of the east-side line, we save 92 megawatts of power, and, in the case of the west side, it comes to 76.

**Mr. Gerrard:** But you're saying that the loss or the savings will continue as you add more power?

**Mr. Brennan:** The savings will continue, but as you add more power, there's more losses because you get more power going down the line then.

**Mr. Gerrard:** I'm presuming if you would shift a considerable amount from the existing transmission to the new bipole in the interim until the production capacity was up higher, is that right?

**Mr. Brennan:** Yes, if we had new generation we require the line. Your assumption would be correct.

**Mr. Gerrard:** In the issue of east versus west, if you have a west line and suppose the scenario was that there was a 2,000 megawatt sale to Saskatchewan, wouldn't it be better to put the converter on in western Manitoba instead of east of Winnipeg?

**Mr. Brennan:** That, clearly, is an option one could look at. Our initial indication is that it would be better in Winnipeg. The main load centre you want the power for other than the sale is Winnipeg, so you'd still have to build some kind of an AC line from the converter station into Winnipeg.

**Mr. Gerrard:** If you have got a sale to Saskatchewan, your line length on the west side would be shorter if you had a converter there, but if you didn't have a converter, then it would be just as long. Is that correct?

**Mr. Brennan:** I'm not sure I followed the question. I apologize.

**Mr. Gerrard:** If you've got a sale to Saskatchewan, then you will still, because of the way–I mean, if you've got the converter east of Winnipeg you'll have to take all the power down to east of Winnipeg and then send it from there. But if you had a converter in western Manitoba and you had a 2,000 megawatt sale to Saskatchewan, then you would have a much shorter route going to Saskatchewan because you wouldn't have to come back to Winnipeg and then out to Brandon or wherever the converter was? **Mr. Brennan:** That is correct. One of the things we're looking at in terms of a sale–that is correct for sure. The only problem with that is we have some existing transmission lines going into Saskatchewan. Right now they cover about 300 megawatts. We believe that it wouldn't take a lot to beef them up. I think there are four transmission lines in total. We think we can beef them up and use the existing transmission lines for a sale.

**Mr. Gerrard:** What's the average sale at the moment to Saskatchewan on those lines?

**Mr. Brennan:** I would have to get that. Saskatchewan has never been a real big purchaser of power from Manitoba Hydro. But every now and then they have some kind of issue or problem and do buy. They're not the biggest customer we have by far.

**Mr. Gerrard:** In terms of the east-west questions, what's the-you mentioned the potential for sales for Saskatchewan, but is there a real likelihood? What's your estimate? Is that a 10 percent chance or a 70 percent chance or a 90 percent chance that there would be substantive sales to Saskatchewan?

**Mr. Brennan:** I wouldn't want Saskatchewan to hear me, but I think it's a good probability.

**Mr. Gerrard:** I mean, if you knew that there were definite large sales to Saskatchewan, would that influence the choice of east versus west if everything else was equal?

**Mr. Brennan:** I think if it was confirmed they would, with the exception of the fact we could upgrade existing lines which would be by far the cheapest option.

**Mr. Gerrard:** The existing lines come across in the north or in the south?

**Mr. Brennan:** They start right around The Pas and come all the way down.

**Mr. Gerrard:** So, if from 300-megawatt capacity now, you could go up to, how far would the existing lines or with upgrading on the existing lines?

Mr. Brennan: They're studying it now.

**Mr. Gerrard:** Any estimate, can you double it, triple it, quadruple it, five times it?

**Mr. Brennan:** I think we can do almost anything. It's just a function of how much it would cost. So what they're doing is they're looking at what the cheapest alternatives would be. **Mr. Gerrard:** Now the line from–for example, Wuskwatim comes down to The Pas and could provide sales to Saskatchewan, I presume, and if in this scenario then for sales to Saskatchewan, what you're suggesting is that the bipole 3 is not really all that relevant because you'd have the existing lines as from Wuskwatim coming to The Pas, which would be upgraded rather than having any need at all to have bipole 3 for sales to Saskatchewan?

**Mr. Brennan:** I don't know if I'd be quite that firm but I think the general intent of what you're saying, I would agree with.

**Mr. Gerrard:** I'm just trying to understand in terms of the decision east versus west whether there is a Saskatchewan consideration, and it looks to me that at this point, because of the other options and bipole 3, that that would be a pretty small factor in a decision whether you went west or east. Is that a fair statement?

**Mr. Brennan:** I think it would because what we're trying to do is improve the reliability for the southern system and that will include Winnipeg and everywhere, so we'd have to make sure the power got to Winnipeg so then we'd still have to build lines from that converter station no matter where it is.

**Mr. Gerrard:** Now the issue of potential sales to Ontario has raised the possibility of a line going, say, to Sudbury or to somewhere in Ontario direct from Conawapa or a northern station. If you knew right now that you had a major sale to Ontario and that you were going to build that line, would you still build bipole 3?

**Mr. Brennan:** Yes. What our concern is, is the reliability of the Manitoba system and that wouldn't do anything for the-the big thing it would do, though, would give us a direct line to another market and that would help us in terms of competing with United States. If you had a big line like that going to southern Ontario, you'd be in real good shape in terms of getting the best price, you know, just by having two good markets.

**Mr. Gerrard:** Again, what I'm trying to understand is whether that has any factor in terms of–at one point I think it was even the Premier who suggested, well, I think that we've got a third option rather than having to go bipole 3 but in fact what you're saying, pretty clearly, is that the only option is either an east-side or a west-side line, that the line to Sudbury is not an alternative to bipole 3?

Mr. Brennan: That's very definitely right.

**Mr. Gerrard:** Now there have been a couple of people who approached me and said, well, why don't you have an underwater line, and I gather that there are some high voltage transmission lines underwater in Europe. You had looked, I think, at some line that would go I don't know if underwater to islands and then–can you tell me whether you have looked at an underwater option down in the middle of Lake Winnipeg, for example, and whether that is even a realistic possibility?

**Mr. Brennan:** The option that we did look at that included a lot of underwater transmission lines is we looked at the Interlake route where it is now and tried to get separation from it by going, I guess it'd be further west, and there we looked at going through Cedar Lake, which is right at Grand Rapids, and there we looked at going underwater. It involved building islands and I don't know what all, but it was cost-prohibitive. It wasn't feasible. The cost of underground cable is really, really expensive.

#### \* (21:30)

**Mr. Gerrard:** Underwater I think you meant and not underground. You wouldn't be going underground in shield country anyway. The underwater cost is very, very high, is what you're saying.

Mr. Brennan: That's what I was trying to say.

**Mr. Gerrard:** One of the considerations in terms of cost, and you've indicated that the cost of, whether it's buying or an agreement to pay for the land or the land use in terms of the transmission site that is included in the pricing, in one of the earlier questions, can you provide a little bit more detail here in terms of what's the normal practice, to what extent the land is bought or the right-of-way purchased or rented.

**Mr. Brennan:** First of all, if we went through Crown land we'd get a good price there. If it went through a farmer's field, we'd try to always get an easement so the farmer can use the land. We pay a pretty good price for that. If it's land that we want control of, then we'd buy it.

**Mr. Gerrard:** Where the situation is through a First Nation's community or a traditional resource area of a First Nations, what's the situation there in terms of any easement funding to the First Nation community?

Mr. Brennan: We would avoid reserves. If we went in their traditional resource area, we'd talk to them, make sure that we would avoid any sensitive areas. In that particular case, it's Crown land usually.

**Mr. Gerrard:** The practice to date has been that there's no cost or essentially no cost for Crown land right of way?

Mr. Brennan: That's correct.

**Mr. Gerrard:** In the scenario that you talked about, if there were no payments for putting right of ways through First Nations' resource areas or Aboriginal resource areas because it's Crown land, but there are payments for coming through farmland to the farmers, then one would anticipate that the costs of land acquisition are going to be considerably higher under that particular scenario on the west side. Is that correct?

**Mr. Brennan:** Certainly, there's probably more Crown land on the east side than on the west side, but we haven't gone into a great deal of detail to see how much. But my instincts would say that's the case.

I would like to go back to your First Nation issue, though, and resource land. We do think that there is an issue there that we should be looking at in terms of compensating in some fashion people that use the resource land.

**Mr. Gerrard:** In terms of the variation for land costs, is there a lot of variation or is it a pretty standard rate?

**Mr. Brennan:** I think it would be a pretty insignificant part of the total cost of \$1.1 billion.

**Mr. Selinger:** We've been going two and a half hours right now. I'm wondering if we want to give our star witness a little break. *[interjection]* He says he's fine? *[interjection]* You're good? *[interjection]* You think you're getting to the end of your questions? *[interjection]* Okay. All right.

**Mr. McFadyen:** Just coming back, you'd indicated that once Gull and Conawapa are on line that the estimate of the line-loss differential between east side and west side would be about 40 megawatts based on calculations. Just trying to attach a value to that, just using this year, if we were to use 2007 as an example, you had indicated that you are selling power in the range of 6 cents to 7 cents per kilowatt hour, which would translate to somewhere between \$60 and \$70 per megawatt hour. If you lost 40 megawatts of power this year in 2007, and we used the mid-point between \$60 and \$70, so let's say \$65, that would translate into a loss of \$22,776,000

just as a one-year loss this year, in 2007 dollars. Does that sound about right?

**Mr. Brennan:** I don't really want to disagree with your way of doing it, but I think I'm going to have to.

It seems to me that you can't take 24 hours a day and always get prime price, like you just can't do that. You know, overnight the price drops and virtually nothing; weekends, it drops to nothing. Well, not nothing, but, you know, certainly the price we're talking about is during the day and a weekday. So you couldn't use that calculation for 24 hours a day, 365 days a year.

**Mr. McFadyen:** So, on that point then, is your estimate of 40 megawatts of line loss at full operation through those lines, or is it reduced somewhat by virtue of the fact that you wouldn't be transmitting that amount of power on a continuous basis over those lines?

**Mr. Brennan:** For sure, and the other thing is there's not always–like the plants, first of all, are 64 percent, 65 percent load factor plants, and we have various operating conditions based on the amount of water and all that. So the system would be optimized, and when I came up with my number they take a look at trying to optimize the generation coming out of the plant and then come up with a number. I'm reasonably comfortable with the number I gave you.

**Mr. McFadyen:** So the 40-megawatt line-loss number then, that's based on something lower than full utilization of those lines then over that time period.

**Mr. Brennan:** As I mentioned, the plants are–Gull might have a higher load factor than the big plants on the Nelson. I don't know what that load factor is, but the big plants have a load factor of about 64 percent, 65 percent and then you'd want to try to maximize that in peak times.

**Mr. McFadyen:** Given that the 40-megawatt number is not based on the assumption of maximum capacity 24 hours a day, seven days a week, which is a sensible assumption given the way we know the system works, we're still talking, though, about an assumption of a loss of 40 megawatts of power and that's independent of how much you're buying or selling at any given time. That's just the loss of power is 40 megawatts, that's a reasonable, realistic assumption of what's lost on the basis that you're not operating at 100 percent capacity 24 hours a day, seven days a week. Is that right? **Mr. Brennan:** It means that whenever you are putting power down at the maximum point, you're going to lose 40 megawatts. I think our models come along and do it with a combination of everything and end up with the 40 megawatts. I'm not sure I can really tell you how it works, but I'm confident of the results.

\* (21:40)

**Mr. McFadyen:** So the assumption is, based on realistic scenarios about line loss, that you're going to lose 40 megawatts, which essentially means that you start with 40 megawatts more at the generating station than what you end up with by the time it reaches the southern point on the line. That difference of 40 megawatts–that power is sold one place or another as it comes in, is it not?

Mr. Brennan: For sure.

**Mr. McFadyen:** So 40 megawatts of line loss in the realistic assumptions means that you'd be selling 40 megawatts less than what otherwise be the case.

Mr. Brennan: At certain times, that's correct.

**Mr. McFadyen:** But, if you were selling power continuously, 24/7, then you'd be operating at higher generating capacity and your line loss numbers would go up. Is that right?

Mr. Brennan: I think you're theory's right.

**Mr. McFadyen:** So, just coming back, if you're able to sell power at \$65 per megawatt hour and you've got 8,000 and some odd hours in a year, 8,760, you'd be selling that power somewhere. You would either be consuming it domestically or it would be exported if you had that extra 40 megawatts. Is that right?

Mr. Brennan: That's correct.

**Mr. McFadyen:** So I'm just trying to understand the assumptions going into the financial calculations then. If there's a loss of 40 megawatts and there are 8,760 hours in a year and the price is \$65 per megawatt hour, then what you're looking at in a single year in 2007 dollars, if you were to lose 40 megawatts this year in 2007 and you were selling at \$65 per megawatt hour, your loss this year would be \$22,776,000. Is that right?

**Mr. Brennan:** Well, I thought we agreed that power's not always worth whatever price you had there. Like, some of that, if you're selling it 24 hours a day, seven days a week, it's not worth the price you said. I don't think I could agree with you.

**Mr. McFadyen:** Okay, so when you were quoting 67 cents per kilowatt hour, was that a peak price, or was that an average? Okay, can you indicate what the average is?

**Mr. Brennan:** I'd have to get it for you. I know that overnight power is probably less than half.

**Mr. McFadyen:** What would you sell overnight power for now, last night?

**Mr. Brennan:** I hope we didn't sell very much last night. You know, like, we try to avoid selling off-peak power, but I would think it'd be around 3 cents. If once we get *Hansard* and some of these comments are not right, I'll make sure that the committee's aware of that.

**Mr. McFadyen:** The prices in the chart that was presented earlier, those were peak and not average prices then. Is that right?

**Mr. Brennan:** I don't think I showed any-the one chart I showed was cost. I think the Edison Electric Institute one, that was a cost.

**Mr. McFadyen:** And do you sell power at a loss normally in a year?

**Mr. Brennan:** Power is a function of what the market is. If you're talking–we try not to sell anything, we try to get the highest price possible, but we have certain fixed costs in the system. You want to recover all your costs. Certainly, if you sell enough power to take care of your costs, you get one price. If you've got lots of water and the average unit cost comes down. So it's a function of how much generation you've got and what the total costs are. The total costs we can control and water we can't. It's a fluctuating thing, and it could fluctuate pretty dramatically, depending on water flows.

**Mr. McFadyen:** In an average year, recognizing the numbers go up and down, is it the policy of Hydro to sell the power for more than what it costs to generate it? *[interjection]* Is it the policy of Hydro to attempt to sell power at a price that's higher than what it costs to generate that power?

**Mr. Brennan:** The incremental cost of additional generation is the cost of water rentals, so you're going to get more than the cost.

**Mr. McFadyen:** For the year ended March 31, 2007, what was your total revenue? Sorry, it's \$2,140,000,000 for that period; \$1,632,000,000 for electricity in revenue. Are you able just to calculate

how many megawatts of power were sold during that time period?

Mr. Brennan: We can get it for you.

**Mr. McFadyen:** Thank you. Well, I guess, if we could, in addition to the forward projections on the value of 40 megawatts of power, if we could get calculations from you on what 40 megawatts of power would be worth in 2007 dollars, just in a single year, that would be helpful in addition to the other projections.

**Mr. Brennan:** It's a sort of a meaningless number because if we give you the 40th year, it won't be worth very much. But we can give it to you.

**Mr. McFadyen:** The request is that it would be just in today's assumptions. In 2007, if you sold 40 megawatts less this year than would have otherwise been the case, what would be the loss on that 40 megawatts?

**Mr. Brennan:** How be I give you the assumptions as I agreed earlier on how we calculated ours, and that way we can take care of any mistakes I made in describing how we shoot power down the transmission line.

It would appear that the line is used differently, of course, during the day than it would be at night. I take it the loss at the end is 40 megawatts so I think your comment you were trying to get me to say, it would seem that it's true, 40 megawatts at this end.

**Mr. McFadyen:** I'm not sure I understood what you just said. Can you try again?

**Mr. Brennan:** I think your comment about 40 megawatts of power being lost is correct.

**Mr. McFadyen:** My comment with respect to the value of that 40 megawatts this year?

**Mr. Brennan:** No. It was the fact that it was actually 40 megawatts of power that was lost.

**Mr. Selinger:** There's continuous discussion about the potential giving up of 40 megawatts of power, but that 40 megawatts of power assumes there's an additional how many megawatts of power that are brought into service?

**Mr. Brennan:** It'd be 1,250 for Conawapa and another six to 30 for Gull, to get that number, so you're approaching 2,000 megawatts.

**Mr. McFadyen:** Just bear with me for a second. I just want to come back on another comment.

\* (21:50)

I'm still trying to understand what you meant when you said that my comment was correct. Which comment were you referring to?

**Mr. Brennan:** The 40 megawatts of power being lost. I think, at one point, I was saying the 40 megawatts was only at the peak or whatever. In actual fact, the 40 megawatts is what was lost overall.

**Mr. McFadyen:** Just to confirm the presentation, you generated roughly \$1.6 billion in revenue from electricity sales in '06-07, on a base of approximately 5,500 megawatts of capacity. Is that right?

**Mr. Brennan:** Yes, with a majority of that being produced by Hydro. A lot of it would not have been produced by the gas turbine and stuff like that. So it's probably a lower number, but, overall, you're correct.

**Mr. McFadyen:** You had, in your earlier just estimate of losses, indicated, I think earlier when I asked about the 40 megawatts, that the \$230-million projection was to I think you said 2017. Did I hear you correctly when you said that?

#### Mr. Brennan: Yes.

**Mr. McFadyen:** So, to be clear, it's a \$230-million loss up until 2017.

**Mr. Brennan:** No. It's for 40 years, present valued at 2017.

**Mr. McFadyen:** What is it present valued from 2007?

**Mr. Brennan:** I'd have to get you that number. It'd be a lower number, though.

**Mr. McFadyen:** Can you just indicate, there's been some discussion around alternate routes, and one of the routes which has been indicated was a direct northern route from the stations on the Nelson River into Ontario. Can you just provide your view on the pros and cons of that option?

**Mr. Brennan:** That option is only for the Ontario sale. It's not for providing reliability to the southern Manitoba system.

There were three main options. There were other ones that were looked at, but three main options that are being considered. One is a direct DC line from the plant up north to Sudbury or around Sudbury. Another one was a DC line from the generating facilities in the north to Thunder Bay and then AC lines from there to Sudbury. Another one would be a line from the north to Winnipeg, and then an AC line to the border, an AC line right down to Sudbury. That was the scheme we looked at previously with Ontario.

**Mr. McFadyen:** There's a spectrum of options in terms of the direct to Ontario route, but is the direct to Ontario route the preferred option of Manitoba Hydro with respect to an Ontario power sale, or would Manitoba Hydro's recommendation be to run first to a Manitoba converter station, southern Manitoba, and then export that power to the east?

**Mr. Brennan:** I guess there are pros and cons of various routes. One of the benefits of the northern route, it gives us a direct link into another market and it's the least cost because it's going a direct route. But you don't have the capability to import power because it's DC.

If you come down to Winnipeg with a DC line and then AC from there, you can import in the case of a dry year and that sort of thing. So you can bring power both ways.

So there are pros and cons of them all, and I think it would be a negotiating process to see what's best to each side and who is a-like there are cost issues involved as well as preferences by both sides. So I don't think I have a preference.

**Mr. McFadyen:** You've been on the public record almost since you became CEO of Manitoba Hydro in 1990 as favouring an east-side line. That position, recognizing that you ultimately are accountable to a government and a Legislature, has changed recently.

Is it your view that the west-side route, bearing in mind all risks and all considerations, is a better option than the east-side route?

**Mr. Brennan:** I was asked to look at what the best alternative would be to an east-side route. I told the board of Manitoba Hydro that I thought the best alternative to an east-side route was a west-side route and the board of Manitoba Hydro made that decision.

**Mr. McFadyen:** What other options were there other than–Interlake has been written off as an option for very good reasons. We support that decision. You support it. The government supports it.

Were there options other than west side that were viable as alternatives to the east-side route?

Mr. Brennan: There were no routing options. There were other options we looked at like, I think I mentioned earlier, gas combustion turbines in the

south. That at first we thought might be a reasonable option because you'd only use them if you had an outage, so the operating costs wouldn't be very high and you'd have a pretty low-cost option. But there are all kinds of other issues associated with that. You'd have to have a gas supply there and the amount of gas was just a horrendous number if you had a problem.

The other thing is we're going to need the DC line and conversion equipment with the next generation anyway, so it didn't seem to be a good option. We looked at imports and that sort of thing. So the best option we came to was a west-side option.

**Mr. McFadyen:** Apart from the natural gas options, I think what you're saying is the west-side option was the only option other than the east-side option, given the range of choices you were faced with?

**Mr. Brennan:** I don't think it was the only one. The other ones I said we looked at and the only routing option, I think, was the west side. But overall we came to the conclusion that the west-side option was the best one.

There is a risk associated with both routes. I think there was clearly a view by various people that there was more risk associated with the east side, really. But who knows, I guess.

**Mr. McFadyen:** So, ultimately, in terms of the risk analysis, the conclusion, I think, is who knows as between the two options which is riskier?

**Mr. Brennan:** I think there are certainly engineers within Manitoba Hydro that think that they could take care of most–mitigate most risks. I think the quantification of the risks is extremely hard to do. We do realize that if there's a strong enough force that got mobilized, it would be really, really hard for us. We really do want to try to do everything we can to protect that export market. It's 40 percent of our total revenue and it would just be horrendous. That shouldn't happen till I retire.

#### \* (22:00)

**Mr. McFadyen:** I've just got one last question. The advice we've had from staff of Hydro is that there's some added risk that comes-there's a general preference, maybe is a better way of describing it, within Hydro to construct major transmission routes away from highways and roadways as opposed to close to highways and roadways from a

risk-management perspective. That's a view that's been expressed to us by your staff. Is that your view?

**Mr. Brennan:** It's especially true in remote areas. If there's traffic on the roads it's not as bad. It's not as big a risk. The risk is the remote areas. If you have a highway, you know, people are shooting insulators and that kind of thing. If it was around Winnipeg, it wouldn't be the same issue, but if you get in real remote areas anywhere it is an issue. Now, we've been lucky more recently but it is a risk.

**Mr. Chairperson:** The hour being 10 p.m., this committee agreed to review this matter at that time, so I'm asking for the will of the committee with respect to this sitting.

**Mr. Selinger:** In informal discussions I understand there is a willingness to consider going to 11 o'clock, perhaps shorter depending on how the questions run, and then at the end of all the questions that other people may wish to ask, we would consider voting on the '03 report.

**Mr. Goertzen:** That essentially is the nature of discussion. I know that earlier in this committee, at the beginning of the committee, there was also discussion about the need for a recommendation for a subsequent Crown Corporations meeting. I know that precedent shows that Public Accounts has done that as recently as this summer, suggesting that another meeting be held quickly. So it's not, certainly, beyond the power of this committee to do that.

There are a lot of issues that won't be touched on tonight, whether it's the new hydro building which I know Mr. Brennan wants to speak proudly of, I'm sure, but there are questions regarding the building along with capital costs for wind energy and those sorts of projects going forward that won't, I'm sure, be touched on tonight.

So, yes, in terms of the committee tonight, I do think that we should be able to make accommodation for both the leader of the independent party and also for my colleague from Portage la Prairie who I know has a number of questions as well and then to proceed to a vote on the March 31, 2003, annual report.

But I do think it's important this committee sends a signal to the House leaders that there is a need for another Crown Corporations Committee looking at hydro prior to this session rising. **Mr. Ashton:** Certainly, the member is correct there was discussion earlier. I note that he was the one that was discussing the point, and, as much as I know the member wants to make his point, Public Accounts is a very different committee from a standing committee–and the member knows that–certainly it's composition and it's functioning.

This is a standing committee and standing committees basically are creatures of the House in terms of the scheduling of committee hearings. We have a committee hearing now and I think we've shown some good co-operation from all in sitting the additional hour. I think it'd be certainly premature and inappropriate to get into discussions that are normally conducted by House leaders respecting the scheduling of this committee, any committee. In fact, that's how we got here, through those discussions. So, as much as I think the member was trying to make a debating point, clearly we are proceeding and I'd suggest we do proceed until 11 o'clock.

Once again, as Deputy House Leader for our caucus, I can indicate that our House leader has always been open to discussion of scheduling of committees. I think the fact that we're meeting tonight and we're actually showing some co-operation, flexibility, sitting until 11 o'clock and passing of committee reports is showing we're making progress.

So, rather than get into debating when and if we're going to meet again, which, again, is the purview of the House leaders and it will be announced in the House, in the Legislature, I suggest we continue with questions and leave the work of the House leaders to the House leaders.

**Mr. Goertzen:** Just briefly then, the Deputy House Leader (Mr. Ashton) mentions that we got here by virtue of House leader negotiation. I would remind him that it took us three years to get here, I believe, and I certainly don't want to repeat that effort on behalf of the government.

So I think the honourable Leader of the Official Opposition (Mr. McFadyen) has a couple of questions to conclude. Then I believe we can move to the Member for River Heights (Mr. Gerrard) and my colleague from Portage la Prairie (Mr. Faurschou).

I will raise before the end of the meeting the issue of a future meeting, again, 11 o'clock. But we will deal with the 2003 report as committed to the minister.

**Mr. Selinger:** I'd recommend a five-minute break so people could take care of business.

**Mr. Chairperson:** Is it the will of the committee to recess for five minutes and that we'll continue sitting after that point? [*Agreed*]

We're recessed for five minutes.

The committee recessed at 10:06 p.m.

#### The committee resumed at 10:18 p.m.

**Mr. Chairperson:** Will the committee come to order please.

We'll now resume questioning. The floor is now open for questions.

**Mr. Gerrard:** I just want to clarify a little bit about the costs, east side versus west side.

Let me start by talking about the elements of the cost. You've got the construction cost; you've got the environmental assessment cost; you've got the planning cost; you've got the land acquisition cost. How does it normally break down in terms of what proportion is construction versus environmental assessment, planning, land acquisition, and there may be other costs that I'm not aware of.

**Mr. Brennan:** I'd have to get those costs for you. I don't have the breakdown.

Mr. Gerrard: That would be helpful.

Now, I am presuming that the construction on the east side, given that there's not a road there for most of it, would be significantly more expensive per kilometre of transmission line than they would be on the west side. Is that correct?

**Mr. Brennan:** I don't think, at this point, the conceptual planning has gone into that kind of detail. I think the costs on the west side have probably been based on the ones that have been done on the east side and just prorated for length. So I generally think you're right, but overall I think our estimates are more general than that, but I think they're appropriate.

\* (22:20)

**Mr. Gerrard:** I can guess from the numbers that you've done it on a, basically, on a per-kilometre basis, but it would seem to me that the cost of construction in an area where there's not even any roads is going to be significantly higher on the east side of Lake Winnipeg than it would be on the west side where you've got-much of that would be coming through farmland, where you've got very quick access, and I presume the construction costs would be significantly lower.

Mr. Brennan: I think I agree with your logic.

**Mr. Gerrard:** Can you give us some figures of costs through farmland versus costs through boreal forest where you've got to cut the road and so on?

**Mr. Brennan:** A few years ago, as you are aware, we built the north-central line coming down from Kelsey to the north-central communities, and we could see how that one compares to other 138 kV lines we've built. So we could give it a go.

**Mr. Gerrard:** Thank you. That would be very helpful if you could do that.

Now, the other thing is that in the west-side route, it seems to me that significant portions of that would probably follow existing power-line corridors. Is that not correct?

**Mr. Brennan:** I think our people, when I suggested that to them, they suggested to me they'd like to take a fresh start. They talked to people and tried to determine where people on the west side thought the line should go, and they want to take an objective look rather than come to that conclusion.

**Mr. Gerrard:** I think that's probably fair, but it would seem to me that if you've got an existing line that, for example, your environmental assessment costs are likely to be much, much lower than if you're looking at a line through pristine forest or in an area where there is no existing line.

**Mr. Brennan:** I shared your view. Then I started– like there's one line we have that comes right down almost in a straight line on the west side, and so I thought, well, we could build another line right close to it and found out it went through some parks and stuff like that. So, after I looked at that, I thought it would be a good idea to let our people do what they originally suggested to me.

**Mr. Gerrard:** Given the significant uncertainties which clearly exist with regard to exactly what corridor is going down the west side and clearly uncertainties in terms of the risks of problems along whatever corridor is chosen, that, at this juncture, there are still major uncertainties on the line going down the west side. Would that not be correct?

Mr. Brennan: Yes. I think there's uncertainties on both lines.

**Mr. Gerrard:** You mentioned earlier on that there is some consideration in terms of the possibility of providing that of a funding-related easement on power lines going through what would be First Nations traditional areas. Could you expand on that?

Mr. Brennan: Transmission associated with the Wuskwatim project, we came up with a transmission line fund which we are proposing to share some revenue to the First Nations in the area that we transversed their property. And we're proposing to do that and talk to the First Nations involved and everything like that. We are finding that we're going to have to make sure that, whatever we do with a major transmission line, like a new DC line, we really give it an awful lot of thought as to how to apply one because there are some Métis communities, as an example, that would have to be considered. There are some, you know, other communities, and especially in the north, that might have some difficulty. And then there are people that you bypass, you know, like the line doesn't go through their area, but they say have the same sort of issues. So we're trying to be real careful in what we do so that people see the benefit of our operations. And so we're reassessing how to apply the transmission line fund that we had for Wuskwatim.

**Mr. Gerrard:** What's the amount of dollars in that transmission line fund for Wuskwatim?

**Mr. Brennan:** I'm not sure of the exact dollars. We try not to give that out because we try to make sure people are reasonably happy. Certainly, the people in there know what they're going to get and they seem to be reasonably happy with that. But the concept is to give them a fixed amount.

**Mr. Gerrard:** If there are environmental problems on either the east or the west side, there may be costs–I think you mentioned this–associated with mitigation of whatever environmental problems may arise. Have you done any estimating in terms of the costs, relatively speaking, east versus west, of mitigating what might be environmental problems on one side or the other?

**Mr. Brennan:** We don't believe mitigation costs per se are a major issue. It's one of locating the line more than mitigating. That mitigation occurs more with generating facilities than it does transmission lines.

**Mr. Gerrard:** You mentioned earlier on that the siting of the converter east of Lake Winnipeg, that you might review it and think about west when I was

talking about the line possibly providing power to Saskatchewan. How firm is that decision in terms of where that would be located, or is that still a flexible site?

I mean, you've got east of Lake Winnipeg is where you're projecting for the converter, but it could move around at this point, or is that an almost certain, firm site?

**Mr. Brennan:** I hope I can say it's a moveable site. We're planning to put it at Riel which is a fixed site east of Winnipeg, not east of Lake Winnipeg. It is a site that we're proposing to proceed with.

**Mr. Gerrard:** Would that be a site, then, that would be similar to the Dorsey site in terms of the significance to the system?

**Mr. Brennan:** That is correct. The site is real close to Deacon Reservoir on the east side.

**Mr. Gerrard:** And the site for the converter up in the north would be somewhere along the Nelson River?

Mr. Brennan: Yes.

**Mr. Gerrard:** That's my questions. I will turn it over to the MLA for Portage.

**Mr. McFadyen:** Mr. Chairperson, just looking at the most recent annual report for 2006-2007, the report indicates that revenue from electricity sales was \$1,632,000,000–just give me a moment to get the report–and that the number of kilowatt hours of power sold in that same period was 32 billion, 100 million kilowatt hours of power sold. Is that correct?

Mr. Brennan: It sounds like it.

**Mr. McFadyen:** So the average price per kilowatt hour in the 2006-2007 year was just over 5 cents per kilowatt hour over that 12-month period. Is that correct?

**Mr. Brennan:** It sounds right. Now, that'll be the average of on peak and off peak.

**Mr. McFadyen:** That's the average for the full year, just over 5 cents per kilowatt hour for that year.

So if in that year you'd had 40 less megawatts available to you, at just over 5 cents per kilowatt hour, the loss in that year, 2006-2007, would have been \$17,520,000. Does that sound right?

**Mr. Brennan:** I don't think I can agree with that. I'd have to give more thought to it.

**Mr. McFadyen:** If we're just talking averages for the year, and you've said that the average sale price for '06-07 was just over 5 cents a kilowatt hour, if you had 40,000 fewer kilowatts multiplied by the number of hours in the year multiplied by 5 cents, you'd come to a number of \$17,520,000. Are there any other factors that need to be build into that calculation?

\* (22:30)

**Mr. Brennan:** I think I'd have to check with staff. I'm not sure if 40 megawatts turns into 40 megawatt hours. So I'd have to check that.

**Mr. McFadyen:** But just the basic principle is that you would multiply the number of kilowatts by the number of hours in the year by the price to arrive at some calculation as to what a kilowatt hour is worth.

**Mr. Brennan:** I think I already said I didn't agree with that. I don't think you can–I agreed with your calculation of taking what we sold to the total revenue. You've got an average price there; I agreed with that. If in fact it turned out to 40 megawatt hours and you multiplied it by an average price, I'd agree with that. I'm not sure if 40 megawatts turns out to be 40 megawatt hours or not.

**Mr. McFadyen:** You'd indicated earlier that the number that was projected of 5 cents was a peak number. Is that right?

**Mr. Brennan:** Weren't we talking between 6 and 7 as being a peak price? I think we were.

**Mr. McFadyen:** You had indicated that a significant amount would have been sold in the 2-to-3 cent range. Is that overnight?

**Mr. Brennan:** What we try to do is optimize it and only sell power in peak times so we get the best price. We try not to sell at off-peak times. Now, sometimes we might have to.

**Mr. McFadyen:** So, if you were selling power at an average price of 5 cents per kilowatt hour and you had 40,000 fewer kilowatts available to you over the course of a year, which is comprised of 8,760 hours, wouldn't the value of those 40,000 kilowatts be \$17,520,000 if we were looking at last year's numbers?

**Mr. Brennan:** First of all, I'm not sure, like I wasn't following your numbers there. But assuming the concept of what you're saying is if you took the 40 megawatt hours, converted it into kilowatt hours–you know, we're only in megawatt hours–and

multiplied by an average rate, I think I'd agree with that. I'm not sure if 40 megawatts turns into 40 megawatt hours though. Now that I'd have to check; like I don't know. I'm not sure how they calculate the actual loss, like I'm not sure what that is. So I'd have to check that before I could confirm that.

**Mr. McFadyen:** But you did say earlier that if you had any power that you have available to you, you sell at some price or another. It gets either consumed domestically or externally. Is that right?

**Mr. Brennan:** Yes, we try to sell everything. The only time we would spill power or spill water is if there were transmission line constraints of some sort or if we thought that by selling the power the price was so low that we're influencing the market price. You wouldn't want to do that. But ordinarily, if we got a reasonable price, we'd sell everything we can. That's the name of the game. You want to start first of all with selling it all on peak.

**Mr. McFadyen:** The way to deal with a surplus situation that you've described is to reduce the amount of power that's generated by spilling more water. Is that right?

**Mr. Brennan:** Spilling more water is a dirty word. So I don't want to spill any water. You could ask me that again because I wasn't sure I quite followed it.

**Mr. McFadyen:** You said that you would spill more water in the response to my earlier question. In the event you were in a surplus situation, you would allow more water to run through the facility without it generating power by running through the turbines.

**Mr. Brennan:** If water goes through the turbines, you get power. So you've got to go through a spillway which doesn't go through the turbine. There are times when places–like we have Kelsey that is not fully developed, and the flow in the Nelson River could be greater than the capability to generate power. That happens on the Winnipeg River quite often. The plants are just not big enough to capture all the water. In those cases you spill, but generally, we don't spill water. I'm not sure I answered your question.

**Mr. McFadyen:** I think you did. The work within Hydro to build a third bipole transmission line, the recommendation I know has been east side, and for reasons of accountability and within our system, you've been asked to explore an alternative to the east-side route. If your advice was being taken, which isn't to say that it always is or should be in a Crown corporation, but if it had been, when would you have ideally commenced work on the bipole 3?

Mr. Brennan: In both cases, we'd start right away.

**Mr. McFadyen:** If you had received a green light in 2000 to proceed with bipole 3, you would have begun work in 2000?

**Mr. Brennan:** No, it wasn't even in the forecast in 2000. We proposed it in 2001.

**Mr. McFadyen:** So you would have commenced in 2001 if you had received that approval at the time.

**Mr. Brennan:** We would have started the planning. I'm not sure in 2001 what the in-service state was, so we'd have to take that into consideration.

**Mr. McFadyen:** If you had received an approval in 2001 to proceed with the east-side line, you would have had bipole 3 completed by 2011. Is that right?

**Mr. Brennan:** I'm not sure what the dates are now, but we can dig that out for you. We didn't ask for approval in 2001. We put it in our capital plan in 2001. We were proposing to do something, but we didn't ask approval. We put it in our financial forecast and took that to the board, but we didn't specifically ask for approval to build the line at that point.

**Mr. McFadyen:** But if you had been granted approval, you would have begun at that time?

Mr. Brennan: Well, no, because we didn't ask.

**Mr. McFadyen:** In terms of the position of Hydro then, when did you first ask for approval to proceed with bipole 3?

**Mr. Brennan:** I'd have to dig out that. Because it was a contentious issue for some time, we went and talked to the board of Manitoba Hydro about coming down the east side. At that point, they said they'd like us to look at other alternatives. I think that would have been about 2005 or something like that.

Rhonda's looking pretty there, but not listening. She can maybe take a look at that for us. When did we first take the recommendation to the board of Hydro about the east side? *[interjection]* I think I was doing better. I think it was 2005. We'll confirm that for you though. **Mr. McFadyen:** Yes, okay. That's all I have. Thank you.

**Mr. David Faurschou (Portage la Prairie):** The hour is going late, and I switched from tea to coffee hoping to get a couple of hours of sleep yet tonight.

Mr. Brennan, my compliments to you and to the well-run organization that we're all very, very proud of. Manitoba Hydro is indeed a crown jewel in the province of Manitoba.

\* (22:40)

Your report of 2003, although dated, is very much of interest because a lot happened in 2002-2003. I might just begin questions in regard to the acquisition of Winnipeg Hydro during the course of this report. It was stated that there were to be no layoffs, wage and benefit restrictions for employees were to be maintained, and the commitment for a downtown office complex of this size and nature of a 400,000 square feet. In tonight's presentation, you stated it was 690,000 square feet. How did the change come to be? Did you get more employees or asked for a larger office?

**Mr. Brennan:** First of all, we committed to the 400 so we could build anything. We looked at what we required. We actually required to consolidate all our head office functions, 800,000 square feet. So the 690 doesn't take care of us all. We're going to have to keep the existing head office building, and it's about 200,000 square feet, just under. So, between the two, we'll be able to accommodate everybody.

Most of the issues that you talked about in staff we were able to handle. There was an issue when we purchased Winnipeg Hydro that we had to-because they were all employees of the City, we had to offer them all jobs and so we had to find out where they fit in Hydro, what their salary would be. We had to make sure that their salary was not out of line with Hydro people and that sort of thing and then offer them jobs. If it ended up at the end of the day that not everybody wanted to come, it would have impacted our actual sale because the people would have been left with the City. They wouldn't have had a job and there would have been a big cost to the City.

So we went through a real quick process, found out how they would fit in at Manitoba Hydro, made offers to them all. I went out and talked to-they were in groups of people, but I talked to every employee of Winnipeg Hydro three times. We offered an early retirement plan to them as well. At the end of the day, I think there were 65, or something, people that retired on the early retirement plan. Every employee came with the exception of one who was on long-term disability.

**Mr. Faurschou:** That's incredible. It is, to merge two large corporations as you did, billing and all the similar activities and to reach that agreement with only that number of persons departing from the corporations.

Having said that, the continued operations of Winnipeg Hydro have been ones of smooth transition from your comments here tonight. I'm interested to see that there are some changes that have come about in the installation of residential and commercial wirings, underground now being buried in the same trench as Shaw Cable and MTS, water lines as well. Have you had any problems emanating from that, seeing that this was a year that you started doing that procedure?

**Mr. Brennan:** We are having problems. We, of course, now have the gas and the electricity so it's easy for us to get. The telephone system is not always ready to opt into the game, so to speak. But they are and it's working reasonably well.

The big thing that we have to do is make sure that the costs are less than what they'd be with everybody doing it individually. So you still get three groups out and everything like that. So you got to make sure it really is efficient. But that's the only issue.

**Mr. Faurschou:** Well, it seems to me to be quite cost-effective if one is going to be able to just trench out one excavation and effectively deposit all the utilities in one.

Speaking of efficiencies, I just want to make note of, in the report, you saying about your own lighting upgrades, your Taylor Avenue headquarters. I look around at the Legislature and wonder, perhaps maybe we might benefit from some of those technological advances in lighting. Perhaps, maybe, you can discuss that with the board and the government services minister, which I think every person serving in this building would appreciate. That's more of a comment than anything.

But I'm hoping the Minister of Finance (Mr. Selinger) is listening because I had the benefit last evening of his pre-budget consultation process and, within that, great attention was made to the Power Smart and the savings that have been generated through that program. But I now hesitate to say that all facts were accurate in last night's presentation so far as your report says that you entered into the EnerSave program, a precursor of the Power Smart program, in 1991. Perhaps maybe your staff could help make the statements in future pre-budget presentations a little more accurate, that 1991 was when Manitoba Hydro initiated Enersave and from that date forward has been helping Manitobans save energy.

**Mr. Brennan:** I think I'll have to take a look at the report. Power Smart was formed around '90-91, and originally Power Smart was a spinoff of B.C. Hydro. We, at one point, had a national company of which every province was involved. Other provinces dropped out, and Manitoba Hydro kept on with Power Smart. We got the licence to operate Power Smart within Manitoba. So, in actual fact, we've been going right since the early '90s and we're really pushing it.

**Mr. Faurschou:** Thank you very much. I'm sure the Finance Minister listened very intently to the new information, and the next presentation I hope will reflect that it may have been in the former administration's term in office that maybe this perhaps came forward.

Speaking of working co-operatively with other organizations, the report does make mention that Manitoba was the only electrical energy-generating corporation in Canada that was working co-operatively with U.S. transmission carriers to effectively work toward what they called the regional transmission operators, and this was just in the fledgling stages in this report. Has that come to fruition and are we, indeed, working with 23 transmission-owning members in 15 states?

**Mr. Brennan:** Yes. I think in 2003, we were probably with MAP, which is a regional network. We're now with a much bigger one, MISO, and it is a large regional transmission co-ordinator, if you will. It's a transmission operator.

**Mr. Faurschou:** That is what the report refers to, is that you've moved from MAP to MISO and now engaged in 23 individual–so, I'm pleased to see that.

Also, in the planning stages, there was great discussion here this evening, the bipole 3. But I'd like to ask, in regard to acquisition or to clearing a new roadway or pathway for a transmission line, in looking at your 2003 map, if the eastern side was effectively the preferred direction to go. I know the

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scale does make short work of a very great distance, but I would say that probably two-thirds to three-quarters of the distance is on the east side of Lake Winnipeg and already has existing power lines and corridors in use.

Mr. Brennan: There are two transmission lines that go up there that are in on the east side. One is a line that comes down from Kelsey to the Interlake communities; it's a 138 kV line. Then there's another one that goes up, and that takes care of the Island Lake-type communities, which include Oxford House and Gods River there and Gods Lake Narrows above Red Sucker and then the Island Lake communities. Then there's another one that goes up from Pine Falls up to Berens River and Poplar River and, as you see at the top, there's one right around Jenpeg to take there, across the lake to Norway House. The one at the southern end, or on the eastern side of Lake Winnipeg there, is one that hasn't been in service all that long, but it was one that probably is going to need work too pretty soon.

**Mr. Faurschou:** Just as a follow up to that, could one not–I'm just a common-sense individual emanating from my farm background, could one not use already the existing right-of-way for a high DC line in the same corridor?

Mr. Brennan: The one coming down, well, I don't think they can. First of all, the routes are not the same, like we're not going to the same places and the corridor, or the route for the existing lines, are pretty small compared to what we need for a new DC line, but, as you can see, the one coming down from Kelsey goes east, you know, southeast, and we want to come north and go west a little and then straights out. So I would think our people would want to take a good objective look and just start fresh. I don't know if you want to go right close to the lake like that either, but I don't know. I think our people should take a look at it and what we have is, we have people really skilled in environmental issues, and that's our stuff. Although chartered accountants think they can do everything, that's probably one we best leave to them.

**Mr. McFadyen:** Just a couple of more questions and then I think I'm done.

If you were looking to try to reduce the amount of capital cost in connection with the bipole 3 project, could you build the west-side line, but not go ahead with the converter station?

Mr. Brennan: No, you could not.

**Mr. McFadyen:** Your original proposal plan on the east-side line was to proceed with the east-side line, but a converter station wasn't part of that proposal back at the time that you were recommending the east-side line. Is that right?

Mr. Brennan: That's correct.

**Mr. McFadyen:** So it's possible to build the east-side line without new converter equipment.

**Mr. Brennan:** Yes it is, for a short period of time. As soon as we build new generation, it'd be required.

**Mr. McFadyen:** It's the new generation that's driving the need for the converter equipment, not an east-side line in that case?

**Mr. Brennan:** I guess there are two issues and there's also the risk associated with losing Dorsey, which is a major risk to us.

**Mr. McFadyen:** That risk exists regardless of the decision on east or west side?

**Mr. Brennan:** Once we build new conversion equipment, that risk goes away, and it doesn't matter whether it's east or west.

**Mr. McFadyen:** So the factor driving the need for the conversion equipment is the risk of Dorsey, the need for the equipment, because of extra generating capacity. That's the driver for building the new conversion equipment if you were running an east-side line?

Mr. Brennan: That's correct.

**Mr. McFadyen:** But you could build the east-side line and still operate the system without new conversion equipment?

**Mr. Brennan:** For a very short–sorry. You're going to have a *Hansard* full of them. For a very short period of time.

**Mr. McFadyen:** When you say, for a very short period of time, what you're saying is that not building it, the new conversion equipment would create some reliability risk which would be enhanced once the new generating capacity came on. Is that right?

**Mr. Brennan:** That's correct, and if we needed to build a plant earlier than what we have for Conawapa right now, like if the load growth went up faster than what we have, we know we can't build Conawapa that fast, so we'd have to go to Gull, which would be virtually the same time as the new line came in.

Mr. McFadyen: I think I'm done. Thank you.

**Mr. Faurschou:** Mr. Brennan, I do appreciate and I want to recognize the number of awards that you received in this report, and the ISO 14001 certification is one that is very, very substantive.

In summing up, one of the indications in this report is the willingness to work with the alternative energy sources. You made mention of working with the City of Winnipeg and the city landfills. I presume you're aware now that the Brady Landfill is recognized as one of the top methane gas emitters in all of Canada. Perhaps if you're not aware or if no one's working on the project, I would say that that would be perhaps an excellent source to be captured for potential power generation.

Moving further into this, it is the year that the provincial government saw fit to take \$203 million under a new provincial act, and it did have a significant impact on your goal to be at 25 percent equity by the year 2011. Has that changed or have you got a forecast as to when you will get to the 75-25?

**Mr. Brennan:** I reviewed that in the presentation I had. It's still our target and we're getting close to it by the end of the forecast period.

I'd also like to thank you very much for your comments about Manitoba Hydro. I'm sure the employees of Manitoba Hydro appreciate them as much as I do.

**Mr. Cullen:** I recognize it's almost 11 o'clock tonight, so I do want to thank Mr. Brennan for his time tonight and I do have a motion for the committee.

Mr. Chairperson: Please proceed.

Mr. Cullen: Thank you, Mr. Chair.

I move that the Standing Committee on Crown Corporations recommends to the House that a subsequent meeting of the Standing Committee on Crown Corporations be called prior to the end of the current legislative session to consider issues related to Manitoba Hydro.

#### Motion presented.

Mr. Chairperson: The motion is in order.

**Mr. Ashton:** I think we had this discussion earlier and I think the members of the committee know that House leaders do discuss the scheduling of committees. I'm assuming coming out of today, which was, I thought, a very fruitful discussion covering many topic areas ranging from the Hydro building to transmission, a lot of very detailed questions, that they will consider that. That is the role of the House leaders. That is the role of the Legislature itself, so certainly from our perspective this motion really pre-empts those discussions.

I think we saw a very co-operative approach tonight. I don't see that there'd be anything different with committee members. I would suggest that each side approach their House leaders. If members opposite feel there's a need for another committee, I think the appropriate thing would be to raise that with their House leader.

So there's no need for this resolution and I certainly recommend that we vote it down.

**Mr. Cullen:** Mr. Chair, very briefly, obviously there are a lot of issues regarding Manitoba Hydro, certainly not limited to the discussion on transmission. I think it's important for Manitoba Hydro customers and, of course, all taxpayers across the province to be in tune with what's going on with our favourite Crown corporation.

So I think this motion just adds some impetus to the House leaders to move this forward, and, hopefully, we can come back and meet as a committee and discuss those other relevant issues concerning Manitoba Hydro, which I think all Manitobans are interested in hearing.

An Honourable Member: Question.

**Mr. Chairperson:** The question has been called. Is the committee ready for the question?

\* (22:50)

Some Honourable Members: Question.

**Mr. Chairperson:** Does the committee wish to have the motion read back?

Some Honourable Members: No.

Mr. Chairperson: Shall the motion pass?

Some Honourable Members: Pass.

Some Honourable Members: No.

#### Voice Vote

**Mr. Chairperson:** All those in favour of the motion, please say yea.

Some Honourable Members: Yea.

Mr. Chairperson: All those opposed, please say nay.

#### Some Honourable Members: Nay.

**Mr. Chairperson:** In the opinion of the Chair, the Nays have it.

#### Mr. Goertzen: On division.

**Mr. Chairperson:** The motion is defeated on division.

\* \* \*

**Mr. Chairperson:** All right, we'll then proceed to the annual reports and test the will of the floor.

Annual Report of the Manitoba Hydro-Electric Board for the year ending March 31, 2003–pass.

Shall The Annual Report of the Manitoba Hydro-Electric Board for the year ending March 31, 2004, pass?

#### Some Honourable Members: No.

Mr. Chairperson: The report is not passed.

Shall The Annual Report of the Manitoba Hydro-Electric Board for the year ending March 31, 2005, pass?

Some Honourable Members: No.

Some Honourable Members: Yes.

Mr. Chairperson: The report is not passed.

Shall The Annual Report of the Manitoba Hydro-Electric Board for the year ending March 31, 2006, pass?

Some Honourable Members: Pass.

Some Honourable Members: No.

Mr. Chairperson: I hear noes, so the report is not passed.

Shall The Annual Report of the Manitoba Hydro-Electric Board for the year ending March 31, 2007, pass?

#### Some Honourable Members: Pass.

Some Honourable Members: No.

**Mr. Chairperson:** I hear noes, so therefore the report does not pass.

The hour being 11 p.m., what is the will of the committee?

Some Honourable Members: Committee rise.

**Mr. Chairperson:** Committee rise. Thank you to members of the committee and also to our good folks from Manitoba Hydro. We appreciate your efforts.

COMMITTEE ROSE AT: 11:02 p.m.

The Legislative Assembly of Manitoba Debates and Proceedings are also available on the Internet at the following address:

http://www.gov.mb.ca/legislature/hansard/index.html