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 21st, 2008
Pages 3861 to 4214

APPEARANCES

Bob Peters		)Board Counsel
Doug Buhr		)City of Winnipeg
Byron Williams		)Coalition
Jennifer Scott	(np)	)TransCanada Keystone
Tamara Trull	(np)	)Pipeline
Tamara McCaffrey		)MIPUG
John Landry	(np)	)
Michael Anderson		)MKO
Patti Ramage		)Manitoba Hydro
Odette Fernandes		)
Bill Gange		)RCM/TREE
Dan Rempel	(np)	)
Peter Miller		)

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LIST OF EXHIBITS

--- Upon commencing at 9:02 a.m.

THE CHAIRPERSON: Good morning, everyone. Welcome to the first day of two (2) days of closing statements, Manitoba Hydro GRA.

Mr. Peters, do you want to remind us what we have come back to do?

MR. BOB PETERS: Thank you, and good morning Mr. Chairman, Mr. Vice Chair, Board Member Proven, ladies and gentlemen.

As you've indicated, Mr. Chairman, today and Friday have been set aside by the Board as dates for oral closing submissions. And the parties will address those and provide those with -- to you today and also on Friday.

There's a couple of matters for keeping the record in order that I'd like to tend first. And that is that undertakings have been provided. Manitoba Hydro has completed answers to all of their undertakings.

I'm not to suggest that all of their undertakings have been given an answer, as there was a least one (1), maybe others that an answer isn't readily available at this time. But I think, for example, the financial statements were coming by mid -- or approximately mid-next month. But having said that,

they've responded to all of the undertakings that they've given.

We have received from RCM/TREE answers to the transcript undertakings. And those have been given exhibit numbers offline. And for the purposes of this morning, I'd like to just record them on the record.

Undertaking Number 90 provided by RCM/TREE will be marked as Exhibit RCM/TREE-6.

--- EXHIBIT NO. RCM/TREE-6: Response to Undertaking 90

MR. BOB PETERS: Undertaking 91 by RCM/TREE will be marked as Exhibit RCM/TREE-7.

--- EXHIBIT NO. RCM/TREE-7: Response to Undertaking 91

MR. BOB PETERS: Undertaking 92 will be marked as Exhibit RCM/TREE-8.

--- EXHIBIT NO. RCM/TREE-8: Response to Undertaking 92

MR. BOB PETERS: And there was also a question posed of one of the RCM witnesses by Coalition. That has been responded to in written form and circulated. And I propose that be marked as RCM/TREE-9.

--- EXHIBIT NO. RCM/TREE-9: Written response to question posed of one of the RCM witnesses by Coalition

MR. BOB PETERS: In addition to those exhibits, there was one more exhibit filed by Coalition. It was Undertaking Number 94 on the record. And I propose it be marked as Coalition Exhibit Number 43.

--- EXHIBIT NO. COALITION-43: Response to Undertaking 94

MR. BOB PETERS: If there are any further undertakings that the parties have, they should notify the Board of that during their -- their opportunity with the microphone today or Friday.

So Mr. Chairman, Mr. Vice Chair and Board Member Proven, the Board has multiple copies of Manitoba Hydro's Letter of Application that was filed in both Tabs 1 and Tab 41 of the PUB counsel book of documents. That document sets out the specific and formal requests by Manitoba Hydro of the Board in this General Rate Application. In addition, and in some cases in duplication, the Board on the last day of the evidentiary phase of this General Rate Application, at transcript

page 3854 and following, set out approximately thirty (30) issues that the board invited parties to address in their closing submissions if they so chose. I am not going to repeat those thirty (30) issues. They're there for all to review and I've seen that some will respond to them and have.

The thirty-first item in that list, Mr. Chairman, was an open-ended invitation to address any additional matters not specifically enumerated by the Board.

As counsel to the Board in these proceedings, I take no position on the merits of any of the issues before the Board. And I'll suggest that the Board soon call on Mr. Williams to provide the Coalition's submissions. Following Mr. Williams, I suggest that the Board call on Mr. Buhr from the City of Winnipeg, representing the City of Winnipeg; then Ms. McCaffrey on behalf of MIPUG; Mr. Anderson on behalf of MKO; and Mr. Gange on behalf of RCM/TREE. I can advise that Keystone will not be providing oral closing submissions in this GRA proceeding.

It is our hope that the submissions will conclude today from the Intervenors. But if not, we will discuss it and present to the Board an alternate plan in terms of making sure this oral submissions conclude

Friday of this week.

Following the Intervenors and on Friday, and no earlier than Friday, the Board will hear from Manitoba Hydro, Ms. Ramage, and Ms. Fernandes on Manitoba Hydro's closing submissions.

So, Mr. Chairman, thank you. Subject to any questions you may have of me at this time, that completes my comments this morning.

THE CHAIRPERSON: Thank you, Mr. Peters. So following your advice, we will move on to Mr. Williams for the Coalition.

MR. DOUG BUHR: I think, Mr. Chairman, he was checking to see if his outline was here. There was some delay apparently in -- in it being provided.

THE CHAIRPERSON: Are you prepared to go now, Mr. Buhr?

MR. DOUG BUHR: Yes, Mr. Chairman.

THE CHAIRPERSON: Then, please proceed.

MR. DOUG BUHR: Thank you.

FINAL SUBMISSIONS BY CITY OF WINNIPEG:

MR. DOUG BUHR: Mr. Chairman, members of the Board, all the references that I will be using are to the book of documents that the City produced at City/Hydro Exhibit 2, Exhibits 3 and 4, and pages 260 --

2265 to 2294 of the transcript.

I carefully considered the Chairman's suggestion regarding submitting copies of the argument. In my case this created somewhat of a quandary, as given the brief nature of my comments, people would have finished reading them before I got past the first paragraph. While some might suggest that this would be advantageous to my position, I respectfully disagree.

The Chairman's listing of the issues, however, and their complexity perhaps explain but do not excuse why area and roadway lighting class problems appear to have gotten lost in the shuffle for far too long.

Hydro says that area and roadway lighting has persistently been above the zone of reasonableness. With respect, that's a gross understatement. As the chart at Tab 2 of the book of document shows, only once in thirty (30) years have we been within the zone.

Hydro agrees that the '99 and 2001 RCCs are an aberration. That's transcript pages 2270 to 2271. Even Hydro acknowledges that however or by whatever means area and roadway lighting is measured, it has been outside the zone. That's Exhibit 2, Tab 1, and Exhibit 3.

Over the year Hydro has reaped

approximately $49 million in excess from this class. That's Exhibit 4.

The history of this class is very simple. Only when this Board orders a change does anything actually happen. For example, in 1996/'97 Hydro proposed zero (0) percent increases. It was the Board that ordered 5 percent cuts in each of those two (2) years. That's transcript pages 2282 to 2283.

Being within the zone once is not a record to be proud of. When I suggested in cross-examine that Hydro had not been aggressive in dealing with that issue, that too is an understatement.

So what has Hydro proposed to deal with the issues? Firstly, the absolute bare minimum change to get us withing the zone, a 0.2 percent change so that the RCC would now be one-o-four point eight (104.8). Then we should pay an additional two hundred thousand dollars ($200,000) more per year. That's the book of documents Tab 1 and the transcript pages -- page 2267.

Hydro proposes nothing to address the six hundred and twenty thousand dollar ($620,000) excess the city is now paying each year. It's $1 million for the entire province. And the references are Tab 2, CITY/HYDRO-1-3, C and D, and transcript page 2293.

This is not a serious attempt by Manitoba

Hydro to rectify anything. And it's only consistent with thirty (30) years in inaction or neglect. In fact Hydro proposes to take an additional five (5) to seven (7) years on top of the thirty (30) they've already had. That's transcript pages 2285 to 2286.

The additional cost of that to the city alone is $5.7 million, six hundred and twenty thousand (620,000) plus two hundred thousand (200,000), times seven (7). These are taxpayers' dollars that the city's elected representatives should be deciding how best to use, not Manitoba Hydro.

Now, what's the cost of Manitoba Hydro to fix this problem? The answer, 0.4 percent of its projected revenue for fiscal year 2007/2008. Transcript pages 2293 and 2294, 0.4 percent of one (1) year.

Mr. Chairman, members of the Board, Hydro has known of this problem for thirty (30) years. Their proposal amounts to letting it continue, even in the face of being able to correct it simply and easily.

That is not fair nor reasonable nor in the public interest. There's nothing new or startling in what I've said. Indeed, as I said in my opening comments many days ago, I am almost embarrassed to be here taking up the Board's time for such an obvious issue.

Having been through the Hearing, I dare to

suggest that I am not the only one who should be so embarrassed by the persistent lack of action on a simple problem with a known solution. Literally, enough is enough. Thank you.

THE CHAIRPERSON: Thank you, Mr. Buhr, for your closing submissions on behalf of the City of Winnipeg.

Mr. Buhr, I now understand that you are planning to retire from the City of Winnipeg's law department? I hope I have that correct.

MR. DOUG BUHR: Yes, Mr. Chairman.

THE CHAIRPERSON: Let me say on behalf of the Public Utilities Board that we want to thank you for your participation in regulatory matters before the Board.

Your involvement has included representing Winnipeg Hydro as well as the City of Winnipeg. Your approach has always been -- and again today -- direct and straight to the point. While the Board does not keep a scorecard, your involvement appears to have been successful, including financially successful for your clients.

We hope you have enjoyed your appearances before this Board, even if we have disagreed with you on occasion.

Even in the GRA before us, the evidence discloses Manitoba Hydro has not sought the same percentage increase from your clients as compared to all other rate classes. That speaks to the effectiveness of your work.

You have obviously influenced Manitoba Hydro, but I must caution you. It remains to be determined through this panel's deliberations the extent to which you have persuaded this Board on the merits of your client's position.

On a more serious note, please accept our best wishes for your health and happiness in your retirement and all that it entails. Thank you again.

MR. DOUG BUHR: Thank you very much, Mr. Chairman.

THE CHAIRPERSON: Mr. Williams, are you ready to go now?

MR. BYRON WILLIAMS: Yes, I am. I do have a -- a couple of handouts. And I caution, I will not be as brief or as succinct as Mr. Buhr.

THE CHAIRPERSON: We would be shocked if you were, Mr. Williams.

(BRIEF PAUSE)

THE CHAIRPERSON: Okay, Mr. Williams, we have the distribution.

FINAL SUBMISSIONS BY COALITION:

MR. BYRON WILLIAMS: Thank you. Mr. Chairman and members of the Board, good morning. I should know that -- note that in the audience is the Executive Director of the Manitoba Society of Seniors, Ms. Kimberly Weihs -- W-E-I-H-S. She's over to the back behind the court reporter. And Ms. Desorcy, whose timeliness is -- rivals my own, I -- I notice has just shown up in the room as well. And she's the Executive Director of the Consumer's Association.

And, just for the benefit of the Board, I -- I have provided to -- to assist in -- hopefully, in -- in terms of the argument on behalf of my clients, two (2) stapled documents.

One is merely a compilation of some exhibits that are already on the record in this proceeding. And that's -- it's got the nice coloured graph on the -- on the front page.

And the -- the second is an outline of the closing argument of the -- of the Coalition, and I propose to take you through it.

I just want to start chatting very briefly

about my clients. And this is the second time that we've brought together this particular Coalition, and it's composed of three (3) groups, one being the Consumer's Association, who are well known to the Board. And they certainly speak for and hear from and represent a wide spectrum of consumers, those from a variety of levels of income, some of them employed in the labour force, some on fixed incomes.

And their long-time partner -- hopefully, not in crime, but before this Board -- is the Manitoba Society of Seniors. And, again, the point I wish to make is that, again, they represent a spectrum of consumers as well. Some of them are -- many of the members of the MSOS are on fixed incomes, but many are still in the labour force.

And the -- the newest member of the team is Winnipeg Harvest. And obviously it's the largest food bank in the Province of Manitoba. And it serves many low-income people. Some of them are on assistance, EI, or disability. Many of them are the working poor.

And collectively, we would suggest to you that they bring a broad perspective to this Board. And at times, it's a difficult balancing act between these spectrum of those on fixed incomes, those in the labour force, those on assistance. But they approach this

looking at three (3) important issues of fairness in the marketplace, affordability, and -- and sustainability.

Moving on to the second page of the -- or page 3 of the outline, I just want to highlight there was a comment made, actually by Mr. Chernick on behalf of TREE/RCM, and who is a impressive witness in this -- this Hearing. But he made a statement on a number of occasions, on the record, that disturbed my clients a little bit.

And I just -- he talked about the importance of implementing inverted rates. He also talked about the fact that he didn't want to see some percentage or some fraction of low-income consumers -- customers getting in the way of the implementation of inverted rates. And I've given you one (1) cite from the trans -- transcript that appears on a number of occasions.

And I want to make it clear that my clients don't consider themselves as -- as, or the people they represent, as people in the way. They don't consider themselves as obstacles to progress. They share many of the same goals and outlooks as others in this proceeding: TREE, MKO, Hydro, and MIPUG.

The values of sustainability are important to them as are the value of price signals. And they,

like others in this room, are committed to the importance of a stable, self-sustaining Manitoba Hydro, recognizing that importance to the province. And they're also committed to the value of affordable, high-quality service.

The perspective that they did -- bring to this proceeding which may differ somewhat -- and I don't want to exaggerate the difference -- perhaps differ from other organizations, perhaps they focus -- provide a greater focus on the reality and current stresses on consumers in the marketplace, and perhaps as well, a more nuanced approach to the complexities of human behaviour with somewhat less emphasis on price signals as a path to energy efficiency.

And I want to talk about both those subjects just for a -- a few moments. First, about -- about consumers in the marketplace of 2008. And the Board, on page 4, may be seeing some language that is quite familiar to them, coming as it does from its comments in the Payday Lending proceeding.

But one (1) of the client -- the points my clients wish to make, looking as -- as we are at a approval or consideration of a 2.25 percent increase for '07/'08 and a 2.9 percent increase proposed for '08/'09, is that within Manitoba, and indeed within Canada, there

are many households in financial dist -- distress.

And this was highlighted by the PUB in Order Number 39/'08 at page 48. It spoke about a growing inequality of disposable family income over the last twenty (20) years, with the bottom 40 percent of households noting no improvement in the real after-inflation disposal income.

And the point the Board appeared to be making at page 49 of that decision, with that while the incomes of the poor have not risen in real terms, the costs of living has. Housing prices have risen dramatic -- dramatically, leading to reduced levels of home ownership and increasingly high rent levels. The disposal income of, in quotation marks, "poor households" pressured not only by rising occupancy costs but also energy pricing, transportation, and a variety of other pressures.

And again the Board, in that decision, cited as another indication of household financial distress the annual level of natural gas disconnections in recent years, between five thousand (5,000) and nine thousand (9,000) households.

And one piece of evidence that come -- that has come up in this Hearing has -- has confirmed the fact that this distress -- this financial stress is not

just being experienced by natural gas customers. Residential electrical dis -- disconnections in '07/'08, per Hydro Exhibit 81, over almost nine thousand eight (9,008), being a total of eight thousand nine hundred and forty (8,940). So again, household distress.

It's an important point my -- my clients wish to make. And -- and staying on the consumers in the marketplace, this will lead later in the discussion to low-income energy efficiency and also inverted rates.

One of the things that my clients wish to point out at page 5 of the outline is the dynamic of the Manitoba housing marketplace. About thirty (30) percent of the marketplace is rented homes. And excluding duplex apartments, there's almost 98,000 apartment units. And of course, these apartment units are -- are excluded from the target group for the Low-Income Energy Efficiency Program.

And it's important, not only because they are excluded, but because renters, as highlighted at -- on the middle of this page, are a particularly economically disadvantaged group. Their average household income is significantly lower than the Manitoba average, as is median household income for renters.

And it's also reflected in real housing affordability challenges, not just for renters, but for

homeowners as well. And housing affordability is often measured in Man -- in Canada as those spending 30 percent or more of their income on shelter. And we see that for renters in Winnipeg and the rest of Manitoba it's in the range of 35 to 40 percent. And for owner-occupied households, it's still above 10 percent.

So one of the -- the points my clients wish to make is within this market place there is tremendous financial dispress -- distress being experienced by some consumers, stagnant incomes, rapidly escalating prices. And there are real energy affordi -- affordability challenges. And this was reco -- recognized by Mr. Weiss in his TREE exhibit, RCM/TREE Exhibit 8.

Another point my clients wish to make, moving to page 6 of their outline, is that when we look -- and this, again, goes later on to the subject of inverted rates. When we look at all-electric homes, those which are likely to be most subject to the impact of the proposed inverted rates, first of all, we should recognize that most new homes in rural areas are installing electric water and space heat.

And that secondly, and this is from the 2006 Hydro load forecast, many of the new all-electric homes are being built in First Nation communities, which

don't have access to the competitive alternatives, such as natural gas. And, of course, we are well and sadly familiar with the reality that First Nation homes on reserve have a disproportionate percentage of low-income persons.

So my clients wish to point out just, again, in conte -- for the purpose of context, that there is a low-income context to the subject of inverted rates. It's established, and this is set out at page 3711 of the transcript, that those using 18,000 kilowatt hours per year on average will tend to see their rates rise more than the average as a result of the Hydro inverted rate proposal.

And what we wish to point out is that 22 percent of those earning less than thirty thousand dollars ($30,000) a year are in that category. Most of these are all-electric customers.

And, just at the bottom of the page, again, we point out that the trend -- and if you go to the bottom right-hand corner, you can see that in terms of rate changes over the last four (4) years, looking towards the proposed 2008/'09 rate increases, the assumed monthly consumption of 1,500 kilowatt hours per month -- 18,000 kilowatt hours per year -- is a group that's suffering or experiencing the greatest impact.

Turning to page 7, another important contextual point my clients wish to make deals with the complexity of consumer behaviour. And without naming names, I think it's clear that -- that some organizations within this room may be supportive of significantly raised electricity rates, the idea and the purpose being the assumption that dramatic rate increases will lead to significant and important energy efficiency gains and benefits.

And the point we wish to make on behalf of our clients for the next couple pages is that, well, that's a simplistic and attractive approach to some. That's not an approach that's consistent with what we know of consumer behaviour. It's not consistent with what empirical evidence we have, in terms of consumer behaviour.

And Mr. Kuczek, on behalf of Hydro -- I had a bit of discussion with him on this in the early days of the Hearing. He noted -- and perhaps it's trite -- he noted it's a complex matter to predict and affect consumer behaviour. And there are different schools of thought.

The neo-classical one -- and I see a typo here -- armed with perfect information, not behaviour, in a perfectly competitive, market consumers will tend to

act in a rational matter -- manner that maximizes their self-interest.

And that's an important and straightforward way of looking at -- at consumer behaviour. But there's other ways equally valuable, such as the New Keynesian or Institutionalization approach, which tells us we can't understand consumer behaviour in the marketplace unless we understand deeper societal or contextual issues, such as poverty, inequality in information, and inequality of market power.

And Mr. Kuczek quite rightly pointed out that in the real world consumer behaviour does not perfectly accord with consumer theory.

And Mr. -- Mr. Chernick made this point as well. He spoke of the complexity of human behaviour and -- and of the reality that behaviour in theory and behaviour in practice may not always move in the same direction.

And we had a candid discussion with him in terms of some of the Coalition exhibits, 33 through 35. Mr. Chernick was talking about how consumers might react to inverted rates and the dampening effect on price signals that budgets have. And he noted that there's some people who basically only pay attention to the size of the cheque. And if these consumers run the budget

they may -- may miss the efficiency signal of inverted rates.

As Mr. Chernick quite -- quite correctly pointed out, if all of your residential customers were economists, you could do things very differently. And if all the customers were economists, and wealthy economists, then those kind of simplistic, straightforward assumptions, in terms of promoting energy efficiency, might well prove to be the -- the sum and be all -- sum and be all, in terms of solutions.

MR. ROBERT MAYER: Mr. Williams, I really hesitate to do this, but if all persons were economists -- and I know these aren't your words, they're somebody else's -- and if they were in fact behaving to their own best interest with all that perfect information, my thought has been throughout these hearings that those people behaving in their best interest would still heat their houses when it became minus thirty (30) no matter what you charged.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Well that's where I'm certainly going, Mr. Mayer. So any interruptions like that, please feel welcome to make.

So -- and I don't want to overstate this

point. But I don't want to understate it either. Appropriate price signals do not necessarily achieve efficiency. And Chernick pointed this out. And again, he was a candid and -- and helpful witness.

Many economic signals in terms of energy use are difficult for consumers to respond to without some assistance. There are a lot of barriers. To a certain degree adopting a New Keynesian or Institutionalist approach.

Philippe Dunsky, who was a, I think, a very credible and important witness on behalf of the Coalition, made this point perhaps more eloquently. There are many barriers in the marketplace that lead to very energy-efficient decisions and investment decisions in the market.

And I do want to spend a couple more minutes on this, because it -- it leads to some of the arguments that come -- come later, in terms of energy efficiency, inverted rates, and also marginal price costing.

In Dunsky's evidence on the last day of the Hearing, PowerPoint slide Number 4, he identified twelve (12) barriers to efficiency. And I'm not going to go through -- through them. I'm sure the Board is -- is familiar with them.

Bur right near the bottom is one (1), one (1) of the twelve (12), average cost pricing. And we were hoping that someone would ask Mr. Dunsky, Well -- well why don't we just go to marginal cost pricing? Won't that solve everything? We were hoping someone would ask him that but no one took the bait.

So we don't have Mr. Dunsky's point on that. But Mr. Wiens has been very helpful on this subject. And he talked about price signals, energy efficiency, and inelastic demand. And he pointed, out as the Vice-Chair -- Vice-Chair did just recently, that energy is a bit of a different commodity.

Economic theory suggests that consumers' demand for energy is less sensitive to price change than the demand for other commodities. And that's particularly in the short term.

But Mr. Wiens also pointed out, when one goes from the short term to the longer term, while the elasticity numbers will go up, but, typically, the general consensus, the conventional wisdom, is that they're still going to be inelastic. Response is going to be inelastic. You're still not going to get a response to price that is, in terms of the quantity demanded, that is as great as the change in price.

And I'll just note that often in -- in

this argument I paraphrase witnesses, and if I do so, I do that without quotation marks. When I'm trying to quote them, I -- I put them in quotation marks.

And there's some very interesting empirical information on this point on this record. Coalition Exhibits 31 and 32 make this point. And one of the most interesting and the most recent was by the RAND Corporation. And I won't dwell on it at length.

But this was a tremendously comprehensive study. It involved a thirty (30) year literature review. It had state-level data on residential and commercial electricity consumption for forty-eight (48) states. And it reached some key conclu -- conclusions, which my clients would submit should inform the debate in this proceeding.

Key conclusion Number 1: In terms of energy, the relationship between demand and price is small. Demand is relatively inelastic to price. In the past twenty (20) years, this relationship has not changed significantly.

And I've reproduced the table from that -- page 23 of that study, which shows both short-run elasticity and long-run elasticity from this study. And this is a global number. There were very distinct regional differences. But there's a -- the top column --

the top line "Residential Electric". Again, you can see the -- the point that even over the long run, the response, in terms of demand, is not proportionate to price, although it's much closer for the commercial customers.

There's another important observation from -- from the RAND Corporation. And, again, this was a US study, so they didn't have the benefit of -- and it did not include Alaska. So they didn't have the benefit of Manitoba winters. But, again, going to the Vice=Chair's comment:

> "Locations where particular energy uses are very valuable, such as air conditioning [there's a typo there] in southern states or winter heating in northern states, could have price elasticity smaller in absolute magnitude because air conditioning and heating are so valuable during periods of extreme clim -- climate. The consumers are unwilling to change their use when prices change."

And I've just put in an excerpt from another study. It's a household study from California, the Reiss and White Study. And I think that's an

interesting one, merely because it focussed on Calif -- on residential households exclusively, and it was using 1993 and '97 data. But it was trying to study the likely effect of the controversial new tariffs in response to the energy crisis in California in 2000/2001.

And its general conclusion was that most households will alter their electricity consumption very little in response to price change. But it did point out, in fairness, that a small fraction would react.

And my clients don't want to be misunderstood on this point. They're not here to tell you that price signals are unimportant. And they would note that while still relatively inelastic, a commercial and industrial customers are more price elastic.

And, as Mr. Wiens pointed out, and in particular, large, energy-intensive industries have significantly higher elasticity. And even at the residential level, some residential uses will have virtually zero, while some will have relatively higher usages.

The points my clients wish to make though is from an efficiency perspective. So if efficiency matters more than ideology, price signals are far from a magic bullet. And the Coalition will argue in the course of this -- this closing argument that there's much more

to be gained by focussing on those other eleven (11) barriers and raising awareness than by dramatic price change.

Hopefully, I'll start moving into some, though not all, of the thirty-one (31) issues that the Board has requested a comment on. And I can assure you, I -- I -- on behalf of my clients, I wasn't able to take instructions on all thirty-one (31).

But before moving there, just by one -- one more point of introduction. From my clients' perspective, this is not just another rate hearing.

It's very important, not only for consumers who are in distress today, but from a clients' perspective, for consumers and the province in -- as we contemplate what appears to be a major -- I -- I've called it an "expansionary agenda." And I've thrown out the figures of thirteen (13) or $14 billion in major capital projects which way -- may be coming down the regulatory agenda in Manitoba in the next few years.

We think that this Hearing's particularly important because this push for expansion comes at the same time as we have some preliminary and early, but sobering, experience from Wuskwatim.

We see that the cost estimates, the capital estimates, were dramatically higher than

projected than expected. We've seen the impact on the Corporation's bottomline from declining -- the declining US dollar, relative to the Canadian dollar. And we've seen a significant downward revision in the pro -- projected internal rate of return for Wuskwatim. And that's in Hydro Exhibit 56, the long-awaited and valiantly fought on behalf of Hydro, reluctantly given, exhibit.

And we think that this is more than just another rate hearing because this push for expansion comes at the same time as we're seeing upward pressure on rates, both from the significant expenditures on the new building and from Wuskwatim and from other capital projects.

And certainly, speaking on behalf of my clients, they're certainly not taking any positions. But that's causing them to look with perhaps a far more agnostic, a far more jaundiced eye than in 2003 on major capital projects aimed at the export market.

So the cautionary note my clients offer in this proceeding is that while it's exciting and it's important and these are important issues for the province -- the major capital expansion -- they see that in -- in there's a real risk that in the rush to expand, in the rush to do glamorous, big, and important things, there's

a risk that -- that we, collectively, will overlook the less glamorous but just as important other things, such as addressing the multiplier barriers to efficiency -- energy efficiency; such as insuring that all Manitobans, including tenants and low-income persons, have the opportunity to full a -- fully benefit from energy efficiency programming; such as bringing more discipline -- long-awaited discipline to OM&A expenditures; and bringing more rigour to the Corporation's approach to sus -- to sustaining, S-U-S-T-A-I-N-I-N-G, capital expenditures.

From my clients' perspective, this is a very important Hearing, because it's important to get the fundamentals in place before we address complex questions -- the complex questions posed by massive capital expansion focussed in large degree on the export market.

So turning to page 11, my clients' list of core issues is not thirty-one (31), although I think we'll answer more than five (5). But these are the -- the five (5) questions that they'll seek to offer answers to -- or five (5) bullets that they'll seek to offer answers to in the course of the next little while.

First of all, has the Corporation met its onus of justifying the rate increase sought? Is the rate increase too much, as some might argue? Is it too

little, as I -- certainly my clients suspect some will argue? Or is it just right? Kind of like the bears and porridge.

Secondly, what is the experience of Wuskwatim? Are there lessons to be learned as we look to a potential decade of major capital expansion?

Third, and this is a long-term objective, can we improve the regulatory process in order to assist Intervenors, the regulator, the utility, and consumers as a whole? And one of the questions, but only one of them, that we'll address in this section is that with reference to the rate-setting process. Should we continue to rely on the Corporation's current debt/equity target?

Fourth, is the Corporation getting optimal bang for the buck when it comes to energy efficiency? What is the optimal way to reduce barriers to energy efficiency for all consumers, including those who are often excluded, tenants and low-income people?

Related to that, in my clients' submission, is a question of, Has the time come for inverted rates for residential customers?

Finally and very importantly, how do we achieve fairness -- best achieve fairness among rate payers? Does the subject of fairness include consideration of how the consumption activities of one

class of consumers expects the bills of others? Are differential rate increases justified in the current proceedings?

On page 12, and again very briefly, there are some important contextual elements in terms of public policy or statements by the Minister or promises or commitments by Hydro that my clients wish to highlight.

One is the dual and central purposes of the Manitoba Hydro Act to promote efficiency but also economy. And we certainly think that speaks to the issue of prudency in terms of expenditures.

Secondly, some of the values or the points expressed by the Minister Selinger in his letter of February 19th, 2008, which is found in MIPUG Exhibit Number 12. I've highlighted some of the language he used which my clients think is important.

He talked about an objective, as we interpret it, of minimising upward rate pressure on all Manitoba Hydro consumers.

He talked about the fairness issue that I raised previously, the concern that increased consumptions of low-priced energy may displace higher value export sales, thereby leading to higher bills for all customers.

And he also talked about language -- he

used language such as "among the lowest electricity rates in North America."

And very briefly, in the exhibits that we have -- and it's fair to say, I think, that Manitoba, although it can no longer claim to have the lowest rates on average in North America, still -- still has among the lowest electricity rates in North America.

And I just draw your attention in the table of the supplementary book of exhibits. I've included on the last two (2) pages -- first of all, COALITION-38, it's at the last two (2) pages of the other book.

The second-last page looks at selected North American utilities and residential average rates. And again, I think it's fair to say, based upon this, that Manitoba still is among the lowest, in terms of residential average rates.

But it's certainly not the lowest in its position, partly as a result of the change of the Canadian dollar has certainly slipped. And you can see here that it's -- as you go through this table that it's probably seventh or eighth on the list, opposed to -- and this is in terms of residential customers.

Moving over to the last page of the short document of exhibits, you see Exhibit MH-75, and

certainly, at least as my clients interpret this, this reflects the large, large industrial revenue per kilowatt hour. And it suggests that in terms of that -- that group of consumers, that Manitoba still is the lowest in North America, at least according to this table. So, just a small point, but a point my clients believe is important to make.

Finally, in terms of the policy context, just a couple points. One regarding Wuskwatim -- and the point was both recognized by Hydro and by the CEC.

That promise -- that project was sold to -- to consumers and to Manitobans on the -- on the assumption that Hydro would be able to maintain its commitment that domestic rate payers would not experience rate increases as a result of the projects. And certainly, from my clients' perspective, that commitment is in question.

As well, in terms of the new corporate head office, certainly it appears that in the Centra -- most recent Centra proceeding some fairly optimistic promises were made, in terms of the impact of that new building. And certainly annual productivity savings projected to be in the range of $20 million annually, over and above lease payment sav -- savings. And we'll come back to that and to see whether that commitment is

-- has indeed been realized.

Turning on page 14 to the merits of the rate increase. I've asked this question before. Has the Corporation met its onus of justifying the rate increase sought?

And on page 15, we're going to jump right to the -- I'll jump right to the conclusion, and then I'll come back to the reasoning in a -- in a second.

And we had some discussion, certainly, with Mr. Bowman, in terms of a hypothetical regulator's dilemma. And I'm not daring to -- to speculate what's in the minds of this regulator. But certainly we recognize that there's a potential for a regulator, in the course of this proceeding, to have competing polls, in terms of the revenue requirement.

Certainly my clients will be arguing for -- at least for the '08/'09 year -- that Manitoba Hydro be granted less than their sought-after 2.9 percent rate increase.

But a question may occur to this regulator whether the providing less -- less than the sought-after rate increases may potentially delay achievement of the enhanced reserves.

And certainly it may -- a regulator may be concerned about providing less than the sought-after rate

increases in ter -- given the fact that we're looking at major pending capital expenditures which are likely to put pressure on the debt/equity ratio and on rates.

And a prudent regulator would certainly consider whether or not providing less than the sought-after rate increases might -- might not be appropriate in that context.

And also there's certainly the daunting issue from the perspective of a lawyer who trembles in the presence of accountants, the implementation of interna -- except for Mr. Cathcart -- the implementation of international accounting standards and its potential impact on rates.

And certainly, from my clients' perspective, they could see how a regulator wanting to see progress in terms of debt/equity ratio, concerned about protecting the Corporation in -- in the face of the risk and pressures put on by higher capital -- and -- and also in terms of challenging new accounting standards -- why there might be an inclination to provide as the rate increase or more than the rate increase.

But my clients' concern and the dilemma they would pose is whether providing the sought-after rate increase or more than the sought-after rate increase may be seen as implicitly endorsing excessive expenditures.

And my clients' point -- and I think their point is borne out by the history of the last few years -- is that the -- the simple, continuing result of higher domestic rate levels doesn't provide us with any real assurance of actual improvements in retained earnings.

And from the Coalition's perspective, in terms of this dilemma, we're not sure that the regulator or -- can have it both ways.

From their perspective, it's -- it would be very difficult, if not impossible, to effectively admonish a corporation for -- at least verbally or in writing -- for excessive expenditures while allowing them to ramp up rate increases at or above the requested amount.

So for this proceeding, my clients' recommendation -- and -- and they'll elaborate on this in a few minutes -- will be -- will be for the Board to identify the concern with expenditure control and reinforce that concern through a less than sought-after rate increase.

And this should not be interpreted as a rejection of the legitimacy of those other points, for example, the impact of rates and pending major capital expenditures.

But in terms of that -- that issue, that impact will not be felt in the IFF for '08/'09, as Mr.

Harper pointed out. And it shouldn't be interpreted as a rejection of the legitimacy of the implementation of international accounting standards and the potential issues for the Corporation.

But on that point, my clients would point out that the Corporation is researching the issue. And it appears that the Corporation's position is that it's premature to reach any conclusions about the impact of the IFRS on Manitoba Hydro's financial statements.

In my clients' submission the only effective way, over the long run, to send a signal about cost control is through the revenue requirement. And in their view, this is the year to do it.

We've got an extra 35 million in the bank due to the positive results of '07/'08. And as Mr. Anderson no doubt will elaborate upon with reference to Hydro Exhibits 52 and 66, the energy in storage as of March 25th, '08, is at very high levels compared to historical levels.

And that -- that option, that approach, from the -- the Coalition's perspective, would still leave the option for the Corporation to come in next year, '08/'09 -- or, '09/'10, demonstrate improvements in cost control, and seek increases in the revenue requirement once -- as new capital expenses hit the rate base and it

has more certainty about the impact of the IFRS.

Mr. Chairman, I propose what I'll try and do is I've a -- a fair ways to go on OM&A. And I'll try and finish that section before -- I'm sure the Board will gratefully accept a -- a break. Again, I'm not living up to Mr. Buhr's tremendous example of this morning.

Turning to page 17 of the outline, in analysing the merits of the rate increase, these are the questions my clients have asked themselves.

Does OM&A matter?

Has Hydro done what it said it would do to improve corporate financial strength?

Has it demonstrated that it employs appropriate tools at the corporate level in managing key cost drivers, such as aging infrastructure?

Is it able to document the effect on the 2008/'09 OM&A of alleged key cost drivers, such as an aging infrastructure?

In non-GRA years, has it met its OM&A financial targets as set out in the Strategic Plan?

Does the Strategic Plan even matter in terms of OM&A targets?

Has Hydro established the reasonableness of its rate increases for the period in question?

Turning to the -- the first one on page 18,

Does OM&A matter? From the client's perspective, it certainly does. You're looking at electric expenses of 1.45 billion in the recent years -- or the current year. And clearly, in terms of those expenditures, OM&A -- OM&A is one of the big two (2). Slightly over -- it amounts to about 360 million.

So from that perspective, when it's combined with finance, it's in fact over half of the electric expenses. So from that perspective, it's certainly a big deal.

And from Mr. Harper's perspective, I asked him, Is this just administrivia? Is knocking off $10 million here or there, $14 million, what's that among friends?

And he said, It's not, certainly not from the perspective of consumers. And not to comment on Mr. Harper's age, but he's been dealing with Hydro Electric consumers for many decades, or electric consumers, anyways.

From their perspective, it's not administrivia. And as he pointed out -- and we think this is an important point -- one has to watch the pennies, and the dollars will look after themselves.

And on this point, I think it's also important, on behalf of my clients, to reflect upon the

advice and the words of Mr. Bowman.

And he made a very important point in this proceeding, that in terms of OM&A, the divergence between the forecast and results -- and these are my words, not him -- his -- that undermines the achievement of financial targets.

He pointed out to systematic increases and -- in OM&A spending that have been a consistent and compounding reason underlying the failure to achieve the debt/equity target.

And he made an eloquent point in terms of the divergence between forecasts and results and the upward trend in OM&A costs over the past two (2) years.

And a perfect example is the IFF-05-01. Back then, just a couple of years ago, the forecast cost per customer in '08/'09 was 338 million -- or, excuse me -- three hundred and thirty eight dollars ($338) per customer.

By IFF-07-1, the forecast costs per customer was three hundred and sixty (360).

And going to the big picture, Mr. Bowman made the point that this negative trend threatens to undermine the achievement of the financial targets.

So while in the short term granting less than the sought-after rate increase might appear to be

counter-productive to the goal of achieving financial targets, the short-term pain -- certainly in Mr. Bowman's evidence, as we understand it, and the Coalition's submission -- is likely to have an important impact in the long term.

Has Hydro done -- has Hydro done what it said it would do to improve corporate financial strength? And Mr. Harper talked about this in his oral evidence. He expressed a concern about product -- productivity initiatives that Hydro said it was starting with the purpose of improving financial strength, but it was not following through on.

And one example of this is apparent in the 2005/'06 Corporate Strategic Plan. One (1) of the four (4) key strategies, in terms of financial performance, was to benchmark key corporate processes against other recognized leaders. But as we confirmed through Interrogatories and cross-examination no formal process benchmarking has been undertaken on a corporate level.

So let's go to the next Corporate Strategic Plan key financial performance target -- or activity, develop corporate and business unit performance measures. But as was confirmed through cross-examination and Interrogatories, with respect to a specific strategy to develop corporate and business unit performance measures,

the terms of reference and a work plan have not yet been developed.

Why not? Well, Mr. Warden said it's a matter of priorities. And that goes back to the central point of my clients. Indeed it is a matter of priorities. And we understand with the -- the exciting and important major projects pending that it is difficult within Manitoba Hydro to balance these priorities.

But we also believe, on behalf of our clients, that it's important to get the fundamentals right. And the concern of the Coalition is that these nuts and bolts issues are not a priority, or at least as high of a priority as they should be from the perspective of the Corporation.

And perhaps the best example of this -- and this point was made by Mr. Harper; and I'm -- I'm turning to page 20 of the outline -- is the new head office and what we've described as the disappearing productivity dividend.

And I want to be -- be clear. My clients -- it's -- it's a good thing that we have an energy-efficient, state of the art head office on -- on downtown Winnipeg. That's a good thing. But commitments were made, in their understanding, and those commitments were highlighted -- and I've noted this before -- in the Centra

Gas hearing.

Centra estimated that the overall cost impact of the new head office would be about 21 million, to be offset by lease payment savings of 5 million and annual productivity savings projected to be in the range of $20 million annually.

So as we -- on behalf of our clients as we come into this Hearing, we're looking where are those productivity savings? Is the Corporation confident it can achieve them? Has it delivered as promised?

Well, in terms of the cost, what does Hydro say? Well, it says it's looking at about 23 million for the first year. But afterwards a more appropriate number to look at in terms of the impact, in terms of costs, is about 18.75 million.

Well, where are the productivity savings? Well, what does Mr. Harper say? Productivity attributed to the head office initially included reduction of roughly two hundred (200) staff. Now that number is well below a hundred (100).

There appears to be no increase assumed in productivity savings in the short term due to the head off -- head office over and above what has been historically been -- been achieved. And he noted it's not the 10 percent they were originally talking bout, not the 2 to 3

percent identified in earlier studies. It's lower.

So we asked Manitoba Hydro, Mr. Derksen, I believe, to provide us with an estimate of the number of positions that are not being filled in anticipation of synergies with the new building.

And Hydro's response was they don't have an estimate. And they indicated that they're not able to provide a reliable estimate in terms of the equivalent full times for the 2007/'08 year that might be held off because of the new building. And they're unable to provide a reliable estimate of the number of EFTs that will not have to be filled as a result of the new building.

And Hydro again reem -- went back to the point of two hundred (200) employees and indicted to make it totally cost neutral, if we're going to achieve -- achieve these savings solely through reduction number of employees, it would be close to a 10 percent productivity increase -- 10 percent of the head office staff of two thousand (2,000), being about two hundred (200) employees.

And, in the course of this discussion, I asked Mr. Warden at page 1171:

> "There was some doubt in your mind that you will be able to achieve the

savings?"

And his answer was:

"I really can't say with confidence that we will."

So what savings does Manitoba Hydro now claim? We know that the forecast 1 percent productivity savings related to the labour costs component of OM&A for '08/'09 implicitly includes the new headquarters.

We also know that apart from lease costs and the fact that the -- it's built into the OM&A productivity, there are no other downward revisions to OM&A costs that you can relate to the new headquarters. And that was confirmed at Page 1192 of the transcript.

And, in fact, Hydro indicated -- and I'm not quoting here, I'm paraphrasing -- there are no other downward revisions. In fact, there may be a temporary increase in costs. There could be some increase in costs which we have not factored into the forecast.

Hydro, in Exhibit Number 37, suggests that the total facilities related savings expect as a result of the move to the new head office is $7 million.

So how do we put this together mathematically? We're going to suggest -- we're going to start with the consumer -- a conservative assumption. Instead of using the 22.8 million for the first year,

let's look at the annualized impact of 18.75 million. Then let's look at the alleged facilities related savings of seven (7) million and the alleged productivity savings.

Manitoba Hydro states that it's holding back filling some positions in expectation of the move to the new head office. Of the two hundred (200) vacancies that currently exist, Hydro states -- and this is in Exhibit 36 -- that one hundred twenty-five (125) or one hundred fifty (150) of them are due to vacancy issues, difficulty in filling positions.

This would suggest that no more than seventy-five (75) are being held back due to the new head office, and that number could be lower. But let's take seventy-five (75) as a conservative assumption for Manitoba Hydro.

Mr. Harper wanted me to use eighty thousand dollars ($80,000) per employee. But I'm going to be conservative again, and I'm going to use a hundred thousand dollars ($100,000) per employee. This would result -- would translate into a reduction of no more than 7.5 million.

So using three (3) conservative assumptions, we calculate the annualized incremental costs of the new headquarters, to rate payers, would appear to be at least 4.25 million annually. So again, a promise

made -- a promise made not that long ago and a promise which certainly does not appear to be kept, in terms of the IFF-07-1.

Moving to page 23, in terms of managing alleged key cost drivers such as aging infrastructure, has Hydro demonstrated that it employs appropriate tools at the corporate level?

And I -- as the Board may have noted during the course of this Hearing, I became quite obsessed with asset condition assessments. And as Mr. Harper testified, these are commonplace in Ontario regulatory experience, both for big utilities and for small utilities. And they're commonplace in the industry. And somewhere on the record -- it's either Coalition Exhibit 12 or 13 -- there's actually a study of best practices in terms of asset condition assessments.

Well, what are these things, the subject of Mr. Williams' obsession? What they are is a snapshot of the utility's assets, noting the degree of degradation and the need for rehabilitation and replacement. They're frequently done by an external party in association with the utility. It helps the utility pull together, on a systematic and organized basis, an overall comprehensive assessment. And the -- for planning purposes, this allows work to be prioritized across the entire asset base.

And certainly at Page 1144 of the transcript, we talk about how Hydro One does this in terms of priorities: at the high level, highest priority, high value, high risk expenditures; at the lowest level, low value, low risk expenditures.

What asset condition assessments do is allow a corporation identify areas where there are information gaps. Regulators use them. They require the utility to demonstrate that they have a sound planning process and to substantiate their need, in terms of expenditures, on a year-by-year basis. And they're done every two (2) to three (3) years.

It allows a regulator to get a good sense of the overall state of the nation. And part of these are important expenditures. So that's best practice in a number of jurisdictions, certainly common practice in Ontario.

Well, how does Hydro address, at a planning level, aging infrastructure? And I -- I cited from the transcript, my cross-examination of Hydro on these -- this point, and I'm not quoting directly. These are the inferences I have drawn from their conclusions. You can certainly check the transcript and the Interrogatory cited to see if you concur with my inferences.

I'm quite confident saying that Hydro has

not conducted an independent review within the last four (4) years of industry best practices with regard to asset condition assessments.

I'm also quite confident that, in terms of managing aging infrastructure, a strategy document for the overall operation corporation does not exist. We asked for it in Coalition-1-36-C and didn't get it.

Based on my discussions with Mr. Warden, my understanding is that priorities and budgets are set at the divisional level, then reviewed at a high -- highly summarized level at the executive level. Hydro, to my knowledge and based upon their answer at page 1151, does not employ independent consultants to assist in the process or to review the process.

We also know that when requested in Coalition-2-52-A to provide a company-wide asset condition assessment, none was provided. And my inference is that no company-wide assessment exists. So that's in terms of aging infrastructure.

There's also some technological issues, and I'm quoting Mr. Warden -- or excuse me, I'm paraphrasing at page 1154. In terms of this planning process, not all of Hydro systems are state of the art. He speaks of AMPS, the main tool used to plan and schedule maintenance tasks and inspections, which is less than state of the art. He

talks about CAMELOT, which is used to record and priortori -- prioritize projects in the area of power supply as being due for replacement.

And lest one thinks that Mr. Harper and Mr. Williams are alone in their -- are in a soliloquy on this -- on this point, I think it's important as well and instructive to look at what Mr. Bowman, on behalf of InterGroup, has said.

He's expressed the concern that there's no consistent, top-down test in place for managing replacements and incremental expansions to the existing system. He expresses concerns with how Hydro employs capital -- the capital coverage ratio and suggests different -- different approaches that Hydro may wish to consider.

Page 26: Is Hydro able to document the effects on the 2008/''09 OM&A of alleged key cost drivers, such as aging infrastructure? And I'm focussing on the '08/''09, year because that's certainly the year in which my clients are asking for a -- that Hydro be granted 1 percent less than it has sought in terms of a rate increase.

What does Mr. Harper say? He talks about -- about -- he talks about anecdotes. And -- he says Hydro has made general references to cost drivers, such as aging

assets and the need to meet increased customer demand. However, no clear link has been provided between these cost drivers and the changes in cost. Mr. Bowman and Mr. Harper both said this, every utility says their assets are aging.

Their assets have been aging since the year they were built. What you have to establish though, as Mr. Harper points out, is what's unique about this particular period of time, in terms of the state of the assets. You need to do more than just say that they're older.

And I think Mr. Derksen agreed with me on this point at page 117 -- 1117 of the transcript. Age, by itself, is certainly not the only factor in spending requirements. And we were talking about prioritising spending requirements.

He said you had to look at a number of factors. And I've set them out there at the bottom of page 26. But where's the substantiation of the impact on the '08/'09 forecast of the allegations of aging assets driving expenditures?

The Coalition made an attempt to assist Manitoba Hydro on this. We asked the question, Interrogatory 1-36. We tried to get a segregation of operating and administrative expenses associated with

maintaining and sustaining existing assets. But we were told it was not readily available.

Attempt Number 2 to assist Manitoba Hydro, the Public Utilities Board, Second Round Number 28. They were looking at OM&A costs and staff EFT increases by rehabilitation requirements and ongoing OM&A. What was the answer? Hydro's not able to divide the information between rehabilitation and ongoing OM&A.

So I made a third effort in a cross-examination, starting at page 1121 of the transcript. We know Hydro said that aging infrastructure was a key cost driver. And it suggested at page 1114 that -- that aging infrastructure is causing pressure on staffing levels.

And at about that same page it said the three (3) major areas for staffing increases as a consequence of the aging infrastructure are power supply, transmission and distribution, and customer service and marketing. And they generously agreed to -- to undertake -- to provide an -- an answer to how much of the -- of that -- the '08/'09 increases in EFTs were required to meet operating and maintenance requirements and charged to OM&A expense.

And that's Exhibit 35, and it's quite instructive. The '08/'09 year: power supply, four (4) EFTs; transmission and distribution, two (2); customer

service and marketing, two (2).

As Mr. Derksen confirmed, if I was looking and focussing exclusively on the transition from '07/''08 to '08/''09, I wouldn't see a lot of growth in the EFTs relating to aging infrastructure in that particular year. We're not seeing a lot of growth.

Turning to page 29, the question posed is: In non-GRA years, has Hydro met its financial targets in terms of OM&A?

And the answer is that our last GRA was in '03/''04. In the three (3) years since, you can see for '04/''05, the actuals were actually higher than the top-down corporate strategic plan target. You see as well in '05/''06 the actuals were higher than the top-down corporate strategic target. And then in '06/''07, again, they were higher than target.

And we focussed on non-GRA years, because it's natural among utilities to -- to come in, in GRA years, with a little closer to target. But does it matter if the strategic target plans are not met? Does the Corporate Strategic Plan matter?

Well, I think Mr. Warden's evidence is that it does. It serves as a broad planning outline and a means for the Corporation to evaluate itself against the key-target measures.

So, in the non-GRA years between the last GRA and this one, based upon the Corporation's own internal evaluations, it's failed. And so we think that this -- this measure does matter.

Turning to page 30 -- and I think I'll -- I'll finish this and then we'll -- we'll head for a break, Mr. Chairman, with your permission.

Has Hydro established the reasonableness of its rate increase for the period in question? Mr. Harper says no. He recommends that the Board approve an annual increase in OM&A for the -- the period in question of 3 percent, rather than 3.9 percent.

He identifies three (3) major points. First of all, OMA -- OM&A is higher than in previous forecasts for the same period. In fact, it's the highest rate of growth we've seen. But there's no substantiation for the increased spending and no unique or one-off programs.

He also says that we should hold the Corporation to its own strategic plans, and the 3 percent is consistent with targets Hydro has set for itself in its Corporate Strategic Plan.

Third, he says and he acknowledges that OM&A, historically, has grown at about 4 percent. But it suggests it should be expected to decline, given that

customer growth is projected to -- to decline, as are Manitoba Hydro's increases -- salary increases -- per FTE, according to its forecast.

So he recommends reduction in the '08/'09 revenue requirement from 2.9 percent to 1.9 percent.

My clients agree, and I've set out some of the reasoning here. Again, the proposed spending level exceeds Corporate targets. The projection for the '07/'09 are higher than in any previous IFF. And the fundamentals just don't support a 3.9 percent per annum increase for OM&A.

And I put in here a detailed description. It also appears in Coalition Exhibit Number 40. And really what we summarize here, turning to the top of page 31, is that if you look at the two key drivers, the slower customer growth should decrease OM&A growth by about 0.3 percent. And also the slower growth of labour costs is also an important factor.

This suggests a growth rate that is lower by more than 1 percent, absent other offsetting factors. And we asked Manitoba Hydro, Are there offsetting factors? Are there any special or non-recurring maintenance programs of the material size during this period? And their answer was no.

So my clients' recommendation, Mr. Chairman

and members of the Board, is that the Board approve the interim 2.25 percent rate increase for '07/'08, but approve a 1.9 percent increase for '08/'09. In their view, the only effective way to send a signal about cost control is through the revenue requirement. And this is the year to do it, given the extra 35 million due to the positive results of '07/'08. This still leaves the option for the Corporation to come in the next year.

Mr. Chairman, I'm going to just -- with your -- I can either break now, or I have a maybe five -- five more minutes on this -- this subject.

THE CHAIRPERSON: Sure, go ahead.

MR. BYRON WILLIAMS: I should never say 5 minutes when Mr. Mayer is watching, but ...

I want to spend a second, start at the bottom of 31, top of 32, to anticipate perhaps what Hydro might say in response or rebuttal.

Certainly the -- at the heart of the Coalition's argument that the -- the proposed rate increase for '08/'09 is excessive is the belief that the OM&A forecast for '08/'09 are submission -- excessive and have not been substantiated. And when you look at OM&A, it's important to realize that labour cost is a key driver; 75 percent of OM&A is labour cost.

And there's been a lot of talk about

sticker shock in this Hearing by Manitoba Hydro, and that's an important point. And they've certainly put an interesting article on sticker shock on the record. And we certainly anticipate that Hydro may introduce doomsday scenarios about la -- labour costs. But we think that those scenarios are not consistent with Hydro's own evidence.

What do we know about labour costs in recent years? And I'm not going to suggest that they're not rising, but they're not rising at the dramatic pace -- the sticker shock pace that Hydro may attempt to suggest. In fact, quoting from the sticker shock article in Manitoba Hydro:

> "Labour costs generally have tracked inflation rates, although there's been a shortage in skilled workers which have driven some costs higher. Labour cro -- costs increase have exceeded the general inflation rate, but they're less direct -- dramatic than those exp -- experienced by commodities."

What else does this sticker shock article say about labour costs?

> "Labour costs have not risen dramatically in recent years, although

there's concern about a merging gap between demand and supply."

So what else do we know about labour costs in the recent years? Well, they have risen faster. And again this is provided in an excerpt from Coalition Number 30 -- 40. In the '03/'07 period, they grew by about 3.8 percent.

But Hydro's own numbers -- and they've not refuted them or withdrawn them on the record of this proceeding -- suggests that their growth over the '07/'09 period is 2.6 percent per FTE.

Hydro also forecasts that the number of customers in thi -- this '07/'09 -- '07 to '09 period is going to be lower than it was in the '03 to '07 period.

We certainly heard in the early days of the Hearing anecdotal evidence from Hydro about its labour rates as compared to others. So we asked the question: What does a true benchmarking study tell us about certain Hydro salaries as compared to other utilities?

And I use the word "true benchmarking," and I've attempted to define it on page 33. I think I'm using Mr. Warden's words:

"We would interpret benchmarking to be a more in-depth review of processes to ensure that the benchmarking exercise is

taking place, that the functions, the processes are truly comparable."

So by "true benchmarking," we -- the Coalition refers to an apples-to-apples comparison, not a comparison of highly aggregated information, which is not useful for very much, if anything.

So there was some information put on the record through an Ontario One benchmarking study that -- that we've cited here. And I think it's actually in the -- in the table of exhibits as well. It's Exhibit Manitoba Hydro Number 60, but I've set out the results here.

We'll look at the three (3) positions. Field operations manager, where does Manitoba Hydro rank? In the median to the 75th percentile in both the minimum wage level for that category and the maximum.

How about design engineer? Median to 75th both for minimum and maximum.

Powerline maintainer? Little lower, 25th percentile to median 25th percentile to median.

We're not using this to suggest that Hydro's salaries are too low. We're simply pointing out that the evidence on the record in this Hearing, when you look at true benchmarking -- appropriate studies -- doesn't provide any evidence that they -- that salaries of Manitoba Hydro are too low. In fact, it looks like

they're pretty much around the middle.

Hydro has thrown out a power surveys -- services survey result, but that's certainly not a true benchmarking study. It's highly aggregated. There's no segregation by job. There's no minimum for positions or maximums. It doesn't tell us anything about seniority or how long individuals have been at the job.

So if Hydro does attempt to rely upon highly aggregated and simplistic comparisons, we'd remind the Board that that is not true cost benchmarking, and Manitoba Hydro admits as such.

And I think I took six (6) minutes, but not bad.

THE CHAIRPERSON: Did well, Mr. Williams. Okay, we will take a break now.

--- Upon recessing at 10:25 a.m.

--- Upon resuming at 10:48 a.m.

THE CHAIRPERSON: Okay, anytime you are ready, Mr. Williams.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Thank you. On my very thin, Buhr-like outline, I'm at the bottom of page

33, top of page 34.

And this is a relatively brief point I wish to make, but my clients certainly felt it was important to recognize. The heading is, "Some Examples of the Interaction of Government Policy in Manitoba Hydro." But they felt it was important to -- to recognize this reality and also recognize some of the cost pressures and stresses this does put on the Corporation.

But certainly, to protect their -- their political flank, at the top of page 34 -- and I want to emphasize this -- when we talk about the cost pressures that this interaction is putting on the Corporation, we're not -- my clients certainly aren't offering judgment on the -- the various initiatives. They just want to recognize it.

And -- and I think it's important, and certainly my clients wish me to say so, that it's important to recognize that this kind of interaction between a Crown and the province, in the past and -- and currently, has really led to some tremendous -- some tremendous benefits to Manitobans. And I'm talking about that on behalf of my clients at the top of page 34.

Whether we look at in -- in my father's time, rural intercorrect -- interconnection, or if we look more of my -- my time, the connection of remote

communities in -- in the north, the Northwest Transmission Development, and certainly the -- the cooperation between Manitoba Hydro and the province has been a boon as to economic development, certainly made a significant contribution to the provincial bottom line.

And today we have a -- a program that my clients applaud such as -- at least in -- in terms of intent, if not in design, the Low-Income Energy Efficiency Program.

It's also important to recognize that there's been some costs to the province in terms of the -- of these tremendous developments. And the Churchill River diversion and its impacts comes to mind.

But, again, my clients did ask me to point out and highlight some of the ongoing impacts on the revenue requirement and/or financial indicators that are -- that are a product of this interaction between Hydro and -- and the province. The -- the new Hydro building, we've certainly talked about. And, again, my clients -- in terms of the -- without expressing opinion, certainly the west side versus the east side decision, in terms of Bipole 3, has important cost ramifications.

In terms of Wuskwatim, again, my clients will come to that in just a couple of seconds. But from -- it's clear, getting to the bottom line, that -- that

Wuskwatim is putting pressure on Manitoba Hydro's debt/equity ratio and upon the revenue requirement, at least out until 2017.

Again, the closure of the Brandon Coal plant, except for emergency use, proposed is another important impact. And, again, I think it's something that my clients are supportive of. But it's -- there are bottom line impacts from this. And we certainly anticipate those on behalf of our clients, in terms of the major new Hydro electric-generating stations. And, again, we've gone through some more of these on -- on these pages.

The simple point is that this is a corporation that in terms -- it's more than just a utility and that it's experiencing significant pressures on its bottom line from a variety of policy and government initiatives, many of them quite beneficial. But it's important, from my clients' perspective, to put that into the mix analytically.

Turning to page 37, my clients have asked, What is the experience of Wuskwatim? Are there lessons we can take from Wuskwatim into this anticipated decade of major capital expansion?

And at the top of page 37, I've restated the commitments by Manitoba Hydro in terms, of Wuskwatim

and the findings of the CEC. And I don't need to -- to belabour that point.

At the bottom of that page through, in the course of this Hearing, both Mr. Harper and Mr. Bowman haven't quite said it, but they've come really close to suggesting that domestic rate payers are experiencing rate pressures as a result of these projects.

Mr. Harper, and I quote him at page 3647:

> "The increased debt is placing pressure on today's rates."

And he goes on to say it's probably one of the contributing factors to increased rates. I think his actual quote was, "It's definitely probably," but I wasn't sure what that meant. So I -- I think that was a cautious insertion by Mr. Harper. So I took out the word definitely.

Mr. Bowman -- press him as I could -- wouldn't quite go to the -- the Nth degree. But he said:

> "We're effectively coming close to raising rates for Wuskwatim."

What is the reality of Wuskwatim? We've summarized at Page 38 some important information about it. With the revised in-service date, we're looking at costs of 1.6 billion, including transmission.

Now when you restate those -- those costs

to take into account both inflation and a later in-service date, you see really the dramatic, in 2002 dollars, change, the current forecast of Wuskwatim to the -- to the original forecast. And that's at the middle of page 38.

And you can see on the left-hand side we're looking at the evidence provided to the Clean Environment Commission -- this -- this is from Manitoba Hydro Exhibit Number 29 -- 600 million for the generating station. Now, that's risen in constant dollars by about 50 percent to 907 million -- almost a billion dollars -- on the generating station. On the transmission line, going more appropriately to the sticker shock issue, you can see the costs almost doubling. The information was provided helpfully, although reluctantly. And that's Manitoba Hydro Exhibit Number 55.

What is the revised internal rate of return? And we're suggesting that it's only 6.5 percent. And I think this is almost pulled directly from the exhibit.

If the capital costs of the project in 2002 dollars is substituted into the April 2003 submission, the resulting mathematical calculation is six point five (6.5) when some costs are included.

And we would suggest the revised internal rate of return is roughly equivalent to the Corporation's

cost of debt. There's been different evidence on the record in terms of that. Mr. Warden originally said 7 percent, but my understanding that -- that figure was subsequently revised to 6.5 percent.

But, certainly, what my clients recall from CEC hearings is that's not anywhere near the type of return that we -- certainly that -- that consumers or Hydro would have been looking for at that point in time.

We've -- there's been an attempt, certainly, to re-shift the debate about Wuskwatim to say that it's needed for domestic needs.

But -- but we think Mr. Surminski frankly addressed that issue in his typical frank fashion. He said that it's the -- and I'll insert the word "firm contracts" that add to the demand that cause the deficits in the long run -- term, if that's what you're getting at. It's a combination of domestic load with your firm contracts that leaves you requiring Wuskwatim.

So are there lessons to be learned? Well, certainly from the consumer perspective, my clients have learned something. Certainly, in Wuskwatim, at the CEC, they didn't really examine closely the capital expenditure forecast of Manitoba Hydro.

There was evidence they relied upon -- and that's their fault or their advisors' fault -- suggesting

that Hydro had a great degree of confidence, which I've cited here, that the estimate would be between 523 million and 620 million. And that simply hasn't been the case.

So, the question was asked in cross-examination, Have there been lessons learned? Have you done an independent review of best practices, in terms of capital expenditure forecast in management in recent years? And Hydro hasn't. There was the Deloitte and Touche study -- and that's found in Coalition 38 -- but that was way back in 2002.

So are there lessons to be learned by Wuskwatim? Well, my clients' starting point is that there's some -- certainly some sobering lessons for consumers. We don't know, in terms of capital expenditure forecasts and management, were there lessons to be learned, because we really haven't asked the question.

They think -- my clients certainly do, as we he -- head into a major decade -- decade of expansion, that that question should be asked, and that, certainly, the Board should recommend to Hydro that it provide an independent review of its capital expenditure procedures for major projects and OM&A look -- both in terms of forecasting and management best practices.

And, certainly, my clients think that, as we move forward, that would be an instructive lesson and

an instructive thing that we can do from Wuskwatim.

At page 30 -- excuse me, it's page 40 -- my clients ask, How can we improve the regulatory process? And they've got a number of suggestions. And I'll -- I'll start with Mr. Harper.

Mr. Harper, in his oral evidence, and I won't re-summarize it, but he talked about four (4) possible ways that you could test the validity of OM&A -- OM&A expenditures.

One of the concerns he raised though, in terms of these four (4) approaches, was that there was insufficient information on the record to use approaches 1, 2 and 4 -- excuse me -- 1, 3 and 4.

So Mr. Harper -- and, again, I won't dwell on this, but he made some very helpful recommendations, in terms of how Hydro could better present information to its regulator in order that the process could move more efficiently. And, also, so that we'd have a better understanding and a better mechanism to test the reasonableness of its expenditures.

One of his most important was the employment of asset condition assessments. And, certainly, I've talked about that already. And then he made a number of recommendations in -- in terms of improving Hydro's presentation to its regulator of its

OM&A budget. And, again, I won't dwell on those. Those are set out at the transcript at pages 3642 to 3643.

Something I will dwell on though, starting at page 42, is an issue which we think was not totally ripe for this Hearing but is something that is important for consideration in future hearings.

And that's the management of -- of Hydro's debt portfolio. And some individuals in this room will requi -- recall back in the 1990s -- going back to hair, Mr. Mayer, when I -- when I had more hair and it was not so grey -- where Manitoba Public Insurance was tested by Intervenors in terms of its investment portfolio -- not its debt management portfolio, but its investment portfolio.

And there were important debates in that forum in the 1990s that had profound impact on Manitoba Public Insurance and provided profound benefits today to Manitoba consumers.

And one of the questions my client is -- is raising is, Is it getting near the time to engage in that debate with Manitoba Hydro, in terms of the management of its debt portfolio, which is in excess of $7 billion?

Well, just by way of background, currently, how does Hydro do this? Mr. Warden had to set me straight on this. But floating rate debt is -- is debt that is

subject to change on a periodic basis, often six (6) months to a year, whereas there's also long-term fixed-rate debt, which is -- is much more stable and changes over a much longer period of time.

Currently, Hydro tends to operating the floating-rate debt about or below 20 percent of its portfolio and a long-term fixed-rate debt of about 80 percent.

And, well, is there a policy that mandates this? Well, this -- this was the original response we got from the Corporation. There's a policy limit to no more than 30 percent of total debt. But Hydro typically manages to within 15 to 25 percent of total debt, i.e., 15 to 25 percent being fixed -- excuse me -- being floating and the remainder being fixed-rate debt.

So originally we asked whether there's a Board minute regarding the 30 percent maximum. And we are told, yes, going back more than twenty (20) years. But that -- that minute apparently predates computers, and it still -- still is MIA -- missing in action. Not to deny that -- that it exists, but it -- it just hasn't been produced.

And Mr. Warden indicated, We have not found it to be an issue that requires Board attention, so the Board has not been asked to look at that for a number of

years.

He also noted that the target guidelines go back more than twenty (20) years. And he wasn't clear at that point in time whether the Board specifically approved that.

So what we have is a long-standing policy. Times have changed since then. And that hasn't been subject, in recent years, to a tremendous amount of review by the Board.

We certainly ask, other than the previously approved, Board-approved document, is there any other document? And we were told no.

So, why does this matter? Well, there's a tradeoff. Floating-rate debt provides economic benefits. Short-term -- generally. Short-term interest rates generally are lower than long-term interest rates in a typical yield curve. And Hydro would admit, and it has, that if you go to only 5 percent floating, you're giving up too much in terms of economic benefit.

Well, what does fixed long-term debt offer? It offers stability. And Hydro would argue if you go over that magic 30 percent for -- for floating -- if you get to 31/69, being thirty-one (31) floating, sixty-nine (69) fixed -- I've got a typo there -- you're giving up too much, in terms of stability and risk.

Well, is there literature on this subject? Well, there is one. It's an article originally cited by the Coalition and then cited by the Corporation in its rebuttal evidence, "Is There an Optimal Mix of Fixed and Floating-Rate Debt?"

And it's a very interesting study. Mr. Warden thinks it should be a hundred (100) years long instead of ten (10) years, so I take his point on that. But it's the best that's on the record, and it's an important -- important study.

And what did it show? Well, if you -- if you looked at 100 percent floating, certainly there was a financial economic benefit. You're -- you're gaining on the economic side. But certainly, quarterly earnings were more variable.

What about a 100 percent fixed? Well, you were paying more. These were the highest interest costs, but there was considerably lower variability than a 100 percent floating.

But what's interesting about the study -- and I discussed a bit of this with Mr. Warden at page 1229 -- is that there were points in the middle -- 69/31, 40/60 -- where not only was interest-costs lower than a 100 percent fixed, but there was lower earning volatility as well.

So we would submit, on behalf of our clients, that there's a key point that we can draw from this literature. It's clear that the floating offers greater econo -- economic benefits, but it does not suggest that excessive risk-averse behaviour necessarily leads to the lowest level of risk.

Why does this matter? Well, on an annual basis, finance expense -- expenses are about $426 million, and Hydro currently holds in excess of $7 billion in debt. So even applying that current policy -- turning to page 49 -- excuse me, 44 -- that range of 15 to 25 percent of the total debt of $7 billion. There's 700 million in terms of a potential to flip between floating and fixed. And if Hydro reduces its interest costs by mere five (5) bases points, that would be a saving of 3.5 million, annually.

We're not suggesting that it's mismanaging the debt portfolio. We're suggesting that this is an issue, given its significance, that is ripe for re-examination. And we're suggesting this -- well, first of all, because there's no Board policy that can be found.

But the one that exists date back -- now we know -- to the 1970s, and it's probably time for review. And we confirmed that there was no recent independent review. There's been no independent review of Hydro's debt optimization approach in the last five (5) years.

It's also of concern to the Coalition that Hydro has been consistently managing, at least in the evidence on this record, towards the bottom of that range -- the 15 to 25 percent. Of the thirteen (13) quarters reviewed in Coalition-1-85-B, Hydro was below the mid-point -- the 20 percent floating point -- twelve (12) times and above the mid-point one (1) time.

Now there may be a perfectly good explanation for that, but that's a subject of concern. Is Hydro being excessively risk-averse and leaving dollars on the table for no appreciable gain and stability? It may be foregoing significant returns for the false premise of reduced risk.

We'd also note that BC Hydro -- it's the one Crown, certainly, that's above Manitoba Hydro -- runs a higher floating/fixed ratio, a range of 26 percent to 46 percent floating.

And I've cited the MPI examples, so I won't dwell on it. But we think this is particularly important as we look at a period where we are looking to -- likely to significantly increase debt. And that there's real opportunities here -- at least, first of all, for a careful review, and there may be cost savings in play as well. So we're recommending an independent review of floating -- of the floating/fixed target range and

maximum, with a view to the consideration of the trade-offs, in terms of economic benefit and stability.

On page 45, I have a -- on behalf of my clients, a brief discussion about benchmarking. And Mr. Peters canvassed this in cross-examination with Mr. Harper, and Mr. Harper wasn't overly enthusiastic on the benchmarking subject.

But I want to be careful, and I think Mr. Harper is -- as I understand it, he wasn't overly enthusiastic about what he would characterize as the fairly simplistic approach to benchmarking taken by Manitoba Hydro, highly aggregated numbers pulled from the annual reports.

The Coalition certainly -- and -- and I'm not speaking for Mr. Harper here -- believes that there may be some -- some value to exploring the issue of true benchmarking. And we've put on the record a couple of examples in this proceeding, Coalition Exhibits Number 8 and Number 9.

The Coalition -- and I'm -- I'm not sure which the numbers are but the -- one (1) of them was the Ontario One distribution study that benchmarked thirteen (13) or fourteen (14) utilities on it -- on matters such as cost per kilo -- kilometre, cost per customer on a variety of factors.

And the other one is the Hay Group Comparison of Labour Rates and Overtime Policies, which, at a micro level, the corpora -- the Coalition found quite valuable.

So answering at least one (1) of the thirty-one (31) questions of the -- of the Board, in terms of benchmarking, my clients see little value in high -- highly aggregated, straight from the annual report benchmarking.

They recommend though that the PUB consider -- and -- and I -- probably cautiously -- the value of process and cost benching -- benchmarking on a selective basis and again, going back to Mr. Warden's definition of "true" -- "true benchmarking."

Page 46, should we rely on the current debt/equity target for rate-setting purposes? I suspect in the -- the only document that rivals the length of my outline, the MIPUG closing argument, they will address this in extensive detail. But I thought it was, certainly on behalf of the clients, useful to put some points on the record.

Let's start with first principles. Why is this target considered to be important? What -- what value does it offer? Certainly, the target, and the progress of Hydro towards it, is intended to demonstrate

to the financial community that Hydro's financially sound and that it's got a appropriately cautious approach to the manages -- management of its finances. And it's also there -- a dual purpose -- to stabilize rates in face of -- - in the face of adverse events.

It's been criticised in this Hearing, in one (1) case by a question posed by myself in -- in terms of its utility or its impact in the environment that we're currently embarking upon. The question posed at page 3423 was:

> "In an era where debt is expected to grow materially, does the debt/equity target act as a perpetual justification to raise rates, even if forecast expenditures are not prudent, reasonable, or necessary?"

When you're adding another 14 billion to the -- or a percentage of that -- to the debt side, that 75/25 target can justify a lot of significant rate increases.

That's not to discount the importance of having equity. It's just, certainly, for my clients' perspective, important to think in this era, whether that's the best -- the best approach to rate setting.

Mr. Bowman answered my inquiry in a more

elegant way:

> "In such an era, do you end up with an undefinable concept of making sufficient progress?"

Mr. Harper, ever the pragmatist, suggested:

> "First of all, if you're looking at satisfying the financial community, you should be looking at what they're actually rating."

And, certainly, the Standard and Poor's measurement -- kind of their apples-to-apples comparison of Canadian utilities -- uses a different measure of debt/equity than Manitoba Hydro's. And int -- interestingly, Manitoba Hydro comes up pretty well, compared to BC Hydro, over the last three (3) years.

So Mr. Harper would suggest that if you want to benchmark against other utilities, perhaps use the same analytical approach. And certainly, the Coalition sees little value in drawing information from, for example, the ICBC annual reports, looking at contributions from the Columbia River Treaty, which -- which certainly doesn't apply to Manitoba.

Mr. Harper, the pragmatist, points out what is irrelevance from it, at least to his judgment, in the terms of bond rating agencies is continued improvement in

equity levels.

And he also observed that in terms of a drought or adverse event, debt/equity -- the target and the percentage is of less rele -- relevance than the actual number; 75/25 in the -- in the face of a -- if it amounts to only $500 million, is of lef -- less relevance than a -- a less favourable percentage, but a higher absolute number, i.e., 2 billion.

I think my clients are going to straddle firmly on the fence on this issue, Mr. Chairman. They think it does deserve re-examination. They're not satisfied the debate in this Hearing has been focussed enough. Partly that's their counsel's fault.

So in the context of the next GRA and proposed major capital expenditures, they suggest we should be re-examining the purpose of the target and the best way to measure it.

Energy efficiency, turning to page 47, is the Corporation getting optimal bang for the buck when it comes to energy efficiency?

And I want to start out by focussing on low-income issues near and dear to the heart of the Coalition. And certainly, just start with an observation by Mr. Kuczek. He suggests that low-income consumers may behave in a manner that's somewhat different from other

consumers. You're dealing with a different market when you're dealing with persons who are struggling on a day-to-day basis just to get by.

At page 49, we provide some insight into the barriers faced by low-income individuals, in terms of energy efficiency, and they're not particularly contentious. In fact, Mr. Kuczek and Mr. Dunsky appear to be in general agreement, so I won't belabour the point.

Access to capital is a significant one. Split or displaced incentives is a -- a major point, and Mr. Kuczek makes the point that split incentives disproportionately hit low-income persons who are disproportionately renters.

There's tremendous barriers just in terms of organizational practices and customs. And this point was well made by Mr. -- Mr. Dunsky. Landlords, even if they see an economic benefit in energy efficiency -- or could see such a benefit -- some may choose to operate purely on a low-cost model and not be interested.

And contractors are very -- excuse me -- some contractors may distrust low-income consumers or be unwilling to enter into the market. And this really goes -- this point goes essentially to the -- the design of the Low-Income Energy Efficiency Program.

Other challenges are added as well,

including, by Mr. Kuczek, higher than average mobility, which adds uncertainty to economic -- to the economic value of long-term investments.

On the next page, it does not have a page number, but I -- I put in Mr. Dunsky's famous table of the fifteen (15) simple steps from -- in terms of the Low-Income Energy Efficiency Program, which he diagrammed in terms of a way for an individual to access the program. And I thought it was a -- a helpful introduction to Mr. Dunsky.

I do want to spend a second on Mr. Dunsky. We are tremendously pleased to be able to -- to share his expertise with the -- with the Board. In our respectful submission, he's really on the cutting edge of some exciting programming in the Eastern Seaboard and in the Province of Quebec.

Well, what does he say about this market? It's a very complex market. It's a difficult thing to do. It's complex to design -- and I'm on page 50 -- an energy efficiency program for this market segment that actually -- that -- that's actually going to work.

So word of warning from Mr. Dunsky right at the start, this is not easy. This is not a market like other markets. And, as he noted, in his disappointment in one of his Quebec pilot projects, the biggest challenge is

actually getting people interested in participating, even -- even though it's free of charge.

And I've outlined -- and Mr. Dunsky's oral evidence speaks for itself, but he's identified four (4) keys to success.

Keep it simple; a turnkey approach with the utility or its contractor taking ownership of what you're trying to do with the customer.

Keep it free. He offers some important caveats to that.

Focus on outreach and be comprehensive.

And in the big picture, and I'm going to go into details in a minute -- in the big picture, he identifies three (3) major weaknesses with the Low-Income Energy Efficiency Program, Manitoba Hydro, three (3) major issues which suggest that in terms of achieving energy efficiency for low-income persons, but both for efficiency reasons and equity reasons, it's -- it's as currently designed less likely to be successful.

The biggest one, going back to the -- the page just before, is its complexity for individual consumers. He describes it as a serious barrier, too many -- too many stops. Hydro has not taken enough ownership of the program.

It's a serious barrier, and it's going to

diminish participation, not slightly, not moderately, but tremendously. There's an enormous barrier here that will significantly attect -- affect participation. And he made the point strongly, the best practices universally suggest employing the turnkey approach.

He also identified a -- a challenge, in terms of community-based organizations. Some will be brilliant and tremendous. Some will have very material capacity concerns. And Mr. Dunsky's point was you have to ask the hard questions now. Either be very selective in who you're -- you're choosing, or invest heavily in training. He also identified significant concerns with measures which were either not included or not careful -- not appropriately included. And he has strongly critical words for the furnace component program -- furnace component element of this program. It isn't much of one. It's simply not going to address those barriers. There is no way this is going to get the early replacement opportunity.

That's the high level. And -- and I'm going to come back to Mr. Dunsky, but we spent a long time with Hydro on the Low-Income Energy Efficiency Program, because we wanted to make some -- some key points. And these start at page 52.

One point, and I'm not going to spend a lot

of time on this page, but certainly the able Board legal counsel cross-examined Hydro to some degree about the Low-Income Energy Efficiency Program and the fact it wasn't meeting the RIM test. And that's pretty clear.

And -- but the bottom line, and I think Mr. Kuczek said this -- and again I'm not going to spend a lot of time on this page, because I think most of us in this room are on board with this concept, Submission (c) on page 52 -- is that Low-Income Energy Efficiency Program is good for -- for the portfolio. It offers some significant potential bill -- bill impacts for low-income consumers, and it's getting into a marketplace where the -- that has not participated as much as we'd like.

And Mr. Bowman, I thought, had something thoughtful to say on this point as well. He's quite supportive of the RIM test. But he noted that low-income DSM is not always going to meet the RIM test. But there still may be reasons to pursue it that relate more to -- to a policy perspective than an economics perspective.

Turning to page 53, Hydro has, at a high level, set up quite ambitious goals in terms of the low-income energy efficiency. Mr. Kuczek said, at page 989, Our objective is to totally clean up the market.

But when you actually look at what they're purporting to do over the next three and a half (3 1/2) to

four (4) years, the rhetoric does not accord with the reality.

Their target market is seventy-six thousand (76,000) households, 35 percent approximately of which are electrical. That calculation, of course, excluded customers residing in apartment suites. And as we've noted in Coalition 5, Exhibit 5, that's almost a hundred thousand (100,000) apartment suites. Not all of them are low income, but -- but certainly there's huge issues in terms of tenants.

Hydro's objective over the next three point five (3.5) -- three and a half (3 1/2) to four (4) years is forty-six hundred (4,600) households, expecting 35 percent of those to be electrical or a bit more.

So if you do the math, and Mr. Kuczek was good enough to do it for me, forty-six hundred (4,600) as a percentage of seventy-six thousand (76,000) is only 6 percent of the total target over three and a half (3 1/2) to four (4) years. As he acknowledged and conceded, it's a small number, a bit less than 2 percent per year.

And that raises tremendous concerns for my clients, given the cost pressure that low-income consumers are on. This is a very muted progress to low-income energy efficiency.

This -- the bottom of page 53 to the top of

page 54 certainly relates to a point that Mr. Dunsky made about the challenges in this marketplace and the challenges of working with community-based organizations.

How are we doing on -- on this program to date in terms of plans? Well, the Centennial Pilot Project, it actually started out with a plan. But at the end of the day, it wasn't really used.

So sometime going forward, Hydro's intent is to have a plan and a contract with these community-based organizations. But at the time of my cross-examination of Mr. -- Mr. Kuczek, no model or template for a community energy efficiency business plan had been developed yet, although there was intentions to meet with community organizations and First Nations to develop one.

I've noted before that this is a -- a small number that Hydro's aspiring to. My clients' concerns are not only with the small number, but they have grave concerns that even this small number will not be reached.

Mr. Kuczek notes, in the middle of page 54, that a lot will depend on community-based organizations. And you certainly heard Mr. -- Mr. Dunsky's comments about that, and also his -- the -- one of the key points he makes is that outreach is so essential. And I think that Mr. Dunsky certainly questions the -- the degree of reliance upon community-based organizations that Hydro is

-- is currently employing.

Of concern to my clients was that there was no criteria developed for evaluating the capability of community-based organizations.

So let's look at the pilot projects. How are they doing? Well, as Mr. Kuczek candidly admitted, We're not meeting the targets that we originally thought we could meet. The community organizations came up with the number of ten (10) per month, and they haven't met those targets to date.

And we've set out, at the top of page 54, the three (3) communities, their targets and how they've done, at least in -- into getting into the homes.

In Brandon, at the time of this cross-examination, they had a target of a hundred and twenty (120). They're in forty (40) homes, all Manitoba Housing Authority homes, no private sector homes.

Island Lakes, a hundred and ten (110) and zero homes.

The Centennial Project's a hundred and twenty (120) -- actually in a hundred and eleven (111) homes, again, all MHA, no private.

Island Lake, we provided the material that we thought they required to do a hundred and one (101) homes, and it's sitting in storage right up there now.

And it is an important comment from Mr. Kuczek. It went from a fairly small project to something that was really likely unrealistic and quite expensive.

Well, what about Centennial and Brandon? Well, Centennial's got the most numbers, but participation does not mean the objectives have actually been attained. As Mr. Kuczek candidly admitted, there's certainly some challenges with the community-based organizations, in terms of moving forward.

He identified big problems, in terms of retrofitting. So, even with the Centennial homes, we're into a lot of homes where the weatherization may be done, the retrofitting was not or not completed.

And, as I've noted before, the plan was to move into private households after the MHA experience. And because of some of the challenges in Centennial, they haven't proceeded there yet.

A further concern with the program as we look to its long-term success is in terms of monitoring. Dunsky, at page 1033, says, This is how we should monitor. Let's evaluate these groups on their ability to hit the targets and a number of other criteria: time from first contact to work completion, results of quality control spot checks, client satisfaction surveys.

Hydro's response? They read his infor --

evidence with interest, but, we have to be careful how we work with these groups. We are monitoring things informally on a flexible, ad hoc basis, kind of a piecemeal type of approach.

And that's certainly of concern to my clients, as is the fact that these targets are under-representative of tenants. And as Mr. Kuczek admits, homeowners, as opposed to renters, would disproportionally benefit.

In terms of tenants, there are a couple of apartment pilots which are a good thing, but no business plan. It's learn as you go.

Just turning quickly to tenants -- and -- and, the bottom of page 56, the top of page 57, the barriers for renters are acknowledged by Mr. Chernick, Mr. -- Mr. Dunsky as well. There's a split incentive problem, a capability problem. There's also shorter investment hor -- horizons due to uncertain tenure.

And Mr. Chernick's got some interesting evidence on that point. I -- I won't belabour it, but at the middle of page 57, he cons -- agreed that there's a risk for renters under an inverted rate structure. The risk is that they will experience the higher costs but lack the capability or can't make the business case to respond to the energy efficiency sig -- signal.

So Chernick's point, as I understood it, is if -- if you're moving into an inclining rate structure environment, you would want to have a set of energy efficiency programs that were available to everyone and would actually work in the marketplace.

And certainly from my client's perspective, they don't have confidence in terms of the Low-Income Energy Efficiency Program. There isn't to date a tenant's program, and they also have concerns for rural customers who -- who have no real competitive options, such as natural gas.

Now I tried to push Mr. Chernick on gradualism at page 2959 of the transcript. I suggested to him, you might want to go slower if you don't have these programs which you say are an important pre-condition in place.

He was going -- prepared to go with me only a little ways, but a little ways down that path. He said that if you -- if you say that, by the time you get the programs designed and worked out, it might be a year or two (2). So he wanted to have a little less of an inverted block, well, maybe. So, he wasn't jumping up and down in terms of enthusiasm for gradualism, but he was prepared to concede that it might be important.

Turning to page 59, in terms of energy

efficiency programs, low-income energy efficiencies, my clients have three (3) concerns. They're not set out expressly on this page.

A first, that the -- in terms of low-income energy efficiency and tenancies, progress is too slow.

They've also got material concerns, secondly, with the design of low-income energy efficiency programs, which suggest that even the limited ambitions of Manitoba Hydro will not be achieved.

A third question -- and I think out of fairness to Hydro -- that also has to be asked, If our objective is really increased participation, how are we going to pay for that?

And so my clients have four (4) recommendations in -- in recard -- with regard to low income and tenancy DFM.

First of all, copying Mr. Dunsky, modify the program design to ensure turnkey service.

Assess -- secondly, assess CBO's capacities prior to contracting.

Third, add a fridge replacement component and adopt a more aggressive approach to furnace replacement. And fourth, in recognition that the -- 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 source of funding.

Mr. Chairman, I apologize for this, if I could stand down for like three (3) minutes, with your permission?

THE CHAIRPERSON: That is fine.

--- Upon recessing at 11:35 a.m.

--- Upon resuming at 11:38 a.m.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Thank you for the -- the respite.

Inverted rates, it's an important part for Mr. Chernick. Inverted rates don't substitute for good energy programs from the Utility.

And something that's interesting on page 59; certainly as we look at inverted rates from an energy efficiency perspective, NERA did some interesting work examining a number of scenarios in terms of inverted rates.

And it looked at the largest impact on the revenue requirement in terms of where it would be achieved and given the scenarios that evaluated. For residential consumers, the largest impact on the revenue requirement

was a negative 2 percent; for medium general service, a negative 8.4 percent; and for general service large greater than 100 kV, negative 13.3 percent.

And Mr. Wiens confirmed in discussion with me, when the question was posed, why so much more for GSL large, why are there -- there are so much more in terms of impact on the revenue requirement and efficiency gains as compared to residential. Why is that?

Two (2) reasons. Well, actually he said three (3), but the third I couldn't understand. But it's at page 2371.

The two (2) -- the two (2) answers that I liked though and that I understood: in large part, he said greater relative elasticity at page 2371. I think that was a big reason. And he also noted the -- a greater gap between current prices charged and marginal costs. I think he commended me for my good work on -- on that point.

In terms of inverted rates, turning to page 60 -- and I've stated this before, but I think it's important to restate -- it's important to understand that there's a potential impact on low-income consumers. We know that the group that's more likely to experience above average rate increases through this are those consuming more than 18,000 kilowatt hours per year.

In terms of the raw numbers, again, this isn't an exact proxy for low income, but we do know that between eighteen (18) and nineteen thousand (19,000) of those earning less than thirty thousand (30,000) a year were in that consuming more than 18,000 kilowatt hours per year.

And in terms of all-electric customers there's between sixteen (16) and seventeen thousand (17,000) earning less than thirty thousand (30,000) a year and consuming more than 18,000 kilowatt hours annually.

Turning to page 61, my clients had divided the issue of inverted rates into two (2) separate issues. The one -- the one (1) issue is, is it time now? Is it time?

And generally, my clients are supportive of the concept analytically. But they have important significant equity concerns: concerns for the impact of all-electrical with no competitive options; concerns for low-income persons who lack the resources to pursue DSM; and concerns for renters who may lack the ability to pursue DSM or for who energy efficiency is uneconomic due to split incentives.

But what did Mr. Harper say? Generally, he said in theory inverted rates are a good thing from an efficiency perspective. And he, I would suggest,

established three (3) hallmarks of success -- of a successful inverted rate program. They should achieve efficiency results, there should be sufficient programs available so consumers can take advantage as to widest possible extent, and that they be publicly acceptable from a fairness perspective.

Mr. Harper noted barriers, in terms of customer's abilities to respond to the rate -- rate signal offered by inverted rates for low-income individuals, tenants, and those in rural areas lacking competitive alternatives.

And he argued -- and I've highlighted this on page 62 -- for both fairness and efficiency reasons, these situations need to be addressed if residential inverted rates are to be successful.

Mr. Harper was in general agreement with Hydro's proposals for 2008, which he characterized as "modest." But he identified key issues to address before further implementation. Again, an advocate of gradualism and though -- addressing the barriers which I've averted to previously.

Mr. Wiens is another person, even when he is not talking about Mr. Bonbright, who I like to listen to. And he also acknowledged, in terms of inverted rates, the barriers to customers' abilities to respond and

expressed, at the bottom of page 62, some sympathy for this. And that's why he would advocate gradual implementation.

And the difference between the low-income population and the proposed piece of implementation of low-income DSM programming would be one of the factors suggesting caution in the pace of which inverted rates are implemented.

So that's what Mr. Wiens and Mr. Harper recommended. I've talked about Mr. Chernick previously. My clients are going to take issue, a little bit, with -- with those recommendations.

They acknowledge and accept and are persuaded that inverted rates offer an important price signal, but that acknowledgement is overshadowed by their equity concerns.

They appreciate the recognition of fairness issues and calls for gradualism as offered by Mr. Harper, Mr. Wiens and, to some extent, Mr. Chernick. However, my clients believe fundamentally that it's unfair to implement inverted rates before giving vulnerable groups to -- the tools to achieve energy efficiency.

They recommend delaying inverted rates until the DSM house is in order, particularly for low-income persons, tenants, and all-electric with no

competitive options.

And the other point they want to make on inverted rates on this area: in the event the Board decides to implement inverted rates at this point in time, Mr. Weiss, on behalf of TREE/RCM in Exhibit RCM/Tree Number 6 -- and you don't need to go there, but he had some very important things to say -- and we commend him for that -- in terms of educating the public about inverted rates and the purposes of them.

And my clients are not necessarily recommending Mr. Weiss' advice there. But he had some important things to say about the need to use a focus group of customers, targeting residential customers with much higher than average use.

He also had some interesting things to say about separating the rate in -- any rate increase from inverted rates so that they could be implemented on a revenue-neutral basis.

And, finally, that the tiering be gradual. That is, the differences in block prices should gradually increase over two (2) to three (3) years.

So, my clients fundamentally think it's an important idea but it -- that its time has not come. To the extent that the Board believes its time has come, they can't overemphasize the importance of public education.

We saw with the example of Smart Metres how public education seemed to be more valuable than the meter. And that's a theme, I think, that my clients think has been highlighted in this Hearing.

The other issue, in terms of inverted rates -- and I'm turning to page 64 -- is really how you balance those issues of equity, economic efficiency, and administrative efficiency, in terms of the design of inverted rates.

I'm not going to belabour this point. But there's really, on the analytical table in this Hearing, three (3) different approaches to inverted rates.

There's a current Manitoba Hydro proceed -- approach, which is one (1) block for all and no seasonal different -- differentiation. Mr. Harper certainly suggested that Hydro might want to look at a seasonal differentiation, which would provide some more protection to those who tended to use more in the winter. That's certainly what Ontario Hydro has done.

And Mr. Chernick suggested differentiation with an all-electric block versus a standard-use block. And we just note at page 64 -- we do note at page 64 -- that NERA looked at -- at these issues. And they preferred the seasonal vagi -- variation, both for reasons of economic efficiency and administrative benefit.

And Mr. Wiens seemed to lean that way as well as, certainly -- although I think he -- he suggested was preliminary, he registered some significant concerns with the going to an all-electric versus the standard approach.

And Mr. Harper as well seems to be, if -- if he was pushed, leaning towards a seasonal approach.

Notwithstanding that brilliant advice from -- from NERA, Mr. Harper and Mr. Wiens -- Mr. Wiens more cautiously -- my clients believe that if the Board, as -- as it looks to the development of inverted rate structure, they really believe that the focus should be on the differentiation between the all-electric block and the standard-use block.

They recognize the administrative difficulties and the efficiency arguments may run the other way. But, from their perspective, the key issue is the vulnerability, the vulnerability of those who rely upon electric heat for their home heating. And they note that the Rand study, which I cited earlier, suggests -- suggests that home heating is highly inelastic for those with no competitive options.

So in the event, as the Board looks at -- at rate design in this area, that's certainly where my clients are leaning in -- in strongly leaning in this --

at this point in time.

At page 66, my -- my clients offer same brief comments about low-income discount programming. And some have suggested -- certainly Mr. Chernick did, and I think Mr. Wiess, as well -- that this is an important vehicle which would allow one to implement either inverted rates highly with a steep incline or a major in -- rate increase and still protect the most vulnerable.

And by "low-income discount program," I'm referring to programs most -- most common in the United States, where target groups -- whether they be based upon income or age or disability -- are offered reduced energy rates in recognition of their -- their disproportionate energy burden.

And at page 66, my clients have pulled through some observations in terms of low income discount programs. The bottom line is my clients are strongly in favour of low-income energy efficiency program -- programming. They're not keen on low-income discount programming, and there's some key reasons why.

One is the track record in the United States. Despite funding of over $4.5 billion in federal and ratepayer assistance, there are simply not enough funds to meet the low-income needs for energy assistance.

And Mr. Wiess noted this in one of his

exhibits -- I believe it was TREE/RCM Exhibit Number 9 -- and Chernick acknowledged this as well. There are certainly many jurisdictions in which additional assistance is required. In fact, evaluation data shows that only one third (1/3) to less than one half (1/2) of the eligible households are being served by these programs in the United States.

And as Chernick admitted and acknowledged, even among good quality affordability programs in the US, there is this gap between those eligible and those actually served.

When you look at re-certification, while most customers remain in need of program assistance, only 40 to 65 percent re-enroll or re-certify. So there's a huge gap between those eligible and those receiving benefits, and even those receiving benefits often fail to re-certify.

My clients are open to further study this issue, but they're uncomfortable with the issue of low-income discount programs. One major reason is the poor record in the United States, in terms of participation.

They're also reluctant to leave low-income consumers divided from other consumers. They feel that while in the short term, under a -- a generous Public Utilities Board, that there may be some short-term

benefits. They wonder about the longer-term impact, and they -- they feel that there's strengths in working towards mutual -- mutually affordable rates for all income levels. And frankly, means -- means testing also leaves my clients uncomfortable.

Page 67 -- and sadly, we had Mr. Dunsky focus on Low-Income Energy Efficiency Programs. Some day it would be nice to get him to come back and look at the whole DSM portfolio of Manitoba Hydro. And we -- we would suggest that -- that perhaps that that's an issue that perhaps wasn't as fully canvassed in this Hearing as it should have -- should have been.

But one of the important debates that we think was rai -- or my clients think was raised in this Hearing is a question of should the regulator high or -- and Hydro be thinking about DSM in a different way?

And, in their own way, three (3) witnesses -- Mr. Bowman, Mr. Chernick and Mr. Dunsky -- all had something important to say about this.

It's all over the record, but they had a really interesting discussion about how we should screen for DSM, Mr. Bowman leaning towards the RIM test, Mr. Chernick and Mr. Dunsky leaning probably towards societal cost testing.

Also an important discussion about non-

energy benefits, and we think it's an important debate. We've traditionally -- certainly, my clients have traditionally looked at DSM on a revenue-neutral basis. But they think that that debate should be opened. And when that debate is open, we should also be looking at non-energy benefits.

So they're recommending either an independent or an internal review of the DSM portfolio with an analysis of screening tests, the portfolio, and the issue of non-energy benefits.

And although it doesn't really fit under DSM, the clients, and certainly Mr. Williams, are quite intrigued with experiments in metering technology. And they certainly think that Hydro should be directed to report back on developments in terms of metering technology. And I put a couple of page references in here, i.e., the utility controlling the thermostats or the Blueline approach.

Mr. Chairman, I probably have about twenty (20) to twenty-five (25) minutes to go. I'm at the Board's convenience.

(BRIEF PAUSE)

THE CHAIRPERSON: We will take the break

now -- we have a reason -- and then we will come back at 1:00, get a bit of an early start. Thank you.

--- Upon recessing at 11:56
--- Upon resuming at 1:05 p.m.

THE CHAIRPERSON: Okay, Mr. Williams, you can continue on with your closing statements whenever you wish.

CONTINUED BY MR. BYRON WILLIAMS

MR. BYRON WILLIAMS: We're -- we're calling it the odyssey, I believe, Mr. Chairman. Page 68 -- there is light at the end of the type -- tunnel.

MR. ROBERT MAYER: Twenty-five (25) minutes, if I recall correctly.

MR. BYRON WILLIAMS: I was going to actually request that the twenty-five (25) minutes be struck from the -- from the record, but I will try and be tight.

I do want to dwell and -- and at -- at the onset of this I've already -- of our presentation on behalf of the Coalition, I've already talked about this.

But I do just want to spend a couple more minutes on efficiency and marginal cost based pricing.

And just to point out an important exhibit, which -- which is Hydro Exhibit Number 80, and it provided the estimated short- term load reduction if marginal rates were applied. And I've given two (2) examples from that exhibit in terms of the load reduction.

You see for residential customers in the short term a relatively modest 1.7 percent, whereas GSL large, greater than 30 kV, in the range of 14 percent. And, again, this -- I've put the explanation there. I think Mr. Wiens helped me with this. It was the -- the difference is due to the relative gap between actual rates and marginal cost based rates and assumed elasticities.

And I -- I hate to disappoint Mr. Wiens, but on pages 69 to 71, I have a -- an extensive discussion of elasticity. And to a certain degree, Mr. Chairman and members of the Board, I've -- I've talked about it already.

On page 70, for example, you see a more thorough sum -- summary of the Rand Corporation report, which is Coalition Exhibit 31. Just towards the bottom of that page, I did want to -- while -- while the -- the study in its entirety, in my view, is quite supportive of the position of the Coalition, there were a couple of caveats that I thought were important to notice.

And one of the things was that the -- the

Rand Corporation said it observed while, you know, the relationship between demand of price was small, there was a need to examine more closely it in an increasing price environment.

But what's interesting on the record of this proceeding is we don't have a lot on the record, in terms of an increasing price environment in the '90s. But there's actually a couple of interesting studies about what happened in the energy price shocks of the 1970s. And It's Bodi and Zimmerman, there's one study, as is Stevens and Adams.

And the -- the point they make is that the -- again the struc -- even the energy price shocks of the 1970s didn't change the structural characteristics of consumer demand. So I think that's an important -- important point.

And, again, with apologies to Mr. Wiens, I'm -- I'm going to move to cost of service issues, which appear at page 72 and 73, which is not out of haste. But I believe the points on elasticity have been made previously.

And, again, cost of service issue, I didn't re-state the question. But the question I had asked originally as part of the core issues is, How do we best achieve fairness among ratepayers? Does the subject of

fairness include consideration of how the consumption activities of one class affects the bills of all consumers?

And to provide some context, we start at page 73 on behalf of the Coalition. And there's four (4) or five (5) important trends that we wish to make on behalf of our clients.

One is the changing face of consumption, and I went through this discussion, again, with Mr. Wiens. If you go back twenty (20) years, when I was a Brandon University graduate, you can see that at that point in time, if you were comparing residential customers to the general service top customers -- annual consumption, in terms of gigawatt hours -- residential customers were really significantly ahead of general service top customers.

Today, or 2006/'07, yesterday, the second line on this changing face of consumption table, you see that we're very close to a crossover point where residential consumption has increased, but much more modestly than general service top customers.

And it's expected, as the first bullet underneath indicates, that by 2009/'10, top customer annual sales are projected to exceed residential.

And projecting out into the forecast about

a decade, eleven (11) years, we see in 2017/2018, the forecast is for general service top customers -- be a fairly significant amount above general residential customers.

So, again, a marked change in terms of who is making demands. Both demand -- demand from both classes is growing, but one is growing at a much faster pace.

What else is going on in the marketplace? And if you -- under "B" on page 73, we -- we start to look at the issue of how the consumption activities of one class of consumers may affect the bill of all customers.

And for the Board's reference, the very first page of the exhibit -- the other document, Mr. Chairman -- that's also is a helpful graphic description of what we're discussing. That's Exhibit Manitoba Hydro 86.

And a simple point we're making, for the purposes of context, is when we look at average export prices, we find them -- and if we're comparing large industrial rates versus lower than -- than residential rates, we see that average export prices tend to be higher than larger industrial rates and lower than residential rates. And that's graphically depicted on Exhibit Manitoba Hydro 86. The blue bar rising vertically are US

and Canadian exports, the average price.

The blue -- the blue line is general service large. You see that it's at or in the range of between three (3) and four (4) cents.

And the red line -- the line above the average export prices -- are residential customers.

And Mr. Peters went through this a fair degree in his conversation in -- in cross-examination with Manitoba Hydro.

To similar effect -- and I won't dwell on it -- if you turn to the top of page 74, again you see that average import prices tend to be higher than large industrial rates and tend to be lower than residential rates. Again, and I won't dwell on those points, the -- I've put in the citations from the records where -- where that information appears.

A third important contextual factor when we start to look at fairness among ratepayers and -- and the issue of whether or not differential rate increases might be mandated lies in the relative proximity to marginal costs.

And by Manitoba Hydro's calculations, certainly the Coalition might take issue with Manitoba Hydro's calculation of long-run marginal costs, but they don't take issue with the conclusion of Manitoba Hydro

that residential rates are closer to marginal costs than those of large industrials.

And you see that on that table. It appeared on the middle of page 74, the current rate for residential of six (6) cents per kilowatt hour versus a -- the estimated long-run marginal cost of seven point six (7.6). Whereas you see for GSL large greater than 30 kV, they're about a little bit less than half of the long run -- the estimated long-run marginal cost.

What else is going on in the market place? Well, we -- if we look to the -- towards the future where pressure on the -- where pressure on the -- on load growth is appearing, we see that load growth for elec -- electric -- electricity-intensive industry for the next five (5) years is expected to amount to 57 percent of total load growth.

And Hydro's conclusion, one in which the Coalition shares, is that large energy-intensive industry is being attracted to Manitoba on a scale that's large enough to threaten the Corporation's revenue position.

In the short term, we see that impact as load being diverted from the export market. In the long term, that impact is load being diverted from the export market, also with the implications of advancing costs in terms of new generation transmission.

And, certainly, that's a -- a concern which the Coalition understands the Minister of Hydro speaking to in MIPUG Exhibit Number 12, and the concern that increase consumption of low priced energy may displace higher value export sales and lead to higher bills for all domestic customers.

And certainly the clients think that as -- as one looks at the issue of cost of service, the allocation of costs amongst classes, that issue of fairness to other consumers is underlined by -- by this analysis.

The other point -- and Mr. Wiens made this more eloquently than -- than I would ever attempt to -- when you look at what type of load is most susceptible to rates below market rates, energy-intensive industry is more influenced than other industry and more influenced than other classes by the price of electricity.

Mr. Chairman and Members of the Board, just in terms of the exhibits -- the handout of exhibits, I'll be directing your attention to in the top right-hand corner, Coalition 28, in the next couple of minutes. That's about in the middle of the -- of the exhibits.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: And the point that we want to underline on behalf of our clients, at page 76 of the outline, is the different conceptions of equity that are at play in this proceeding.

Mr. Wiens again des -- described a fairness to mean as a principle that equal customers should be treated equally in terms of assignment of costs and unequals unequally.

And historically, embedded costs have been used to define fairness. Embedded costs is captured in the -- the cost of service studies, traditionally. And the test is, we would suggest, are, are individual customers paying their fair share of the costs incurred in the past of -- of the costs incurred in the cas -- in the past being used to service today's customers?

So that's one definition of "fairness," and it's one that's traditionally been used by the Board and certainly MIPUG advocates very strongly for continued, almost exclusive, application of that definition of "fairness."

But in the past Board orders, there's been a sense that when we look at fairness, when we look at an equitable allocation of costs, we should be taking into account other considerations: pre-export costs of service based on embedded costs; perhaps more importantly,

marginal costs.

And Mr. Wiens acknowledges that while we do tend to look at the past, is also true that one can look at any kilowatt hour and say it is a marginal kilowatt hour as well.

And some jurisdictions -- notably New York, California, Oregon -- are using a different test to define fairness. They are looking to something I'll describe as "the equal proportion of marginal costs." And they -- they, for that purpose, they look at the costs that the current customer's consumption decisions will lead to in the future. And what does Mr. Wiens say about this? Well, he says that there's a case to be made, that you need to give it some weight -- this idea of marginal costs -- when you've got the type of divergence between embedded and marginal costs that were seen in this jurisdiction today.

What we've done in COALITION-28 is attempt to articulate some of these different concepts of equity. And we -- we've captured, I believe, on behalf of our clients, all but one (1) on here, and I'll address that in a second. In the -- in the second column, you see the revenue costs coverage ratio, assuming no exports. You see the total is about seventy-five (75) -- on average, it's seventy-five point one (75.1).

And you see that there's a fairly close relationship using -- leaving aside Mr. Buhr, and he really is the outlier in all of this analysis. But leaving aside Mr. Buhr and wishing him a happy retirement, we -- you see the -- the difference, assuming no exports between residential and GSL large greater than 100 kV is really quite -- quite modest.

Now once you throw exports into the traditional, looking backwards, embedded costs perspective, then you get to the third column. And, again, comparing residential versus GSL large, you see that residential is still within the zone of reasonableness.

But you can understand the disquiet with which MIPUG's clients look at the embedded Cost of Service Study and say, Well perhaps we're paying too much, and perhaps GSL large less than 30 kV should be paying a bit more.

Now Hydro has expressed some discomfort with the -- what they interpret to be the Board-approved cost of service methodology and their preferred method -- methodology is captured in the fourth column, COALITION 1-59.

And, again, you see a relatively -- looking at residential and GSL greater than 100 kV relatively

close relationship. So that's looking back. That's looking using one perspective on fairness.

Well, let's look forward. And really what we've done in the last two columns here is take the results from Manitoba Hydro Exhibit 68 and normalising them -- normalize them.

And then, on a forward-looking basis -- on a normalized, forward-looking basis, one gets a very different perspective on fairness, taking again, GSL large greater than 100 kV, at zero point eight one five (0.815) versus residential one point one zero (1.10).

So the question becomes, What does one do with these different conceptions of equity? What weight does one accord to them? Are these reliable ways of looking at the issue? And I'm going to skip over page 77, because I think I've -- I've dealt with that. And I'm actually going to go to page 80 and then come back to pages 79 and 70 -- 78 and 79.

So leaving, again, aside the area and roadway lighting, one of the issues raised in this Hearing is, given the embedded costs of service results, should we be seeking and applying differential rate increases? Certainly that was raised by Board counsel in cross-examination. Certainly, it was been raised in the evidence of MIPUG. That information's before the Board.

What we want to concentrate on on page 80 is what, first of all, Mr. Harper says. And what Mr. Harper says is that certainly weight should be given to the embedded Cost of Service Study, significant weight. But the PUB should be aware that other factors, such as pre-export allocation and marginal costs, can yield significantly different results.

Hydro has a -- a similar position to Mr. Harper. It says it's premature to differentiate among classes. And one of the key reasons they cite is that when you take a marginal cost perspective, that might provide a very different set of recommendations when it comes to differential rate increases. And going back to Coalition Exhibit Number 28, that's the best illustration of Hydro's point in the respectful view of the Coalition.

If one looks at the PUB embedded Cost of Service Study, that would suggest that GSL large might be looking at a -- a slight -- a slightly lower rate increase relative to other classes.

Going to the normalized efficiency or marginal cost perspective in the far right-hand column, that suggests that GSL large perhaps should be experiencing a higher than average rate increase.

So these are the mixed messages. And -- and for that reason our clients, with the exception of

roadway lighting, reject the differential rate increase.

They think that while significant weight should be given to the embedded Cost of Service approach, there is legitimacy to giving weight to other factors, such as pre-export allocation and marginal -- marginal costs. And those factors certainly yield a -- a different result.

Just flipping back very quickly to pages 78 and 79 of the Coalition submission, Man -- the Manitoba -- the expert witnesses for MIPUG took issue with Manitoba Hydro and -- and the Coalition's approach to the marginal cost perspective and suggested a -- a different approach, in terms of calculating marginal costs in Exhibit Number 15.

And no one asked Mr. Harper the question of whether he preferred the -- the COALITION-28 approach or the -- the MIPUG approach. And that's unfortunate, because I think he had a valuable answer. But I've certainly set out, in pages 78 and 79, an analysis of -- of which approach is correct. And given my time commitments and also my fatigue, the Board can read that at its leisure.

But if the Board wants to look at the implication of using a marginal cost-based Cost of Service in -- in the view of the Coalition, it should not use the

results of MIPUG-15. And the results portrayed in COALITION-28 are -- are much more reliable.

And the primary reason is that the MIPUG approach distorts its results by forcing reconciliation to an embedded cost approach of an in -- individual function basis. And without belabouring this point, it's discussed at some detail on pages 78 and 79 of the outline.

Again just a -- a few small notes going on through page 81. The Coalition thinks it's also important when we look at marginal costs to recognize that Hydro's marginal cost analysis may overstate the local distribution and customer costs, and that's discussed on this page.

And to the extent that that -- that Hydro is in error, these errors would be disproportionally borne by the residential class, general service small and to a lesser extent, medium. So that's an important point the Coalition thought was a -- that should be made.

Finally on page 82, the residential monthly charge, this is a bit of a difficult one. Certainly, the Coalition recognizes that customer-related costs are a legitimate cost.

What -- what they're softly recommending to the Board is on the fourth bullet there. Given the other rate design issues, perhaps the basic monthly charge --

the basic monthly charge should be focussed on recovering a percentage of the customer costs, excluding customer-related distribution flat costs. And I've elaborated on that briefly there.

Two (2) final points on pages 80 -- well, one (1) -- one (1) of my two (2) final points on page 83, Mr. Chernick has raised a very valid point about marginal cost estimates and the lack of transparency in -- in which they're currently calculated. And we think that the experience that he's drawn upon from other jurisdictions is valuable.

And that might be something that the Board might want to look at, is prior to the next general rate hearing, sending the parties away to -- to see if they can come up, perhaps with the assistance of Board counsel, with some way to discuss ways to address Intervenors' concerns with transparency and being able to test marginal cost analysis and reconcile that with the Corporation's concerns -- legitimate concerns -- in terms of commercial information.

Certainly, it seems to be possible in other jurisdictions, and that's something that -- that would be helpful for future regulation of the Corporation.

On page 84 and 85, one brief comment about rates for new and expanded industrial load. There's a new

-- our assumption, on behalf of the Coalition, is that there's a new hearing pending. We look forward to that on behalf of our clients.

But at the bottom of page 84, we do raise some comments or concerns in terms of the dispute resolution process as proposed in the existing Manitoba Hydro application.

And, as we understood it, in the event that there was am -- a dispute between -- in terms of baseline or exemption between Hydro and a company, that dispute would -- would come before the Public Utilities Board. But in the event that there was an exemption, it wasn't contemplated that that would be -- come before the Public Utilities Board or be testable in -- in some sort of public forum.

And that's an important transparency issue from the perspective of my clients, because to the extent that exemptions are granted, they will put upward pressure on other customer bills. So when Manitoba Hydro comes back -- so when Manitoba Hydro comes back with its new proposal, my clients are certainly hoping to see that addressed.

Mr. Chairman, I believe I've gone through the recommendations of the Coalition which appear at pages 86 and 87 in their sum. We don't answer the 31 questions

posed by the Board, but I think -- I'm fairly confident that this addresses the recommendations that -- that have appeared before the Board. And subject to any questions by the Board, these are the submissions of the Coalition.

THE CHAIRPERSON: Thank you very much, Mr. Williams.

Mr. Peters, I imagine there will be no difficulty having the whole brief put on the record? Because on some elements, he just skipped over and referred to it.

MR. BOB PETERS: I will canvass that at the break and report back. But I think if we have it electronically from Mr. Williams' office, we can work with it.

THE CHAIRPERSON: Very good. Thank you. Thank you again, Mr. Williams.

MR. ROBERT MAYER: Just one question before you leave, Byron.

On the -- on that last issue that you raised, on the issue of exemptions, do I read into this that you are suggesting that should any other potential Intervenors challenge an exemption, they should be able to bring that forward as well?

MR. BYRON WILLIAMS: Mr. Chairman, I'm not sure that -- or Mr. Vice Chair, I'm not sure that I, on

behalf of the clients, had -- had gone that far down the path.

What we were raising was the fact that these exemptions can have -- there's two (2) issues with these exemptions. One is some other industry players may feel that they're treated unfairly. Also, other interested parties -- other consumer groups -- may feel that -- that there's been a backdoor deal or some unfair process by which this exemption has been granted, which has put pressure on rates.

And so, from that perspective, we're flagging the concern that certainly one -- one might want to at least have regulatory approval or consideration of these exemptions.

And I apologize I'm -- if I'm dodging. It's because I -- I was really focussing on behalf of the clients on the other consumers rather than the -- than other industrial players. So we're -- we're hoping -- we don't have a recommendation. We're hoping Hydro addresses its mind to it.

MR. ROBERT MAYER: Mr. Williams, the Board has -- this panel, in any event -- has similar concerns. We were, I think, some of us looking for a recommendation in this regard.

And I take it that that might have to wait

for another day?

MR. BYRON WILLIAMS: Mr. Chairman or Mr. Vice Chair, and with permission of the Board, I -- I can chat with my clients about this. And if -- if they have some more specific thoughts, if other parties don't object, we would put those in writing by tomorrow, if -- if that's helpful. I'm not sure I'll get instructions, but if I do, we'd be pleased to do that.

(COALITION SUMMARY INSERTED BELOW)

Outline of the Closing Argument of the Coalition
May 21, 2008
The Coalition

Consumers Association
spectrum of consumers
different levels of income
working or fixed

Society of Seniors
spectrum
many on fixed incomes
many still in labour force

Winnipeg Harvest
serve many low income people
some on assistance, EI or disability,
many working poor

Collectively a broad perspective
balancing act
fairness in the marketplace
affordability
sustainability
Not just persons in the way

Chernick (2973) (didn't want to see some percentage or some fraction of low income customers "getting in the way" of the implementation of inverted rates)

repeated elsewhere on transcript
Clients do not consider themselves an obstacle to progress

Share many of the same goals and outlooks as others in the proceeding (TREE/RCM, MKO, Hydro, MIPUG)

sustainability
value of price signals
importance of a stable, self sustaining Manitoba Hydro to

the Province of Manitoba
value of affordable, high quality service

Where the Coalition perhaps differs from other organizations

perhaps greater focus on the reality and current stresses on consumers in the marketplace

perhaps more nuanced approach to the complexities of human behaviour with somewhat less emphasis on price signals as a path to efficiency

Consumers in the Marketplace of 2008

Household Financial Distress
. . . growing inequality of disposable family income over the last twenty years . .. the bottom four deciles (40%) of households have noted no improvement in their real after-inflation disposable income over this period . . (PUB Order No. 39/08, p. 48)

While the incomes of the poor have not risen in real terms, the cost of living has. House prices have risen dramatically, leading to reduced levels of home ownership

and increasingly higher rent levels. The disposable income of “poorer” households has been pressured not only by rising occupancy costs but also energy pricing – transportation and household, water rates, bus fares, cigarettes and food. (PUB Order No. 39/08,49)

Another indication of household financial distress is the annual level of natural gas disconnections in Winnipeg and Brandon residences. In recent years, between 5,000 and 9,000 households have had their services disconnected as a result of delinquency. (PUB Order No. 39/08,50)

Residential Electric Disconnections 2007/08 (MH Exhibit 81)

Winnipeg	Rural	Total
6428	2512	8940

The Importance of Tenants in the Marketplace

The Manitoba Housing Marketplace – Tenure (Coalition 5)

All housing tenures	Owned	Rented	Band
448,780	309,300 (68.9%)	127,895 (28.5)	11,585

(2.6%)

(Excluding duplex apartments, 97,745 apartment units or 21.8% of the marketplace)

The Economic Disadvantage of Renters

The Manitoba Housing Marketplace – Average and Median Income (Coalition 5)

Average Household Income($)			Median Household Incomes		
All	Owned	Rented	All	Owned	Rented
51,568	61,594	29,727	42,419	53,188	23,583

Housing Affordability Challenges for Many Renters and Homeowners

The Manitoba Housing Marketplace – Affordability (Coalition 5)

Tenant-Occupied households spending 30% or more of household income on shelter

Winnipeg	37.8
Rest of Manitoba	34.7

Owner occupied households spending 30% or more of

household income on shelter

Winnipeg 11.6
Rest of Manitoba 10.8

Energy Affordability Challenges

*energy bills are still unaffordable for many customers due to the weather, poor housing and a substantial amount of low income customers (RCM/TREE 8)

All Electric Homes are Increasingly First Nation Homes (2006 Load Forecast, p. 14)

> most new homes in rural areas installed electric water and space heat (2312)
>
> many of the new all-electric homes are being built in First Nation communities that do not have access to natural gas (2312)

First Nation homes on reserve have a disproportionate percentage of low income persons

> disproportionate amount of low income persons

(1006)

A Low Income Context to Inverted Rates

as a consequence of the inverted rate proposal, those using 1500 KwH a month (18,000 KwH per year) on average will tend to see their rates rise more than average (3711)

22% of those earning less than than $30,000 are consuming more than 18,000 kW.h annually (1002)

most of these are all electric customers (1002)

Residential rate increases over the past few years tend to effect those who consume more (Coalition 32)

Assumed Monthly Consumption(KwH)	April 2004	March 2007	2008 (p)
800	100	108.7	111.2
1,000	100	109.3	112.1
1,200	100	109.7	112.7
1,500	100	110.2	113.4

The Complexity of Consumer Behaviour

Kuczek
It's a complex matter to predict and affect consumer behaviour (Kuczek) (893)
Different Schools of Thought:
* neoclassical – armed with perfect behaviour in a perfectly competitive market, consumers will tend to act in a rational manner that maximizes their self interest; (894 Kuczek)

* New Keynesyian – we can't understand consumer behaviour unless we understand deeper societal or contextual issues such as poverty, inequality in information, inequality in market power (895) Kuczek

In the real world – consumer behaviour does not perfectly accord with consumer theory (896 – Kuczek)

To similar effect, Chernick
spoke of the Complexity of Human Behaviour (2926)

behaviour in theory and behaviour in practice may not move in the same direction (2927)

candid discussion (Coalition Exhibits 33 – 35)

there's some people who basically only pay attention to the size of the cheque (2936) – Chernick

if these customers are on the budget, they may miss the efficiency signal of inverted rates (2938)

if all of your residential customers were economists, you could do things very differently (2938)

Appropriate Price Signals do not necessarily achieve efficiency

Chernick - many economic signals in terms of energy use are difficult for consumers to respond to without some assistance – there are a lot of barriers (2929)

Dunsky - There are many barriers in the marketplace that lead to very energy- inefficient decisions and investment decisions in the market (3656)

12 Barriers to Efficiency (Dunsky slide 4)

* Information and search costs
* Performance uncertainty
* Transaction and hassle costs
* Access to capital
* Organizational practice and customs
* Split or displaced incentives
* Unavailability of products and services
* Bounded rationality
* Hidden costs and benefits
* Aggregated attributes
* Average Cost Pricing
* Externalities

Price Signals, Energy Efficiency and Inelastic Demand

unfortunate no one asked Dunsky about elasticity of demand in the context of residential, commercial and industrial usage

Wiens

> economic theory suggests that consumers' demand for energy is less sensitive to price change than the demand from other commodities (2358)

when one goes from the short term to the longer term the elasticity numbers will go up

"But typically, the general consensus, the conventional wisdom, is that they're still going to be inelastic. You're still not going to get a response to price that is, in terms of the quantity demanded, that is as great as the change in price." (2364)

Rand Corporation (2006) (see Coalition 31)

a) methodology

(30 year literature review) (state-level panel data on residential and commercial electricity consumption and residential natural gas consumption 48 contiguous US states) (residential data 1977 to 2004) (13)

b) key conclusions

* the relationship between demand and price is small (xi)
* demand is relatively inelastic to price (xi)
* in the past 20 years, this relationship has not changed significantly (xi)

Class (23)	Short Run Elasticity	Long Run Elasticity
res elec	-.24	-.32
com elec	-.21	-.97

* locations where particular energy uses are very valuable such as air condition in southern states or winter heating in northern states could have price elasticity smaller in absolute magnitude because air conditioning and heating are so so valuable during periods of extreme climate that consumers are unwilling to change their use when prices change (p. 7) (2437)

Household Electricity Demand Revisited, 2005 (Excerpt Coalition 32), Reiss and White

extensive data representative sample of 1300 California households (res), 1993 and 1997 data - study the likely effects of controversial new tariff in California following electricity supply crisis in 2000 - 2001

most households will alter their electricity consumption very little in response to a price change (870)

a small fraction are energy demanders (1/8) and would react with large changes

Not to say price signals are not important

while still relatively inelastic, commercial, industrial more price elastic (Wiens)(2360)

and in particular large energy intensive industries significantly higher elasticity (Wiens 2363)

although quite inelastic, residential consumer recognize value of price signals -some residential uses will have virtually zero while some will have relatively higher usages (Wiens 2363)

but from an efficiency perspective price signals far from a magic bullet

Coalition will argue - much more to be gained by removing barriers – raising awareness - than by dramatic price change

Not just another rate hearing

* Appear to be on the cusp of a major expansionary agenda ($13 or $14 Billion)

* Push for expansion – comes at the same time – sobering experience of Wuskwatim

dramatically higher costs

impact declining US dollar

significant downward revision to Internal Rate of Return (Hydro 56)

* Push for expansion – comes at the same time – significant expenditures new building – Wuskwatim are placing upwards pressure on rates

* Causing residential consumers to look with perhaps a far more agnostic/jaundiced eye than in 200203 on major capital projects aimed at the export market

* Real risk that in the rush to expand – in the rush to do glamorous big things – we will overlook – the less glamorous but just as important other things

addressing multiple barriers to efficiency

ensuring that all Manitobans including

tenants and low income persons have the opportunity to fully benefit from energy efficiency programming

bringing more discipline to O, M and A expenditures

more rigour to the corporation's approach to sustaining capital expenditures

* Important to get the fundamentals in place before we address complex questions posed by massive capital expansion focused in large degree on export market

Core Issues

* Has the Corporation met its onus of justifying the rate increase sought?

Is the rate increase too much? too little? or just right?

* What is the experience of Wuskwatim? Are there lessons to be learned as we look to a decade of major capital expansion?

* Can we improve the regulatory process in order to assist intervenors, the regulator, the utility and consumers as a whole? With reference to the rate setting process, should we continue to rely on the Corporation's current debt/equity target?

* Is the Corporation getting optimal bang for the buck when it comes to energy efficiency? What is the optimal way to reduce barriers to energy efficiency for all consumers including tenants and low income people? Has the time come for inverted rates for residential customers?

* How do we best achieve fairness among rate payers? Does the subject of fairness include consideration of how the consumption activities of one class of consumers affect the bills of all consumers? Are differential rate increases justified in the current proceeding?

The Public Policy Context

Other key contextual elements

* legislative objectives
* statements by Minister
* promises or commitments by Hydro

The Manitoba Hydro Act

2 The purposes and objects of this Act are to provide for the continuance of a supply of power adequate for the needs of the province, and to engage in and to promote economy and efficiency in the development, generation, transmission, distribution, supply and end-use of power ...

The Minister's Letter of February 19, 2008 (MIPUG 12)

Manitoba Hydro's proposed approach is intended to balance the need to support economic growth in Manitoba along with minimizing upward rate pressure on all Manitoba Hydro customers.

I share Manitoba Hydro's concern that increased concentrated consumption of low priced energy may displace higher value export sales opportunities and thereby lead to higher bills for all domestic (residential, commercial and industrial) customers as well as inhibit global greenhouse gas emission reductions.

I trust that Manitoba Hydro has explained that existing

loads will be completely unaffected, and continue to enjoy among the lowest electricity rates in North America

see Coalition 38, MH 75

CEC Proceedings Regarding Wuskwatim

* Hydro

> Temporary increases to the Corporation's debt/equity ratio and decreases to the level of interest coverage which may occur in the early years of the project are judged to be manageable without impacting the Corporation's financial stability or requiring offsetting increases to domestic rates. (3430)

* The CEC

> The Commission's support for the project is contingent on Manitoba Hydro being able to maintain its commitment that domestic ratepayers will not experience rate increases as a result of the projects (3431)

The New Corporate Head Office

* Centra

Centra estimated that overall cost impact of the new head office would be $21 million per annum, to be offset by lease payment savings of $5 million and annual productivity savings projected to be in the range of $20 million annually (Board Order 99/07, 40)

The Merits of the Rate Increase

Has the Corporation met its onus of justifying the rate increase sought?

Is the rate increase too much? too little? or just right?

The Regulator's Dilemma - Reconciling Competing Pulls on the Revenue Requirement (Coalition 39)

providing less than sought after rate increases may potentially delay achievement of enhanced reserves (3420)

regulator also may be concerned about:

the impact on rates of pending major capital expenditures

the implementation of international accounting standards and its affect on rates (see 818 – 822, 1779, 3211 – 3214)

But providing the sought after rate increase or more than sought after rate increases may be seen as implicitly endorsing excessive expenditures (3420)

simple continued result of higher domestic rate levels doesn't provide us with any real assurance of actual improvements in retained earnings (3421)

Coalition's perspective

cannot effectively admonish for expenses while allowing Corporation to ramp up ate increases at or above requested amount

Coalition's recommendation in this proceeding

– identify concern with expenditure control

- reinforce that concern through less than sought after rate increase

Not a rejection of the legitimacy of concerns about

> the impact on rates of pending major capital expenditures
>
> (but impact will not be in IFF for 2008/09) (Harper, 3638)
>
> the implementation of international accounting standards (see pages 818 – 822, 1779, 3211 – 3214)
>
> (IFRS becomes the new GAAP after January 1, 2001)
>
> (May have significant impact on rates)
>
> (Corporation is researching issue)
>
> (Corporation's position - premature to reach any conclusions about impact of IFRS on Hydro's financial statements)

In the long run, only effective way to send a signal

about cost control is through revenue requirement

This is the year to do it given extra $35 M due to positive results 07/08 (3622)

Still leaves option for the Corporation to come in next year 2009/10

demonstrate improvement in cost control

seek increase in revenue requirement once:

i) as new capital expenses hit rate base
ii) more certainty about impact IFRS

In Analyzing the Merits of the Rate Increase

Key Questions:

* Does O, M and A matter?

* Has Hydro done what it said it would do to improve corporate financial strength?

* In terms of managing alleged key cost drivers such as

aging infrastructure, has Hydro demonstrated that it employs appropriate tools at the Corporate level?

* Is Hydro able to document the effect on the 2008/09 OM & A of alleged key cost drivers such as aging infrastructure?

* In non GRA years, has Hydro met its O, M and A financial targets as set out in the strategic plan? Does the strategic plan matter?

* Has Hydro established the reasonableness of its rate increase for the period in question?

Does O, M and A Matter?

OM and A is one of the Big Two

expenses electric $1.45 B (1080)

slightly over half finance and O, M and A (1080-81)

i) finance expense - $426 M (1080)
ii) O, M and A - $360 M (1080)

Watching the pennies (Harper)

* not administrivia – 3637 (not administriva to consumers)

* one has to watch the pennies and the dollars will look after themselves (3638)

Divergence between forecasts and results undermines achievement of financial targets (Bowman)

* systematic increases and OM&A spending have been a consistent and compounding reason underlying the failure to achieve the debt/equity target (3394-5) (Bowman)

* divergence between forecast and results and upward trend in OM&A costs since about 2003/04 (3398)

IFF05-1

forecast cost per customers 08/09 $338 (3393)

IFF07-1

forecast cost per customers 08/09 $360 (3393)

* negative trend threatens to undermine achievement of financial targets

Has Hydro done what it said it would do to improve corporate financial strength?

Harper concerns about productivity initiatives that Hydro says it is starting but not following through on (3637) (3640)

2005/06 CSP

> one of four strategies was to benchmark key corporate processes against other recognized leaders (1082)

but

> No formal process benchmarking has been undertaken on a corporate level (1082) (Coalition II-43 a)

2007/08 CSP

Develop corporate and business unit performance measures (1083)

but

With respect to a specific strategy to develop Corporate and business unit performance measures, the terms of reference and/or work plans have not yet been developed? (1083) (Coalition I-8)

It is a matter of priorities

Mr. Warden (pp. 1084)

"It is a matter of priorities."

Exactly the Concern of the Coalition

The Head Office and the Disappearing Productivity Dividend

Centra

Centra estimated that overall cost impact of the new head office would be $21 million per annum, to be offset by

lease payment savings of $5 million and annual productivity savings projected to be in the range of $20 million annually (Board Order 99/07, 40)

Hydro on the head office

$22.8 M is incremental for first year alone (1184)

Annualized impact is $18.75 million (1184)

Harper on the Head Office

-productivity attributed to head office (3641) included reduction of roughly 200 hundred staff - now that number is well below a hundred (3641)

there appears to be no increase assumed in productivity savings in the short term due to the head office over and above what has historically been achieved (3641)

not the 10% originally talked about - not the 2 to 3% identified in earlier studies (3641)

I don't have an estimate (Hydro)

"I don't have an estimate no"

Hydro:

no estimate of the number of positions that are not being filled in anticipation of synergies with the new building (1165)

not able to provide a reliable estimate in terms of the EFTs for the 2007/08 year that might be held off because of the new building (1168)

unable to provide a reliable estimate of the number of EFTs that will not have to be filled as a result of the new building (1168)

No Confidence in productivity savings of $20 million

To make the new building totally cost-neutral, if we're going to achieve these savings solely through – reduction in numbers of employees, it would be close to a 10 percent productivity

increase (1169) – 200 employees

there is some doubt in your mind that you will be able to achieve these savings (1171)

"I really can't say with confidence that we will" (1171)

What savings does hydro now claim

the forecast 1 percent productivity saving related to the labour cost component of OM&A for 2008/09 implicitly includes the new headquarters. (1189)

apart from lease costs and the reality that OM&A productivity is built into the 2008/098 forecast, there are no other downward revisions to OM&A costs that you can relate to the new headquarters (1192)

there are no other downward revisions – in facts there may be a temporary increase in costs – there could . . . be some increases in costs which we have not factored into the forecast (1193)

The total facilities related savings expected as a result of the move to the new head office is $7 million. (includes $5.3 mil to landlords $3.6 m lease, $0.9 M taxes, 0.8 M common costs) (the balance represents internally incurred costs or payments to contractors and others) (MH Exhibit 37)

The Logical Conclusion

conservative assumption

annualized cost impact is $18.75 million (1184)

alleged facilities related savings - $7 million

alleged productivity savings - MH states that it is holding back filling some positions in expectation of the move to the new head office. Of the 200 vacancies that currently exist, MH states that 125-150 are

due to difficulty in filling positions. This would suggest that no more than 75 are being held back due to the new head office and the number could be lower (Ex. #36).

At $80,000 per employees (labour and benefits per EFT) (TR 1175) this would translate into a reduction of no more than $6 M (at $1000,000 per employee (all in) this would translate into a reduction of no more than $7.5 M)

Conservatively the annualized incremental cost of the New Headquarters to ratepayers would appear to be at least $4.25 M annually

$18.75 - ($7 m) – ($7.5M) = $4.25 M

In terms of managing alleged key cost drivers such as aging infrastructures, has Hydro demonstrated that it employs appropriate tools at the Corporate level?

Common Industry Practices

* Asset Condition Assessments (3625)

common place in Ontario regulatory experience – big and small utilities (3628)

common place in the industry – see the Best Practices Exhibit Coalition (12 or 13 – check)

* what they are

snapshot of utility's assets noting degree of degradation and need for rehabilitation and replacement (frequently done by external party in association with utility)(3625)

external party helps utility pull together on a systematic and organized basis into an overall comprehensive assessment (3225-26)

allows work to be prioritized across the entire asset base (3226)

i.e. Hydro One with the assistance of an independent third party prepares asset condition assessments that are reviewed by its regulator (1144)

High Value/High Risk

Moderate Value/High Risk

Low Value/Low Risk

also allows one to identify areas where there are information gaps (3227)

* how regulators use them

requires utility to demonstrate it has a sound planning process (3630)

substantiates need year over year

* done every 2 to 3 years

allows regulator to get a sense of whether the overall state of the nation is improving or getting worse (3627)

How Hydro Addresses Aging Infrastructure (1135 – 1152)

Inferences which may be drawn

no independent review within the last four year of industry best practices with regard to asset condition assessments (1151/1152)

in terms of managing aging infrastructure - a strategy document for the overall operation does not exist (1135/36, Coalition I-36 c)

priorities and budgets are set at the divisional level then reviewed at a highly summarized level at the executive level (1149 – 1150)

no independent consultants to assist in the process or to review the process (1151)

no formal company wide asset condition assessment provided (1146, Coalition II-52 a)

no company wide asset condition assessment exists (1147)

there's no overarching corporate strategy

documents which pulls together the asset condition assessments from each department in terms of their ranking and value (1151)

Not all of our systems are state of the Art (Warden) (p. 1154)

AMPS – main tool used to plan and schedule maintenance tasks and inspections

- less than state of the art - (pp. 1153)

CAMELOT – used to record and prioritize portfolio of potential projects in the area of power supply due for replacement (1154)

The Intergroup Comments

* concern no consistent top-down test in place for managing replacements and incremental expansions to the existing system (3407 -08)

* not satisfied with how Hydro employs capital coverage ratio (3409)

* may wish to consider

BC sustaining capital ratio (3409)

NFLD depreciation balance test (3410)

Is Hydro able to document the effect on the 2008/09 OM & A of alleged key cost drivers such as aging infrastructure?

Harper's General Comments

* Hydro has made general references to cost drivers such as aging assets and the need to meet increased customer demand – however, no clear link has been provided between these cost drivers and the changes in costs (Harper – 3632)

* I hear every utility say their assets are aging – their assets have been aging since the year they were first built (3644)

* Have to establish what's unique about this particular period in terms of the state of the assets) (need to do more to establish work requirements than just say you're

older) (3644)

Hydro agrees that age by itself is certainly not the only factor

Derksen (1117)

“Age, by itself, is certainly not the only factor in spending requirements”

look at:

customer requests and growth patterns

the assets' condition

the assets' performance (including failure rate)

employee and public safety

manufacturers recommendations

balancing issues related to costs and revenue

But where's the substantiation

Attempts to assist Manitoba Hydro?

Attempt 1

Coalition I-36

(1119) the segregation of operating and administrative expenses associated with maintaining and sustaining existing assets is not readily available

Attempt 2

PUB II-28 OM&A cost and staff EFT increases by rehabilitation requirements and ongoing OM&A

(1120) hydro not able to divide the information between rehabilitation and ongoing OM&A

Attempt 3

Cross pages 1121 – Aging Infrastructure as a Cost Driver (PUB I-20)

suggestion aging infrastructure is causing pressure on staffing levels (1114)

3 major areas for staffing increases

power supply, transmission and distribution and customer service and marketing (1114 approx)

BUT

2008/09 Increases of EFTs that are Required to Meet Operating and Maintenance Requirements and are charged to O&A Expense (Exhibit 35)

Division	2008/09 Forecast
Power Supply	4
Transmission & Distribution	2
Customer Service and Marketing	2

* If I was looking and focusing exclusively on the transition from 07/08 til 08/09, I wouldn't see a lot of growth in EFTS relating to aging infrastructure in that particular year (p. 1131 Derksen)

We're not seeing a lot of growth in 08/09 with regard to transmission and distribution (1132 Derksen)

* note – may explain some cost pressures not an explanation of deviations from forecast (it is not something that suddenly erupted for Hydro or indeed for any other utility) (i.e. 1115 – PUB II-28) most North American utility assets have ages in excess of 30 years (1115)

In non GRA years, has Hydro met its financial targets in terms of O, M and A?

OM and A Per Customer
(Exhibit Coalition 10)

Year	CSP Target	Actual	Actual Higher or Lower
2004/05	$584	$$591	actual higher than target
2005/06	$600	$609	actual higher than target
2006/07	$612	$626	actual higher than target

So what if the strategic target plans are not met? Does the Corporate Strategic Plan Matter?

Warden – re corporate strategic plan

serves as broad planning outline and as a means for the Corporation to evaluate itself against the key target measures (900)

sets out key goals of the Corporation (899)

with regard to each goal, it identities measures and associated targets by which it will determine its progress towards achieving those goals (899)

identifies measures or strategies by which it will work towards achieving those targets (900)

to the extent the corporation does not reach its target it may wish to reflect upon its strategies and execution of those strategies in order to improve (900)

Has Hydro established the reasonableness of its rate increase for the period in question?

Harper says no

- he recommends the board should approve an annual increase in OM&A for 06/07 through 08/09 of 3.0 percent rather than 3.9 percent

- OM&A higher than in previous forecasts for same period (3633) this is the highest rate of growth we've seen - however - there's no substantiation for the increased spending and no unique or one-off programs

- 3 percent is consistent with targets Hydro has set for itself in its own corporate strategic plan (3634)

- historic growth in OM & A of 4% should be expected to decline given that customer growth is projected to decline as are wage and salary increases per FTE according to the Hydro forecasts (3634)

- Harper recommends a reduction in the 2008/09 revenue requirement from 2.9% to 1.9% (3636)

The Coalition agrees with Mr. Harper

* Proposed Spending Levels Exceed Corporate Targets

See (ECS Evidence - pages 19-20)(PUB/MH II- 7

d)), (PUB/MH I-23 d)

* Current projection for OM&A increases for 2007-2009 higher than in any previous IFF

The increase in OM&A forecast for 2007-2009 is higher in the current IFF07-1 than in any previous IFF. See ECS Evidence Table 13, page 16

* The fundamentals don't support a 3.9% per annum increase in OM&A

During the 2003-2007 period Electric Operations OM&A grew by 4% per annum (ECS Evidence, page 15).

However, during this period customer growth was 1% per annum and labour costs per FTE were increasing at 3.8% per annum (ECS Evidence pages 14-15)

During the 2007-2009 period, the fundamental drivers have changed:

Customer growth has declined to 0.6% per annum
Labour cost / FTE growth has decline to 2.6% per annum

* Based on these changes in the underlying fundamentals one would expect the overall growth in OM&A to decrease:

The slower customer growth should decrease OM&A growth by 0.3% (i.e. 0.9 minus 0.6)

The slower cost of labour growth should decrease OM&A growth by 0.8% (i.e., 70 % of 3.8-2.6 - where the 70% reflects the fact that 70% of OM&A is labour costs)

This suggests a growth rate that is lower by more than 1% -- absent other offsetting factors

* In terms of offsetting factors – MH was asked if there were any special or non-recurring maintenance programs of a material size during this period and said NO (COALITION/MH II 23 a))

* MH has suggested that there are significant cost pressures from other non-labour sources. However, as seen in their Rebuttal Evidence these cost pressures are not new and are also reflected in the 4% per annum historic growth value (Rebuttal, page 3)

* COALITION Exhibit #40 shows that a 3% per annum

increase is consistent with the underlying fundamentals.

Recommendation

approve interim 2.25 for 07/08

approve 1.9% 08/09

In the long run, only effective way to send a signal about cost control is through revenue requirement

This is the year to do it given extra $35 M due to positive results 07/08 (3622)

Still leaves option for the Corporation to come in next year 2009/10

demonstrate improvement in cost control

seek increase in revenue requirement once:

as new capital expenses hit rate base - more certainty about impact IFRS
Anticipating Hydro's Rebuttal on O, M and A

Labour Costs Backgrounder

* Labour cost is the key driver of O, M and A

75% of O, M and A is labour costs (1187)

* Productivity Allowance of one per cent per year applies only to labour costs (1187)

Anticipated Hydro Rebuttal

* Manitoba Hydro may introduce doomsday scenarios about labour costs drawn from newspaper headline but such scenarios are not consistent with its own evidence

* What do we know about labour costs in recent years?

* Labour Costs are rising faster than inflation but not at a dramatic pace

Sticker Shock Excerpts

> labour costs generally have tracked inflation rates but shortages in skilled workers have driven costs higher for utility equipment and

construction services . . . (57)

labour cost increases – while less dramatic than those experienced by commodities – nevertheless have exceed the general inflation rates (60)

While labour costs have not risen dramatically in recent years, utilities increasingly are concerned about an emerging gap between demand and supply of skilled construction labour (60)

* Hydro's labour costs/fte have risen faster than inflation and are projected to rise slightly faster than inflation

Coalition 40 Excerpt

(2003 – 2007)

labour costs/fte grew about 3.8% (more than inflation)

number of customers 0.9%

projection 2007 – 09

2.6%/fte (projected by Hydro to be lower than 2003 – 2007)
number of customers 0.6% (projected by Hydro to be lower)

* True benchmarking

We would interpret benchmarking to be a more in depth review of processes to ensure that when the benchmarking exercise is taking place that the functions – the processes are truly comparable (1087)

* Hydro may offer anecdotal evidence of its labour rates as compared to others but what does a true benchmarking study tell us about certain Hydro's salaries as compared to other utilities?

Position	Minimum(percentile)	Maximum (percentile)
Field Operations Manager	median – 75 percentile	
		median – 75 percentile

Design Engineer median – 75 percentile
median - 75 percentile

Powerline Maintainer 25th percentile – median
25th percentile - median

* Power Services Survey Results tell us very little because they are not true benchmarking studies

highly aggregated

no segregation by job

no minimum for positions

no maximum

does not tell us anything about seniority – how long at job (i.e. what percentages are at minimum and maximum)

* Hydro may attempt to rely upon highly aggregated and simplistic comparisons drawn from the annual reports but that is not true cost benchmarking and Manitoba Hydro

admits as such

Some Examples of the Interaction of Government Policy and MB Hydro

* Tremendous achievements:

rural interconnection
remote community interconnection (North West Transmission)
economic development
significant contribution to provincial bottom line
low income energy efficiency

* Some tragic and ongoing costs

CRD/Northern Flood Agreements

* ongoing impacts on revenue requirement and/or financial indicators

* new Hydro building

significant annual incremental cost at least $4.25 M

* Bi-Pole III - east side versus west side decision

PUB/MH I-4 f) indicates that

the capital cost of the West side route is $410 million higher

The present value (2017 $) of the increased line losses associated with the Western route is $107 M (with existing generation) and $181 M (with Conawapa)

* Wuskwatim

PUB/MH I-72 a) provides the history of the in-service capital costs for Wuskwatim

CEC filing (2009/2010 I/S) = $901 M

IFF07-1 (2011.12 I/S) = $1,595M

MH undertaking #31 shows an increase in project costs (expressed in $ 2002) from $713 M for the CEC to $1,129 M for IFF07-1.

The response to PB/MH II-3 b) shows that net income is negative until 2017.

This suggests that as well as putting pressure on MH's

D/E ratio – the Wuskwatim will increase the RR until after 2017,

* Closing of Brandon Coal Plant except for emergency use

Appendix 22, page 8 states that if Brandon is retired prematurely (i.e., prior to 2019) the annual reduction in net income would be $20 M. Restrictions on operations (e.g. essential operations only) would reduce net income by $10 M annually

MIPUG/MH I- 5 c) states that if Brandon is retired – the impact of a major 5-year drought increases by $150 M or more, For the 2003.04 drought period, the operation of Brandon saved in the order of $50 M.

* proposed new major hydro-electric generating stations (when - impact on debt/equity);

The most recent Power Resource plan (Appendix 45) shows:
o Wuskwatim (200 MW) in-service in 2012/13
o Conawapa (1300 MW) in-service in 2021/22

The need date for new generation to meet domestic load and committed exports is 2020/21 (but it is anticipated

that Conawapa can not come into service earlier (Appendix 45, page 11).

The new sale to Wisconsin starts in 2018 and will require the development of new hydro generation (TR 3183-3184). More than just Conawapa is needed to service the contracts with both Wisconsin and Minnesota (TR 3185)

On page 25 of the Harper Evidence it was stated that the $1.5 B on spending on new Generation and Transmission was impacting on the D/E ratio by 5% in 2008/09. The spending on Wuskwatim to this point is $590 M – suggesting that its impact is between 1-> 2 percentage points.

* uniform rates

In the PCOSS for 2007/08 the cost of uniform rates is set at $17 M (Appendix 11.1, page 11)

* special dividend

Special payments to the province totaled $204 M in 2003 and 2004 (PUB/MH I-49 a))

Int he 2004 GRA MH provided info on the impact of the special payment on the D/E ratio (MIPUG/MH I-8 d) versus Appendix 4.1). For 2003/04 the impact was 3 percentage points (i.e. 82% without vs. 85% with). By 2008/09 the impact was still 3 percentage points (i.e. 84% vs. 87%)

* water rental fees/debt guarantee fees/large corporation capital tax

These payments are all summarized in PUB/MH I-49 a). The total actual in 2006/07 was $219 M. The forecast value for 2008/09 is $223 M.

* low income energy efficiency/bill 11 impacts - what are the costs projected for 08/09 (how much from Bill 11 - any additional from elsewhere)

MIPUG/MH II-1 f) reports annual amortization of Bill 11 costs of $2 M in 2008 and $4 M in 2008/09.

Significant Impact on Hydro's Bottom line

What is the experience of Wuskwatim? Are there lessons to be learned as we look to a decade of major capital expansion?

CEC Proceedings Regarding Wuskwatim

* Hydro

> Temporary increases to the Corporation's debt/equity ratio and decreases to the level of interest coverage which may occur in the early years of the project are judged to be manageable without impact the Corporation's financial stability or requiring offsetting increases to domestic rates. (3430)

* The CEC

> The Commission's support for the project is contingent on Manitoba Hydro being able to maintain its commitment that domestic ratepayers will not experience rate increases as a result of the projects (3431)

The Analysts' Perspectives

Harper

> capital expenditure - the increased debt is

placing pressure on today's rates - Wuskwatim - its probably one of the contributing factors to increased rates (3647)

Bowman

We're effectively coming close to raising rates for Wuskwatim (3431)

Wuskwatim

Revised ISD

$1.3 billion generation $1.6 billion including transmission (943/944)

Restatement of Current Forecast of Wuskwatim Gen and Trans to Enable Comparison with Original Forecast (MH 29)

(in $millions)

Wuskwatim GS 2009/10 from CEC	ISD Wuskwatim GS 2011/12 ISD from IFF07-1	Dif
600	907	307

Wuskwatim Trans 2009/10 ISD from CEC	Wuskwatim Trans 2011/12 ISD from IFF07-1	Dif
113	222	110

Revised Internal Rate of Return of only 6.5% (MH Exhibit 55)

If the capital cost of the Wuskwatim project in 2002 dollars is substituted into the analysis provided in the April 2003 submission to the CEC, the resulting mathematical calculation is a umber of 7.8% when sunk costs are excluded and a number of 6.5% when sunk costs are included.

The Revised Internal Rate of Return is roughly equivalent to the Corporation's cost of debt

p. 941 Warden Average cost of debt between now and the in-service date of 2012 – 7 percent (subsequently revised

to 6.5%)

The Need for Wuskwatim

Surminski it “is the contracts that add to the demand (that) cause the deficits in the long term, if that's what you're getting at” (948)

its the combination of domestic load with your firm contracts that leaves you requiring Wuskwatim so that you're in a surplus position rather than a deficit position (948)

Capital Program Management (957)

Re: Wuskwatim

> evidence at the CEC hearing was that the flat slope of the cost estimate line indicates that the estimate is very tight within a 90 percent confidence that the estimate will be between 523 million and 620 million in terms of generation (959)
>
> capital process – we go through a rigorous capital

review process. Its reviewed at a number of different levels within the organization before it makes its way into the capital expenditure forecast. (961)

We have not had an independent review of best practices in terms of capital expenditure forecasting and management in recent years (961)

Deloitte and Touche study (Coalition 38) - way back in 2002

Recommendation

* Independent Review of Capital Expenditure - major projects and O, M and A (Forecast and Management Best Practices)

How can we improve the regulatory process in order to assist intervenors, the regulator, the utility and consumers as a whole? With reference to the rate setting process, should we continue to rely on the Corporation's current debt/equity target?

O, M, A

* Harper Possible Approaches to Testing

i) address changes in actual elements of O, M and A

ii) Envelope Basis using key drivers such as customer counts – variances would then be explained on the basis of unique or one-off requirements (3623)
iii) benchmark costs against utilities with similar characteristics (3624)

simplistic example Appendix 12.12

more Detailed examples Coalition Exhibits 8 and 9

iv)review how utility's spending plans are developed and prioritized (3624)

However, insufficient information on the record to use approaches 1, 2 and 4 (3631)

its not particularly informative to say cost of increase due to operational requirement or additional FTS (3631)

benchmarking results used by Hydro are “fairly simplistic” (3632)

hydro has made general references to cost drivers such as aging assets and the need to meet increased customer demand – however, no clear link has been provided between these cost drivers and the changes in costs (Harper – 3632)

* Harper Recommendations

* Employment of Asset Condition Assessments

* Improve Presentation to Regulator of OM&A Budget (3642 – 3643)

Management of Debt Portfolio

floating rate debt – subject to change on a periodic basis

a) Currently

floating rate debt about 20 percent of

portfolio)/long term fixed rate debt 80 percent (1220)

b) The Policy – Original Response

Coalition I-85 a)

policy limit to no more than 30% of total debt (1220)

typically manages to within 15 – 25% of total debt (target guidelines) (1221)

Is there a Board Minute re 30 percent maximum? – yes going back more than 20 years (1234)

We have not found it to be an issue that requires Board attention so the Board has not been asked to look at that for a number of years (1236)

The target guidelines 15% – 25% go back more than 20 years (1238)

Whether the Board has specifically approved that, I haven't reviewed it for some time so I would have to

confirm that.

Other than the previously approved Board approved document there's no other document (1239)

c) The Tradeoff

floating rate debt – provides economic benefits (1221)

short term interest rates are lower than long term interest rates in a typical upward sloping yield curve (1222)

Hydro - if you go to 5 percent floating – giving up too much in terms of eonomic benefit (1233)

fixed long term debt (stability) (1222)

Hydro - if you go to 31% fixed giving up too much in terms stability and risk

d) The Literature

article cited by Corporation in its rebuttal

Is there an optimal Mix of Fixed and Floating Rate Debt (1225)

studied ten year period which Mr. Warden claims is too short

100% floating - lower interest costs but quarterly earnings more variable (1226)

100% fixed – interest costs highest but with considerably lower variability than 100% floating (1227)

cases between the 100 percent endpoint where interest cost lower than 100% fixed with lower earnings volatility as well - 69/31 (1229) (see also 40/60)

key point

while literature suggests floating greater economic benefit

literature does not suggest that excessive risk averse behaviour necessarily leads to the lowest level of risk

69/31 less risk than 100/0 – also better return

40/60 less risk than 100/0 – also better return

d) The Significance

expenses electric $1.45 B (1080)

finance expense - $426 M (1080)

Manitoba Hydro currently holds in excess of $7 billion in debt (1244)

even applying current policy, range of 15 to 25 percent – of total debt of $7 billion – 700 M potential to flip between floating and fixed (1237)

if Manitoba Hydro reduces its interests costs by a mere five basis points that would be a saving of $3.5 million annually (1245)

forecast to 2018 short term rates tending to be lower than long term rats through to 2018 (Coalition II-77 c))

e) The Concerns

i) No Board Policy can be found

ii) Policy to the Extent it exists – dates back to 70s

iii) No recent independent review – (1243) We have not conducted an independent review – There's been no independent review of Manitoba Hydro's debt optimization approach strategy in the last five years (1244)

iv) Consistently managing towards the bottom of range - (Coalition I-85 b) – 13 quarters reviewed Hydro below the mid-point 12 times above the mid-point 1 time (1242)

v) Risk of significant dollars being left on the table for no appreciable gain in stability

vi) May be foregoing significant returns for false premise of reduced risk

vii) BC Hydro runs higher floating to fixed ratio – range 26 percent to 46 percent floating rate (1243)

viii) MPI example (1990s all bonds/no equity) (2000s– concern insufficient diversification in equities)

ix) Debt is expected to grow quite significantly with major hydro-electric expansion

Recommendation

* Independent Review of floating/fixed target range and maximum – consideration of tradeoffs in terms of economic benefit and stability

Benchmarking

* Cost Benchmarking (1084)

a) Coalition I-73

Hydro has not participated in any recent benchmarking exercises comparing its costs with those of comparable utilities either in terms of total costs or individual functions (1087)

b) no Canadian Electrical Association cost comparison with other utilities since 2003/04 (Coalition Exhibit 33) "the last report produced by the Canadian Electrical Association was in 2004 for the 2003/04 fiscal year)

more of a high level comparison (1087)

but

c) Hydro does participate in Ontario One distribution study

- cost per kilometre
- cost per customer
- asset replacement rates
- reliability
- safety
- meter reading
- tree trimming

and d) Hydro does participate in the Hay Group – Comparison of Labour Rates and Overtime Policy

Recommendation

* little value in highly aggregated straight from the annual report benchmarking
* PUB consider process and cost benchmarking on a selective basis to explore value

Should we continue to rely on the current debt/equity target for rate setting purposes?

First Principles

* debt/equity targets

demonstrate to financial community that hydro is financially sound (3649)

stabilize rates in face of adverse events

Questions/Criticisms

* in an era where debt is expected to grow materially, does the debt/equity target act as a perpetual justification to raise rates even if forecast expenditures are not prudent, reasonable, or necessary? (3423)

* in such an era – do you end up with an undefinable concept of making sufficient progress (3423)

* from a pragmatic perspectives

if you're looking at satisfying financial community should be looking at what they're

actually rating (i.e. Standard and Poor's standard measurement) (3650)

MB Hydro doesn't take real issue with Standard and Poors calculation (1205)

Figures for MB Hydro and BC Hydro over the last three years – quite similar (1207)

if you want to benchmark against other utilities use same testing

what's of relevance is continued improvement (3651)

in terms of drought or adverse event – debt/equity of less relevance than actual number (3652)

Recommendation

* in the context of next GRA and proposed major capital expenditures, re-examine purpose of target and best means to measure

Energy Efficiency

Is the Corporation getting optimal bang for the buck when it comes to energy efficiency? What is the optimal way to reduce barriers to energy efficiency for all consumers including tenants and low income people? Has the time come for inverted rates for residential customers?

Low Income Issues

Low income consumers behaviour or response likely different from other consumers (897) Kuczek) – you're dealing with a different market when you're dealing with persons who are struggling on a day to day basis just to get by

> priorities could be "just getting by day to day and worrying about how they're going to pay their bills "

Particularly Acute Barriers to Low Income Efficiency

Dunsky (slide 5) (3657 – 3660)

* Access to capital

* Split or displaced incentives

* Organizational practice and customs

landlords – low cost model

contractors – distrust low income market

* Others

education (illiteracy), linguistic challenges, distrust

Kuczek

lack of access to capital which diminishes the ability to pay for higher upfront costs (990)

higher than average mobility adds uncertainty to economic value of long term investments (990)

contractors may be unwilling to work for low income customers or charge a premium to them (990)

split incentives disproportionately hits low income persons who are disproportionately renters

(990) Dunsky - Low Income

A Very Challenging Market

Its a very complex market. Its a very complex and difficult thing to do, to design an energy efficiency program for this market segment that's actually going to work (3661)

The biggest challenge is actually getting people interested in participating even though its free of charge (3666)

Principles for Success (3661 -

* keep it simple - turnkey - take ownership A to Z of what your are trying to do with the customer (3662)
* keep it free (3664)
* focus on outreach (3665)
* be comprehensive (36666)

Hydro's Weaknesses

* design (complexity/hops/ownership)

this is a serious barrier and it is going to diminish participation tremendously (3675) (3680)

there's an enormous barrier here that will significantly affect participation (3681)

Reference table

best practices employ the turnkey approach (3686)

* delivery (CBO challenges) (3675)

capacity (3686)

either be selective or invest heavily in training

right CBO culture for the job (3688)

* measures (furnaces (3693) , fridges (3689), grey water heat delivery) (3676)

the furnace component of this program isn't much of one – its simply not going to address those barriers (3694)

there is no way this is going to get at the early replacement opportunity (3695)

Low Income Energy Efficiency Programs

a) Tests - Issue how regulator might wish to evaluate benefits (Board advisor cross examination)

TRC – what are the benefits and costs of implementing a measures

total benefits versus total costs (benefits = direct energy benefits)

Societal cost tests – theory there's more benefits associated with implement DSM measures than just the avoided costs (983) - (used California and Oregon) (983) – other benefits environment/comfort (982)

RIM –(985) – indication of cost effectiveness from a ratepayer's perspective – provides an indication of the program's long term impact on rates

b) Customers pay bills not rates

might pursue to have a more balanced portfolio (986)

even if slightly negative impact on rates – may have a very positive impact on bills for those who participate in the program (987)

c) LIEEP is good for the portfolio

Kuczek – 989 “we think they're good for the DSM portfolio as a whole.”

good because:

offering some significant potential bill impacts for low-income consumers (989)

getting into a marketplace where we don't feel like that market sector has participated as much as we'd like (989)

Bowman

> Low income DSM is not always going to meet the RIM test but there may still be reasons to

pursue it that relate more tha policy perspective than a strict economics perspective. (3450 – 3452)

d) Participation Goals

Aspiring for higher participation within the LIEEP programs (989)

Our objective is to totally clean up the market (989)

e) The marketplace - A small number

no estimate of the marketplace currently being reached by other programming because haven't tracked power smart programming based on income level (992) PUBI-74 e))

76,000 households – 35% electrical 26,600 (993)

calculation of 76,000 excluded customers residing in apartment suites (MH 32, Undertaking 37) (almost 100,000 apartment suites in Manitoba (Coalition 5)

objective over next 3.5 to 4 years 4600 households (993)

expect 35% of the households to be electrical (995)

it might even be a little higher we're talking to a number of First Nation communities at this point, and we're hoping to pursue more communities in the rural and northern areas as well (995)

6 percent of total target (994)

“its a small number” (994)

“a bit less than 2 percent per year” (994)

it was decided that the level would be an aggressive target to pursue (994)

some entities that had their programs up and running for longer than us might feel like they could capture 3 percent (995)

f) A Challenging Market Place

* the Centennial pilot started off with a plan being formulated but at the end of the day we didn't really use the plan (1010)

* going forward our intent is to have a plan and a contract with these community based organizations (1010)
plan = target, time frame, method and measures, agreement

* no model or template for a community energy efficiency business plan developed yet (1011)

* we're going to be meeting with both those community organizations and be reviewing a draft plan that they're proposing to us in the near future (1011)

* looking at something similar but different for First Nation communities (1012)

g) A Small Number that is unlikely to be reached

i) focus on community based organizations for program delivery (1015)

a lot will depend on community based organizations (1014) - that's where most opportunities and

results will be achieved (1014)

not all are created equal, some have more administrative capacity – some have less (1015)

no criteria developed for evaluating the capability of community based organizations (1015)

ii) Pilot projects (1020,-1023) (PUB I-34), Tab 40 PUB Exhibit 12, Coalition II-100 a)

"we're not meeting the targets that we originally thought we could meet."

The community organizations came up with a number of ten (10) per month and they haven't met those targets to date. (1032)

Community	Target	Reality
Brandon	120	40 (all MHA)
Island Lakes	110	zero
Centennial	120	111 (all MHA)

Island Lake

"we provided the material that we thought they required to do a hundred and one homes and it's sitting in storage right now up there." (1027)

they've had the materials for more than a year and there's nothing more to report (1784)

it went from a fairly small project to something that was really likely unrealistic and quite expensive (1787)

Centennial and Brandon

(1024) participation does not mean that objectives in terms of weatherization and retrofit have been attained "There's certainly some challenges with the community-based organizations in terms of moving forward. . . . " "Where the challenges come into play is caulking and certain measure like that." (1025) "retrofitting"

all MHA (1029) the plan was to move into private households after MHA experience "And because of some of the challenges in Centennial they haven't proceeded there yet."

to date neither Brandon or Centennial has embarked down

the path of private households (1030)

1031 - “no contracts with Brandon and Centennial”

h) Monitoring – A Piecemeal type of approach

Dunsky's suggestions for evaluation of community based groups (1033)

ability to hit targets

time from first contact to work completion

results of quality control spot checks

client satisfaction surveys

Hydro's Response

(1034) we have to be very careful on how we work with some of these community organizations “we are monitoring things informally”

“Flexible, ad hoc basis” (1034/1035)

"its a piecemeal type of an approach." (1035)

i) The Targets are underepresentative of renters

84% owners 16% renters (1038) (Coalition 7)

the "targets are underepresentative of renters" (1039)

homeowners as opposed to renters will disproportionately benefit (1040)

the current makeup of the low income energy efficiency program excludes the tenants of apartments (1040)

yet Centennial suggests "69 percent of low income household rent their accommodations and 31 percent own" (1048)

j) Apartment Pilots

no business plan "Its learn as you go" (1043)

not aware of successes in other areas in terms of

renters (1044)

k) Complexity – Dunsky's description of the process is reasonable (1051)

“We've had some discussions about whether or not in some cases it might make sense for us to work with contractors and try to streamline the process . . . “ (1054)
Renters

Barriers for Renters

* Chernick (2954)

split incentive problem,

capability problem,

shorter investment horizon due to uncertain tenure)

* Chernick (2956) split incentive or principle agent problem where bill payer has one set of incentives but the landlord, contractor, the plumber have other

incentives and its very difficult to get the right result because of that inefficiency

* capability Chernick (2955) – you may not be in a position to put in gas heating because the landlord has to make the arrangements

* shorter investment time horizon - Chernick (2955) when you get into things that have pay backs of even four or five years, you may be reluctant to undertake them

Risk for renters in an inverted rate structure

> risk for renter under an inverted rate structure is that they will experience the higher cost but lack the capability or can't make the business case to respond to the energy efficiency signal (2957) – Chernick

Objectives

> moving into an inclining rates structure environment – you would want to have a set of energy efficiency programs that were available to everyone and would actually work in the

marketplace (Chernick – 2957)

Perhaps Gradualism

if you say by the time you got the programs designed and worked out, it might be a year or two, so we want to have a little less of an inverted block, well maybe (Chernick 2959)

Recommendations re low income and tenancy DSM

* modify program design to ensure turnkey service in which Manitoba Hydro (or its contractors) subsume all contracting, payment and incentive collection tasks

* Assess CBO capacities prior to contracting

* Add a fridge replacement component and adopt a more aggressive approach to furnace replacement

* Concern that roll-out of LIEEP is too slow – request proposal for expedited roll-out of LIEEP which addresses costs/benefits/sources of funding

Inverted Rates

Inverted Rates Don't Substitute for good DSM

Chernick - inverted rates “dont” substitute for good energy programs from the utility (2952)

Estimate of the Impact of Effective TOD and Inverted Rates on Manitoba Hydro's Revenue Requirement (Coalition 25, pp. 46 -48)

Evaluation of scenarios by NERA (2368 – 2370)

Class	Largest Impact on Revenue Requirement of Scenarios
residential	negative 2 percent
medium general service	negative 8.4 percent
general service large greater than 100 kV	negative 13.3 percent

largest impact on revenue requirement due to GSL – due to:

in large part - greater relative elasticity (2371)

gap between current prices charged and marginal costs (2372)

Inverted Rates Impact on Lower Income Consumers

estimate of electric customers with incomes less than 30,000 (999)

85,745 (Coalition II-70)

18,608 earning less than $30,000 and consuming more than 18,000 kw.h per hear (1002)

16,561 all electric customers earning less than $30,000 and consuming more than 18,000 kW.h annually (1002)

Inverted Rates for Residential Customers

Issue 1:

Fairness to:

all electrical with no competitive options

low income persons who lack the resources to pursue DSM

renters who may lack the ability to pursue DSM or for who DSM is uneconomic due to split incentives

Harper (3706)

* in theory, a good thing from efficiency perspective (3707)

* hallmarks for success:

efficiency results

programs available so consumers can take advantage to the widest possible extent (3708)

publicly acceptable from a fairness perspectives

* barriers to customers' ability to respond:

low income

tenants

rural

* for both fairness and efficiency reasons these situations need to be address if residential inverted

rates are to be successful (3708)

* generally agrees with Hydro's proposal for 2008 (3709)

* Key issues to address before further implementation:
        barriers to customers' ability to respond:
        low income
        tenants
        rural
        current DSM programs need to be fully focused on
        those using 1500 KwH per month or more (3710-11)

Wiens

re barriers to customers' ability to respond:
        low income
        tenants
        rural
        we have some sympathy for this - that we would
        look at gradual implementation as the way of
        dealing with it (2445 – 2446)

        the difference between low income population and
        the proposed pace of implementation of low income

DSM programming would be one of the factors suggesting caution in the pace at which inverted rates are implemented or the pace at which you move towards marginal costs (2446 2447)

Recommendations

Inverted rates important price signal but overshadowed by equity concerns

Clients appreciate recognition of fairness issues and calls for gradualism

however, believe fundamental lack of fairness to implement inverted rates before giving vulnerable groups the tools to achieve energy efficiency

- slow roll out low incomes
- no roll out tenants
- all electric use growing in rural Manitoba

delay inverted rates until DSM house in order particularly for low income, tenants all electric no competitive options

Public Education Important (consider Weiss comments)

Inverted Rates for Residential Customers (2378)

Issue 2:

Balancing Issues of

Equity

Economic Efficiency

Administrative Efficiency

Hydro's Current Approach

* same block size for all electric and standard - no seasonal variation (2379)

NERA's approach

* separate non seasonal first blocks defined both for

standard and electric space heating or

* same block size but varying by season

* NERA prefers seasonal variation (2381)

better allocation of resources (2382) - economic efficiency

administrative benefit (2382)

Wiens commentary (2383)

* there is a real issue of being able to determine who heating with electricity and who is using it for other uses (2384)

* we have an issue with being accurate about who has and who hasn't electric heat when we're talking about something in the order of four hundred and twenty thousand residential customers (2384)

* the simplest way to deal with it is to have a low first block in the summer months and a higher one in the winter months (2386)

* administratively, I believe it is doable within the context of the existing billing system (2388)

* the higher you raise the breakpoint in winter - you're minimizing the impact on people who have difficulty finding another sources and certainly would have to incur greater costs perhaps significantly greater costs (2387)

* but the higher you move up - you're giving up some of the economic efficiency benefit (2387)

Recommendation

clients recognize administrative difficulties and efficiency arguments but key issue is vulnerability of those who rely upon electric heat for home

Rand study suggests highly inelastic for those with no competitive options

preference all electric heat block

Low Income Discount Programming

Apprise, Ratepayer Funded Low-Income Energy Programs: Performance and Possibilities (July 2007) (Coalition 37)

* Despite funding of over $4.5 billion in Federal and ratepayer assistance, there are not enough funds to meet the low-income need for energy assistance. (p. 85)

* Chernick - there's certainly many jurisdiction in which additional assistance is required (2977)

* Evaluation data showed that only one third to less than one half of the eligible households are served by these programs (86)

* Even among good quality affordability programs in the US, there is a gap between those eligible and those actually served (Chernick - 2979)

* Most of the programs require customers to verify their program eligibility every year or every other year . . . recertification is a challenge to these programs. While most customers remain in need of program assistance only 40 to 65 percent re-enroll or re-certify. (87)

* Energy affordability programs reduce the cost of using

energy, and therefore program managers are concerned that they may result in increased energy usage . . . Program evaluations find small and insignificant increases in energy usage, or sometimes even declines in energy usage (Coalition 37, p. 95)

Chernick - “if you're skimping on food, and skimping on your medications, and keeping the thermostat down, and be very careful to keep the lights out, if your budget is relaxed a little bit by having your electric bill discounted, or your gas bill discounted, the first thing you may do is spend your money on the food or the medications or something else that's important to you (efficiency) (2965)

Comment

While clients are open to further study of the issue, uncomfortable with low income discount programs:

* poor record in terms of participation
* division of low income consumer from others
* means testing always leaves uncomfortable

DSM

Are programs aggressive?

Are programs efficient?

Should the regulator/hydro be thinking about DSM in a different way?

Discussion Chernick, Dunsky, Bowman appropriateness of different screens

RIM

Societal Cost Testing

TRC

as well as non energy benefits

Recommendation

* Independent Review of DSM Portfolio (screening tests, portfolio, nebs)

* Report back on development in terms of metering technology (965) – i) utility controlling thermostats (i.e. peak shaving) 977 ii) blueline – information in

terms of rates and usage

Efficiency and Marginal Cost Based Pricing

Estimated Short-term Load Reduction if Marginal Rates Applied (Hydro 80)

Residential 1.7%

GSL large greater than 30 kV 14%

going to marginal costs

- the smallest long term load reduction would be residential

- the largest long term load reduction would be GSL

due to:

a) relative gap between actual rates and marginal cost based rates (2432)

b) assumed elasticities

Elasticity (per Wiens and NERA)

what is elasticity

elasticity is a key measure of the likely response of customers to the new rate structure (2356)

it is measured by the percent change in quantity demanded divided by the percent change in price (2356)

typically in the negative range indicating that demand falls as price increases (2356)

what is inelastic demand

inelastic demand is a less than proportionate change in demand as compared to the change in price (2357)

what does economic theory suggest about consumers' demand for energy

economic theory suggests that consumers' demand for energy is less sensitive to price change than the demand

from other commodities (2358)

what does NERA assume regarding the elasticity of residential and large industrial customers

NERA assumption for residential customers for the purposes of their study – highly inelastic (2359)

some residential uses will be higher than NERA assumes and some will be virtually zero (Wiens 2363)

NERA assumption for large industrial greater than 100 kV pretty inelastic but much more elastic than residential (2360)

in terms of energy intensive – there would be a significant higher elasticity than the NERA assumption and a lower elasticity to some other types of industry (Wiens 2363)

the bottom line

when one goes from the short term to the longer term the elasticity numbers assumed by NERA will go up

"But typically, the general consensus, the conventional wisdom, is that they're still going to be inelastic. You're still not going to get a response to price that is, in terms of the quantity demanded, that is as great as the change in price." (2364)

Elasticity Part 2

Regional Differences in the Price Elasticity of Demand for Energy – Rand Corporation, February 2006 (Coalition 31)

a) methodology

(30 year literature review) (state-level panel data on residential and commercial electricity consumption and residential natural gas consumption 48 contiguous US states) (residential data 1977 to 2004) (13)

b) key conclusions

* the relationship between demand and price is small (xi)
* demand is relatively inelastic to price (xi)
* in the past 20 years, this relationship has not changed

significantly (xi)

Class(23)	Short Run Elasticity	Long Run Elasticity
res elec	-.24	-.32
com elec	-.21	-.97

* locations where particular energy uses are very valuable such as air condition in southern states or winter heating in northern states could have price elasticity smaller in absolute magnitude because air conditioning and heating are so so valuable during periods of extreme climate that consumers are unwilling to change their use when prices change (p. 7) (2437)

* Wiens - this premise “generally accords with conventional theory” (2437) – if the use is valuable and there is no easy substitute, you're going to have a tendency that its going to be less elastic

c) Caveats and interesting points

* need to examine more closely in increasing price environment (xi) reference to California (2000 – 2001)

* reference to Bohi and Zimmerman (1984) – the energy price shocks of the 1970s did not change the structural characteristics of consumer demand (11) see also Stevens and Adams (on record) Study response to energy crisis "the demand for electricity in the residential sector is estimated to have become less elastic for the recent period of rising real prices as compared to earlier periods of stable or falling real price" "We conclude that demand appears to be asymmetric with respect to price in both the short and long run."
Household Electricity Demand Revisited, Review of Economic Studies 2005 (Excerpt Coalition 32), Reiss and White

a) Methodology

extensive data representative sample of 1300 California households (res), 1993 and 1997 data – study the likely effects of controversial new tariff in California following electricity supply crisis in 2000 – 2001

b) Conclusions

mean annual price elasticity to be negative 0.39

most households will alter their electricity consumption very little in response to a price change (870)

households that do not use electricity for space heating or air conditioning have an estimated mean price elasticity very close to zero (869)

a small fraction are energy demanders (1/8) and would react with large changes

households with lower income are more sensitive to energy prices than households with medium to high incomes (870)

Cost of Service Issues

Context

A. The Changing Face of Consumption

	Residential (2303)	General Service Top Customers (2306-07)
1986/87	5,000 GwH	3,000 GwH
2006/07	6,500 GwH	6,000 GwH
2017/18 (for)	7200 GwH (2308)	8,600 GwH (2308)

* By 2009/10, Top Customers annual sales are projected to exceed residential. (2307)

* In the 1980s, annual residential sale were a fair degree above the general services top customers and by 2017/18, the reverse is actually expected to be the case. (2309)

Top consumers are projected to be a significant degree above the residential sales by 2017/18. (2309)

B. Rates/Market Prices/Marginal Costs

(i) Average Export Prices Tend to be higher than large industrial rates and lower than residential rates (2344 - 2350)

* average gross export rate forecast for fiscal 07/08 5.4 cents per KwH (2349)

* average gross export rate forecast for fiscal 08/09 5.6 cents per KwH (2349)

* by 2006/07 average residential rates above 6 cents per

KwH (2347)

* 2006/07 – average GSL greater than 100 kV less than 3.5 cents per KwH (2347/48)

ii) Average Import Prices Tend to be higher than large industrial rates and lower than residential rates (2344 – 2350, 2425)

* 2006/07 – GSL greater than 100 kV - less than 3.5 cents per KwH (2347/48)

* Corp actual average cost of imports for 2007/08 5.35 cents per KwH (MH 87)

* by 2006/07 average residential rates above 6 cents per KwH (2347)

iii. Residential rates are closer to marginal costs than those of large industrials

(Coalition 29)

Class	Current Rate	Long Run Marginal Cost
res	6 cents per KwH	7.6 cents per KwH

GSL greater than
30kV 3.2 cents per KwH 6.8 cents per KwH

C. Electricity Intensive Industry is Expected to be a Major Driver of Load Growth in the Next Five Years

* Load growth for electricity intensive industry for the next five years is expected to amount to 57% of total load growth. (2310 or Coaliton II-37)

D. Large Energy Intensive Industry is being attracted to Manitoba on a scale that's large enough to threaten the Corporation's Revenue Position (2316)

short term - load being diverted from the export market

* selling for 3.2 cents per KwH which is considerably lower than average for firm or opportunity exports (2317/18)

* See (Coalition Exhibit 20)

long term

- load being diverted from the export market - also

advancing costs in terms of new generation and transmission

The Minister's Letter of February 19, 2008 (MIPUG 12)

Manitoba Hydro's proposed approach is intended to balance the need to support economic growth in Manitoba along with minimizing upward rate pressure on all Manitoba Hydro customers.

I share Manitoba Hydro's concern that increased concentrated consumption of low priced energy may displace higher value export sales opportunities and thereby lead to higher bills for all domestic (residential, commercial and industrial) customers as well as inhibit global greenhouse gas emission reductions.

E. Energy Intensive Load is Most Susceptible to Rates below market rates (2321)

* “energy-intensive industry is more influenced than other industry and more influenced than other customer classes by the price of - - of electricity” (2322)

* typically large industrial users for which electricity is a significant part of their cost of production are going to be more attracted to lower rates than:
    a) a residential customer coming to Winnipeg
    b) non energy intensive industry

Different Conceptions of Equity

Fairness

    equal customers should be treated equally in terms of assignment of costs and unequals unequally (2413)

    while we do tend to look at the past, it is also true that one can look at any kilowatt hour and say that it is a marginal kilowatt hour as well (2416)

    historically - embedded costs have been used to define fairness

    test are individual customer classes paying their fair share of the costs incurred in the past being used to service today's customers (2415)

some jurisdictions have used equal proportion of marginal costs

test - looks at the cost the current customer's consumptions decisions will lead to in the future (2416)

there's a case to be made that you need to give it some weight when you've got the type of divergence between embedded and marginal costs that we're seeing in this jurisdiction today (Wiens – 2415)

Efficiency

rates should provide a signal to consumers regarding the cost consequences of their consumption choices (2414)

Coalition 28

RCC from a variety of perspectives

no exports

Board approved methodology

Hydro Recommended Approach

Marginal Cost per Hydro Exhibit 68

Normalized Marginal Cost per Coalition 26

Coalition Exhibit 26 (2400)

* somewhat akin to the equiproportional marginal cost of approach to class revenue allocation of some other jurisdictions (2402)

* results

Class

Residential 1.1

GSL greater than 100 kV 0.815

Equiproportional Marginal Cost Approach to Class Revenue Allocations (2372 – 2376)

setting class revenue requirements on the basis of equal proportion of class marginal cost revenues (2373 to 2376)

MIPUG's Approach

i) MIPUG's approach to determining marginal cost-based revenue to cost ratio is set out in its Exhibit #15
ii) MIPUG works out the marginal costs by customer class for each major function COSS function: Generation, Transmission, Sub-Transmission; Distribution (Customer) and Distribution (Plant).
iii) Then for each function – the relative allocation by customer class based on marginal costs is applied to the Embedded (i.e., PCOSS) determined cost for the function

Commentary:

MH Cross-Examination (TR. 3564)

* The first part of MH's cross points out the difference between the total marginal cost and total embedded cost varies (on a percentage basis) widely across the various functions (TR 3568-3571)
* The second part of the MH's cross points out that under

MIPUGs proposal the ratio of embedded costs attributed to each class (using MIPUG's MC method) relative to the total marginal cost of serving each class varies widely (TR 3572-3575)

* Residential is 38%
* GSL > 100 is 58%

Significance

* Stepping back for moment, the objective is to look at the results of a marginal cost based "cost allocation" and use it to help inform decision with respect to revenue allocation to customer classes
* MH's exhibit #68 calculates the marginal costs to serve each customer class. However, when contrasted with the revenues from each class the results are all below 100% and do not provide useful input as to which classes are paying more/less than they should when the issue is considered from a marginal cost perspective
* In order to make the results useful – one want to normalize the results around 100% (so the R/C are in a form we are used to seeing)
* Exhibit 68 achieves this by simply pro-rating the marginal costs allocated to each class down by the same percentage such that the total now equals the total

revenues collected from customers – hence the term “equal proportional”.

* The second part of MH’s cross – brings out the fact that under the MIPUG approach the difference between the actual marginal costs and the adjusted marginal costs (to match the revenues) is not the same for each class – they are all not the same “equal proportion”.
* The reason this occurs is that the ratio of marginal costs to embedded costs varies by across the functions – as illustrated in the first part of MH’s cross.

Which Approach is Correct?

iv) Unfortunately no one asked Mr. Harper

v) In the Coalition's view the MH approach is correct.

vi) The MIPUG approach is better suited to where one want to incorporate marginal cost principles in an embedded COSS (as opposed to doing a Marginal costs based COSS). The allocation of generation costs using the SEP prices is one example of where MH is already doing this and the approach is very similar to MIPUG’s – i.e. determine the marginal costs for a function and use them to allocate

the cost of that function)

vii) If the Board want to look at a the implications of using a marginal cost based COSS it should not look at the end results of MIPUG 15 . The MIPUG approach distorts these results – by forcing reconciliation to an embedded cost approach on an individual function basis.

Differential Rate Increases

Harper's Position

weight to embedded cost of service

caution first year of application study (3704)

PUB – other factors pre-export allocation, marginal and environmental costs hese perspectives can yield significantly different results (3705)

rate increase already above inflation would be compounded by differential rates (3705)

Hydro's position

* its premature to differentiate among classes for two reasons

i) order 117/06 noted factors other than embedded costs should be considered (2398) - when you take a marginal cost perspective that might provide a very different set of recommendations when it comes to differential rate increases (2398)

Recommendation

> With the exception of Roadway lighting reject differential rates increase

Marginal Cost Notes

Hydro's Marginal Cost Analysis May Overstate Local Distribution and Customer Costs

* its a possibility estimated marginal costs for customer costs may be overstated (2393) Wiens

* these are the type of costs that if we add a customer during the course of the years are not likely to change to the same degree as the average so it could be an

overstatment (2393) (Wiens)

* Wiens its more likely they're overstated than understated (2394)

* in the short term, the marginal costs of distribution are probably overstated (2394)

* to the extent that Hydro is in error, these errors would be disproportionately borne by the residential class, general service small and to a less extent medium (2396)

* likewise, Bowman - Bowman wouldn't be surprised if the incremental cost of adding a new residential customer was lower than the average cost (3445)

* customer service costs more material to residential about 10% than large industrials (about 1%) (3445) (Bowman)

Local Distribution and Customer Costs play a more marginal role

* customer marginal cost not a function of customer's

electricity use and more peripheral to the design of the tailblock rate (2354) (Coalition Exhibit 25, p. 14)

* local distribution cost less relevant to the design of the tailblock rate because they're less driven by customer usage and less elastic in terms of customer response (2354) (Coalition Exhibit 25, p. 14)

Residential Monthly Charge

* customer related costs are a legitimate cost (2449)

* to the extent one went to a pure volumetric recovery of these costs, there would considerations in terms of fairness (2449)

* the losers would be high volume consumers

* given the other rate design issues, perhaps the basic monthly charge should be focused on recovering a percentage of the customer costs excluding customer related distribution flat costs (2448-49) (i.e. exclude customer related distribution costs and focus just on customer service and metering costs) (2450)

Transparency and the Issue of Marginal Cost Estimates

(2921 -22)

Experience in Other Jurisdictions

Chernick

* even where commercially sensitive, that is not put onto the public record, “its almost always available to the regulators and to most or all of the parties under appropriate protective orders.” (2922-2923)

* purpose – provide transparency (2923) test reasonableness (2924) improve the record (2924)
Rates for New or Expanded Industrial Load

A. The Concern

low price energy consumption by energy intensive industries may be displacing higher priced export opportunities (2326)

negatively effecting – Manitoba Hydro's bottom line (2326)

negatively effecting – customers' bills (2326)

B. The Other Perspective

potential benefits to Manitoba (2327)

increased tax base

increased payrolls

retention of good corporate citizens

C. The Balancing Act

Trying to weigh the provincial benefits which may

in some cases be revenues to government

may be regional income benefits

against the overall cost to customers who would have to see rates go up because of expansion of the load (2328)

D.Transparency and The Dispute Resolution Process

propospal in event of dispute regarding baseline or exemption criteria that PUB act as arbitrator (2334)

no PUB approval process in the event customer exempted from higher rates (2335)

an important program because its going to have an impact on the bottom line of the Corporation and on customers' bills (2338)

to the extent that exemptions are granted - they will put upwards pressure on other customers' bills (2338)

Recommendations

Proposed Rate Increases

approve interim 2.25 for 07/08

approve 1.9% 08/09

Regulatory Process

* Independent Review of Capital Expenditure – major projects and O, M and A (Forecast and Management Best Practices)

* Employment of Asset Condition Assessments

* Improve Presentation to Regulator of OM&A Budget (3642 – 3643)

* Independent Review of floating/fixed target range and maximum – consideration of tradeoffs in terms of economic benefit and stability

* In the context of next GRA and proposed major capital expenditures, re-examine purpose of debt/equity target and best means to measure

* PUB consider process and cost benchmarking on a selective basis to explore value

Energy Efficiency

* Independent Review of DSM Portfolio (screening tests, portfolio, nebs)

* Report back on development in terms of metering technology (965) – i) utility controlling thermostats (i.e. peak shaving) 977 ii) blueline – information in terms of rates and usage

LIEEP

* modify program design to ensure turnkey service in which Manitoba Hydro (or its contractors) subsume all contracting, payment and incentive collection tasks
* Assess CBO capacities prior to contracting
* Add a fridge replacement component and adopt a more aggressive approach to furance replacement

* Concern that roll-out of LIEEP is too slow – request proposal for expedited roll-out of LIEEP which addresses costs/benefits/sources of funding

Inverted Rates

* delay inverted rates until DSM house in order particularly for low income, tenants all electric no competitive options

* Public Education Important (consider Weiss comments)

* preference all electric heat block

Differential Rate Increase

* With the exception of Roadway lighting reject differential rates increase

(INSERT CONCLUDED)

THE CHAIRPERSON: That's fine. Thank you. Okay, Ms. McCaffrey for MIPUG...?

FINAL SUBMISSIONS BY MIPUG:

MS. TAMARA MCCAFFREY: Thank you, very much. Just -- just at the outset and follow-up to the Vice Chair's questions and comments, right at -- MIPUG's understanding is that Manitoba Hydro has withdrawn that application or, in any event, they are not seeking approval of that new rate from this Hearing.

And I understand also that they plan to come back and file something else at some point, at the appropriate time. And I don't want to make too many assumptions as to what that would look like.

So with respect to Mr. Williams' comment, if -- if he does come back and file something in writing

tomorrow, I -- I would like to reserve the right to, of course, review it. And if we have anything to follow up, I'd like the opportunity to do so.

THE CHAIRPERSON: Fair enough.

MS. TAMARA MCCAFFREY: But I don't plan to walk down the road of the withdrawn, in my view, industrial rate proposal. And that's the reason that we've taken this approach, given Ms. Ramage's comments on the record. And I believe I've clarified with Ms. Ramage offline as well, just to make sure that my understanding was -- was correct.

THE CHAIRPERSON: Yes, we recall Ms. Ramage's comments as well.

MS. PATTI RAMAGE: If it might help, Mr. Chairman and Ms. McCaffrey, I -- I don't know technically if we would refer to the term "withdrawn."

But I think it's safe to say that Manitoba Hydro wasn't looking for any -- any direction from the Board at that point and is really going to be revisiting its proposal.

THE CHAIRPERSON: Thank you, Ms. Ramage.

CONTINUED BY MS. TAMARA MCCAFFREY:

MS. TAMARA MCCAFFREY: Now, I can tell you, I don't think there's too many in the room that have

as much support as I do. Perhaps the Board, perhaps Hydro. And, because of that, I have a very large book of written argument, containing some thirty-five (35) issues, thirty-one (31) of which, or thirty (30) of which were -- were raised by yourself, Mr. -- Mr. Chair.

What I propose to do, because this is written argument with respect to each of these issues, but they also do provide in some cases some attachments -- an excerpt from a transcript referred to perhaps or a document. And I think the easiest way to manage that evidence, in conversation with Board counsel, would be to have this marked as an Exhibit -- MIPUG Exhibit-16 -- or 17. Thank you, Mr. Peters.

And that the argument form part of the record, I think that you'll find that there -- that the consultants at InterGroup who assist MIPUG with our -- with the intervention haven't been sleeping much over the past few weeks, in terms of trying -- working very, very hard to try and assist the Board with respect to each of the issues that the Board indicated was on its mind. And we hope that it's helpful to you.

My closing submissions, probably to the relief of all, will be briefer. Will not -- I don't propose to go through all thirty-five (35) issues here. They're -- they're written. They're succinct, and the

references are there before you.

What I will do is focus on the key areas: revenue requirement, whether the rate increase is merited, some costs of service and rate design issues, and, of course, the evolution of regulation as we see it, with respect to the reserves.

So there are a few other issues as well that I will deal with. But, at the outset I don't plan to go through all thirty-five (35) tabs of the -- of the written submissions.

THE CHAIRPERSON: Okay, then we will take it as MIPUG Exhibit Number 17.

--- EXHIBIT NO. MIPUG-17: MIPUG written submissions

CONTINUED BY MS. TAMARA MCCAFFREY:

MS. TAMARA MCCAFFREY: Thank you.

At the outset, in a regulated monopoly, of course, the regulator stands in the place of the market. And the purpose and the jurisdiction that you've been given is to approve Manitoba Hydro's rates that are just and reasonable, pursuant to Section 77(a) of the Public Utility Act dealing with the just and reasonable criteria; and also informed by Section 26 of part 4 of the Crown Corporation Public Review and Accountability

Act; as well as Sections of the Manitoba Hydro Act, Sections 39 -- for example, prices payable for power supplied by the corporations to return to it the cost of supplying power and so on.

I won't go through all the -- the legislative provisions. Everyone in the room is well familiar with them, especially this Board.

When looking at just and reasonable rates, of course, a regulatory convention is that long-term stability and predictability are -- are very important goals in this rate setting context.

As Justice Monnin of the Court of Appeal indicated in a -- in a recent decision of 2005:

> "The -- in approving rates that are fair, the regulator must balance the interest of rate payers with the financial health of the utility. And together, these interests represent the general public interest."

On the subject of revenue requirement, Manitoba Hydro's indicated that it requires the requested funds, some 29.6 million, in order to continue to make progress towards its financial targets, in particular the 75/25 debt/equity ratio.

You may recall that in MIPUG Exhibit 7,

which we reviewed with Manitoba Hydro, we looked at the IFF-02 and compared that to the IFF-07 to -- in order to examine what's changed and where we're at today.

In the IFF-02, it was predicted that Manitoba Hydro would achieve the 75 debt -- 25 debt/equity ratio target by 2011/'12.

IFF-07, of course, we -- we do not reach it in 2011/'12, nor do we reach it at anytime in the horizon of this IFF.

Retained earnings were higher than what was forecast to be in '02, both now and in the 2012 test year that we reviewed.

Debt ratios were actually a bit better off in '07/'08 today than -- than were forecast. Although a few years out, 2011/'12, based on the '07 forecast, debt ratios are expected to be 3 percent higher than were forecast to be in the '02 IFF.

Total revenues -- quite a bit higher then in the '02 IFF, for both the '07/'08 and '11/'12 test years. We know there's more plant in service now then -- then what was assumed in '02.

And when Mr. Bowman took you through the pre-filed evidence, they examined each of the rationales given by Manitoba Hydro in support of their assertion that further rate increases are required against that

back drop of comparison.

One of the rationales was the drought. Was that a valid reason? No, because the utility had completely recovered by '07/'08.

How about the government payment? No, because actually what was paid was less than was forecast in the '02 forecast, which, as we know, saw the utility reaching their debt/equity target.

Increase load, lower than average rate increases? No. Overall, revenues were higher even without the proposed new industrial load rate, as were overall rate increases. And the transcript reference, Mr. Bowman's evidence, page 3274 and 75.

OM&A, an area which also has a material impact on the Corporation's ability to achieve its financial targets, seems to be poorly controlled. In the years reviewed, we've seen an upward shift in OM&A spending year after year -- $250 million impact over the relevant period in fact, a 3 percent impact on the debt/equity ratio.

In fact, if O&M&A growth had been kept to the pace that was forecast in 2002, there would be no need for a rate increase today, because the '02 forecast of approximately 326 million for '07/'08 versus the 360 million that we're hearing Hydro requires today -- a $34

million difference, which exceeds the revenue being sought in this rate application.

The Coalition witness, Mr. Harper, also agreed and discussed this in his evidence at page 18. He also indicated that his evidence was essentially that the OM&A spending has not been as efficient as it should be. It's exceeded its forecast over the relevant period, and he would recommend that the Board reflect this in terms of a downward adjustment to the rate increases being sought.

You can -- this goes in some further detail at -- at the Tab 3 of our written submissions as well as item Number 21. And with respect to Exhibits PUB/MIPUG-12 and the MIPUG pre-filed evidence Attachment B all review the issue of OM&A spending. So this was one area, in fact, that did seem to bear out as to why Hydro's back before you seeking increased revenue.

The second factor, increased capital spending, as Mr. Bowman put it, "bears out in spades," page 3276 -- 3278 of -- of the transcript.

Well, Wuskwatim we see is likely becoming a factor driving rate increases. Both Mr. Harper, and Mr. Bowman, and McLaren agree on that point.

We are seeing that new development is having an enormous impact on debt/equity ratios. And

with respect to this IFF and the new development we're seeing in that horizon, not even taking into account what's just beyond that horizon, it's keeping the target out of reach for the period that the IFF deals with.

And, of course, we know Conawapa and Keeyask, just a couple of years beyond the range of the IFF, is bringing in again further potential massive impacts.

At page 3282 of the transcript, Mr. Bowman discussed this issue and indicated in terms of the overwhelming impact that this new generation has on debt/equity ratios, that when we take into account the new generation of Conawapa and Keeyask, we're looking at something like $6 billion in equity would be actually required to reach the 25 percent target.

And is this linked to the purposes for which reserves are -- are intended which is rate stabilization and meeting of extraordinary contingencies? MIPUG's evidence was that there's an insufficient linkage.

In this climate of massive capital extension, the debt/equity target is not likely to be attained any time in the planning future. To hold it out as the basis for rate increases year after year makes me think of holding a carrot out at the end of a pole in

order to get the donkey to move in the old -- in the old movies. The donkey may move, the carrot remains out of reach, and never actually reached.

MR. ROBERT MAYER: Who's the donkey?

CONTINUED BY MS. TAMARA MCCAFFREY:

MS. TAMARA MCCAFFREY: When I jotted down these comments, I -- I considered leaving that out, but -- but the image stayed with me throughout this whole Hearing -- this notion of moving towards that carrot. But you're never going to get that carrot, not if we're using the wrong tool. If we're not achieving the target, how can it be considered meaningful in the context of setting rates.

In terms of a predictable and stable rate regime over the long term, it is not. It is not a meaningful target for the purpose of setting rates. Meaningful for lots of other purposes, but in this room, for the purposes of regulation, it's not getting us there. The current approach is showing a trend of rate requests -- requests as erratic and unpredictable as water flows themselves.

MIPUG members have always stressed the importance of a stable and predictable rate regime to their industries. You've heard that in this Hearing and

in others in their presentations. This is even more important in terms of the financial climate in which the utility exists with a growing shift towards exp -- export sales.

So we have the dilemma of the regulator, on the one hand, of costs are not being prudently incurred or if there's no evidence to substantiate whether the costs -- for example, perhaps head office costs at 18.75 million, for example -- are prudent or being offset by savings so as to be revenue-neutral, well, the Board could disallow them through the rates approved.

There's some discussion of this issue in the MIPUG written argument under Public Utility Board's issue Number 24, at Tab 24. However, in a Crown monopoly regulated context, the customer's interest in being protected from unreasonable charges or costs must also be balanced with the financial health of the utility. And the balancing the two, as I've indicated before, are the public interests which the regulator must protect.

Now, certain items, of course, such as charitable donations and sponsorship, which the Chair raised in item Number 13 and is discussed at Tab 13 of our written submissions, are a horse of a different colour. In this particular case, they're not material.

Around 3 million a year and, because of that, in principle, MIPUG takes the position that they would not be disallowed, and there's some discussion of that. But in principle there's no adjustment required here in this Hearing, given the small amount involved.

But for regulation to be meaningful, the role of the regulator cannot be diminished to the point of being compelled to rubber-stamp all costs incurred by the utility, capital, OM&A or otherwise. Of course not. What would be the point then?

With the requested rate increase, Manitoba Hydro was targeting an interest coverage ratio of 1.29. Yet their target is actually 1.2, which is surpassed, we know, without any rate increase. So there seems to be a basis for an argument that the rate increase could be in fact lower than what's being requested by the utility.

However, in this proceeding MIPUG does not oppose Manitoba Hydro receiving the 29.6 million that they're seeking. And in fact, our recommendations are essentially that differential rate increases be given -- and there's a discussion of this which I'll go to further at PUB issue Number 15, our Tab 15 -- and a second revenue-neutral rate adjustment each and every year, unless Manitoba Hydro comes back with another GRA, to bring the classes to within the zone of reasonableness

within five (5) years. Again, why have a goal -- a target of getting there if one does not actually take steps to achieving it?

Secondly, MIPUG recommends that revenue be allowed in the rates as its level requested, that it's contingent upon Manitoba Hydro developing reserves for the purpose of rate stabilization and meeting extraordinary contingencies. The legislative parameters for that are already established and have long been in place in Section 40(1) of the Manitoba Hydro Act. And, again, there's further discussion of this which I'll deal with at issue Number 9.

Now, as discussed in our written submissions under Tab 3, MIPUG's not opposing the amount of the increase revenue, recognising that there is a potential need for a transition to a new rate level in the current expansionary environment. This transition should be measured and predictable to enhance the stability of rates over the long term.

Looking ahead, to develop a stable and predictable rate setting regime in an area of massive capital expansion requires some evolution. So how do we resolve the regulator's dilemma? We need to develop improved regulatory checks on Hydro through rate regulation if it is to be meaningful and more than a

rubber-stamping of costs for fear of risking adverse impacts on the financial health of the utility.

Mr. Williams also indicated that the Coalition and Mr. Harp -- Mr. Harper also accept that simple continued increases to domestic rate levels do not provide assurance of actual improvements in retained earnings. They don't provide assurance that those reserves that are contemplated under Section 40(1) of the Manitoba Hydro Act for the purposes of rates stabilization and meeting extraordinary contingencies are going to be there in this expansionary environment.

Development of the right kind of reserve mechanism funded as a charge against Hydro's rate, net expert revenue levels can do this and should be pursued.

Manitoba Hydro has dismissed a reserve concept as outdated. We know they tried it before. We know they're not doing it anymore. And in fact, they suggested that British Columbia had rescinded their reserve provision.

Now, that's not accurate. And -- and we explain that at page -- Tab 10 at page 10-5 of our written submission, because in fact, what BC Hydro did was simply replace their former mechanism with the heritage deferral account, which is a regulatory account to stabilize rates in the face of -- of swings in water

flows.

What relevance does the fact that Manitoba Hydro used to do this and no longer does it anymore -- some ten (10) -- fifteen (15) years ago -- have on developing an appropriate reserve mechanism today in an area of -- in an era of massive capital growth, far greater risks associated with this and increasing risks associated with Manitoba Hydro's export sales? None.

The Board has expressed interest in this -- in this concept in each of the last two (2) major rate revisions. There's all kinds of ways to think about developing this, as Mr. Bowman stated. It's a creative exercise. Surely, the ingenuity that is present in this room is up to the task. It is time for the Public Utility Board to strongly and specifically prescribe that Manitoba Hydro take specific steps with respect to the creation of appropriate reserves to ensure that these reserves are going to be in place when in fact they are required.

Options exist, and it's developed further in the PUB/MIPUG-IR-6 and MIPUG Exhibit 14, which we went through in the -- while Mr. Bowman and Mr. McLaren were on the stand, and further references that you can find at Tab 10 at pages 10-3 to 10-4 of the written submissions.

The legislative framework exists.

Sections 40(1) of the Act specifically contemplates this. Section 40(2) specifically contemplates reserves again being used for rate stabilization. It is silent on the precise mechanism, but the legislative intent is clear. Reserves are supposed to be there for the rate stabilization and in the event of meeting significant contingencies and risks.

The Manitoba Hydro current method of using retained earnings as a basis to this does not ensure this result. We have a frenetic series of rate requests and withdrawals of requests, sometimes within a month, as Mr. Bowman's testified. A rate setting regime that varies rate approvals but the fluctuations in water flow is quite unheard of in a regulated context, transcript pages 3291 and -- and 3292.

Manitoba Hydro is coming back and forth before you based on good or negative water flows. MIPUG industries are concerned as to this recent trend in terms of the rate requests.

I recently taught my little boy to ride a two (2) wheeler. And you know, at first he would look down at his feet and he'd zig zag all over the road. But the trick is, as we may remember, is when you look further down the road, you'll have a much straighter ride.

That's what MIPUG is trying to do here with respect to this concept of reserves. It's looking further down the road. It's looking at the issue of capital expansion and the implication to the end of the IFF, beyond the IFF, in the -- in the near future beyond the IFF.

The potential impacts of that are enormous, and it changes the way we have to think about the use of the debt/equity target in the rate setting context. If the Public Utility Board agrees with MIPUG's position on this then it is incumbent upon you to direct that the reserves are going to be there to stabilize rates in the event of major risks.

(BRIEF PAUSE)

MS. TAMARA MCCAFFREY: MIPUG is urging you to adopt a reserve provision concept today, mechanisms to be refined at a special hearing, direct that at this Hearing a review of Manitoba Hydro's risks, long-term reserves levels associated with those risks -- not just the percentage, but rather a -- a logical link with the -- the risks themselves. And this should be informed by Manitoba Hydro's capital expansion plans.

As we indicate in our written submissions

at page 10-5, given Hydro's poor record in responding to this, a general form of directive with respect to reserves and risk assessments in the past, it is apparent that any studies or analysis by Hydro intended to initiate the stated review must be guided by a more prescriptive set of requirements and scope issued by this Board.

Another form of evolution with respect to the regulatory environment is concerned with the issue of capital oversight by this Board. Mr. Chair raised this in issue Number 19, and there's some discussion provided by MIPUG for your review at that tab of our written submissions.

MIPUG would support a recommendation for legislative change with respect to capital oversight. And as well, we note that in other regulations the type of legislative indicator achieves this through a certificate of public necessity. And that might be one option that this Board consider in terms of making recommendations to the Minister.

Alternatively, we echo the Coalition's recommendation that a comprehensive review of Manitoba Hydro's major capital projects, such as was done by order in council in 1990/177 which looked at the capital projects between the period of 1990 and 2009, take place.

It's timely to do this again.

The capital land -- landscape is vastly different than when the 1990 review took place. And the assertions that we've heard from Manitoba Hydro that essentially increased equity should be funded by rate increase -- increases now -- and there's further discussion of this in tab 19 -- shows just how this kind of spending could have a significant impact on rates.

As we discuss at tab 19, pages 19-1 and 19-2 of the written argument, there's no basis for concluding that providing the utility with a debt guarantee in any way hurts the province's credit rating.

There's no cost to the province. The payments for this guarantee are significant, approximately $70 million per year, and growing potentially by a further 100 million if Conawapa and Keeyask come in at current rates, and regardless, providing rate increases for balance sheet reasons, in effect pre-fund equity required for the coming phase of major capital expansion.

We can see nothing in the Public Utility Board's regulatory legislation which contemplates rate increases in order to safeguard the province's credit rating.

With respect to the regulatory oversight

in this framework, my comments earlier apply here. You should not feel compelled to compensate Manitoba Hydro for all capital spending regardless of whether the Public Utility Board deems it prudent or not. Such would be tantamount to rubber stamping and would completely neutralize the public interest objection of regulation.

Moving on to the subject of sinking funds, Manitoba Hydro -- we recommend that they pursue this without delay given the capital spending forecast. To do so would enhance Manitoba Hydro's net income by approximately $93 million over the IFF period. And there's some discussion of this issue at Tab 34 of our written submissions.

We already have Hydro's acknowledgement that it's not as necessary as it used to be. There's no reason to delay with respect to the evidence. And we would recommend that Manitoba Hydro be directed to pursue this sooner rather than later.

On the subject of DSM, MIPUG takes the position that the Hydro should pursue all cost-effective -- that is relative to the marginal cost of acquiring power resources -- DSM, including removing the requirement for non-utility generation customers to displace 100 percent of their own load before receiving the benefit of the kinds of pricing that are closer to

that which Manitoba Hydro pays for other suppliers, as wind and imports.

The customer economic impact should be discarded as a threshold test in favour of giving customers all the relevant information and allowing them to make informed decisions as to whether to pursue DSM.

DSM should be viewed as a cost-effective means of acquiring power resources. And therefore, its economic should be evaluated in a manner similar to that employed for new generation.

MIPUG is concerned that Manitoba Hydro's present DSM approach is screening out a lot of opportunities that should be pursued in this area. And there's some further discussion that can be found at Tab 27 of our written submissions.

On the subject of cost of service, Manitoba Hydro should be directed to correct the double counting of DSM energy by removing it from the export class.

The customer should be receiving the benefits of the DSM it participated in. Hydro's method results in greater cost. And in fact, for the residential class, the cost are the highest -- some $9 million in costs, as you heard from Mr. Bowman -- for the residential class alone, but all classes see an increase

in costs. This is the opposite signal one would want in order to encourage customer participation in DSM.

Aside from the double-counting issue, the present cost of service model is a useful regulatory tool which the Board can rely on in setting rates.

At Tab 15 of the written submission, and dealing with the Utilization Cost Service Study and the Chairman's issues 15, 16 and 25, you see again the MIPUG recommendation for the differential rate increases.

MIPUG points out that all variations of the Cost of Service Study that the Public Utility Board indicated that they wanted to look at in their Order 117/'06 had been reviewed and presented by MIPUG witnesses. And all pre- and post-expert allocation and marginal cost indicate that differential rate increases are merited.

On the subject of marginal cost, we note and remind you that the evidence, with respect to the equiproportional marginal cost approach -- which is to say the least, infrequently used in the cost of service context -- is used even and only then in the context of separate and unbundled functions, such as distribution generation, as opposed to all bundled together, which gives you a -- a significantly different result.

That's not really the way -- the way that

the Coalition recommends -- it's not really the way that it's done in the utilities, that we're aware of, that use an equiproportional marginal cost -- cost of service. And there -- there are very few of them, as Mr. Harper also acknowledged.

Embedded costs and the cost of service is the one that -- that's certainly used the most. And -- and it avoids some of the difficulties surrounding the ability to test the Manitoba Hydro's methodology for determining marginal cost, also acknowledged by Mr. Harper when we cross-examined him on this issue.

With respect to rate design, Manitoba -- or Manitoba Industrial Power Users Group -- recommends that Manitoba Hydro be directed to develop an inverted rate structure for industrials that provides the type of price signals that allow a customer to respond and to see the benefits of doing so.

As Mr. Bowman noted at page 3369 of the transcript:

> "Inverted rates can affect all of the customers, not just a few, all of the customers, all load on the system."

Properly designed, they're revenue-neutral to the customer, which lessens the importance of testing the marginal cost price forecast, an issue fraught with

mystery, as we canvas with Mr. Surminski in our cross-examination, prior to the withdrawal of Manitoba Hydro's --

MR. ROBERT MAYER: Whatever.

CONTINUED BY MS. TAMARA MCCAFFREY:

MS. TAMARA MCCAFFREY: -- or the -- however you want to define it -- of the -- of the industrial rate proposal.

The right type of price signal, particularly to industrial customers, gives the potential to affect far more load than what was suggested in this former proposal. And Mr. Bowman talked about that at page 3362-3363 of the transcript.

In a climate of increased load arising from various fronts, including from a risk of fuel switching as natural gas prices continue to climb, developing inverted rates and potentially seasonal time-of-use rates and other modern rate design options make sense. And it's imperative that Hydro get on with it.

In the greater than 100 kilovolt class there is potentially six (6) terrawatt hours of load, prices for which industry pays attention to and will respond to the appropriate signals. The opportunity here is enormous in terms of price signals to encourage

conservation and efficiency, valid regulatory goals.

DSM opportunities and greater incentives for non-utility generation from existing customers exist. On the other side of this increased price sensitivity is that the wrong price signal can have negative impacts -- far greater, potentially negative impacts -- on industry could put a company, in fact, out of business than it would in some other customer classes. So it's important that the right signal be developed and as soon as possible.

MIPUG would like this Board to provide a strong directive to Manitoba Hydro to develop within the twelve (12) to eighteen (18) month time frame that Hydro indicated it would take modern rate designs using inverted rates that are revenue-neutral to the customer.

And also MIPUG recommends considering the potential of seasonal time-of-use rates, all of which again have the valid regulatory objective of promoting efficiency and conservation in terms of the use and power. That gives every customer the right price signal on every kilowatt hour.

With respect to the seasonal rates, an example would be a customer with an ability to load shift. It could recognize the increased value that, for example, summer power, if a customer could -- could lower

their load in the summer, has the Manitoba Hydro system -- it would freed up more power at a time when that power has it -- has greater value.

If the right type of rate was developed, the cost to the customer would reflect that. They'd be lower. It's an improvement over the winter ratchet, which sends too strong a price signal for some and none to others, and it's a win-win situation.

In terms of non-utility generation, as I've indicated before, we'd like to see that that policy of displacing a 100 percent of their own load first be changed to be fairer to Manitoba Hydro's customers with this generation potential. Why should an existing customer be worse off than a wind generator in Manitoba? The latter has to compete with the export market type pricing.

Well, Manitoba Hydro's customer with non-utility generation potential -- with generation potential must compete with Grand Rapids or Pointe du Bois type prices. Mr. Bowman discussed that at page 3365 of the transcript.

This contradicts Manitoba Hydro's stated objective of obtaining or freeing up additional resources to capture exports. Why not? When the power resource can be obtained for a price better than marginal cost,

why not pursue it?

The concept of industrial load growth having an adverse impact on all customer classes was raised by the Chair at issue Number 7, and it's discussed in our written submissions under tab of the same number.

MIPUG's position is this is not valid as a regulatory construct. It's not a valid regulatory premise for rate making. It singles out industrial load growth in a situation where essentially the same is true of all customer classes for virtually every regulated utility in existence.

Load growth by any customer class requires the addition of new resources whose cost is higher than the existing average. And Mr. Williams talked about this and framed it in sort of a -- the context of the -- the adverse impact, and I want to take you through that a little bit. And I want to challenge that notion and question that notion as -- whether this, in fact, is an adverse impact. Let's look at it.

Growth of load by any class results in the need for all customers to experience increased rates to support the addition of new higher cost generation -- true of any load growth, whether residential, electric heating, fuel switching from natural gas to electricity, or industrial -- could impact on the amount of load

available for exports or resulting in adding new higher cost generation. These may raise average rates -- may.

I say that because there would have to be some detailed consideration supported by data, which isn't here in this proceeding, such as, in the short term, timeline constraints. Well, we know they can result in less export value and, therefore, the impact on Manitoba Hydro revenues from "foregone exports," -- and I put that in quotation marks -- is greatly diminished.

Considerations regarding time the power is used would also be necessary, and we know that off-peak exports are much less valuable and can be certainly below domestic prices. In the long term, the notion of whether the need for additional new generation as a result of load growth is even a problem requiring a regulatory solution needs to be questioned.

Consider that advancing new generation today for domestic load helps put in place low-cost assets built in today's dollars. Just as today's heritage assets may be credited to past development, future low-cost generation will depend on assets that are put in place today.

There's been this notion that this is a bad thing. It's not necessarily a bad thing. In fact, MIPUG would argue there's some benefit to that.

And other benefits that the Board would want to consider includes a value of adding new generation in the context of reducing dependency on the export market and mitigating Manitoba Hydro and the ratepayer exposure to the inherent risks of protectionism, policy changes, competition, and transmission constraints, all of risks were identified by the utility.

Keeping all of this in mind, Manitoba Hydro would like to leave this issue accepting that at this stage the utility does not have a proposal before the Board that -- for which it is seeking approval, and, accordingly, the Board does not need to feel boxed in to stating a firm position on this premise out of this Hearing. There's no requirement to rule on it, as it were.

This issue will be, I'm sure, debated at the appropriate time. But as there's no new proposal before you in which the utility's seeking approval, there's no specific ruling required at this juncture.

And again, my comments with respect to additional data considerations and debate that would need to be looked at before this premise could be so simply accepted, really does need to be examined.

With respect to the issue raised by the

Chair, issue Number 8, and at our Tab 8 of our written submissions, the process for hearing regarding the industrial rate proposal, MIPUG would like Manitoba Hydro to be able to take whatever time is required to do this right, to do this well, including additional consultations with interested parties which they have been -- Ms. Ramage indicated they were interested in pursuing.

Again, there's no requirement for the Board to feel that they must impose any deadlines now. The applicant, I'm sure, will be dealing with this issue with all the energies they can muster once they've recover -- recovered from this General Rate Application.

Any potential prejudice, with respect to timing, can be addressed, and MIPUG would certainly support any measures being put in place to ensure that no one would benefit from this so-called "gaming the system," increasing the load based on getting benefits before any kind of benchmark is put in place.

Once the applications's filed, at that point, a pre-hearing conference should take place to review the process options. And the options, again, could include potentially a technical conference under Section 11 of the Public Utility Board rule, and other issues. But all of that could be canvassed and would be

canvassed, in our view, at a pre-hearing conference once the new application is filed.

With respect to the service extension policy, now this is a -- one that actually wasn't raised by yourself, Mr. Chair, but MIPUG has addressed it at Tab 32 of the written submissions. It's a very interesting issue.

You recall that the service extension policy -- which essentially was described, I think, by Mr. Wiens -- as Manitoba Hydro's long-standing policy of contributing up to three (3) times the expected annual revenue from a customer of the costs that it would take to supply that customer with power provided it -- it extended the grid or enhanced the grid, if I'm putting it correctly.

Now I think that the Public Utility Board was somewhat surprised when they learned that this was suspended by Manitoba Hydro unilaterally in 2005. In fact, I think this came up at the Cost of Service Hearing in 2006 as Mr. Mayer may recall. Comments were made that the Board -- by the Chairman and by the Vice Chair -- that the Board certainly expected that Hydro would come before them if they seek to change the rates. And then the issue went underground.

And in this Hearing, we've raised it again

following the cross-examination by Board counsel on this subject, excerpts of which we provided at Tab 32 of our written submissions for you to review the transcript on your own.

MIPUG's position is that suspending that policy is without legal authority. The utility didn't have a legal basis to do that. It means that the customers must now pay more for service extension costs than they did under that policy. Now we know the Public Utility Board has the sole jurisdiction to approve Hydro's rates for services where they're just and reasonable.

Part IV, Crown Corporation Public Review and Accountability Act, Section 26(1):

> "No change in rates for services and no new rates for services shall be made or introduced without the approval of the Public Utilities Board."

Rates for services, are they defined as the price per kilowatt hour in the rate schedule? They are not. How does the legislation define them? They relate to the prices charged for the provision of power, Section 26(2) the CCPRA. Power is defined in the Manitoba Hydro Act to be electrical power, howsoever generated.

The terms and conditions of service are directly relevant to whether the rate for service is just and reasonable. And again, Section 26 talks specifically about rates for services. That makes sense.

That's why, of course, the Public Utility Board requires that no change to the terms and conditions of the curtailable rates program, for example -- the surplus energy program, for another -- are changed without Board approval. We've provided references for you, page 2, Tab 32 of our written submissions.

The customer's paying increased costs, with respect to the provision of power, and that has not been approved by the Public Utility Board. Manitoba Hydro is seeing increased revenue, and it doesn't matter if it's one dollar ($1) or a million. There's no legal authority for it.

Mr. Wiens confirmed, and the transcript references again are at Tab 32, that customers have come, and they have paid more to get that power, notwithstanding the suspension of the policy as a result of this unilateral suspension. The money amount's irrelevant.

On principle -- and I'm not saying that a MIPUG member has been affected by this directly, but in principle -- they cannot do indirectly what they're not

permitted to do directly under the legislation, which is charge prices that relate to the provision of power without first getting the approval of this Board.

And it is no answer to say, Well, the utility can set terms and conditions of service under Section 28(1)(a) of their constituting legislation, which by the way must be done by regulation in order to come into effect, of course. The Public Utility Board has jurisdiction over Manitoba Hydro's rates supercedes -- supercedes that.

MR. ROBERT MAYER: Ms. McCaffrey, are you suggesting or is your argument that all costs and prices charged by Manitoba Hydro are equivalent to, quote, "rates"?

MS. TAMARA MCCAFFREY: Prices charged by the utility, with respect to the provision of power, is how it's defined. And that is exactly what this is, and that is a rate, Mr. Vice Chair. In MIPUG's position, that constitutes a rate.

It absolutely is contained in that definition. That definition is not restricted to a price per kilowatt hour contained in the schedule. It is prices charged for the provision of power. And I -- and I urge the Public Utility --

MR. ROBERT MAYER: That -- that includes

capital extensions then?

MS. TAMARA MCCAFFREY: Capital extension -- if the customer is paying those costs -- doesn't matter that it's capital, it's resulting in a -- in a revenue to the Utility while getting around the Public Utility Board. There's an increased revenue there. The capital -- you can't -- for Hydro to say, Well, it's capital, hang on. It's capital. This is a separate area. Is it prices paid for the provision of power? Yes. Is it a material term or condition of the service of providing the power? Absolutely.

I can't see any legal basis on which this cannot come before the Public Utility Board. This is squarely within your jurisdiction, in MIPUG's respectful view.

MR. ROBERT MAYER: I have your position. Thank you, very much.

CONTINUED BY MS. TAMARA MCCAFFREY:

MS. TAMARA MCCAFFREY: Now MIPUG does offer suggestions in written submissions under that tab. And the Public Utility Board may wish to discuss this further with Board counsel.

MIPUG takes the position that this Board has to defend its jurisdiction -- the defendant's

jurisdiction in principle -- when there's no legal basis for charging prices for the provision of power as Hydro's doing when they suspended this policy.

MIPUG would suggest that an option to the Board is to make a declaration that that suspension is in fact invalid, order that either an accounting of costs paid since the suspension of the policy be provided to the Board, or -- and/or the Board could order or that Hydro refund the amounts improperly charged from its utilities customers as a result of that suspension.

And I think you can do that pursuant to your powers under a number of different sections. But, just to highlight them for the sake of your counsel and your -- your review into this if I've persuaded you to do so -- Section 24(4) the Public Utility Act, which provides that for the enforcements of your orders and all other matters necessary or proper for the due exercise of your powers or, otherwise, for carrying out any of the Public Utility Board's powers into effect, the Public Utility Board does have all such powers, rights, and privileges as are vested in the Court of Queen's Bench or a judge thereof.

Also in Section 28(11), in matters within jurisdiction, power to require the owner of a public utility to do anything which required to do under the

Public Utility Act or any other act of the legislature is provided.

Of course, Public Utility Board can also initiate an inquiry into the matter is another option. And your authority for that, I'm sure you know, is Section 27(1) of your Act.

And, in any event, the Board must take action to protect its jurisdiction to approve rates. Manitoba Hydro cannot do indirectly what it cannot do directly: charge prices related to the provision of power or change material conditions upon which a rate has been approved, material terms and conditions of the service, without the Board's approval.

And on that note, I'd like to ask the Board if we might take a little break and I might confer with Mr. Bowman here and review if whether there's any additional points I'd like to make. But I -- I believe I'm just about done.

THE CHAIRPERSON: That is just fine. Thank you.

--- Upon recessing at 2:27 p.m.

--- Upon resuming at 2:40 p.m.

THE CHAIRPERSON: Okay, Ms. McCaffrey,

you have another point?

MS. TAMARA MCCAFFREY: Yes, it's brief. In conferring with Mr. Bowman, he pointed out to me, as a much greater knowledge of Hydro system than I pretend to have, Hydro does a lot of extensions, and I -- I don't want there to be confusion about the position that we're taking. We're not saying that Hydro has to come before the Board for every single extension, every time they do an extension, with respect to approval. We're talking about approval of the policy itself here.

So I hope that clarifies our position in case I had inadvertently created some confusion.

MR. DAVID CHIASSON: I think we understood you. Thank you.

MS. TAMARA MCCAFFREY: Thank you very much, and it's always a pleasure to -- to appear before you. On behalf of MIPUG, we appreciate the -- the thoughtful comments and issues laid out but the Public Utility Board. That really assisted us in terms of what to turn our mind to, and we hope the submissions are helpful.

Just, if I could indicate to the Board, I have -- I'd like to be excused. I have -- I have a matter -- my little girl needs to be picked up. And I'm -- the person who was supposed to do it has had some

emergency. So I'm -- I'm -- if it's all right with the Board, I don't mean any disrespect to Mr. Gange. I hate to miss his, I'm sure, eloquent argument, but I -- I'd like to -- to slip out now if I may?

THE CHAIRPERSON: No need to worry. You have done your job. Thank you, and thank you, Ms. McCaffrey, you...

We were going to move to Mr. Anderson now. I do not see him right now. Mr. Gange, are you prepared to proceed?

MR. BILL GANGE: Yes, that's correct, Mr. Chair, I am.

MR. ROBERT MAYER: Do we have any idea where Mr. Anderson is?

MS. TAMARA MCCAFFREY: I -- I don't know where he is, but he did indicate to me he was hoping to argue on Friday. I don't know if he had discussions with counsel.

MR. BOB PETERS: I've been in touch with Mr. Anderson by email this afternoon and kept him apprised of the proceedings. And I'm expecting him here by 3:00.

THE CHAIRPERSON: Oh, very good, okay. Mr. Gange...?

MR. BILL GANGE: Yes, thank you, Mr.

Chair. And I won't take offence at Ms. McCaffrey's leaving. If I were in her shoes, I'd be doing the same thing.

FINAL SUBMISSIONS BY RCM/TREE:

MR. BILL GANGE: Mr. Chair, I have submitted or I've provided to Mr. Gaudreau, and I believe that you have our written submission. I'm -- I'm going to review it. I -- I hope it won't be too boring if I just go through it. It's going to be -- I'm going to follow it quite closely. There will be some deviation, but not significantly.

I also provided and I believe that you ought to have a one (1) page statement from the Toronto Star newspaper --

THE CHAIRPERSON: Yes, we have it.

MR. BILL GANGE: -- and -- and Mr. Peters -- in -- in discussions that I had with Mr. Peters, he advised me that, in fact, he had received the actual reasons for decision in the case that is in -- cited in the Toronto Star.

I have made some copies of that decision. And I -- I haven't attempted to make as many copies as there are people here, but I've -- there's a significant number. And -- and I -- I think -- I am going to make

reference to that case at some point during the -- during my submission.

THE CHAIRPERSON: Thank you, Mr. Gange, Mr. Gaudreau will help. Just one (1) for us because we have it anyway. The main thing is to make sure they have it.

(BRIEF PAUSE)

THE CHAIRPERSON: What we are saying, Mr. Gange, is the Board has actually received copies of this decision. And I am just telling Mr. Gaudreau there are extra copies he needs, he can use ours since we have it.

Okay, sir.

CONTINUED BY MR. BILL GANGE:

MR. BILL GANGE: Thank you, Mr. Chair. This General Rate Application comes before the Public Utilities Board in a context of complex background issues.

Despite Manitoba Hydro's DSM programs, Manitoba Hydro's standard electric residential customers are increasing their energy consumption by approximately 7 percent per year, while our neighbours in Saskatchewan are reducing their electrical consumption by

approximately 3 percent per year. And the transcript reference on that is page 742 and following.

Energy-intensive industry growth will have a significant impact on other customers. Manitoba Hydro has acted on the energy-intensive industry issue by proposing a new rate for the general service large category. The complexities of this rate calculation are, however, subject to consideration by the Board in a further hearing.

Manitoba Hydro is fac -- is facing significant capital costs as major construction projects will soon commence. These capital costs will be incurred at a time when there is a high debt/equity ratio. Even with the new construction programs, Manitoba Hydro is forecasting energy shortages in the years 2009 to 2011 from accelerated load growth.

As in previous hearings, Resource Conservation Manitoba, in time to respect earth's ecosystems, are guided by principles of sustainability and justice of the formulation of our positions and believe that these principles should guide the Board as well in its determination of the public interest.

These principles should be pursued in an integrated manner. Sustainability is not just a guideline for the environment department and justice for

the courts. We're the social welfare system. In particular, both are relevant, in our view, to rate setting.

This means that Manitoba Hydro should be regarded not just as a deliverer of gas and electricity commodities but as a provider of energy services to customers and the province in a manner that reflects the public interest.

Guidance regarding sustainability, justice, and the public interest is contained in the Manitoba Hydro Act, the Sustainable Development Act, Manitoba Hydro's corporate strategic plan, and government policies; such as provincial leadership and climate change mitigation and the commitment to provide affordable energy -- particularly for low-income, rural, northern and senior people, as reflected in the creation of the Affordable Energy Fund and in the Treasury Board directive to the Ministers responsible for the PUB and energy, science, and technology to explore opportunities and develop alternatives to reduce energy costs for low-income families.

Whereas in some jurisdictions, the regulator's hands may be tied in its interpretation of the public interest, in Manitoba the Board could not be more unfettered. Section 26.4 of the Crown Corporations

Public Review and Accountability Act, provides to this Board the legislative authority to take into account those matters that the Board considers relevant in determining the public interest.

Government, of course, can set direction and legislation in policies, as mentioned above, but it does not have to micro-manage in areas where it lacks the requisite expertise and information that the Public Utilities Board process attracts and elicits.

In addition, with respect to emergent issues, government may take its inspiration from the Board analysis and recommendations as it did in legislating the Winter Heating Cost Control Act following Board Order 135/'05 which highlighted the plight of residential customers, especially low-income customers facing a post-Katrina gas price spike.

Correspondence released in the current process between the Minister responsible for Manitoba Hydro and MIPUG indicates that government specifically intends for Manitoba Hydro and the Public Utilities Board process to address the issues and solutions related to system and customer impacts of large new general service loads, even though several parties believe that government should have a role in devising or implementing a solution.

In short, it is our view that the Board has a sufficiently broad mandate to address all the matters before it in the current process, both old and emerging. It may be that for some matters like capital expenditures, it can only make recommendations, but these and the other matters are entirely relevant to the assessment of the present and future financial health of the Corporation, the sustainability and justice of its policies, and operations and the determination of just and reasonable rates.

Previously, the Board has ordered attention to sustainability issues in rate design for both economic and environmental considerations. And in PUB Order 117/'06 at page 3, your Board stated:

> "The Board seeks to assure itself that Manitoba Hydro's rate design and rates are consistent with the pursuit of the environmental objectives of the Sustainable Development Act."

As a further response to the risk that higher domestic consumption poses for net income and domestic rate levels, Manitoba Hydro is directed to bring proposals forward to the Board to eliminate declining block rate schedules and to introduce inverted and time-of-use rates, initially for large volume, non-residential

customers.

Energy efficiency presents the potential for a virtuous circle, wherein lower domestic consumption results in reduced customer bills, higher Manitoba Hydro aggregate net or export revenue and net income and lower carbon emissions by Manitoba Hydro's American export customers.

The Board has also ordered reports and recommendations and other efficiency-related rate reforms, including establishment of a new energy intensive industry rate class, paying marginal costs of supply, rebalancing energy and demand charges, and elimination of the winter ratchet.

Again in 117/'06, the Board further ordered that future cost of service filings should also include supplemental information by customer class, including approximate revenue/costs ratios related to the inclusion of marginal cost information and the allocation of notional environmental emissions costs.

The Board indicated that it would take the marginal and environmental cost information into account in addition to the embedded cost -- costs in setting rates. And -- and again the Board stated to reiterate:

> "The Board will consider the historic embedded cost of COSS pre- and post-net

export RCC indices, together with marginal and environmental cost information and such other circumstances and factors that it deems necessary in its consideration of future rate proposals. While zone of reasonableness readings will be a consideration, neither it nor the RFCC indices will be the sole determinant of rates."

RCM and TREE wish to call the Board's attention to four (4) significant issues raised in the current proceeding:

Number 1, Hydro's electricity rates are no longer the lowest on the continent.

Second, load growth continues to exceed past projections with negative impacts on Hydro's finances and customers and the environment.

Thirdly, 2004 was a watershed year between unchanging rates and the prospect of a steady and possibly steep incline. The old image of rate stability, is unchanging rates that is declining in real terms at the rate of inflation, must be shed.

Number 4, we are explaining -- exploring for the first time the implications of a new COSS methodology in a rate hearing.

That first issue, last year, because of the raise -- rising value of the Canadian dollar against the US dollar, Manitoba Hydro ceased to be the lowest rate utility in North America. This breaks the spell of a long-standing distinction of Manitoba Hydro and provides an occasion to reflect on the appropriateness of the lowest rates in North America target to meet the exceptional value goal in the corporate strategic plan, its potential harms as well as the presumed economic benefits, and the possibility of more beneficial targets for the Utility.

What targets within a context of sustainable energy use would be more beneficial than lowest rates? Since customers pay bills, not rates, a more appropriate target would be low bills for customers who use power efficiently. A complimentary target would be to increase the efficiency of power usage by customers, benchmarked by both Manitoba trends in usage and comparisons with other jurisdictions.

Another term associated with exceptional value is affordable energy. The concept of affordability refers to the bills a customer must pay relative to their ability to pay. Effective conservation programs lower bills and thus make energy more affordable for all customers.

But for many customers of sufficient income, particularly if they are non-heating customers, electrical affordability is not an issue, based on anecdotal evidence of hearing participants or their relatives who pay the bills.

To make energy affordable, it is important to focus on customers' energy burdens and target the most vulnerable with conservation and bill assistance as discussed in the evidence of Messrs. Wiens, Chernick, and Dunsky.

To measure energy affordability, Manitoba Hydro needs to gather information on the energy burdens of Manitobans and track the effectiveness of its program to lower the number and extent of high and severe burdens. Low average rates across the board are not a sensitive measure of energy affordability if they ignore measures of efficient use and ability to pay.

RCM/TREE's evidence in this proceeding, summarized in the recommendations to follow, propose rates and programs tailored to support the linked goals of affordability and efficiency.

Secondly, one negative consequence of suppressed electricity rates is a jump in load growth beyond previous predictions which threatens the export surplus, hastens the requirement to construct more costly

new plant for domestic use, escalates the value -- the level of greenhouse gas emissions in North America, and has the potential for an adverse impact -- impact on Centra Gas if the flight from gas to electricity for water and space heating continues.

For example, despite the best effort of Manitoba Hydro's Power Smart programs, electrical usage in Manitoba continues to climb at rates higher than earlier forecast.

Wuskwatim, originally justified for advanced construction to serve the export market, is now required at the earliest possible in-service date for domestic load. Moreover, the 2007/'08 power resource plan identifies new energy deficits for the years 2009/'10 through 2011/'12.

This morning Mr. Williams had a theoretical discussion of small elasticities in the residential market. It is our view that -- that that discussion must be set against the actual experience in Manitoba where gas and electricity costs are converging.

You will recall that Mr. Chernick, in his testimony, disagrees with the -- the studies that had been presented with respect to elasticities. And it was his view that -- that the studies that he had reviewed would suggest that the elasticities are significantly

greater.

Secondly, the actual Manitoba experience disagrees with that concept of small elasticities. The subsidy for electricity that is currently in place, as a result of the export revenues, makes the price so low that the gas market rates as -- as established by -- by Centra Gas means that -- that the electrical and the gas rates are converging.

While the load growth for large industrial users has the largest potential financial impact on the Corporation and its customers, load growth in the non-electric heat residential sector, at 7 percent per annum, is a matter of concern. Our neighbours in Saskatchewan, as I previously -- previously stated, are reducing their electrical consumption by approximately 3 percent per year.

The explanation for this difference that was provided by Mr. Kuczek is that Saskatchewan residential customers prefer natural gas water heaters while more Manitobans are switching to electricity to heat water. The increase in energy consumption has negative global greenhouse gas consequences. That's set out in -- in RCM/TREE/MANITOBA HYDRO-1-3(C).

Consumers switch from natural gas water heaters to electrical water heaters due to what we see as

perverse pricing and mistaken assumptions as a result of a failure to engage in -- in part in full cost accounting.

MR. ROBERT MAYER: I'm having a little trouble with that reasoning, sir. You're saying that we get less greenhouse gases by burning natural gas than we do from using hydroelectric power?

MR. BILL GANGE: It's not quite what we're saying there, Mr. Mayer.

The evidence -- the evidence that -- that has been presented, quite clearly in -- in our view, has been that -- that use of -- of natural gas for water heating is a significant saving with respect to electrical power and that the more electrical power that is saved, the more that can be exported to the United States, which then potentially displaces coal-generated power. That's -- that's -- hopefully that -- that clarifies that point?

MR. ROBERT MAYER: Yes, that does.

MR. BILL GANGE: Thank you, sir.

CONTINUED BY MR. BILL GANGE:

MR. BILL GANGE: It is our view that the prospects could get considerably worse if the trend to replace gas space heat with electrical space heat reached

the same proportions. The juxtaposition of increased gas prices with submission-market electricity prices and -- Mr. Mayer, just as -- as your comment identified -- a green promotion or a rationalization of the switch that fails to take into account the wider consequences in North America makes a more massive conversion to electric space heat a real threat.

You will recall that in Mr. Ciekiewicz's presentation he -- he testified at -- at length of -- and with -- and with real compassion and -- and -- well, with real passion and in intensity of the -- the green nature of the use of electrical space heating.

There's -- the -- the -- through the IR process, we also found out that the MTS Centre next door is using a significant amount of electricity, and Friesen Tokar Architects have designed the building -- the Strand amongst others. The considerable promotion of geothermal installations in gas service areas all point to a growing momentum behind this trend. And it is a -- is the position of RCM/TREE that that trend is harmful.

The evidence indicates that 2004 was a watershed year for electricity rates. After more than a decade without increases and a 2 percent decline for industrial customers in 2003, a couple of years of drought signalled the necessity of a multi-year climb in

rates to address Manitoba Hydro's under-capitalization.

The perspective rate of increase could have been less had Manitoba Hydro in an extended period of favourable water flows, without extraordinary capital expenditures, raised its rates enough to accelerate debt repayment to improve its capital structure. And the question that we pose is, Did this fixation on the lowest rates that -- having that target prevent this from happening?

Fourthly, this is the first GRA under the new cost of service methodology which treats export customers as a separate class and defines a revenue surplus from that class.

Domestic customers, on the other hand, all have a revenue shortfall relative to their allocated costs and are subsidized by the surplus revenue from the export class. This raises the policy questions of (a) how best to distribute the export surplus to the elements, activities, and classes of the utility; and (b) for each classes' share of the subsidy, how to distribute it within the class.

It is our position that -- that from time to time, there has been discussion of cross-subsidization from one class to another. It is the position of RCM/TREE that there is no class subsidization, cross-

subsidization at all, and the subsidization is strictly limited to the export revenues.

RCM/TREE is making the following recommendations for the Board with respect to direction to -- to Manitoba Hydro on a number of points:

Each general service large customer should be charged the embedded energy rate for usage up to a baseline and marginal cost, including environmental costs above that level.

New general service large customers should be charged entirely the marginal energy rate. The additional energy should be used to fund economic development grants and increase DSM and to decrease the demand charges.

The Board should direct Manitoba Hydro to participate in a collaborative effort with interested parties to determine if there are areas of agreement for the design of the new industrial rate proposals. This collaborative approach should be ordered to precede the later hearing before this Board to consider the new industrial rate proposal. We agree with the proposal to a fixed -- to fix December 31st, 2007, as the end date for determining baseline levels.

With respect to the collaborative effort, in the Centra hearing that -- that only the Chair was at,

but RCM/TREE urged that -- that there be a much more collaborative approach taken to these hearings. And -- and we again would urge that and -- and see the -- the new industrial rate as -- as an opportunity to implement a collaborative approach. RCM/TREE would like to be in that room with Mr. Chernick when various conceptions -- concepts are explored.

Secondly, RCM/TREE would -- would recommend that Manitoba Hydro should use the increased revenues from tail block sales to reduce customer demand and inner block energy charges; to use those funds to fund enhanced energy efficiency program, low income-customer discounts and economic development; and to improve Manitoba Hydro's financial structure.

MR. ROBERT MAYER: Just one moment on that one again. If I recall RCM/TREE's original discussions, with respect to inverted rates, there was to be no extra revenue, that it was any move to inverted rates was to be revenue-neutral. So I don't understand that last recommendation.

(BRIEF PAUSE)

MR. BILL GANGE: Mr. Mayer, you -- you're right, they are supposed to be revenue-neutral. You --

you're correct, they are supposed to be revenue-neutral. However, if -- that may not occur. And -- and to the degree that they do not occur, that -- that access should be devoted in -- in the manner that we suggested.

But -- but you -- you're quite correct, that -- that our understanding is that -- that the inverted rates struc -- structure ought to, in a perfect situation, result in a revenue-neutral design.

MR. ROBERT MAYER: Thank you.

CONTINUED BY MR. BILL GANGE:

MR. BILL GANGE: Thirdly, Manitoba Hydro should eliminate demand ratchets. Fourthly, Manitoba Hydro should implement time-of-use energy charges, starting with the largest customers and move revenue collection from demand charges to time-of-use energy charges.

It is the position of RCM/TREE that Manitoba Hydro should be required to comply with the Board's rate design directives, phasing in the directives to increase tail block energy rates and to reducing customer demand and inner block energy charges ought to start with the Board's directive arising out of this proceeding.

Elimination of the demand charge could be

entirely implemented in this proceeding. It is recognized that time-of-use rates will require appropriate meetings -- metering and should be implemented as soon as feasible.

Mr. -- or Professor Miller points out that -- that I -- I misspoke, and that it should be the elimination of the demand rachet. I believe that I may have said the elimination of the demand charge.

Fifthly, the Board should require Manitoba Hydro to participate in a public review of marginal costs including environmental costs. If Manitoba Hydro's forecast data are commercially sensitive, publically information -- publically available information could be used to satisfy the Board's directive too, in Order 117/'06.

RCM and TREE do not consider the directive to have been satisfied by including only environmental costs internalized in the market. We believe that such information is part of the full cost accounting that is to inform decision-making as prescribed by guideline one of the Sustainable Development Act.

6 deals with -- with the inverted rates. And RCM/TREE accepts that a 2.9 percent residential rate increase is appropriate and that the 2.25 percent interim increase last year is warranted and should be finalized.

RCM and TREE suggest, however, that the basic monthly charge should be reduced to approximately four dollars and seventy cents ($4.70) per month. The rate for the initial energy block should be set at six (6) cents per kilowatt hour for 600 kilowatt hours per month for non-heating customers and for all customers in non-winter months, plus a winter heating allowance for all-electric customers totally 6400 kilowatt hours annually, distributed over the heating season. The rate for additional energy should be set at about six point two eight (6.28) cents per kilowatt hour.

In its rebuttal Manitoba Hydro worries about the accuracy of its database for identifying customers with electric heat capability, as it must to administer city and provincial tax revenues.

RCM and TREE believe that for existing customers, if the identification is good enough for the tax collectors, it should be good enough for rate design, even if there are borderline or problematic cases. Exceptional cases and administrative gaps should not obstruct sound policies. In the case of customers wishing to decl -- newly declare electricity as their heating source, it is reasonable to require a Power Smart inspection to verify heating source and building efficiency.

This morning, Mr. Williams stated that Mr. Chernick had stated that -- that low-income customers ought not to get in the way of -- of the inverted rates. That's not quite what he said. What -- what Mr. Chernick said, in his testimony, is found at pages 2890 and following 2891.

And what Mr. Chernick was saying was that -- that in -- in his presentation it was his position that inverted rates are a good and sound economic policy for Manitoba Hydro to implement and to follow. And he said that there are situations where sometimes there will be low-income customers that -- that are affected by that and that -- that the fact that there are going to be people that are affected is not something that -- that ought to operate as a veto over the -- the good and sound public policy, and that what ought to happen is that proper procedures to protect those customers ought to be put in place, hand-in-glove.

He was not attempting to minimize the risks. He was not attempting to marginalize those people. He was saying that there are proper steps that ought to be taken and -- and those steps are -- are also part of our recommendations.

If the Board is inclined to continue the tradition instituted by Manitoba Hydro of limiting an

increase for any customer to a maximum of 3 percent over the class increase or 5.9 percent in the current instance, RCM/TREE are prepared to accept the rate structure set out in Manitoba Hydro Undertaking Number 94, which was Exhibit Number 89.

Pursuant to the calculations performed by Manitoba Hydro, the basic charge would be set at four dollars and seventy-four cents ($4.74), the first block would be set at six (6) cents per kilowatt hour, and the balance would be charged at six point two (6.2) cents per kilowatt hour.

In its rebuttal Manitoba Hydro suggested that lowering the basic charge for electric customers might incent customers with small gas usage to switch to all electric appliances to avoid the recently increased gas basic monthly charge.

However, since gas customers are also electric customers, such an incentive to switch is already built into the growing basic charge for small users of gas. Lowering the basic electric charge and increasing the tail block rate provides a counter-incentive for that move.

The rebuttal also suggested that because customer-related costs are real costs, larger consumers of energy will be subsidising these costs for smaller

consumers of energy.

In reply, we note that all customers are subsidized from credited export profits and that credits applied to the basic charge, rather than energy, are more equitably distributed in addition to providing a stronger price signal to conserve.

It is the export customers, not high-consuming domestic customers, who provide the subsidy. It is the higher-consuming domestic customers who curtail the capacity for the export earnings that provide this subsidy. In this respect, the basic electric charge differs from the basic gas charge, and it is not unreasonable that they diverge.

RCM and TREE have also pointed out in Centra Gas hearings that various externalities factored into the cost of gas might justify an inverted gas rate -- and -- and we have in fact argued that in the last hearing -- or we now add a reduced basic charge funded by pricing the gas commodity to reflect those externalities.

An alternative approach would be to have a minimum charge for each customer's bill. This would be like a basic charge with a small quantum of free electricity, say 100 kilowatt hours per month, thrown in. In this case, the export subsidy is applied to zero out an amount so small that almost every customer will

surpass it, almost all of the time, but if not, the minimum bill must still be paid.

If Manitoba Hydro requires additional time to prepare education materials and mitigation measures, it might be possible to introduce the residential rate increase with a flat rate structure in the month following the Board order and implement a revenue-neutral inverted rate structure as described above in the fall.

Number 7. The general service small energy rate should be increased to about six point six eight (6.68) cents per kilowatt hour for all energy plus any increase needed to offset the elimination of the demand ratchet. The customer charge for non-demand metered customers should be reduced to about nine dollars ($9.00), and the demand charge for demand-metered customers should be reduced to about six dollars and forty cents ($6.40) per kV.A.

Number 8, the general service medium energy charge should be increased to 2.76 per kilowatt hour, plus any increase needed to offset the elimination of the demand ratchet, and the customer and/or demand charge decreased. If the reduction is taken entirely in the demand charge, it would be reduced by about fifty (50) cents per kVA.

Number 9, if the Board increases funding

for DSM, low-income programs, economic development, or strengthening Hydro's balance sheet, the additional costs should be recovered through energy rates and through energy -- tail block energy charges where possible.

Number 10, Manitoba Hydro should institute an affordability program for its low-income customers. In addition to their social benefits for the least well-off in our society, the programs are beneficial to non-participating customers because of reductions in utility costs and increases in the amount of money collected from low income customers.

Manitoba Hydro should, at a minimum, set its goal as reducing the energy burden of its low income customers to below the severe level of 15 percent of their income.

And, at that point, Mr. Chair, I pause to note that you raised, as issue Number 20, the question of -- of the Board's more limited jurisdiction compared to the situation with Centra Gas. And you wanted views with respect to that are related to the utility's approach or possible approach to low-income customers.

And MIPUG, in its detailed and lengthy submission, took the position this is social policy and is not something for this Board to be considering. Hence, the reference to the case that I've provided to

you.

It is our position that -- that, first of all, these are not discriminatory matters at all and that it is within the Board's jurisdiction. I would point out it -- in the decision of the Advocacy Centre for Tenants, Ontario, and others versus the Ontario Energy Board -- which is a decision which was just released on the 16th of May of 2008, from the Ontario Supreme Court of Justice Divisional Court -- Justices Kiteley and Cumming, at paragraphs 55 and 56, dealt with the issue of whether low-income programs would -- could be viewed within the Board's jurisdiction.

And the court, in that decision, as you had in your previous decision with respect to Centra, where you referred -- where you stated that you preferred the dissenting opinion that had been -- that had been issued by the Ontario Energy Board in your review, so too the divisional court preferred the dissenting view in that case. And that is now the majority position.

And I think it's useful for the record to refer to paragraphs 55 and 56 of that decision. In that decision at paragraph 55, the court held:

> "However, in our view, the Board need not stop there. Rather, the Board, in the consideration of its statutory

objectives, might consider it appropriate to use a specific method or technique in the implementation of its basic cost of service calculation to arrive at a final fixing of rates that are considered just and reasonable rates."

This could mean, for example, to further the objective of energy conservation, the use of incentive rates, or -- or differential pricing, dependent upon the quantity of energy consumed, as well, to further the objective of protecting the interests of consumers.

This could mean taking into account income levels in pricing to achieve the delivery of affordable energy to low-income cust -- consumers on the basis that this meets the objective of protecting the interests of consumers with respect to prices.

The Board is engaged in rate setting within the context of the interpretation of its statute in a fair, large, and liberal manner. It is not engaged in setting social policy. I would urge that this Board consider that same approach.

And -- and that then takes me back to the -- the rebuttal that Manitoba Hydro -- that -- argued that it is not a social or income redistribution agency;

it's revenues are not obtained through taxation, but are rather payments for service from customers.

In fact, none of Hydro's domestic customers pay in full for their service. And the Utility is very much in the redistribution business, taking from the export customers and giving it to the domestic ones. The question for the Board to decide, as we noted earlier, is what distribution is most in the public interest, as judged in terms of the various principles, laws, and policies that pertain to this process?

RCM/TREE advocate an integrated approach to affordability and efficiency. We believe that, as a matter of social justice, basic energy needs must be met, and that the utility, as a supplier of energy services, has a key role to play.

As indicated above, Mr. Wiess' evidence pointed to numerous utility cost savings that can arise from effective low-income customer assistance, which make it imprudent not to provide such assistance.

Moreover, there's an urgent need to replace -- to re-price the tail block of electrical consumption to forestall the fuel switch -- switching from gas to electricity that has begun as -- and is inflating Manitoba loads.

But the plight of low-income families with

high energy bills deters the rapid -- adoption of the inverted rate remedy, even though smaller consumers of electricity might benefit.

It is our view that -- that the inverted rate structure will provide -- has the potential to provide significant relief for a majority of low-income customers. And although Mr. Williams' comments this morning focussed on those -- those low-income customers that will be adversely affected, we would say to you that it is our view that the majority of low-income customers will receive a benefit from inverted rates, and those people cannot be forgotten.

Mr. Chernick proposes that we think of targeted low income conservation programs and bill assistance through vouchers as mitigation measures enabling us to move more quickly down the conservation path. It is our view that this is not a time for extreme gradulation -- gradualism as was advocated in the testimony of Mr. Harper.

Point Number 11 sets out a number of points that were raised by Mr. Wiess in his written testimony. I'm not going to review them, word for word. But basically, Mr. Wiess said that there's a number of things that have to be done.

First of all, Hydro has to set a goal, and

-- and that that goal is that it ought to be reducing its low-income customers total energy burden to 15 percent or less of their income. And that over time, that -- that number ought to be reduced to around 11 percent, and that that should be the number that is described as "a high energy burden."

Secondly, Mr. Wiess recommended that -- that Hydro set submission-goals and outreach targets and that -- that specific groups -- such as seniors, minorities -- be targeted. And -- and I -- I can say that Professor Miller and I were both exceptionally impressed by the evidence of Mr. Dunsky.

You'll recall that -- that it was RCM/TREE that introduced Mr. Dunsky to the Public Utilities Board last year in the Centra Gas hearing, when -- when his report on Hydro Quebec Mr. Weiss' evidence. We agree with Mr. Dunsky that this is a difficult process, but it is one where -- where specific plans have to be set.

Mr. Weiss also recommended that -- that low-income families with the highest usage be targeted as -- as the -- the top priority. He further recommended that -- that DSM programs -- that -- that the -- that the -- the affordability program be linked to low-income DSM programs.

Mr. Williams said this morning that his

clients are wary of means tests. Well, they're already in effect. They're already in effect with respect to the low-income DSM programs, and -- and it's -- the suggestion that's being made is no greater than what is currently in place.

Mr. Weiss stated that from his perspective, from his experience and his review of the literature, percentage of income programs with equal payment plans compared to all others seem to change customer behaviour the most, and he stated that the most successful programs require customers to keep current with their monthly payment to remain in the program.

This requirement both leads to changes in behaviour on the part of customers, and produces revenues that reduce or even completely offset the cost of the program.

And I know that -- that Hydro has stated to you in its testimony that it remains skeptical of Mr. Weiss' views on this point. But that is his -- his review of the literature, it's his review of -- of his experience, and -- and we would urge that you consider this very seriously.

He also recommended that -- that the program should allow for easy re-certification each year, and that the program ought to facilitate long-term

participation.

His final recommendation on that point was that an affordability program should be seen as an ongoing experiment including the use of a control group of low-income customers that are not enrolled in the program.

Frequent evaluations are very useful, as is an advisory group consisting of social service agencies, low-income customers, conservation and social justice advocates, and utility personnel involved with the program. He acknowledges that low-income populations are very diverse and they require innovative outreach efforts and varied approaches. The utility should be prepared to fine tune the program and to expect some disappointments.

I'm going to de our presentation, Mr. Chair, by saying that RCM/TREE supports Manitoba Hydro in its bid to establish a financially secure and socially responsible utility.

RCM/TREE's position is that Manitoba Hydro -- is that Manitoba Hydro must continue to develop targeted DSM and affordability programs for its low-income customers. It must develop robust, effective DSM programs. It must rethink its commitment to providing electrical energy at the lowest rates in North America,

and it must move towards changing the -- the -- pardon me, charging the marginal price of consuming electricity so that the principles of sustainability can be properly observed.

Thank you, Mr. Chair, that's my submission on behalf of our RCM/TREE and I'm happy to respond to any questions that anybody might have.

THE CHAIRPERSON: Thank you very much, Mr. Gange, Professor Miller.

Mr. Peters, do we know where Mr. Anderson is?

MR. BOB PETERS: I -- I think he may be in the building. He had emailed me that he was on his way here at ten (10) minutes to, and obviously he was just waiting for a grandiose entrance --

THE CHAIRPERSON: Here we are.

MR. BOB PETERS: -- so I welcome Mr. Anderson. Perhaps --

THE CHAIRPERSON: Perfect timing. Your timing was perfect.

MR. MICHAEL ANDERSON: Mr. Chair, I just have to get my books from the workroom.

THE CHAIRPERSON: Sure, we will take a few minutes while you are doing that.

MR. MICHAEL ANDERSON: Thank you, and I

probably would not complete today. If -- I won't? Do you have to rise at 4:00? Okay, well, I would have to leave shortly after that for other commitments, so I shall get my books and get going. Thank you.

--- Upon recessing at 3:31 p.m.
--- Upon resuming at 3:38 p.m.

THE CHAIRPERSON: Okay, folks. Mr. Anderson, you can begin whenever you wish.

MR. MICHAEL ANDERSON: Thank you, Mr. Chair. Mr. Vice Chair, Board Member Proven, Manitoba Hydro panel, thank you very much for the opportunity to provide our closing comments on a very interesting proceeding with a considerable amount of material.

I understand that, given the point in time that we have and my continuing on, that I've been -- it's been suggested that I would have the option of whatever I don't say today, that I provide as early and as possible tomorrow to Ms. Ramage, in writing, so that you can consider that before you do your argument on Friday.

And if that's acceptable, then we can -- well, I can note a point that might be convenient to rise, and then I'll get the material to you as soon as possible tomorrow, if that's acceptable.

MS. PATTI RAMAGE: That would be acceptable.

THE CHAIRPERSON: And with a copy to us too, as well, Mr. Anderson.

FINAL SUBMISSIONS BY MKO:

MR. MICHAEL ANDERSON: It would be a general circulation to all parties, Mr. Chair, of course. Thank you.

Well, as MKO always does when it makes its final comments on proceedings, it likes to provide a bit of background on our interests, some of which is drawn from the proceeding and some of which is drawn from comments that we've made at various hearing -- sessions including the motion hearing on the MIPUG motion regarding the -- the new and expanding industrial rate.

We see this particular proceeding, whether it is inherent in this proceeding and the decisions arising from it, as being very important because Manitoba Hydro, as a corporation, is on the cusp of some significant change and focus in direction.

Manitoba Hydro's always been seeking as my -- as Mr. Gange was describing to you -- provide the lowest cost service in North America, and has prided itself considerably on doing so for many years, although

there's some new competitors in the marketplace, depending on how you measure the cost of electricity.

We have, however, before us a -- an aggressive capital plan which, perhaps, is the most extensive in the Corporation's history with, perhaps, the possible exception of the nearly back-to-back projects at Grand Rapids and Kettle in the old days.

But in -- in all of those events the finances of the Corporation, its rate setting, the value it places on the energy it produces, are all things that are going to be under considerable scrutiny by both Hydro and the Intervenors and, certainly, by MKO. So we see the decisions that are being made regarding cost of service, rate design, and rate setting.

The implicit acceptance, at least by the Crown and Manitoba Hydro's capital program -- I note for example, Ms. Ramage's reminder to the Board and her emails regarding the admissibility of the evidence of Mr. Dunsky, that in 1989 the Court of Appeal had clarified the status of the Board's jurisdiction in respect to capital plans. And, as a matter of history, of course, MKO is really the instigator of that proceeding for the Court of Appeal as a stated case.

It was our interest in ensuring that all were aware clearly that the utility was not able to be

regulated -- was not subject to line item regulation in respect of regulatory approval of its -- its capital projects, initiatives it was undertaking or anything else, that the Board had a rather blunt instrument available to it of approving or not approving the rates being proposed to it by Manitoba Hydro.

Simply put, that you would -- the Board would either authorize Hydro to raise the revenue that it -- it felt it needed to undertake all of its plans, or it wouldn't. And so MKO's intent in 1989 was to raise to the attention, certainly, of the Legislative Assembly, that if it was the regular -- if it was regulatory oversight of Manitoba Hydro that the legislature intended, it needed to amend the acts -- the relevant legislation -- in order to provide that authority.

So, MKO finds itself with the similar interest, as it had in 1989, of an aggressive capital program that is not subject to regulation in the ordinary sense as would be recognized by the National Association of Regulatory Utilities Commissioners or our colleagues here in Canada.

So it means that the -- the interest of this Board and its know -- considerable knowledge about regulatory regulation and the art and science of regulating Manitoba Hydro under the -- the legislative

framework that we have is of keen interest to MKO because of the outcomes directly affecting the citizens of MKO.

We've mentioned before, of course, that the MKO First Nations, there's some considerable discussion about shareholders. And -- and I'd like to actually touch on all of the questions that you had raised, Mr. Chair -- most of them, in any case -- as I go through my proceeding.

But one of the comments was about shareholders. It's MKO's view, of course, that the original capital investors, perhaps, or at least concurrent capital investors in the Manitoba Hydro system, are the First Nations in Northern Manitoba affected by the projects.

In a very real sense, the ability to generate rev -- wealth and revenue was affected by the projects in a material way. The activities -- this relationship between the livelihoods of First Nations citizens and the resource base on which they depended, which was now being converted, shall we say, into the production of hydro power for the province -- needs of the province is noted at Article 18-4 of the Northern Flood Agreement. And I'll take a minute just to read it, because it clarifies, and it focusses and exam -- is a good example of MKO's view.

"The project affects the activities and traditional lifestyles of the communities. And anxieties have developed regarding the viability of the communities, the free and safe use of the waterways, and the continued opportunity to carry on traditional activities, particularly as they relate to the wildlife resources as a source of food, income-in-kind, and income. These anxieties may be allayed by Hydro, Manitoba, and Canada using their best efforts to ensure that potential benefits of the project are made available in a practical manner to the residents of each reserve."

So in essence, they're clearly with references to food, income, and income-in-kind. There's a clear reference to a form of capital, certainly, that is resident in the waters, lands, and the resources that were previously used for their traditional livelihoods of the community.

I would note as footnote or a matter of reference that the reference to income and income-in-kind appears only as an affirmative reference in the Northern

Flood Agreement, but I make the point because it was the original arrangement or acknowledging the rations of citizens.

The points that I've made in the past, of course, is that the object was to benefit the citizens of Canada and, most particularly, of Manitoba while ensuring that the First Nation citizens were -- their interests were addressed and that any damages to the interests, opportunities and lifestyles, and assets of those adversely affected may be compensated appropriately and justly.

So in essence -- and hopefully without making the point too extensively through these references to the original of the agreements between the First Nations and Manitoba Hydro and the Province and Canada -- we see the Hydro-affected customers, as we've referred to them and as the Board acknowledged in its previous order in respect of examining mitigation costs, that the Hydro-affected customers are concurrent capital inventors in Manitoba Hydro. And in our view, they're the holder of Class A shares.

We have a keen interest in ensuring that every kilowatt hour generated has an end result of the irreversible adverse environmental, social, and cultural effects of the projects. Returns, as is noted in Article

18(4), the benefits of the project remain available in a practical manner.

So we have a great deal of interest in Hydro's proposals for maximizing export revenues, because that's what we would like to ensure takes place, so that those benefits can be returned to the community and those values achieved.

We note in a -- as a matter of summary go -- just going through the materials, that Manitoba Hydro earned 1.6 billion in total electrical sales in 2007, including 592 million in export sales, for a net income for 122 million.

Previously, in 2006, Hydro achieved all-time records of total electricity sales of 1.8 billion, export sales of 827 million on a net income of $415 million. So these benefits that were referred to in the Northern Flood Agreement in December of 1977 are producing considerable value both to Manitoba Hydro as a corporation but certainly to the customers of Hydro, including its export customers and to the province.

According to the information that's provided in this proceeding, that Manitoba Hydro's net income in 2008 will again exceed 300 million and will be the second highest in Hydro's history. Manitoba Hydro recently forecasted 5.5 billion in export revenues from

the fifteen (15) export contracts over the next ten (10) years with export sales to account for more -- more than 40 percent of Hydro's electricity revenues.

I make -- I'm interest -- as a matter of interest to this number of 5.5 billion in export revenues from the export contracts, as referred to by Minister Selinger during the announcement of the Wuskwatim -- the Wisconsin Term Letter that Mr. Peters, of course, had examined Manitoba Hydro on shortly thereafter.

We also, through the same discussion with Mr. Peters and the Hydro panel, a very significant announcement -- it had the effect of being an announcement -- that the recently announced foreign export sales to both Minnesota and Wisconsin will require the concurrent construction, or in close sequence of Keeyask and Conawapa and their associated transmission, and result in a significant increase in Manitoba Hydro's ten (10) year capital expenditure forecast included in this CEF of approximately $9 billion.

Mr. Peters invited Manitoba Hydro to update the capital expenditure forecasts, and there was an -- Exhibit 77 provides -- Manitoba Hydro Exhibit 77, I believe, provides some of that information, but it's generalized. But it leaves us with, in essence, going through all of the materials and doing our own totals.

Well, MKO's back at the envelope total is between 13 and 14 billion generation and transmission end.

So those are very significant steps the Corporation's taking, very significant values in terms of expenditures and revenues that all will occur largely within the MKO region.

We also note that in addition to that in 2007, the province, of course, received $112 million in water rentals. In 2006, because of the significant sales of electricity and the production of power, is 131 million, with capital taxes in both years of about $77 million. So there's significant values that have -- are of keen interest to Manitoba Hydro.

In terms of one of the mechanisms for benefits, in a practical sense, we appreciate and thank Manitoba Hydro for their responses to our inquiries regarding person -- Aboriginal employment in the projects, particularly for the comments provided in Manitoba Hydro Exhibits 49 and 51, providing breakdowns both for the Wuskwatim project and Manitoba Hydro 49 and generally throughout the Corporation in their four (4) categories in fifty-one (51).

MKO is pleased to see that there is an increase in employment generally through the Corporation of Aboriginal persons in the North, and one (1) of our --

our concerns in ensuring that benefits are achieved arises in the discussion regarding these exhibits roughly at transcript pages 1440 and -- and thereabouts, in that Manitoba Hydro, even with these considerable values and the significant capital program, does not have a formal written policy on Aboriginal employment.

Now, we're happy to see that the gains are taking place but would request that the Board encourage, with the tools that it has available, and we would request Manitoba Hydro to develop a formal written policy on Aboriginal employment, particularly if it's planning to spend $14 billion within the MKO region, taking away of course the converter station at Riel and so on, which would be southern Manitoba. But the main body of the expense -- expenditure -- was -- is -- was in the MKO area.

Most of the existing transmission and large generation is within the MKO region. And this -- this amounts to a significant potential benefit of which, hopefully, Hydro Manitoba and Canada use their best efforts to ensure -- are made available in a practical manner to the residents.

One practical manner certainly would be a codified employment policy for the citizen -- Aboriginal citizens of the North, particularly the Hydro-affected

citizens which I have previously described as Hydro's Class A shareholders.

We also, in viewing these large changes, recognize, as I've already mentioned, regarding the regulatory framework and the 1989 Court of Appeal ruling on the reference regarding the Board's jurisdiction.

MKO is also concerned that the federal -- the provincial framework regulating Manitoba Hydro and that's governing Hydro as a corporation, may actually, in retrospect, be a relic of the public power era of the 1960s.

Similar to the type of language used about benefits to Canada, all the citizens of Canada and, most particularly of Manitoba, on the one hand, and so forth at Article 18(2) of the NFA, those irreversible effects were justified at the time for the needs of the province: for schools, industry, hospitals, agriculture, development and so forth. But now we're really not operating in that environment anymore, and other tools to manage the Corporation are necessary.

To that extent, we'd like the Board to consider whether, in its general advisory capacity to the legislative assembly, to provide a recommendation to the legislature to examine the regulatory and legislative framework for Manitoba Hydro, given these significant

changes in its corporate function.

It's building for export. As a primary objective, it's certainly optimising export revenues as a core objective of the Corporation. And the new and expanding industrial rate is evidence of its interest in optimising the value of every kilowatt hour produced.

So things are changing. We're not producing power anymore to provide to everyone who wire hooks up to the system, based on the customer service policy. We're setting new rules, setting new limits, and incorporating and considering engaging in new risks.

So MKO is, in a modern context, looking to see the development of policies in legislative frameworks to ensure that procurement, employment and contracting, revenue -- resource revenue sharing perhaps, given these enormous values, benefit sharing, certainly, and resource access arrangements are enforceable conditions of government financial support approvals or licences related to these projects to formalize this benefit transfer mechanism.

The stakes are high, the values are great, and certainly the benefits to the citizens of Northern Manitoba, the MKO First Nations in particular, justify those considerations.

Now I had earlier mentioned that, as part

of these considerations, that examination of the basis for the establishment of the initial settlement agreements would also be potentially incorporated within that. And to use -- I had mentioned briefly to the Chair that I had wanted to make some very brief references to Manitoba Hydro's published annual reports which are available online, and I only have two (2) simple references to use there.

And one is -- as another highlight of value that for the fifteen (15) years between 1992 and 2006 -- these are readily available on Hydro's website -- Manitoba Hydro paid the Province of Manitoba 1 million -- $1,013,000,000 in water rentals -- $1.013 billion in the fifteen (15) years between 1992 and 2006.

Over that same period, interestingly, by comparison, Manitoba Hydro's corporate net income was 1.324 billion. So a very comparable amount of revenue, net of the operating expenses of the corporation -- setting of tax aside or fees aside was paid to the province and also earned by the Corporation.

So adding the two (2) numbers together, we have over the fifteen (15) year period, net of costs, $1.337 billion -- $2.337 billion generated by the utility.

So we're -- we're in a process right now

where we're looking at making the potential for consider -- for those values, considerably greater and certainly for the benefits received by the province in taxes and fees and for the corporation and its customers through its revenues.

Now, in terms of our basic questions in examining the application, I had two (2) sets of series of questions: one set that's internal to us, and one that the Chair had asked. A series of them, the Chair had asked. The first is those of you that have participated with us before, we -- we described the examination, the testing, of the revenue requirement and the -- whether the costs are justifiable as diving for dollars. What we're looking for is money that might be able to be recovered that might arguably offset a -- a rate increase.

And we note that -- that Mr. Williams and the Coalition -- Mr. Harper and others -- had -- had provided a considerable amount of analysis of various costs and changes in circumstances to determine whether the -- the rate increase that we have before us of the 2.9 percent was just and reasonable.

And they had determined that approximately 1 percent of the revenue requirement -- between 10 and 14 million -- may be able to be adjusted in accord with the

evidence that Mr. Harper provided and, certainly, the summary that Mr. Williams presented today.

In looking at the work that the Coalition has done in that regard, MKO concurs in their analysis and would, leaping to the second of the Chair's questions -- well, it's actually question three (3) -- we would say that the rate increase that's proposed ought to be 1.9 percent as proposed by the Coalition.

In respect of the justifiable cost OM&A, forecast appreciation and -- and so forth, regarding the 2.5 percent interim increase, we acknowledge, as has the Coalition and MIPUG, that those expenses ought to be confirmed in an order as requested by Hydro; and that, essentially, we're past that point in time; and, in a practical term, going back retrospectively and -- and addressing them would not be, in -- in practice, the way to approach it.

Clearly, on go-forward rate increases, Hydro can assess its financial performance and make new applications, either plus or minus on the forecast rate increases that they now have before us.

In terms of other comments, I understand that Mr. Williams had suggested to you that MKO is interested in -- in Manitoba Hydro Exhibit 66, which was a response to an MKO -- an undertaking to MKO. We are,

and we believe that those exhibits should also be looked at in terms of any consideration the Board might give to this 1.9 percent increase.

Of interest in Exhibit 66, of course, is that energy in -- in reservoir storage, as of March 2008, is near the all-time historic record for that period of time. And I thank Hydro for providing this -- the handy colour graph, because it's clearly indicated.

The energy in storage right now, in fact, the position is very similar to what it was at the beginning of the all-time record year, 2005/'06.

So clearly, however, the water levels that we're most interested in for long-term energy production are those that emerge in -- in June, July, and August when the flow comes into the province in these eighteen (18) reservoirs. But we make the point that statistically and historically, we're at a position very similar to the beginning point, at least from a fiscal year perspective, of the all-time record year in '05/'06.

The exhibits that were provided also in response to our questions -- Manitoba Hydro Exhibit 52 and 53 -- in -- in a table format, provide similar information so that you -- we can compare the differences between energy reser -- reservoir energy in storage

between the record year and how we're shaping up as we head into the current fiscal year.

Without knowing, of course, with any perfect certainty what the year will look like, we discussed during our -- my -- our cross-examination that the south is dry, but on balance. The reservoirs throughout Manitoba Hydro's system have energy in storage that should be able to be called upon for the production of revenues throughout the year.

And we're hoping that that -- those facts bolster the Coalition's analysis and lead to a 1.9 percent rate increase being confirmed by the Board.

Now, in terms of the other aspect -- the justification for an effect of the capital program on rates, which is one of the questions that we asked ourselves as a part of our test, clearly, the power resource planning criteria, outlined in Section 8.2 of Tab 8, are reasonable for the operation of a hydro utility. It's basically pretty hard to quibble with building a hydro system to meet low flows to provide security for firm loads. You need to do that.

The issue, however, is that Manitoba Hydro has, except for the Kelsey generating station, which we did discuss, has been optimized on an engineering design basis to produce energy and better than low flow years.

So while the core criteria is for building projects for low flow, for dependable flows in order to meet our firm loads, the fact is, of course, as we know from the revenues we've been generating, that we have optimized facilities again, with the exception of Kelsey and, interestingly, as -- if I recall correctly, Lori River, because they were built in isolation from any other load.

And we all know that load generation have to simultaneously balance at all points in time. I believe Mr. Dunsky made a brief mention of that basic operational physics.

However, what is important -- in terms of accepting in a general sense the power resource planning criteria -- is that the operating side of running dams that are built for dependable flows that are optimized and can -- can produce considerable revenues and better than dependable years, result in operational effects that need to be examined and carefully considered in terms of both risks to the corporation -- in terms of addressing them.

And I have some comment in respect to MIPUG's position on corporate risk that tie into that, and also through the cost side. That is to ensure that these optimized operations are correctly identifying and

quantifying and accommodating and compensating, if necessary, the environmental costs associated with those operations. Because if you build a ban -- dam larger to produce power under optimized flows, it has operational effects on the water regime and may, in fact, have a higher elevation of it and so on.

So we're keenly interested, as we've discussed, in ensuring that the costs side of optimized operation is correctly reflected in mitigation programs, compensation uncertain, and customer rates.

You'll recall that we had made the suggestion that once identified, that these costs ought not to be passed onto Hydro effective customers. And we appreciate the Board's Order in 117/'04 to ask Hydro to investigate the removal of those costs from customer rates -- to discuss it with INAC and MKO.

That is that it was our thought that -- and we were grateful for the Board's interest in the idea, that mitigation costs ought not -- that those that are intended as the beneficiaries of Manitoba Hydro mitigation programs ought not to have the benefits of that mitigation activity clawed back in effect through customer rates.

So again, as we move into a new era with expanded capital program and focus on export operations

and maximising revenues, ensuring we're actually -- we're accurately identifying, quantifying, and providing for mitigation compensation programs, if necessary, is a critical element of the operation of the system. And our view is in effect an augment or part of the power resource planning criteria.

I would note as an aside that environmental considerations, again in the context of MIPUG's comments about risk, which I'll address as I promised, can emerge as what -- what amount to non-engineering feasability issues or non-engineering risks that are associated with operational considerations and costs. Particularly as we move into a new environment, as we had discussed, that require certain, higher standards of environmental review and now the new element of the duty of the Crown to consult, justify, and accommodate.

Another key element in this same environment that we've discussed -- and I'll only touch on because it -- it captures it all in terms of potential recommendations by the -- this Board to certainly the Minister responsible and potentially to the legislative assembly -- is the involvement by government in the decision-making of the Corporation from a policy-setting perspective that is potentially driving the costs of the

Corporation.

So again, with a very large capital expenditure program, we're very keenly interested in how the decisions are made, how justifications take place, how the determination of just and reasonable -- in the public interest is arrived at.

You'll recall during my cross-examination of the Manitoba Hydro revenue requirement panel -- and I thank the Board for its admission of MKO Exhibit 5. It was a letter from the Minister responsible for Manitoba Hydro to the Chairman of the Board describing its policy regarding the eastside and ding in its paragraph that it doesn't regard -- that the Manitoba Government does not regard an eastside Bipole 3 as being consistent with these commitments and initiatives, and there was some discussion as to whether that amounted to Government direction.

It's MKO's view that it does, and that it -- it puts in to the process of the Board's important deliberations about the just and reasonableness, not only of cost, but of the rates that are required to raise those costs. The fact that certain significant costs, as the evidence has indicated, regarding the -- the change in expanse, the increase in costs due to the -- the new westside routing of the Bipole 3 line, how that is being

addressed and incorporated.

It is difficult -- it sets a different standard to determine a measurement of just and reasonable on costs that are, in fact, directed by the Crown, are a consequence of Government direction to the Corporation. And they're beyond the reach of -- of us to analyze and to digest and to refine, because we're -- we'll all look at the costs as they -- as they become closer to expenditure, and take a keen interest in ensuring that they are efficient, effective and reasonable. But it remains that the global costs are as a consequence of the Crown direction to the Corporation.

Also noting, of course, that the -- the sale, itself, to Wisconsin Public Service was announced by the Premier in an August 17th, 2008 press release. This is a significant achievement; it's not a surprise the Crown would be interested and happy to announce it.

Now, in -- in terms of examining approaches to identifying the potential additional other costs, I had wanted to just touch briefly on at this point, MKO Exhibit 6-1, 6-2, 6-3 and the exhibits that arose from them.

You will recall that the MKO exhibits were three (3) questions that were asked in respect of the possibility of analysis of the costs and revenues

associated with modified water regime operations. And sixty-three (63) deals with the -- the val -- the costs and mitigation costs, potentially, of the Augmented Flow Program, which is referred to in MKO Exhibit 4, which is an increase of approximately 5000 cubic feet per second, a release from a Notigii control structure during an operating year.

Manitoba Hydro indicated in its analysis in Exhibit 63 that 650,000 megawatt hours, assuming median flow conditions, would result. And then using the -- the benefit cost analysis -- and I apologize for jumping a bit -- in Exhibit -- Manitoba Hydro Exhibit 54, which was the analysis of Kelsey using the median at fifty-five dollars ($55) a megawatt hour, that produces an annual value of approximately 35.7 million as a result of the Augmented Flow Program. And I thank Hydro for providing that information.

Having said that, it indicated it doesn't have an estimate of the net overall value, and that when we asked about additional revenues and mitigation costs included in the IFF -- and I should say, in fairness, the we -- that Mr. -- the Chairman, of course, assisted us in framing these questions, and I thank you for that.

The last two (2) sentences in -- in their answer is that:

"No analysis is available to quantify the portion in Manitoba Hydro's CRD mitigation costs are associated with the Augmented Flow Program."

So we have $35.7 million in value identified, but no analysis of the potential mitigation costs. MKO's concerned about this.

However, Hydro says, and we believe somewhat in a -- respectfully, in a -- in a somewhat contradictory manner -- to the extent there may be any incremental mitigation costs associated with the Augmented Flow Program; they are included in the IFF.

We would suggest that the certainty about whether they are -- are or are not included in the IFF would flow from an analysis identifying the cost.

So, using this as a -- I suppose, as an example, where there are changes in the water regime and operation of the Corporation to increase the generation of its projects, which is the object of this exercise, of the Augmented Flow Program itself, it ought to and, in fact, must come with a -- the ability of the Corporation to identify the increased mitigation costs in a segmented manner.

We're releasing 5,000 cubic feet per second of water from the Notigii control structure.

We're increasing water levels downstream which is, of course, precisely what the operator -- what the application to water stewardship is requesting. Associated with that certainly are effects.

Without getting into the argument that goes before environmental science about when an affect becomes an impact, it is certain and I think it is reasonable to accept that there will be effects from the release of 5,000 cubic feet of per -- per second of water from the Notigii control structure. On an annualized basis as described in the application dated, the second -- the 14th of February, 2008.

So as we test whether or not the costs are just and reasonable, we submit that the Board ought to require Hydro to ensure that wherever is able to identify a value from a change in its operation, an augmented flow condition, that it also be able to associate the mitigation costs with those values to ensure that they're properly recorded and addressed.

Now similarly, we raise another issue that conceptually links Exhibits 52 and 53 and those they arose from. For example, MKO, Manitoba Hydro Round 2-3(B) and that is, in effect, the eighteen (18) reservoirs that the energy and storage arrives at.

Exhibits 60 -- Manitoba Hydro Exhibit 64

and 65, which arise from, again, on our Exhibit 6-2, MKO Exhibit 6-2 and 6-3, were an attempt by MKO to determine whether Manitoba Hydro can similarly analyze the costs and value to it of reservoir operations not controlled by Manitoba Hydro in other provinces, but from reservoirs that -- that contained reservoir energy and storage that Manitoba Hydro clearly receives a benefit for as that water flows into the Manitoba Hydro system.

Now, we would suggest that clearly it's all about timing. The water's coming; it's whether it gets here sooner or later. But as we pointed out in the -- the MKO exhibit addressing the water management issues -- this is MKO Exhibit 6, page 2, in which the management of the flood risk in the Saskatchewan River was being considered by Manitoba Water stewardship to potentially be mitigated by reservoir operations in Saskatchewan -- is clearly beginning to link the effects of these fortuitous releases of water from Saskatchewan that -- that are flowing into the Manitoba Hydro system and providing reservoir energy and storage in Manitoba.

To the extent that there are impacts associated with that, Manitoba Hydro has indicated that they believe that the effects of that would be addressed by Sask Power that they have -- do not have responsibility. It says -- the last sentence of the

first paragraph in Exhibit 64:

> "Should high water conditions occur during the period of the IFF, Manitoba Hydro does not expect Saskatchewan to modify its reservoir operations".

To some extent, that's inconsistent at least with the suggestion made by Manitoba water stewardship on minimizing flood effects at The Pas. And, certainly, in MKO Exhibit 3, which is an extract from The Pas Indian band settlement as it then was; The Pas Indian Ban is now today, of course, the Opaskwayak Cree Nation.

Article 6.01 is a water regime review and consultation committee which refers explicitly at Item -- at Sub 1(C) to initiate discussions with Saskatchewan Power Corporation to obtain information with respect to the activities of Saskatchewan Power Corporation which may impact on the water regime and to determine the effect of sec -- activities on the water regime.

So, again, in addition to Manitoba Hydro being able to identify the environmental effects and consequences of water regime modifications within its own control -- the Augmented Flow Program releases from the Notigii -- Notigii controls structure.

As Manitoba ventures into additional optimized operations and, certainly, into additional

capital programs that benefit from the waters of the -- the energy -- reservoir energy in storage from the eighteen (18) reservoirs that feed the Manitoba Hydro System, Manitoba also ought to be able to identify the costs and benefits of modified flows into the province from neighbouring utilities from which it receives water.

Clearly, they're using the reference at least as little as it might be in Water Stewardship's Annual Flood Report that was dated March 31, '06, and the small discussion that we have available to us at Exhibit 65, and so on, indicate that we should be able to -- to do that. Again, the operational criteria may, in its basic engineering considerations, be reasonable and appropriate, but it must be tied to the ability to identify, quantify and address the costs of those operations, where ever they might be within the system.

Certainly, in a further proceeding, would be our interest to explore in greater detail the values and costs of these types of operations.

How, having said that, an interesting example of precisely this type of analysis, although again, not with the mitigation costs included, is Exhibit 54, which is Manitoba Hydro's response to an undertaking to MKO regarding -- to produce a summary of the analysis

done for the Kelsey Rerunnering Project, identifying its values as compared to its costs. And, again, I thank the Board for its Order in this regard, and Manitoba Hydro for producing the exhibit, because we find it very interesting.

As Man -- as we had said during the discussion on seeking this information, and as Manitoba Hydro acknowledges in the last paragraph of the exhibit, the above description for the Kelsey Project is an example of how Manitoba Hydro initially justifies a large project and continuously monitors it as it proceeds to completion.

The analysis speaks for itself. It provides a very helpful table at page 2 of Exhibit 54 that outlines the costs and benefits and, interestingly, the internal rate of return; there is considerable discussion in this proceeding about a mechanism to do that. And the object being, in this case, that Manitoba Hydro has indicated at the first sentence of paragraph 3 of page 1, that it's running the analysis of an '94 flow conditions under the splash simulation model, which we have explored both here and, I believe, it's the Clean Environment Commission on Wuskwatim.

So there's considerable material about its ability to simulate and estimate.

It's produced an estimate from that analysis of 350 gigawatt hours, which, using the same -- the median value provided in this exhibit at $19.25 million per year of additional generation as a result of the project. The economics have changed due to the increase in -- in construction and capital costs, but it remains a desirable and favourable project for the Corporation.

What's interesting about this analysis, though, and what we had wanted to, to some extent, contrast with the analysis done for the Churchill and Saskatchewan Rivers -- that is Hydro's suggestion that it was not readily able to do the analysis of the change in flows, is that Manitoba Hydro has indicated in Exhibit 54 that it will rerun the analysis each time a generator is installed, and there's seven (7) of them.

So it suggests to MKO that there's a capability, perhaps not for real-time analysis of simulations in the system, but a fairly robust ability to change assumptions and to derive results in terms of values and potential costs.

The Utility has demonstrated, in Exhibit 54, that it certainly has that capacity on its analysis of the values of the Kelsey Project, its con -- it's continual rerunning of it as each stage in the capital

plan is proceeded with. And MKO suggests that the Board use the tools available to it to require Manitoba Hydro, as I've already indicated, to do an analysis of the environmental social/cultural cost of its operations including its integrated or other operations with the utilities are that are providing energy reservoir -- reservoir, energy and storage from other reservoirs outside of Hydro's control.

Combined all together, they do have an impact on the provinces noted in the -- in the water stewardship analysis, MKO-6, and clearly as we move into this new environment, these are the sort -- these are the types of standards and the capability of analysis that MKO would expect of Manitoba Hydro and we would hope matters of interest to the Board, to ensure that environmental costs are properly identified, accounted for and addressed.

And with that, I -- with the Board's permission, would like to close and then provide the remainder of my submission to Manitoba Hydro in writing and to the Board and all parties for tomorrow.

THE CHAIRPERSON: Thank you, very much, Mr. Anderson. So then we'll adjourn the oral hearing and await Manitoba Hydro's closing statements on Friday morning.

MR. BOB PETERS: Does -- does the Board have, Mr. Chairman, a preferred time on Friday? I won't speak for Ms. Ramage in terms of the spectrum of her anal -- or her submissions, whether it's -- I'm sure it might be somewhere between Mr. Buhr's and Mr. William's, but I'm not sure where.

MS. PATTI RAMAGE: I dream of being like Mr. Buhr but I suspect it will be more like Mr. Williams.

THE CHAIRPERSON: Okay, then we'll see you all Friday morning at 9:00.

--- Upon recessing at 4:24 p.m.

Certified Correct,

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Cheryl Lavigne