

1 Q. Re: GRK-NLH-123

2 Preamble:

3 GRK-NLH-123 refers to Article 3 of the Muskrat Falls PPA to respond to the
4 question:

5 Does the expression "the full capacity of the Muskrat Falls plant" in the
6 citation refer to a) the full installed capacity of the Muskrat Falls plant (824
7 MW), at all times, or b) the full amount of whatever capacity is available
8 from the Muskrat Falls plant at any given time?

9 If the latter, does the MFPPA provide any commitments to NLH with respect
10 to the amount of capacity that will be available to it at any given time?

11 Section 3.2(a) of the PPA reads:

12 (a) Restrictions on Forecasting & Scheduling - NLH shall only forecast and
13 Schedule Energy and Capacity attributable to the MF Plant to serve NL
14 Native Load in accordance with Good Utility Practice and subject to the
15 following restrictions and limitations: (i) Contracted Commitments, (ii)
16 Capacity of the MF Plant, (iii) WMA limitations, (iv) hydrological conditions,
17 and (v) Forgivable Events.

18 (b) Availability Commitment - Subject to Section 3.2(a), (i) all Energy and
19 Capacity from the MF Plant that is forecasted or Scheduled by NLH in the
20 156 Week Forecast, Four Week Schedule or NL Native Load Day-Ahead
21 Schedule shall be and remain available to NLH on a firm and priority basis,
22 and (ii) NLH may at any time adjust the hourly Energy delivery requirements
23 for NL Native Load in accordance with the Scheduling Protocol.

24 ...

25 (d) Plant Operations and Reservoirs - The Parties agree that in order to
26 achieve the principles set forth in this Section 3.2, NLH shall have maximum
27 flexibility in Scheduling Energy and Capacity from the MF Plant for the

1 purpose of meeting the NL Native Load provided that such flexibility shall be
2 subject to the provisions of Section 3.2(a). ... (underlining added)

3 **Question:**

4 **Please explain in detail the nature of each of the restrictions and limitations**
5 **mentioned in s. 3.2(a), namely: (i) Contracted Commitments, (ii) Capacity of the**
6 **MF Plant, (iii) WMA limitations, (iv) hydrological conditions, and (v) Forgivable**
7 **Events.**

8 **In particular, please explain:**

9 **a) the nature of the “WMA limitations”(s. 3.2(a) (iii)), and how they might**
10 **affect the scheduling of Capacity;**

11 **b) the extent to which “hydrological conditions” (s. 3.2(a) (iv)) depend on**
12 **the operations of the Churchill Falls plant, and how the operating choices**
13 **made by CF(L)Co will affect available capacity from the Muskrat Falls plant;**
14 **and**

15 **c) the definition of ‘Forgivable Events’ (s. 3.2(a) (v)). In particular, please**
16 **indicate whether or not plant unavailability due to a North Spur slide**
17 **would be considered a Forgivable Event under the PPA.**

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20 A. The restrictions and limitations referenced in Section 3.2(a) are further discussed
21 below. Defined terms are from the Power Purchase Agreement:

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23 **“Contracted Commitments”** means firm commitments by
24 or on behalf of Muskrat as permitted by this Agreement to
25 sell Energy and Capacity in External Markets under
26 contracts for prescribed amounts of such Energy and
27 Capacity for fixed durations, and includes the NS Block...
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1 Consequently, capacity associated with the Nova Scotia Block would be deducted
2 from the Muskrat Falls plant capacity during the hours when the Nova Scotia Block
3 is to be delivered.

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5 The capacity of the Muskrat Falls Plant is nominally 824 MW, but would be
6 determined based on the plant operating conditions at any point in time, and most
7 importantly based on the net head available at the plant.

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9 Hydrological conditions vary continuously and are a constant limitation on any
10 hydroelectric plant. For Muskrat Falls, dispatch must be coordinated to maintain
11 reservoir levels between minimum supply level (38.5 m) and full supply level (39.0
12 m). The operational target for Muskrat Falls would be to maintain full supply level
13 to maximize plant efficiency and to maintain a reserve of water in the reservoir for
14 drawdown during peak periods if necessary.

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16 While Muskrat Falls is downstream of Churchill Falls, and therefore inflows to the
17 Muskrat Falls reservoir are partially comprised of outflows from Churchill Falls, the
18 Water Management Agreement (WMA) provides a mechanism for energy to be
19 stored in the Churchill Falls reservoir for use during periods when output from
20 Churchill Falls is reduced.

21

22 The WMA for the Churchill River limits the available capacity available under the
23 PPA to the actual capacity available at the Muskrat Falls plant. While the nominal
24 capacity of the Muskrat Falls plant is 824 MW, the available capacity will be less
25 than 824 MW at times during equipment maintenance or as a result of a forced
26 outage. During such times, the WMA does not permit the Muskrat Falls operator to
27 draw on capacity from other facilities, and Muskrat's capacity is limited to the
28 actual capacity available at the plant.

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“Forgivable Event” means any one of a Force Majeure, Planned Maintenance, a Safety Event or an action required to be taken by a Party to comply with Good Utility Practice unless such action is necessitated by or results from such Party’s failure to comply with Good Utility Practice...

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In relation to the specific question posed regarding a North Spur slide, although not anticipated, such an event would be expected to be forgivable, as Good Utility Practice is being followed for the design and construction of the North Spur improvements.

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