MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO'S APPLICATION
FOR APPROVAL OF NEW ELECTRICITY RATES
FOR 2010/11 AND 2011/12

Before Board Panel:
Graham Lane - Board Chairman
Robert Mayer, Q.C. - Board Member

HELD AT:
Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
July 4, 2011
Pages 8328 to 8524

APPEARANCES

Bob Peters	(np)	)Board Counsel
Anita Southall		)
Patti Ramage		)Manitoba Hydro
Marla Boyd		)
Byron Williams		)CAC/MSOS
Myfanwy Bowman	(np)	)
Antoine Hacault		)MIPUG
Michael Anderson	(np)	)MKO
William Gange		)RCM/TREE
Delanie Coad	(np)	)SCO
Denise Pambrun		)City of Winnipeg
Gavin Wood	(np)	)Independent Experts

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--- Upon commencing at 9:39 a.m.

THE CHAIRPERSON: Okay. Good morning, everyone. We're a little late, but not that bad. So we're into closing statements now. We'll begin with comments from Ms. Southall.

MS. ANITA SOUTHALL: Thank you, Mr. Chairman and Mr. Vice-Chair. Before I turn to closing comments, there are just a few procedural matters to be attended to to ensure that the record remains complete. The first is the marking of documents filed since the close of the evidentiary portion of this hearing on June 9, 2011 as exhibits.

I note that I sent out a general request for parties to advise as to any additional exhibits they intend to file. And I can advise that on June 15 Mr. Gange, on behalf of RCM/TREE, filed his witness' written response to Undertaking number 164, which is to be marked as Exhibit RCM/TREE number 14.

--- EXHIBIT NO. RCM/TREE-14: Response to Undertaking 164

MS. ANITA SOUTHALL: Also, on June 15 Mr. Gange filed his witness' written response to Undertaking number 165, which is to be marked as Exhibit RCM/TREE number 15.

--- EXHIBIT NO. RCM/TREE-15: Response to Undertaking 165

MS. ANITA SOUTHALL: On June 23rd the Board received a copy of the written answers of Doctors Kubursi and Magee provided to questions posed of them arising on the PUB undertaking set. That darcu -- pardon me. That document should be marked as Exhibit KM number 14.

--- EXHIBIT NO. KM-14: Written answers of Doctors Kubursi and Magee provided to questions posed of them arising on the PUB undertaking set

MS. ANITA SOUTHALL: I can also indicate that counsel for Doctors Kubursi and Magee, Mr. Wood, advised that answers to the remaining pre-asks of the PUB and I believe pre-asks of Manitoba Hydro were to be provided today, July the 4th, and that -- that was a communication as of last week.

As of this morning, they have not been

received, so we don't have those answers from those independent experts at the present time. If that changes, of course, and we receive them, I'll advise everyone. And I'm assuming that Mr. Wood would be circulating those by email, in any event.

I can further indicate that we have a number of -- or a few Manitoba Hydro exhibits. We just want to make sure they're on the record. We believe a couple of them are, but just to be safe, Exhibit Manitoba Hydro 155 is the IFF-10 export revenue assumptions.

--- EXHIBIT NO. MH-155: IFF-10 export revenue assumptions

MS. ANITA SOUTHALL: This document, when originally filed, was incomplete. And Manitoba Hydro has sent a revised version of this undertaking response by email on June 30th. So that's Manitoba Hydro Exhibit 155.

Manitoba Hydro Exhibit 156 is the Manitoba Hydro projected operating statement.

--- EXHIBIT NO. MH-156: Manitoba Hydro projected operating statement

MS. ANITA SOUTHALL: And, finally, Manitoba Hydro Exhibit 157 is to be recorded as Power Smart annual report 2009/2010.

--- EXHIBIT NO. MH-157: Power Smart annual report 2009/2010

MS. ANITA SOUTHALL: Finally I'll ask each of the counsel when they're providing their oral closing submissions to indicate in their submissions if there are any undertakings still outstanding and, if so, when the Board can expect those responses to be filed.

And finally, counsel, if there are any additional documents to be marked as exhibits you'll please inform the Board and provide copies and the exhibit numbers or we'll ask Mr. Singh to assist us in terms of your next exhibit number.

So with those matters addressed I'll turn to my closing comments.

CLOSING COMMENTS BY MS. ANITA SOUTHALL:

MS. ANITA SOUTHALL: Mr. Chairman, Mr. Vice-Chair, Manitoba Hydro's letter of application is filed in Tab 1 of the Board counsel book of documents. In that document Manitoba Hydro sets out the specific formal requests of the Board in the General Rate Application.

During the last day of the evidentiary phase of this General Rate Application June, 9th, the Chairman set out several issues for the parties to consider addressing in their closing submissions. As counsel to the Board in this proceeding, we take no position on the merits of any of the issues before the Board. Given the length of this hearing and the breadth of issues touched upon I'm going to briefly summarize certain issues that the Board may wish to include in its deliberations.

In Manitoba Hydro's rate application it seeks approval of rate schedules incorporated -- sorry, incorporating an across the board 2.9 percent average increase in general consumers rates effective April 1, 2010, with the exception of area and roadway lighting, no rate increase there.

Due to the unprecedented length of the hearing process, by way of Orders 18/10 and 33/10 the Board granted the requested increase on an interim ex parte basis. Final confirmation or revision of that rate increase is required.

Secondly, approval of rate schedules incorporate a further across the board 2.9 percent average increase in general consumers rate effective April 1, 2011. Again, due to the unique circumstances of the hearing process the Board issued Order 40/11 granting a 2 percent increase on an interim ex parte basis. Final confirmation or revision of that rate increase is also required.

I'm just going to pause and ask whether or not -- those were not ex parte. Okay. Thank -- sorry, I see my -- My Learned Friends from Manitoba Hydro and -- and there were submissions on those increases. They were interim of course. And thank you for the clarification.

Next, Manitoba Hydro seeks final approval of all surplus energy program ex parte rate orders outstanding, final approval of curtailable rate program ex parte, final approval of Order 126/09 which resulted from Manitoba Hydro's application for temporary billing demand concessions for general service medium and large customers related to the impacts of the economic downturn. Manitoba Hydro requests that the temporary billing demand concessions be made permanent under the program.

A separate but related issue raised by the Board is what process should be considered should Manitoba Hydro apply for a further general rate increase for 2012. While the Board will have to wait to hear from

Manitoba Hydro as to its intentions the other parties may have suggestions for the Board's consideration.

Manitoba Hydro also sought approval of a reduction in the basic monthly charge for residential customers, the BMC. Manitoba Hydro proposed reducing the BMC from six dollars eighty-five cents ($6.85) to five dollars eighty-five cents ($5.85) effective April 1, 2010, followed by a further reduction to four dollars eighty-five cents ($4.85) to be effective April 1, 2011.

The Board in granting an interim rate increase effective April 1, 2010 and April 1, 2011 did not implement the requested reductions in the BMC. Instead, Manitoba Hydro was directed to apply the rate increase to the energy charge portion of rates.

There is also the issue of finalizing interim diesel rates and possibly establishing a new interim rate for next year, perhaps further reducing the tail block rate.

We are uncertain as to whether MKO intends to file or make closing submissions in this GRA but note that the Board has been patiently waiting confirmation of the matters listed in the Board's last diesel rate order.

On this matter, there was a recent press release indicating Manitoba Hydro is intending on installing wind turbines in some diesel communities.

We'll await to see if Manitoba Hydro will be able to provide a further update and details in its closing submissions.

Turning to the topic of operating results, Manitoba Hydro filed IFF-09 in support of its rate application. During the hearing process, Manitoba Hydro updated its financial outlook, issuing IFF-10. At Tab 2 of Board counsel's book of documents, there is an analysis which compares the operating results for electric operations forecast in IFF-09 with updated actual results for fiscal 2010 and updated forecast for fiscal 2011 and 2012.

What that analysis indicates is that, on an overall basis, Manitoba Hydro's net income and financial position for the three (3) years has improved by 148 million greater than what was forecast in IFF-09 when the application was filed. Included in this result is the impact of the 2.9 percent rate increase granted in April 2010. The improvement is due primarily to lower realized and forecast appreciation, finance expense, and fuel and power purchase costs, as well as the continuation of capitalizing and deferring costs.

As to rate increases granted, since 2004/'05, and including the forecast increases applied for in this application, Manitoba Hydro has received cumulative increases of over 22 percent, this based on the 2 percent interim increase granted April 1, 2011, bringing in aggregate annual additional revenue of over $220 million. On a cumulative basis, since the last GRA in 2008, the additional incremental revenue granted since 2004/'05 exceeds $788 million. Manitoba Hydro's reported net income for the period was over $1 billion.

Compared with IFF-07-1, presented at the last GRA, Manitoba Hydro's net income for the fiscal years 2008 to 2012 is forecast to be $304 million higher than what was forecast at that time. Since 2004/'05, Manitoba Hydro has received, on an -- on a cumulative basis, over $950 million in additional Board-approved revenue. As noted, the long-sought financial target of a debt-to-equity ratio of 75:25 has been achieved, although, interestingly, not celebrated. Rather, Manitoba Hydro is now incorporating additional and higher rate increases, higher than the rate of inflation, in its financial forecasts.

Turning to the topic of risk, a significant portion of the hearing was to address risks and risk management issues for Manitoba Hydro, as directed by the Board in Order 32/09, and subsequently in the preliminary procedural orders in this process. The Board engaged Doctors Kubursi and Magee as independent experts to address issues of risk at Manitoba Hydro within the context of duties accepted by KM under their terms of reference. They produced reports, testified, and responded to questions of Manitoba Hydro, the Board and Intervenors. As noted previously, certain pre-asks of the PUB and Manitoba Hydro are still unresponded to by KM as of today.

Manitoba Hydro's original filing addressed risk issues and its overall risk management approach in its ongoing operational plans. Manitoba Hydro introduced the evidence of its own employees on Manitoba Hydro's risk management strategy. Manitoba Hydro also introduced the evidence of Mr. Rose of ICF, and the evidence of a KPMG panel on the issues of risk management at Manitoba Hydro.

The major identified risk faced by Manitoba Hydro is volumetric drought risk, and the Board heard evidence with respect to the financial implications of drought. Manitoba Hydro has asserted that the financial consequences of a five (5) year drought could be expected to be two (2) point -- sorry, $2 billion in reduced retained earnings and $2.4 billion when expected increased finance costs are considered. Manitoba Hydro indicated that, in shortage and high import prices -- sorry, that if shortage and high import prices coincided with the drought period. This would increase the cost of a five (5) year drought from 2 billion to $2.5 billion. The impacts, including finance costs, would make for a still larger shortfall.

The Board heard recommendations made by the independent experts that Manitoba Hydro should not rely on retained earnings as the only buffer against a drought but should also consider incorporating a reservoir storage buffer as a mitigation measure.

The Board further heard evidence on the varying duration of droughts, including the financial implications of droughts with durations longer than five (5) years.

Evidence was heard and the issue was discussed on the period of 1928 to 1941, when droughts were experienced in twelve (12) of the fourteen (14) years, a period reflective of an extreme drought condition. A repeat of such conditions would be expected to have a significantly greater financial impact on Manitoba Hydro.

The Board has received varied projections of the potential cost of drought of different durations by Manitoba Hydro, as I noted a moment ago, by KM, and also commentary on those projections in the evidence of ICF and KPMG.

Manitoba Hydro does not have a formal written drought-preparedness plan but had stated that it would file with the Board a drought-preparedness plan by April 1, 2011. The plan has yet to be filed.

Manitoba Hydro has also stated that drought planning is a constant activity and is incorporated in Manitoba Hydro's business processes. Both ICF and the independent experts who assess the risks faced by Manitoba Hydro recommend that a formal plan be prepared. These matters were examined and tested extensively by Board counsel and by the Intervenors through their counsel.

On the issue of middle office at Manitoba Hydro, the Board also heard evidence on the risk management framework of Manitoba Hydro with both KPMG and independent experts assessing the structures in place. KPMG and the independent experts both recommended an enhanced role for an independent middle office in risk mitigation, that expanded role to include involvement in identification, assessment, and mitigation of risks related to export contracts.

KM and KPMG found that the middle office is not involved in the review of export contracts or overall export volumes. The independent experts also recommended that the middle office be elevated within the organizational structure of Manitoba Hydro due to the importance of the function. KM also recommends that the role of the middle office should be expanded to vet or review front office operations and that it is vested with the authority to undertake such a role.

The Board also heard risk management expert testimony on a number of general principles, including but not limited to moral hazard and its effect on appropriate management of risk at public companies; comparison of Manitoba Hydro's risk tolerance with that of its domestic customers; consideration of the appropriate overall operational objective of Manitoba Hydro, maximize revenues or minimize cost; and possible mitigation approaches and options as outlined by KM, addressed by Manitoba Hydro, ICF, and KPMG, and further considered by the Intervenors' own experts and tested by all participants.

The Board should consider the weight to be given to the evidence of various experts in considering findings or recommendations on all such matters. And the Board expects to receive submissions from the parties on all risk issues and risk management issues in their closing statements.

On the matter of models, the Board also heard evidence on the models incorporated for both operational and long-term planning purposes, in particular, SPLASH and HERMES. Recommendations were made by the independent experts to place the models into a seamless interface on a common platform, this to avoid differences and provide for economies of scale and scope.

The independent experts further recommended that the SPLASH model be subject to review, including a formalized process of back testing and external validation, including peer reviews and the involvement of outside subject matter experts, noting that a number of the models are internally developed and would benefit from such an outside review. Other recommendations made by both KPMG and the independent experts included that Manitoba Hydro develop formal model documentation, including user manuals.

Manitoba Hydro introduced its own evidence on these issues and has attempted to shed light on the working of its models as part of its risk management approach, which Manitoba Hydro says has been and continues to be integral to its approach to strategic planning and overall operations on a daily basis. These matters were also tested on cross-examination.

Turning to the issue of export contracts. Much evidence has been heard on the new term sheets for sales in export markets to Wisconsin Public Service and

Minnesota Power, a portion of which has been formalized in contract.

The Board heard that the term sheets were initially re -- pardon me, initially negotiated in late 2007 and early 2008. Each of these long-term export contracts requires the commitment from Manitoba Hydro for major new generation and transmission development and a commitment from the counterparty to make transmission investments to receive the electricity. Minnesota Power will require to build a 250-megawatt transmission line while Wisconsin Public Service is required to invest in a 400-megawatt transmission line.

With respect to the recently announced contracts with Minnesota Power and Wisconsin Public Service, Manitoba Hydro has indicated that there has been but a slight change to the pricing from the term sheets and that fundamentally the prices for the fixed price energy in the contracts have not changed.

With respect to the contract inked with Minnesota Power, Manitoba Hydro also indicated that while half of the energy under the contract had been directly linked to the market, now the contract incorporates a collar around the market price that ties it to the fixed price.

Manitoba Hydro indicated that this feature provides benefits to both parties in that Minnesota Power is protected from future price spikes and also provides downside protection to Manitoba Hydro if prices stay low. Importantly, the Board has yet to receive and review the contracts.

The Board has heard that one (1) of the contracts, particularly with Wisconsin Public Service, currently only 100 megawatts of the 500 megawatts included on the term sheet has been converted into a contract. The additional 400 megawatts included in Manitoba Hydro's forecasts is predicated upon Wisconsin Public Service investing in transmission in the US to receive the electricity. Without such transmission investment Manitoba Hydro has indicated that the sale to Wisconsin Public Service would not proceed. The timing of the Conawapa generation development is predicated on the additional 400 megawatt contract with Wisconsin Public Service.

Since entering into the term sheets circumstances have changed whereby a new economic environment has developed, one that includes lower export and domestic electricity demand and starkly lower opportunity export sales prices.

Also in this hearing Manitoba Hydro's capital expenditure forecast and related risk considerations were covered. Risk is inherent in the proposed development plan of Manitoba Hydro, and the role of long-term contracts is central to the Utility's preferred and announced development plan.

A comparison was provided by Manitoba Hydro which analyzed a sale versus no-sale development sequence. The two (2) analyses were addressed by KPMG and ICF. In regard to ICF's analysis, they had indicated on a net present value basis, a reduction in customer bills in the order of $153 million. However, that was the calculation made before the capital costs of Keeyask and Conawapa were updated, and both of those estimates have been revised higher by considerably more than ICF's net present value forecast.

In its analysis, KPMG found the proposed development sequence to be more favourable than the alternate development sequence, the no-build option. The sale versus no-sale analysis prepared by KPMG also did not incorporate material increases in capital costs for the major generation and transmission projects.

And neither of the analyses, not ICF's nor KPMG's, incorporates ICF's changed view on the delay in the development of a carbon regulation regime and updated lower forecast cost for natural gas, both expected to negatively impact electricity export prices. It is not clear on exactly how the outcomes of both ICF and KPMG's analysis would change given the changed circumstances.

On the matter of domestic load. Due in part to the post-2008 economic downturn, domestic load has declined by over 1,000 megawatts since the 2009 Power Resource Plan was developed. That plan forming the basis of the original business case for the development of new generation.

The reduction is due primarily to an 850-gigawatt-hour reduction in load for top industrial cu -- consumers. This representing seven (7) to eight (8) years of normal load growth projections being lost in one (1) year. In addition, Manitoba Hydro indicated that there was a further reduction in top industrial consumer load, that in the order of 650 gigawatts in 2011, 450 gigawatts from pulp and paper, and 200 gigawatt hours from primary metals.

Manitoba Hydro has indicated that the 450 gigawatt hours of load reduction from the pulp and paper sector was a permanent loss representing one and one-third (1 1/3) years of total Manitoba load growth. In addition, Manitoba Hydro has confirmed a further 500-megawatt load reduction due to the Northern Manitoba smelter and refinery closures slated for 2015. As a result of these losses the requirements for new generation for domestic purposes have apparently been delayed by a decade.

Manitoba Hydro indicated that it is actively seeking longer-term market and firm contracts for the surplus dependable energy created by the now expected Manitoba load reduction.

Speaking to the Wuskwatim generating station. The output of Wuskwatim, the next generation station to come online in 2012, is not required for domestic consumption until at the earliest 2019/'20. The Wuskwatim station was most recently estimated to cost $1.6 billion rather than the $900 million forecast at the Clean Environment Commission review that supported the development. It is now expected to begin operations in 2011/'12 and be fully in service in 2012/'13.

Manitoba Hydro has forecast that the dam will operate at a loss for the first four (4) years of operations through 2014/2015. This is different than the prior forecast based on IFF-09-1 which prese -- projected operating losses for only the first two (2) years of operations.

The updated forecast based on IFF-10 is found at Manitoba Hydro Exhibit 115, which includes an estimated calculation of a loss for 2012/'13. In that calculation, Manitoba Hydro has determined finance expense based on notionally allocating 35 percent of the capital cost of the project to be paid by internally-generated funds. Such an allocation of ratepayer monies reduces the debt assigned to the project, although it appears that Manitoba Hydro debt finances 100 percent of its new construction, it having no liquid reserves.

At this hearing the Board heard evidence that the capital costs related to Bipole 3 had increased from a 2007 estimate of $2.2 billion to now $3.3 billion. The $3.3 billion appears not to include finance expenses and relies on a different engineering approach, one that remains to be proved appropriate.

As it is, while the annual expense to support this capital investment was previously estimated at approximately $225 million with the capital cost escalation to 3.3 billion, the annual expense of this project is now esti -- pardon me, is now approximately $330 million, an increase of $105 million.

Keeyask capital costs have also been updated in CEF-10 from CEF-09, 5.6 billion from 4.6 billion, an increase of $1 billion. The incremental revenue requirement in the first year of operation has increased from 383 million to 471 million, an increase of $88 million.

Conawapa generation station capital cost estimate of CEF-10 has increased to 7.8 billion, up from 6.2 billion, an increase of $1.5 billion. This also has had an impact on the IFF and has increased the incremental revenue requirement from 570 million to 710 million, an increase of $140 million.

On an overall basis, these three (3) major projects required to support new export contracts, which, on a combined basis, had a previous capital cost forecast of 13.1 billion, that in CEF-09, now have forecast capital costs of 16.7 billion, this in CEF-10, an increase of over $3.6 billion.

The estimated annual revenue requirement related to these investments has increased to approximately $1.5 billion, up from 1.2 billion, an increase of over 330 million from previously forecast. A determination of these amounts is found at PUB Exhibit 25.

Counsel notes that the evidence indicates a history of construction cost estimate increases, so, for some, it may not be surprising if the current estimates require further changes.

Manitoba Hydro is currently spending approximately at least $25 million a month on its major generation and transmission projects. This before at least required environmental revenues and an expected

NFAAT review, the latter as earlier indicated as being required by the government.

With respect to the joint Keeyask development agreement, Manitoba Hydro entered into an agreement with four (4) First Nations communities, Tataskweyak Cree Nation, War Lake First Nation, Fox Lake Cree Nation, and York Factory First Nation, on May 29, 2009.

The agreement provides for the four (4) First Nations to participate in either a preferred equity or equity ownership of up to 25 percent of the Keeyask generating station. Details of the agreement and a comparison with the Wuskwatim partnership development agreement can be found at Tab 50 of the Board counsel book of documents.

Manitoba Hydro indicated that it has spent approximately $400 million to date on the Keeyask development, the dam now expected by the Utility to come into service in 2020. As well, Manitoba Hydro has indicated that it is currently spending approximately $10 million per month on the Keeyask development. Included in this spending are amounts to the four (4) First Nations pursuant to the agreement.

Manitoba Hydro stated that it is spending monies to protect the in-service date and that for the development to go forward there are required regulatory approvals needed in both Canada and the United States. If those approvals are not obtained Manitoba Hydro has confirmed that it may be required to write off all or a part of its accumulated expenditures.

Turning to the issue of capitalized expenditures, finance, and OM&A. In addition, incurring costs to physically build the new generation and transmission projects Manitoba Hydro capitalizes to the projects significant amounts of OM&A expense and interest costs.

Manitoba Hydro had forecast total OM&A before capitalization of 542.6 million in 2003/'04 and is forecast to be 723.7 million in 2010/'11 and 754.1 million forecast in 2011/'12. A major driver for the increase is staffing increases as labour and benefit costs represent over 75 percent of the total operating expenses of Manitoba Hydro.

Staffing levels have grown from five thousand six hundred seventy-nine (5,679) full-time employees in 2003/'04, then with a total annual payroll and benefits of over 398 million. The staff level is forecast to increase to six thousand six hundred sixty-nine (6,669) full-time employees in 2010/'11, an increase of nine hundred ninety (990) staff with forecast payroll and benefits of over $556 million.

Manitoba Hydro indicated that as a result of its aging workforce it was necessary to hire an increased number of trainees in the electrical trades program. Manitoba Hydro indicated that the number of trainees and apprentices in 2010/'11 were five hundred eighty-eight (588) full-time employees, representing 8 percent of its workforce.

In 2003/'04, Manitoba Hydro capitalized approximately 28 percent of labour and benefits. The amount of labour and benefits capitalized has increased since then, and Manitoba Hydro now capitalizes over 32 percent of its labour and benefits. Including overheads, in total, Manitoba Hydro is forecasting to capitalize 304 million of OM&A expenses in 2010/'11, and over 310 million in 2011/'12, representing over 41 percent of its annual corporate OM -- OM&A expense.

In addition to capitalizing OM&A, Manitoba Hydro defers a significant portion of its finance expense on an annual basis. Manitoba Hydro is forecasting to have total interest on its short and long-term debt to be $553 million in 2010/'11 and over 613 million in 2011/'12. Manitoba Hydro has forecast to capitalize 130.8 million in 2010/'11 and over $137 million in 2011/'12. Over 23 percent of interest costs are being capitalized for each of the two (2) test years.

After capitalization and other adjustments, finance expense is forecast to be 412.5 million in 2010/'11 and 467.6 million in 2011/'12. As the major new generation and transmission projects commence construction, Manitoba Hydro will be capitalizing a greater portion of interest costs, with 449 million, or 43 percent of net interest expense, being capitalized in 2017/'18. By 2029, Manitoba Hydro is forecasting to capitalize over $4.8 billion in interest costs.

Annual finance expense, which is currently at 467.6 million in 2011/'12, is expected to grow to over $1.5 billion by 2026 when the last of the major new generation and transmission projects now anticipated, Conawapa, is expected to be in service.

Operating, maintenance and administrative costs related to electric operations have grown from 299 million in 2004/'05 to over 378 million in 2009/'10, representing an increase of over $79 million and a compound annual average growth of 4.8 percent. Manitoba Hydro is forecasting OM&A to be 398 million in 2010/'11 and 402 million in 2011/'12. This represents a compound annual growth rate of 3.2 percent for the two (2) test years, while CPI is forecast to be under 2 percent.

Manitoba Hydro attributed the increases in part to accounting changes that have taken place since 2008/'09. OM&A have increased in 2009/'10 by 11 million, and in 2009/'10 -- sorry, and are forecasting increases in the order of $31 million in 2010/'11 and 27 million in 2011/'12 relating -- related accounting changes to comply with new accounting standards. Included in these amounts are provisions for IFRS-related accounting changes of $18 million in 2011 -- pardon me, 2010/'11, and $14 million in 2011/'12.

Eliminating the impact of accounting changes, Manitoba Hydro makes the point in its rebuttal evidence on page 14 that the compounded annual growth in OM&A since 2005/'06 was 3 percent, while inflation tracked at 1.7 percent. Manitoba Hydro attributed the increased above inflation to higher costs and maintenance requirements that have been experienced also by other utilities in Canada.

With respect to IFRS, the International Financial Reporting Standards were to replace current Canadian accounting standards in 2011/'12. However, Canadian utilities have been granted a one (1) year voluntary deferment on implementation of IFRS to allow for a transition of accounting standards that do not recognize rate regulated assets and liabilities.

Manitoba Hydro will be required to prepare IFRS-compliant financial statements for its fiscal 2012/'13 year, with comparative financial information for 2011/'12.

As standards currently are written, Manitoba Hydro will be required to write off the balance of its rate-regulated assets against retained earnings. Manitoba Hydro has indicated that regardless whether rate-regulated assets are allowed under IFRS it does not necessarily have to affect its rate setting. With respect to the implications of conversion to IFRS on the rate setting process, Manitoba Hydro believes that any changes in accounting practices can be accommodated within the rate setting framework.

Since IFRS results in changes to the timing when certain costs will be recognized in its operating accounts, Manitoba Hydro believes that some mechanism may be required to defer the cost for rate purposes. Manitoba Hydro stated it would provide the Board with alternatives to consider at the appropriate time.

The issue and impact of IFRS will next be seen in Manitoba Hydro's next General Rate Application. Another area impacted relates to the level of expenditures that Manitoba Hydro can capitalize. IFRS does not allow planning studies to be capitalized which were previously amortized over fifteen (15) years unless there is assurance that the facilities will be built.

IFRS also has more restrictive requirements of what type of expenditures can be capitalized. Manitoba Hydro has made a provision of $18 million for electric operations for IFRS changes in 2010/'11 and $14 million in 2011/'12, representing the impact of changing the overhead rate. Manitoba Hydro has made the accounting change which impacts the financial statements in advance of its adoption of IFRS having opted to take the one (1) year deferral to implement IFRS for 2012/'13.

Another area of change is how Manitoba Hydro will depreciate its capital plant. Under IFRS there is a requirement for Manitoba Hydro to group component assets with similar service lives. Manitoba Hydro is currently undertaking a depreciation study towards being IFRS compliant.

Turning to the twenty (20) year IFF comparison. Manitoba Hydro provided in this application a twenty (20) forecast for IFF-09 and an updated IFF-10 twenty (20) year electric forecast found as Manitoba -- Manitoba Hydro Exhibit 156. This twenty (20) year forecast was updated to incorporate its approved increase cost to Bipole 3 and to reflect its current cost estimates for both Keeyask and Conawapa.

Manitoba Hydro indicated that the IFF-10 did not have any changed export or domestic load assumptions from the previous forecast. The Utility has not reflected the reduced natural gas prices forecast by ICF or the changed views on a carbon premium regime, neither incorporated into this recent filing by Manitoba Hydro. Both have negative implication on forecast export price revenues.

Manitoba Hydro has indicated that it will be updating its IFF forecast in the normal course in the fall of this year. As a result of the updated forecast and when compared to IFF-09 the Utility's projected net income over its twenty (20) year forecast horizon has been reduced by over $3.2 billion despite employing lower interest rates to 2020. The reduction is due primarily to an increase in the capital costs of the major generation and transmission projects.

In MH-09-1, long-term debt was forecast to grow from 7.8 billion in 2010 to 17.7 billion in 2029. With the upward revised capital cost of the major generation and transmission projects reflected in IFF-MH-10-2, Manitoba Hydro now forecast to have long-term debt of over 23 billion in 2029, an increase of $5.3 billion from the previous forecast.

The debt-to-equity ratio forecast for 2029 has also changed negatively from 51:49 of IFF-09 to 72:28 in IFF-10, this representing the forecast reduction in aggregate net income and the increased capital costs from the one forecast to the next.

As noted by the Chairman in his closing comments on June 9th, Manitoba Hydro's plan to bring into service major new generation and transmission during a decade of investment, a plan which has already led to material expenditures capitalized in advance of final approval in all cases except for Wuskwatim, has a direct bearing on rates. And this Board's mandate is to approve just and reasonable rates based on prudent expenditures.

The Chair's closing comments also drew many other possible areas for consideration to the attention of all parties to the process. In particular the Board noted the following as issues which it may consider: an export rate stabilization mechanism; a rate rider as a risk mitigation tool; on the concept of retained earnings, how much is enough in the circumstances; is a 75:25 debt-equity ratio still a valid target; do the parties have or wish to offer any further comments on the need and/or prospects for a future energy intensive industrial rate; taking into account that there are approximately eighty-thousand (80,000) delinquent accounts each month with Manitoba Hydro, should the Board and Manitoba Hydro consider creation of a low-income assistance rate program; should an interest rate deferral account be created to capture forecast variance in interest rates given major debt borrowings contemplated in Manitoba Hydro's forecast; what should be done with respect to the cost of service study and rate design matters discussed in the hearing; and back to the issue of risk, do the parties wish to provide comments to the Board on the risk tolerance of Manitoba Hydro's customers which may different from the -- pardon me, which may differ from the risk tolerance of the Utility and its sole shareholder.

The Board will await the submissions from the party as -- par -- pardon me, from the parties as to the issues that they want the Board to address.

In conclusion, on behalf of Mr. Peters, I wish to echo some of the sentiment of the Chairman in his closing comments on June 9th and in so doing I thank all participants in this hearing process and all counsel for their cooperation and assistance in the process.

Mr. Chairman, Mr. Vice-Chair, those are my closing comments. I suggest the Board now call on Ms. Pambrun for the City of Winnipeg to make closing oral submissions on behalf of the City and then I believe Mr.

Williams will follow with the closing submissions of CAC/MSOS. Thank you.

THE CHAIRPERSON: Thank you, Ms. Southall. Ms. Pambrun, for the City...?

FINAL SUBMISSIONS BY THE CITY OF WINNIPEG:

MS. DENISE PAMBRUN: Thank you, Mr. Chairman. Good morning to all my colleagues. I think perhaps I was invited to speak first in the hope that I will set a brilliant example for my colleagues and be extremely brief, and in that respect I will not disappoint, perhaps in many others I will.

The City was granted Intervenor status in this matter and, as you noted, my participation in this hearing was extremely limited mainly because the City's position related only to its role on the area and lighting category. Also, because the City did not wish to duplicate, knowing it could not do so in any competent way, the excellent efforts of my colleagues. The City was trying to focus on the distribution issue rather than on the overall cost.

There are three (3) different aspects that -- or different approaches the City could focus on. One (1) of them was really the fact that Manitoba Hydro itself was not really relying as it said in its opening statement on the cost of service study that was filed in this matter. Having said that I could have taken the approach that was really essentially taken by my predecessor in these matters, Mr. Buhr, I understand that his approach was generally to say that it wasn't fair that the City should pay a disproportionate share of the costs.

But I think I prefer to be guided by the Board's comments itself in Interim Order 18/10, which is cited at pa -- paragraph 6 of my written argument. And rather than making you go there I will just read it. In Interim Order 18/10 the PUB held as follows:

> "There has been no rate increase to the area and roadway lighting class since April 1, 2005. Until the Board gains further understanding of the costs and cost of service for this class there will be no rate increases interim or otherwise."

The applicant, Manitoba Hydro, did not spend a great deal of time in this hearing trying to explain the cost of service study to this Board or to me. Perhaps it's fair to say that no matter how much time they had tried to explain it to me, I still wouldn't have understood it.

Having said that, I certainly am no further ahead and I don't believe the Board is a great deal further ahead either. And I'm not necessarily faulting Manitoba Hydro for that, given that they have a new cost of service study coming, they say, and because they didn't -- because they didn't rely on the one that is before us.

The City's area -- the area and roadway lighting category is outside the zone of reasonableness and I have provided, attached to my written argument, a very brief appendix that recalculates the ratio of cost coverage to revenue, which shows that if the rate increases that were originally sought by Hydro were granted it would increase the RCC to over 110 percent. And I hope my calculations were accurate, and I hope Hydro will correct me if I'm wrong, but I believe that, simple as they are, they are basically correct. And I think they justify the City's position that the rate increase that was originally proposed by Hydro but was abandoned at the beginning of this application should not be granted, and that the position taken by Hydro in this hearing should be sustained and no rate increase should be granted.

The City takes no position on rate increases outside that category, not really being in a position to comment on them, and I think that is all really that I can add of any value. Thank you.

THE CHAIRPERSON: Thank you, Ms. Pambrun.

MS. ANITA SOUTHALL: Mr. -- Mr. Chairman, we'll just mark Ms. Pambrun's written submission as a City of Winnipeg exibit, for the record.

THE CHAIRPERSON: Very good. Good idea.

MS. DENISE PAMBRUN: Thank you.

MS. ANITA SOUTHALL: Thank you.

THE CHAIRPERSON: Thank you.

--- EXHIBIT NO. CITY-3: City of Winnipeg's written submission

THE CHAIRPERSON: Mr. Williams, do you want to start now, or do you prefer us taking a break now?

MR. BYRON WILLIAMS: The -- I have one (1) small document which I -- I have to distribute to other members, so it might be useful to take a five (5) minute break or --

THE CHAIRPERSON: Okay. Let's do -- okay. We'll take the normal break --

MR. BYRON WILLIAMS: Okay.

THE CHAIRPERSON: -- and then you can go

right through to lunch.

MR. BYRON WILLIAMS: Thank you.

--- Upon recessing at 10:30 a.m.
--- Upon resuming at 10:52 a.m.

THE CHAIRPERSON: Okay. First of all, Ms. Southall...?

MS. ANITA SOUTHALL: Thank you, Mr. Chairman. Just a note, then, that the City's written submission, as presented by Ms. Pambrun on behalf of the City, is Exhibit number 3 for City of Winnipeg.

THE CHAIRPERSON: Thank you.

MS. ANITA SOUTHALL: And I think there's just one (1) additional clean-up matter that Manitoba Hydro's counsel wants to introduce.

MS. PATTI RAMAGE: Yes. We noted this morning, in running through the exhibits, there was an -- it's not an additional exhibit filed, it was -- Manitoba Hydro Exhibit 43 revised was circulated to the parties, because when we were re -- reviewing the evidence Manitoba Hydro noted that the last column in -- in that exhibit had been cut off.

So last week, on June 27th, Exhibit 43 was distributed to all the parties, including the Board, in the revised form. So I thought we should get that on the record.

THE CHAIRPERSON: Thank you. For CAC/MSOS, Mr. Williams...?

FINAL SUBMISSIONS BY CAC/MSOS:

MR. BYRON WILLIAMS: Yes, thank you, Mr. Chairman and Mr. Vice-Chair, and good morning. Just a couple of preliminary matters. One (1) is in terms of undertakings. Professor Carter, in his day of test -- oral testimony, was -- made a number of undertakings. He is extremely bitter at me now for agreeing to them. They -- I'm just teasing.

He -- but they did require additional runs, one (1) from the Department of Family Services and one (1) from Statistics Canada. So the last I spoke with him was Friday, Thursday or Friday, and he indicated that Family Services indicated to him that they had finalized their run but they were -- and they were going to give it to him this week, and Statistics Canada he is expecting this week. So that's just the update. We are making all efforts, but because they required a -- information to be generated, it's taking a little longer than we would have liked.

Secondly, in terms of materials related to the argument of my clients this morning, there should be three (3) additional documents. And My Friend, Ms. Ramage, will have some comments about one (1) of them, which I wish to -- to make sure that we give her an opportunity to do so.

One (1) is a very brief document, more in the -- the City of Winnipeg briefness. It's called "Additional Materials from the Record." And these are just some additional materials from the record to assist the argument. I believe the only colour version is in the Chairperson's hands, so -- so I'm hoping that he will share with the Vice-Chair. I'm not sure that will be the case.

Second is a lengthy document called, "The Written Outline -- The Written Outline of Argument of CAC/MSOS." And I would indicate that this was sent out -- an earlier version of this was sent out on Thursday on -- and we have provided an updated version to the Board. The updates consist of -- especially with regard to the evidence of Mr. Colton and Professor Carter. It was inadequately ci -- cited. So that's the primary update. There might have been a change in we've moved a statement, which is a citation below a quote instead of above it, but those are the -- we will send out a revised electronic version of this document this afternoon.

And, finally, there is a document which is titled "Final Recommendations," and it has some tabs attached to it. And at the front of the final recommendations are indeed the final recommendations of my client. And then there are nine (9) attachments. And Attachments 3 and 4, I'd ask the Board not to look at them for a second. They are -- and -- and I'll just indicate, they are documents which were what we considered to be a summary of the record of this proceeding in terms of the evidence of Professors Kubursi and Magee.

And My Friend, Ms. Ramage, notes for me that it's -- it's sounding particularly authoritative, and I'll certainly allow her to put her comments on the record. And I think the -- the concern she -- she's -- she is going to offer is that -- that this is more in the guise of expert evidence rather than commentary on the record.

Speaking for our clients, we are -- we are confident that it -- it accurately reflects the record of this proceeding, but we understand Ms. Ramage's concerns. We're at the beck and call of the Board on this. We are certainly prepared to -- when -- we'll certainly do as instructed. It will not -- I -- I think it will assist the Board's deliberations, but the exclusion of it will not prejudice my client's submissions. I suggest Ms. Ramage be -- be given an opportunity to -- to offer her comments.

THE CHAIRPERSON: Ms. Ramage...?

MS. PATTI RAMAGE: Yes, the concern from Manitoba Hydro's perspective is these documents purport to summarize the Kubursi/Magee Report and put that report in plain language. CAC themselves have no expertise in order to do that if -- I -- I -- I think we can all recognize that. And therethor -- therefore they've had to rely on their own advisors to do that. And it's Manitoba Hydro's view that if you're having your advisors put materials in front of this Board, those advisors should, in the normal course, have filed some sort of pre-filed evidence and been subjected to cross-examination.

I -- given the -- the time at which we received this I -- I can't comment on Mr. Williams' statement that most of it comes from the record, I wasn't able to -- I didn't have the record with me at the lake this weekend to check that. But there are definitely some authoritative statements made in this document that go beyond argument. For example, it tells us on page 5 of it that, in addition, a set of observations can be tested against --

MR. ROBERT MAYER: Page -- page 5 of what?

MS. PATTI RAMAGE: Oh, sorry. Page 5 of this document. It simply makes statements telling us what is the norm and what is not the norm and -- and it's --it's the document called "The Plain Language Discussion of Professors Kubursi and Magee." And that's Attachment 3.

And my concern is I can't say that I found anything particularly objectionable in those statements but the process has to have some discipline, and when we're filing an expert's report it should come in the normal course not during final argument.

So that's Manitoba Hydro's concern, we -- particularly given -- I think we got this Thursday evening. If there is something in there that we have a concern about it's very difficult to find that at this stage in the game and so that's Manitoba Hydro's concern. Now, like Mr. Williams, I'm -- I'm not at this point -- at this level of review saying we are irreparably harmed but I have concerns with this type of material being filed in -- in final argument as opposed to earlier in the process.

MR. BYRON WILLIAMS: Mr. Chairman --

THE CHAIRPERSON: Well, we --

MR. BYRON WILLIAMS: -- and Mr. Vice-Chair, just by summary. I -- I think I can, if called upon, would be able to -- to provide references from -- from the record for -- for all of these statements.

But what I -- I propose to do in my closing submissions is, recognizing the caution of Manitoba Hydro not refer to these two (2) attachments and -- unless -- and -- and certainly if the Board wishes to remove them from the record. As I said I -- I think they're of more help and -- and no prejudice but we're certainly open to that -- that as well.

MR. ROBERT MAYER: Mr. Williams, I have a couple of questions. And I just got the written outline argument this morning and you list on page 8 introductory comments about CAC/MSOS experts. I see Dr. Higgins (sic) listed as number one (1). I'd asked a couple of times during the course of these proceedings were we going to hear from him. As far as I know we didn't. Is anything from Dr. Higgins included in any of the material that Ms. Ramage has concerns about?

MR. BYRON WILLIAMS: No, Mr. -- but -- but I think -- but to be clear, I think I called those the analysts and remember that I have to do my submissions about costs in the -- in the course of this hearing. So this is the -- the team that -- that is --

it's on the record that this is the team that is supporting us.

But -- but, Mr. Mayer, if you were, I think, going to the thrust of your question, listed there as well is Professor Simpson right be -- beneath him. And certainly if you look at the original genesis of the memo that's Attachment 3, that was me asking for a plain language description of what -- what is going on in the hearing.

What I have done is edited this document with some of our own language and also deleted any extraneous documents from the -- the original memo I received from Professor Simpson. For example, he refers to hydrology texts. I took those texts out because they're not on the record of this proceeding so the -- the -- the language about probability distributions that you see, for example, on page 3 you could -- you would have found similar language in Professor Simpson's memo. You would also find similar language in the expert evidence, the expert report of Professors Kubursi and Magee, that's why I didn't feel uncomfortable.

But again, I -- I do understand Hydro's concerns and I -- and I don't want them to feel like we're back-dooring them with this.

THE CHAIRPERSON: Thank you, Mr.

Williams. We know this --

MS. PATTI RAMAGE: If I could just -- oh, sorry -- clarify, and I'm looking at PUB counsel 2, is Ms. -- is Dr. Simpson's memo -- because I understand this to have been written by Dr. Simpson. Is his memo on the record previously? And maybe that would --

MR. BYRON WILLIAMS: Well, there -- there's two (2) things. This is not the memo that was originally provided to me by Professor Simpson. I said the genesis of some of the plain language. Does that -- that assist?

THE CHAIRPERSON: Mr. Williams, this is your final argument, closing statements. We can give it the -- the weight that we choose to give it. I -- I don't think that we want to impede your delivery. We appreciate the comments that you've made of where you've drawn on it, and we've -- we've already seen sections, these particular sections, so I -- I would just proceed as you planned.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Well, where I plan would be to -- would -- would be to start to direct you to the written outline of -- of CAC/MSOS. And at page 3 you'll see a -- a headline called "A Potential Legacy for this Extraordinary Hearing." And -- and before I get to the substance of that -- that quote, perhaps in the very first conversation I had with Mr. Warden in cross-examination, I took him to task for a -- a comment in the -- in the -- that Hydro had made in its first -- first of the hearing about regulatory burden.

And the thrust of my argument through cross-examination on -- on that day was that, recognizing that this hearing itself has been onerous on -- on all parties, that really the record over the last decade suggests that the Public Utilities Board, rather than be a burden to Manitoba Public -- Manitoba Hydro, has been a valuable part of -- of a -- of its stability and -- and the confidence in -- in which various organizations relate to it.

And certainly we have comments on the record of this proceeding from bond rating agencies, commenting very favourably on the support this regulator has provided to -- to Manitoba Hydro in -- in drought -- in drought times. And -- and certainly we also have evidence on the record saying that, rather than be a burden, the cost of regulation has been -- been quite relatively inexpensive as compared to Manitoba Hydro's revenues.

So that's just kind of -- which -- but

that brings us to this hearing, and the thought that our clients had was, this hearing itself has been extraordinarily time consuming. It's been significantly expensive and, given that, the question our clients asked is: What would they see as an appropriate legacy from this hearing? What would be a -- a good result, not -- justifying from their perspective, the -- the degree of expenditure and the degree of analysis? And on this page they've set out at -- at, I shall not say high level, they have set out a -- a list of -- of what they see as what would be a -- an important legacy of this hearing, if this could be achieved.

And I'll come to those comments in a second, but I do -- at the bottom of the page, you will see obviously something that I -- I lifted from the -- the statement of the chairperson in his opening comments in the MPI pre-hearing conference just last week, when he stated that openness and transparency are the clarion calls of this Board.

And if one looks at the legacy that our -- our clients seek to achieve from this hearing, a lot of that relates to transparency: better forecasting in the area of -- of debt financing; improved accountability when we look at debt financing and also when we look at major capital projects, so -- so that the circumstances that arose in terms of Bipole 3 do not arise again or that we have better assurance that they will not; transparent mechanisms to protect and reward consumers in terms of unforeseen variances in export market revenues, the rate stabilization mechanism of Mr. Matwichuk, sending a -- a message to them about the good times in terms of exceeding forecasts on export revenues as well as the bad times; better transparency in terms of -- and better accountability in terms of debt financing costs in -- in terms of the deferral mechanism proposed by Mr. McCormick; number 4, recognizing that this Board cannot dictate to Manitoba Hydro how it spends in terms of energy efficiency, in terms of how it spends in terms of low-income energy efficiency, using the revenue requirement, using the rate setting process to send a message that this -- that this regulator expects more in terms of a commitment and improved accountability in terms of energy efficiency, especially as it affects low-income persons; point number 5 is a transparent roadmap using modern statistical methodology for risk quantification and mitigation as they may affect the rate setting process.

And later on you're going to hear some critical comments from my clients in terms of Professors Kubursi and Magee, but you're also going to hear some very flattering ones, I hope. And -- and in our client's submission, due in large part to their independent expert, we -- we are far ahead of the game as compared to Manitoba Public Insurance in terms of a real clear outline in terms of risk quantification, like at an early stage, and I'll -- I'll try and elaborate on that point, but...

Number 6, a revenue requirement that transparently addresses both test year and long-term -- long-term issues. And our clients certainly have read Board Order 40/11 with obsessive -- obsessive detail. And they've -- they're aware, even from the comments of Board counsel at the start, that -- that there are competing themes in this hearing, concerns the Board may have about how ha -- Hydro manages its day-to-day expenditures, concerns about the dramatic growth in capitalized OM&A, concerns about debt financing, concerns about energy efficiency. But countervailing against that, our clients are also aware the Board is looking farther down the line and having material discomfort with the "promise" of the decade of investment.

And what we're going to propose in our recommendations is what we hope is a innovative approach to try and -- try and do what is very difficult to do, to send messages about efficiency over the short-term, but also recognize those longer term issues. And whether I'm successful or not, I guess we -- we won't find out until the closing argument -- until the -- until the Board's order. Thank you for that correction.

The final point in terms of the legacy, and the Board already has started to speak to this in its interim order, is recognizing the material stresses that consumers are still under, that business is still under, that industry is still under. The recession is a factor, but certainly as a resident of Souris, there are also tremendous stresses at a localized basis related to the flood. And -- and we think those are important matters for the Board to take judicial consideration of, to take note of, as it sets this rate.

At pages -- at page 4 we begin a discussion of the statutory legal and regulatory framework. Now, the Board may say it's well familiar with this, there's no real need go through it, but certainly bitter experience with the Manitoba Public Insurance stated case suggests to my clients that it's important for this Board to, in its reasons for decisions, enunciate the statutory framework that it is operating under, enunciate the -- the criteria it is employing because we've seen certainly with the case of Manitoba Public Insurance where a large regulated util --

company may misconstrue or misunderstand that.

And on page 4 -- and on page 4 of this outline our clients make a couple of important points looking at the underlying legislative purpose of this Board. And that's made in the -- the second -- the -- the middle, and then the last quote -- or the last citation on this page.

In the middle citation we make the point that the underlying purpose remains the same whether we're dealing with a utility or a Crown corporation pursuant to the Crown Corporations Act. And that's balancing those two (2) fundamental concerns: the interest of ratepayers and the financial help of the utility and corporation -- or corporation.

And section -- the last paragraph makes the point again that when we're looking at a just and reasonable rate that is that balancing act. And again, Mr. Chairman and Mr. Vice-Chairman, we recognize that underlying the Board's judgment in the Interim Order 40-11 and in a series of judgments since the drought has been a recognition of this long-term issue, a concern with the underlying health of the Corporation as it may affect ratepayers. And certainly in our submission it's open to the Board to -- to have those considerations at hand and those -- those are a very important part of the deliberation.

At page 5, though, we set out another equally central part of that deliberation, and again we're citing Mr. Wiens favourite -- favourite author, Mr. Bonbright. But we make the point on this page that it is central to the regulatory process that a determination be made whether or not the applicant in question is employing all reasonable cost efficiencies. And the test is whether those costs reasonably or prudently occur, whether they're necessary. And that philosophy applies equally to public ownership and to private ownership.

And the dilemma we recognized at the last hearing, we call it the regulatory dilemma, we recognize it again in this one, is that there may be competing pressures on the rate base and the revenue requirement. The Board may, in its wisdom, decide that there is a need for greater efficiencies, but against that they may have a concern with the longer-term picture. And we're hoping in the course of our deliberations to give you tools to address both in -- in -- in the -- in the context of this final order.

At page 6, right at the po -- the -- the top I again plagiarize from the Chairman in his opening comments in the Manitoba Public Insurance proceeding, suggesting that the Board interpret this role of setting just and reasonable rates based on prudent expenditures.

And we set out what our clients consider the five (5) elements of that test. And, again, we emphasize this point because we have noted in other proceedings with other Crown corporations, maybe they haven't fully understood how the test should work. And perhaps I don't, but this is certainly our clients' position.

An important part of this test right at the bo -- start, ensuring that forecasts are reasonably reliable. Ensuring that actual and projected costs incurred are necessary and prudent. Assessing the revenue needs of the Corporation while giving due consideration to its overall financial health, the big picture that -- that the Board speaks so eloquently of in Order 40/11. Determining an appropriate allocation of approved costs between classes and making My Learned Friend from the City of Winnipeg keep her comments relatively brief. And setting just and reasonable rates in accordance with the statutory objectives.

And in our client's submissions, Mr. Chairman, Mr. Vice-Chair, we're going to suggest to the Board that in its reasons it make express readings -- express findings, excuse me, on all five (5) of these car -- categories.

And to jump to the end of the story before I get to the -- to our recommendations, we're certainly going to ask the Board to say in ter -- under the heading of prudent and necessary costs, that as well as looking at the improvements in the corp -- Corporation's position we are going to ask the Board to look at its 2 percent interim rate and suggest to it that maybe, given the new evidence that has come in, the new evidence from Mr. Brennan, the new evidence from Mr. McCormick, et cetera, that maybe you should knock a little bit off or a lot off that 2 percent, and do so expressly.

We also note though and we -- although this is not my clients' first preference give -- given the -- the Corporation's -- the Board's concern with the overall health of the Corporation, looking to the long term, we're also going to suggest that the Board may -- may want to ultimately add a bit back in, in terms of the long-term risk to the -- risks to the Corporation.

And, Mr. Chairman, Mr. Vice-Chair, I'll get to it in just -- near the end, but just to give you an example, let's say the Board in its wisdom decided: You're not doing the job on energy efficiency, you're not doing the job on OM&A, you're not doing the job on maximizing the opportunities in terms of debt financing. It could -- and this isn't our clients' position, but opt

-- or notionally, knock off a percent, one (1) percentage point, from 2 to 1 percent. Do so expressly, and then roll back in, in terms of its long-term concerns, another .5 percent. And make the point in its written decision that, but for its concerns with the long-term risks avail -- facing the Corporation, there is -- the rate decrease would have been greater.

So that's the kind of concept that we're trying to present, Mr. -- Mr. Vice-Chair.

MR. ROBERT MAYER: Mr. Williams, you mentioned the new evidence of Mr. Brennan. Having not seen him in this room for some time, I'm assuming that you are referring to the letter that was placed in evidence respecting how Hydro was going to economize?

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: I'm referring to Exhibits 112 and 124, which relate to the expressions of concern offered by Mr. Brennan, yes.

Turning to page 7 of the outline, Mr. Chairman, Mr. Vice-Chair, I don't need to tell you who CAC/MSOS are. There are four (4) points I do want you to take from this page.

First of all, the -- and I speak to the insight that my clients seek to bring to this hearing, and one is that they are -- the fact that they're long-term participants in the regulatory process, not just on the Hydro side, but on the MPI side as well. And so I think they bring some insight to this proceeding that others may not in terms of risk quantification, stress tests versus probabilistic analysis. And that's important to know where our clients are coming from.

Towards the -- the middle paragraph, we talk about CAC's consumer contact -- contacts. And it's important to know that our clients have a mechanism by which they yearly, daily, hear from consumers. You've -- the Board's also heard through the -- through the course of this hearing from Professor Carter about workshops on low-income rate assistance, and also other forms of consumer consultation through my interim arguments on March the 9th. And the point I'm trying to make is that our clients have gone to some extraordinary lengths in terms of getting that insight from consumers, and especially those affecting vulnerable groups.

Finally, Mr. Chairman and Mr. Vice-Chair, a sad note, which you'll see in the second-last paragraph of this proceeding, is that this is -- will be the -- the last hearing in which our clients include the Manitoba Society of Seniors, and an editorial comment certainly. They've been a -- a fabulous client, and certainly they will be -- they will be missed. And the reasons are not any break-up in the coalition, they -- they relate to the future of the Manitoba Society of Seniors.

At page 8, Mr. Chairman and Mr. Vice-Chair, and -- and as the Vice-Chair has correctly noted, I talk about some of the analysts that -- whose perspective is underlying the CAC/MSOS presentation. We talk about Professor Higgin and Professor Simpson, and certainly Bill Harper.

At page 9, we talk about the actual expert witnesses of CAC/MSOS, and a -- a couple of points about each of them. Mr. Matwichuk brings a fabulous regulatory accounting perspective to this proceeding based on his experience in a variety of jurisdictions. And I think that is really -- certainly on behalf of our clients, we submit that that has really enriched his perspective.

Professor Carter is really the outlier, the outsider in this hearing, because he comes not from a rate regulation perspective, but from a perspective of the delivery of poverty services, anti-poverty services, the evaluation of them, and strategic planning. And we think that's an important insight that he brings from outside the -- the normal process, noting that he's been relied upon as a strategist by the province quite recently.

And certainly there's the very shy and retiring Mr. McCormick. The -- who I think had the best quote of the whole hearing when he said he was allergic to bad forecasting. And -- and you have to commend Mr. McCormick and also, we'll submit, give substantial weight to his submissions because to -- the proof is in the pudding. He has materially assisted this Board in terms of Centra. He has materially assisted this Board in Hydro, even in IFF-09. The enhancements which they speak of in IFF-09 in terms of debt financing are ones certainly that Mr. McCormick brought to their attention through information requests.

And the last point on Mr. McCormick I note is that he had a life before he was a consultant. It was a fabulously rich and diverse life, including at a senior level in ScotiaMc -- McLeod, in which he participated in the pla -- the placement of billions of dollars of debt. So this is not a outsider who's -- who's not dealt with issues of substantial ma -- magnitude in terms of the placement of debt.

In terms of, at page 10, the team, certainly we want to make the point that this is a strong multi-disciplinary ter -- team with diverse backgrounds, not just from industry, not just from consumer, but a richer background. And we certainly think that their work has been -- been justified. The contribution will be noted, we hope, in the Board's final order.

At page 11, we talk about the independent experts, and we're going to do so at two (2) places in this hearing, Mr. Chairman and Mr. Vice-Chair. I wanted to talk on behalf of our clients about them now because later on we are going to have some strong words about some of their analysis in chapter 6. And -- and certainly -- our clients certainly believe that the -- the June 24th undertaking response of the independent experts reinforces the position that our clients were -- were seeking to make in terms of them.

But notwithstanding our grave concerns with their analysis underlying chapter 6, our clients wanted to make the -- the point that there's -- there's -- that -- that one can't take a bad result in chapter 6 and tarnish the entire report. And we're going to suggest that each chapter of these experts should br weighed carefully, taking into account the primary author, his respective expertise, and giving due consideration to their specific analysis.

And we do want to recognize at this point in time a number of very important contributions by the independent experts to this hearing. Their advice about forecasting and means to which -- by which to improve forecasting we think was -- by Professor Kubursi was very valuable and supportive, as well of the advice of Mr. McCormick.

We think that they have done yeoman service in terms of the whistleblower's report. And certainly there's a Moody analysis that's attached to CAC/MSOS Exhibit 15, it's particularly Tab 6, which cites in part the independent experts as allaying some of the concerns of Moody, also the KPMG report as well. But that's important to remember, that both KPMG and the independent expert have added some value in that regard.

Chapter 4 of the independent expert's -- primarily authored by Mr. -- Professor Magee, there is some strong work there in terms of the issue of risk associated with water flows. And at the top of page 12 of our outline they make a very important point. They certainly enrich and add a -- in chapter 4, a fundamentally more sophisticated and -- and useful approach than Manitoba Hydro's, our clients would submit. But at the end of the day they make the point that, when it comes to the water flows, Manitoba Hydro's approach does not appear to be biased.

And hearing that from two (2) econometricians, the words can be lost sometimes in the -- in the -- in, you know, significance and bias, but when they -- when they say that it's not excessively optimistic or pessimistic, that's an important statement by those experts. And certainly we -- we're of the view that Professor Magee, in chapter 4, materially improves on Manitoba Hydro's process.

And the last point -- some of the comments which -- which -- excuse me, I have a few more points here. We certainly, on behalf of our clients, will be taking material issue with the numbers ultimately produced by Professors Kubursi and Magee, but they do outline a very important approach to risk analysis, which we've set out the path, having four (4) elements at page 12, and moving on to -- to page 13. And we note as well that Mr. Cormie, in his evidence, seemed to -- to have some support for this conceptually, as well as Mr. Wallach.

Turning to page 14 -- and, excuse me, one (1) last summary comment, and -- and I made this and I -- I saw some puzzled looks in the room. Our clients have gone through the wars in terms of risk quantification with Manitoba Public Insurance, and we've seen the -- the endless debates about stress tests as -- as addressed through the minimum capital -- the MCT versus probabilistic assessment. And my clients are certainly of the view that, in this one (1) hearing, Professors

Kubursi and Magee analytically have contribute a great deal and -- to the Board's overall understanding of these issues. Even the inclusion of probability distributions, matters of that type, have been very -- an extremely substantial contribution.

At page 14, we chat about some of the limitations in terms of the -- the independent experts. And Professor Kubursi said to me at page 6460 of the transcripts -- and I'm -- I'm not including the full quote, but this is an excerpt, therefore the quotation marks:

"We had so many things to do, and it truly was a daunting retainer."

And we think, when -- when one looks at their report, you can see different levels of comfort with different areas, with Professor Kubursi clearly more comfortable discussing broader concepts of risk management and risk mitigation, but deferring to Professor Magee and noting more comfort with his answers in more technical areas of econometric analysis.

And this is an important point, Mr. Chairman and Mr. Vice-Chair, because there's two (2) major chapters involving that type of skill set: chapter 4, in which the primary author was Professor Magee, and chapter 6, in which the primary author was Professor

Kubursi. And -- and we note that, given the many demands, the areas of primary comfort and significant technical challenges, it's not surprising that there were material challenges with chapter 6.

And, Mr. Chairman and Mr. Vice-Chair, I have a very lengthy section about Professors Kubursi and Magee that comes later in this argument and, so, rather than -- than dwelling on pages 15 and 16 at this point in time, I am merely going to state that our clients have fundamental concerns with a variety of the analyses and numbers that flow from chapter 6. And -- and at the top of page 16 of our summary, we also make the point that the estimates of a five (5) year and seven (7) year drought produced by Professors Kubursi and Magee flow from the data from chapter 6 as well as the probability distributions. And so the same concerns that we have relating to that entirety of that chapter, which I will elaborate upon a bit later, flow to those estimates as well.

The point that we seek to make on the rest of page 16 is simply one would not be surprised that very gifted analysts, trying to rapidly learn about a large utility in a rapid basis, might have some -- some challenges. And the point we're trying to make on page 16 is that, notwithstanding those challenges, that concept that they advance is materially important, and Hydro itself acknowledges it at page 86 of its rebuttal.

And we put that quote there for the Board to -- to consider, and we think it's an important point to make. Notwithstanding data limitations, notwithstanding flawed analysis, in our respectful submission, there's an important concept that can materially assist this Board in developing an appropriate road map for risk quantification, risk mitigation, and analysis. And that's why we state that, notwithstanding our severe concerns with chapter 6, in many ways they've left us, or our clients, from our clients' perspective, farther ahead than in some ways we are with Manitoba Public Insurance.

On page 17, our clients merely cite our understanding -- their understanding of the Manitoba Hydro position, and my -- My Learned Friend, Ms. Southall, summarized a lot of the case much better than I can, so I -- I will merely state that that is our understanding of their position.

At page 18, though, we provide an overview of our clients' concerns relating to forecasts. And certainly there is -- Professors Kubursi and Magee make this point: that there are risks associated with inaccurate forecasts. And I'm referring the Board to the top of page 18. And just for the Board's information, I've tried to accurately reflect and cite from the record on behalf of our clients. If I've got something in quotation marks, I'm -- I'm quoting it exactly. If I'm just citing it, I'm trying to fairly summarize their statement.

At the top of page 18, though, Professors Kubursi and Magee make the point that inaccuracy of forecasting carry both operational and planning risk. And they make it -- they note their concern with the overestimation of revenues can create a -- an optimistic atmosphere of complacency and overcommitment, with underestimation sending perhaps an opposite atmosphere. But that both are costly.

And we note as well the Board's comments, and I'm -- I'm working off of handwritten notes, but from the MPI pre-hearing conference. In that case, over the last few years, the lengthy record of inaccurate forecasts from Manitoba Public Insurance has led to ongoing and regular overcharging of customers. And so, during the course of our clients' submission today, they will be outlining some concerns with forecasting.

Our primary areas of concern in terms of forecasting are cumula -- cumulative net income, what we characterize as a significant overestimate of financing costs, our concern with what we -- our clients consider to be a material understatement of capital costs related to Bipole 3 in IFF-09 and IFF-10, Mr. Matwichuk's point about significant variances in export revenue forecasts from actual, and also our clients concerns with what they consider to be an underperformance in residential demand-side management as compared to plan. And our clients -- we don't have a single forecasting section so it will be interspersed in -- in different parts of the argument.

One (1) last comment before we leave this cha -- page, Mr. Vice-Chair and Mr. Chairman. As I said, our clients have read the Board's interim order with great interest and -- and they acknowledge the Board's legitimate concern with the plausibility of elements of the decade of investment. But they also want to make the point that within those long-term forecasts of Manitoba Hydro there are other challenges which may go the other way. Revenues, certainly over the last few years, have been significantly underestimated. Our clients, via Mr. McCormick, make the point that financing costs are -- are significantly overestimated. So while our clients acknowledge the Board's concerns with the decade of in -- investment, they -- they note that built into the IFFs are revenues -- revenue imp -- are forecast with revenue implications going the other way.

At page 19 our clients cite the evidence of Mr. Matwichuk. And certainly I can't recall that this was contested either through cross-examination or rebuttal, although I'll -- certainly would be subject to check on that. Mr. Matwichuk looked at cumulative annual net income between the period 2005 through 2010. And the actual he suggested at 1.44 billion was significantly greater than the forecast net income of 663 million. So the difference -- the variance there, in his view, was seven (7) -- 777 million. And that, from our client's perspective, is an important thing to keep in mind as we test the IFFs looking lo -- more at the long-term.

And certainly Board counsel's comments of earlier this morning in terms of changes from IFF-07 until today, even from IFF-09 until today, also are supportive of our clients' thesis that there are -- there are hidden strengths in the -- in the revenues of the corporation that are not always reflected in forecasts.

At pages 20 to 23 we ask what may seem to be a rhetorical question: Do all overforecasts of intra -- interest expenses or underforecasts of revenues matter? And while it may seem rhetorical, we're not sure what Hydro's answer is because at page 22 of 96 of the rebuttal they seem to say that to the extent there are higher contributions to retained earnings as a result of the overestimation of interest expense there will be lower future rate increase requirements.

So, given Hydro's position, as we understand it from the rebuttal evidence, our clients felt the need to an -- ask this question and to answer it. And they say most emphatically they do matter, both the underforecast of expenses and the under -- excuse me, both the overforecast of expenses and the underforecasts of revenue.

And when we look specifically -- still staying on page 20. When we look specifically at finance expense, never have the forecasts of finance expense been more important than the current context. It's the largest expense category in the forecast. And Mr. McCormick points out, it's projected to get even larger going out to 2020. And certainly as the Board opening -- or the Board counsel's comments noted, there's also significant capitalized finance ex -- expense as well.

And Mr. McCormick has a gift for the glib phrase and I -- I'm going to cite him directly here.

"We're embarking on a decade of investment. And, frankly, I'd rather know the cumulative consequences of the millions or perhaps billions of dollars of new net -- new debt that's going to be incurred over time. And I'd rather they were properly estimated."

Our clients could not agree more. On page 20 at the top, they also noted -- note the evidence -- page 21, excuse me. They also note the evidence of MIPUG, Mr. Bowman and Mr. McLaren, who noted -- did a really interesting contrast in their evidence, and that -- this is captured in the transcript as well, looking at IFF-07 versus IFF-09 or IFF-10.

And what they noted is that if you're going -- going to look back at IFF-07 in terms of equity as compared to debt, Hydro's forecasts at that point in time were relatively pessimistic compared to IFF-09 and IFF-10 in the current years, the test years. But they were projecting lower rate increases than -- than we see proposed in -- in the current application.

And counsel for the Board questioned whether the achievement of lower debt-equity was cause for celebration. Messrs. Bowman and McLaren correctly note that, notwithstanding the achievement of higher retained earnings than forecast, the Corporation is now seeking higher for -- a higher rate increase.

In the middle of page 21 we make the point that there is no guarantee that excess revenues to collect overestimated costs will go to retained earnings.

And -- and, frankly, Mr. Brennan's memos, Exhibits 112 of Manitoba Hydro and Exhibits 124, make that client -- that point for our clients better than they could.

And there are issues of intergenerational equity raised and they were highlighted by Mr. McCormick. And cer -- getting estimates wrong in the forecast years raises concerns of intergenerational equity for customers in the forecast years. And, again, to quote him:

"It's not an RSP. It's not something that I can get the year I need it. It's like I've given it away and at some future year of unknown time, some potentially illusionary benefit will be available to the customer but not necessarily to me."

So that's why our clients are firmly of the view that forecasting matters.

At page 22, I'm not going to -- we -- really, numbers 5 and 6 are citing the Board from the Manitoba Public Insurance proceeding. And in that proceeding, the Board made very clear that forecasting is very, very important. And page 9 of Order 86/11 in the -- in the context appropriate claims incurred, which is a cost line in Manitoba Public Insurance, the Board made the point that it was very important for ensuring just and reasonable rates to get those estimates accurate.

The quote under heading number 6 again is from Board -- from another MPI Board Order, 43/11. It notes that the rebate was driven by inaccurate forecasts, and that while ratepayers tend to like rebates there are profound issues raised by them relating to intergenerational equity and fair and reasonable rates.

And certainly from our client's perspective, Mr. Chairman and Mr. Vice-Chair, we can say with confidence that from a consumer perspective it is preferable to have money in one's pockets based on more accurate forecasts rather than in the pocket of the Corporation based upon less accurate forecasts.

And going to the top of page 23, we certainly are of the -- the view, our clients are, and without suggesting any motivation of personal gain, that all other things being equal, many corporations tend to preser -- pre -- prefer to have excess forecasts in their pocket because it gives them more flexibility to spend and less need to ask for more the next time. And that is exactly why consumers care about forecasts. They -- that's why they prefer accurate forecasts.

And again, Mr. McCormick -- I'm going to cite him a few times today -- said this really well:

"I don't think Hydro is individually

nefarious about their forecasting methodology but I'll bet, within an organization like that, there's a much bigger desire to estimate just a little bit more than there is to grind things down to the last cent."

And we think the record of this hearing, with the exception of Bipole 3, makes that point.

And Mr. McCormick goes to a deeper point:

"I've not objected to Hydro having a particular equity or income layer. I do object to defending a seriously flawed and substantially untested group of policies as a part of a program that has the effect of maintaining or increasing income. I would prefer that, if someone actually needed a higher level of income, that they would make the case directly rather than surreptitiously."

And certainly, Mr. Chairman and Mr. Vice-Chairman, from our clients' perspective, they would rather have improved forecasting built into the rates and then if the Board, in its wisdom, ultimately decides, perhaps against my clients' objections, that retained earnings need to be built up for the decade of investment and because of the risks, that that be a transparent part of the rate setting -- rate setting process, rather than relying on variances from forecasts to -- to achieve that.

At page 24 of the outline, our clients move --

MR. ROBERT MAYER: Before -- before you leave there, I -- I was -- I caught your comment going -- going back to page 23, "I don't think Hydro is individually nefarious" line, and you said except with respect to the Bipole 3 estimates. And I don't understand that because --

MR. BYRON WILLIAMS: Sorry, sorry. And I don't -- Mr. Mayer, if that was the -- I -- I think I was trying to say two (2) different things there, so let me -- let me back up.

MR. ROBERT MAYER: No, no. Let me finish --

MR. BYRON WILLIAMS: Okay.

MR. ROBERT MAYER: -- the question.

MR. BYRON WILLIAMS: Oh, I'm sorry.

MR. ROBERT MAYER: I -- what I took from your comment was that, except in the case of Bipole 3, Manitoba Hydro would, or would tend to be more generous with themselves, in other words, overestimate the costs. And then you said except in the case of Bipole 3, but my evide -- my recollection of the evidence is that the estimates that we originally got from Manitoba Hydro's vice-presidents was in fact higher than the eventual estimate we got from the retained experts. So I -- I was a little confused by your comment.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: And please accept my apology for interrupting. I'm pumped today, so I apologize for that. Yes, you had the first part of our point, which is that, all other things being equal, we certainly see a -- a tendency to -- to -- on forecasting finance costs, et cetera, revenue, err on the side of pessimism.

In -- in terms of Bipole 3, we certainly do not disagree with you that there was a 3.9 billion figure put forward, but that 3.9 billion figure was not built into the IFF. And so the distinction, Mr. Mayer, that I -- that I draw may be the -- maybe there was some either pessimistic or more -- more realistic estimates from the -- the line, but in terms of the IFF, the figure that actually was translated was less. And I want to go -- be -- be more accurate, Mr. Mayer. In IFF-09 and IFF-

10, there was only 2.2 billion built in as opposed -- so -- so very optimistic estimates in -- in terms of that.

The last point is, although those were optimistic estimates, they weren't affecting the test years, they were going farther out in time. So I hope I've satisfactually -- factorily answered your question.

In terms of this -- this section, Hydro's performance as compared to the expectations at the time of its rate application. I very briefly just want to draw the -- the Board's attention to the final recommendations section with the tabs, the -- the other -- the big document with the other tabs, and to Tab 2 specifically. So it's Tab 2 to the -- the other very hefty document, and it should be the number 2, and it should be a overview of recent financial forecast.

Does the Board have that? I'm seeing heads nodding. Mr. Vice-Chair and Mr. Chair, I don't mean to go through all the pages of this document, but I wanted the Board to be aware that it's -- that it's there. And what it essentially does at page 2 is start with the -- the Manitoba Hydro's initial expectations, init -- of its initial application. Excuse me, I apologize to the court reporter.

What it does at page 2 is go through Manitoba Hydro's initial application. And then it tests those results against a number of new -- subsequent pieces of information that came on the record. At page 4 they look at the actual results for 2009/'10, and there's a sta -- Table 2 at page 5 does so. At pages 6 and 7 it takes one through the initial IFF-10 as compared to IFF-09. And page 8, it notes the sub -- substantial improvement in Hydro's position relative to that.

At page 9, Tab -- Table 4 performs a more limited exercise with the limited results from the third quarter of 2010/'11. And then at pages 10 and 11 some brief commentary is provided about three (3) additional documents: one (1) being Manitoba Hydro's submission regarding its interim rates, another being the PUB's decision, and, finally, the updated Bipole -- updated IFF-10-2 on page 11.

And so I won't drag you through that except for to -- to note a couple of highlights at page 7, which is Table 3. This -- this is a useful -- so this is Table 3 at page 7 in the top right corner of this attachment, and just drawing your attention to the net income line. And you'll see Table 3 net income, seventy (70), which in IFF-09 was estimated to be seventy-eight (78), and in IFF-10 was estimated to be eighty-seven (87). And if you'd just go over a couple of columns you'll see the -- the analogous estimates for 2010/'11 and 2011/'12 in IFF-10, and certainly a big difference from 149 million versus 78 million, and 125 million versus 87 million.

A last couple of points just in terms of this document. At page 11 in the comment section at the middle of the page our clients note that even after a 2 percent interim rate increase as opposed to a two point nine (2.9), the anticipated net income for 2011/'12 will be about 112 million, which is higher than was originally forecast for 2011/'12 in IFF-09. And also that retained earnings will be higher as well, even -- even with a lower interim rate increase than sought by Manitoba Hydro.

The -- the last point on page 11 my clients wish to point out -- and actually Ms. Southall did a better job of it than I did in -- in her comments this morning -- but certainly when we look farther out in terms of the implications of the revised estimate and the impacts of Bipole 3, certainly by 2019/2020 there is some deterioration in the debt-to-equity ratio related to the original forecast. She went into greater detail but that's a point that, in fairness, our clients felt it was important to bring to the Board's attention.

Mr. Chairman, I propose to -- I can either finish this section which I think would take about twelve/fifteen (12/15) minutes or I could take a break now. I'm -- I'm at the discretion of the Board.

THE CHAIRPERSON: Why don't you finish this section.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Recognizing that the clock is now ticking, really -- at pages 24 and 25 we try and respond some -- you know, the -- let me back up. In Attachment 2, we tried to summarize how circumstances have changed or to lay out how circumstances have changed. On these two (2) pages we try and summarize some of the potential implications for the rate hearing.

When we get to the fourth bullet on page 24 there's some important information for the short term, for the test years. Collectively, the new information suggests that the results in terms of overall retained earnings and debt ratio for 2011/'12 will be better than originally forecast. 2009/'10 actual results exceeded the forecast used in the GRA.

The current outlooks both in IFF-10 and 10-2 in -- for 2011 -- 2010/'11 and 2011/'12 in terms of net income and year-end retained earnings and debt ratio are both better than foreseen in IFF-09. And the most recent actual results for the first nine (9) months of

2010/'11 suggest that the financial results will be better than forecast in IFF-09.

So what conclusions do we draw from that focussing on the short term? The current outlook for the test period does not support the need for rate increases in either 2010/'11 or 2011/'12 greater than those already approved on an interim basis.

And at the second-last bullet we make the -- we -- we -- we make the analytical leap and we asserm -- we assume that if one were to view Manitoba Hydro's original proposal as an acknowledgement that the year-end '11/'12 financial forecast set out in IFF-09 was reasonable, one could argue that the interim increases approved for these years could be rolled back and still yield results at least as favourable as those originally expected.

And we go on to say on the last bullet on this page that even if one were to totally eliminate the 2 percent interim increase, a first-order approximation would suggest a $42 million reduction in net income for 2011/'12 and retained earnings for the end of the period. This would yield retained earnings of two (2) hun -- 2 billion 437 million. Still in excess of the retained earnings forecast in IFF-09 of -- of twenty (20) -- 2.396 billion.

We note, and certainly we draw this from the Board's reasonings in the interim order, that the real pressure for increasing rates in 2010/'11 and 2011/'12 is with regard to the financial outlook betw -- beyond 2011/'12 an assert -- an uncertainty associated with that outlook.

And certainly the Board is more familiar with its words than we are but when we look at those risks and concerns noted by the PUB, we observe they're related primarily to uncertainty regarding the export market in terms of prices and firm contracts as well as the timing and cost of future capital spending for major projects including Bipole 3, Conawapa, and Keeyask.

And, ultimately, at the end of the day, whether those export prices will support the costs of new generation projects.

And I really at times hate to agree with Manitoba Hydro on -- on a number of issues but it is -- our clients acknowledge the Board's concerns and -- and indeed share a number of them. And there -- but they also note that the IFFs presented by Hydro reflect a proposed development that is predicated on the assumption that major generation can be pre-built in advance of domestic need to the benefit of domestic ratepayers.

Clearly, the PUB's concerns about whether these benefits will materialize, or whether future export prices and the actual costs of projects will be such that these benefits will not materialize -- and, again, Board counsel's opening statement spoke to that. And our clients agree and concur that the Board is right to be concerned that Manitoba Hydro's proposed development plan is yet untested.

However, there is a process to test this plan and the regulatory process, including necessary environmental proceedings, cannot ultimately proceed unless the benefits can be clearly demonstrated and substantiated in the needs for and justification review.

The Wuskwatim hearing, Mr. Chairman and Mr. Vice-Chair, was a thorough hearing, not -- in hindsight, we've learned a ton. And certainly, from the consumer perspective, we expect to be considerably more assertive in testing the Corporation's capital cost projections, their export revenue forecasts. But the point we -- we wish to make on -- on this page is that we understand the Board's concerns and it's -- it's certainly, as reflected in the interim order, of the need to reflect and to protect both the Corporation and ratepayers from events unfolding, not as Hydro anticipated but as others might anticipate, but that there is a process in place to -- to test the merits of

Hydro's case and -- and if it can't be made out, to stop at least some of these expenditures.

MR. ROBERT MAYER: Mr. Williams, what is the process you suggest is set in place?

MR. BYRON WILLIAMS: By that, Mr. Chairman, or Mr. Vice-Chair, I mean that under the legislation, there needs to be a -- certainly in terms of -- a major review.

MR. ROBERT MAYER: Which legislation, Mr. Williams?

MR. BYRON WILLIAMS: Not this legislation, Mr. Vice -- Vice-Chair, but you -- the environment --

MR. ROBERT MAYER: Okay. Mr. -- Mr. Williams, yes, I understand that a review is required under the Clean Environment Act. And -- and the last time we dealt with the issue of a dam, the needs for and alternatives to, quote, "the justification for the project were somehow combined." Both the Chair and I note with interest that despite the public announcement of the building of Keeyask, we have yet to understand or be advised as to what if any process will be put forward to deal with the needs for and alternatives to. Do you have any information we don't?

MR. BYRON WILLIAMS: No, but Mr. -- Mr.

Vice-Chair, I don't think that that -- if you wish me to speculate, there's -- there's three (3) options: one (1) is a -- a PUB-led need for and alternatives analysis; one (1) is a CEC need for and alternatives analysis; and one (1) is a joint, such as in Wuskwatim. Perhaps there's others. If I were betting -- a -- a betting person, I wouldn't bet a lot, but my -- my guess might be a CEC-led proceeding.

And if -- Mr. Vice-Chair, I'm not sure that I -- I have your point. But if your point is that there will be a review but that the PUB may not be involved, certainly my clients acknowledge that. And I think their preference would be for a PUB involvement. But that doesn't mean that CEC-led process would be necessarily any less rigorous or insightful.

MR. ROBERT MAYER: Thank you, Mr. Williams.

MR. BYRON WILLIAMS: Mr. Chairman, I see you reaching for your...

THE CHAIRPERSON: No.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: One (1) of the -- and I -- I think I still have five (5) minutes, so I mi -- I might try and go on to a related issue which also might provoke some intervention. Starting on the -- the next page, which hopefully is page 26. It's not numbered. It's co -- it's titled "Intergenerational Equity." And -- and these comments are -- are related, Mr. Chairman and Mr. Vice-Chair. And we -- we've seen the words "intergenerational equity" used quite a lot in -- in the context of major capital projects in this hearing.

And at the bullet second from the top we -- we note the evidence of Mr. Warden from the transcript, page 8,041, where he was responding to some comments by MI -- MIPUG. And I'm not sure we've actually fairly presented them here, but this is what -- what Mr. -- Mr. Warden interpreted them to be.

Some suggestion that current ratepayers were pre-funding Keeyask and Conawapa by stating that all costs incurred were capitalized and only included in rates once the fac -- facility's concern came into service, and, as a result, there was no pre-funding and no intergenerational issue.

And you -- at a theoretical level the Board would have heard some evidence from Mr. Matwichuk as well on intergenerational equity, making the point that when one is dealing with major capital projects, Mr. Ma -- Matwichuk's argument was that those per -- tho --

the costs should be set against those persons who were expected to benefit from -- from the project. So, to that degree, there is agreement between one (1) of the CAC/MSOS witnesses, Mr. Matwichuk, and Mr. Warden.

We want to go on though, Mr. Vice-Chair and Mr. Chair, under the comment section to note as well though that there are implications for ratepayers today of these major expenditures. $25 million a month I believe is the evidence noted by the Board counsel. And certainly our clients concur that the costs are capitalized and attract interest during construction, and they believe that that is an appropriate approach. But they note as well that these costs for construction in progress do affect Manitoba Hydro's balance sheet and its debt-equity ratio.

And if -- if the assets are funded through debt the effect will be to increase the debt ratio. And given Hydro and the PUB's use of the debt ratio as a measure of financial soundness, this puts pressure on current rates to the -- at least to the degree that current rates are increased so as to maintain the debt ratio.

And certainly, again, our clients agree with Mr. Warden that there's no direct pre-funding of such projects and that that is appropriate, but that the existence of such projects, they acknowledge, does create pressure for rate increases in the short-term. And certainly if Hydro -- the PUB respond to such pressures in terms of the debt equity, then such projects are indeed affecting current rates even before they come in service.

And the concern from our client's perspective is that current customers' rates are being affected and influenced by facilities that they're not using. In Order 40/11 the Board stated that the current ratepayers are, in a sense, engaged in plans that involve risk, with the costs of those risks deferred to other generations, certainly speaking to Keeyask, Conawapa and Bipole.

And, again, I perhaps made that point earlier in terms of Mr. Matwichuk's evidence, but from our clients' perspective these costs are part of the planning process that is required in order to ensure that supply is available to meet future demand. Future generations rightfully expect that such planning will occur, and in the case of Hydro, given our approach to export markets, this planning also includes consideration of facility advancement or construction for exports where it can benefit future generations in terms of lower rates. And, again, from our clients' perspective it is reasonable for future customers to expect current customers to pursue opportunities that will reduce future rates.

If the PUB's concern is that the amount of money being spent and where it is being spent on the -- on the right areas of -- and where -- and whether it's being spent in the right areas, these are definitely legitimate concerns from our clients' perspective.

The challenge of course is our -- is the Board's jurisdiction. These are not areas where the Board can direct Manitoba Hydro as Hydro's capital planning is not subject to review and approval by the PUB. And some of these concerns will not be addressed in the upcoming needs for review. They're concerned with the money being spent to get to the needs to rev -- needs for review stage.

The real issue is therefore the outstanding concern of the PUB and others that is precluded from reviewing Manitoba Hydro's capital programs, including that part of the program that deals with the funding for studies regarding the need for future capital projects.

Mr. Chairman, just -- and Mr. Vice-Chair, just a last note, and -- and in the Board orders -- Interim Order 40/11, the Board says it is concerned with meeting --

"The Board is concerned with meeting the need for intergenerational equity with MH taking risks on behalf of current ratepayers that could contribute to higher rates in comparison with inflation rather than lower rates for future generations."

And if my clients parse that statement they fully acknowledge that there is a risk that these expenditures could contribute to higher rates rather than lower rates for future generations. They acknowledge that.

Where they differ with the Board is they do not accept from their perspective that those risks are being taken on behalf of today's ratepayers. From my clients' perspective they're being taken on behalf of future generations. And that's the -- a long-winded way to -- to -- to respond to that -- that point.

THE CHAIRPERSON: Okay. We'll take our break now. We'll come back at 1:15. Thank you.

--- Upon recessing at 12:16 p.m.

--- Upon resuming at 1:21 p.m.

THE CHAIRPERSON: Okay, folks. We should return to our task. Mr. Williams, we'll -- you had a good lunch and you're all renewed and invigorated and all that.

MR. BYRON WILLIAMS: That -- that may be asking a bit much, Mr. Chairman, but thank you for your kind thoughts. I should have noted this morning, in terms of the three (3) documents that were distributed on behalf of CAC/MSOS, we would suggest that the additional materials be -- be CAC/MSOS-36, that the written outline of argument be CAC/MSOS-37, and that the final recommendations be CAC/MSOS-38.

THE CHAIRPERSON: So be it.

--- EXHIBIT NO. CAC/MSOS-36: Additional materials

--- EXHIBIT NO. CAC/MSOS-37: Written outline of argument

--- EXHIBIT NO. CAC/MSOS-38: Final recommendations

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: I may have had some -- some assistance in designating the -- the numbers, Mr. Vice-Chair. For the -- the Board's guidance, I -- we should be on or about page 28 of the written outline. And also in the additional materials, being CAC/MSOS-36, you might want to have -- flip over the cover page and there should be a -- a table, "Bank of Canada Benchmarks," with one (1) person having a colour version.

And -- and before turning to the text of page 28, it's perhaps useful to take a -- a look at this chart, which was a -- originally it was -- National Bank did an analysis, I believe, from April '05 to May '09, and then Mr. McCormick took it out a few more years. And -- and I'm sure my friend Mr. Schulz, who was a patient and thoughtful witness, would like to take it back to the height of 1982 or so, long -- you know, at a different time for the Bank of Canada.

So the -- the only point at this point in time in -- in addressing your attention to this chart is, it makes the point, my clients think quite eloquently, that at -- at certain points in time, it depen -- it -- it makes a great deal of difference whether built into your forecasts for new debt are short-term interest rates, which are -- in the May '09 year, you can see well below 1 percent, or ten (10) year interest rates, which are, for those with the non-colour version, the grey line, and you can see the gap between -- between those two (2) in, for example, May of '09, and -- and certainly long -- long, i.e., thirty (30) years, which is the -- the upper line in the May '09 time frame.

And I focus on that time frame because obviously the information presented by Mr. Cor -- McCormick makes the point that as we headed into the 2010/'11 General Rate Application there was a significant gap between short-term rates and -- and other rates.

And moving now to -- to the text itself, again I -- I quote Mr. McCormick characterizing Hydro's forecast as represented in IFF-09 as upwardly biased and regretfully a bit of a revenue grab and saying to us all that -- that he believed we can do better. And at the heart of his initial argument, this is set out under the heading, "Systemic Overestimation of Financing Costs." And this is what was found in IFF-09, the concept that all new debt was forecast to be long-term debt.

Now, Mr. Schulz and -- put some precision on what is meant by that at page 515 of the transcript. The debt streams were forecast to be thirty (30) years and the interest rate applied was a ten (10) year plus, which is the average arithmetically of the calculation of tens and thirties.

And both Mr. Rainkie and Mr. Schulz were candid in confirming that this was a long-standing practice of the Corporation. They didn't say it went back as far as Mr. Warden, but it did -- it did date -- predate their positions, at least in the middle of the -- this past decade.

And why this far -- policy was of concern to Mr. McCormick, of course it's the -- in terms of forecasting the costs of new debt, was it's the basis on which the application was made, but also because the practice of treating all new debt as, for short-hand purposes, long-term debt, wasn't reflective of Manitoba Hydro's borrowing practices or borrowing policies.

And the fact is that during -- certainly in two (2) -- IFF-09/IFF-10 their target range in terms of floating debt was 15 to 25 percent and their upper limit was 30 percent. So forecasting new debt based only on the assumption that was fixed and/or long-term debt, in Mr. McCormick's view, materially overremp -- represented interest costs.

And he, at the bottom of page 28, noted that in his original estimate he estimated an impact of 5 million of savings in the first year and -- and somewhat of an additional amount in the second. But he went on in his oral evidence to confirm that based on current and prevailing interest rates that it would be -- would be higher.

Now, the top of page 29 we cite the fact, and we give Manitoba Hydro credit for this, that on a going-forward basis they appear to have adjusted their policies so that in IFF-10 they will build in a component of -- or they did build in a component of fifteen (15) -- excuse me, 20 percent floating and 80 percent fixed. And I believe both Mr. Schulz and Mr. Rainkie described that as an enhancement, so we congratulate Mr. McCormick for the concept and also Hydro for adopting it.

But there's -- there are three (3) points that we -- we wish to make still on this -- this issue though. The first of is -- is that while IFF-10 was corrected, the application, the rate application was based upon IFF-09 and those inflated financing costs are still built into it.

The second, which goes towards the bottom of page 29, is that Mr. McCormick argues that still built within the forecast cost of new debt is an additional bias. And there's -- actually, there's a better slide that says this, I think, slide 11, which I'll come to in a few moments.

But Mr. McCormick made the point that assuming that all long-term debt will be the average of ten (10) -- ten (10) and thirty (30) years fails to recognize that there are -- that there are debt issues that are for a lower po -- period of time and generally a lower interest rate. And he also made the point that it did not take into account short-term notes in his -- or that in -- in his view did not sufficiently take them in such that it was upwardly biased. And certainly Mr. McCormick argued for the - in -- on a rate-setting basis that the ratio of floating to fixed should be 27 percent to 33.

The last point be -- before I leave page 29 is actually towards the top of it. You see reference to an asymmetric forecasting advantage. And both Mr. McCormick and Mr. Matwichuk in our clients' submission have made a compelling argument that -- that there are benefits to Manitoba Hydro from underfore -- overforecasting expenses, excuse me, and underforecasting revenues. And Mr. McCormick has a pithy statement in the middle of page 29 on that point.

Turning to page 30. Again, following up on Mr. McCormick's evidence. Apart from the composition of the projected cost of new debt between floating and fixed, the other point he wished to make was that as compared to either IFF-09, especially as compared to IFF-09, interest costs for the 2010/'11 and 2011/'12 year are ma -- excuse me, let me try that again. When we look today at what actual interest rates are in the marketplace and what they are projected to be for the remainder of the '11/'12 year they are materially lower than what was set out in IFF-09. So Mr. McCormick's point is it's not just the composition between floating and fixed which buy us the results, it's now that the forecasts from IFF-09 have been overtaken by reality and the reality is sharply lower interest rates.

And at the bottom of page 30 we highlight the gap between what Hydro forecast in 2009 for short-term rates, being 3.8 percent, and the forecasts in the current rate for 2011/'12 which is set out in McCormick slide 45, 1.5 percent. Over 200 basis points. And even on long term while the gap is not as dramatic, there is a -- still a gap in that the most recent information shows that forecasts were averaging about 3.6 percent as opposed to the 3.95. So Mr. McCormick's advice to the Board is look at the composition but also let's not be stuck with dated forecasts when we have the one (1) benefit perhaps of a longer hearing, which is we have current -- current interest rates and also more up-to-date forecasts of interest rates.

And at the top of page 31 we present Mr. McCormick's conclusion that updated rates are indicative of significant excess interest costs being forecast in the revenue requirement.

In pages -- the next couple of pages that are set out, pages 31 and 32, our clients move from the actual numbers to some advice to Manitoba Hydro and the Board for future rate setting. And Mr. McCormick expresses the concern in his written and oral evidence that the criteria for which Manitoba Hydro selects its forecasters for interest costs -- well, he's not sure what the criteria is, and he -- he's not confident that they are being selected on the basis of merit. And further, he suggests that they should be selected on the basis of merit.

And he has a cute quote on page 31 about -- about going -- Manitoba Hydro going shopping for forecasts.

Forecasters pick BMO, pick Scotia and the feds, but they didn't really look at the ingredients and they didn't make that important choice in terms of -- at least with any publicly expressed criteria in terms of which were the better forecasters.

And Mr. McCormick says, and it's advice that we would offer to the Board, is that I'd like to get the guy with the best track record on my si -- side as opposed to worrying about a cacophony, C-A-C-O-P-H-O-N-Y, of voices.

On this point we note that there are similar commentaries and supportive commentaries by

Professors Kubursi and Magee in terms of economic forecasters. They suggest that, again, Hydro should be establishing accuracy criteria for forecasters and selecting based upon it.

And on page 32 I -- I again put in again the advice of Mr. McCormick at the top of the page and the advice in a slightly different context and perhaps not as assertively as Mr. McCormick but to the same effect of Professors Kubursi and Magee.

And on this point our -- our clients have one (1) additional point on this page that -- that they make. And -- and if you look at the thrust of McCormick and Kubursi and Magee's evidence, it's that not all forecasters are created equal, that it is a good practice going forward to have express criteria upon which to evaluate these forecasters, and -- and that indeed some forecasters may or may not deserve additional weight.

And we were looking at the bottom of page 32 for any other support for that. And, to some degree, Mr. Surminski, in terms of his export forecasts, does take a similar approach, perhaps the criteria not as express as my clients would like. But Mr. Surminski offered evidence at pages 5,225 and 5,228 of the transcript about -- on the export forecast side -- this is at the bottom of page 32 if persons are looking, on the export side of the equation pruning certain forecasters, one (1) which wasn't MISO specific, others who are less able to articulate the rationale for their estimates.

So it's not a radical concept that Kubursi and Magee are as -- espousing. It's not a radical concept that Mr. McCormick is espousing. To some degree, you can find internal support for that from Manitoba Hydro as well. Again, the point being one would expect express criteria and that forecasters would be measured against it.

At page 33 we come to a very important point of Mr. McCormick that was somewhat expressed in his written evidence but really fully flowered in his oral evidence. And I took the liberty at the top of this page of putting a quote from Bonbright that I put to Mr. -- Mr. Wiens in cross-examination: four (4) things come not back, the spoken word, the sped arrow, the past life, and the neglected opportunity.

And obviously our focus here is the neglected opportunity. And Mr. McCormick, on this page, speaks more powerfully than I can. And he -- he was pointing to this very chart which I -- which I showed to the Board at the opening of my comments this afternoon.

"I do believe that in handling its debt

portfolio over the last number of years
Hydro has missed or lost many
opportunities to provide consumers with
lower interest costs without unduly
increasing the risk of their
performance. They have never been
anywhere near the top range in a whole
range of financial markets."

He argues that their 15 to 25 percent tar -- per -- target range is a bit of a fiction because they really, even in these illustrative years between -- illustrative years in the -- in the record, haven't gone really between 16.6 and 21.8 percent.

And he -- he says and he begs the question, if you look at this table that is provided at the first page of the additional materials, if -- if this table does not provide an occasion when one might expect Hydro to move towards the top of its target range, when would that occasion arise? May '09 is a perfect illustrative example, but even within the test-year period, there's ample evidence to support some lost opportunities, certainly within the test-year period.

At page 34 of the outline Mr. McCormick makes the argument that you could have had a -- a double win, if this policy would have been applied on a more consistent pace -- basis from June 2001 moving forward. And we think he makes a -- a compelling case.

At page 35 -- at page 35 of the outline, Mr. McCormick goes on and suggests that the fear of being near the top range, top end of the range, is overstated, because there are mitigation tools available. And he provides some interesting sites from EMERA, E-M-E-R-A, in terms of how they cap their exposure to 80 -- 86 percent of their floating rate debt. There's -- as he notes -- that's page 7,782 to the transcript -- there's a small insurance premium, but -- but there is protection put in place. And he goes on, as I -- what I'm hoping will prove a clever segue to my discussion of the National Bank report, to say:

> "Regrettably, there is no discussion of caps on floating rate debt in the NBF report."

I'm going to come to N -- NBF in just a couple of pages, but at page 36, we highlight another concern expressed by Mr. McCormick in his oral evidence. I'll just wait a second for -- we -- we go on page 36 to another concern expressed by Mr. McCormick. And he notes that he has not seen a debt concentration policy for Hydro. Now, there may be one on the record, we don't have perfect mastery of the record, but there is not one on the record, to our knowledge.

And he points out a year of concern. And I'll have to check the cite. I see I've got written 2019 here; it might indeed be 2018. But in one (1) of these particular years, being either 2018 or 2019, there's over a billion dollar of debt, 13 percent of total debt, either maturing or interest rate obligation maturing. And he notes that, in terms of some of the information that again he puts on the slides of his evidence, that in -- there's a total of around $4 billion maturing in the six (6) highest years. And by six (6) highest years, I mean years in which there's the highest amount of debt maturing. And as Mr. McCormick says, "that's half the game."

And so he again expresses the concern that there should have been a discussion on caps in the NBF report, as well as a discussion on risk related to maturities.

So an important element of risk that was perhaps not as fully discussed as we might have liked in this proceeding.

At page 37 through 39, our clients offer their comments about the National Bank report. And like their comments on Kubursi and Magee, our clients think that the National Bank report is an important report, albeit with significant flaws. We'll start first, and maybe it's the nature of the adversarial process, with some of its limitations.

In our clients' view, important elements of its terms of retainer were not completed, perhaps the most important being: Define an optimal relative weighting of fixed versus floating debts in different yield environments: flat, steep, and inverted.

And it's Mr. McCormick's view that this was not done. And certainly, hopefully, as the preceding discussion made evident, this would have been an important addition to the insight offered by National Bank. The evidence suggests that Manitoba Hydro may be artificially restricting its range in terms of floating versus fixed debt, and even in yield environments which might suggest a more aggressive move into floating debt. And additional consideration -- completion of the terms of retainer, in terms of optimal yield in different yield environments might have been a tremendous insight that NBF could have offered. They did talk a bit about market timing but they did not do, in our clients' view, what they were asked to do.

A smaller point, although it's certainly perturbed Mr. McCormick, was that there wasn't a comparative reporting of peers that -- that in effect of their policies it was not done properly. And frankly he has devastating evidence on this set out in slides 28 through 30 of his oral outline, and so I shall not dwell upon it.

McCormick also points out that important elements of the -- of the report were flawed. And there's the infamous Table 14, one (1) of nine (9) values being right in terms of floating rate percentages, and two (2) of nine (9) in terms of total debt. And again, the slides almost speak for themselves, so I will not dwell on them.

A more methodological concern and -- and -- and in this area we would contrast NBF, National Bank, with Kubursi and Ma -- Magee -- this is at the bottom of page 37 -- is there's relatively little insight pro -- provided by NBF in terms of the detailed modelling, whether that's probability distributions, ranges. And we saw how valuable, even though it was open to a lot of criticism, that was with Professor Kubursi and Magee, providing important insight in to the methodology, which, like Kubursi and Magee involved Monte Carlo simulations. So that's a weakness of the NBF report.

And one (1) final one. And again you may wish to refer to the chart, the additional materials that was provided. The period of analysis for the National

Bank was only about four (4) years. It doesn't mean that the insight isn't valuable, but the four (4) years that were selected were an interesting four (4) years. And if you refer to the -- the table, which is the first page, additional materials from the record, you can get some insight into why those were such interesting years.

And you can see that for approximately seventeen (17) of the forty-eight (48), forty-nine (49) months in question, short-term rates and long-term rates were either in a relatively flat or inverted yield curve environment, which happens to be of the -- of the whole decade, that's also the period in which they were in that -- in that sort of situation.

So that does raise the question, valuable as the NBF report is, whether the particular sample period might have -- might have benefited from analyzing a longer period.

Now in fairness to NBF, we assume that the reason for their starting point of April, 2005 was that would approximate the opening of the MISO mar -- marketplace to -- to -- to a more open access marketplace. And certainly that -- that may -- may indeed be the rationale. And if so, we understand the rationale for doing so. But it does raise the question if whether at some later date, when there's a bit more data available, in terms of the MISO marketplace, whether this examination, in terms of optimal yield, might be revisited.

So those are the criticisms of NBF set out at page 38. But there are some really important insights that come from this. And at the bo -- bottom of page 38 we note that NB -- NBF identifies a relatively strong, positive correlation between MISO spot market prices and short-term interest rates. And the conclusion they draw, and certainly my clients are supportive of that conclusion, is that this provides insight into the utility of using floating rates is a partial hedge against fluctuations in the MISO market. And Mr. Schulz well described this in his evidence.

They were able to statistically determine there was a correlation between short-term interest rates and MISO pricing from the 2005 to 2009 period such that they, in effect, acted as a hedge. And he went on to take this -- there's a significance to this conclusion. To an outsider, to a non-expert, such as myself, one might assume that if one judge risk in terms of income statement variance, then a hundred percent fixed rate would be the risk free the -- or the lowest risk situation.

But what Mr. Schulz pointed out was that if risk -- and this is at the bottom of page 38, is risk is measured in volatility in net income, a hundred percent fixed rate portfolio and a 27 percent floating 73 percent fixed rate portfolio have essentially the same risk characteristics. And this is an important insight from the NBF report.

At the top of page 39, NBF offers some insight, we suggest, into the use of quantitative risk analysis, and -- and, to some degrees, a more considered approach to correlation, one might argue, than Professors Kubursi and Magee. And they also note, and this is important in weighing the evidence of Professor Kubursi and Magee, is that there does not ex -- they do -- would not expect there to be a correlation between hydrology and mi -- macroeconomic risk factors, such as interest rates. And certainly I'll come to that point a bit later.

I think the most -- on behalf of our clients, we would submit that the most important conver -- conclusion of NBF, although they don't put it in these words, is that there is no free money. Certainly -- and they don't state this expressively -- expressly, but the calculations and the conclusions that they relate -- they -- they present in our client's view make the point that excessive reliance on the certainty of long-term fixed debt comes at a material cost in terms of lost opportunity for lower debt cost.

And they -- recognising that they have a limited dat -- data set, they do conclude that the unoptimal -- optimal portfolio for Manitoba Hydro should be broader, 14 to 27 percent. And, at the very least, moving up those two (2) percentage points raises further question in our clients' mind about why Hydro appears to be artificially restricting its floating rate component to 22 percent. If those conditions were in play -- concerns were in play within the Hydro target range when NBF is saying you can do better at relatively similar risk at 27 percent, those concerns are even -- are only reinforced.

Mr. McCormick sums it up aptly. Each one of these points, i.e., a floating versus fixed, is worth millions of dollars of consumer interest savings. Right now, the short-term/long-term spread is over 3 percent. So if you start doing math on 800 million, say 5 percent times 3 percent, you're coming up with some fairly nice numbers.

And our clients certainly regret the fact that National Bank was not presented as witnesses. We -- we think, especially given that Kubursi and Magee were here doing Monte Carlo simulations, the evidence of another witness with some insight into that approach would have been extremely valuable.

Turning to page 41 of the outline.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Our clients want to move from what Mr. McCormick has presented, to their conclusions, and we've set them out on this page. We do comment Mr. McCormick for suggesting and Hydro for ada -- adopting the improvements to the forecast of new debt, being 20 percent floating, 80 percent fixed. We think that should be brought in -- into play, or even a more aggressive number, for the purpose -- purposes of this General Rate Application.

The second bullet is an important one. For the purposes of the revenue requirement, the current one an -- a going forward basis, our clients would suggest that the for -- for forecasting for revenue setting, that forecast of new debt should be re-done based on three (3) -- three (3) criteria. The first is Hydro's policy in terms of floating and fixed debt. I omitted the word "policy" in the outline. The second is their actual practice in terms of floating and fixed debt. And the third, which at times, our clients would submit, may contrast with Hydro's approach is a reasonable practice of a prudent and reasonable utility seeking to achieve appropriate returns at an acceptable level of risk.

And hopefully the pane has grasped our client's argument that -- that, from time to time over the past period, Hydro has foregone opportunity and incurred excessive costs.

So our clients' advice to the Board is to commend Hydro for a good start in IFF-10, but to pre -- prefer, for rate setting purposes, a floating rate, not at 20 percent, but towards the higher end of the NBF range, being 25 to 27 percent. And we've put our rationale there.

Our clients also strongly recommend at the bottom of this page an -- the interest deferral mechanism proposed by Mr. McCormick. And they would suggest that Hydro should be advised that to the extent that there are -- that the extent of any corporate recoveries from this mechanism will be contingent on a determora -- termination that it has been manage -- magi -- managing its financial cost prudently.

Mr. Chairman, if you can just excuse me for one (1) second.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: I apologise for the delay. Somewhere buried in this outline is a better explanation of the interest deferral mechanism. But I'll -- I'll go off memory and just briefly surpri -- su -- summarize a couple of my clients' points in this regard.

Mr. McCormick ad -- advised that an interest deferral me -- mechanism was important because it -- it took away, on a -- on a forecasting basis, the motivation for the Corporation to overstate its interest costs. And -- and our clients wholeheartedly agree with that. There's no motivation to overstate your costs if you know that you're going to have to correct them subsequently.

The other reason my clients like an interest deferral mechanism, is for the reasons set out at the bottom of page 41. Certainly if -- if the mechanism itself worked in such a way that for the Corporation in -- in circumstances where it wished to withdraw from that mechanism because its interest costs were higher than forecast, if -- if it were included in the mechanism, an evaluation of whether it had been managing its costs in a -- its financing costs prudently, that would be, in some ways, the best of -- of both worlds; taking away the motivation to over forecast costs, but also allowing some review in terms of the mechanism of the prudency of those costs.

Turning to page 42. I don't mean to -- to dwell on this page except for to note that Mr. McCormick has made the point, on a number of occasions, that -- that there are things that might be better documented in terms of Manitoba Hydro's policies. For example, a recognition by its board or an expressed documentation of the target floating rate component, as well as the upper limit. We're told that that document exists somewhere; it was passed in the old history of the Corporation. We're not sure where it is. Debt maturity limits as well is another example, and that is the simple point that we make on page 42.

If the -- the panel -- I'm turning to page 43, where we enter the evidence of Mr. Matwichuk as it leads to a rate stabilization mechanism. But one (1) thing that I would ask the Board to -- while they're doing so, in the additional materials from the record, the second graph in, the second -- so it's in the additional materials from the record, the second graph in is titled "Manitoba Hydro Export Revenue Variances." And this is a -- a slide from Mr. Matwichuk's writ -- prefiled evidence, as well as his oral evidence outline.

And the Vice-Chair asked the question what this figure represented, or what this graph represented. And it is the variance between actual and forecast for the particular years, with the -- the forecast being the forecast for rate-setting purposes. And a central argument in term -- in -- by Mr. Matwichuk, in terms of his rate stabilization mechanism, flows from this graph. And -- and the material variances from forecast, in terms of export revenues, again we -- we have the drought year at the -- the bottom end, and also we have numerous years in which the -- there was a positive variance in terms of actuals from forecast.

And one (1) caution on this graph. There seem to -- this is export revenues, it doesn't in -- include variances in import costs, but it -- but it is an important graph in our evidence. And the point that Mr. Matwichuk wanted to make, before I leave this graph, is forecasted export revenues are built into our cost of service model, but the variations from forecast aren't, and -- not expressly. And he pointed to the moral hazard, an asymmetric advantage to Manitoba Hydro in terms of under-forecasting export revenues.

And if one thinks of the rate stabilization mechanism, the big picture, and I will come back to that, but in Mr. Matwichuk's views, it would have three (3) important values: 1) would be transparency, bringing those variances from forecasts back into the rate; 2) would be in terms of smoothing events, both positive and adverse; and 3) would be reducing the risk of moral hazard.

At the bottom of page 43, Mr. Matwichuk -- I've put -- inserted a -- a quote from Mr. Matwichuk about that graph in revenue variances I've shown to you. And he states that he is not aware of another regulated entity where actuals vary so significantly and continually from forecast, and there is simper (sic) reliance on costs of service without the use of another tool.

At page 44, and -- and My Friend, Ms. Southall, presented similar information this morning, at the top of page 44, we note the quote from the National Bank, that the primary source of net income variability is hydrology risk. And Mr. Matwichuk notes very significant revenue variances, in terms of export revenues as compared to forecast, as high as 48 percent of forecast, and on average 22 percent. And in the middle of page 44, he notes that export revenues have been under forecast by $441 million in the period between 2001 and 2009.

At page -- I'm gonna skip on, Mr.

Chairman, and I'm -- I'm trying to be thorough but also there are points with which I think the Boards (sic) will fairly comfortable with.

At page 45 we see references to asymmetry of risk. And again, I've spoken of this briefly, but in his ev -- oral evidence Mr. Matwichuk made the point that we can be relatively confident that Hydro will go back to ratepayers in the down years. And the drought of 2004 was an example where Hydro came back and -- and indeed the Board also in its wisdom saw fit to -- to increase the revenue -- the rate increase for a variety of reasons.

We can't be as confident that Hydro when it has a positive forecast will go back to the regulator. And if it doesn't that money may go to a good place. It -- it may indeed go to a place where we'd like it to be, but it may not. It may go -- it may be going to excessive OM&A expenditures, it may go to imprudent capital expenditures, we do not know. And that is the asymmetry of risk in terms of export revenue forecasts of which Mr. Matwichuk speaks.

He makes an important point at the bottom of page 45 in terms of transparency and transparency both in -- in terms of capturing the upside of risk, positive variances from forecast, and the downside. And he certainly sees the RSM as a powerful vehicle in that way.

At the top of page 36 -- 46, excuse me, we set out considerations in terms of determining whether a rate stabilization mechanism may be required. And again, Mr. Matwichuk a few pages ago noted that in his twenty-seven (27) years of experience, the absence of an RSM in this circumstance is an outlier. And he points to good guidance to the Board in when one might -- it -- may wish to employ such a mechanism. He sets his own test out at the -- at the top of page 46 and then he sets out the National Energy Board criteria. If there's absence of control in the results -- and certainly goodness knows hydrology is something we cannot control -- an inability to reasonably forecast -- and again there are material challenges in terms of the forecasting of hydrology and also materiality. And certainly we hope that we have made the point of the importance of export revenues to the bottom line and the importance of this -- and significance of the variance.

Mr. Matwichuk argues that retained earnings are not a sufficient or appropriate vehicle to deal with significant variances between forecast and actual. And certainly he's got his accounting hat on with the interesting accounting of the history behind setting retained earnings, making the point that retained earnings are not a cash bal -- balance, and in the case of Hydro, supported by capital investment and infrastructure, or capitalization, of course, of -- of expenditures relating to projects that are not yet in service. He underlines the fact that it is not accessible liquidity.

Mr. Chairman and Mr. Vice-Chair, the Board, Mr. Matwichuk went through a very detailed explanation, or he started to, of his mechanism. The Board quite properly interrupted him and said we -- we have a good handle on it so I'm not going to go into a lot of detail. In terms of his mechanism I put some important references at the bottom of page 46, on where it appears in the transcript and in his outline of written -- written oral evidence. That's -- of oral evidence, excuse me.

There is one (1) point that I -- I do want to make in terms of Mr. Matwichuk's evidence, though, and not because we fear that the Board may have not grasped it, because we're confident they did, but because some of the other parties in the room, including Hydro and -- and My Friends from MIPUG, may not have -- have grasped it as well as the Board.

And in terms of page 47, we put out an answer from Mr. Matwichuk in the upper third of the page in terms of how he defined net export revenues. And he makes the point that my definition of net export revenues, ultimately to be used for this mechanism, does include the netting of power purchases, and that was expressed in his written evidence and also in his direct evidence before cross-examination.

And -- and just for the Board in terms of the additional materials, they may wish to move two (2) pages further along. There should be a graph called, "Illustrative example." This is in the additional materials, the little Exhibit 36, "Illustrative example."

And -- and what this is, this illustrative example, is -- it was set out in Mr. Matwichuk's evidence between slide 67 and 69, but it also appeared in an IR response, and what it did was respond to a question of the Public Utilities Board in terms of show us how it would work looking at the variances in export revenues in -- in the particular time period set out.

And this is an accurate response to the -- to the inquiry of the Public Utilities Board. But it -- it's important to remember that the initial question was on export revenue variances. It didn't include imported power.

And so variations in terms of the cost of service definition of export revenues in terms of imported power would not be reflected in this graph, and that's what Mr. Matwichuk attempted to convey at pages 7,670 and 71 of its evidence.

My simple point is this, Mr. Chairman. Both counsel for MIPUG and counsel for Manitoba Hydro appeared to point to the 2005 year in terms of the export revenue -- or the -- the mechanism and say, Well, look, the year after the drought people are still getting a positive -- they're still getting -- their bill is not -- their bill is still a bit less because of this RSM.

And our -- our clients' response to that is twofold; certainly in the example it is. If one threw in imported power, that result would be a little bit different, and, also, it'd be little bit different -- a little bit lower in terms of the zero line.

The second point, though, is that this is exactly what a rate stabilization mechanism should be doing, is that it should be muting the effect of adverse events. It should be taking them into account in a transparent manner. But it also -- it's there, and it's an important element of the tool. It is there as, really ,the one (1) smoothing mechanism for adverse variances related to hydrology that's before the panel in this Hearing, and that's why our clients feel very strongly about this mechanism.

And, Mr. Chairman and Vice-Chairman, I know it's a complicated point, so please stop me if -- if I'm -- if I'm losing you. I'll put that down to my explanation, and not otherwise.

At page 48, again, we highlight in the middle of the page on behalf of our clients and Mr. Matwichuk what they believe should be the effect of a rate stabilization mechanism; more transparency and really reflected on the actual bill, as Mr. -- Mr. Matwichuk suggested, the consequences of positive variances from forecast related to export revenues, and also negative.

And we think that's good for consumers to have that indication of how their bill is being reflected by variances in the export market as compared to forecast. That is important.

Secondly, the utility of rate smoothing and, third, reduction of moral hazard.

The Vice-Chair, as well as My Friend Mr. Hacault and perhaps My Friend Ms. Boyd, asked some really good questions of Mr. Matwichuk in terms of how do you implement this? And we've sent out a bit of a discussion at page 49 of -- of this -- of this outline. And the panel might also want to turn to the -- the tabbed recommendation binder or handout that's Exhibit 38 of

CAC/MSOS, and specifically to Tab 8, or Attachment 8. That's Attachment 8 to the recommendations.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: And there was -- the panel will recall certainly some discussion from My Friend Mr. Hacault quite rightly asking Mr. Matwichuk, How does this work? How does this work if we don't have a test year? Do we take in -- do we consider the untested IFF in terms of determining the mechanism? How does that work? And the Vice-Chair popped in with some questions as -- as well.

And what we've tried to do in this -- in this handout is reflect that discussion, and I'm not sure I can do it justice in the -- the time I'm allotting myself, but essentially saying that there are three (3) possible approaches to -- to implementing the RSM. And one (1) is to only employ it in -- in the years following a test year, based upon the IFFs presented in the test year. That's the top one, that's 'A'. Secondly is to -- the one in the middle is to -- to only update the variance in test years, but take in -- into account and amortize the year-over-year variance, which is the one in the middle. And the third is operating the variance on an annual basis, certainly it's relatively easy in test years, and either using a written process or otherwise to take it into account in non-test years.

There are pros and cons to each of these approaches, and certainly we present them to the Board for its consideration. Our clients' bias is probably num -- or letter 'C', the one at the bottom. That will provide the most up-to-date variances. The limitation or concern we would express to it would -- would be that it would not -- we wouldn't have the benefit of testing all the IFFs. So that's a bit of a discre -- discussion. I hope it facilitates the Board's consideration on this point.

Mr. Chairman, I'm making good progress. I'm happy to keep going for another topic or two (2) and -- and if -- if that's the -- the will of the Board, I will move you to page 50, if you would, of the outline.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: At page 50, our clients seek to address the reasonableness and prudence of the Corporation's expenditures, including OM&A. And we suggest at page 50 that there are, in the course of this hearing, perhaps four (4) variations or perspectives that have emerged. The witnesses from MIPUG, Mr. Bowman and Mr. McLaren, do, in our clients' submission, a -- a really useful job comparing OM&A and normal spending since IFF-07 versus the spending in IFF-09 and '10. And certainly they identify a disturbing upward trend, and they suggest that it is increasing from earlier forecasts and requires additional controls from Hydro and the regulator.

And I put to Mr. Bowman: What does a -- additional controls mean? And certainly you'll hear from Mr. Hacault on this point, but he did say that if there is a level of discomfort with ongoing cost escalation, sending a message through the revenue requirement would be entirely consistent with our evidence. And we'll get to Mr. Brennan in a moment, but he also said that one (1) of the issues is finding a way in the short term to support Mr. Brennan in his efforts to impose cost control and to get people to pay attention to that. So that's the MIPUG perspective, and -- and certainly a thoughtful one which can commend to the Board's consideration.

Perhaps less eloquently, CAC/MSOS took the Hydro panel through a serie -- series of exhibits which are found in CAC/MSOS Exhibit 14. The ones of particular interest to my clients were tabs 8 and 9 as amended very modestly by Mr. Rainkie, 10 and 11. Those are tabs 8, 9, 10 and 11, which were Tables 2 through 6. I hope I've got those right. I'll check that upon the conclusion of my argument.

And these exhibits looked at OM&A expenditures per customer as set out in IFF-09 and IFF-10 as compared to inflation, both before and after revisions for CICA accounting rules, and we commend those to the Board's view, but certainly, in our clients' submission, they suggest that the OM&A per customer is growing significantly faster than inflation pre-CICA accounting rules, and still somewhat faster than inflation after the employment of CICA accounting rules. And certainly our clients, prior to Mr. Brennan's memos, were -- that -- that certainly was their -- their view of the case.

Mr. Rainkie and the Hydro rebuttal set out at pages 50 and 51, we would suggest, had a -- a different perspective, essentially suggesting -- and these are -- this is not a quote, but certainly our interpretation of his evidence, that, to the extent that there were OM&A increases in excess of inflation, if one recognizes accounting changes, they were really not a matter of substantive concern and certainly not any indication that expenditure control was not prudent and reasonable.

And certainly this is a matter of

interpretation, but the fourth perspective our clients would suggest is the perspective of Mr. Brennan as outlined in Exhibits 1 -- 112 Manitoba Hydro and 124. And we have to commend our friends from MIPUG for bringing this information forward. I'm still jealous of them for doing so. My clients are -- are appropriately appreciative and we thank them.

So we have included in some detail a couple of the comments of Mr. Brennan, some from 2009 and then some from partway through the test year. 2009 he states:

> "For some time now, I have been concerned about the substantial increase to Manitoba Hydro's OM&A expense. For the eleven (11) month period ended February 28, 2009, OM&A expense has increased by over 8 percent at the corporate level, with even greater year-over-year increases in some divisions. It is not acceptable for operating budgets to be overexpen -- extended to the extent that we are seeing in fiscal year 2008/'09."

And certainly my clients concur.

In August of 2010, he suggests that over the past five (5) years travel expenses have increased, and he sets out the rate, 6.6 percent per year. More critically, and highlighted by our clients in their -- by our clients, excuse me, by Board counsel in her opening comments, wages, salaries, and benefits account for close to 75 percent of Manitoba Hydro's total operating expense.

Over the past five (5) years this component of operating expense increased at an average rate of 5 percent per year, including a 6.2 percent increase over the past year. Equivalent full-time employees, EFTs, peaked at an all-time high of six six two zero (6,620) during 2009/'10. And, of course, the Board has spoken of this as well in its interim order.

And then the last reference is to overtime costs. At least this is our understanding. Overtime costs have grown at a very significant average rate of 8.3 percent per year over the past five (5) years. In '09/'10 they exceeded $50 million, an increase of 9.6 percent over the past year.

Now, again, it is a matter of interpretation, but our -- in our clients' view, the perspective of Manitoba Hydro's panel and Mr. Rainkie would appear to be at odds with the perspective of Mr. Brennan as well as the MIPUG witnesses, and certainly our clients' perspective.

If we are correct in suggesting that Hydro's panel is indicating there's no problems with increases in excess of inflation given accounting changes, aging assets, and the vacancies that existed, then -- then it is our interpretation that Mr. Brennan disagrees.

And we note specifically that in Exhibit 124 Mr. Brennan cites the aging of assets. He was aware of this and certainly, in our submission, still saying that this is an unacceptable level of increase. And surely he was aware of the vacancy interest.

He's still expressing concerns at the annual increase -- increases being experienced in OM&A. And, from our clients' perspective, and I have to say that this certainly makes Mr. Harper happy, based upon his years on this issue, this is a critical internal acknowledgement tha -- of a problem that has not been properly externally acknowledged in the GRA proceeding. And, in our client's view, it undermines Hydro's argument, that their ongoing expenditure controls and their historic, being the '08/'09, '09/'10, and '10/'11 years, are prudent and reasonable.

We also note, referring to Exhibit 124, that these are gross values prior to any capitalization accounting adjustment, or at least that's our understanding. We also note -- and to his credit, Mr. Brennan has suggested some mitigation measures, but they, in our clients' view, in our -- their respectful view, are really short-term measures that cannot be relied upon to restrain OM&A in -- over the long-term.

And so certainly -- and we will -- we will come to this point, Mr. Chairman and Mr. Vice-Chairman, in our recommendations, but we are -- certainly think that this is a critical piece of new evidence not available to the Board at the time of the interim applications that suggest that the 2 percent interim rate in place should be somewhat reduced.

And we've put some recommendations here at page 52 in terms of how, for the purposes of next GRA, the Board may want to ask Manitoba Hydro to report back and ask it to demonstrate action and commitment in this area.

And, also, the second-last bullet on page 52 relating really to capital rationalization is an explanation of how this is being implemented. And, again, reiterating the point that we think that this rate order for '11 and '12, in our clients' view, should be sending a message to Hydro to listen to Mr. Brennan on a long-term basis and -- and that this Board will not at this point in time allow Hydro to pass through the full cost of its inefficiencies.

(BRIEF PAUSE)

MR. ROBERT MAYER: Just -- Mr. Williams, I don't know how long the other side is gonna -- Mr. Brennan presumably could have implemented, successfully implemented, the recommendation he talked about. If I recall correctly one (1) was to somehow limit out of province travel and the other was to consider the freezing of executive salaries.

We don't -- we're not sure that either of them actually happened. In fact, we're pretty sure the second one didn't despite the fact that there was some kind of indication from the province that civil servants would have at least some sort of restrictions placed on any salary increases. What's your point, Mr. -- Mr. Williams?

Mr. Brennan could have implemented those -- those issues. You're not setting up the panel against Mr. Brennan or Mr. Brennan against the panel, clearly he had the authority to do that. What's the point?

MR. BYRON WILLIAMS: I think I have three (3) points, Mr. Chairman and -- or Mr. Vice-Chair. And if -- I -- I thought I had made them but let me try again.

Point 1 is that as compared to external evidence suggesting challenges in cost control, there is vital internal evidence suggesting that there are material challenges in cost control, staff growth, et cetera, overtime, those are material. And that's a critical internal acknowledgement of what Intervenors have been saying for some time, sir.

Secondly, Mr. Vice-Chair, in terms of Mr. -- frankly, you know, it might have been a token message by Mr. -- Mr. Brennan to restrix -- restrict management salaries. That's -- the point we were trying to make in terms of his recommendations were, in our view, those aren't deep-seated systemic mechanisms to bring those expenditures under control. Those are ones that may temporarily relieve the strain, but the ongoing pressures that he identified will not be corrected by any of those recommendations.

And certainly Mr. Vice-Chair, we will come to capital asset prioritization, which is a critical tool of expenditure control. And we will al -- my -- so that was intended as a setup to some of those areas.

Third, Mr. Vice-Chair, the Board -- I guess the point -- my point is that I don't care about -- excuse me. I don't care or nor -- nor do our clients about Hydro's management fighting with Mr. Brennan except for to the point that it's -- our argument is that his opinion is inconsistent with their evidence in this hearing.

What we do care about, though, Mr. Vice-Chair, is that this Board have the tools to send a message to Manitoba Hydro in terms of efficiencies, it has that tool in the revenue requirement.

Is that helpful, sir?

MR. ROBERT MAYER: I -- I think we had the point about we have the tools quite some time ago. I was just wondering where -- why we were going back to the others.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Well, we think this is a pretty critical point, Mr. -- Mr. Vice-Chair, and it's supportive of what both CMMG (sic) and our clients have been saying for -- for some time. Hold it, CMMG -- sorry, I'm in the wrong proceeding, that would be MIPUG.

Mr. Chairman and Vice-Chairman, one (1) -- one (1) more subject before we get to the break perhaps, to capital program justification. And I'm going to speak about Bipole 3 to a considerable degree in this next section.

No one disputes in this hearing the capital intensive nature of this Utility, whether we look at depreciation costs or financing costs or whether we're looking longer term to deferred capitaliza -- capitalized expenses. Capital spending is a major driver of Hydro's revenue requirement. And certainly we note from the interim order as well as Order 18/10 concern relating to the accuracy of capital cost estimates used for major projects, including the big four (4): Bipole 3, Wuskwatim, Keeyask, and Conawapa. And again, we'll try not to trespass on helpful evidence or helpful -- a helpful summation put on the record by Board counsel this morning.

Our clients' particular concern in the context of this discussion is the Bipole 3 experience, and also the lessons the regulatory process can take from the Bipole 3 experience. And at pages 53 and 54, my clients outline a number of concerns about the Bipole 3 budget. Some of these are -- are process, some of these are accuracy. Starting with who signed off on the capital project justifications numbers 4 and 5, and it appears that Bipole 3 was an -- this -- this is at the middle of page 53 -- Bipole 3 was an exception in that it was signed off by the Board, whereas they are typically signed off by the executive.

Particularly concerning for our clients is that the use of placeholder budgets for Bipole 3, and certainly IFF-07, it is our understanding that it included a placeholder budget, and those -- that -- and which are not typically taken forward. A particular concern as well for our client is the absence of material contingencies in the CPJs associated with Bipole 3, which we understand is not typical when projects are many years from initiation.

And, again, we're hoping that we're accurately capturing the thrust of Mr. Warden's evidence here, and we're putting the citations for it. He says a significant contingency would normally be expected when they're many years from initiation. Generally would -- we would expect a larger contingency. And, again, we're paraphrasing here. Hopefully, we're accurately paraphrasing.

Again, a matter of grave concern for our client is that by September of 2009, a revised CPJ, signed off by the responsible business units and suggesting a near doubling of the forecast costs of the project was available to senior management but not signed off on. And we note the words of Mr. Warden at transcript page 4,856:

"The order of magnitude of the revision

was unprecedented."

And we also understand his evidence to be that senior management were aware of the rough numbers at least by September '09.

And at the top of page 54, and here the word "limbo" we are not trying to attribute to Mr. Ward -- Warden, and we want to be clear of that. But let's take September 2009. This unprecedented number presented to senior management, what happened with -- with that number? Our clients frankly don't understand. They don't understand what happened to it. We know it was not sent out to external consultants for more than a year. We know that, by September of 2009, there was this materially larger estimate, almost a doubling, presented by the larger business -- responsible business units, yet there was no revised forecast relating to Bipole 3 included in IFF-09 or even in IFF-10.

In essence, what our clients consider to be the discredited $2.2 billion figure remained in effect until March or April 2011. And that is gravely concerning for our clients and -- because it goes to the forecasting of the Board.

MR. ROBERT MAYER: Mr. Williams, in case you missed our reaction to the documents as they were presented, we have your point on that issue.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: And, Mr. -- Mr. Vice-Chair, I know you have our point. My clients believe strongly -- and I'm not trying to be redundant, but my clients believe strongly that -- that these things that -- need to be said.

We also -- and we thank Board counsel for this point, even the revised CPJ of $3.2 billion, there's still a substantial uncertainty around it. And this is the middle of page 54 towards the bottom third, a) that there is a reduced contingency of fi -- as well as a different technology.

And, as we understand the evidence of Hydro, the revised estimate of 3.2 billion depends critically on whether or not the condensed -- the source condenser will work in this particular circumstance.

The other interesting piece of information that came to the attention of our clients in the CPJs related to Bipole 3, for the first time in the $3.9 billion figure of September 2009, was this concept of management reserve. And certainly our clients -- and we do thank Mr. Warden for talking to BC and trying to let -- enrich our understanding of it, but there -- we all have a bit to learn about what management reserve means, and it's something, our clients would submit, we need to keep our eyes on on a going-forward basis.

So those are our clients' -- and, Mr. Vice-Chair, I won't belabour the point on that in terms of the things that are causing concern for our clients, but at page 55 we offer some suggestions to the Board in terms of what might be done.

First of all, we have to start with what the Board can't do, which -- which is it doesn't have jurisdiction to review and approve Hydro's capital plans. And certainly our clients believe that's unfortunate, but that is what it is.

But certainly, as Board counsel indicated this morning again, capital spending clearly influences the revenue requirement, and uncertainty regarding the level of capital spending influences the Board's assessment of risk and the rate increases that may be required to offset this risk.

From our clients' perspective, on a going-forward basis, it is critical that the Board have up-to-date information regarding what Manitoba Hydro conti -- considers to be its future capital costs, and also to have a full understanding as to the provisions for risk, both contingencies and management reserve.

And we note that there are certain informations Hydro already filed, the capital expenditure forecast. But, to our understanding, there is limited information in the capital expenditure forecast in terms of the risks associated with a particular capital project and any allowance that Hydro has incorporated into the project's cost to address these risks, to -- at least to the extent that we are looking for it.

However, this information is documented by Hydro through its capital project justification framework and can be found in the CPJs, or capital project justifications, forms established for each project.

And so our clients' strong recommendation for forecasting purposes is that in order to assist the PUB in understanding the risks associated with Hydro's planned capital projects and the extent to which these risks are addressed in the capital cost estimates, it would be useful for the PUB to require as part of the initial filing of a
GRA the CPJ form for all major projects, which our clients define as those with costs in excess of $100 million.

Our clients found that type of documentation tremendously insightful in this proceeding. We recognize that there may be some confidentiality issues that -- that need to be addressed, and certainly Hydro will have comments on that, but what a tremendous tool for really getting one's teeth into the estimates of Bipole 3, the CPJ that eventually found its way onto the record.

MR. ROBERT MAYER: That said, Mr. Williams, if you accept the evidence of Mr. Cormie, and I'm inclined to, that Bipole 3 is a -- is a requirement, so you guys down here can be assured that you're going to continue to get 75 percent of the hydro-electric generat -- generation at least available to you. If you accept that evidence and if you accept the fact that Bipole 3 is required for reliability purposes, what do we do about the capital costs?

MR. BYRON WILLIAMS: Well, the -- the first thing, Mr. Chair -- Mr. Vice-Chair, and I don't think you've heard our -- our clients in terms of -- let me back up. In terms of your premise of Bipole 3, we -- we think the record of this hearing indicates that it's needed for reliability purposes. Also, that it serves another purpose in terms of bringing down power from some of the proposed new developments. But we don't disagree with you in terms of your operating premise.

The point my clients are trying to make is that, if the Board is going to set rates, it's got to rely on forecasts. If the Board is going to set rates, it wants to look at the -- the short term, the test-year pictures. It also wants to have a picture going out in time in terms of what is the likely impact on -- on the rate base of these major capital expenditures. And our clients' point, Mr. Vice-Chair, is that, for rate setting, the Board has to have more con -- has to have more information, better information available than currently is available to it.

And -- and our clients' concern is, Bipole 3, an extra billion dollars, if it's only an extra billion dollars, that's 6 percent of, you know, the $16 mil -- billion in capital estimates that were presented in IFF-09 and IFF-10. And it's critical -- we -- we know what the Board is taking into account. It should be able to have confidence that these forecasts have taken into account, excuse me, contingencies. The Board should know if there's puff in the forecasts for management reserves, and contingencies as well. There needs to be more information on the record for rate-setting purposes.

And so, Mr. Vice-Chair, in terms of what can you do about it, I'm going to go back to my case theory. I guess you have two (2) choices. You can increase rates out of a fear that they're -- they're going to mismanage costs, or you can send a -- a different message that they need -- through the revenue requirement, lower rates or lower the interim rate a little bit. Send the message, We don't like what you're doing. And I'm not speaking of Bipole 3 and the costs there specifically, but in terms of capital per se.

And if -- if I could ask -- I could go on for one (1) more area, or I could --

THE CHAIRPERSON: Is the area in the same --

MR. BYRON WILLIAMS: It -- it is.

THE CHAIRPERSON: -- or could it be separated? Well, carry on, then.

MR. BYRON WILLIAMS: And it -- it's pages 56 through 58 of our outline, our clients' outline, excuse me. And also in terms of the recommendations document, which is Exhibit 38, there's Tab 7. It should be Tab 7 of the recommendation called "Asset Management."

THE CHAIRPERSON: What's your preference? You've been at it quite a long time.

MR. BYRON WILLIAMS: Mr. -- Mr. Chair, it -- it kind of fits with the same subject and -- and --

THE CHAIRPERSON: Well, then, carry on.

MR. BYRON WILLIAMS: -- unless -- unless the number of pages scare you, I think I can move through it fairly quickly.

THE CHAIRPERSON: Mr. Williams, if you had to require to go on until midnight, I'd be sitting here, so fear not.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: My client would not be. Just -- just in terms of Attachment 7, which is from the recommendation, I just want to draw to the Board's attention what we've tried to do in this attachment is put together a history from the prior regulatory proceedings in terms of the discussion of asset management. And -- and so I'm not going to -- I'll have some summary comments when I return to our outline, but I just want the Board to be aware that what we've done is summarized a number of the pertinent comments from prior Board orders, including 116/08, 150/08 and at page 4 we've taken us to the current application and summarized our understanding of the record -- from the current record -- from -- from that.

And, finally, at page 6 we've gone back to not a high-level discussion, but a conceptual discussion, just a reminder of what asset condition assessments are about. And I think that's a -- an important discussion that I'd recommend for the Board to read. Certainly --

MR. ROBERT MAYER: Some of us already have. We -- I actually got this faxed to me on Thursday, I think.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Well, that will make at least two (2) of us, then, Mr. Vice-Chair.

In terms of returning to our outline at page 56 we thought it would be -- again, we do have an excerpt from Board Order 116/08, and the important paragraph on page 56 of the outline is the third one. Kind of really the genesis of this -- this asset condition assessment study. And certainly it's a suggestion of Mr. Harper:

> "Desprite -- despite prior cautions from the Board, Manitoba Hydro intends to spend on average 385 million a year on capital construction through to and including 2017/'18, capital expenditures that are not related to major generation and transmission projects which are accounted for separately. In an effort to better justify and demonstrate the necessity of such normal capital expenditures the Board agrees with the Intervenors on the need for peria -- periodic asset condition assessment study."

So that's all very well and good and --

and very important and we thank the Board for that.

Turning to page 58 of the outline and skipping right over page 57. Our clients point the Board at the top of page 58 to the Boar -- to Hydro's response to CAC/MSOS Information Request 17C. And because we asked it to explain how it determines maintenance and replacement requirements. And this response was very telling from our client's perspe -- perspective because the response deals with each functional area separately and talks about the tools and processes used by each area to determine its individual needs. And while there is a discussion under each area of prioritization, there is no real indication of how that prioritization is done. No assurance that the same values and objectives are used by each business unit.

And based on our reading of that response we find it difficult to conclude that there is a process for prioritizing projects across the various functions. Again, we may be incorrect in that presumption or conclusion but that was our reading in 2008, it remains our concern today.

Directing your attention to the bottom of page 58 under the heading "Issues and Recommendations." It's important and contextually important to understand that asset management plans are increasingly used by regulators. And what our clients were looking for in terms of turning the asset condition assessment into an asset management plan is, within each functional area, how projects will be prioritized, what criteria are used for prioritization, and are the same criteria used in each functional area. Finally, are there trade-offs made between investments and different functional areas, and if so how is this done and who is responsible for it.

Mr. Chairman and Mr. Vice-Chairman, I don't have it right before you but in terms of a recommendation in this specific area, what my clients would be looking for would be two (2) things. One (1) is a capital asset management report recommending best regulatory practices and -- and best approach from Manitoba Hydro to be filed in support of the next GRA. And secondly -- and the Board will be aware -- so that's one (1) thing we would be asking for.

Secondly, that presented to Manitoba Hydro by way of a exhibit with an excerpt from the Keema report, K-E-E-M-A, from the Ontario Energy Board, which Hydro indicated it would take -- take into consideration in developing its approach in this important area. And our clients would request that Hydro also be directed in support of its application, its next application, to file the Keema report on best regulatory practices in terms of capital asset management.

And Mr. Chairman and Mr. Vice-Chairman, we believe that would be a appropriate point for a break if we could.

THE CHAIRPERSON: Thank you, Mr. Williams. So we'll have our regular break and be back in fifteen (15) minutes. Thank you.

--- Upon recessing at 2:55 p.m.
--- Upon resuming at 3:17 p.m.

THE CHAIRPERSON: Okay, folks. Let's continue. Go ahead, Mr. Williams.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Yes, thank you, Mr. Chair and Mr. Vice-Chair. One (1) of My Learned Friends has -- has raised my attention that I -- I may have inadvertently misstated Mr. McCormick's qualifications, so I'm going to have ma -- Ms. McLellan check that out and -- and if I have done so I will correct that, whether by email correspondence or otherwise, but that's at page 9 of our outline. There may be a misstatement which is inadvertent that I will correct.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: At page -- and I do thank the -- the per -- the -- My Learned Friend for bringing that to my attention.

At page 59 of our outline, our clients' outline, I begin to tread where -- into the target of re -- the issue of retained earnings at least with some trepidation. And, Mr. Chairman and Mr. Vice-Chair, what I've tried to do on behalf of our clients at page 59 is summarize what we understand to be the evidence of Mr. Warden, the MIPUG witnesses, and also Mr. Matwichuk.

And -- and clearly Hydro has indicated on a number of occasions that it -- that it supports a 75:25 debt-equity ratio. But our understanding of their evidence is that they are prepared to relax that ratio in the decade of investment. And, further, when I spoke -- and this conversation at transcript five sixty-eight (568) and five sixty-nine (569) was in the context of the Bipole -- Bipole capital variation in estimates or the -- the bigger number.

And I translate or present our understanding of Mr. Warden, suggesting that there's nothing wrong with letting the debt rate decline if we have confidence in the returns of the next decade, which may be the billion dollar question.

MIPUG is, at least as we understand their evidence, and this is based upon our cross-examination of their panel -- ex -- excuse me, I'm not sure it's our cross-examination, but anyways, it is of their evidence. There were -- and I'll -- two (2) points. The requirement to meet a 75:25 debt-equity ratio actually by the end of the long-term IFF period with all the massive investments we're talking about actually exceeds the estimates of the five (5) year drought by about a billion dollars. And a next -- the next statement from the same page.

So there's a little bit of discomfort that those two (2) get a bit delinked as you go forward and it underlines a caution we have had about using a 75:25 measure as the overriding factor.

And I -- I -- we note as well the -- the comments of the MIPUG witnesses, that they consider a two point nine (2.9) and two (2) to be perfect -- perfectly reasonable even in -- in the face of uncertainty related to the decade of investment.

Mr. Matwichuk, at least as we understand his evidence, and certainly I should have put citations here, so I apologize for that. Our interpretation of Mr. Matwichuk is that he suggests that less reliance should be placed on retained earnings for the purposes of rate setting on a going-forward basis.

And as we look at his evidence, what he tries to do is, Okay, well, let's look at the issue of rate stability, which is important. Well, in his view, there's a better tool in the rate stabilization mechanism. In terms of access to capital, and he did have a discussion with the Chairman on this point, from Mr. Matwichuk's perspective, the dominant factor is the provincial debt guarantee.

And he also points out, certainly in response to information requests posed by the PUB, that there have been substantial variances in Hydro's debt-equity ratio with no apparent impact on the province's credit rating. And certainly he notes the supportive regulatory environment in the context of adverse events. And, again, he pointed directly to the aftermath of the '03/'04 drought, where the equity-to-capital ratio was 12:88 with no commensurate diminution of the province's bond rating grade. And I think this was about the time where the panel intervened in his evidence and asked, Well, wasn't there a -- a rate increase from the -- the regulator. And certainly there was.

The other point that Matwichuk makes is that in terms of an indicator of financial health, there have been major firms with really healthy retained earnings that have been pushed into -- into bankruptcy when their a -- operating capital is interrupted. And I think he used the -- the American example of Enron and he also used the Canadian example of the BC utility -- I -- I forget what its name is, P and G or something to -- that effect. So tha -- that seems to be the thrust of Mr. Matwichuk's evidence.

And from our clients' perspective, looking at this rate hearing, both at the short term and the long term, they're tending to place less reliance on the da -- debt-equity ratio.

And in terms -- I guess analytically, in -- in terms of how they -- our clients look at the issues of access to capital, they point to the underlying advantages of Manitoba Hydro in terms of its monopoly, in terms of its supportive regulatory environment at the times of drought, and also the provincial debt guarantee fee. And just on those points, Mr. Chairman and Vice-Chair, and I didn't sum -- put -- put references in from the record but there's actually some interesting evidence from Mr. Judah Rose of ICF at pages 3,052 three -- through 3,054 of hi -- of the transcript in terms of the importance of the monopoly and that insured line of domestic revenues when it comes to looking at access to capital.

And Mr. Chen from the KPMG Panel -- certainly in our view at transcript page 3,557 made the point that certainly when you look at a firm operating in a competitive marketplace it is critical to have high reserves, and certainly we recognize that. We would also note that the key advantage of the monopoly environment is that when adverse events take place customers will be -- will be there for the monopoly.

And we point out in particular that this regulator has been particularly supportive to this Utility in the time of -- in the time of drought. And I can't say my clients have always leapt for joy at the rate increases that flowed from that, but our clients do acknowledge that when you're -- that when looking at the level of retained earnings, that a supportive regulatory environment in adverse circumstances is critically important.

And at page 4,819 of the transcript, there's a reference to DBRS, Dominion Bond Rating Services, commenting favourably on the PUB's demonstrated record of approving rate increases in dou -- drought conditions. And -- and if you back-trace that reference you can see where it appears in the DBRS report.

The provincial debt guarantee fee

obviously is critically important in terms of our clients' consideration of levels of retained earning. And, again, they note a comment from Moody's and -- from their February 7th, 2011 report which was placed on the record by Hydro. I don't have the actual cite on me but I believe it -- it can be found as a Hydro exhibit but also in CAC/MSOS tabs -- Exhibit 14, Tab 6.

Moody's suggests when you're looking at regulated utilities that Manitoba and BC are unique and not readable -- readily comparable to other regulated utilities. And I think that reference, I'm going off memory from months ago, but I think it's at the top of the second page of that report.

The other -- so certainly in -- from our clients' perspective, this is a hearing in which they place less weight on the debt-to-equity ratio and certainly do not see it as a driver of any material rate increases. They note that for the test years the debt-equity ratio remains at 74:26 under IFF-10 and IFF-10 with Bipole. Now, there is the -- the issues raised by the Board in terms of accumulated other comprehensive income, as well as the significant amount of depreciation. But from our clients' perspective, the current accounting treatment in terms of equity and debt presented by Hydro is -- is one which they choose to rely upon.

Looking farther out, our clients agree certainly directionally with MIPUG and Mr. Warden that in times of major capital expenditures there is room to relax in terms of equity-to-debt ratios. And they note that by vi -- via a directive, that is what took place in British Columbia, where they moved from 75:25 to 80:20.

Our clients -- in terms of ultimately what the Board should be looking at in terms of for rate setting purposes, our clients think that -- that determination on that is -- is not a determination for today. They think that we had a good discussion in this hearing in terms of access to capital, that that discussion could be enriched.

In terms of rate stability, they feel that the discussion as well in terms of underly -- standing the purpose of retained earnings or some other mechanism has a way to go. And they also think that we might want to look at this issue more carefully once we have a better sense of which capital projects will be approved or not. So that's where our clients are for the purposes of this proceeding.

Turning to the outline, page 61, our clients pose the question: Have the benefits of Hydro's preferred capital benefit plan been established? And it's important to -- to recall that Manitoba Hydro brought this issue into play in this proceeding, certainly in our client's perspective, in -- in tal -- in -- in justifying the proposals in terms of rate increases. They spoke a lot of the decade of investment versus the decade of return and certainly argued that the benefits of -- and set that up as an underlying context to its rate hearing. And certainly it has asserted in the context of this hearing the benefits of its preferred plan outweigh its cost, and that it is preferable to the alternative scenario.

Our clients -- hopefully that's not raining in Souris as well. Excuse me. In talking about the benefits of the pre -- preferred plan in the context of this hearing my clients want to be very careful, they are not prejudging the preferred plan of Manitoba Hydro as compared to the alternative plan or to other alternatives. They're counting on there being a need for and alternative process, and they will keep their powder dry in terms of an ultimate conclusion until that time.

But what they will address in the context of this hearing is whether Hydro's made its case, has it made its case in terms of the benefits of the preferred plan, as -- as it's discussed from time to time. And, certainly, from our clients' perspective Board counsel set out the issues well in her opening comments this morning and you can find additional insight in the Board's interim order.

And our clients' also think that the evidence of Mr. Rose in this hearing is particularly compelling and that he highlights a number of material significant changes in natural gas forecasts, CO2 adders, coal retirements that result in the perspective of the case in terms of the preferred plan being less bright than they were in 2009.

One other comment that my clients would make, certainly which appears at the bottom of page 61 and the top of page 62, much was made by KPMG of the purported benefits of the preferred plan as compared to the alternative plan of about a hundred and fifty (150) -- I think I've -- I think I might have -- yeah, a $150 million. But the point our clients would make, which is set out on footnote 29, is -- is compare that to net consumer revenues between the period of 20 -- 2009/'10 and 2019/'20 and that figure is -- is absolutely dwarfed. So that submission is not a very persuasive submission from our clients' perspective. And, certainly, in the context of a need for and alternative, they would certainly expect a lot more.

And our client --

THE CHAIRPERSON: Was that $150 million present value estimate made in the absence of knowledge of the increased capital cost?

CONTINUED BY MR BYRON WILLIAMS:

MR. BYRON WILLIAMS: Yes, Mr. Chairman, and we certainly heard Board counsel speak to that this morning, but, I guess my clients' point went a -- went a bit further. It's not that they -- even if the figure was justifiable in terms of the analysis, one would have to look at the additional risk associated with that plan, and when it's taken in context of overall consumer revenues that's not, to our clients' sense, a very persuasive case to date.

Again, our clients also are of the view that the benefits of the preferred plan, at the top of page 62, have to be really looked at rigorously in light of our experience with -- with Wuskwatim, both on the capital side and in terms of export price forecast.

So here's where our clients in terms of the benefits of the preferred plan, they note as well that there's been new evidence since the interim rate relating to contracts in the United States and they are of the view that -- that that does remove some uncertainty related to the merits of Hydro's preferred plans.

In the second bullet on page 62, our clients - - and again cautioning that this is for this hearing only, suggests that on a balance of probabilities based on the -- based on the evidence currently before the Board, Hydro's assertions in terms of the benefits of its preferred plan cannot be verified and, certainly, from our clients' perspective should not be relied upon for the purposes of the GRA.

As we stated previously, these can only be properly tested in a -- needs for and alternative proceeding. And, certainly, from our clients' perspective - and we would welcome obiter comments from the Board on this point - any such assessment of the preferred alternative and any other alternatives must involve a more complete disclosure of information than existed in this proceeding. Certainly to the finder of fact that -- from our clients' perspective to -- to other parties as well.

Our clients also have another comment both about the preferred plan and the alternative plan and -- and that relates to energy efficiency and our lack of confidence that the current energy efficiency programming of Manitoba Hydro is maximizing these opportunities. And my clients simply note that -- that the preferred plan and the alternative plan might look somewhat different or perhaps materially different in the context of a more assertive energy efficiency program.

I'm going to turn on behalf of our clients to the issue of risk quantification. And in the additional materials from the record, which is, I believe, CAC/MSOS-36. If one goes in a few pages in, about six (6) pages in there should be the response of Professors Kubursi and Magee to CAC/MSOS-35. It's a one (1) -- Mr. -- Mr. Vice-Chair, it's the additional materials from the record, the -- the small, little document.

And this is a small point but we -- we thought it might be of interest to the Board in -- when it looks to the future and its concerns about global warming and the impact, if any, and -- of global warming upon hydrology.

And the Board will be aware that the methodology pres -- pursued by Professors Kubursi and Magee in terms of their -- in terms of their assessments of hydrology was a third order auto regressive [AR model], a fairly -- and certainly our clients have some favourable comments about that approach.

But what -- the -- the question that our clients posed to Kubursi and Magee in this Information

Request is whether a more sophisticated model working off of the acromym -- acronym ARIMA, A-R-I-M-A, might be better able to capture changes in -- in different periods of time, structural breaks that could not be captured by a simp -- a single auto-regressive process.

And the point that my clients are -- are simply trying to make, Mr. Chairman and Mr. Vice-Chair, is that certainly Professors Kubursi and Magee in chapter 4 of their evidence presented some really interesting and insightful element analysis of hydrology in terms of using their preferred methodology, a third order auto-regressive mo -- model.

Looking outward to the future, there may be other more sophisticated models that certainly Hydro may wish to consider as -- as it looks at these issues, and that's the simple point. And I've included these two (2) references, CAC/MSOS KM-35, and on the next page, 34, because they try and capture a little bit of the -- the tradeoff between the two (2) methodologies. The one presented by Kubursi and Magee being more simple, less complex, which is -- can often be a good thing, but also perhaps having more challenges in capturing how flows differ over different periods. And that's something -- a small point but that our clients thought may be of assistance to Hydro and to others.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: At page 64 of our outline on behalf of our clients we start with looking at in greater detail of the -- the evidence of Professors Kubursi and Magee as they relate to chapter 6. And I want to preface my comments again on behalf of my clients because it is -- hopefully they made clear near the start, they think that these independent experts have made a very positive contribution to the process, but they have grave concerns with the analysis flo -- run -- flowing from chapter 6.

And our clients certainly note at pada -- page 18 of their written evidence, Professors Kubursi and Me -- Magee talked about what the Board should take into account in to setting a target in terms of drought and -- and it's certainly their evidence at that page sent some shivers into the heart of -- of my clients, talking about a seven (7) year drought at -- as well as other factors: high interest rates, high exchange rates, high import costs, and one (1) other factor which escapes me at this point in time.

And the statements were of some concern to my clients for two (2) reasons. One (1) is, by that stage in time they had significant concerns with the numbers flowing from chapter 6. And secondly, that those statements on page 18 on their face appear to give no or little considerations to issues of probability and correlation between risks. And, certainly, from my clients' perspective, that statement on page 18 was seen as inconsistent with the Professors legitimate focus on problem -- probabilistic risk management.

And so from my clients' perspective - and this we will -- we will try and go through this in some detail - it's important to understand how the primary estimates of risk placed on the record by Professors Kubursi and Magee, in this proceeding, flow from chapter 6. There are estimates of a five (5) year drought and a seven (7) year drought put on the record of the proceeding of this hearing by the Professors. And they have confirmed that the -- that that analysis relies upon the underlying data and probability distributions found in chapter 6. That's set out in an Information Response Hydro/KM-8, but also in my cross-examination of Professor Kubursi.

Just to drive that point home, the data comes from the Table 6.1 and the estimates derived therefrom, and the underlying probability distributions are derived from chapter 6 as well, Figure 6.18 through figure 6.44 as further amended by the Professors in their report of June 10, 2011.

Now, if we turn to the outline at 65 -- page 65, it's -- it's standard -- actually there's one (1) -- one (1) point I want to make at the top. And one (1) second, I apologize, Mr. Chairman and Mr. Vice-Chair.

At the very top of this page we note that Professors Kubursi and Magee had a statement that they did not think the actual series would produce the best correlation. And what we mean by that is in their original report at page 229, they didn't produce an estimate of a five (5) year drought or a seven (7) year drought. And their reasons for doing so are stated in that original report and they are very telling. And this is pulled directly from report page 229.

> "We did not examine the results of a five (5) year or seven (7) year drought as we did not have and did not think that the actual series would produce the best correlation given that our estimate came from a statistical simulation exercise."

So even before a more detailed examination of some of the challenges in chapter 6, Professors Kubursi and Magee quite legitimately and rightly were expressing some misgivings about using the data from that limited sample, using the probability distributions from that limited sample, and applying it to a five (5) year and a seven (7) year drought. And our clients thinks that that is important proper cautionary advice from the Professors set out in their report.

And the Professors would be the first to tell us that estimates cannot be reasonably relied upon if their underlying data is flawed, if the probability distributions derived from the underlying data is wrong, or if the underlying methodology is wrong. And we note in the middle of page 65 that Professor Magee has candidly confirmed -- and he was always a candid witness -- that a different distribution would give a different result.

And certainly, from our client's perspective, even before the material downward revision to many of -- of the calculations found in chapter 6, found in Kubursi and Magee's undertaking response of June 24th, even before that, our clients were of the view that the record of this proceeding had demonstrated flaws in terms of the data in chapter 6, the probability distributions, and the underlying methodology.

Towards the bottom of page 65 our clients discuss the flawed data and, frankly, there's a better analysis of it in the rebuttal evidence of Manitoba Hydro. And, certainly, Mr. Cormie gives some insight into it on this point on April 7th, 2011 during my cross-examination of him.

As well, though, Professor Magee admits -- and I think this is page 6,082, we should stroke out the second page in that reference -- this is, again, at page 65 towards the bottom, that we might have ended up with better data covering a longer period of time using Hydro information.

It's important to understand -- and -- and certainly Mr. Chairman and Mr. Vice-Chairman, I didn't grasp this point when I embarked upon this endeavour -- that flawed and a limited amount of data can lead to flawed probability distributions. And flawed probability distributions matter. And I'm trying to express this in a accessible manner, but if you think of Monte Carlo simulations, those thousands of simulations, they involve both randomization and replication. Apart from data, the key input into randomnization -- randomization, creating that random dis -- distribution, is the probability distribution. So if that probability distribution is flawed, then one must question and challenge the numbers that flow from it.

Professor Magee -- and I'm referring to

the top of page 66, transcript reference -- he makes his point well. He makes the point it's not just the numbers, it's the distribution. And he confirmed in my cross-examination of him that in selecting a probability distribution there is always the room -- the potential for error. And we use a very simple example of trying to pick between two (2) different potential distributions using a sample of five (5) pieces of information, five (5) sources of data or around thirty (30).

What Professor Magee candidly confirmed was that the fewer the samples, the higher the probability of selecting the wrong distribution. And that is one (1) of the challenges in Professor -- in chapter 6, the limited sample size that particular period. As we say toward the top third of page 66 of our outline, the possibility is only enhanced when one is relying on analytically vulnerable data from a small sample.

And in my cross-examination of Professor Kubursi on May 26th, we had a discussion about one (1) of those probability distributions -- the triangular probability distribution related to exchange rates. And this was not the only triangular probability distribution which appeared, but it certainly was to our clients very illustrative of the challenges associated with probabilities distributions flowing from chapter 6.

In discussing -- certainly, from our client's perspective, this was an awkward choice of probability distribution because the logic of that figure, six point one eight (6.18), was that there was a zero probability -- zero probability of an exchange rate above ninety-three point eight (93.8) US cents to buy a Canadian dollar. And I asked this question of Professor Kubursi in a couple of ways just to hammer home the point, I hope.

> "The chosen distribution did not allow for value above ninety-three point eight (93.8) cents US to buy a Canadian dollar."

Well, one wouldn't need to look at much evidence to suggest that that probability distribution is undermined by reality. But CAC/MSOS did introduce an exhibit, I believe it's 27, Mr. Singh might correct me by one (1), but an exhibit of exchange rates from a certain period of time, providing ample evidence of situations where it requires more than one (1) dollar US to buy one (1) Canadian dollar. And I've cited the pages from the transcript for your information.

So, that's just one (1) example of the challenges with the probability distributions. But if one looks through Figures 6.18 through Figures 6.44, that is not the only triangular probability distribution, that is not the only distribution that might be subject to question.

And our clients have to note and -- and they're not quite sure what to make of it, but in the June 10th, 2011 document submitted by Professors Kubursi and Magee as part of underta -- their June 24th undertakings, there's two (2) references that my clients find concerning. One (1) is at page 3 -- and these pages, Mr. Chairman, Mr. Vice-Chairman, are not numbered in the document provided by Kubursi and Magee and they're not before you so I apologize for this -- or at least I didn't provide them to you.

But on the third page of the kind of summary of their responses, about a -- two-third (2/3), just below the midpoint of the page, they indicate that they refitted generation, and its probability distribution is displayed in Figure 9. And then at the very last page of that same document, they -- they speak of major changes in their quantification of Manitoba Hydro's risks. They refer to the zero intercept which I'll speak of further, royalties, and also wrong probability distributions. We're not quite sure what they mean by that and -- and certainly I think we -- we perhaps all should figure out what they do mean by that.

But, again, that leaves us with additional discomfort with the analysis in chapter 6 and -- and we're not sure how to interpret this. Are they saying that they got their generation distribution, probability distribution wrong in prior analysis. I'm not sure. But that's just a -- a matter of some concern from their undertakings.

What is more definite -- and this appears at the bottom of page 66 -- is an analytic flaw, our clients would say, in terms of the chapter 6 analysis. And our clients' first concern was that in chapter 6 they would have expected, given that hydrology was the greatest risk to Manitoba Hydro, that the Monte Carlo simulations, as well as the stress tests conducted in chapter 6, would have been employed using a random distribution of water flow.

Our clients were surprised to learn that chapter 6 did not model Hydro's biggest risk. Instead they used generation as a proxy for -- for water flow, or in the words of Professors Kubursi and Magee in their undertaking response, they translated water flows into generation.

And our clients' deep and profound concern with this analytic approach was only exacerbated when, through the cross-examination of My Learned Friend Mr. Hacault, they were presented with the formula by which Professors Kubursi and Magee translated from water flow to generation.

And just for the Board's awareness, the little document "Additional Materials from the Records," the second-last page, I -- so that's the one with the colour graphs -- I haven't included their formula, but you may want to have the second-last page there which is "Water Flows and MH Generation 1912 through 2005." And, Mr. Chairman, if you have the coloured version it's probably blue or -- I see your head nodding. So this -- just before we get into this, this is not the -- the Hydro linear -- excuse me, the Kubursi and -- and Magee linear regression presented on this page, it is the one presented in cross-examination.

But once CAC/MSOS learned of the formula that Professors Magee and Kubursi were employing to translate from water flow to generation, they became additionally concerned because of the formula which, for shorthand purposes, they will call the "zero intercept linear rege --regression." In their view, it wasn't a very good fit. And the document that the Chairperson has before him -- and -- and as you will be, Mr. Vice-Chair, but not in colour, for which I apologize -- no -- no slur intended -- is what this -- this linear regression was put to Professors Kubursi and Magee in cross-examination, concocted quick -- quickly by CAC/MSOS over -- over the lunch hour.

And it's what I will call "The Simple Linear Regression with Intercept." And when you review their response to PUB -- or to their June 24th undertaking response and the Kubursi and Magee document dated June 10 to 11, you will see that they have replicated this simple linear regression of water produced at the hearing by CAC/MSOS and tested it against their original approach.

And what they confirm, and this is at page 67 of the outline, is that both statistical and practical considerations favour the use of the zero -- excuse me, strike that -- favour the use of the with-intercept regression line. In other words, the one introduced by CAC/MSOS. And they confirm -- and I'm citing from the page 8 and 9 of -- I'm trying to recall if it's their undertaking or their -- yeah, it is their undertaking not the June 10th document. It's not before the panel. They confirm that not using the intercept produced a poor fit and, hence, poor estimates of generation for any given water flow. In other words, the methodology that they employed for chapter 6 was inferior to the one presented to them on May 31st, 2011, which raises serious questions about the analysis and the numbers flowing from chapter 6.

And in their June 10th to 11 document, Professors Kubursi and Magee candidly confirm their most -- more serious error in chapter 6 was the mistake involving generation.

And Professor -- excuse me, Mr. Chairman and Mr. Vice-Chair, I -- I've -- I've tried to religiously stay away from our recommendations, Tab 3 and 4, but I -- I'm going to turn you there for -- for a moment because there are numbers that -- that are there that are important. They're not contentious, they -- they come from Kubursi and Magee, but I wish to highlight them for you, and that is Tab 4 of the recommendations page 3 and 4.

And what I simply mean to do is summarize what also appears at Table 10 of the June 10th, 2011 response of Kubursi and Magee but it's not before you and so I apologize for this.

What they do when they -- Mr. Chairman, I'm sorry, do you have that?

So essentially, what Kubursi and Magee do -- Professors Kubursi and Magee, on June 24th, and it's summarized in Table 10 of their June 10th, 2011 document, the very last page, is they say, okay, well let's -- let's re-calculate a couple of the figures from Chapter 6 using the 'with intercept' model and also making some adjustments for royalties. And the numbers that flow from that and -- and we would -- are materially different from what appeared in the last -- in Table 6.2 of the original report. And we attempt to summarize that at the bottom of page 3, as well as on page 4 of Tab 4.

So the second or third last paragraph on Tab 3 you see a figure going from minus 788 million to minus 198 million which we would calculate to be an impact -- a reduction of 590 million or 75 percent.

If you flip to the next page, you'll see -- that should be page -- page 4 of Tab 4 -- what appears to be a reduction from 722 million to 337 million, we would estimate to be a reduction in excess of 50 percent. Again, another calculation reduced from minus 1200 million to minus 758 million.

Now, Mr. Chairman, Mr. Vice-Chairman, we haven't had a lot of time to look at those numbers, so we'd urge you to check those with others but we think this points to another significant challenge with the report of Professors Kubursi and Magee. They used the wrong formula, in our respectful submission, in translating from water flow to generation. To their enormous credit they've conceded that and I'm not sure how many experts would do that but they have and to their enormous credit they've recalculated and shared with us what we -- certainly our clients consider it to be material differences. So from our clients' perspective, we give them tremendous credit for doing so.

Again, we would urge the Board -- we haven't had a lot of time to look at that, to make sure that our -- our interpretation of their information is correct.

Going back to the -- the regression, the linear regression that our clients presented in cross-examination, the blue graph in the Chairman's version, the water flow and MH generation, one also has to recognize this was something that CAC/MSOS literally did over lunch and we've shared with the Board the R-squared for that calculation of 0.8846 in the top right-hand corner. And it is important to recognize - and if you'll just give me one (1) second - that what this essentially suggests is that about -- a significant amount of the variation between 11 and 12 percent is not explained by water flows. There's something else going on there. So even what our clients certainly consider to be a superior methodology is hardly a perfect methodology.

And there are still substantial -- our

clients certainly wouldn't dare to suggest to you that something that they crafted fairly quickly on May 31st would be the ultimate best way to -- to perform this calculation. And certainly from that -- their perspective that leaves additional room for questioning the conclusions that Professors Kubursi and Magee in Chapter 6.

Turning to page 68 of the outline. And -- Mr. Chairman, if I might have a moment.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Our clients make the point on page 68 of their outline and this -- for those who sit on the MPI Panel we'll go back to the debates in MPI proceedings between probabilistic assessment and stress tests. And this is not a numerical concern but an analytic concern. Our clients are a bit uncomfortable in Chapter 6, as well, with the reliance on stress test as represented by Figure 6.2 through Figure 6.17 as compared to true pure Monte Carlo assessments of risk as represented, however imperfectly, in Figure 6.1.

They're -- they're concerned with that from an analytic perspective -- and certainly Mr. Cormie had some comments about this in my cross-examination of him -- in that when you do stress tests you can create some quite significant, sometimes enormous numbers, to which no probability of occurrence is attached.

And certainly from my clients' perspectives, our clients' perspective, a more health approach, a more analytically rigorous approach and one that provides greater insight is one that looks at the magnitude of risk but also the probability of risk, Monte Car -- a pure Monte Carlo probabilistic assessment as opposed to the stress tests which are reflected in much of Figure 6 -- Chapter 6.

The most -- and -- and we would note that Mr. Wallach, certainly in our view, about a third (1/3) of the way down page 6 -- 68 of the outline, makes this point very well in pages 7137 through 7141.

And we note, as well, that the extreme nature of some of the scenarios presented was really underscored by our -- our clients' cross-examination of Profeshor -- Professor Magee. And we -- we took two (2) figures, Figure 6.1, which was the base case, as compared to Figure 6.2, which was a stress test. And close to 95 percent of the values presented in Figure 6.2 did not appear in the probabilistic assessment, suggesting that they were relatively extreme values.

Mr. Cormie put it more succinctly

suggesting that you would have to go over nine (9) standard deviations to the left from the mean before you got a -- a loss of the magnitude expressed in Figure 6.2.

And just two (2) last points on risk quantification. There's one (1) figure found in the evidence of Professors Kubursi and Magee that gives my clients a great deal of discomfort, that is Figure 6.17, which combines -- and it's not before you. It combines an extreme adverse water situation with high interests rates, high exchange rates, and also high import costs. And our concern with that assessment -- and I hope we set it out well at pages 68 and 69 of the outline -- is that -- that a very large number flowing from an extremely unlikely scenario. And even in the written evidence, I -- I -- our clients would submit that Professor Kubursi concedes that.

But the assumptions captured there are, perhaps, inconsistent. For example, National Bank assumed that there was no correlation between interests rates and hydrology risk. That's a reasonable assumption in our clients' submissions, and we were uncomfortable with the presentation of such extreme scenarios with no consideration of their probabilistic likelihood or limited consideration.

The last point which is made at page 69, and I'm not sure I'll do it justice here, this doesn't relate just to Professors Kubursi and Magee. It relates to our entire deliberations in terms of drought risk in the context of this proceeding.

And we have all learned some of the lessons from '03/'04. We're aware of some of the factors which lead to the very high losses experienced by Hydro in that period, shortage priceage -- shortage pricing being one (1).

But what our clients are suggesting on this page is that there would appear to be significant consensus between Mr. Rose, Professors Kubursi and Mr. Cormie, at least to some degree, on how the situation for Hydro has changed since the opening of the MISO market in 2005.

And there's an IR response on this point, which is CAC/MSOS Hydro 1-62, which served as a launching point for a really interesting discussion with Professor Kubursi on this point on pages 6554 through 6557.

And, as I took his evidence, and the Board should read it, obviously, for it -- to see if it agrees, he was suggesting that in the new MISO market the issue of shortage priceage should have largely disappeared -- again, I urge you to read that discussion and make sure I've not misquoted him, but that's certainly our -- our con -- our conclusion -- but that there were ongoing transmission constraints.

Mr. Rose spoke to this at some detail in his evidence, and perhaps the best analysis, in our view, is provided by Mr. Cormie at pages 5343 and 5352. The point being, in terms of risk con -- quantification, our clients -- the -- the im -- the issues of the drought of '03/'04, we have to learn those lessons but we also have to acknowledge where things have changed. And one (1) material area in which things have changed as it relates to risk quantification is shortage priceage -- shortage pricing.

In terms of our recommendations in terms of risk quantification, most of them have been gone through in my discussion, certainly down to the bottom of page 70, but the -- the last two bullets on page 70, I do want to underscore -- underscore again.

The analysis of the five (5) year and seven (7) year drought scenarios were applied on the data from Table 6.1 and the probability distributions from Chapter 6.

In our client's view, no reliance -- going to the last bullet on page 71 -- no reliance can be placed on the estimates of the five (5) year drought and the seven (7) year drought, given that that analysis of

Professors Kubursi and Magee flows from Table 6.1 data and Chapter 6 probability distributions.

Demand side management, Mr. Chairman, is the next area. I'm hoping I can move through that fairly quickly. I do apologize for the time we're taking, but it's -- it is what it is.

Would you like me to proceed, sir? Our brief discussion of demand side management...

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Begins at page 72 and our summary of the transcript -- others may disagree -- is that certainly in the cross-examination of the Hydro panel by Board counsel, Hydro struggled to defend its achievements and future plans relating to energy efficiency in the current proceeding. Certainly that's our interpretation and we point to the cross-examination of Board counsel starting at page 4496.

Our clients interpret Hydro's evidence as offering a relatively pessimistic viewture -- vision of the future, arguing that there may not be the same value of future opportunities as existing opportunities that can be captured in a cost-effective manner. And we note that on -- on at least two (2) occasions Hydro used the

terminology "manage expectations" suggesting that -- that there was an
intent to manage expectations. And certainly, our clients would concede that our expectations in terms of their performance in demand side management have been managed; they have been deemed.

Mr. Chernick concluded that Hydro appears to be spending less, looking forward and aiming low. He argued that Hydro has not demonstrated a commitment to maximizing benefits for customers, and our clients agree.

And we recognize that the Board cannot tell Hydro how to spend its energy-efficiency dollars but that the Board can, in the process of rate setting, make judgments on whether Hydro is maximizing the use, its operations, in that portfolio in a prudent and reasonable manner as they may affect costs and revenues.

And our clients' review of Hydro Exhibit 157, the most recent filing in terms of the 2009/'10 Power Smart annual review, suggests that there are ongoing challenges with this program. And we're not going to detail them at a great deal except for at page 73, the fourth paragraph in. We note that electric Power Smart programs, their achievements in ter -- in electric savings were below the planned savings in 2009/'10. And we set out below that a number of the reasons for that.

And in page 74 we note, as well, the third paragraph, that low income energy efficiency program is producing lower than expected in that particular year due to -- due to lower than planned program participation.

In the context of this Hearing, certainly our clients would interpret the evidence, certainly on the residential side, as suggesting that Hydro is performing -- performing to date less well than planned and also is presenting less ambitious goals into the future.

There are different perspectives on the record of this Hearing. There is the evidence of Mr. Dunsky which we cite very quickly at the bottom of page 30 -- 74, noting that he was a thoughtful and well-received witness in the last GRA and offering a more optimistic and hopeful vision of demand side management in this Hearing.

In terms of our recommendations in terms of demand side management set out at page 75, I'll skip over the first three (3) bullets, but we would recommend that the Board make a number of findings. This is in the middle of page 75.

One is to note that the DSM savings that Hydro attributes to some of its more successful residential plans, such as CFLs, are more optimistic than those adopted by other well respected bodies in the area of energy efficiency such as the Ontario Power Authority. And there's an IR response CAC/MSOS/Hydro-79, which enumerates this in part. There's also a Second Round follow-up.

We would also ask the Board to determine that resi -- Power Smart residential incentive-based programs are lagging relative to plan with the major factors appearing to be lower participation rates.

We would also ask the Board to determine that particularly concerning is the low participation rates in the Low Income Energy Efficiency Programs and the low spend from the AEF or Affordable Energy Fund.

Again, on page 75 going to 76, looking at further con -- con -- findings we would ask the Board to make, we would ask the Board to accept the conclusion of Mr. Chernick, as we interpret it, that the 2009 and '10 DSM plans appear to be spending less and aiming lower.

To accept his conclusion as we would interpret it, at the top of page 76, that Hydro's DSM program -- programming has not demonstrated a commitment to maximizing benefits for customers, and to accept the conclusions of Mr. Dunsky that leadership energy efficiency will require new, more ambition electricity savings goals as well as a re -- reconsideration of its current portfolio of programs and strategies.

Now turning just to rate setting, and, of course, Mr. Chairman and Mr. Vice-Chair, in looking at this, one has to be mindful of the Board's jurisdiction, which is to approve rates based upon determinations of evidence.

And in terms of -- and for that, in terms of the rate-setting process, as you've no doubt -- doubt gathered, we're going to be asking for some sort of reduction in the approved interim rate based on OM&A expenditures, based on demand side management performing less well than one might expect to maximize benefits and revenues and minimize costs, and based upon excessive forecasts for financing, debt interest financing.

And we would ask the Board, if it deems it appropriate, to identify that a factor in the reduction of the approved interim rate increase was the finding that the Board's -- the Corporation's ongoing operations of its energy efficiency program is not prudent and reasonable, and not consistent with in -- industry best practice.

We -- we put down a bit of a wish list in terms of at least directionally where our clients would indi -- would like to see more action from Manitoba Hydro. One (1) point in -- in particular -- the sec --

second bullet under the rate setting process -- probably not appropriate under there -- is that -- is that strategically reviewing the Low Income Energy Efficiency Program and retaining an independent third party evaluation and audit of its operations to be filed in support of the next General Rate Application and, certainly, to consult with the regulator and interested Intervenors.

Mr. Dunsky, at page 63 of his discussion of Manitoba Hydro, talks about the importance of independent evaluations. Mr. Chernick did, as well, in terms of his discussion with CAC/MSOS in cross-examination.

And from our client's perspective, the under-performance in the residential area generally, but in low income energy efficiency programming in particular, suggests the need of important external reviews in support of the next rate application.

We put in an -- a -- an additional wish list, again identifying -- recognizing that there are limitations to the Board's jurisdiction, which follows.

Mr. Chairman, I could proceed to a couple of other areas or we could take a brief break. I -- I'm subject to your advice.

THE CHAIRPERSON: I'm going to ask, Mr.

Hacault, do you know how long your closing statement will take approximately?

MR. ANTOINE HACAULT: What I'll try to do tonight, Mr. Chairman and Mr. Vice-Chair, is I note that there is some duplication in the comments I initially was going to make which have been covered by my colleague here. I had anticipated taking a morning, and I'm hoping that upon reviewing the comments that have been provided by Mr. Williams, I can substantially reduce that.

THE CHAIRPERSON: Mr. Gange, do you have a view from RCM/TREE?

MR. WILLIAM GANGE: I would hope no more than two (2) hours. That -- that would be -- that -- that's -- two (2) hours is a maximum I would say, Mr. Chair.

(BRIEF PAUSE)

THE CHAIRPERSON: It's been a long day, Mr. Williams. It's a lot for your presentation and the others, and our listening and absorbing at the same time, so maybe we'll -- do you have a -- can you give us an estimate of how much time it would take you to conclude tomorrow?

MR. BYRON WILLIAMS: If you'd just give

me a couple of minutes, Mr. Chair?

THE CHAIRPERSON: Sure.

MR. ROBERT MAYER: Or how much would it take -- how long would it take you to finish today, and I would hope it wouldn't make any difference if it were tomorrow?

MR. BYRON WILLIAMS: Mr. Vice-Chair, it probably would make about twenty (20) minutes difference because I'm just getting a little tired. But -- so it -- Mr. Chairman, the -- the biggest -- I anticipate about twenty (20) minutes on inverted rates, we want to spend some time on that, and on low-income rate assistance about an hour. The other, maybe forty-five (45) minutes but -- and then our recommendations, maybe fifteen (15) -- fifteen (15) to twenty (20) minutes. So I would do my very best to do it in somewhere between an hour and fifteen (15) minutes and an hour and forty (40).

THE CHAIRPERSON: Okay. We're going to take five (5) minutes and then we'll go to 5:00, just to make sure that everybody fits in tomorrow.

--- Upon recessing at 4:29 p.m.

--- Upon resuming at 4:36 p.m.

THE CHAIRPERSON: Okay. Welcome back

everyone.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Yes. Thank you. And it should be at about page 78 of your -- your outline, relating to costs of service and revenue-to-cost ratios. And I just note that there's a -- a formatting error at the top of this page and the next page on demand-side management which should be deleted.

At page 78, our clients have set out a very -- what I hope is a relatively terse summary of the issues related to cost allocation that have come to their attention in the course of this hearing. Ultimately, their recommendations in -- in this area are set out at page 79 and I'll really take the Board there.

The Board -- the Board notes that in the interim order, apart from the City of Winnipeg, there was no further rebalancing among classes of consumers, and certainly that is a similar approach that our clients would recommend in -- in the context of -- of this proceeding.

In support of that position, they outline the fact that there's an ongoing review of all areas of Hydro's current PCOSS methodology including marginal -- marginal costs as it affects that methodology. They also note, as well, that the witness for TREE/RCM, Mr. Chernick, has suggested that the existing cost of service methodology may overstate residential cost to some degree and -- and, again, that's a matter that the Boards think the -- that our clients think the Board should take into consideration in -- in terms of cost allocation.

Also important from our clients' perspective is the existing cost of service study lacks a robust marginal cost-based analysis. But they would note that there's current evidence suggesting that such an analysis would yield different results compared to an embedded cost analysis, and we've set out a bit of that on the proceeding page.

So certainly in terms of cost allocation, our clients' recommendation is no further re-balancing of revenues between the customer classes over and above that already subsumed in the interim approved rates.

And my clients would note -- the Board did in the interim order -- that there -- there's many more rate applications to come. And to the extent that rebalancing is required we'll get better insight into that once we have a robust marginal cost based analysis as well as consideration of Mr. Chernick's position. So that is our clients' position on cost allocation.

Inverted rates. In my cross-examination

of the Hydro Panel, I presented a -- a table looking at taking a snapshot of customers at two (2) points in time, one (1) being March 31st, 2004, and one (1) being March 31st, 2011. And Mr. Wiens, honest and fair witness that he is, pointed out that our analysis actually understated the impact of the -- of the change.

And so what we have set out is from page 9 -- or excuse me, on page 81 of our outline is a historic change in residential bills similar to what we originally presented but revised based upon Mr. Wiens -- my cross-examination of Mr. Wiens. And again, this was -- this was prior to the interim rate application, but we think that there are some important points made by this table.

And what it does is look at two (2) bills at two (2) points in time, one (1) being March 31st, 2004, one (1) being March 31st, 2011, and also different consumption levels, five hundred (500) to twenty-five hundred (2500) in 500 kilowatt hour incre -- increments.

And it looks at the percentage change in these relative bills -- these relative consumption levels from the 500 kilowatt monthly use to the 25 kilowatt (sic) monthly use. And it also compares them to cumulative inflation as provided by Manitoba Hydro in one (1) of its undertakings.

And what one can see, obviously, as -- as well, that average rates in -- you know, in these two (2) snapshots increased faster than inflation in these two (2) particular periods.

There's also a gap between more modest users of electricity and the highest users with the percentage change experienced by those using in excess of 2,000 kilowatt hours per month between '04 and '11 being 23.53 percent, and even more for those at twenty-five hundred (2500).

And our clients -- this was prior to the interim order that they presented this application because they thought it was important to provide some bill information and -- and also some insight into some of the pressure the Board has been hearing from consumers in their presentations to it in terms of some of the stressors that those who rely on space heating to heat their homes have been experiencing in -- in the context of -- of inverted rates.

It also is important though my clients -- this -- this snapshot also -- it also underlies the rate pressure that all consumers have -- have faced. And our clients realize that the -- that there are rationales for this, recovering from a drought and otherwise. But even those who are at the 500 or 1000 kilowatt hour certainly were facing some rate increases substantially above inflation.

And perhaps in my March 9th, 2011 interim argument, I spoke more -- I hope I spoke more eloquently about consumers and -- and the impact that consumers are facing as they face budget constraints, employers -- maybe not the wage settlements that they are looking for, the pressures of the recession and the modest recovery from it, the pressures in certain localized areas of the province in terms of the flood and the terrible personal consequences and, in some cases, business or consumer consequences, as well.

And we thought that this graph on behalf of our clients was a useful illustration of this and my client has also asked me to emphasize a point that the Board made in the diesel Hearing in terms of the double whammy of rate increases upon consumers. There's their actual bill, as well as the increased cost of goods and services that there have to -- they have to purchase. The Board is well aware of it but my client has asked me to emphasize it.

In terms of inverted rates, at pages 9 and 10, we set out a bit of a discussion but at the bottom of page 10, we -- we put out two (2) important bullets and, certainly, the -- excuse me, I'm -- bottom of page 82. Someone's getting tired.

At the bottom of page 82 there are two (2) important bullets and certainly from my clients' perspective, they want to sincerely thank the Board for their decision in terms of moving away from, at least in this proceeding, from the inclining block structure to a level block structure. And certainly, they think that this is important and especially given the relative lack of progress in -- in introducing DSM programs, assisting in mitigating the impact of steeper inverted rates. And our clients note that not all low income customers are low volume users and this is particularly important for them.

They do have to note, as well, of course, that the rate design changes adopted on April -- as effective April 1st, 2011, did result in higher than average bill impacts for customers with a moderate level of use.

At page 83, not page 11, of our outline, our clients make our recommendations in this area. First of all, that no inverted rate be introduced for the residential class for the 2011/'12 year and that further discussion on the merits of an inverted rate should take into account the progress of Hydro in addressing energy efficiency needs for all customers, including vulnerable persons and tenants.

And Mr. Vice-Chair and Chairman, there's another important recommendation which I'm just going to -- to move towards and I'll just convey it to you verbally.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: The other recommendation is, our clients have been somewhat resistant to the idea of inverted rates when it's not coupled with sufficient energy efficiency programming. They're interested in considering the dialogue in subsequent years, not 2011/'12, but they would make the point that any future consideration of inverted rates for residential customers must fully come with the option of employing a different level of inversion for those relying upon electricity to heat their home.

And so our clients still are not onboard on this and I doubt they ever will be onboard unless they see material improvement, from their perspective, in DSM energy efficiency affecting residential and, in particular, low income customers, but they recognize, based upon the experience of the current system, or the system that was in existence prior to April 1st, 2011, of the need to take a different approach or a different look at those relying upon electricity to heat their homes.

Page 85 -- 84 of the outline, excuse me, Temporary Billing Demand Concession Program and Board Order 126/09. And in the -- in the recommendations, Tab 9, I just want to draw the -- the attention of the Board to the very last attachment in which our clients attempt to present a briefing note on temporary billing demand concessions, their understanding of the key elements of the program, and the justification of the program. This is Tab 9 and -- of the Board's Order.

And if you go to page 3 of that Tab, you'll see some commentary under the heading "Repayable," and certainly, from our client's perspective, they wouldn't have a lot of difficulties with this program if it were repayable. They see some analogies in terms of flexible payment arrangements for all customers and, certainly, at the repayable level, they do not have any problems with this approach.

Under the "Not-repayable" heading, under the -- at the risk of appearing somewhat wishy-washy, our clients -- but -- but they're not. The clients are trying to -- they've struggled with this issue, and you might have gathered that by the fact that we didn't present a final position on it on Thursday. What they try and do on pages 3 and 4 is canvass some of the arguments for and against. I'm not saying they've captured all of them, but they've -- they're trying to present the arguments both for and against. Ultimately, our clients -- ultimately, our clients do not support this proposal, if the -- the benefits are not repayable.

So we've set these out. The -- we've tried to be fair to -- to both perspectives in this discussion. Ultimately, our clients felt they could not support it for some of the reasons that are set out on pages 3 and 4. And I leave those for the Board's consideration, which be -- leads me to really the last area of my evidence before -- evidence -- the last area of my client's submissions before -- before their recommendations.

And, Mr. Chairman, I made some pretty good time in that -- that session. Certainly, I'd prefer to start tomorrow morning, even if it's an hour, or half an hour earlier, if that would assist the -- the panel. I'm -- I'm running out of rhetorical abilities, limited as they were in the first place.

THE CHAIRPERSON: Well, your stamina and determination is evident, Mr. Williams. We appre -- we appreciate it, that's for sure. We would love to start tomorrow 9:00, but unfortunately we've got another commitment at 9:00. So we'll have to start at 9:30, but

I think we'll be fine.

So we'll see you all tomorrow morning at 9:30. Thank you again.

--- Upon adjourning at 4:52 p.m.

Certified correct,

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Cheryl Lavigne, Ms.