QUESTION:

In your review of Manitoba Hydro's export price analysis, how is inflation factored in to the prices? Are the export prices prepared in nominal or real amounts? Is inflation added in by Manitoba Hydro or by the price forecaster?

RESPONSE:

Prices provided by the independent expert price forecasters to Manitoba Hydro are in real dollars. Manitoba Hydro uses its own inflation forecast provided in Appendix 11.2 of the NFAT Submission.

SUBJECT:

REFERENCE: OL-12-1 comparing Bi-Pole III to natural gas development (page25-26): http://www.pub.gov.mb.ca/exhibits/mh-154.pdf

PREAMBLE:

QUESTION:

Was this document (OL-12-1) included in La Capra's review of the resource plans?

RESPONSE:

This response assumes the request is referring to MH's 20 Year Financial Outlook: Updated to reflect the revised capital estimate for Bipole III, 2010/11- 2029/30 dated June 2011.

LCA reviewed more recent MH financial plans. We did not review this particular document.

SUBJECT:

REFERENCE: OL-12-1 comparing Bi-Pole III to natural gas development (page25-26): http://www.pub.gov.mb.ca/exhibits/mh-154.pdf

PREAMBLE: OL-12-1 sets out a natural gas generation scenario which at the time was used as an alternative to Bipole 3. The document indicated that if natural gas generation was to be installed at that time, 2000 MW would be required, with a capital cost of $2.988 billion in current dollars. Further this document indicates that if gas were to be installed, "a firm gas supply is required at an average cost of $181 million per year".

QUESTION:

Can La Capra indicate if the natural gas assumptions noted in the preamble are consistent with the costs for capital and firm gas contracting used by Manitoba Hydro in the NFAT? Does the NFAT include costs for firm gas supply contracting outside of unit costs for generation? Or is the difference simply that (a) large gas units being run periodically for reliability (Bipole alternative) versus (b) smaller gas units being added energy supply (drought) rationale? Is Hydro's presentation in OL-12-1 a fair summary of the extent to which natural gas may have been required if it were to play a dual role of meeting supply requirements (Plan 1 (All Gas)) as well as transmission backup for the Bipole system?

RESPONSE:

LCA has not been able to fully resolve our understanding of the modeling of gas prices by MH. The table below provides copies of LCA IRs to MH that have not been answered that should provide the necessary information.

Technically, MH did respond to LCA-476, but the response refers back to LCA-475.

Round 1	LCA-095		Please provide all monthly fuel cost assumptions for the thermal generation modeled in SPLASH.
Round 2	475		Does the natural gas price entered into SPLASH for use in estimating the production costs of MH's existing natural-gas fired units reflect only Henry Hub prices? If there are any adjustments made to the Henry Hub forecast, please provide the adjustments used for the natural gas price forecasts relied upon for the NFAT submission with any supporting work papers in electronic spreadsheet format. Please provide the information separately for the 2012/13 forecast and 2013/14 forecast.
Round 2	476		Does the natural gas price entered into SPLASH for use in estimating the production costs of new CCGT or CT units reflect only Henry Hub prices? If there are any adjustments made to the Henry Hub forecast, such as a basis differential, please provide the adjustments used for the natural gas price forecasts relied upon for the NFAT submission with any supporting work papers in electronic spreadsheet format. Please provide the information separately for the 2012/13 forecast and 2013/14 forecast.
Round 2	481	This question references documents MH has labeled as commercially sensitive information. Please refer to the Natural Gas price forecasts on page 4 of the pdf.	Please provide the assumed transportation charges for the natural gas price forecasts listed in the pdf.

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SUBJECT:

REFERENCE:

PREAMBLE: La Capra indicates that MH's planning criteria are "very conservative with respect to the consideration of energy imports" and that this is a revised policy

QUESTION:

Please provide La Capra's assessment of all impacts of Hydro's decision to revise its policy. Is it possible to revise the economic and/or financial modeling to indicate if different resource plan would be preferred absent this change in import policy?

RESPONSE:

Please refer LCA's Supplemental Technical Appendices 3B and 9B, which includes an analysis of an alternative scenario with a higher import limit.

PREAMBLE: La Capra indicates it has developed its own models in Excel format that are being shared on disk as part of this submission (e.g., page LCA-3).

QUESTION:

Is there a redacted version of La Capra's excel models that can be shared with parties not eligible to access CSI?

RESPONSE:

The models referred to in the request are not CSI. All non-CSI models and workpapers can be downloaded from the following website:

http://www.pub.gov.mb.ca/nfat_reports_worksheets.html

PREAMBLE: Added La Capra scenarios (page LCA-6)

QUESTION:

Please provide the full summary assumptions, inputs, modeling results and spreadsheets (with the exception of CSI) in respect of each added case that La Capra has requested or received.

RESPONSE:

Please see LCA's Supplemental Filing, especially Technical Appendices 3B, 5, 9B, and 10B and supporting workpapers.

SUBJECT: Input assumptions

REFERENCE:

PREAMBLE: La Capra indicates that the perspective of MH's expert forecasters has likely changed over the 2 years since they completed their work (LCA-11)

QUESTION:

If the opinion of forecasters is expected to change more frequently than every 2 years, how does La Capra view that forecast data should be used in an NFAT making decisions for plant to come into service in 2019? 2026? Is it La Capra's view that by 2018 (when the commitment decisions for Conawapa must be made) the data used in this NFAT (circa 2012) will be excessively stale and will need to be updated?

RESPONSE:

This response assumes the statement referenced is the sentence in the 3rd paragraph on page LCA-11 of LCA's Initial Expert Analysis Report that reads: "LCA is concerned that the perspective of the experts that was captured in the probabilistic analysis has likely changed in the two years since the analysis was conducted."

LCA's view is that it is appropriate to do analysis utilizing scenario, uncertainty, risk and sensitivity analyses as is described in Technical Appendices 9A & 9B to test the robustness of a decision to proceed or not with any large and/or long lived project. The changing view of the future notwithstanding, robust decisions (projects where all or most futures indicate a beneficial investment) should go forward. Decisions on major energy projects will need to be made based upon forecasts of inherently uncertain parameters. The LCA review in Technical Appendices 9A & 9B cover the LCA view of ways to use a large amount of information on differing assumptions about future conditions and forecasts to support decision making within the context of this uncertainty.

LCA's view is that it is incumbent upon the project developers, in this case MH, to be continuously vigilant as to changes that occur in anticipated costs or benefits and the planning assumptions that are relied upon to support investment decisions. This is true of projects which are awaiting commitment whether they are idle projects or projects still spending some development money.

The statement cited from the LCA report was offered in this context. The uncertainty analysis provided by MH in its NFAT analysis relied upon experts' assessments of probabilities of future values in discount rates, capital costs, and energy prices. Those assessments were made over two years ago. Given that circumstances do change and that expert opinions based on what is known today could be different than opinions based on what was known two years ago, LCA believes it to be important to test those assumptions in light of what is known today.

It remains to be seen as to whether the view of the future changes appreciably between now and 2018 to declare that the data used in this NFAT application and its review by experts and other parties is indeed stale and needing updating. It is LCA's view that planning analysis should be updated to current information at the time an investment commitment is made.

SUBJECT: Solar

REFERENCE:

PREAMBLE: La Capra indicates that "Industry sources shows that BOTH solar costs are projected to decline over time" (page LCA-15).

QUESTION:

Please explain what is meant by "both".

RESPONSE:

“both” is a typographical error. Strike “both” from that sentence.

SUBJECT: Economic Analysis

REFERENCE:

PREAMBLE: On page LCA-26 La Capra indicates that a La Capra specific methodology has been developed

QUESTION:

Please provide a comprehensive list of all of the ways the La Capra model is different than the Manitoba Hydro model.

RESPONSE:

Please refer to LCA Technical Appendix 9A, pages 9A-60 through 79, which explains LCA's critique of the MH methodology for uncertainty analysis and explains and illustrates the specific changes LCA made to that methodology.

QUESTION:

Please indicate, for each section of the La Capra report, whether any draft of the section was provided to Manitoba Hydro to "fact check" and if so, please provide a copy of that draft section as submitted to Manitoba Hydro, and also provide the response of Manitoba Hydro.

RESPONSE:

No drafts were provided to MH to fact check.

SUBJECT: Financial Analysis

REFERENCE: Appendix 9

PREAMBLE: Figure 9-87

QUESTION:

The figure indicates it shows NPVs over 50 years, however the NPV value for Reference Scenario PDP is $1.696 billion which is equal to the NPV over 78 years per MH NFAT submission. Why does this table report a 78 year NPV value?

RESPONSE:

Figures 9-86, 9-87 and 9-88 were discovered to have an error. Corrected versions of these figures are provided in LCA's response to CAC/LCA-008.

SUBJECT: Debt Guarantee Fee

REFERENCE:

PREAMBLE: La Capra indicates that the Debt Guarantee Fee is "compensation" to the province "for taking on the potential costs should the loan guarantee be needed"

QUESTION:

Please indicate if La Capra did any assessment as to the reasonableness of the 1% Debt Guarantee Fee level as a fee in exchange for bona fide services/costs incurred by the Provincial Government, versus being a generator of net revenue (akin to water rentals) for the Provincial Government? For example, please see the attached reference as to studies regarding the Newfoundland Hydro debt guarantee fee level (concluding that only 0.25% to 0.5% is justifiable as a fee in exchange for services/costs).

http://publicinfo.nlh.nl.ca/NLH%202013%20GRA/Requests%20for%20Information/Batch%202%20Oct%2017-2013/PUB-NLH-059.pdf

RESPONSE:

LCA did not perform any analysis on the level of Debt Guarantee Fee, nor whether it should be considered a generator of net revenue for the Provincial Government. LCA made its decision to conduct its Provincial View analyses assuming that the Debt Guarantee Fee is compensatory for risk and should be considered a cost to MH and a cost to the Province based upon discussions with Morrison Park Associates (MPA). Please refer to the MPA expert report.

SUBJECT: Debt Guarantee Fee

REFERENCE:

PREAMBLE: La Capra indicates that the Debt Guarantee Fee is "compensation" to the province "for taking on the potential costs should the loan guarantee be needed"

QUESTION:

Please indicate the jurisdictions reviewed by La Capra to determine the industry standard on the concept of debt guarantee "compensation" and in particular, the jurisdictions with Crown utilities include Newfoundland, BC, Quebec, Northwest Territories, Yukon, New Brunswick. Please provide the results of any such review.

RESPONSE:

Please see response to MIPUG/LCA-10a.

SUBJECT: Debt Guarantee Fee

REFERENCE:

PREAMBLE: La Capra indicates that the Debt Guarantee Fee is "compensation" to the province "for taking on the potential costs should the loan guarantee be needed"

QUESTION:

If the debt guarantee fee were proposed at a different level, for example 3%, would La Capra's review of the NFAT similarly accept this as a a revised level of compensation. Is there a threshold beyond which the fee is more akin to a "Transfer".

RESPONSE:

If the view of MPA changes LCA would adjust accordingly. Please also see response to MIPUB/LCA-10a.

SUBJECT: SPLASH

REFERENCE: http://www.hydro.mb.ca/regulatory_affairs/electric/gra_2010_2012/

PREAMBLE: La Capra indicates they did not complete an "audit-level" inspection of the SPLASH model (page 9A-4)

QUESTION:

Is an audit level inspection part of La Capra's intended scope? Did La Capra review the peer review of SPLASH that was provided to the PUB at Appendix 74 of the 2010 GRA (see weblink). If so, does La Capra have different conclusions than contained in the Peer Review?

RESPONSE:

Audit-level inspection of MH's SPLASH model was not part of LCA's scope of work. LCA did review the Peer Review, but did not attempt to replicate the analysis. A critique of some SPLASH modeling assumptions is included in Technical Appendix 6, pages 6-69 to 6-72 under the heading "Process for Estimating Price Coefficients in SPLASH".

SUBJECT: Economic Analysis

REFERENCE: Appendix 9

PREAMBLE: Figure 9-36

QUESTION:

In the shorter horizon analysis how does La Capra deal with residual value of facilities as of the end of the modelling period. For example, for a 25 year scenario, is there an adjustment for the remaining value in facilities left over or existing as at the star of year 26?

RESPONSE:

The LCA analysis does not make any adjustment for residual value when calculating the Cumulative Present Value ("CPV") of the shorter time periods. LCA has attempted to be precise in its wording by differentiating the CPV through 20, 35 and 50 years from the Net Present Value ("NPV") at the end of 78 years since MH analysis was used and MH calculated a salvage or residual value. CPV are informing how projects compare on a present value base up to a certain point in time.