

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

## 2 NFAT review for Manitoba Hydro's proposed preferred development plan for 3 the Keeyask and Conawapa Generating Stations, their associated domestic AC 4 transmission facilities and a new Canada-USA transmission interconnection

### 5 INTRODUCTION

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

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

### 14 THE PLAN

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

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

### 27 MANDATE

28 The NFAT will be conducted under the authority of Section 107 of *The Public Utilities Board Act*  
29 ("The PUB Act"). PUB members designated by the Chair to conduct the NFAT under section  
30 15(6) of The PUB Act will constitute the NFAT Panel (the "Panel"). Panel members will exercise  
31 their duty to conduct the assigned NFAT in accordance with The PUB Act and these Terms of  
32 Reference.

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

- 35
- 36 (a) may hear evidence *in camera* for the purpose of protecting Commercially  
37 Sensitive Information as defined in Appendix A, which forms a part of these Terms of  
38 Reference;
- 39

- 40 (b) may exercise discretion over the access of any person to Commercially Sensitive  
41 Information; and  
42  
43 (c) shall follow the Rules of Practice and Procedure of the PUB, as amended from  
44 time to time, if not otherwise dealt with under these Terms of Reference.

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

## 51 PUBLIC PARTICIPATION

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

## 53 SCOPE OF THE NFAT REVIEW

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

- 58 1. An assessment as to whether the needs for Hydro's Plan are thoroughly justified, and  
59 sound, its timing is warranted, and the factors that Hydro is relying upon to prove its  
60 needs are complete, reasonable and accurate. The assessment will take the  
61 following factors into consideration:
  - 62 a. The alignment of the Plan to Hydro's mandate, as set out in Section 2 of *The*  
63 *Manitoba Hydro Act*.
  - 64 b. The alignment of the Plan to Manitoba's Clean Energy Strategy and the  
65 Principles of Sustainable Development as outlined in *The Sustainable*  
66 *Development Act*.
  - 67 c. The extent to which the Plan is needed to address reliability and security  
68 requirements of Manitoba's electricity supply.
  - 69 d. The reasonableness, thoroughness and soundness of all critical inputs and  
70 assumptions Hydro relied upon for its justification of its needs. This should  
71 include Hydro's planning load forecast and future load scenarios, its demand and  
72 supply analysis, export expectations and commitments, and demand side  
73 management and conservation forecasts.
- 74  
75 2. An assessment as to whether the Plan is justified as superior to potential alternatives  
76 that could fulfill the need. The assessment will take the following factors into  
77 consideration:
  - 78  
79 a. If preferred and alternative resource and conservation evaluations are complete,  
80 accurate, thorough, reasonable and sound;
  - 81 b. The alignment of the Plan and alternatives to Manitoba's Clean Energy Strategy,  
82 *The Climate Change and Emissions Reduction Act* and the Principles of  
83 Sustainable Development as outlined in *The Sustainable Development Act*;

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

107 ***Independent Expert Consultants***

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

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

- 115
- 116 (a) the high level forecasts of export revenues that are filed by Hydro and whether  
117 the forecasts appropriately and accurately reflect the export contracts, including  
118 Commercially Sensitive Information.
- 119
- 120 (b) the accuracy and reasonableness of Hydro's approach to producing an  
121 assessment of financial risks (including drought), the assessment of which is derived  
122 using Commercially Sensitive Information;
- 123
- 124 (c) the appropriateness and correct application of methodologies that cannot be  
125 publicly disclosed by MH because they contain Commercially Sensitive Information,  
126 such as whether Hydro's approach to comparing generation sequences follows sound  
127 industry practice;
- 128

129 (d) whether high level summaries filed by Hydro of Net Present Values and Internal  
130 Rates of Return which are derived from Commercially Sensitive Information reflect  
131 sound assumptions and calculations; and  
132

133 (e) the accuracy and soundness of Hydro's calculation of a consensus forecast of  
134 future market prices for electricity and fuels which is derived from Commercially  
135 Sensitive Information.

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

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

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

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

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

157 **NOT IN SCOPE**

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

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

- 171
- 172
- 173
- Any past Hydro development proposals or government assessments of past development proposals, including past NFATs;
  - Historic environmental costs.

174

175 **Appendix A**

176 **PROVISIONS FOR THE PROTECTION OF COMMERCIALY SENSITIVE INFORMATION:**

177 *Transparency*

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

185  
186 (a) any and all export contracts and term sheets now or hereafter in existence for the  
187 purchase and sale of power and energy entered into between Hydro and its customers  
188 in the United States of America, including but not limited to the export contracts and term  
189 sheets commonly described as follows: Minnesota Power 250 MW Energy Exchange  
190 Agreement; Minnesota Power 250 MW Power Sale Agreement; Wisconsin Public  
191 Service 100 MW Power Sale Agreement; Wisconsin Public Service 108 MW Energy  
192 Sale Agreement; Wisconsin Public Service Term Sheet, Northern States Power 375/325  
193 MW System Power Sale Agreement; Northern States Power 125 MW System Power  
194 Sale Agreement, and Northern States Power 350 MW Seasonal Diversity Agreement  
195 (collectively, “Export Contracts”);

196  
197 (b) the internal, non-public load forecast prepared by Hydro on an annual basis  
198 (collectively, “Load Forecast”); and

199  
200 (c) the Hydro document dated September 24, 2010 titled “THE 2010/11 POWER  
201 RESOURCE PLAN, Report PPD #10-07” and any further existing or future power  
202 resource plans hereinafter developed by Hydro (collectively, “Power Resource Plan”)

203 *Document Filings and Evidence*

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

208 (a) Public Filings

209  
210 Any documents that do not contain Commercially Sensitive Information are to be filed on  
211 the public record. As part of its NFAT submission Hydro shall file on the public record  
212 copies of its Export Contracts, Load Forecast and Power Resource Plan, with details  
213 considered by Hydro to be Commercially Sensitive Information redacted.

214  
215 To the extent that information necessary for the conduct of the NFAT cannot be made  
216 public due to the presence of Commercially Sensitive Information, Hydro shall file on the

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

220  
221 Any evidence before the Panel shall be public, other than evidence with respect to  
222 Commercially Sensitive Information, which testimony shall be received in camera as  
223 further described in (b) below. To the extent that it deems practical, the Panel shall limit  
224 the scope of *in camera* proceedings so that the major issues in the NFAT review can be  
225 canvassed and discussed in public.

226 (b) Confidential Filings

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

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

- 232  
233 i) review the complete, unredacted versions of Hydro documents that contain  
234 Commercially Sensitive Information; and  
235  
236 ii) permit evidence with respect to Commercially Sensitive Information.

237 *Access to In Camera Evidence*

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

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

- 245  
246 1. Members of the Panel, the Board's Executive Director and Board staff may  
247 review Commercially Sensitive Information and participate in the *in camera* process for  
248 the purpose of carrying out their specific duties with respect to the NFAT without having  
249 to sign an undertaking or a non-disclosure agreement.  
250  
251 2. Legal counsel of record of the Board and counsel for registered interveners may  
252 review Commercially Sensitive Information and participate in the *in camera* process  
253 upon execution of an undertaking to the Panel in a form agreeable to the Panel and  
254 Hydro.  
255  
256 3. Any independent consultant(s) appointed by the Panel and any non-staff Panel  
257 advisors with a need to know, as determined by the Chair, may review Commercially  
258 Sensitive Information and participate in the *in camera* process upon execution of a non-  
259 disclosure agreement in a form agreeable to the Panel and Hydro.

260  
261 Subject to the following dispute resolution provision, the Panel will not publish  
262 Commercially Sensitive Information in Orders or other public documents or include  
263 information that would enable a third party to reverse engineer Commercially Sensitive  
264 Information. The Panel will establish procedures to protect the documents and evidence  
265 from inadvertent disclosure and will instruct each individual who receives access to do  
266 the same. If the Panel so chooses, it may solicit Hydro's comments on particular  
267 documents that are in the process of being prepared in the interests of avoiding  
268 inadvertent disclosures.

269 ***Dispute Resolution Regarding Commercially Sensitive Information***

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

280