

**Reference from the Lieutenant-governor in Council  
On the Muskrat Falls Project  
(the “Muskrat Falls Review”)  
REQUESTS FOR INFORMATION**

CA/KPL-Nalcor-194 Consumer Question: The Muskrat Falls generation unit relies upon the huge water reservoirs above Churchill Falls and upon the regulation of water by CFL(CO) which is governed by the terms of the 1969 power contract with Hydro Quebec. The management of water on the Churchill River is of vital importance, but not totally within the control of the Government of Newfoundland and Labrador, notwithstanding the fact that the facilities in place operate on the basis of water leases issued by the Province. The PUB held a hearing on water management for the Lower Churchill in 2009 and issued a board order. Nalcor Exhibit 17 contains the Churchill Falls Management Agreement dated 2009. CE 27Rev 1 (Public) states as follows:

*A water management agreement has been formalized between CF(L)Co and the Lower Churchill facilities to ensure that all plants produce in concert to maximize energy production from the river. All the studies conducted contain some or all of the provisions of the agreement. Studies MF1320 and MF1330 explicitly contain the requirement to coordinate operations and share the regulating benefits of the Upper Churchill storage system between plants along the river, thus permitting the benefits of regulation to apply to each facility during the calculation of firm energy. The Acres 1998 study implicitly coordinated production between plants, in that all plants were operated to serve all loads; however, the benefits of the regulation provided by the Upper Churchill reservoirs were not explicitly numerated for the individual facilities.*

MHI-Nalcor 22 contains the following question and answer:

*With respect to MF1320, this report indicates firm generation of*

1 515 MWc, not 824 MWc at Muskrat Falls. Why?

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3 *The 515 MWc rating is the MW-continuous rating and is a means of*  
4 *expressing the firm capability based on water availability. The 824 MW*  
5 *value refers to the nameplate capacity rating of the plant, comprised of*  
6 *four units at 206 MW each. (MF1320, as of the date of this response,*  
7 *July 26, 2011, has not been disclosed to the public as it may contain*  
8 *commercially sensitive or confidential information. Some or all of this*  
9 *report may be released at a later date.)*

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11 Was Hydro Quebec a party to the water management agreement?

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13 CA/KPL-Nalcor-195 Consumer Question: Further to the preamble outlined in  
14 CA/KPL-Nalcor-194, to what extent does Hydro Quebec have control over  
15 the flow of water from Churchill Falls by virtue of the terms of the 1969  
16 contract?

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18 CA/KPL-Nalcor-196 Consumer Question: Further to the preamble outlined in  
19 CA/KPL-Nalcor-194, how does the 2009 Churchill Falls Water  
20 Management Agreement allow Nalcor Energy to optimize the flow of  
21 water for Muskrat Falls?

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23 CA/KPL-Nalcor-197 Consumer Question: Further to the preamble outlined in  
24 CA/KPL-Nalcor-194, what is the matching or congruence of seasonal  
25 water flow from Churchill Falls compared with Muskrat Falls and how  
26 does the seasonal load pattern of these operations complement each  
27 other? Are the peak demands coincident or divergent?

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29 CA/KPL-Nalcor-198 Consumer Question: Further to the preamble outlined in  
30 CA/KPL-Nalcor-194, how will the demands by Emera for Muskrat Falls  
31 power be met and how well do they match with those of Hydro Quebec?

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33 CA/KPL-Nalcor-199 Consumer Question: Further to the preamble outlined in  
34 CA/KPL-Nalcor-194, what is the purpose of the transmission line to be

1 built between Muskrat Falls and Churchill Falls?

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3 CA/KPL-Nalcor-200 Consumer Question: Further to the preamble outlined in  
4 CA/KPL-Nalcor-194, will this transmission line require an agreement with  
5 CFL(Co) With Hydro Quebec?  
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7 CA/KPL-Nalcor-201 Consumer Question: Further to the preamble outlined in  
8 CA/KPL-Nalcor-194, is there an agreement between Nalcor Energy and  
9 Hydro Quebec to share power or water?  
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11 CA/KPL-Nalcor-202 Consumer Question: Further to the preamble outlined in  
12 CA/KPL-Nalcor-194, can Muskrat Falls generate additional energy  
13 beyond the projected 4.5TWh, with improved water management and  
14 with the direct engagement of Hydro Quebec?  
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16 CA/KPL-Nalcor-203 Consumer Question: Further to the preamble outlined in  
17 CA/KPL-Nalcor-194, what is the danger that Muskrat Falls will not be able  
18 to deliver 4.5 TWh of firm energy?  
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20 CA/KPL-Nalcor-204 Consumer Question: Further to the preamble outlined in  
21 CA/KPL-Nalcor-194, what other parties might be affected by potential  
22 changes in the regulation of Churchill Falls water flow? Would the Iron  
23 Ore Company of Canada be affected? Would other participants in Twinco  
24 be affected?  
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26 CA/KPL-Nalcor-205 Consumer Question: Further to the preamble outlined in  
27 CA/KPL-Nalcor-194, what are the terms of the power agreement with the  
28 Iron Ore Company of Canada? How often is their power contracts  
29 renegotiated?  
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31 CA/KPL-Nalcor-206 Consumer Question: Further to the preamble outlined in  
32 CA/KPL-Nalcor-194, has Nalcor or the Government of Newfoundland and  
33 Labrador attempted to engage Hydro Quebec in the optimization of water  
34 flow, apart from the 2009 PUB process?

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2 CA/KPL-Nalcor-207 Consumer Question: Further to the preamble outlined in  
3 CA/KPL-Nalcor-194, would a water management agreement with Hydro  
4 Quebec which removed the restrictions upon water management  
5 contained in the power contract allow the Lower Churchill to generate  
6 additional power and energy? If so, what would be the effect on the  
7 rated capacity of Muskrat Falls and Gull Island?  
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10 Dated at St. John's in the Province of Newfoundland and Labrador, this 6<sup>th</sup> day of February,  
11 2012.  
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16  
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