

Needs For and Alternatives To

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**MINISTER RESPONSIBLE
FOR MANITOBA HYDRO**

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

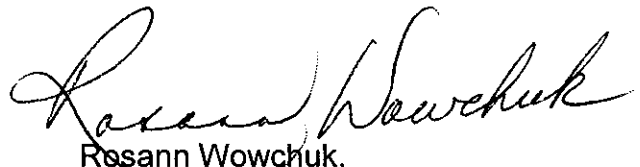
JAN 13 2011

Mr. Victor H. Schroeder,
Chairman, Board of Directors,
Manitoba Hydro
P.O. Box 815 Stn. Main
Winnipeg MB R3C 2P4

Dear Mr. Schroeder,

Further to our discussion about the regulatory processes to be applied to major new hydro generation projects, I can advise that in addition to review and licensing under applicable provincial statutes (including, but not necessarily limited to *The Environment Act* and *The Water Power Act*), it is the provincial government's intention to assign responsibility to an independent body for carrying out an NFAT (Needs For and Alternatives To) assessment of such projects. I trust this information will assist Manitoba Hydro in preparing for regulatory review of such projects as Keeyask and Conawapa.

Sincerely,


Rosann Wowchuk,
Minister

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November 16, 2012

MANITOBA ASKS INDEPENDENT BOARD TO REVIEW MAJOR HYDRO CAPITAL PROJECTS

The provincial government has asked the Public Utilities Board to conduct a Needs For and Alternatives To (NFAT) review of upcoming Manitoba Hydro projects including the Keeyask and Conawapa generating stations and their associated transmission facilities, Innovation, Energy and Mines Minister Dave Chomiak, minister responsible for Manitoba Hydro, announced today.

"Building Keeyask and Conawapa represents a major economic development opportunity for our province," said Chomiak. "The purpose of the NFAT review is to provide an independent assessment of the need for new generation and to compare the benefits of building new hydro generation to alternatives such as natural gas."

The NFAT review would be conducted by a sub-panel of the Public Utilities Board(PUB) in order to give the board the capacity needed to conduct the review while meeting its statutory responsibilities. Panel members are expected to be announced and detailed terms of reference will be provided to the PUB in the new year.

"The estimated \$13.3-billion investment in Manitoba's north that would result from Keeyask and Conawapa would propel the province's economy for decades to come and provide clean, low-cost and reliable power for future generations of Manitobans," said Chomiak. "Moving forward with these projects is an important decision and Manitobans need to be assured that they are in the best long-term interest of the province."

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MANITOBA ORDER IN COUNCIL

DATE: **April 17, 2013**

ORDER IN COUNCIL NO.: **00128 / 2013**

RECOMMENDED BY: **Healthy Living, Seniors and Consumer Affairs**

ORDER

1. The Public Utilities Board (the "PUB") is assigned the conduct of a Needs For and Alternatives To review (an "NFAT review") of Manitoba Hydro's proposed preferred development plan, which includes the Keeyask and Conawapa Generating Stations, their associated domestic alternative current ("AC") transmission facilities, and a new Canada-United States of America ("USA") transmission interconnection.
2. Arthur Mauro and Mel Lazareck are appointed as members of the PUB, for the purpose of participating in the NFAT review, with terms to expire on such date as the PUB has fully completed its assigned duties in respect of the NFAT review, unless their appointments are revoked before that date by the Lieutenant Governor in Council.
3. The NFAT review will be conducted in accordance with the attached Terms of Reference.
4. This Order is effective on the date it is made.

AUTHORITY

The Public Utilities Board Act, C.C.S.M. c. P280, states:

Membership of board

4 The board shall be composed of such number of members, not less than three, as the Lieutenant Governor in Council may determine.

Appointment of members

7 The members shall be appointed by the Lieutenant Governor in Council, and shall be paid such remunerations as determined by the Lieutenant Governor in Council.

Term of office

9 Each member shall hold office during pleasure of the Lieutenant Governor in Council.

Power of board to perform assigned duties

107 The board may perform duties assigned to it

...

(b) by order of the Lieutenant Governor in Council; or

...

and Part I, in so far as it is applicable, applies to the carrying out of duties so assigned.

BACKGROUND

No.

1. The Government of Manitoba wishes to have the PUB conduct an NFAT review of Manitoba Hydro's proposed preferred development plan for meeting a growing provincial demand for electricity and for taking advantage of export opportunities, which includes the Keeyask and Conawapa Generating Stations, their associated AC transmission facilities, and a new Canada-USA transmission interconnection, in accordance with the attached Terms of Reference.
2. Arthur Mauro and Mel Lazareck are being appointed to provide the PUB with the necessary capacity and expertise for the NFAT review. Manitoba has requested the chair of PUB to designate these new members, under subsection 15(6) of *The Public Utilities Board Act*, as the members who will conduct the NFAT review, together with any other members of PUB as he deems necessary for purposes of the review.

Terms of Reference - Needs For and Alternatives To (NFAT) Review

NFAT review for Manitoba Hydro's proposed preferred development plan for the Keeyask and Conawapa Generating Stations, their associated domestic AC transmission facilities and a new Canada-USA transmission interconnection

INTRODUCTION

On January 13, 2011, the Government of Manitoba notified Manitoba Hydro (Hydro) of its intention to carry out a public Needs For and Alternatives To (NFAT) review and assessment of the corporation's proposed preferred development plan (Plan) for major new hydro-electric generation and Canada-USA interconnection facilities using an independent body.

On November 15, 2012 the Minister of Innovation, Energy and Mines announced that the Government of Manitoba had asked the Manitoba Public Utilities Board (PUB) to conduct the NFAT for the Keeyask and Conawapa Generating Stations and their associated transmission facilities. This document, including Appendix A, outlines the Terms of Reference for the NFAT.

THE PLAN

Hydro's Plan is intended to meet a growing provincial demand for electricity and take advantage of opportunities to export power to US customer utilities. The Plan includes the Keeyask and Conawapa Generating Stations, their associated domestic AC transmission facilities and a new Canada-USA transmission interconnection. Hydro has stated that its Plan is being brought forward now to take advantage of the proposed Canada-USA interconnection and long-term firm export sale opportunities that occur rather infrequently. Hydro's Plan is dependent upon developing a new transmission interconnection into the USA and entering into long-term firm export sales with US-based electric utilities Minnesota Power and Wisconsin Public Service.

Hydro asserts that the Plan will provide significant benefits to Manitobans. Hydro also asserts that the value proposition of its Plan is justified on a very broad basis, taking into consideration inherent uncertainties that exist over a reasonable range of future possible critical inputs into its business case, and that it is the best development option when compared to alternatives.

MANDATE

The NFAT will be conducted under the authority of Section 107 of *The Public Utilities Board Act* ("The PUB Act"). PUB members designated by the Chair to conduct the NFAT under section 15(6) of The PUB Act will constitute the NFAT Panel (the "Panel"). Panel members will exercise their duty to conduct the assigned NFAT in accordance with The PUB Act and these Terms of Reference.

For greater certainty, in conducting the NFAT, the Panel members who are designated by the Chair to conduct the review:

- (a) may hear evidence *in camera* for the purpose of protecting Commercially Sensitive Information as defined in Appendix A, which forms a part of these Terms of Reference;

- (b) may exercise discretion over the access of any person to Commercially Sensitive Information; and
- (c) shall follow the Rules of Practice and Procedure of the PUB, as amended from time to time, if not otherwise dealt with under these Terms of Reference.

At the completion of its review, the Panel will provide a report to the Minister responsible for the administration of *The Public Utilities Board Act* (currently the Minister of Healthy Living, Seniors and Consumer Affairs) no later than June 20, 2014. The report will include recommendations to the Government of Manitoba on the needs for Hydro's preferred development Plan and an overall assessment as to whether or not the Plan is in the best long-term interest of the province of Manitoba when compared to other options and alternatives.

PUBLIC PARTICIPATION

The public will be encouraged to provide input and comment on the Plan as part of the NFAT.

SCOPE OF THE NFAT REVIEW

The Panel will review and assess the needs for and alternatives to Hydro's Plan. Its assessment will be based upon the evidence submitted by Hydro, intervenors and independent expert consultants used by PUB to assist in the NFAT. The Panel's report to the Minister will address the following items:

1. An assessment as to whether the needs for Hydro's Plan are thoroughly justified, and sound, its timing is warranted, and the factors that Hydro is relying upon to prove its needs are complete, reasonable and accurate. The assessment will take the following factors into consideration:
 - a. The alignment of the Plan to Hydro's mandate, as set out in Section 2 of *The Manitoba Hydro Act*.
 - b. The alignment of the Plan to Manitoba's Clean Energy Strategy and the Principles of Sustainable Development as outlined in *The Sustainable Development Act*.
 - c. The extent to which the Plan is needed to address reliability and security requirements of Manitoba's electricity supply.
 - d. The reasonableness, thoroughness and soundness of all critical inputs and assumptions Hydro relied upon for its justification of its needs. This should include Hydro's planning load forecast and future load scenarios, its demand and supply analysis, export expectations and commitments, and demand side management and conservation forecasts.
2. An assessment as to whether the Plan is justified as superior to potential alternatives that could fulfill the need. The assessment will take the following factors into consideration:
 - a. If preferred and alternative resource and conservation evaluations are complete, accurate, thorough, reasonable and sound;
 - b. The alignment of the Plan and alternatives to Manitoba's Clean Energy Strategy, *The Climate Change and Emissions Reduction Act* and the Principles of Sustainable Development as outlined in *The Sustainable Development Act*;

- c. The accuracy and reasonableness of the modeling of export contract sale prices, terms, conditions, scheduling provisions, export transmission costs, and the reasonableness of projected revenues;
- d. The reasonableness of forecasted critical inputs including construction costs, opportunity export revenues, future fuel prices, electricity market price forecasts, the determinants of those values, and export volumes;
- e. The reasonableness of the scope and evaluation of risks and the benefits proposed to arise from the development and the reasonableness and the reliability of Hydro's interpretation of the most likely future outcomes as a result of climate changes, interest rate fluctuations, export market prices, domestic load fluctuations, droughts, competing technologies, fuel prices, carbon pricing, technology developments, economic conditions, Hydro's transmission positions and other relevant factors;
- f. The impact on domestic electricity rates over time with and without the Plan and with alternatives;
- g. The financial and economic risks of the Plan and export contracts and export opportunity revenues in relation to alternative development strategies;
- h. The socio-economic impacts and benefits of the Plan and alternatives to northern and aboriginal communities;
- i. The macro environmental impact of the Plan compared to alternatives;
- j. If the Plan has been justified to provide the highest level of overall socio-economic benefit to Manitobans, and is justified to be the preferable long-term electricity development option for Manitoba when compared to alternatives.

Independent Expert Consultants

The Panel shall establish a process for the thorough review of any information that the Panel determines to be relevant to the conduct of the NFAT, including relevant Commercially Sensitive Information, as defined in Appendix A, subject to these Terms of Reference.

The Panel may use one or more independent expert consultant(s) for the purpose of the NFAT. In addition to such other questions and issues as the Panel may determine they should examine, the independent expert consultant(s) shall be expected to critically examine the following:

- (a) the high level forecasts of export revenues that are filed by Hydro and whether the forecasts appropriately and accurately reflect the export contracts, including Commercially Sensitive Information.
- (b) the accuracy and reasonableness of Hydro's approach to producing an assessment of financial risks (including drought), the assessment of which is derived using Commercially Sensitive Information;
- (c) the appropriateness and correct application of methodologies that cannot be publicly disclosed by MH because they contain Commercially Sensitive Information, such as whether Hydro's approach to comparing generation sequences follows sound industry practice;

- (d) whether high level summaries filed by Hydro of Net Present Values and Internal Rates of Return which are derived from Commercially Sensitive Information reflect sound assumptions and calculations; and
- (e) the accuracy and soundness of Hydro's calculation of a consensus forecast of future market prices for electricity and fuels which is derived from Commercially Sensitive Information.

The PUB shall hire the independent expert consultant(s).

The independent expert consultant(s) shall provide a report(s) to be filed in evidence on the public record, which shall contain their analysis of the submissions filed by Hydro, with sufficient information to satisfy the Panel that the review was conducted with due diligence. The report(s) shall not draw conclusions as to the needs for or alternatives to the Plan, which is the role of the Panel.

The independent expert consultant(s) shall be available for cross-examination at the public hearing, and shall be available as a resource to legal counsel for registered intervenors as deemed necessary by the PUB to prepare for the cross-examination of Hydro witnesses on Commercially Sensitive Information.

The independent expert consultant(s) may also provide such advice to the Panel, and file such report(s) with the Panel *in camera*, that contain, reference, or analyse Commercially Sensitive Information in sufficient detail to satisfy the Panel. Cross-examination of the independent expert consultant(s) on such issues shall be permitted *in camera*.

The independent expert consultant(s) shall not quote in their publicly filed report(s) Commercially Sensitive Information or information that would enable a third party to reverse-engineer Commercially Sensitive Information ("reverse-engineer" means to discover, synthesize or otherwise recreate the Commercially Sensitive Information following a detailed examination). No public cross-examination of the independent expert consultant(s) shall take place with respect to Commercially Sensitive Information. The independent expert consultant(s) will be required to execute a non-disclosure agreement satisfactory to Hydro and the Panel.

NOT IN SCOPE

The following items are not in the scope of the NFAT:

- The Bipole III transmission line and converter station project;
- The Pointe Du Bois project;
- The commercial arrangements between Hydro and its aboriginal partners for the development of the proposed hydro-electric generating facilities (the impacts of these are included in the cost of the projects that are part of the Plan);
- The environmental reviews of the proposed projects that are part of the Plan, including Environmental Impact Statements (these will be conducted through individual processes by the Manitoba Clean Environment Commission ("CEC"), and where possible the impacts of the matters to be considered by the CEC are included in the costs of the projects that are part of the Plan);
- Aboriginal consultation pursuant to Section 35 of the *Constitution Act* (this is conducted as a separate Crown-Aboriginal consultation process);

- Any past Hydro development proposals or government assessments of past development proposals, including past NFATs;
- Historic environmental costs.

Appendix A

PROVISIONS FOR THE PROTECTION OF COMMERCIALLY SENSITIVE INFORMATION:

Transparency

The Panel is directed to conduct the NFAT in a transparent and public process. However, in conducting the NFAT, the Panel is to ensure adequate protection of any information the disclosure of which may reasonably be expected to cause undue financial loss to Manitoba Hydro (“Hydro”) or any of its contractual counterparties or to harm significantly Hydro’s or its contractual counterparties’ or domestic customers’ competitive position, including, but not limited to, any sections of the following documents containing such information (collectively, “Commercially Sensitive Information”):

- (a) any and all export contracts and term sheets now or hereafter in existence for the purchase and sale of power and energy entered into between Hydro and its customers in the United States of America, including but not limited to the export contracts and term sheets commonly described as follows: Minnesota Power 250 MW Energy Exchange Agreement; Minnesota Power 250 MW Power Sale Agreement; Wisconsin Public Service 100 MW Power Sale Agreement; Wisconsin Public Service 108 MW Energy Sale Agreement; Wisconsin Public Service Term Sheet, Northern States Power 375/325 MW System Power Sale Agreement; Northern States Power 125 MW System Power Sale Agreement, and Northern States Power 350 MW Seasonal Diversity Agreement (collectively, “Export Contracts”);
- (b) the internal, non-public load forecast prepared by Hydro on an annual basis (collectively, “Load Forecast”); and
- (c) the Hydro document dated September 24, 2010 titled “THE 2010/11 POWER RESOURCE PLAN, Report PPD #10-07” and any further existing or future power resource plans hereinafter developed by Hydro (collectively, “Power Resource Plan”)

Document Filings and Evidence

In conducting the NFAT, the Panel shall be able to require the production, from Hydro, of any documents and other such evidence as the Panel determines to be relevant to the conduct of the NFAT within the scope of the Terms of Reference from the Province of Manitoba. The procedures for filings and evidence shall be as set out below:

- (a) Public Filings

Any documents that do not contain Commercially Sensitive Information are to be filed on the public record. As part of its NFAT submission Hydro shall file on the public record copies of its Export Contracts, Load Forecast and Power Resource Plan, with details considered by Hydro to be Commercially Sensitive Information redacted.

To the extent that information necessary for the conduct of the NFAT cannot be made public due to the presence of Commercially Sensitive Information, Hydro shall file on the

public record high level summaries and reports that incorporate the relevant information, at a level of summary and aggregation which will not disclose Commercially Sensitive Information.

Any evidence before the Panel shall be public, other than evidence with respect to Commercially Sensitive Information, which testimony shall be received in camera as further described in (b) below. To the extent that it deems practical, the Panel shall limit the scope of *in camera* proceedings so that the major issues in the NFAT review can be canvassed and discussed in public.

(b) Confidential Filings

Any documents that the Panel determines to be relevant but that contain Commercially Sensitive Information are to be filed with the Panel in confidence in unredacted form, including unredacted copies of the Export Contracts, Load Forecast and Power Resource Plan.

On an *in camera* basis, the Panel may:

- i) review the complete, unredacted versions of Hydro documents that contain Commercially Sensitive Information; and
- ii) permit evidence with respect to Commercially Sensitive Information.

Access to In Camera Evidence

Based on the *in camera* review, the Panel may choose to publish findings and conclusions about export revenues, forecast market prices and the like, to inform the public discussion and serve as inputs to further analysis and review by participants at the public hearing, or it may choose to reserve comment until the conclusion of the hearing.

The documents filed and evidence adduced *in camera* shall not be made public, other than through the high-level summaries as described above, and shall only be disclosed to or shared with the following persons, on the terms and conditions as noted below:

1. Members of the Panel, the Board's Executive Director and Board staff may review Commercially Sensitive Information and participate in the *in camera* process for the purpose of carrying out their specific duties with respect to the NFAT without having to sign an undertaking or a non-disclosure agreement.
2. Legal counsel of record of the Board and counsel for registered interveners may review Commercially Sensitive Information and participate in the *in camera* process upon execution of an undertaking to the Panel in a form agreeable to the Panel and Hydro.
3. Any independent consultant(s) appointed by the Panel and any non-staff Panel advisors with a need to know, as determined by the Chair, may review Commercially Sensitive Information and participate in the *in camera* process upon execution of a non-disclosure agreement in a form agreeable to the Panel and Hydro.

Subject to the following dispute resolution provision, the Panel will not publish Commercially Sensitive Information in Orders or other public documents or include information that would enable a third party to reverse engineer Commercially Sensitive Information. The Panel will establish procedures to protect the documents and evidence from inadvertent disclosure and will instruct each individual who receives access to do the same. If the Panel so chooses, it may solicit Hydro's comments on particular documents that are in the process of being prepared in the interests of avoiding inadvertent disclosures.

Dispute Resolution Regarding Commercially Sensitive Information

If, during the in camera review, the Panel identifies any Commercially Sensitive Information, other than third party proprietary price forecasts, which the Panel considers would be beneficial to place on the public record at the NFAT, the Panel may refer those matters in dispute to a neutral third party to be agreed upon between the Panel and Hydro. The third party will receive written submissions and make a decision thereon, on an expedited basis, which decision will be given effect to in the proceedings before the Panel. In arriving at any such decision, the neutral third party shall specifically take into account the general undesirability of making disclosure of any Commercially Sensitive Information that may have been furnished to Hydro by third parties, in reliance upon contractual commitments by Hydro to maintain confidentiality, and the importance of maintaining such confidences.