MANITOBA PUBLIC UTILITIES BOARD

Re: 2008/'09 GENERAL RATE APPLICATION
MANITOBA HYDRO

Before Board Panel:

Graham Lane	- Board Chairman
Robert Mayer	- Board Member
Susan Proven	- Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
May 23rd, 2008
Pages 4215 to 4409

APPEARANCES

Bob Peters		)Board Counsel
Doug Buhr		)City of Winnipeg
Byron Williams	(np)	)Coalition
Jennifer Scott	(np)	)TransCanada Keystone
Tamara Trull	(np)	)Pipeline
Tamara McCaffrey		)MIPUG
John Landry	(np)	)
Michael Anderson		)MKO
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--- Upon commencing at 9:05 a.m.

THE CHAIRPERSON: Okay. Good morning, everyone. We are running a little late. It is only 9:06.

Mr. Peters, remind us of the work we have to do today?

MR. BOB PETERS: Yes, thank you. I apologise. I think I contributed to the six (6) minutes we've just lost.

Mr. Chairman, Board members, at the end of the day on Monday, Mr. Anderson was on the microphone. And at the end of his submission, he cut it somewhat short and was given an opportunity to provide any additional points to the Board, to the parties, and also to Manitoba Hydro in writing.

He did that yesterday by about 4:30. Parties -- at least I received an email correspondence containing some recommendations that MKO would like this Board to consider.

Mr. Anderson has provided a copy of that I believe to -- to all parties. And we should have that as part of the record. And maybe Mr. Anderson can speak to that.

THE CHAIRPERSON: We could put it right into the record?

MR. BOB PETERS: I believe electronically we have it. And I could -- I could work with Ms. Lavigne and provide it into the record, yes.

THE CHAIRPERSON: Mr. Anderson?

MR. MICHAEL ANDERSON: I can undertake to provide it as an MS Word file to make that job easier. I circulated it in PDF form.

THE CHAIRPERSON: Very good, thank you.

MR. MICHAEL ANDERSON: Mr. Chair, just while I'm speaking, I -- perhaps just during the day it wasn't clear to me that I would have closed all of my comments in lieu of providing additional written comments, and that I had expected this morning to be able to address at least some of the high points or key elements that are in the outline that was provided yesterday as further oral comments this morning, with the remainder of them to be included in the record as described by Mr. Peters.

In terms of being able to circulate this, I did advise the Chair and the Board and parties that I would provide it as soon as possible yesterday.

I did have a full schedule yesterday. So when I provided it, it was the earliest opportunity that I had to extract this from my binder of speaking notes and turn it into a single document.

And so I had, albeit perhaps not as early as hoped by parties in terms of my schedule, did circulate as soon as I was able to do so.

I have copies that I can circulate to everyone this morning if Mr. Gaudreau would like to assist with that.

THE CHAIRPERSON: Mr. Gaudreau...?

MR. MICHAEL ANDERSON: And with the Board's leave, I would like to resume making my oral submission, at least on those high points.

In the event -- the matters, as we can see, speak to the questions that you had asked all parties for the most part. They include of course the points that I had already made on Wednesday, which I don't intend to touch upon again today.

In the event that there are -- recognizing the timing issues in respect of Ms. Ramage's comments to the Board today, I could perhaps propose that if there is any matter that I raised that would be a surprise to Manitoba Hydro, that the Board provide the opportunity for Ms. Ramage to provide written comments, perhaps by next Tuesday, I'd be satisfied with that.

If -- if that's acceptable to the Board, hopefully that would provide a mechanism to allow me to complete the few oral items that I did wish to discuss with the Board on behalf of MKO.

THE CHAIRPERSON: Thank you, Mr. Anderson. I will just ask the various parties.

Ms. McCaffrey, do you have a view on Mr. Anderson addressing the Board orally this morning?

MS. TAMARA MCCAFFREY: I don't have any problem with that, Mr. Chairman.

THE CHAIRPERSON: Mr. Buhr...?

MR. DOUG BUHR: Other than the fact, Mr. Chairman, it was my understanding that this was to be concluded on Wednesday and that the arrangement was that Mr. Anderson would submit what was left in writing and that this morning would be Manitoba Hydro. That was my understanding of the ruling.

Now, perhaps I am incorrect, and that may not stand in the way of doing this. But I would suggest, with respect, that I think there's a process here, and I think it should be followed.

MR. CHAIRPERSON: Thank you, Mr. Buhr.

Mr. Gange, do you have a view?

MR. BILL GANGE: I don't have a view.

MR. CHAIRPERSON: Ms. Ramage...?

MS. PATTI RAMAGE: Yes, Mr. Chair, Manitoba Hydro does have a view. This schedule has been in place for months and weeks before it -- there was weeks between evidentiary -- the close of evidentiary portion of the Hearing and the final argument.

Mr. Anderson yet on Wednesday indicated he -- he wasn't ready. A courtesy -- further courtesy was extended at that time. And that courtesy, in Mr. Anderson's words, was that:

> "I understand that, given the point in time that we have and my continuing on, that I've been -- it's been suggested I would have the option of whatever I don't say today, that I provide as early as possible -- and is possible tomorrow to Mr. -- to -- to Ms. Ramage."

And that's whatever he didn't say on Wednesday, and that was to be provided in writing.

My concern here is -- not only with respect to the issue -- issue but on a precedent basis that when commitments are made, we should abide by them. The Hearing can go on forever if we keep allowing parties to -- to add on and add on after they've made a commitment.

I can tell you I'm working on very little sleep right now in terms of preparing this and to try to respond to comments now made on the fly. And to change my argument will be difficult. And I don't relish the idea of keeping this going and having to provide further written comments next week and then further delay the process so that the Board can review those comments. That's Manitoba Hydro's position.

THE CHAIRPERSON: Thank you, Ms. Ramage. We will stand down for a few minutes and be right back.

MR. MICHAEL ANDERSON: Mr. Chair, if I might -- sorry.

One point of, hopefully, important clarification, I was fully prepared on Wednesday to complete, in terms of the substance of my submission. I had all my materials present. It was really pressing personal commitments that made it difficult for me to continue after 4:20 p.m.

But I just wanted, for the record, to be clear. I was fully ready to complete my oral submission on Wednesday afternoon.

THE CHAIRPERSON: Thank you, Mr. Anderson. We will just stand down for a minute.

--- Upon recessing at 9:11 a.m.
--- Upon resuming at 9:15 a.m.

THE CHAIRPERSON: Mr. Anderson, when we closed on Wednesday, we anticipated that you would put into writing your remaining closing statement, which you did on Thursday and have now provided to the various parties. And we will ensure that that is put on the record.

Our intention now is to proceed with Manitoba Hydro's closing statement. With that, however, we will give you our commitment that we will read carefully your closing written statement and take it into the context of the rest of the Hearing. Thank you.

Ms. Ramage...?

MS. PATTI RAMAGE: Thank you, Mr. Chair. We -- before I begin my submission, I just point out Manitoba Hydro has distributed two (2) handouts. One is an outline of closing argument. The other is a handout with just some copies of pieces of legislation and cases that I'll be referring to during my argument. So I just wanted to make sure everybody in the room has that before I begin.

THE CHAIRPERSON: We have it.

CLOSING SUBMISSIONS BY MANITOBA HYDRO:

MS. PATTI RAMAGE: Thank you. Mr. Chairman, Mr. Vice-Chair, Board Member Proven, we've covered a lot of territory since Manitoba Hydro filed its general application way back in August of 2007.

Through two (2) rounds of Information Requests, numbering over sixteen hundred (1,600) of those Information Requests, many exhibits and books of documents during the -- and seventeen (17) days of public hearings over the months of March, April, and May, we've discussed a broad range of issues.

Most of those issues have been ably identified by the Chairman in the listing he provided at the conclusion of the evidentiary portion of the Hearing. I will comment on each of the Chairman's issues, but I would first like to bring back into focus the essential components of Manitoba Hydro's General Rate Application.

Manitoba Hydro is requesting PUB's final approval of the following:

A) Approval of a 2.9 percent, across the board rate increase for all customer classes, with the exception of area and roadway lighting, for which a 1 percent rate increase is sought.

Final approval of a 2.25 percent interim rate increase, implemented March 1st of 2007 and approved in Order 21/07.

C) Approval to extend the Surplus Energy Program to March 31st, 2013.

D) Final approval of all Surplus Energy Program interim rate orders.

E) Confirmation of modifications to the Curtailable Rate Program and approval of all interim orders related to this program.

And F) confirmation of changes to the Limited use of Billing Demand Program, or LUBD.

Manitoba Hydro is not seeking approval on interim ex-parte orders related to diesel electric service, as referred to in item G of our letter of application.

Nor are we seeking approval of the new general service large rate for new or expanding loads, as referenced in item H.

The corporation intends to submit a diesel application as soon as possible following execution of the settlement agreement. As indicated by Mr. Warden during an exchange with Mr. Anderson, Manitoba Hydro is expecting execution of the diesel settlement agreement in the very near future.

With respect to item H, the new rate for large industrial loads, Manitoba Hydro intends to re-file an application with the Board later in the year.

The only aspect of the new rate for which Manitoba Hydro is requesting the Board's endorsement at this time is the date of December 31st as being the date from which the baseline calculation will be made.

I'd now like to provide Manitoba Hydro's position on each of the issues identified by the Chairman in his remarks.

Dealing first with issues 1 and 2, is the 2.25% interim increase provided March 1st, 2007, warranted and should it be finalized?

Prior to the issuance of Order 20 and 21 of '07, Manitoba Hydro was required to respond to Information Requests submitted by both the Board and CAC/MSOS.

The Board circulated the application to past Intervenors of record, and three (3) provided detailed comments.

In coming to its conclusion, the Board indicated that its primary concern related to Manitoba Hydro's financial strength, that being a cornerstone of establishing just and reasonable rates in the public interest.

Manitoba Hydro submits that approval of the 2.25 percent rate increase was and continues to be in the public interest. No evidence has been raised in these proceedings which might cause the Board to revisit its decision.

At the time of the application, Manitoba Hydro was projecting as a result of water conditions, net income for fiscal '06/'07 would be 102 million, and that's absent rate adjustments, as opposed to the 217 million that had been forecast.

In the Board's words, and here I'm quoting from page 26 of Order 20/07:

> "If rates are too low to produce annual net income adequate to satisfy financing and operating requirements or the expectation of debt markets that provide Manitoba Hydro's financing, major problems can arise for Manitoba

Hydro; it's only shareholder, the Province of Manitoba; and the public served by both."

Manitoba Hydro's concern that the forecast net income levels would not be met proved well founded. As set out at page 99 of the Corporation's 2007 Annual Report, net income in the electricity sector for the year ending March 31st, 2007 was 121 million, almost $100 million less than had been projected.

Clearly, had this rate increase been deferred until this GRA, a more substantial increase would have been sought in the current proceeding. This modest 2.25 percent contributed to rate stability.

By acting in a timely fashion, intergenerational equity was also enhanced by implementing the rate increases required in order to make some progress towards reasonable financial targets, rather than delaying and requiring larger increases from ratepayers in subsequent periods.

There's been no evidence in this Hearing to suggest that the 2.25 percent rate increase was not justified, and I believe all Intervenors have supported finalization.

Moving now to issue Number 3, the merit and timing of the proposed 2.9 percent increase across all rate classes, excepting area and roadway lighting.

An across the board increase can be justified on a number of grounds. As -- as noted by Mr. Warden at page 78 of the transcript:

"Recognizing the reality of Manitoba Hydro's retained earnings deficiency, no class of service provides revenue equal to 100 percent of cost, including area and roadway lighting."

Until Manitoba Hydro reaches its retained earnings target, there is a strong rationale for across the board increases.

Further, concerns have been raised by both Manitoba Hydro and Intervenors regarding the application of directives in Order 117/06 with respect to cost of service methodology. We've not heard from the Board, and until we do so, it would be premature to differentiate amongst classes.

On a similar note, Order 117/06 made it clear the Board was interested in considering the impacts of marginal costs on Manitoba Hydro's rate applications. The Chairman has asked for comments in this Hearing. And we've heard diverse opinions and submissions on how this information could be used. Manitoba Hydro will address this issue in greater detail later in this submission.

But for the purposes of addressing the Chairman's question regarding an across the board increase, suffice it to say that the application of marginal cost perspective resul -- will result in a very different set of recommendations with respect to differential -- differential class rate increases in the circumstances. And certainly, until the PUB has provided direction as to how it wishes to use this information, an across the board increase is appropriate.

Now area and roadway lighting is one exception to this comment. Manitoba Hydro recognizes that area and roadway lighting is slightly above the zone of reasonableness, with an RCC of one hundred and five point eight (105.8).

As such, Manitoba Hydro suggests that this class be given a less than average 1 percent rate increase. A 1.9 percent less than average increase should bring -- should serve to bring area and roadway lighting solidly within the zone of reasonableness.

As previously noted, however, no class of service -- including area and roway -- roadway lighting -- is paying the full cost of service as long as Manitoba Hydro has a retained earnings deficiency.

With respect to the timing of the rate increase, Manitoba Hydro recognized that an -- recognizes that an implementation date of -- date back to April 1st of 2008 will be difficult with some -- without some form of a rate rider or a higher than the requested rate increase.

Given the favourable results for the 2007/2008 fiscal year, Manitoba Hydro is prepared to suggest an implementation date of June 1st, 2008, or such other date as may be deemed appropriate by this Board. Manitoba Hydro would request that the Board implement these rate increases as soon as practical.

The Chairman has requested the parties address a number of issues relating to the new International Financial Reporting Standards, or IFRS.

International Financial Reporting Standards represents a significant change in accounting standards for entities in Canada. These standards, which are required to be adopted for fiscal years beginning after January 1st, 2011, may have substantial impacts on the calculation of annual income for Manitoba Hydro and also on its retained earnings as of the date of adoption.

Although the implications for Manitoba

Hydro are not yet fully known, there is a high likelihood that IFRS will require Manitoba Hydro to recognize a higher level of expense each year and a corresponding lower level of cost deferred or capitalized.

As well, there is a possibility that certain deferred charges that exist on the balance sheet of Manitoba Hydro at the point of IFRS implementation, primarily regulated assets and deferred pension costs, will no longer be allowed to be presented on the balance sheet in that manner and therefore must be deducted from retained earnings, thereby re-stating the retained earnings to a lower balance.

The annual impacts on operating expense could be an increase in the order of $100 million, equivalent to the revenue that would be generated by a 10 percent rate increase for domestic customers.

The impact on retained earnings of the potential adjustment to the carrying values of deferred charges could also be in excess of $100 million, thereby reducing the debt/equity ratio by close to a full percentage point at that time.

The Corporation is taking prudent and appropriate steps to ensure that it fully understands the impacts of the adoption of IFRS on its financial position and on its revenue requirements.

As evidenced by Mr. Warden on page 3221 of the transcript, Manitoba Hydro has received proposals from several consulting firms to assist in assessing these impacts. However, until the review work is complete, a more definitive assessment cannot be provided.

The Chairman specifically requested comments as to whether Hydro expected that IFRS will be implemented with perspective effects and no retroactive restatements. Manitoba Hydro understands that the application of IFRS will generally be retrospective, but there are certain electives available to first-time adopters that allow a deemed approach to be used to value items such as property, plant, and equipment.

As well, Manitoba Hydro understands that prior year comparative statements must be provided for the first year that IFRS is adopted. Under the application of these requirements, it is anticipated that the financial statements for the fiscal year 2011/2012 will be the first year for financial statements prepared under IFRS for Manitoba Hydro. With these statements, comparative financial statements will have to be provided for the fiscal year 2010/2011. These comparative statements must be prepared in accordance with IFRS.

The Chairman also asked if there are any views on the possible employment and/or validity of separate regulatory accounting with reconciliation to audit accounts reflecting IFRS. It has been suggested by MIPUG that the appropriate approach for utilities and regulators to address the implementation of IFR -- IFRS is to ignore it.

On page 3517 of the transcript, Mr. Bowman suggests that two (2) sets of books would be appropriate for a regulated utility under IFRS: one that meets the regulators requirements, and one that the debt-rating agencies and external stakeholders could use to assess financial performance and strength. He further suggested that this is what's been happening in other jurisdictions and, therefore, could be appropriate for Manitoba Hydro.

What Mr. Bowman appears to mis -- appears to misunderstand is the nature and magnitude of the differences that are embedded in current practice compared to the differences that may come about as the result of ignoring the implementation of IFRS.

It is not reasonable to assume that the debt-rating agencies and lenders will simply accept continuing losses in a utility due to its regulator using a different set of accounting assumptions than those required for financial reporting purposes.

Not addressing this issue could result in difficulty attracting capital at reasonable rates and that, Mr. Chairman, is not in the best interests of any of the ratepayers being served.

It is therefore Manitoba Hydro's position that maintaining two (2) sets of books is not an appropriate response to rate setting given the implementation of IFRS.

The seventh issue was how does Manitoba Hydro's premise that new and expanded load from industry affect the rates of all customer classes to their detriment meet with the parties perspectives. There is simply no doubt that expansion of large industry in Manitoba will affect the rates of all customer classes to their detriment.

This is reviewed in the various presentations to the interested parties summarized at Appendix 46 to the current application. More recently, Manitoba Hydro's rebuttal evidence on page 43 reviews the marginal cost of generation for 2008/2009 which, when aggregated, has an average value of five point six five (5.65) cents per kilowatt hour transmission voltage.

As a typical large industrial provides revenues of about three point two (3.2) cents per kilowatt hour, the expected revenue loss from diverting 100 megawatts, and the associated -- and the associated energy from the export market to a new or expanded industrial load, is $17.6 million. And that's without even considering the marginal cost of transmission. This was discussed with Mr. Peters at transcript pages 2038 through 41.

At current industrial general service large rates and expected export prices an expansion of large industrial row -- load of 100 megawatts generates a requirement to increase domestic revenues by $18 million.

MIPUG's written submission at pages 7.1 and 7.2 notes that any load growth in Manitoba, whether a residential, electric heating or industrial, requires either foregoing higher priced exports or the addition of new and higher cost generation, each of which will raise average rates for all customers in Manitoba, because all power rates in Manitoba are set significantly below marginal costs.

This is absolutely true. However, the impacts of large energy in debt -- intensive industry are both more significant than those of other loads and more amenable to being addressed through pricing.

Several points are worth noting here. First, residential and commercial customers as a class have increased in absolute gigawatt hours over the past fifteen (15) years to a similar degree as large energy intensives. But the percent rate of growth is much lower for the residentials and commercials.

Further, it appears that the significant higher percentage rate of growth by energy-intensive industry will continue, in absence of any mitigating measures. There is some discussion of this at Section 2 of Exhibit R of Mr. Wiens' affidavit filed in this proceedings. I can refer you also to the discussion Mr. Wiens had with Mr. Williams at transcript pages 2303 through 11. Mr. Williams also summarized this very well in his written submission at page 73.

Second, unlike energy-intensive industry, individual residential and commercial customers do not require new or expanded energy in the tens of millions of kilowatt hours annually. Individual decisions by energy-intensive industry have several orders of magnitude greater impact on Manitoba Hydro's available surpluses than individual decisions by residential and commercial customers.

Our third point, from Manitoba Hydro's rebuttal evidence, page 3 -- 43, the marginal cost to serve a large industrial load is six point four (6.4) cents per kilowatt hour, while the marginal cost to serve a residential or small general service load is seven point two (7.2) cents.

From PCOSS '08, the average revenue from a large industrial is three point two (3.2) cents per kilowatt hour and from residential and general service small, six point four (6.4) cents.

Hence, the appropriate revenue loss associated with diversion of a kilowatt hour from the export market is three point two (3.2) cents for an industrial customer, compared to merely point eight (.8) cents for a residential or small general service customer.

Fourth, electricity-intensive industry is expected to amount to 50 percent of load growth for the next five (5) years. Here I refer you to transcript page 2310.

Summing the effects of this significant contribution to load growth, with the relative gap between rates and marginal costs, suggests that such industry may be responsible for well over half, and perhaps as much as 80 percent, of the costs of diverting energy from the export market to the domestic market over the next five (5) years.

Fifth, residential and commercial customers' loads are not influenced by price to anywhere near the same extent as energy-intensive industry. The existing low rates, which under-recover relative to marginal cost, are an insignificant factor in the decisions of most residential or commercial customers to -- when they making the decision to locate or expand in Manitoba. The same is not true for large, energy-intensive industry.

Mr. Bowman acknowledged large industry is price-sensitive at transcript page 3363, as did Mr. Turner during his presentation at transcript page 2780 and again at 2790 through 93.

Last, the expansion of large industry at current rates in Manitoba contributes disproportionately to reductions in overall revenue and, therefore, to increases in rates required to make up that reduction.

In recent regulatory decisions, all domestic classes have been asked to contribute the same percentage increase. And if the strict rules of the PCOSS '08 Embedded Cost Study are the basis for future increases, the residential class will be asked for larger increases than the industrial customers whose load expansion may be driving at least part of that increase.

MIPUG's written argument on page 7.1 suggests that considering such effects is just not a valid, primary regulatory premise. However, it doesn't seem reasonable or fair that existing small volume customers should bear all or most of the burden of cost increases driven disproportionately by increasing major loads which are strongly price-driven.

The only alternatives available to address this effect are to design and implement a specific rate to isolate the revenue impact of expanding large loads to those loads which are expanding. And that's something similar to what we had included in this application.

Or we can amend the cost of service and rate design parameters employed by this Board so as to give significantly more weight to marginal cost of energy in the establishment of rates to all customer classes.

Or I guess the third option would be a combination of those two (2) measures.

MIPUG's summation at -- on page 7.2 suggests a more detailed analysis of the extent to which tie line constraints affects the extent of the revenue gap should -- is required.

Mr. Chairman, this is simply a red herring. Manitoba Hydro determines marginal costs based on the full historic range of water conditions, which imp -- appropriately incorporates tie limitations.

Similarly, the suggestion made by MIPUG on page 7.2, the domestic load expansion in the past contrib -- contributed to the development of new, profitable generation, may have some merit. But it should not be extrapolated to suggest that it is beneficial to develop new, higher-cost generation today just to sell it at low embedded costs to new, energy-intensive loads.

There is clearly sufficient information on the record today to conclude that new or expanding energy-intensive load contributes disproportionately to an increased revenue require -- requirement for Manitoba Hydro and all of its domestic customers.

(BRIEF PAUSE)

MS. PATTI RAMAGE: The Chairman also requested the parties comment on Manitoba Hydro's proposal with respect to endorsing the date of December 31, 2007, as the date for determining baseline levels and to provide comments with respect to process for dealing on a go-forward basis.

It is correct at this time that Manitoba Hydro is only asking the Board to endorse in principle the date of December 31, 2007, as the last date for determining baseline levels, including any applied Power Smart or other credits of existing customers.

With respect to future processes, Manitoba Hydro anticipates another hearing, likely in the fall of the current fiscal year, to review evidence by both Manitoba Hydro and Intervenors with respect to the proposed rate. Manitoba Hydro expects that it will consult further with large industrial customers and then re-file its industrial rate proposal to accommodate the PUB's schedule.

(BRIEF PAUSE)

MS. PATTI RAMAGE: The Chairman's question 9 requested comments regarding reliance on the debt/equity ratio and the quantification of risks.

Manitoba Hydro believes that the current debt/equity ratio is the most efficient means to deal with risk and to simultaneously serve other purposes, such as aiding and communicating with stakeholders.

While the debt/equity ratio test serves a multitude of purposes, the emphasis in these and previous proceedings has been as a means test to -- to whether the ratio provides sufficient retained earnings such that a reasonable degree of rate stability can be maintained during adverse events.

Manitoba Hydro faces a number of risks in this business. Retained earnings are an effective means of coping with these risks. Since one of the largest of the adverse events that the Corporation faces is drought, and it is a recurring risk, an important test of its debt ratio is the ability to manage the costs of a severe drought.

In Appendix 12.5 of its filing, Manitoba Hydro indicated that the costs of a drought, including financing costs, could be $2.8 billion with a repeat of the worst five (5) year flow period in its history and $3.5 billion with -- with the worst seven (7) year flows on record.

If the droughts were to coincide with a period of high electricity prices, the costs could be higher due to the higher cost of imports and the higher value of the lost export opportunities.

I'd note that the results of this analysis were not challenged during the Hearing.

Another important use of the debt/equity ratio is that potential bond holders can make an informed decision beyond simply relying on the overall credit rating of the province as to whether they should invest in the Province of Manitoba bonds or those of some other province.

The credit rating is a very simple distillation of a large amount of financial and economic information. And with Manitoba Hydro's debt representing roughly one half (1/2) of Manitoba's consolidated debt, the financial strength of Hydro will be an important factor in an investor's decision-making process.

While the focus of these proceedings has been the debt/equity ratio, Manitoba Hydro wishes to point out that it also uses other measures of financial soundness, including the capital coverage ratio, the interest coverage ratio, the actual and projected level of annual earnings, and the earnings potential of its assets.

Taken together, Manitoba Hydro believes that these measures adequately represent the financial sound -- soundness of the utility.

The MIPUG witnesses advocated the adoption of a dedicated reserve for risk protection and that the PUB should instruct Manitoba Hydro on the annual contributions or withdrawals of the reserve. This was issue 10.

Manitoba Hydro's position is that a dedicated reserve would serve no useful purpose whatsoever. It's important to remember that retained earnings represent the accumulation of net income and not a bank account from which checks can be written during an adverse event.

The simple act of declaring a reserve through the appropriation of a portion of retained earnings provides no change in the level of retained earnings available to accommodate risk.

In fact, relying upon a formulaic method of building up these reserves and restricting their use to specified risks limits the flexibility of the utility to manage the wide range of risks that it does face.

It can also produce rate instability, the opposite of its intended purpose. It does this by driving the build up regardless of net income as well as the setting up of necessary fixed replenishment schemes following draw-downs.

Another obvious weakness is the inability of the reserves to accommodate major risks while they are in the process of being built up or being re-built.

The analysis provided by MIPUG in their Exhibit 14 simplistically suggested that these reserves could be easily set up to deal with drought but fail to recognize the magnitude -- the magnitude of drought risk, the possibility of consecutive droughts, and the large increase and/or extended period of time necessary to accumulate reserves of the magnitude required.

The most serious problem with the MIPUG argument is that it advocates the separating of rate setting from the financial position of the utility.

By fixing an annual contribution to reserves irrespective of net income, it is very possible to have a rate stabilization reserve that looks healthy while the underlying retained earnings, of which reserves are merely a subset, has been severely impaired.

Manitoba Hydro does not have the luxury of a shareholder who can inject equity into the utility in order to repair potential damage to its equity from the application of this method.

There was also some discussion by MIPUG witnesses in their prepared -- in their pre-filed testimony of the cash funding of this dedicated reserve. Such a proposal would be a replication of the current sicking -- sinking fund requirements that MIPUG strongly suggests be abolished due to the net costs that arise as a result of the interest rate spreads between debt and investments.

Manitoba Hydro is hopeful that the noncommittal stance on the cash funding of reserves by the MIPUG witnesses under cross-examination represents the result of more careful thought about the unnecessary costs that this would incur.

Manitoba Hydro's view is the debt/equity ratio provides a fair and efficient means to set retained earnings as a basis for the setting of rate increases.

It would also be Manitoba Hydro's view that the currently used formula for the ratio is reasonable and that the confusing BC Hydro situation of using one ratio for net -- financial reporting, a second for calculating dividends to the province, and a third for rate setting -- all of which are different than the credit ratings used -- should be avoided at all costs.

Before moving on to the next point, I'm going to segue into a comment on sinking funds, which wasn't part of the Chairman's questions, but it fits in nicely here.

MIPUG has advocated that Hydro seek relief from their requirements to maintain sinking funds for debt retirement. This position is based on the incremental cost of maintaining this fund due to interest rate spreads between debt and investment, including the guarantee fee.

The historic benefit of the sinking fund as an integral part of its foreign currency exposure management program cannot be emphasized enough. As Mr. Warden stated at page 603 of the transcript:

> "New accounting standards -- standards are limiting the degree to which sinking funds can be used as a hedge for accounting purposes and that the Corporation intends to re-evaluate the need for a sinking fund at the appropriate time.
> In the meantime, the sinking funds still serves a useful purpose during this transitional phase to new accounting standards, and it remains a legislative requirement."

At issue 11 the Chairman requested comments as to whether capital expenditures ought to play a role in -- in our -- in rate setting in an environment where the shareholder is not expected to invest capital and the utility's current reserve balance is below target.

Manitoba Hydro is bound by an obligation to serve its customers. All new generating transmission and distribution expenditures contained in IFF-'07-1 are to accommodate low growth, to maintain or enhance system reliability and safety, or to protect the environment.

Manitoba Hydro is clearly of the view that rates should be set to continue progress towards its financial targets, targets that incorporate the inclusion of these capital expenditures. By choosing to do otherwise is to jeopardize the financial position of the utility.

Manitoba Hydro's --

MR. ROBERT MAYER: Ms. Ramage, on that point, partway through these proceedings, we were -- we have evidence that Manitoba Hydro may well now be committed to, in addition to Wuskwatim, to building Conawapa for sure.

If Conawapa is built, we've been told that you need Bipole 3, those -- if our reading of the letter of commitment to Wisconsin is correct, it's my understanding somebody's expected to supply power to Wuskwatim -- to Wisconsin within ten (10) years. And that brings the whole issue within the -- within the present IFF.

Are we to ignore that rather significant change in circumstances between the filing of the application and the signing of the letter of intent with Wus -- with Wisconsin?

(BRIEF PAUSE)

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Mr. Mayer, I think the response to that is simply that that has no impact on the short term or what we are speaking of in this rate application and that Manitoba Hydro will be bringing a new IFF to this Board, that it is going to show those impacts.

Continuing on in this topic, Manitoba Hydro's only source of equity is from earnings generated through the rate setting process.

If rates are somehow to be set while ignoring the cost of new facilities coming into service, retained earnings could be significantly harmed during the initial operating periods of these facilities. Such an outcome could be a red flag for the credit rating agencies who are keenly interested in continuing forward progress by Manitoba Hydro.

Manitoba Hydro is clearly of the view that while rates are set to recover operating costs plus an appropriate level of income, the regulator must be cognisant of the capital being expended to provide the -- for the future service requirements of the utility. And that will come in the next IFF, Mr. Chair -- or Vice Chair.

The Chairman posed the question at issue 12, What is the comfort level with Manitoba Hydro's load forecast, given the direction and present position of natural gas prices and recent juxtaposition of the annual space heating costs of electricity and natural gas?

Manitoba Hydro has a great deal of confidence in its load forecast related to fuel choice by residential customers. Manitoba Hydro's load forecast model, as explained in Appendix 35, page 11, predicts the proportion of customers that will install electric heat in each of the forecast years -- in each of the forecast areas, I'm sorry.

This proportion is called the "market

share of electricity," or MSE. It is calculated by dividing the number of all-electric basic customers by the number of total standard and all-electric basic customers.

This model employs an econometric equation that predicts the future MSE in each area based on the previous market share and the relative prices of oil and natural gas compared to electricity.

In the 2007 load forecast, Appendix 35, page 5, the residential housing forecast was increased by two hundred (200) homes per year, and the residential end-use model was updated to include a higher saturation of electric water heating.

From page 12, historically, the market share of electricity grew rapidly in the late 1980s and early 1990s. This growth dissipated in the mid to late 1990s, but the percentage of all-electric customers has continued to steadily increase since 2000. Overall, the saturation of electric space heat is forecast to grow at a slow but steady rate, increasing from 30.6 percent in 2006/2007 to 33.7 percent by 2027/'28.

The forecast also notes, at page 10, that future load growth will be led by expansion in the single detached housing market, with significant growth in space heating and water heating.

Of course, price forecasts for both natural gas and electricity are drivers in the prediction of the market share of electricity. The 2007 load forecast was based on price forecasts at the time it was prepared, which was May of 2007. The forecast is updated annually, and the upcoming forecast will reflect -- will reflect price expectations for the competing fuels at the current time.

Should the gas price forecast currently exceed that which underlines the 2007 load forecast, the likelihood is that there will be increases to the overall residential load forecast.

This, however, would not be the first time forecast price changes have entered a new load forecast. And typically, the incremental loads resulting from higher gas forecasts have not significantly moved the overall load forecast in the subsequent year.

It should be noted that residential sales account for about 32 percent of overall domestic sales. Variances from residential forecast over a five (5) year period, therefore, are considerably outweighed by the preponderance of general service sales.

To the extent that there is forecast risk over the next five (5) years or so relating to changing natural gas prices, that risk can be mitigated to some extent by having a clearly enunciated intent to adopt and gradually implement residential inverted rates, with only general seasonal variation, or with heating allowances restricted to areas where natural gas is not available.

With respect to Manitoba Hydro's load growth, we'd like to take the opportunity now to correct an error placed on the record on Wednesday by Mr. Gange.

At two (2) points in his written summation, Mr. Gange states that Manitoba Hydro's standard residential customers -- that is, those presumed to use heating sources other than electricity -- are increasing their energy consumption by approximately 7 percent per year.

He cites transcript page 742, a discussion with Mr. Kuczek, which referenced the response to PUB/Manitoba Hydro First Round 94(c).

That response clearly indicates that the growth levels for the different groups cited were over a four (4) year period, 2002/'03 through 2006/'07, not a one (1) year period. Thus, the residential standard increase in per customer usage was 7.3 percent over four (4) years, not one (1) year. That amounts to a rate increase of 1.8 percent per year.

Manitoba Hydro's 2007 load forecast document, filed in this proceeding as Appendix 35, provides the data underlying this trend, at page 16. On page 13, it notes:

> "The primary reasons for this growth are an increasing saturation of electric water heating, computers with Internet access, and large-screen TVs. The residential standard class will continue to grow as electric water heating becomes more popular. Most new homes are built without chimneys and are installing high-efficient gas furnaces and electric water heaters."

PUB/Manitoba Hydro First Round 94(c) also shows per customer usages by all-electrics declining by 8.2 percent per year over the four (4) year period, 2002/'03 through '06/'07, which is an annual rate decline of 2.1 percent of year. Overall, the residential class per capita usage increased at a rate of just .1 percent per year over that period.

The Chairman requested comments regarding the values or views that are held as the expendit -- are held as to the expenditures of utility revenues for charitable community support and/or other economic development purposes.

Manitoba Hydro's corporate sponsorship and donation expenditures are in the order of 4 to $5 million per year, or approximately one-quarter (1/4) of 1 percent of its annual revenues from domestic and extraprovincial customers. As indicated in the response to Coalition/Manitoba Hydro Second Round 46(b), the majority of these donations are approved individually by the president and CEO to ensure that the amounts are expended appropriately.

As with most other large corporations, Manitoba Hydro maintains that it has a corporate social responsibility. It has an obligation to consider the interests of society by taking responsibility for the impact of its activities on customers, employees, shareholders, communities, and other stakeholders, as well as the environment.

In addition to contributing to its -- to meeting its social obligations, the Corporate Donation Program also conserve to meet business needs. Business needs that are addressed through this program would include supporting a strong culture of social responsibility for employees within the organization; developing and supporting a positive reputation in the communities throughout the province; assisting in recruitment.

More and more potential employees consider broader factors when choosing which employer to work for. Having a strong corporate social responsibility program demonstrates that Manitoba Hydro has positive social values in addition to its business activities.

Finally, there is furthering business knowledge. A component of Manitoba Hydro's donation and sponsorship program relates to furthering education and knowledge in fields related to Manitoba Hydro's business.

The fourteenth question that was posed dealt with the treatment of the export class, the DSM, and thermal generation in the Cost of Service Study. The Chairman posed the question:

> "Has a suitable Cost of Service -- Cost -- suitable Cost of Service Study embedded cost model been arrived at with Manitoba Hydro's recent proposed changes?"

Manitoba Hydro's position on this issue is that the current cost model, as depicted in PCOSS '08, does not provide the most suitable basis for evaluating either class revenue requirements or rate design.

Manitoba Hydro's fundamental issue with PCOSS '08 relates to the assignment or allocation of costs to exports. The ultimate impact of these directives is well depicted in the pre-filed evidence of Patrick Bowman and Andrew McLaren on page 28 of that pre-filed evidence.

It Table 4.1 -- or 4-1 -- bulk power costs are depicted for each of the major classes. For firm, long-term committed service to transmission voltage domestic customers -- that's general service large, greater than 100 kV -- the embedded cost per kilowatt hour is three point two nine (3.29) cents, compared to four point eight three (4.83) cents for the export class, a significant portion of whose energy is made up of short-term opportunity sales and for which a significant portion of the firm sales is relatively short-term.

It is counter-intuitive that sales of what is substantially a byproduct of the system designed to provide firm power for Manitobans should be costed out at 40 percent higher than the sales of the main product.

Further, if the Board were to accept Mr. Bowman and McLaren's version of -- about power costs in that same table, the embedded cost for export sales at five point one five (5.15) cents per kilowatt hour would now exceed the domestic embedded cost at transmission voltage, three point one six -- one six (3.16) cents by over 60 percent.

At the very least, Manitoba Hydro believes that the embedded bulk power costs of export sales should not be higher on a unit basis in -- than the embedded costs to transmission voltage domestic customers.

A case could be made that the embedded cost of exports should be lower than the embedded costs of similar voltage domestic customers which are, after all, at a higher degree of firmness.

The counter-intuitive outcome of export unit costs significantly higher than domestic unit costs traces directly to specific directives in Order 117/06. Specifically, these directives are:

1) Manitoba Hydro was directed to utilize a single export class and to allocate costs to that class in a manner comparable to the allocation of costs to domestic classes plus assign certain costs directly against export.

2) Trading desk, map, and MISO costs, thermal plant costs, water rental and power purchase

costs that are directly attributable to export sales were to be directly assigned to the export class.

Third, PUB Order 117/06 also directed that certain other costs be specifically assigned to the export class, including the revenue impacts of uniform rates and the costs of DSM for domestic customers.

The Corporation filed with this Board on April 12th, 2007, a revision to its PCOSS '08 -- '06, I'm sorry -- that implemented the directives from Order 117/06. In that filing, Manitoba Hydro outlined its interpretation of these directives and outlined some issues associated with those methodology changes.

In summary, these concerns were:

> "The changes to the directed methodology assign a much larger portion of generation and transmission costs against exports and reduce the amount of residual export revenue available for allocation to the domestic customer classes. This has the same affect on Class RCCs as the previous methodologies, in which allocation of export revenues to the domestic rate classes was limited to only the generation and transmission functions."

This is demonstrated conclusively in Manitoba Hydro's rebuttal evidence on pages 33 through 36. It is simply not true that the problem of how to allocate and export revenues disappears, if we can find enough costs to make the net revenues disappear.

Allocating those costs against exports relieves domestic customers of responsibility for those costs. The more energy intense the customer class, the greater the share of relief when those costs are allocated to the export market. The gap between rates and marginal cost is the largest in the case of large industry.

Allocation of more costs against exports widens the gap between domestic rates and marginal costs. While this gap can be bridged to some extent by rate design, the wider the gap, the more difficult it is to use rate design to bridge it. When the gap becomes as wide as it is in Manitoba, the consideration of separate and administratively difficult treatment for large load expansions becomes necessary.

Some of the cost directed to be specifically assigned to exports have been a matter of some discussion during these proceedings. The treatment of thermal costs in the PCOSS was reviewed at transcript page 1829 through 1837.

A key point of that discussion was whether or not Manitoba Hydro can correctly interpret -- interpreted the Boyd's -- Board's directive in Order 117/06 with respect to thermal costs.

One interpretation of that directive is that all thermal costs, including interest and depreciation on plant, should be directly assigned against exports. In PCOSS '08, only the fuel costs related to operating the thermal plants against -- or that's $23.2 million has been directly assigned to the export class.

The remaining operating and maintenance costs, as well as interest and depreciation expense associated with thermal generation, are moved to the generation pool to be shared by all classes of customers, including exports.

Manitoba Hydro believes that this treatment, while not strictly reflecting cost causality, is the closest cost causal interpretation consistent with the directive.

Capital and operating maintenance costs of the thermal generation are incurred to provide system reliability, which benefits domestic customers. In fact, some of these costs were incurred before Manitoba Hydro had any substantial capability to export.

While fuel costs may be incurred to support either domestic or export sales, a significant portion of fuel costs over the longer term are incurred to support domestic sales in low water years.

When prices in the export market are sufficiently high, it becomes economic to dispatch thermal stations. But they would not have been built, nor would the ongoing operating and maintenance costs be incurred, just to facilitate occasional sales that are economic.

With respect to DSM costs, Manitoba Hydro has interpreted the Order to mean that all DSM energy savings should be assumed to serve the export market. Accordingly, the $24.6 million forecast in DSM costs and the associated 1,350 gigawatt hours of annual energy savings associated with all DSM carried out to date are applied to the export class.

MIPUG has challenged the treatment of DSM costs and argues that it creates an energy imbalance between demand and supply. Since they're -- they base this on the -- on the fact that there is no DSM supply of energy and the DSM load reduction is already factored into customer load forecasts.

MIPUG witnesses argue that the correct interpretation of Order 117/06 is the cost but not any associated energy be directly assigned to the export class, thus creating an even greater imbalance. That is increasing the embedded cost premium on export sales from 47 percent to 62 percent. Manitoba Hydro's response is provided as rebuttal evidence on page 31.

The principle is that the party who gains the benefit should also be allocated the cost of the programs. In the past Manitoba Hydro has assigned DSM costs directly to the customer costs that benefited from the program. The benefits were in the form of lower class loads and lower costs of energy and capacity to domestic classes.

If the directive is sustained, the DSM costs are to be directly assigned to exports. Then it's only appropriate that the benefits, as included in PCOSS '08, be assigned as well.

If the Board continues to direct DSM and thermal costs be assigned to exports, Manitoba Hydro recommends that the Board confirm the treatment by the Corporation in PCOSS '08.

However, more serious is the overall concern about over-allocation of cost to exports and the resulting impacts on outputs of the embedded cost

In a future application Manitoba Hydro will recommend further measures to deal with the impact of export revenues on domestic allocated costs in the embedded Cost of Service Study.

In principle, such measures should:

1) Assure an appropriate allocation of embedded generation and transmission costs as between exports and domestic customer classes.

And 2) Allocate net export revenues in such a way as to minimize implicit subsidies to energy.

(BRIEF PAUSE)

MS. PATTI RAMAGE: Mr. Chairman, I'm not sure I have -- my next topic will probably take about twenty (20) -- well maybe not that long, ten (10) to fifteen (15) minutes. I'm not sure if you'd like me -- I can keep going or if you'd want to have a break.

THE CHAIRPERSON: I think you deserve a break too. We will have a short break.

(BRIEF PAUSE)

THE CHAIRPERSON: Fifteen (15) minutes.

--- Upon recessing at 10:07 a.m.
--- Upon resuming at 10:27 a.m.

THE CHAIRPERSON: Anytime you are ready, Ms. Ramage.

MS. PATTI RAMAGE: I'm guessing you're all looking at how thick my binder is right now.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: The fifteenth question posed by the Chairman -- so this is almost, in questions, the halfway mark. I, unfortunately, can't guarantee it is the halfway mark.

The fifteenth question was with respect to whether to incorporate express consideration of marginal and environmental cost in setting rates.

There appears to be little disagreement among the interested parties that marginal cost should -- should not only be a consideration, but should be the principle consideration in setting rates.

Typically, this would take the form of setting the most sensitive aspects of the rate structure of each class of service -- for example, the tail block -- at or close to marginal cost. And here I direct you to transcript pages 3067 through 68, 3463 -- 62 through 63, and 3706 through 08.

Consideration of marginal cost in the allocation of revenue requirement among the various customer classes is more contentious.

Manitoba Hydro believes that in the current environment, where energy rates to domestic customers are well below marginal cost and the degree of the gap -- and the degree of the gap varies among utility functions as well as among domestic classes of service, that consideration of marginal cost needs to be integrated into the design of the Cost of Service Study.

This mainly comes down to recognizing the marginal cost of generation, because it is this function that is the largest portion of Manitoba Hydro's cost and where the gap between marginal cost and embedded cost is defined in the PCOSS is greatest.

This is also where the impact of increasing domestic load is most immediately impacting Manitoba Hydro's financial situation.

A kilowatt hour diverted from the export market to domestic customers typically causes Manitoba Hydro to give up more revenue from export sales than it obtains from the sale to the domestic customer. The revenue gap is larger as one proceeds up the customer scale from residential to large industrial.

The only other function for which marginal cost exceeds embedded cost to any degree, or even at all, is the transmission function which, is also part of the bulk power cost. However, in the case of transmission, domestic load expansion will result in increased cost to serve over several or even many years.

On the other hand, the impact of increased energy sales is felt almost immediately by Manitoba Hydro as export sales are diverted to serve the domestic market.

For the functions other than generation and transmission at current estimates, rates based on embedded costs would actually over-recover relative to marginal cost.

Manitoba Hydro's filing and the Cost of Service review proceeding recommended that a full share of embedded cost be allocated to firm exports, but only variable costs be allocated to opportunity exports.

The impact of this recommendation was to effectively allocate 80 percent of total export revenue on the basis of generation and transmission and only 20 percent on the basis of other functions.

During the present proceeding, Manitoba Hydro has filed its Cost of Service Study, consistent with the interpretation of the directives in Board Order 117/06.

This is meant, as described earlier, allocating a full share of embedded costs to all exports, opportunity as well in firm, and also specifically assigning identified costs, such as imports, thermal fuel, and DSM against marginal exports.

The impact of incorporating these directive is that 88 percent of export revenue is effectively allocated as generation and transmission and only 12 percent on the basis of other functions.

The significant point is that the higher proportion of export revenue allocated on the basis of generation and transmission, either as an allocation of cost to an export class or as a cost offset to domestic classes, the less recogn -- the less recognition is given to the very large gap between marginal and embedded cost.

A simple way to incorporate marginal costs considerations directly but not explicitly into the embedded cost study is to decrease the percentage of export revenue allocated on the basis of generation and transmission, particularly, generation.

This can be accomplished in one of several ways which I commend to the Board's consideration.

The Board could employ the results of column 3 on page 18 of PCOSS '08 in Appendix 11.1 of Manitoba Hydro's application. These results were obtained by assigning only variable generation costs to exports and allocating all other costs to flow through to the domestic classes.

Of course, this will yield results less than 100 percent RCC for all domestic classes and an overall result of only 75 percent for classes collectively served from the grid.

The results do show on a rel -- relative basis the effect of eliminating on all non-variable cost of export from consideration and hence remove part of the gap between embedded and marginal cost.

Indexing these results to 100 percent would indicate that all classes, except for general service large less than thirty (30) kVs and area and roadway lighting, are within the ninety-five (95) to one hundred and five (105) zone of reasonableness.

Alternatively, you could adopt the recommendation made earlier in this argument to assure that the allocation of embedded generation and transmission cost to exports is no greater on a kir -- kilowatt hour basis than the allocation to domestic customers served a transmission voltage. Allocate any resulting net export revenues in such a way as to minimize or eliminate any implicit subsidies to energy.

The diversion of net export revenues away from subsidizing energy towards different subsidies -- such as fixed customer related costs, DSM, or other policy objectives -- may need to be phased in over several years in order to avoid major cost allocation discontinuities.

Even so, a clear signal that this was the Board's intent would allow customers to prepare for the rate impacts that may follow from such an approach to -- to allocation.

Either of these alternatives would partially close the gap between marginal and embedded costs and would amount to a partial recognition of marginal costs without having to explicitly factor marginal costs into the study.

Comparing embedded costs of generation and transmission in PCOSS '08 and the marginal cost of the same functions in Manitoba Hydro Exhibit 68, adopting one of these approaches would implicitly weight the embedded study at about 85 percent and the marginal cost numbers at about 15 percent. Of course, this determination would have to be tested at a future proceeding.

Finally, these recommendations could be recast as not really addressing marginal costs, per se, but merely correcting an imbalance in the embedded cost study that results from the weight of generation and transmission in the treatment of export revenues and the significantly higher implied unit costs of export sales.

Moving on to question 16, the weight of be given to embedded to marginal costs, in the context of the immediately foregoing argument, Manitoba Hydro has provided its view that the minimum weighting for marginal cost in the final determination of revenue requirement allocation should be in the order of approximately 15 percent if the depiction in PCOSS '08 is viewed as -- as a correct version of embedded cost. It is useful as well to review the position taken -- taken by other participants in this Hearing.

Mr. Harper appears to be of the view that most weight should be assigned to an embedded study. In discussion with Ms. McCaffrey at transcript page 3760, he states that:

> "Marginal cost is not generally used for cost of service, but more for rate design."

However, he goes on to say here; I'm quoting:

> "That isn't to say that, you know, even at the -- at the cost of service side it doesn't give you useful insight. That's not to say you maybe want to put a 100 percent weighting on the marginal cost results or even 50 percent weighting on the marginal cost results. I think to a large extent most weighting goes to the embedded cost of service results."

He reiterated the same perspective at transcript page 3829 with Mr. Peters.

Mr. Chernick is also a proponent of using embedded cost studies for revenue requirement allocation, but he places an important caveat on that.

His response to Manitoba Hydro/RCM/TREE-1, which I reviewed with him during cross-examination at pages 3016 through 17, is worth highlighting. Here he said:

> "In particular when the unit revenues -- when unit revenues allocated to the class through an embedded Cost of Service Study are significantly below the cost of serving major new loads in the class, both locational decisions and the efficiency decisions will be distorted by allowing the new load onto the embedded cost rate."

He then goes further in -- down further in that response to say:

> "In such situations both equity and efficiency may require that some classes or subclasses pay more than would be allocated to them using the embedded cost methods."

And then at the last sentence of his response, he says:

> "This outcome is particularly likely for large industrials where marginal generation costs are much higher than embedded generation costs."

And during cross-examination Mr. Chernick further elaborated on that point. And there I -- I direct you to transcript page 3018 and -- through 3019.

This is precisely the concern that Manitoba Hydro has been articulating since at least 2002 on why Manitoba Hydro strongly suggests a need to integrate some consideration of marginal cost into the allocation of revenue requirement among customer classes.

Finally, we need to review the contribution of the MIPUG witnesses to this debate. Substantively, this means evaluating the significance of MIPUG Exhibit 15 which expresses the perspective that it doesn't matter whether we use embedded or marginal cost, because the result is pretty much the same either way.

Now this is because MIPUG-15 uses Manitoba Hydro's marginal cost estimates in Manitoba Hydro Exhibit 68 to scale post-export allocated embedded costs in each of the functions, regardless of whether marginal cost exceed embedded costs in that function by a factor of two and a half (2 1/2), as in the case for generation; 2.1 as in the case of transmission; or actually fall below the embedded cost, as they do by 24 percent for the other functions combined.

In effect, while MIPUG-15 is used to scale marginal costs within each and -- each function to embedded cost in -- in the same way that PCOSS '08 does for generation, it effectively provides no weight for marginal cost at all.

Not surprising then that it comes up with results very similar to PCOSS '08. Not surprising either that when you get to the end of the calculations in MIPUG Exhibit 15, the gap between marginal embedded cost is only 38 percent for residential and general service small non-demand, but 58 percent for general service large. And there I refer you to transcript pages 3571 through 75.

Mr. Bowman and Mr. McLaren tell us that this is the way EPMC allocation is carried out in California and that they have done the research. We have no reason to doubt them, but these results have not been tested in any significant way.

In particular, the context in which the methodology is applied in California has not been tested. It's not known, for example, if embedded generation cost results are distorted in the same way by the treatment of export revenues in California as they are in Manitoba. Given that California tends to be an importer rather than exporter, I suspect that they aren't.

All of this leads Manitoba Hydro to suggest that unless some mechanism can be agreed upon to deal with the significant effects of export revenue on embedded generation cost along the lines of which we've recommended, that some weighting -- perhaps in the order of 15 to 20 percent -- should be given to marginal cost results in evaluating the allocation of revenue requirement among domestic classes.

The question of giving weight to marginal cost automatically raises the question as to how estimates of marginal cost are to be tested.

Manitoba Hydro is unable to provide much of the evidence supporting its forward estimates of marginal generation cost, but believe its methods are to be reasonable.

Other information may be available on the public record which can support or modify Manitoba Hydro's estimates. Information such as recent export and import cost and SEP prices have been cited in the current proceeding. Another source which could be consulted is the recent and historic clearing prices in the MISO market at the nodes most relevant to Manitoba Hydro sales and purchases.

In order to give weight to marginal cost in determining class revenue requirement allocations, Manitoba Hydro does not require that the Board accept its forward estimates, either in the near year such as 2008/'09 or as a long-term levelized cost.

Manitoba Hydro is confident that a reasonable estimate of energy values, which is the most significant concern with respect to marginal cost, can be obtained from public sources. Manitoba Hydro is also confident that such an estimate, while not necessar -- necessarily precise, will nevertheless demonstrate the significant gap between energy embedded and marginal cost.

The next section deals with inverted rates.

MR. ROBERT MAYER: Just -- just before you go there --

MS. PATTI RAMAGE: Sure.

MR. ROBERT MAYER: I'm a lawyer, not an accountant, and -- but am I correct in -- basically you are telling us -- or your last piece told us that we can measure marginal pricing, and we should equate that with marginal cost or at least in the basis of the COSS?

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Yes, that's correct. Not used to Mr. Wiens being that far away from me.

Dealing with inverted rates, Manitoba Hydro, in this GRA, has introduced an inverted rates structure for the residential class where the tail block is greater than the first block.

While the inversion proposed in this application is modest, at less than 1 percent, the aim stated by Manitoba Hydro is to gradually increase the tail block portion of the rate closer to the marginal cost of energy, or approximately seven point two (7.2) cents per kilowatt hour, as referenced in RCM/TREE/Manitoba Hydro First Round 6C.

In general there's been a positive -- there has been positive support by all parties for inverted rates as an appropriate mechanism to send price signals to customers. Inverted rates, as opposed to the declining block structure of the past, encourages customers to make more appropriate energy choices as well as encourages conservation of the energy resource, as noted by Mr. Harper at transcript page 3706:

> "Objectives of rate design is to encourage consumers to use electricity

> more efficiently. Economic theory tells us that to achieve -- to achieve this, incremental use should be priced at marginal cost. Therefore, from a theoretical perspective, inverted rates, where a second tier as price closer to marginal costs, can be considered a positive view."

While inverted rates can be expected to encour -- encourage conservation, there are a number of issues that need to be addressed as the level of inversion increases over time.

Inverted rates will impact future incentive levels that will be offered through Manitoba Hydro's Power Smart programs. Justification for incentive levels are driven primarily by the differential between domestic rates and marginal cost.

As this gap narrows through the introduction of inverted rate structures, lower incentive levels will be needed to offer -- will need to be offered to maintain comparable -- comparable utility benefit cost ratios.

Therefore, it's important to concurrently assess the impacts of lower Power Smart incentives concurrently with introducing an inverted rate structure if the ultimate goal is to increase customer participation in energy efficiency opportunities.

Manitoba Hydro acknowledges that future evolution of the inverted residential rate must take into consideration the needs and constraints of customers who currently use electricity as a primary heating fuel while continuing to encourage appropriate -- appropriate fuel choice in areas of the province served by natural gas.

In addition, consideration will need to be taken into account for customers choosing geothermal technology for heating and cooling purposes as these customers' load profiles are distinct from either a conventional electric or natural gas heating system.

Further, the special issues faced by tenants who pay their own electricity bills and by low-income individuals also need to be considered regarding the pace of inversion in future rate applications as well as the delivery of DSM programs.

With respect to heating loads, there are essentially three (3) approaches that can be taken to provide for meeting these needs within a lower-cost first block.

The more complex mechanism is to design a separate residential rate for electric heating loads. This is the method preferred by Mr. Chernick and described in his pre-filed evidence at pages 23 and 24, where he recommends for existing heating customers, add kilowatt hours to the initial block in the heating season to increase the percentage of heating energy served on the initial block to roughly 54 percent that the non-heating customers receive.

That initial allowance would total about six thousand four hundred (6,400) over the year. As noted by Manitoba Hydro in its rebuttal evidence on pages 49 and 50:

> "A specific rate targeted at electric heat customers may create incentive for customers to report electric heat capability and may create as well significant cost and burden to administer the rate."

Manitoba Hydro's rebuttal evidence offers two (2) alternatives, which may be simpler to administer but may not specifically target all-electric heat customers or exclude customers who use other sources of heating.

The simplest is to differentiate the size of the first block by season, with a larger block in the winter, as is done in Ontario.

The other is to provide a larger first block in winter only in areas not served by natural gas, although this may be complicated by uniform rates legislation.

The advantages and disadvantages of these approaches are also discussed in Manitoba Hydro's rebuttal evidence on pages 49 and 50. That evidence concludes by noting:

> "Any alternative mechanism to implement seasonal differentiation or heating type differentiation involves trading off -- trading off between various desirable attributes of rate structures: fairness, appropriate price signal, customer acceptability, and ease of administration."

Manitoba Hydro is prepared to review these alternatives. But the fact that a major utility, such as Ontario's Hydro One, has opted for simplicity suggests that there may be some difficulty in the more complex approaches.

Given the significance of residential

electric heat in Manitoba, as well as higher degree days compared to Ontario, it would likely be appropriate to set the first winter block size higher than that in Ontario.

The nominal inversion proposed for 2008/'09 allows Manitoba Hydro to study feasible alternatives as well as to gradually introduce the concept to customers in adapting to the inverted rate proposal.

Next I'll deal with the question regarding the basic monthly charge. Basic monthly charges are, along with energy and demand, a common element of rate design.

The current residential electric basic monthly charge, at six dollars and twenty-four cents ($6.24), recovers significantly less than the embedded customer related costs and is also significantly less than the basic monthly charge levied to residential natural gas customers.

However, the basic monthly charge is arguably the element of the rate structure which least affects customers decisions. That is, it is the least elastic portion of the rate structure. Hence, there is capability to vary it, even significantly, from embedded cost and still not influence customers' decisions to any significant degree.

If it is considered desirable to increase energy charges within a constrained revenue requirement, that objective can be met by reducing fixed charges such as the basic monthly charge.

Mr. Chernick, on behalf of RCM/TREE, argues that basic monthly charges should be progressively reduced and ultimately eliminated as energy tail blocks are increased. And the area I refer to is pre-filed evidence, page 24.

In its rebuttal evidence, Manitoba Hydro has agreed that this proposal may have merit. However, also to be considered are that customer-related costs are real costs -- approximately nineteen dollars ($19) per month in PCOSS '08 -- and that the natural gas utility basic charge cannot be eliminated. Eliminating the electric basic charge may affect customer acceptance of the gas basic charge.

On balance, Manitoba Hydro supports the position taken by Mr. Harper where he stated, at transcript page 3709:

> "I generally gree -- I generally agree with Manitoba Hydro's proposal for

2008. Its decision to maintain the customer service charge at six dollars and twenty-four cents ($6.24) represents an acceptable balance between trying to recover a reasonable, fair share of customer-related costs and trying to send -- send a signal through the usage price, prices on a per energy basis that reflects the value of consumption. However, it may become necessary to review this position in future rate proceedings as the inverted rate evolves and the second block increases in price."

The Chairman requested the party's position as to whether the Board's determination of public interest is broad enough to take into account the utility's sole shareholder is the province and that the shareholder's accounts are affected by the utility.

The short answer to this question, Mr. Chairman, members of the Board, is simply, yes. In considering the PUB's jurisdiction over setting the rates for power for Manitoba Hydro, I refer you to the Crown Corporation's Public Review and Accountability Act, which I'm going to -- it's quite a mouthful, so I'm going to be referring to it as the Accountability Act as I go through.

But in that Act, at Section 26(4), it states:

"In reaching a decision pursuant to this part, the Public Utilities Board may:
A) Take into consideration; and then, 2) interest and expenses on debt incurred for the purpose of the Corporation by the government.
8. Any compelling policy consideration that the Board considers relevant to the matter and 9) any other factors the Board considers relevant to the matter."

So from a brief review of the PUB's jurisdiction, with respect to setting rates for Manitoba Hydro, it's quite clear the PUB has the ability to take compelling policy issues, such as the impact of Manitoba Hydro's financial circumstances on the province of Manitoba, into consideration in setting electricity rates.

The link between the financial position of Manitoba Hydro and the province and the negative impact that poor financial performance of Manitoba Hydro can have on the bond ratings, interest costs, and ability to raise capital of the province is well-established on the record of this proceeding and has been well-articulated by the PUB in a number of its recent orders, including Order 101/04, 117/06, and 20/07.

I won't belabour these well-established connections other than to summarize the issue by saying that poor perf -- poor financial performance by Manitoba Hydro over a sustained period of time will negatively impact the province's bond ratings, interest costs, and ability to raise capital.

And given Manitoba Hydro borrows substantially all of its capital through the province based on its bond ratings, this situation will also directly negatively impact the utility and its customers.

Any party to this preeding should be hard -- to this proceeding should be hard-pressed to argue that any factor that could have a direct negative financial impact on Manitoba Hydro's customers isn't something that the PUB ought to consider. I'm sorry.

Any party to this proceeding should be hard-pressed to argue that any factor that could have a direct negative impact on Manitoba Hydro's customers isn't something that the PUB ought to consider in its rate determination.

Next is item 20 on the Chairman's list, which dealt with the extent of the Board's rate-making authority. The Chairman asked:

> "Lacking the ability to approve major capital expenditures or direct specific action with respect to operating actions, is not the Board left with assuring rates adequate to allow future identified direction to be adequately funded and to make comments as to any concerns?"

Manitoba Hydro generally agrees with the Chairman's comment that the Board's role is to assure that rates are adequate to allow future identified direction be adequately funded.

Using different language, the Board's role is to balance the interest of the utility's ratepayers with the fiscal help of -- health of the Corporation. This represents the general public interest. In this context, the utility and the ratepayer's interests are one and the same.

The Chairman's example illustrates this fact at its simplest level. The provision of adequate funding for corporate initiatives is essential in order for the utility to be able to fulfill its duty to serve, and as such is equally in the interest of ratepayers and the utility and is in clearly -- and is clearly in the general public interest.

In the same question the Chairman acknowledges that the Board lacks the ability to approve major capital expenditures or direct specific action with respect to operating actions.

Section 26 of the Accountability Act requires Manitoba Hydro submit changes in rates or new rates to the Board for approval, and that's at page 1 of the handout of the legislation.

The Manitoba Court of Appeal recognized in both the 1989 reference case and the 1993 MKO decision -- and a copy of that MKO decision is also in this handout -- that the Accountability Act creates a regulatory environment in which rates are to be approved without providing the regulator with power to approve proposed expenses or disallow costs.

As referenced by the Chairman, the Board has developed the practice of making recommendations in its orders associated with approving a particular rate. The significance of these recommend -- recommendations should not be underestimated.

It is of note that in the MKO decision, the Manitoba -- Manitoba Court of Appeal acknowledged this practice of making recommendations as being effective even though not strictly within the Board's mandate.

The Board is free to express its views as to where the utility might reduce its revenue requirement where less than requested rates are approved or it may provide reasons as to why rate approvals at or above requested amounts have been granted and recommend where the additional revenues be applied.

Parties encouraging the Board to expand its practice in this regard should, however, be cognisant of the Court of Appeals comment that these type of recommendations are not strictly within the PUB's mandate, particularly where other regulatory or legislative bodies are charged with a particular function.

Manitoba Hydro is subject to significant oversight mechanisms. These include the Minister responsible for Manitoba Hydro, Cabinet, the Board of Manitoba Hydro, Crown Corporations Council, the Auditor General of Manitoba, and, of course, the Public Utilities Board.

The oversight of Manitoba Hydro, as set out in various pieces of legislation, notably the Manitoba Hydro Act and the Accountability Act, and -- which is the piece of legislation that serves to provide the PUB with authority to regulate rates.

That same piece of legislation creates the Crown Corporations Council, the duties of which include, for example, the development of criteria for measuring the Corporation's performance and review of capital expenditure proposals.

Debates and proceedings in the legislature at the time the PUB Act exemption -- the Section 2(5) exemption -- was enacted indicate that the government, as guarantor of Manitoba Hydro's debt, saw itself as the appropriate body to oversee Manitoba Hydro's capital plans.

The government may decide that PUB review of major capital projects is in the interest -- is in the public interest and may initiate such process. We saw this with the 1990 review of the proposed Ontario sale and again when the government elected to appoint Public Utility Board members to the CEC panel reviewing Wuskwatim.

In such cases a scope of the review is defined by order in council which can be tailored to meet specific consumer interests in accordance with the com -- circumstances at hand.

The twenty-first issue, the Chairman requested views with respect to Manitoba Hydro's efforts to restrain OM&A costs and also with respect to capital expenditure levels.

As illustrated on page 2 of -- of Appendix 12.11, Manitoba Hydro's total OM&A costs are forecast to increase by an average of 3.4 percent over the period from 2002 to 2010. And costs per customer is forecasted to increase by an average of 2.6 over that same period.

When considering the utility's specific cost increases, customer load growth, and business requirement changes that are expected to occur over that period, the projected increases are exceptionally low.

On page 2 of its rebuttal evidence, Manitoba Hydro indicated the following notable cost pressures:

"Increased maintenance requirements due

to aging infrastructure and changing technology; increased requirements for environmental monitoring; northern staffing costs and community relations; increased domestic load growth, including ongoing operating costs associated with new plant into service; export marketing requirements and opportunities, including maintaining and enhancing the ability to participate in the MISO marketplace; fuel costs; staffing costs, including wage settlements; increased emphasis on requirements for technical training, succession planning, Aboriginal pre-placement programs, and competitive marketplace factors; also, materials and external service cost pressures that are substantially in excess of CPI."

Further information was provided on page 3 of the rebuttal evidence in the form of a table showing information provided by Stats Canada on some of the commodity and external pressures facing the industry over the period 2002 to 2006.

These include: mineral fuels, 59.7 percent; ferrous materials, 40.3 percent; non-ferrous metal -- I'm sorry -- non-ferrous metals, 194.8 percent. The commercial facility construction index between 2003 to -- and 2007 increased by 32.8 percent.

It's also of note that the Manitoba consumer price index increased by an accumulative percentage of 8.9 percent over the same period, and the Manitoba hourly wage increased by 10.6 percent over that period. By comparison, Manitoba Hydro's cost per customer increased by only 9.5 percent over that period.

These cost increases are continuing. Gasoline costs have increased by appox -- approximately 30 percent over the last few months alone. As indicated by Mr. Warren -- Warden on page 84 of the transcript:

"Manitoba Hy -- Manitoba's wage pressures are continuing to increase, the average biweekly wage having gone up by a further 4.1 percent in 2007 alone."

And according to a recent Winnipeg Free Press article:

"Manitoba wage increases are now the highest in the country."

With respect to aging infrastructure, both Mr. Harper and Mr. Bowman agree that aging infrastructure is a real issue with utilities across Canada and that aging infrastructure causes increased maintenance requirements and increased replacement requirements. These acknowledgements can be found on pages 3780 through 3781 for Mr. Harper and page 3559 for Mr. Bowman.

However, Mr. Harper suggested that an asset condition assessment. That is a document prepared by an external party which summarizes internal knowledge with regard to asset conditions was necessary in order to verify that maintenance was required.

Manitoba Hydro has the expertise and systems in place to understand the conditions of its assets and already optimizes its maintenance and replacement programs based on this data.

This is referenced on page 1146 of the transcript, where Mr. Derksen indicated that Manitoba Hydro performs ongoing assessments of its assets.

This is further represented in the response to Coalition/Manitoba Hydro Round 2 52(a) where the systems and processes used are summarized.

The suggested action of engaging a consultant will provide no additional value to Manitoba Hydro. The results of Manitoba Hydro's procedures, with respect to asset maintenance, is evidenced by its overall cost performance, which has been substantially better than other Canadian utilities. And here I refer you to Appendix 12.12, figure 2.

Also its reliability performance shows that Manitoba Hydro ranks among the leaders in terms of lowest outage frequency and the lowest duration for customers experiencing outages. And there I referenced page 81 of the transcripts.

Staffing is another main area where Manitoba Hydro's being challenged. This is an other -- another industry-wide issue.

MR. ROBERT MAYER: Excuse -- excuse me again. I really hate to do this. But the issue of your assets and the asset condition report, you make the argument that doing what Mr. Harper suggested would be of no value to Manitoba Hydro.

I think the issue, however, is that, would it be of value to the Board and would it be of value to Intervenors in assessing Manitoba Hydro's assertion that it requires higher rate increases due to the deteriorating condition of its older assets?

It seems to me that the argument that

Manitoba Hydro doesn't need this doesn't answer the question, does -- does the Board or do the Intervenors need some asset condition reports in order to judge whether or not your assertion of the extra rate increase necessary to deal with -- with the aging assets?

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: I -- I think the answer to that is simply that those type of reviews don't come cheap. We're looking at trying to keep our OM&A down. And at the same time they don't come cheap, and we're able to report to you the -- the matters that I've just discussed, in terms of lowest outage frequency, lowest duration for customers experiencing outages. So I think we have to balance Manitoba Hydro's success with -- with costs of providing additional reports.

But at the end of the day, if the Board determines that it wants us to incur those costs, then -- then that's what we would ultimately do. But in Manitoba Hydro's opinion it's just a question of balancing what we saw the value to -- to the cost of obtaining that.

MR. ROBERT MAYER: Ms. Ramage, if we eliminated the requirement that there be an outside internal expert to do this -- I'm assuming, since you allege that you do this anyway internally -- then providing an asset condition report, even from Hydro's point of view, determining the value of your assets and the condition of your assets -- and I don't -- I'm not sure what that would look like.

But I mean, I know Seven Sister's generating station on the Winnipeg River's been in place a long time. And I don't know how you do an asset condition report on something like that.

But if you're already doing that, what extra costs would it be to provide the Board with such an asset condition report if we didn't require you to hire outside experts?

I realize that may take some time, Ms. Ramage. And I'm assuming we're going to have a break for lunch at some point in time. So I wouldn't be overly upset if you responded to the question after lunch.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Yeah, I think that might be better, because I think I'd just be telling you that I suspect it's -- it's a question of cost in terms of staff time, putting systems in place, and -- and the IT and everything else to be developed for that. But I'm going to check whether that response is the correct one.

MS. SUSAN PROVEN: Just from my perspective, I think I read some of that. Now, I don't know whether I saw an actual assessment from a, you know, a condition assessment point of view.

But I think I actually remember reading, when it came to some of the expenses on some of these facilities, that you were reporting in a simplistic way, perhaps just to the Board, about why you were spending the money in each of the projects. So I -- I think I saw a little bit of that.

MS. PATTI RAMAGE: And I think that's exactly -- I think that's what we are doing. Therefore, the assumption is when we talk to -- what -- what Mr. Harper recommend -- I think a key component is that it's an external party coming in to give that opinion. And I assume it's something more than what we're doing today, but -- when Mr. Harper -- certainly something more than what we're filing today.

(BRIEF PAUSE)

MR. ROBERT MAYER: Are we on benchmarking?

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Not quite. I think I was just starting staffing. We're getting very close to benchmarking.

Staffing's another main issue where Manitoba Hydro is being challenged. This is another industry-wide issue, as I mentioned. In his direct evidence, Mr. Warden indicated recruitment levels are expected to double over the next several years due to the high level of retirements and due to increased needs.

When asked whether he agreed that the shortage of skilled labour has recently become a problem for the industry, Mr. Bowman responded:

> "I hear that from nearly every client I work with, in this industry and others."

And there it's -- I refer you to page 3560 of the transcript.

The ability to attract, train, and retrai -- retain qualified personnel is essential for Manitoba Hydro to meet its obligation to serve. The marketplace has become very competitive in Western Canada, and Manitoba is no exception to this phenomenon.

Again, recent articles in the Winnipeg Free Press have highlighted the extent to which this is causing problems at the City of Winnipeg and at other entities. It concluded that public sector wages are not keeping up with the private sector and that public sector wages, therefore, will have to rise.

In the interim vacancies related to this issue have caused a reduction to operating costs for 2007/2008. This situation is being managed by deferring non-essential maintenance and through performing certain operating activities such as tree-trimming, streetlight audits, district surveys, collections, meter exchanges, product research and process improvement initiatives less frequently.

However, in the forecast period, addressing ongoing operating and maintenance needs will result in additional costs in terms of higher wages, higher recruitment costs, higher training costs, and higher staff retention costs, especially in northern areas, where staff retention has become more difficult.

In his evidence, Mr. Harper has suggested that a 3 percent increase to OM&A expenses would be more appropriate to Manitoba Hydro's circumstances than the 3.9 percent that Manitoba Hydro has forecast.

As support for this, he indicated that 3 percent is consistent with Manitoba Hydro's strategic plan and, also, that a 3 percent growth factor gives ample room for cost increases, considering a wage growth rate of 2.6 percent and a customer growth rate of .6 percent.

However, other than customer count increases, Mr. Harper provides no acknowledgement of the changes to other business and cost drivers that Manitoba Hydro is facing.

For example, Mr. Harper's analysis fails to address commodity cost factors that are continuing to increase at historically high rates. In 2007, vehicle fuel alone has increased by an excess of 40 percent, which increases this component of Manitoba Hydro's costs by greater than $3 million since 2007. Other commodities and contractor service charges are also continuing to increase by much higher rates now than in the past.

In addition to increased costs associated with aging infrastructure, other notable business cost drivers include increased environmental monitoring requirements, increased staff levels for export marketing and participation in the MISO marketplace, and increased technical and safety training requirements.

Manitoba Hydro has forecast that OM&A growth required in the period from 2007 to 2009 will continue at a 3.9 percent rate compared to the 4. -- the 4.0 rate experienced from 2002 to 2007.

All cost and business factors point to this being a requirement, with the potential of future pressure on salaries being greater than in the past, due to the difficulty in attracting skilled staff in the competitive marketplace.

From a conservative perspective, if the cost per EFT increased at the same rate in 2007 to 2009 as it did in 2002 to 2007 period -- that is, 3.8 percent -- utilizing Mr. Harper's approach provided in his response to Manitoba Hydro/Coalition-3, which he corrected in his direct evidence, the result of providing for a 3 percent increase in total OM&A would only allow a 2 percent factor to cover other cost increases, such as additional labour requirements, additional cost of commodities and services, additional cost of fuel, and general cost escalation. This is clearly unrealistic.

I would also like to address or clarify a few of Mr. Williams' representations made in his final argument on Wednesday.

Firstly, on page 27 of his outline, he represented that because Manitoba Hydro showed only eight (8) operating EFT increases for 2008/2009, Manitoba Hydro could not support its contention that it had additional operating and maintenance needs.

Mr. Williams has grossly misunderstood Hydro's evidence in this regard. Manitoba Hydro's Exhibit 35, upon which this data is based, shows operating EFT increases totalling one hundred and eighty (180) over the four (4) year period 2006 to 2009. Of that, ninety-four (94) were forecast in 2007/'08 and eight (8) were forecast in 2008/'09.

Manitoba Hydro has recognized this requirement and is ramping up its recruitment and training processes to meet these additional needs. The schedule demonstrates Manitoba Hydro's recognition of the urgency of this situation.

Well, on page 27 of the Coalition's outline, Mr. Williams asserts that because Manitoba Hydro was unable to provide a differentiation between ongoing maintenance and aging infrastructure related to maintenance, it could be concluded that there was no additional OM&A requirement.

This contravenes his own expert, Mr. Harper's testimony, as well as the testimony of Mr.

Bowman of MIPUG, who both acknowledge that aging infrastructure was a common industry problem and that was causing -- it was causing increased maintenance and replacement requirements.

As illustrated in Manitoba Hydro's rebuttal evidence, Manitoba Hydro has a strong record of meeting its forecasts. When it does not meet forecast, either being over or under the forecast, there are substantiative and supportive reasons explaining the deviation. Manitoba Hydro has strong budgetary and management control systems which provide performance and information relative to approved forecasts.

The contention provide -- provided by both the Caption and MIPUG that the fact that Manitoba Hydro forecasts costs increases with each successive IFF is evidence that costs are out of control is very realistic, and it's very unfair.

MR. VINCE WARDEN: Very unrealistic.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Oh, very unrealistic, sorry. Mr. Warden corrected me pretty quick on that one. Here I thought he was leaning in to tell me I was doing a good job.

Ms. McCaffrey even went so far as to say if OM&A had been kept to the pace that was forecast in 2002, there would be no need for a rate increase today. That was at transcript page 4116.

However, forecasts are just that -- they are forecasts. And they will undoubtedly change based on the events of the day.

For example, when IFF-02 was prepared in 2002, the price of a barrel of oil was twenty-three dollars ($23). Did anyone forecast that it would rise above a hundred and thirty five ($135) dollars, as we heard on this morning's news? In 2002, a litre of gasoline was sixty-two (.62) cents. And the last time I was at the pump, it was more than double that, but I still filled the tank.

Or perhaps closer to home for Ms. McCaffrey's clients, the price of nickel was five ($5) dollars per pound in 2002. And now it trades above twelve ($12) dollars. Or copper, which has gone from a dollar a pound to over four ($4) dollars a pound.

The point is forecasts do change, not because of errors in the forecast or costs being out of control, but because of changes in the underlying components that make up the forecast. I can guarantee you that if we return five (5) years from now and the compon -- and the components that comprise the IFF will be different than they are today.

Rather than dwell on the changes to the forecasts, as both Coalition and MIPUG have done, it's far better to analyse the effectiveness of Manitoba Hydro in controlling the actual increases in its year-over-year operating costs. Manitoba Hydro has demonstrated that its managed its operating costs very well.

This is illustrated by comparing Manitoba Hydro's results to those of other utilities who are experiencing similar cost and business drivers. Figure 2 of Appendix 12.1-2 provides this comparison and shows that over the past eight (8) years, Manitoba Hydro has performed substant -- has performed substantially better than other utilities in terms of cost per customer.

As well, it was noted during this Hearing that subsequent to the preparation of this chart, Sask Power had experienced a 15.5 percent increase in its operating costs, and BC Hydro was applying for a rate increase incorporating a 6.5 percent increase to its operating costs.

With respect to the level of capital expenditures, well, Manitoba Hydro has an obligation to serve its customers. This means that it's required to provide service to any customer who requests service within practical limitations.

This obligation includes provide in-service in a safe, reliable, efficient, and environmentally responsible manner. The capital expenditure program represents the long-term investments that the utility must make in order to fill its obligation to serve.

Routinely, this means adding transmission and distribution facilities when new services are -- when new services are requested or existing services expanded. It also means ensuring that existing facilities meet safety, reliability, and environmental standards. Many of these standards evolve and become more stringent as time progresses. But Manitoba Hydro must ensure, on a reasonable basis, that its facilities are upgraded in an appropriate manner.

As well, in accordance with this obligation, the utility will need to construct new major generation and transmission facilities from time to time, provided that it's in the best interest of customers.

Manitoba Hydro's current capital program shows some substantial increases from previous forecasts.

In addition to providing for new generation and transmission facilities, there are several key elements that are placing pressure on this program.

Primarily, aging infrastructure, as indicated in the response to Coalition Round 2 52(a), the average age of Manitoba Hydro's transmission and distribution assets is twenty (20) to thirty (30) years old, which is beyond the halfway point of their estimated useful lives.

Labour market pressures: The Corporation is experiencing difficulties in attracting labour to meet its operating and capital requirements. Further, contractor costs are escalating due to high demand in North America, particularly in Western Canada.

Another, commodity costs: The price of major commodities -- such as copper, steel and concrete -- are rising at a much higher rate than inflation.

Finally, regulatory and environmental requirements: Safety and environmental needs continue to become stronger drivers as time progresses.

These cost increases are being experienced by all utilities. As referenced in response to PUB/Manitoba Hydro Round 2 47, in the sticker shock article, authors Greg Besheta (phonetic) and Mark Chopka (phonetic) detailed the overwhelming evidence that utility construction costs have risen dramatically over the past three (3) years and that these costs will remain elevated for some time.

Examples cited include input costs, such as steel, copper, and concrete, which have risen at rates unprecedented in the industry.

The article references prices for line transformers and pad transformers, which have increased by 68 percent and 79 percent respectively between January 2004 and January 2007, with increases during 2006 alone of 28 percent and 23 percent.

Notwithstanding the unprecedented cost pressures being experienced by utilities across North America, Manitoba Hydro has exercised considerable restraint in only incurring expenditures essential for the ongoing safe, reliable, efficient, and environmentally responsible delivery of power to Manitoba consumers.

This is accomplished through a rigorous capital justification and management control structure and is affirmed each year by a comprehensive review by Crown Corporation's Council.

Next the role of benchmarking: Manitoba

Hydro participates in various surveys. I know Mr. Mayer is just dying for this one.

We participate in various surveys with respect to cost and performance comparisons with other utilities. As well, Manitoba Hydro collects high level data on comparator utilities and uses that data to assist in its assessment of its own performance.

All indicators demonstrate that Manitoba Hydro is performing very well in terms of customer service, reliability, cost, safety, rates, energy efficiency, environmental projection, and Aboriginal employment.

Although benchmarking can provide advantageous results, it can consume significant time and resources and, therefore, when done properly, can be very expensive. When we were talking about benchmarking, we are not talking about conducting a survey. Benchmarking requires far more in-depth analysis that can be obtained through a survey.

Nor are we talking about research. Taking away good ideas from other organizations is researching. Benchmarking requires examination of an existing process that has been in operation for long enough that there's going to exist data on its effectiveness and its resource costs.

As outlined in Mr. Warden's evidence, there are many potential pitfalls to benchmarking. Most notably, it's expensive, and it's difficult to find comparable utilities. Also there often exists a misguided notion that there are pre-existing appropriate benchmarks to be found.

Formal benchmarking is not the only method available to assess performance and/or improve processes. The utility industry has created associations and formens -- and forums that facilitate the sharing of knowledge and ideas related to industry processes. These are all very important considerations when assessing whether, and to what extent, an organization should perform benchmarking.

As Mr. Warden indicated on page 1090 of the transcript, departments within Manitoba Hydro often participate in studies to assess and improve their processes and performance.

These studies are facilitated through the involvement in groups such as the Committee on Performance Excellence, a component of the Canadian Electric Association, and the Electric Utility Costing Group, which is an organization of North American Utility Professionals, which meet to review common issues and problems.

It is Manitoba Hydro's position that the activities it undertakes in this regard are appropriate and that due to its positive performance and also due to the difficulties and high costs associated with performing detailed benchmarking studies, further formal benchmarking initiatives are not warranted at this time.

This position appears to be supported by Mr. Harper who, when asked about whether the Board should spend a lot of time on benchmarking, he responded, at page 3820 that:

> "Well, so as a tool, I'd put it down towards the bottom of the list."

Issue 23 was if the Brandon Coal Plant is to be reduced to emergency running only, should the estimate of ten (10) to twenty (20) million be reflected in current rate decisions?

The restrictions on the Bran -- operations of Brandon Un -- Unit Number 5 will take effect in 2009. And I'd like to just bring that to your attention, because we put 2012 in our outline. That's incorrect.

These will impact Manitoba Hydro's costs in the range to 10 to $20 million per year. It's important to be cognisant of such cost increases in the future. However, it shouldn't have a direct impact on the current application. But Manitoba Hydro will incorporate the impacts of Brandon Unit 5 on future financial forecasts.

MR. ROBERT MAYER: We're getting a little close, aren't we? If we're now at 2009 instead of 2012 to deal with the change.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Yes, it's -- it's December 31st, 2009. So we'll be able to get it into the next forecast. Unfortunately, forecasts are prepared at different times than government announcements are, so...

Issue 24 is the tracking of savings with respect to the new downtown office. Manitoba Hydro is constructing a new head office. A new downtown head office was required as a condition of its acquisition of Winnipeg Hydro. In addition to meeting this obligation, the new head office will consolidate much of its operations and administrative staff into one facility.

As Mr. Warden -- Warden indicated on page 700 of the transcript, Manitoba Hydro has been utilizing temporary facilities for some of its staff since the early 1970s. Because of other priorities, capital dollars have been spent on other, more necessary capital additions and replacements since that time.

However, with the continued growth of the organization into more temporary facilities, with the acquisition of Centra Gas and Winnipeg Hydro each adding in excess of five hundred (500) employees, and with the aforementioned obligation to construct a new facility, this prior -- priority is now finally being addressed.

In addition to providing up to date facilities for its employees, the new head office provides an opportunity to enhance the collaborative work environment. It is expected that these enhancements will result not only in productivity savings, but also in higher quality outputs.

In turn, these attributes translate into some direct and easily measurable results, such as eliminated lease costs, reducing travelling time and costs for travel between buildings, and reduced costs of staff moves due to common location and offered -- office standardization.

As well, and more importantly, the move to a common location can result in other benefits that are not so easy to measure, but they are very real.

Examples of these less easily measured

benefits include items such as the greater interaction between groups, which results in more complete information for more effective and faster decision making; the ability to merge customer inquiry centres into one location, which will facilitate the adoption of common practices and allow enhancements to customer service.

There are also benefits to a common-owned facility that will realiz -- be realized but will occur in the future. These benefits include fixing the price of a facility for an extended period of time.

Currently many of Hydro's leased facilities are at market values reflective of the period when the leases were first contracted. At renewal time, there may substantial increases to these lease costs due to increased property values, which we've experienced in Winnipeg as of late and due to market conditions.

Further, these lease facilities are not as energy efficient or environmentally friendly as the new head office. More stringent environmental controls and an increased energy cost may translate into much higher costs in the future for these lease facilities. These types of benefits have to be measured in the context of what otherwise would have happened.

As referenced by Mr. Harper at page 3824 of the transcripts, participants at past hearings have had experience trying to measure these types of benefits but have found it difficult.

Manitoba Hydro's evidence indicates that given all the factors driving the requirement for the new head office, it was and is a necessary investment. It has also provided evidence that on an annualized basis, given forecasted long-term debt interest rates of approximately 18.75 million of annual benefits is required to offset the cost of the new facilities. And there I refer you to PUB/Manitoba Hydro Round 1 42.

As well, Mr. Warden has indicated that studies have found that productivity savings of 10 percent or more have been experienced when operations have been centralized, which indicates that productivity improvements alone may able -- may be able to offset all of the cost of the new building. In fairness, however, Mr. Warden has also stated he's not entirely confident that this is achievable.

It is Manitoba Hydro's view that focussing on the details of savings associated with the new hea -- head office in future pro -- proceedings will prove difficult and costly.

Manitoba Hydro has committed to maximizing the opportunities and savings associated with its much needed new head office. But this will take time, as evidenced by Mr. Warden on page 630 and further referenced in -- in Exhibit Manitoba Hydro-36.

Manitoba Hydro is actively pursuing savings in advance of the move by maintaining vacant -- vacant positions, in part due to expected productivity savings related to common facilities.

Given these realities, it's appropriate and in the best interest for the PUB to continue to review the costs and savings of the utility from an overall perspective to ensure the costs incurred are fair and reasonable, rather than focussing specifically on the head office.

Issue 25 deals with, Is a second future year rate increase in order? As Manitoba Hydro outlined in Tab 3 of the application, IFF-07 continues to assume modest rate increases of 2.9 percent annually, aligned with the forecast rates of inflation for the foreseeable future.

This will help to ensure that Manitoba Hydro continues to make reasonable progress towards attainment of its financial targets as expeditially -- expeditiously as possible via regular and prudent rate increases over time.

The regular rate increases not only enable the Corporation to attain its financial targets in a reasonably timely manner, but also help to ensure rate stability for customers and shield them from large rate increases in the future that may be required as a result of drought or other risks that the Corporation faces.

Manitoba Hydro believes that it's helpful for the PUB to continue to provide in its orders general guidance with respect to its views on the financial outlook, financial targets, risks, and policy considerations in reviewing and determining the Corporation's rate applications, such that management may take these views into consideration in formulating future rate applications.

For instance, obtaining the PUB's views on the continuing appropriateness, with respect to its debt/equity ratio target of 75/25, provides useful insight and direction to all of the parties to a rate application proceedings in terms of focussing the discussion on those matters of most assistance to the PUB in satisfying its mandate, rather than to continually re-examine the PUB's previous direction.

Manitoba Hydro notes that the PUB had included in its notice of application and pre-hearing conference notice that in respect of this GRA, which was dated September 28, 2007, the following passage:

"Further, pursuant to its authority to vary an application, the Board may explore rate changes, not only for April 1, 2008 but also for 2009."

Manitoba Hydro believes that there is significant and persuasive evidence before the PUB to grant further rate relief for 2009 if it so chooses and further -- and that further rate relief is not inconsistent with the Corporation's current integrated financial forecast.

Issue 26 -- at issue 26, the Chairman asked: "Keeping in mind the Board's more limited jurisdiction compared to the situation with Centra Gas, you're requested views with respect to, or related to, the utility's approach or possible approach to low-income customers."

Manitoba Hydro's approach to pursuing energy efficiency opportunities in the low-income market sector should be consistent with the Corporation's approach to pursuing all energy-efficient opportunities, including adhering to the following principles and practices.

Programs should be designed to address market barriers, with consideration being given to the most effective -- most cost-effective tools for achieving the energy-efficient opportunities in each specific application or targetive -- targeted initiative -- for example, incentives, rate structures, education materials.

All energy-efficient opportunities should be pursued while staff are in the home working with the customer. How when -- however, an emphasis should be placed on the cost-effective opportunities. The cost-effectiveness of energy-efficient opportunities should be measured from a global perspective, taking into account all benefits and costs, provided the benefit and cost components can be reasonably quantified.

Incentive levels provided from ratepayer source funds should be based on and linked to the expected benefits which ratepayers can reasonably expect to realize through the investment.

And finally, when applicable, external

sources of funds should -- these should be pursued to support non-energy related benefits. By this, I mean social benefits that are concurrently realized with energy-efficient initiatives.

Manitoba Hydro's lower-income program is supported through a number of sources, including the Corporation's Power Smart initiative, the Affordable Energy Fund, the federal government's ecoENERGY grant program, and a number of third-party sources, which have included the United Way, the Winnipeg Foundation, the City of Brandon, water stewardship, competitiveness training and trade, and science, technology, energy and mines.

Through external partnerships and funding sources, additional non-energy benefits have been realized concurrently with implementing energy-efficient measures, which include -- included local job creation, training of community residents, and efficiencies in water use.

Through the Power Smart lower-income program, energy-efficient opportunities are being achieved primarily through insulation measures and a number of lower cost weatherization opportunities. These opportunities are being implemented with no or minimal -- minimum contribution from the homeowner.

Manitoba Hydro's financial contributions towards the lower-income program are provided through the Corporation's Power Smart incentive-based programs and funding through the Affordable Energy Fund, which was created with this specific purpose in mind.

With the existence of the Affordable Energy Fund, there is no apparent need to provide additional funding from Manitoba Hydro's Power Smart initiative for lower-income customers beyond the funding that is offered to all customers.

The issue of whether Manitoba Hydro's approach in the lower-income market sector should be revenue-neutral to non-low income customers should be treated in a manner consistent with Manitoba Hydro's overall approach to pursuing energy efficiency opportunities.

Specifically, the Corporation attempts to design electric efficiency programs which result in a rate impact measure that is one (1) or greater. As such, all customers, including low-income customers, are effectively better off or at least indifferent.

Manitoba Hydro, however, should continue to use the RIM of one (1) or greater as a guideline, not a rule. For example, the Corporation may offer some programs that have a RIM of slightly lower than one (1) if the inclusion of these programs provided a better balance portfolio of -- better balance portfolio of programs and are judged to assist in achieving the Corporation's overall strategic objectives, including being a leader in promoting energy conversate -- conservation, providing customers with excellent service, and being proactive in protecting the environment.

With regards to Mr. Dunsky's evidence, respecting Manitoba Hydro's lower-income program, Manitoba Hydro appreciates Mr. Dunsky's comments on the program's strengths and acknowledges Mr. Dunsky's suggestions for improvement.

Mr. Dunsky's comments are relatively consistent with feedback that Manitoba Hydro has received from consultations with other entities delivering similar programs across Canada.

Manitoba Hydro agrees with Mr. Dunsky that there is value in pursuing all energy-efficient initiatives during opportune times, such as presented through the Corporation's lower-income program and specifically, when a consumer is engaged in pursuing energy efficient opportunities.

Mr. Dunsky observes that there are offsetting balances to be made in designing a program. Pres -- present initiatives involve job training components in areas of under-employment, an offset to utility-hired contractors.

Manitoba Hydro, however, finds Mr. Dunsky's testimony somewhat conflicting in terms of when it is necessary to pay the entire cost for an energy-efficient measure relative to when it is -- when it is acceptable for the lower-income customer to take some financial responsibility through potentially convenient, low interest rate loans.

Mr. Dunsky suggests that it is not necessary to pay the entire cost -- or I'm sorry, that it -- okay, my version now -- Mr. Dunsky suggests that it is necessary to pay the entire cost for a fridge replacement, as the customer simply will not participate in the activity due to the financing barrier, even if a loan is provided.

Later, Mr. Dunsky suggests that there is no need to pay for the entire cost of an energy-efficient service, even through -- though a furnace replacement is much more costly than a fridge -- fridge replacement. When questioned on the conflicting rationale, Mr. Dunsky suggested that, and here I reference transcript page 3847:

"A few -- a furnace replacement would potentially be unacceptable to the general public and other ratepayers."

The low-income program has just been put into the market, one of the first and most comprehensive in Canada. Manitoba Hydro will be monitoring its success closely and making modifications to enhance update.

Manitoba Hydro is well aware of the need to enhance the program for rental premises and require -- and requires low-income tenants to benefit from initiatives. This will be enhanced. Similarly, apartments will be added to the program.

Presently each house is assessed for the potential to update the fridge and furnace, and methods to enhance the program for these opportunities will be assessed shortly.

In their final submissions, other Intervenors appeared to have ignored the preface to the Chairman's question, and that was keeping in mind the Board's limited jurisdiction compared to Centra Gas.

At Centra's fall 2007 GRA, there was an extensive discussion regarding low income DSM. CAC/MSOS and RCM/TREE were both Intervenors at that proceeding. And I understand -- introduce the Board and others to Mr. Wiess, and I think to a lesser extent to Mr. Dunsky. The Board's order, properly binding on Centra Gas but not Manitoba Hydro, included directives dealing with low income DSM.

What is important to note is that Manitoba Hydro voluntarily applied those directives to electric DSM programming. Manitoba Hydro questions the efficiency of bringing the same witnesses back to review the same issues just months later.

And Manitoba Hydro suggests in the future, attempts be made to confine these issues to one arena, Centra being the logical choice, given the -- given the jurisd -- jurisdictional issues on the electric side.

Issue 27 is energy efficiency measures, how important and at what cost.

THE CHAIRPERSON: Ms. Ramage, I am wondering --

MS. PATTI RAMAGE: Yes?

THE CHAIRPERSON: -- it would appear just from my observation here that you are going to go considerably longer than 12:00. You can let us know when you would like to take the break, because we can come back. We do not have to wait an hour and fifteen minutes before we return.

We could stop, for example, even now for that matter or at -- basically your choice.

(BRIEF PAUSE)

MS. PATTI RAMAGE: I'm going to suggest we're at issue 27. I think I can get to the end of the Chairman's list, certainly before, I -- I suspect, before noon and before Manitoba Hydro's lunch that they've ordered has arrived, which it hasn't arrived yet, I'm told.

THE CHAIRPERSON: Well, I am thinking too, you have been providing your --

MS. PATTI RAMAGE: If you like, I can stop now. I was more concerned that we'd be sitting in the back room waiting for lunch to arrive. So if it has arrived and -- and you'd like to take a break now it's certainly --

THE CHAIRPERSON: Well, you have been --

MS. PATTI RAMAGE: -- I don't mind stopping talking.

THE CHAIRPERSON: You have making your presentation now for an hour and a half. And that is quite a long period of time, but...

MS. PATTI RAMAGE: It certainly is.

THE CHAIRPERSON: Okay, well we will have our break now. If we were to come back at 12:30, would that work for you?

MS. PATTI RAMAGE: That would be fine.

THE CHAIRPERSON: Very good.

MR. DOUG BUHR: Mr. Chairman, excuse me. I have a prior commitment, and I would ask to be excused at this point in time. And I apologise. I anticipated that we would finish this morning, and obviously I can't estimate time either.

THE CHAIRPERSON: Okay. Thank you, Mr. Buhr. Thank you again for your participation in the Hearing.

MR. PATTI RAMAGE: If Mr. Buhr is -- is departing, I -- I did have a comment at the end of my submission. I'd just like to make that.

I'd like to especially recognize his contribution over the years and wish him well in his retirement on behalf of Manitoba Hydro.

He is, along with Mr. Peters, the only two (2) counsel in the room who were here the first time I did my first PUB hearing. So I guess you're leaving it to me and Mr. Peters to take care of this crew.

MR. DOUG BUHR: It's -- it's nice to know that I'm not the only old one in the room. I -- I thank you for your kind words, and I would specifically like to acknowledge Manitoba Hydro's -- and its staff and personnel and their assistance and co-operation and patience.

It's been much appreciated and a great benefit. Thank you.

THE CHAIRPERSON: Thank you, Mr. Buhr. We will be back at 12:30.

--- Upon recessing at 11:42 a.m.
--- Upon commencing at 12:40 p.m.

THE CHAIRPERSON: Welcome back. Okay, Ms. Ramage, any time.

MS. PATTI RAMAGE: Maybe I'll begin this afternoon, Mr, Mayer, with addressing your question as best I can. Over the lunch break we spoke to a number of engineers, and they indicated a little bit to my surprise, maybe not, that they would welcome an asset condition report, as it would help bolster their budget requests that have been deferred by executive.

MR. ROBERT MAYER: That's not the answer you're going to get.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: And they, however, indicated that -- when we asked about whether they could do it themselves, a big sigh perhaps. And then said that this undertaking would be extremely time intensive, and they don't at present have the resources. And I suspect someone won't approve them very easily or that's been their -- their experience.

So they don't have the resources to conduct it internally. And their concern also applied to an external report, as they said the consultants depend heavily on internal resources.

So in the meantime, I -- I do want to emphasize through those comments that essential system priorities are being met and that this -- I -- I don't know that that answer has been all that helpful to you.

It's back to the same concern about -- about the -- the value of the report and -- and what it can provide to both our executive and this Board, in terms of increasing overall value to the Corporation.

And that's, I guess, something that this Board will be deliberating on, as I assume our executive has in the past.

MS. SUSAN PROVEN: Can -- can I interject with just a quick question?

I had a guest at my bed and breakfast, and he works for -- he said he worked for Manitoba Hydro. So out of curiosity I asked him what he -- you know, what does he do? This was about a year ago.

And he said, Well, I am one of the people that checks the dams, the strength of the dams, like, you know, in case there's a problem.

And I -- I was reassured that, you know, so I mean are there these people --

MR. ROBERT MAYER: You don't live downstream from them.

MS. SUSAN PROVEN: No, but I mean, I, you know, there must be people in the Corporation that that is there job, is it not, like...

MS. PATTI RAMAGE: Oh, definitely there's people. It's just the role that they play and what their other jobs are is I think what the -- the problem is.

THE CHAIRPERSON: Thank you, Ms. Ramage.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: I think I was on item 27, the energy efficiency measures, how important, at what cost -- and at what cost?

Energy efficiency measures offer a viable and economic option for assisting in meeting the province's existing and future energy requirements. To the degree that energy efficient opportunities are more economic than alternative supply side options, Manitoba Hydro should pursue these options, and these options should be pursued aggressively.

This effort supports the Corporation's strategic goal of being proactive in protecting the environment and as a leading utility in promoting sustainable energy supply and service.

In assessing the relative economics of supply and demand-side options, appropriate consideration should be given to the differences between the two (2) broad categories by considering both revenues and cost impacts.

With supply options, additional revenue is generated from the sale of additional energy. Whereas with demand-side options, additional revenue is generated when marginal domestic rates are lower than export revenues.

The industry-accepted tests that are used for assessing the economics of an energy-efficient opportunity and which assist in determining an appropriate incentive level for energy-efficient opportunities are the total resource costs tests -- that's TRC -- and the rate impact measure, which is RIM.

The TRC test is a benefit cost test where a TRC greater than one (1) means the energy-efficient opportunity is cost effective, but the test does not consider who pays for the measure or who benefits from the measure.

The RIM test provides a tool to assist in determining an appropriate incental -- incentive level, whereby a RIM greater than one point o (1.0) -- zero -- one point zero (1.0) indicates downward pressure on rates and results in the utility and its ratepayers being economically better off.

Other considerations for determining an appropriate incentive level includes consideration of customer payback, current market acceptance of an energy-efficient measure, and expected timing for regulated -- regulated codes and standards to come into effect with respect to an energy-efficient measure.

Issue 29 dealt with the views as to the degree of responsibility Hydro bears with respect to advising customers as to the selection of energy sources for space and water heating.

Manitoba Hydro's role in advising customers on their selection for energy options for space and water heating should be focussed on providing customers with information on energy choices to assist customers in making informed decisions.

Caution needs to be exercised in providing customers with guidance on the economics of choosing a -- a specific energy source over another energy source as future energy prices and relative prices of energy options are uncertain.

Factors impacting future energy prices and relative energy prices include both market factors and potential future domestic utility rate structure changes -- for example, inverted rate structures.

Issue 29 deals with Wuskwatim plans and forecasts. At the time of the CEC hearing for Wuskwatim, the plan was to advance the plant from 2020 to 2009 for export opportunities. A small increase in the debt/equity ratio compared to a no-advancement scenario was anticipated. And Manitoba Hydro's view was that any resulting delay in the achievement of the 75/25 target beyond 2011/2012 would be manageable without additional incremental rate increases.

At the CEC, Manitoba Hydro offered the -- offered that the impacts on the debt/equity ratio, due to the advancement of Wuskwatim for export sales, would not require any additional rate increases.

Here we are today, with a debt/equity ratio about where we projected it during the CEC. By any measure, this would suggest that, despite Wuskwatim now being required for domestic purposes and that its costs should quite rightly be recognized in the setting of rates similar to those of any other facility in the Manitoba Hydro system, no incremental rate increases for its advancement are included in the current forecast.

There was much discussion at this Hearing on the increase in capital cost for Wuskwatim since the CEC hearing and on the details of the partnership arrangements. Capital costs are driven by external forces, such as the strong demand for construction labour in the Alberta Tar Sands and the worldwide appetite for commodities and for hydraulic generators and turbines.

Thus, these capital cost increases reflect the global economy in which Manitoba Hydro operates and are not the result of any mismanagement by Hydro, nor could Manitoba Hydro be in a position to have any influence over these world market forces.

In fact, rather than just passively accepting the general civi -- civil contract for the construction of Wuskwatim, Manitoba Hydro initially tried to negotiate a satisfactory cost sharing arrangement with the sole bidder.

When that process was unsuccessful, Hydro broke the work into three (3) separate packages and re-tendered them in order to increase the number of potential bidders in its effort to drive down the cost of this project. Helping to lessen the effects of these cost increases have been increases in the market price for electricity, which both increases the export revenue potential from Wuskwatim and also increases its value as a means to offset costly imports.

Now I'm at item 30. I wish I could be more excited about being at -- at item 30, but we have a little bit to do after that.

The last item on the Chairman's list was a request that the parties provide comments on their degree of comfort with the Board's Centra Gas order that directed that any incremental costs that may end up being associated with the new head office rests -- resting solely with the electricity account.

Manitoba Hydro operates its gas and electric utilities as an integrated utili -- entity. The cost of -- of operating each utility is allocated to each in accordance with the integrated cost allocation methodology, which is primarily based upon the cost of work performed on behalf of each utility.

The new head office is being constructed partially as an obligation made based upon the acquisition of Winnipeg Hydro and as well because moving to common facilities will benefit both utilities in terms of more efficient operations and better customer service through enhanced collaboration and opportunities. The acquisition of Winnipeg Hydro by Manitoba Hydro was of direct benefit to both gas and electricity utility operations.

Because Winnipeg Hydro operated in the same service area as Centra Gas, Centra Gas customers benefit directly as a result of greater synergistic opportunities being realized, such as in meter reading and common billing practices.

As well, Centra Gas received a reduction in administrative overhead charges subsequent to the acts -- acquisition of Winnipeg Hydro. This reduction was due to the ability of Manitoba Hydro to incorporate Winnipeg Hydro's operations into its own without a commensurate increase in administrative and general costs.

The result was that the overhead burden on operating and capital activities was reduced as a percentage of activity rates, thereby reducing the charges to Centra Gas.

The new head office has further advantages for Centra Gas. Centra had negotiated a ten (10) year lease at its 444 St. Mary Avenue location at a very low cost, which reflected the economic conditions of the time. This lease will expire at the end of 2008. And any new lease would have been reflective of current market conditions, which are much brighter than they were in 1998.

As well, given that the cost allocated to each utility is based upon the costs incurred, any productivity savings that are either attributable to providing service to gas customers or are shared would flow to Centra Gas through the normal cost allocation process.

Further, customer service benefits achieved through a more collaborative and efficient work environment provided by the new facility would also flow directly to Centra customers.

Given that there are and will be further substantial benefits flowing to Centra as a result of the acquisition of Winnipeg Hydro and the related move to -- to common facilities, it is Manitoba Hydro's view that continuing to allocate the actual costs of the work performed on behalf of each utility, to each utility, is the best course of action.

As such, there should be no special allocation process implemented to ensure that the costs of the new head office flow only to electric customers.

The Chairman also invited parties to speak to any additional matters not otherwise addressed in his comprehensive issues list.

During the course of this proceeding, a number of parties have commented on the possibility or desirability of collaboration among Manitoba Hydro and stakeholders as a way to resolve outstanding concerns. Manitoba Hydro would like to take this opportunity to provide its comments in this regard.

Mr. Chernick, at transcript page 2910 through 13, suggested that rate design, DSM, and marginal cost modification might be issues amenable to resolution or at least clarification through stakeholder conferences outside this formal hearing -- process.

Mr. McLaren and Mr. Gange discussed a similar process at transcript page 3456 through 60, with respect to industrial rate design and other issues.

At this point, Manitoba Hydro would simply like to go on record as being prepared to participate in any collaborative process that has a reasonable promise of effective and efficient resolution of outstanding issues.

This is only like -- likely to occur where each party of the process comes willingly and with the intention of working cooperatively towards a common goal. As such, Manitoba Hydro does not believe the Board should direct the parties engage in collaborative processes. Rather they're a part -- a matter for the parties to initiate and thereafter set the terms of reference.

At the end of the day, though, when parties hold strong ideological or other beliefs it is only the Board that has the power to move an issue forward.

MIPUG has taken the position that the PUB has jurisdiction over Manitoba Hydro's service extension policy and that Manitoba Hydro ought not to have suspended the policy without first obtaining PUB approval.

First, it's important to understand what the service extension policy was. As noted by Mr. Wiens at transcript page 2052, Manitoba Hydro had a long-standing service extension policy, established by the Corporation, which set out the amount the Corporation is prepared to invest in facilities to serve general service large customers requesting services -- service at voltages over 30 kVs.

The policy was that Manitoba Hydro itself would invest up to three (3) times the anticipated annual revenue, provided that the extension served to extend the common grid. It did not apply to dedicated facilities.

As Mr. Wiens explained, in 2005 Manitoba Hydro recognized that the cost of serving those customers, in terms of foregone revenues as compared to revenues received from those -- revenues received from those customers, was significant.

Therefore, Manitoba Hydro determined that it would no longer invest anything to connect these customers. The customers would not be denied service, but they'd have to pay their incremental cost of connecting to Manitoba Hydro's system. To do otherwise would impose a significant and unfair burden on Manitoba Hydro's other customers.

The PUB has never reviewed nor approved Manitoba Hydro's service extension policy. The reason being, very simply, that it falls outside the jurisdiction of the Board and within the exclusive jurisdiction of the Corporation.

And here, I -- I direct you, it's the third page in the handout, and that's Section 49.1 of the Manitoba Hydro Act. And this section reads:

> "The extension or enhancement of the supply of power by the Corporation to any customer shall be on the terms and conditions which may include a contribution to or payment for capital expenditures acceptable to the Corporation."

Again, "acceptable to the Corporation." The legislature has clearly and concisely provided Manitoba Hydro the power to set the terms and conditions for service extensions, including the authority to make contributions or require capital contributions. There's no requirement that the PUB approve these terms and conditions.

MIPUG argues that while Manitoba Hydro has the authority to set terms and conditions of service pursuant to Section 26 of the -- 28 -- I'm sorry, of the

Manitoba Hydro Act and to set to the price for power pursuant to Section 39, both of these powers, if subject to the overriding authority of the PUB to approve same.

MIPUG then leaps to the conclusion that if Manitoba Hydro's authority to set terms and conditions related to the price of power is subject to PUB approval, then the PUB must also approve terms and conditions for service extension policies.

The basic premises of this argument is flawed. Even if the PUB does have direct approval authority over setting terms and conditions for the provision of power, a proposition that I would suggest is not supported by the legislation, the fact remains that the service extension policy is an entirely separate matter.

It deals with Manitoba Hydro's contribution towards the capital cost of extending new service or upgrading existing service. It has nothing to do with electric rates or the customers price for power.

Now, even if one were to ignore this obvious distinction, the legislation itself doesn't support MIPUG's argument. And here, if you go to the fourth page of the argument -- or of the handout, you'll see Section 39(1) of the Manitoba Hydro Act. And that section provides that:

> "Manitoba Hydro may fix price for power sold by the Corporation".

Its authority in this regard, however, is explicitly subject to part 4 of the Accountability Act. We see that at Section 39(2), right underneath "The Price for Power Sold by Corporation," we're immediately told that while Manitoba Hydro can fix it, that any -- that price will be subject to review by the Public Utilities Board.

Rates -- as we're well aware by this point, Section 26 of the Accountability Act provides that Manitoba Hydro may not introduce new rates for service or change existing rates for service without approval of the PUB. Rates for service is specifically defined at Section 26(2) as being the:

> "Price for pow -- price charged with respect to the provision of power, as defined in the Manitoba Hydro Act".

Power is defined in the Manitoba Hydro Act as "electrical power, howsoever generated." Now, there's a number of points to be drawn from this analysis.

First, Section 39(1) of the Manitoba Hydro Act and Section 26 of the Accountability Act both focus on price and only price. You will not find the phrase terms and conditions in either of these sections.

MR. ROBERT MAYER: Ms. Ramage...?

MS. PATTI RAMAGE: Mm-hm?

MR. ROBERT MAYER: I -- I'm looking at your handout at Section 49.1, which appears to have come into effect or been passed at the same time 48 and 49 were repealed.

But when you look at the, if I -- if I -- I've been trying -- this is really badly piec -- badly drafted piece of legislation, with all due respect to whoever may have done it, but:

> "The extension or enhancement of the supply of power by the Corporation to any customer shall be on terms and conditions."

Now let's leave out the lit -- that middle part for a bit, "acceptable to the Corporation".

It doesn't say -- it says the terms and conditions have to be acceptable to the Corporation. I don't see anything in here that says it's within your exclusive jurisdiction to set them?

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Well, if -- if I can just carr -- I-- I will address that in terms of accep -- accepting the comment that all things under the Manitoba Hydro Act are generally for the Corporation unless it's otherwise directed that another party would be involved. And -- and I'll address whether another party would be involved.

Otherwise, I think it can safely be assumed that the Corporation would be setting those.

MIPUG -- just carrying on where I was -- MIPUG states that the term "provision of power" found in the Accountability Act must be understood to include the terms and conditions that characterize the service that customers receive.

Such a reading is contrary to the basic statutory -- basic rules of statutory interpretation. These include:

> "Words must be given their ordinary meaning. Priced for the provision of power means priced for the provision of power. It doesn't mean terms and conditions related to a service extension policy."

Another principle of statutory

interpretation is that each term, each sentence, and each paragraph has been deliberately drafted with a specific result in mind, and there exists a presumption against adding or deleting words.

Had the legislature intended PUB review of terms and conditions, it would have said so. Had the legislature clearly intended the -- the legislature, sorry, clearly intended the PUB to review the price for power, there is no such reference with respect to terms and conditions, nor should one be gratuitously added.

A third principle of statutory interpretation deals with the uniford -- uniformity of expression. Each term should have one (1) and only one (1) meaning.

Similarly, a different expression implies a different concept: different terms, different meanings. The terms "price" and "terms and conditions" are two (2) different concepts are used differently in the legislation. And it should be afforded different meanings.

This is clearly illustrated by the fact that the term "price" is used in Section 39 of the Manitoba Hydro Act, whereas the terms -- whereas the phrase "terms and conditions" is used elsewhere in the Act, notably Section 28 and Section 49.

Now, MIPUG has attempted to work around what I would suggest is the clear intent of Section 49.1 of the Manitoba Hydro Act by arguing at page 32-2 of its submission that Manitoba Hydro's jurisdiction to set prices for the supply of power, pursuant to Section 39, and to define terms and conditions related to the supply of power, pursuant to Section 28, cannot negate the overriding jurisdiction of the PUB to regulate both.

But an examination of Section 28 clearly demonstrates the flaw in this logic. Section 28 of the Manitoba Hydro Act says the Board -- and that's the Manitoba Hydro Board:

> "May by regulation prescribe Sub (a), the terms and conditions upon and subject to which the Corporation will supply power to the users of power supplied by it."

Section 28 is also in that handout, Mr. Mayer.

(BRIEF PAUSE)

MS. PATTI RAMAGE: MIPUG is suggesting the powers granted to Manitoba Hydro by Section 28, that is the power to set its terms and conditions, is subject to PUB approval.

Now, unlike Section 39(1), dealing with price, there is no immediately following proviso stating PUB approval must be obtained. More importantly, the legislature gives Manitoba Hydro the power to set its terms and conditions by regulation.

Regulations have the power of legislation. Clearly, if Manitoba Hydro's power to set terms and conditions of service were to be subject to PUB approval, this would have been clearly stated. In fact, there would be no granting of -- of this extraordinary power to enact regulations. It simply wouldn't make sense.

Manitoba Hydro designs the product, the PUB approves the price for the product. As noted by MIPUG, Manitoba Hydro has knowledged -- acknowledged in the past that it can't materially change the product without confirming the price remains appropriate, and that's absolutely correct.

But that is quite different from the suggestion that price includes terms and conditions and any terms and conditions, not just those associated with the provision of power, but those associated with service extension policies.

Manitoba Hydro has jurisdiction with respect to its service extension policies, pursuant to Section 49.1 of the Manitoba Hydro Act. No other party has been provided with supervisory power over that section other than Manitoba Hydro. This policy is not a rate or a price for power. The PUB has never purported to have jurisdiction in this area and has been quite right in that regard.

I'm now going to turn to some rate design issues.

With respect to the tariffs filed with this application for all domestic rate classes, Manitoba Hydro's position is that the Board should approve them as filed, with the single exception of the general service large rate second energy block. The review of this rate structure has been postponed. Hence, Manitoba Hydro is intending to file an amended tariff sheet for approval by the Board.

(BRIEF PAUSE)

MS. PATTI RAMAGE: We have that tariff sheet. I think it's probably back in the -- in the back room. If -- if we like, we can have it made an exhibit or we could forward it to the Board following the end of the Hearing. But it simply gives us the tariff seat -- sheet for the general service large, taking out the new large industrial rate.

In any event, we note that several of the parties have made constructive suggestions with respect to rate design. And Manitoba Hydro intends to consider them all prior to filing its next GRA.

However, in the interest of maintaining rate continuity and limiting adverse customer impacts, Manitoba Hydro believes that the tariff sheets filed, and -- and with the one (1) exception that we intend to amend, are more appropriate -- are most appropriate.

I will address some of the Intervenor comments on rate design individually. First, MIPUG.

With respect to the rates sought in the current application, MIPUG is asking this Board to turn back the clock and apply the rate increase equally to the demand and energy charge -- charges.

That would be simply inconsistent with the rate objectives clearly enunciated by Manitoba Hydro in this application at Tab 10, page 3.

Consistent with conservation objectives, the rate schedules proposed -- propose an inverted rate for residential and greater increases to energy charges than demand charges for the general service small demand -- small demand, medium, and large classes.

There was a distinct -- a discussion between Mr. Peters and Mr. Wiens, beginning at transcript page 1886, which reviews the relative disparities between both marginal and embedded costs of both demand and energy from -- from the rates charged for demand and energy, with particular reference to the general service large greater than 100 kV class.

The conclusion was that demand charges are over-recovering and energy charges are under-recovering relative to the available measures of cost.

Since 2001 Manitoba Hydro has been re-balancing demand and energy charges by applying the entire rate increase to the energy charge. This is a direction that has been approved by this Board since then, and there's no compelling reason to change that direction today.

On a more forward-looking basis, MIPUG has argued that the Board should, and I quote:

> "Direct Manitoba Hydro to develop an inverted rate structure for general service large customers in consultation

> with customers to be filed with the Board for consideration."

And there I'm quoting from MIPUG's written summary at page 17-2.

Manitoba Hydro is supportive of this direction and -- and intends to prepare recommendations regarding a structure which may incorporate time-of-use provisions for filing with the Board as soon as practical.

On a matter related to inverted rates, MIPUG is also encouraging the Board to direct Manitoba Hydro to update its non-utility generation policy to remove the requirement for customers to serve their own load first. There I reference MIPUG written summaries, the written summary at page 33-1.

Manitoba Hydro does not accept that its current -- current policy is inappropriate. If it could be ascertained that any non-utility generation developed was truly a new resource being brought to market, then it might be appropriate to reconsider or waive the current policy and market the customer's generation at export prices.

However, Manitoba Hydro is not interested in taking a customer's generation to market and then having to reduce its own export sales in order to make up the customer's energy requirements.

This is what Mr. Wiens meant at transcript page 2861 when he referred to customers arbitraging Manitoba Hydro's power. It means they stop using their own power, their own generation, to supply their load, and have Manitoba Hydro supply it again, while asking Manitoba Hydro to wield their own power to the export market at a higher price.

The BCUC, in directing BC Hydro on this issue and allowing customers to sell self-generated elec -- self-generated electricity, commented as follows, and I'm quoting:

> "The commission directs BC Hydro to allow rate schedule 1821 customers with idle self-generation capability to sell excess self-generated electricity, provided the self-generating customers do not arbitrage between embedded cost utility service and market prices."

This means that BC Hydro is not required to supply any increased embed -- any increased embedded cost of service to an RS 8 -- 1821 customer selling its self-generation output to market. And I've supplied a copy of BCUC Order G38-1 in that handout.

In any event, the development of an inverted rate schedule for industrial customers would allow them to benefit to the full extent of marginal costs from using their own generation, whether it supplied their own load or was moved on to Manitoba Hydro's system, provided that the baseline was established or reestablished to recognize the capability of the customer-owned generation.

Manitoba Hydro respectfully suggests that this would be the best method of integrating customer-owned generation.

Dealing with RCM/TREE, Manitoba Hydro will consider RCM/TREE's general concerns with respect to time-of-use rates and demand energy re-balancing.

However, Manitoba Hydro would prefer to keep the existing demand rates and ratchets in place, pending a review of new rate proposals by this Board and stakeholders.

Now, Mr. Chairman, members of the Board, let me turn briefly to the issue of Manitoba Hydro's fixed versus floating rate debt policy, as -- was raised by the Coalition in its final argument.

I should note that this topic area was covered in some detail by Manitoba Hydro on pages 16 to 23 of its rebuttal evidence.

The Coalition has suggested that Manitoba Hydro has been too conservative in its use of floating rate financing and should be directed by the PUB to undertake a study on this issue.

Manitoba Hydro's policy is to limit the level of floating rate debt to more than -- to no more than 30 percent of total debt outstanding. And it manages the level of floating rate debt to be within a target range of 15 percent to 25 percent of total debt.

As the parties to the Hearing appear to agree, the tradeoff associated with the use of floating rate debt is between the typically lower costs and the higher volatility.

Manitoba Hydro's floating rate debt policy is designed such that the Corporation provides ratepayers with the economic benefits associated with floating rate debt, while ensuring that a prudent level of interest rate stability is maintained for debt servicing costs through the long term, fixed rate financing.

During the period March 2004 to March 2007, there was a small reduction in Manitoba Hydro's floating debt rate -- debt ratio from 21.9 percent to 19.0 percent. Long-term interest rates in the last four (4) years have been historic -- at historic lows. And Manitoba Hydro's general preference during this period -- period was to fix the majority of its new financing at relatively attractive, long term interest rates.

In Manitoba Hydro's view the strategy of favouring long term, fixed rate financing during periods of time when: 1) long-term interest rates are low, relative to historic norms; and 2) when the premium associated with long term, fixed rate debt is low and the yield curve is relatively flat, is appropriate and likely to produce costs over the long-term that are similar to a strategy of adding more floating rate debt, with the added benefit of reducing the volatility of interest expense.

With the ver -- with the recent return of the yield curve to a more -- to more of a normal upswing sloping pattern, and the very favourable floating interest rates of late, Manitoba Hydro continues to use floating rate debt in a prudent manner and is -- issued $200 million of US floating rate debt in February of 2008, which has increased the floating -- floating rate debt ratio at March 31st, 2008, to be in excess of 20 percent.

Manitoba Hydro does not agree with the Coalition's recommendation that a study on this issue was warranted and asserts that there is already significant support on the record for its current floating rate debt policy:

1) A recent comparison of the floating rate debt policies and ratios of other Canadian electric utilities shows that Manitoba Hydro's policy can be characterized as moderately aggressive -- as a moderately aggressive policy in the utility industry.

2) Prudent management of Manitoba Hydro's overall risk profile requires a balancing of the significant operating risks and volatility that the Corporation is exposed to with the financial risk associated with its floating rate debt policy, such that it operates within acceptable levels of overall risk.

Third, Manitoba Hydro's assets are mainly composed of fixed assets with relatively long service lives. And as such, it is appropriate, from the perspective of -- of the matching of the maturity profile of assets and liabilities, that the majority of the related financing of the fixed assets would be in the form of long term, fixed rate financing.

In summary, Manitoba Hydro believes that its floating rate debt policy strikes an appropriate balance between the economic benefits of floating rate financing and ensuring that a prudent level of interest rate stability is maintained and, at the same time, allows the Corporation to respond to changing market conditions.

Manitoba Hydro's application included a request to modify the terms and conditions of some of its miscellaneous rate options, as well as to give final approval to numerous applications which have been approved on an interim basis since the Board issued its last major order in August of 2006.

This is where we get into the dry stuff now.

(BRIEF PAUSE)

MR. ROBERT MAYER: We're not seeing a lot of opposition to some of this stuff, Ms. Ramage, so keep it short.

CONTINUED BY MS. PATTI RAMAGE:

MS. PATTI RAMAGE: Well, then I'll just run through. We've applied for the Surplus Energy Program. We've noted changes in the program and we are asking the Board to confirm that the rates for that program will continue to apply in light of those changes.

We're also asking the Board to confirm all the rates, the interim ex-parte rates that have been issued, including not only to the date of today, but to the date that the Board actually issues its order. We do have a here a -- a list of orders to today's date that Ms. Fernandes can distribute, and maybe I'll just keep going while she passes that out. But that'll provide the Board with that list.

The same thing applies for the Curtailable Rate Program. I'd also add that the Curtailable Rate Program interim orders have been included in the list that we're having distributed. And no one has opp -- opposed that.

Manitoba Hydro has also asked that the Board confirm the changes to the limited use of billing demand rate set out in Appendix 10.6.

The change approved in Order 27/05 issued February 17th, of 2005, was to reduce the eligibility requirement from thirty-six (36) to -- months to twelve (12) months. This change hasn't been contested in the proceedings. And we'd again ask the Board to confirm the rates with that change.

Dealing with short-term power, Manitoba Hydro's application proposes the customers on the short-term power rate be allowed a maximum use of 1,000 kilowatt hours per month for secure -- security purposes and to be subject to the same contract in twelve (12) month ratchet provisions as other demand billed customers. And this request is described at Tab 10 on pages 8 and 10.

Manitoba Hydro is proposing that all the short-term power customers be subject to the 25 percent ratchet provisions in all months, excluding the three (3) winter months of -- of December, January, Febru -- February. And again, this request has been unopposed during the proceeding.

Dealing with class con -- consolidation, Manitoba Hydro is of course requesting approval of all rate structures included in its current application. If such approval is received, the Board will be approving the first step of a two (2) step provision, described in Tab 10 at page 5, to consolidate the general service small demand and general service medium rates.

General service small and medium customers currently pay the same demand charge and the same charge for runoff energy. They are both served from corporate-owned transformation and they -- their utilization voltages are similar.

This new consolidated class will in time have the same rates and rate structure as the current general service small class. It will take one (1) or two (2) more rate changes to have both rates -- rate classes fully consolidated. But the rate structure proposed in this application for the medium class is moving towards achieving this goal.

This means moving from a single energy charge for the current medium customers to a blocked energy charge, which will generate more revenue from the energy component of the rate. This will be offset by the introduction of a blocked demand charge whereby the first 50 kV.As. will be at no charge as is the case with general service small demand customers today.

The block structure for the medium class will be at the same -- will be the same as the small class in that the first energy block will be 11,000 kilowatt hours, the second block at 8,500 kilowatt hours.

However, during the progression to full consolidation, the rates proposed in the block structure will be lower for medium demand customers than for small demand customers.

Manitoba Hydro is not proposing to change the rate structures for general service small and medium LUB -- LUBD customers to reflect the move towards a consolidated rate class for regular gen -- GS small and medium customers. The rate structure for LUBD customers will continue to have only a single energy charge and single demand charge, with the demand charge applied to all kV.As.

The demand charge represents approximately 25 percent of the total demand charge for the corresponding general service rate class, while the energy charge is calculated to provide revenue neutrality to the standard -- to the standard rate at an 18 percent load factor.

The introduction of the declining block structure to the general service medium class is intended to address the discontinuity between general service medium and the small customers.

At around 200 kV.A -- at around the 200 kV.A transmission point, general service medium customers currently pay about one hundred dollars ($100) per month less than general service small customers at the same point.

So it is to the customer's advantage to increase demand to move into the general service medium class. The proposed consolidation will eliminate this discontinuity.

Manitoba Hydro therefore requests its -- that its rates to general service small and medium be approved as filed.

Lastly, Manitoba Hydro received MKO's submission late yesterday afternoon. We have not been able to review it in detail. But based on my summary review, I would simply comment that much of the relief sought by Mr. Anderson appears to me to belong in other forums and certainly not this one.

So in conclusion, Manitoba Hydro would say that a 2.9 across the board rate increase is clearly reasonable, as summarized in Mr. Warden's direct evidence, starting at page 74 of the transcript:

> "There exists compelling reasons to support the requested rate increases."

First, Manitoba Hydro is faced with increasing cost pressures as it fulfills its mandate to provide energy to Manitoba consumers.

Second, Manitoba Hydro has significant requirements for funds to manage its operating and capital programs. And more funds -- and more funds generated internally will lead to reduced debt, which in turn leads to a reduced financing costs for the ultimate benefit of Manitoba consumers.

Third, Manitoba Hydro has been striving to achieve a capital structure which is more comparable to that of other large Canadian utilities. Steady progress towards the achievement of its financial targets is important for the financial well-being of the Corporation as well as to provide confidence to bond holders, rating agencies, and other stakeholders that Manitoba Hydro is a strong financially self-sus -- sustaining corporation.

Fourth, Manitoba Hydro faces a number of very significant risks which could have severe financial consequences. In order to properly manage and prepare for the risks faced by the Corporation, an adequate level of retained earnings or equity is essential.

Fifth, rate stability is absolutely important. It is prudent to raise rates gradually over time rather than be confronted with what would inevitably be large rate increases in the future.

Finally, as we've discussed during these proceedings, two (2) other significant issues are looming on the horizon: the implementation of IFRS and the restrictions on the operations of Brandon -- of the Brandon Coal Plant.

This 2.9 rate increase ought to be across the board, with the exemption of area and roadway lighting. No class of service provides revenue equal to 100 percent of cost, including area and roadway lighting. Until Manitoba Hydro reaches its retained earnings target, there is a strong rationale for across-the-board increases.

We have not heard from the Board regarding the application of directives in Order 117/06, nor have we received guidance on how the Board intends to consider marginal cost in the context of rate applications. Until we receive such direction, it would be premature to differentiate amongst classes.

And that -- and with that Mr. Chairman, Vice Chairman Mayer, and Board Member Proven, I would conclude fin -- Manitoba Hydro's fin -- final argument in this proceeding.

And on behalf of the Corporation, I'd like to thank the Board and its advisors and other parties to the proceedings for their time and interest in Manitoba Hydro's activities.

These -- these issues that we've raised today are important, albeit, a little bit dry at times. I'd also like to extend a thank you to the other parties in the proceedings, and I comment that despite our differences, this group is a collegial group, both in and out of the -- of the hearing room. And it makes it much more pleasant to deal with people in this forum than in -- in many other forums.

Finally, I'd like to acknowledge the team from Manitoba Hydro, both front and back row. Without any disrespect to anyone in this room intended, I truly believe you cannot understand the above-and-beyond effort these people go to, to -- when they do these rate hearings.

And I'll let you in on a little secret. While it appears that Mr. Warden and Mr. Wiens are running this ship, it's Ms. Wallace in the back room that keeps this thing afloat.

And finally, without intending to give any evidence, I can advise that we're going to be losing one (1) of our back row members. Ms. Doering in our back row will be leaving us, along with her husband, a Manitoba Hydro engineer for Alberta, shortly. So we would like to officially wish her well on the record. And we've appreciated her work throughout these hearings.

And with that, that closes -- finishes my final submission.

THE CHAIRPERSON: Thank you, Ms. Ramage.

Before we wind this thing down, Mr. Peters, can you think of any other issues we have to address?

MR. BOB PETERS: There's one that perhaps should be addressed before we close today, Mr. Chairman. And let me just introduce it to the Board.

MKO has provided oral comments on -- on Monday. And they've also this morning provided their written outline of recommendations. Mr. Anderson had prepared some speaking notes and submissions for his -- that lead to his recommendations that have been provided. And without taking the microphone away from him, I'll give him a chance to add anything.

I believe Mr. Anderson is requesting of the Board that the Board accept and attach to the outline of recommendations the speaking notes that he -- that he was using to prepare them.

Mr. Anderson...?

THE CHAIRPERSON: Mr. Anderson...?

(BRIEF PAUSE)

MR. MICHAEL ANDERSON: That's correct, Mr. Peters, thank you.

The speaking notes are organized as

responses to each of the Chair's questions that he delivered to us all on May 2nd. And the conclusions are drawn from them. But the speaking notes were the materials that were in my note binder in clean text form. And I had intended today to distribute that to the Board and parties.

So with the Board's leave, I'd like to attach them or include them with the comments that you had already indicated would be incorporated into the transcript.

THE CHAIRPERSON: Thank you, Mr. Anderson.

Ms. McCaffrey, do you have any views?

MS. TAMARA MCCAFFREY: No, as you know, Mr. Chair, I wasn't here at the end of the day due to another obligation that I had. So I -- but I -- in speaking to Mr. Anderson offline I understand that it -- it was his intention to have an opportunity to -- to deal with things this morning. There may have been some mis -- misunderstanding there, so I certainly would support that.

I have no objection to that at all.

THE CHAIRPERSON: Thank you. Mr. Gange...? Ms. Ramage...?

MS. PATTI RAMAGE: I'm torn at this one -- on this one, because there was a process. I think there was a clear understanding.

And while it -- it may not have any impact today, in terms of whether Manitoba Hydro has to respond further, the fact is that we're now going to be reviewing Mr. Anderson's materials in more detail and potentially having -- have to respond. I'm hoping that that wouldn't be the case if they're filed.

My bigger concern is on a -- on a precedential value that Intervenors then be allowed to continue to -- to provide submissions.

But I think at this point in the hearing Manitoba Hydro is -- is of the view that -- that let Mr. Anderson file them. We'll look at them.

But we would like to hear a message from the Board as -- in terms of this on a go-forward basis, that this doesn't set a precedent for people to continue the hearing process or depart from a procedure that's been clearly delineated.

THE CHAIRPERSON: Our acceptance of the filing would be 'without prejudice' to any future hearing.

Mr. Anderson, we are prepared to receive your comments. As you know, this material does not represent evidence. It is just support, basically, for your argument.

Ms. Ramage and any other party, you are not under any obligation to provide any further comments with respect to Mr. Anderson's filing of his notes. If you do have some comment, we would be pleased to receive it, say, by no later than next Friday.

Mr. Anderson, do you have -- could Mr. Gaudreau help you distribute it?

MR. MICHAEL ANDERSON: Mr. Chair, yes, I do have copies. I -- I thank you for that. These would have been the additional comments I would have continued with on Wednesday, had I had the opportunity to continue that day.

THE CHAIRPERSON: Very good, we have it--

MR. MICHAEL ANDERSON: But thank you, Mr. Peters, for raising the matter. Thank you, Board. Thank you, Ms. Ramage, for consenting to the filing of these additional comments.

(MKO ARGUMENT OUTLINE INSERTED BELOW)

Outline of MKO Final Submission [May 21 2008]

Re: Transcript Questions from the Chair – Page 3854 - 3860

1. Is the 2.25 percent interim increase provided March the 1st, 2007 warranted?

* MKO does not object to the finalization of the 2.25 percent interim increase provided March the 1st, 2007, primarily for the reasons noted by Coalition and MIPUG.

2. Should it be finalized?

* Yes.

3. Your views on the merit and timing of the proposed 2.9 percent increase across all rate classes excepting area and roadway lighting for which a 1 percent increase proposed by Hydro.

* MKO does not support the proposed 2.9% rate increase. The evidence points to higher than expected revenues for 08/09 from higher water levels in the north, notwithstanding lower levels in the south. MKO recognizes the need for a rate increase, as noted by

MIPUG in their written argument. MKO suggest a 1.9% overall rate increase is adequate and appropriate, considering the probability for increased revenues and the Coalition’s submissions, including Mr. Harper’s recommendations and Coalition Ex. 40, on costs.

4. The weight and/or consideration to be given to the approach of IFRS. Mr. Warden has suggested that the implementation of these new accounting standards, in or before physical 2011/12, may reduce IFF07-1 annual net income forecasts by as much as $120 million a year if we understood the testimony correctly.

How is this Board to view this prospect?
What are the implications for rates and what are the implications for Hydro's financial targets?

* MKO supports MIPUG’s position that it is premature to adopt the International Financial Reporting Standards (IFRS) approach at this time. MH should file in a future proceeding additional evidence on the pros and cons of this approach for the Board and interveners to review.

5. Is Hydro's expectation that IFRS will be implemented with prospective effects and no retroactive restatements reasonable?

* See 4 above.

6. Is there any views on the possible employment and/or validity of separate regulatory accounting with reconciliation to audited accounts?
* See 4 above.

7. How does Manitoba Hydro's premise that new and expanded load from industry affects all -- affects the rates of all customer classes to their detriment, meet with the parties' perspectives? Do you agree? Justifiable? To what degree acceptable?

* MKO submits charging higher rates to new energy intensive general service customers will increase Manitoba Hydro revenues and potentially provide for lower rates to all customers and greater dividends to the Manitoba government.

* MKO has concerns with the rate design proposed by Manitoba Hydro, as will be expanded upon under item 8.

8. In terms of Manitoba Hydro's proposed energy intensive industry rate, above baseline and not subject to exemption, the Board understands that Hydro will not be asking the Board for any approvals flowing from this GRA. Rather, the Board understands Manitoba Hydro will only be asking the Board to prove in principal the date of December 31st, 2007, as the end date for determining any baseline levels that may be operative in any future intensive energy industry rate.

While there will be a further process, presumably this year, your comments on necessity options and process to address the matter are requested.

* In light of Manitoba Hydro's acknowledgment during MKO's cross-examination to re-file the proposed energy intensive industry rate (April 30, 2008, T. 3146/12-16), MKO will limit is comments to rate design principles that should be considered by Manitoba Hydro in setting the proposed energy intensive industry rate.

* Firstly, MKO submits that the proposed energy intensive industry rate violates several fundamental rate design criteria in that it will charge different rates to similar customers. The implementation of such a rate should only be done after the Manitoba government has set and communicated clear policy direction that such a rate is in the best interests of Manitoba. MKO suggests that Manitoba Hydro provide confirmation from the Manitoba government and file the appropriate documents in the upcoming proceeding on this rate.

* MKO would be very concerned if Manitoba Hydro were allowed to proposed rates that diverge from standard rate design principles to implement public policy without clear Manitoba government direction to do so.

* Secondly, MKO is concerned that the proposed rate design will have a fixed implementation date that will create a price cliff and intergenerational inequities. In essence, Manitoba Hydro is suggesting that large general service customers connected to the system prior to January 1, 2008 have rights to low cost energy that a customer connected after December 31, 2007 does not have. This type of rate violates several rate design principles, which can be summarized as a postage stamp tariff. Differentiating between old and new customers is

a dangerous precedent, which will become difficult to manage over time. For example, in 20 years will the December 31, 2007 baseline date still be reasonable, defendable or appropriate?

* Thirdly, the proposed energy intensive industry rate will differentiate customers based on who should receive the net export benefits and who should not. Manitoba Hydro confirmed that all Manitoba Hydro generation is build for the benefit of all Manitoba Hydro customers (April 30, 2008 T. 3128/3-9) and that all Manitoba Hydro customers pay for the generation through their rates (April 30, T. 3128/25-3129-3). MKO is concerned that moving away from the fundamental principle that all Manitoba Hydro customers, including diesel community customers, should share the net export benefits is a dangerous precedent that should not be taken lightly.

* Fourthly, MKO is concerned that the proposed rate will only apply to the large general service customer class. Manitoba Hydro admits that a kWh saved has the same value, regardless of which type of customers it is saved from (April 30, 2008 T. 3141/4-12). And by value we mean the same potential export sale revenue, not the same margin or profit, as the Vice Chair noted on transcript page 3141.

* While MKO recognizes that it may be more administratively simple to limit the proposed energy intensive provisions to the large general service customer class (April 30, 2008 T. 3148/3-12), all customers classes can provide a benefit to Manitoba Hydro from minimizing the amount of electricity consumed. Again, MKO submits that limiting the rate to one customer class violates standard rate design principles.

* MKO suggests that if limiting the sale of electricity to new energy intensive industry customers is a policy objective of the Manitoba government, then a more appropriate mechanism should be used instead of altering Manitoba Hydro’s rates. For example, the Manitoba government could simply implement measures that would not allow energy intensive industries to expand or new energy intensive industries to operate in Manitoba. One measure could be that new energy intensive industries would simply not be granted approval to operate in Manitoba. This could, and MKO submits, should be the appropriate course of action for the Manitoba government to take,

rather than trying to implement public policy through Manitoba Hydro’s rates.

* Later in my comments under item 17, MKO will provide additional comments on the proposed energy intensive industry rate.

9. In past orders, the Board has expressed concern with respect to Hydro's business risk and required Hydro to file detailed analysis, quantifying the risk by item; a request that, though met in part, has not been fully met. Would not consideration of a change to the present reliance on the debt/equity ratio is a test to financial soundness and the levels of equity within that ratio depend on a full understanding and quantification of risks.

* MKO does not fully agree with MIPUG on this issue. MKO submits that the Board should be evaluating the business risk associated with each major expenditure to determine if the expenditure is in the public interest. Risk evaluation is a fundamental aspect of regulatory oversight and reliance the debt/equity or other simple ratios will not provide a sufficient indication of prudence.

* We agree with the Coalition that in light of the upcoming $14 billion in capital expenditures a re-examination of the reliance that should be placed on the debt/equity ratio would be worthwhile in a future proceeding.

* MKO also has noted that Manitoba’s duty to engage in the Crown Consultation process where any action or decision may impact upon or infringe the exercise of a right recognized under s. 35 of the Constitution Act, 1982. In addition, s. 8 of the Interpretation Act is to be “read into” all Manitoba statutes and requires that the Crown act at all times in a manner that will not abrogate or derogate from aboriginal or Treaty rights. The potential “risk” to project approvals and schedules must be identified and taken into account.

* In addition, as highlighted by the Winnipeg Free Press report on May 6, 2008 that the Fox Lake Cree Nation of the Gillam area would oppose future developments until outstanding claims against Canada have been resolved, the potential “risk” to project approvals and schedules with

outstanding claims must be identified and taken into account.

10. Do the parties accept the recommendation of the MIPUG witnesses as a concept that a dedicated reserve model should be developed to replace the current reliance and retained earnings and a target debt/equity ratio?

* MKO agrees with MIPUG that a separate procedure should be convened to address the reserve model issue. MKO submits that the MIPUG recommendation has merit and should be pursued further.

11. Should capital expenditures play any role in rate setting in an environment when the shareholder is not expected to invest capital to allow for major capital expenditures and the utility's current reserve balance is below the target?

* Yes. The Board must take on the responsibility to review major capital expenditures that will have an impact on future rates. MKO agrees with MIPUG on this point and will not repeat the points made under item 19 of their written argument.

12. What is the comfort level with Hydro's load forecast, given the direction and present position of natural gas prices and in recent juxtaposition of the annual space-heating costs of electricity and natural gas?

* MKO has concerns with MH’s load forecast. One GJ of natural gas has the same energy content as 277 kWh of electricity. For a residential customer, if electricity costs six cents per kWh, the equivalent natural gas price is nearly $20/GJ. Therefore, if electricity costs continue to be about six cents per kWh, residential customers are better off using natural gas for space and water heating if natural gas prices are less than $20/GJ delivered. MKO submits that in areas where natural gas is available, residential customers, and Manitoba in general, are better off fuel switching from electricity to natural gas. The full impact of fuel switching should be reflected in MH’s load forecasts.

13. What values or what views are held as to the expenditures of utility revenues for charitable community support and/or economic development purposes?

* MKO notes that regulators in other jurisdictions do not allow investor owned utilities to include charitable donations in their revenue requirement. For example, the Alberta Electric Utilities Board Decision U97065 at p. 421 has set the precedent in Alberta that has been applied over the last decade.

* MKO submits that Manitoba Hydro should not be using utility revenues for community support and/or economic development purposes without a clear direction from the Manitoba government. MKO submits that Manitoba Hydro's mandate is to provide low cost service to its customers, not to try and second guess and implement public policy.

* MKO recommends that Manitoba Hydro revenues ordinarily not be used for charitable purposes without specific direction from government. MKO notes that Manitoba Hydro paid the province of Manitoba $198 million in fees and taxes in 2007 and suggests that provincial earmarking of such contributions for charitable purposes is more appropriate. MKO also recommends, however, that Manitoba Hydro and the Board clearly distinguish Manitoba Hydro's necessary and appropriate costs, expenditures and investments related to operations, mitigation and agreement obligations as not being analogous to "charitable donations". MKO would also view endowments funded by Hydro's net export revenues intended to benefit Hydro Affected Communities such as for regional economic development, community infrastructure and the enhancement of fish and wildlife as not being "charitable donations".

14. As a suitable COSS embedded cost model been arrived at with Hydro's recent proposed changes?

* MKO concurs with the MIPUG recommendations on the 08/09 COSS.

15. The utilization of the COSS model arising out of Order 117/'06 and whether to incorporate express consideration of marginal and environmental costs in setting rates.

* MKO does not have a recommendation for the Board on this issue.

* MKO cannot identify how additional environmental costs were included in the PCOSS08. In general, MKO supports greater consideration of environmental costs and will

continue to argue for a fair share of the environmental benefits to accrue back to the MKO communities.

* MKO recommends that any PCOSS should quantify both environmental benefits and costs.

16. For the purpose of differentiating rates, views on the weight given -- to be given to embedded costs as opposed to marginal costs.

* MKO does not have a recommendation for the Board on this issue.

17. Inverted rates. What are the views with respect to Manitoba Hydro's proposal for 2008/'09?
Noted by the utility as a starting point and if in agreement with the concept, what would be the next steps in a subsequent GRA?

* MKO generally supports the concept of inverted rate structures to encourage demand and energy management as noted in Application Appendix 12.2. As discussed further under item 27 regarding energy efficiency, Manitoba Hydro is somewhat unique in that the value of a kWh saved is equal, more or less, to the incremental export sale revenue.

* However, MKO shares the concerns expressed by the Coalition that inverted rates for residential customers may disadvantage those consumers with electric water and space heating, which included MKO consumers, most of which are low income.

* MKO also notes the inelastic demand response residential customers have to electricity price, as noted in the studies the Coalition referenced in their oral submissions. MKO supports the Coalition's comments that the addressing the barriers to entry noted by Mr. Dunsky and making DSM and energy efficiently programs universally available to all MH residential customers, included those in the diesel communities, will likely have greater impact on reducing domestic demand growth and increasing net export revenues than inverted rates for residential customers.
* MKO cautions the Board to accept the inverted rate proposals suggested by RCM/TREE in their final submissions for residential customers. These rate designs require further testing and review to ensure that

low income and remote community MKO customers are not unduly disadvantaged.

* As noted under item 8 earlier, MKO is concerned that Manitoba Hydro's proposed energy intensive rate design would not apply to all rate classes.

* MKO suggests that properly designed inverted rate structures could accomplish the goals Manitoba Hydro is trying to achieve with their proposed energy intensive rate design. In essence, the proposed energy intensive rate design is an inverted rate structure, albeit with a very sharp price cliff above the baseline set for each customer.

* The current diesel rates suffer from the same price cliff for consumption above a pre-defined amount. A more gradual inverted rate design may accomplish the objectives Manitoba Hydro seeks without the controversy inherent is trying to set and administer baselines.

* Inverted rates, designed for all customer classes, could send the price signal that the more consumed for similar customers, the greater the cost. Again, care must be taken that low income and/or rural csutoerms are not disadvantaged.
* As noted by Manitoba Hydro, the generation built in Manitoba provides more than economic benefits, it also provides "quality of life" benefits (April 30, 2008 T. 3143 4-12). There should be an appropriate trade-off between providing the appropriate level of "quality of life" benefits and maximizing the economic value of Manitoba Hydro's generation capability.

* MKO submits that inverted rate structures would allow individual Manitoba Hydro customers to make the choice to consume additional electricity and potentially pay higher rates.

* In terms of implementation, MKO recognizes that the development and implementation of inverted rate structures will be difficult and controversial. However, most things worth doing are not easy.

* MKO suggests that Manitoba Hydro be directed to propose inverted rates structures in the next GRA across all customer classes, with care taken to ensure rual and/or low income consumers are not unduly disadvantaged.

18. Basic monthly charges. Should they remain frozen when the cost of providing service continues to increase? Some here may be aware that the natural gas basic monthly charges were increased after seventeen (17) years of no change through the last Centra GRA.

* MKO does not have a recommendation for the Board on this issue.

19. Do the parties accept an interpretation of the Board's determination of the public interests broad enough to take into account that the utility's sole shareholder is a province and that the shareholder's accounts are affected by the utility?

* Response provided under item 11.

* As to the Board's consideration of who is the "shareholder"of Manitoba Hydro, MKO recommends that the Board acknowledge that the Hydro Affected First Nations are also the original capital investors in the Manitoba Hydro system, as is acknowledged under Article 18.4 of the 1977 Northern Flood Agreement. MKO recommends that the Board acknowledge that the Hydro Affected First Nations are - at a minimum, co-investors in the hydroelectric generating facilities and are, in effect, perpetual holders of Class "A" shares in Manitoba Hydro for which a return on investment should be identified and "paid" by Manitoba Hydro.

20. Lacking the ability to approve capital -- major capital expenditures or direct specific action with respect to operating actions is not the Board left with assuring rates adequate to allow future identified direction to be adequately funded and to making comments as to any concerns?

* Response provided under item 11.

21. Views with respect to Hydro's efforts to restrain OM&A costs and also with respect to capital expenditure transit levels.

* MKO submits that MH Is not doing enough to restrain OM&A costs and the capital cost forecasts do not appear to be appropriate in light of actual costs. We support the Coalitions submissions on the need to send a strong

message to MH that more needs to be done to manage OM&A costs.

* MKO supports the requirement for MH to benchmark their costs against other utilities and report to the Board why their costs deviate from statistical average. The Ontario One study, MH Ex. 60, or the Services Survey results, do not provide the level of detail required for an appropriate review of MH's costs via benchmarking. The Coalition Ex. 8 & 9 are better examples of what is required.

* MKO notes that with the implementation of performance or formula based rates in many jurisdictions around the world the use of benchmarks is becoming common place. MH should be able to implement a meaningful benchmark program without difficulty or excessive cost.

22. Views with respect to the utility of benchmarking against other utilities accepting jurisdictional, circumstantial and corporate differences.

* Response provided under item 21.

23. If the Government's direction is that the Brandon coal plant is to be reduced to emergency running only, ahead of 2019, should the Utility's estimate of an annual negative impact of, I think it was $10 to $20 lion of net income, be reflected in current rate considerations?

* MKO does not have a recommendation for the Board on this issue.

24. Should any tracking of the anticipated operating savings to offset the extra costs associated with the new head office be instituted? And if so, how?

* MKO concurs with the Coalition and MIPUG recommendations regarding the tracking of costs and benefits associated with the new head office.

25. The Board asked Hydro to provide a two (2) year GRA while the Utility has applied for only one (1) forward year. Should the Board give consideration to provide guidance or direction for a second future year?

* Yes, after the MIPUG recommendation on the dedicated reserve model has been tested and if found appropriate,

implemented.

26. Keeping in mind the Boards more limited jurisdiction compared to the situation with Centra Gas, views with respect to or related to the Utility's approach or possible approach to low income customers, should that approach be revenue neutral to non-low income customers?

* MKO submits that the proposed DSM programs do not have to be revenue neutral to one particular customer class, or group of customers within a particular customer class. To the extent that provincial government elects to use MH rates as social policy implementation tools, and provides clear direction to MH to do so, then the application of standard rate design principles have been violated. Similarly to the proposed industrial high intensity rate issue, if the provincial government provides clear policy direction to MH, then MH has no choice but to implement. For the DSM programs targeted to certain customers, in the absence of a clear provincial government direction on who should pay, MKO submits that all MH customers should bear the costs of the mandated DSM programs.

* MKO submits that the concept of revenue neutrality is based on a set of assumptions regarding capital costs, discount rates and a forecast of future savings. Given the variable involved, revenue neutrality is at best an educated guess, and should not be the primary criteria for evaluating the merits of a particular program. As noted by MH and the Vice Chair, electricity provides other “quality of life” benefits (April 30, 2008 T. 3143 4-12).

27. Energy efficiency measures: How important and at what cost?

* MKO submits that energy efficiency measures are very important, especially for the high cost to serve diesel communities.

* The value of a kWh saved from an energy efficiency program in Manitoba may need to be evaluated differently from other jurisdictions. In many jurisdictions, the value of a kWh saved is related to the avoided capital cost of building a new kW of generating capacity. MIPUG made the same point in their final submissions. For the non-diesel community customers, the value of a kWh saved could be the difference between the avoided cost and the

export sale price.

* In general, Manitoba Hydro should be valuing a kWh saved as the potential incremental net revenue from an export sale, as Manitoba Hydro agreed (April 30, 2008, T. 3140/10-14).

* If energy efficiency programs are to be evaluated in this manner, Manitoba Hydro should be putting more onus on energy efficiency programs for large general service customers where the value of a kWh saved is greatest, that is, where the profit margin from the kWh saved is highest. The high margin from a kWh saved is the other side of the coin that MH is trying capture with the energy intensity rate – don't sell the cheap power to new industrial loads as the lost margin from a potential export sale to too high.

* For customers in the diesel zone, 1 kWh saved also reduces the cost of diesel to generate the kWh, so the margin from a kWh saved is more difficult to evaluate. Under a postage stamp tariff, it is probably fair to assume that the marginal cost to serve a diesel zone customer is higher than the marginal cost to serve an urban residential customer (April 30, 2008, T. 3136/18-23).

* However, since a kWh saved in the diesel zone does not provide an extra kWh for export sale, the more traditional approach of valuing a kWh saved at the cost of new generation capacity should be used. MKO submits that this value is much higher than the value of a kWh saved for a non-diesel zone residential customer as noted earlier.

* We note that Manitoba Hydro has suggested that amount of electricity required to serve the diesel communities could double in the next 20 years (April 30, 2008 T. 3121/10-20).

* However, there is now a significant disjoint in that INAC will pay for new generation capacity in the diesel communities, whereas all Manitoba Hydro customers pay for new generation capacity in the rest of the province. MKO is concerned that since Manitoba Hydro does not have to pay for new generation capacity in the diesel communities, it is not pursuing energy efficiency programs in the remote communities to the extent it

should.

* We note from PUB Order 17/04, page 38, the Board ordered Manitoba Hydro to take action on Demand Side Management Programs and Energy Management initiatives in the remote communities. MKO submits that not enough has been done.

* In the responses to MKO's questions to Manitoba Hydro on the home audit program for low income individuals, we are concerned that Manitoba Hydro stated that the program would not apply to homes in the MKO communities where the benefits are perceived to be flowing to INAC (T1533/7-21). MH's response is inconsistent with their application where they state under Tab 12, page 12 of 17, lines 32 to 34, of their application:
Manitoba Hydro can report that residential customers in the diesel zone have access to all DSM programs offered grid customers and are made aware of all Manitoba Hydro energy efficiency initiatives via bill inserts.

* MH states that having the customer involved in the DSM programs may be beneficial and that MH will help along the way (March 10, 2008, T 779/6-18). MKO agrees with Mr. Dunsky that MH proposed DSM programs for low income consumer pose significant barriers, as explained in his written materials (Ex. #COALITION-1-2 & Ex. #COALITION-41) and oral testimony (May 2, 2008, T. 3657-3662). MKO recommends that the Board direct MH to incorporate Mr. Dunsky's recommendations into their DSM programs to improve the probability that the DSM programs will reach low-income MKO customers., Specifically, we agree with the Coalitions 4 recommendations:
o modify the program design to ensure turnkey service
o assess CBO's capacities prior to contracting
o add a fridge replacement component and adopt a more aggressive approach to furnace replacement
o in recognition that the role of the low-income energy efficiency and tenancy programs is too slow, request a proposal for an expedited rollout, which address costs, benefits, and sources of funding

* Arising from Manitoba Hydro's responses to MKO's questions regarding the home audit program for low income individuals, MKO is very concerned that Manitoba Hydro stated that the program would not apply to homes in the MKO communities where Manitoba Hydro perceives that the benefits would flow to Indian and Northern Affairs Canada

(T1533/7-21). Manitoba Hydro's response appears to be inconsistent with Hydro's evidence regarding the availability of DSM programs, for example, as set out under Tab 12, page 12 of 17, lines 32 to 34, of the Application, where Hydro states: "Manitoba Hydro can report that residential customers in the diesel zone have access to all DSM programs". MKO recommends that the Board immediately direct Manitoba Hydro to make available and to implement DSM programs for all customers in all MKO First Nation communities, whether or not Manitoba Hydro perceives that the benefits may accrue to INAC. MKO also recommends that Manitoba Hydro personnel working with First Nation customers be directed to immediately meet with MKO and the MKO First Nations to resolve any misconceptions or lack of information on the part of Manitoba Hydro (T1530-1532) regarding the beneficiaries of DSM programs in the MKO First Nation communities.

* MKO submits that Manitoba Hydro's position is in violation with the spirit of PUB Order 17/04 where Manitoba Hydro committed to implement demand side and energy efficiency programs in the diesel communities as part of the effort to reduce the financial burden on MKO customers.

* MKO therefore submits that Manitoba Hydro should re-evaluate their energy efficiency programs, incorporate Mr. Dunsky's recommendations', revise their qualification criteria and set more realistic targets for the amounts Manitoba Hydro would be willing to invest in energy efficiency measures in the diesel communities.

28. Views as to the degree of responsibility Hydro bears with respect to advising customers as to the selection of energy sources for space and water heating.

* MH has the responsibility to communicate all of its DSM and energy efficiency knowledge to MKO customers, esp. in the diesel communities as per the directions provided in PUB Order 17/04. MKO submits that more needs to be done, as noted under item 27.

29. Comments, if any, with respect to the revised Wuskwatim plans and forecasts. I'll never pronounce that word right if I do it a hundred (100) times.

* Response provided under item 11.

30. The degree of comfort with the Board's Centra Gas Order that directed that any incremental cost that may end up being associated with new head office resting solely with the electricity account.

* Response provided under item 24.

31. Anything that the parties may wish to specifically address that have not been mentioned.

* MKO submits that PUB Orders 17/04, 46/04, 159/04 and 176/06 should remain interim until after the Negotiated Settlement is fully executed and the diesel rates can be fully tested. MKO suggests that an appropriate review of the rates for the diesel communities will come when MH files their next diesel cost of service study (April 11, 2008 T. 2258, next diesel cost of service study to be filed later in 2008).

* MH stated that they will not request final diesel rates until the settlement is signed (April 11, 2008, T. 2253):

> "MR. ROBERT MAYER: We -- we only have at this point in time an interim order on diesel rates, as I understand it, and we are awaiting this elusive signature before Manitoba Hydro applies to make those rates permanent.
> Is that an accurate description of where we're at?
> MR. VINCE WARDEN: Yes, it is, Mr. Mayer."

Summary of Recommendations to the Board

1. MKO recommends that the Board direct Manitoba Hydro to develop a formal written policy on Aboriginal employment, particularly in light of a potential capital expenditures of $14 billion within the MKO region and new generation and transmission.

2. MKO requests that the Board, in its general advisory capacity, recommend that the Legislature Assembly examine the legislative and regulatory framework for Manitoba Hydro, given these significant changes in its corporate function related to the expansion of the Manitoba Hydro system to serve opportunities in the export market.

3. In respect regarding the 2.5 percent interim increase and particularly in respect of whether the OM&A, forecast interest and depreciation and other costs are just and reasonable, MKO acknowledges, as has the Coalition and MIPUG, that these costs and rates ought to be confirmed in an Order as requested by Hydro and that in practice, going back retrospectively and addressing these costs would not be the best way to approach rates that have already been effect, except for extraordinary circumstances such as actual revenues being considerably greater than forecast.

4. In respect of the proposed 2.9% rate increase, MKO recommends that the Board approve a rate increase of 1.9%, as also recommended by the Coalition.

5. In addition to the rational for a reduction of 1% in the proposed rate increase as set out by the Coalition, MKO further suggests that the near-record system energy in reservoir storage as of March 28, 2008 as shown in Manitoba Hydro Exhibits 66, 52 and 53, bolsters the Coalition's analysis and suggests that revenues over forecast are to be expected in 2008-2009. MKO suggests that the Board ought to give weight to these Exhibits as part of the Board's consideration of MKO's and the Coalition’s recommendation that the Board issue an order reducing the proposed rate increase by 1% to 1.9%.

6. MKO recommends that as part of the test to be applied to determine whether or not Hydro's costs are just and reasonable, the Board ought to require Hydro to ensure that wherever is able to identify a value from a change in its operation, for example such that Augmented Flow Program as shown in Manitoba Hydro Exhibit 63, that Hydro also be able to associate the adverse effects and mitigation costs with those values to ensure that the adverse effects and costs are properly and fully identified, reported, accounted for and addressed.

7. MKO suggests that the Board require Manitoba Hydro to do a complete analysis of the values and of the environmental, social and cultural costs of Hydro's integrated or other operations in association with utilities and entities are that are contributing water flows to Hydro's system energy in reservoir storage from reservoirs outside of Hydro's control in order to ensure that all environmental, social and cultural costs are properly identified, reported, accounted for and

addressed.

8. MKO supports the suggestion by other intervenors that the effect of the proposed implementation by Manitoba Hydro of the International Financial Reporting Standards be considered in a future proceeding in which additional evidence is submitted by Manitoba Hydro and tested by the Board and interested parties.

9. Noting Manitoba Hydro is now intending to re-file the proposed energy intensive industry rate (April 30, 2008, T. 3146/12-16), MKO suggests that if limiting the sale of electricity to new energy intensive industry customers is a policy objective of the Manitoba government, then a more appropriate mechanism should be used instead of altering Manitoba Hydro's rates. For example, the Manitoba government would directly consider measures that would not allow energy intensive industries to expand or new energy intensive industries to operate in Manitoba.

10. In respect of the matter of arriving at a full understanding and quantification of risks, MKO submits that the Board should be evaluating the business risk associated with each major expenditure to determine if the expenditure is in the public interest. Risk evaluation is a fundamental aspect of regulatory oversight and reliance the debt/equity or other simple ratios will not provide a sufficient indication of prudence.

11. MKO agrees with MIPUG that a separate procedure should be convened to address the reserve model issue. MKO submits that the MIPUG recommendation has merit and should be pursued further.

12. MKO recommends that the Board must take on the responsibility to review major capital expenditures that will have an impact on future rates.

13. The full impact of fuel switching between electricity and natural gas should be fully and accurately reflected in MH's load forecasts.

14. MKO recommends that Manitoba Hydro revenues ordinarily not be used for charitable purposes without specific direction from government. MKO notes that Manitoba Hydro paid the province of Manitoba $198 million in fees and taxes in 2007 and suggests that provincial

earmarking of such contributions for charitable purposes is more appropriate. MKO also recommends, however, that Manitoba Hydro and the Board clearly distinguish Manitoba Hydro's necessary and appropriate costs, expenditures and investments related to operations, mitigation and agreement obligations as not being analogous to "charitable donations". MKO would also view endowments funded by Hydro's net export revenues intended to benefit Hydro Affected Communities such as for regional economic development, community infrastructure and the enhancement of fish and wildlife as not being "charitable donations".

15. In respect of PCOSS 2008, MKO is unable to clearly identify what additional environmental costs were included by Manitoba Hydro. MKO recommends that marginal and full environmental costs be applied in the setting of rates and be specifically identified in any COSS.

16. MKO suggests that properly designed inverted rate structures could accomplish the goals Manitoba Hydro is trying to achieve with their proposed energy intensive rate design and that Manitoba Hydro should propose such rates for all customer classes in the next proceeding. As noted by Manitoba Hydro, the hydroelectric generation built in Manitoba provides more than economic benefits, it also provides "quality of life" benefits (April 30, 2008 T. 3143 4-12). Inverted rates must reflect an appropriate trade-off between providing the appropriate level of "quality of life" benefits and maximizing the economic value of Manitoba Hydro's generation capability. In this regard, MKO further recommends that the Board order that the application of any inverted rate structure for any customer class must be accompanied by universally available and practically accessible DSM programs that are provided by Manitoba Hydro on a turnkey basis, as recommended by Mr. Dunsky.

17. As to the Board's consideration of who is the "shareholder"of Manitoba Hydro, MKO recommends that the Board acknowledge that the Hydro Affected First Nations are also the original capital investors in the Manitoba Hydro system, as is acknowledged under Article 18.4 of the 1977 Northern Flood Agreement. MKO recommends that the Board acknowledge that the Hydro Affected First Nations are - at a minimum, co-investors in the hydroelectric generating facilities and are, in effect, perpetual holders of Class "A" shares in Manitoba Hydro for which a return on investment should be identified and

"paid" by Manitoba Hydro.

18. MKO submits that MH can do - and must do - more to restrain OM&A costs and the capital cost forecasts do not appear to be appropriate in light of actual costs. MKO supports the requirement for MH to benchmark their costs against other utilities and to report to the Board why Hydro's costs deviate from statistical average.

19. MKO recommends that the Board require the tracking of costs and benefits associated with Manitoba Hydro's new head office.

20. MKO recommends that Manitoba Hydro not move to a two-year GRA approach until measures such as the dedicated reserve model can be tested, and if found appropriate, implemented.

21. MKO submits that the proposed DSM programs do not have to be revenue neutral to one particular customer class, or group of customers within a particular customer class, where there is clear government direction to make specific DSM programs available to certain customers. For the DSM programs targeted to certain customers, in the absence of a clear provincial government direction on who should pay, MKO submits that all Manitoba Hydro customers should bear the costs of the mandated DSM programs.

22. MKO views ensuring the availability of DSM programs, particularly to low income and remote residential customers and to general service customers in First Nation communities, to be of the highest importance. MKO recommends that DSM programs be universally available and practically accessible to such customers and are provided by Manitoba Hydro on a turnkey basis, as recommended by Mr. Dunsky.

23. As an immediate measure, MKO recommends that the Board direct Manitoba Hydro to incorporate Mr. Dunsky's recommendations into their DSM programs to improve the probability that the DSM programs will reach low-income MKO customers. MKO further recommends that the Board direct Manitoba Hydro to regularly report on the availability of the low-income DSM programs to low-income First Nation customers and on the success of the implementation of such programs by Manitoba Hydro's low-income First Nation customers.

24. Arising from Manitoba Hydro's responses to MKO's questions regarding the home audit program for low income individuals, MKO is very concerned that Manitoba Hydro stated that the program would not apply to homes in the MKO communities where Manitoba Hydro perceives that the benefits would flow to Indian and Northern Affairs Canada (T1533/7-21). Manitoba Hydro's response appears to be inconsistent with Hydro's evidence regarding the availability of DSM programs, for example, as set out under Tab 12, page 12 of 17, lines 32 to 34, of the Application, where Hydro states: "Manitoba Hydro can report that residential customers in the diesel zone have access to all DSM programs". MKO recommends that the Board immediately direct Manitoba Hydro to make available and to implement DSM programs for all customers in all MKO First Nation communities, whether or not Manitoba Hydro perceives that the benefits may accrue to INAC. MKO also recommends that Manitoba Hydro personnel working with First Nation customers be directed to immediately meet with MKO and the MKO First Nations to resolve any misconceptions or lack of information on the part of Manitoba Hydro (T1530-1532) regarding the beneficiaries of DSM programs in the MKO First Nation communities.

25. MKO requests that Manitoba Hydro provide confirmation from the Manitoba government and to file the appropriate documents in the upcoming proceeding clearly showing that the Manitoba government directs Manitoba Hydro to seek approval for a new rate for new and expanding energy intensive industries.

26. MKO recommends that PUB Orders 17/04, 46/04, 159/04 and 176/06 relating to rates applicable in the four MKO Diesel First Nation communities not be confirmed as final at this time and that final approval would be appropriate once the tentative settlement agreement has been executed by the parties.

27. MKO has made a valuable contribution to the proceedings and requests that the Board approve an award of costs to MKO in respect of the expert advice and assistance provided to MKO by Mr. Dale Hildebrand of Desiderata Energy Consulting, Calgary, Alberta.

(MKO OUTLINE CONCLUDED)

THE CHAIRPERSON: Well, I want to thank

all the parties again. We did before closing statement, but it has been a lengthy hearing. It has contained an enormous amount of information. There has been a phenomenal amount of work that has gone into this, primarily by Manitoba Hydro, but also by all the other parties to this proceeding.

We will now be sequestering ourselves, and in due course we will be issuing our order.

And I would like to again thank Board counsel and Board advisors and Board staff for the effort that they put into this, along with everyone else.

MR. ROBERT MAYER: Just -- just before we go, I've just taken a brief look at the documents we've been provided.

The back several pages appear to be a repeat of what has already been filed. Is that correct?

MR. MICHAEL ANDERSON: The final pages --

MR. ROBERT MAYER: The summary of recommend--

MR. MICHAEL ANDERSON: -- are exactly the same, Mr. Vice Chair. Yes, correct. And they are extracted from the comments on the previous pages.

MR. ROBERT MAYER: Thank you.

THE CHAIRPERSON: Okay, thanks again. We stand adjourned.

--- Upon adjourning at 1:31 p.m.

Certified Correct,

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Cheryl Lavigne