

1 **Q. Page 11, Lines 2 to 4: Providing Newfoundland Power a billing demand credit for**
2 **curtailable load consistent with the generation credit establishes a set billing**
3 **demand credit for the period between test years. What does Mr. Brockman propose**
4 **with respect to the establishment of Newfoundland Power's billing demand between**
5 **test years to address growth or decline in the amount of curtailable load? In the**
6 **response, please explain why such a proposal is reasonable.**

7
8 **A. A. Background**

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10 Newfoundland Power's Rate #2.3 and #2.4 customers who participate in the Company's
11 Curtailable Service Option ("CSO") must demonstrate their ability to curtail to the
12 satisfaction of Newfoundland Power prior to availing of the CSO rate option. Customers
13 participating in the CSO will benefit from a curtailment credit by (i) reducing demand by
14 a specific amount during curtailment periods; or (ii) contracting to reduce demand to a
15 firm demand level which the customer's maximum demand must not exceed during a
16 curtailment period. Newfoundland Power will call upon its CSO customers to curtail
17 during the calendar months of December, January, February and March.

18
19 To ensure compliance with the CSO and to ensure the curtailable load is reliable,
20 Newfoundland Power's CSO option contains penalties should a CSO customer fail to
21 curtail when requested. A CSO customer that fails to curtail when requested will see a
22 reduction in their Curtailment Credit of 50%. If a customer fails to curtail a second time
23 during a winter season, the Curtailment Credit will be reduced by a further 25%. Should
24 a CSO customer fail to curtail three times during a winter season, the Customer forfeits
25 100% of the Curtailment Credit and will no longer be entitled to service under the CSO.¹
26 To further ensure compliance with the CSO, Newfoundland Power requires that
27 participating customers have load monitoring equipment installed that is accessible to the
28 Company.

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30 **B. Proposal**

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32 Mr. Brockman proposes the following for establishing Newfoundland Power's billing
33 demand between test years to address growth or decline in the amount of curtailable load.

- 34
35 1. Hydro and Newfoundland Power should develop a mutually agreeable method for
36 annually testing how much load curtailment Newfoundland Power has available.
37 This amount should account for the likelihood that not all customers will successfully
38 curtail load everytime they are asked. Mr. Brockman does caution that testing
39 curtailments when the system does not need them runs a danger of driving customers
40 off the rate, if it is not done judiciously.

41
42 Newfoundland Power's peak load forecast identifies the amount of load curtailments
43 which are forecast to reduce its native peak demand. The amount of load curtailment

¹ See Attachment A, Newfoundland Power Inc. Curtailable Service Option (for Rates #2.3 and #2.4 only).

used in the Company's peak load forecast reflects the historical relationship between the sum of each of its customers load available for curtailment and the amount of curtailment actually achieved. The results of Newfoundland Power's curtailment activity are filed annually with the Board.² For the period of test year, the amount used to reduce billing demand should be determined based on the annual test.

2. Until such time as a mutually acceptable curtailment test is devised, Mr. Brockman would suggest that a historical percentage of actual load curtailed vs. load curtailment requested by Newfoundland Power be used to determine a curtailment credit.

Table 1 below shows the percentage of the available curtailment under Newfoundland Power's CSO that was actually achieved from the 2005/2006 winter season to the most recent winter season of 2013/2014.

Table 1 Newfoundland Power Actual Curtailed Load vs Requested Curtailments			
Winter Season	Number of Requests (per season)	Percent of Available Load Curtailed	Curtailed (MW)
2005/2006	2	81%	7.0 - 9.5
2006/2007	4	95%	7.2 - 10.6
2007/2008	5	73%	5.9 - 9.0
2008/2009	7	76%	5.9 - 10.0
2009/2010	6	67%	6.7 - 10.4
2010/2011	2	92%	8.9 - 11.0
2011/2012	2	83%	10.0
2012/2013	8	79%	8.1 - 11.8
2013/2014	11	75%	7.0 - 8.5

3. To increase, or decrease the credited demand dollars, Newfoundland Power's existing billing demand calculation should be augmented to account for any changes between test years in the amount of curtailable load Newfoundland Power has under contract, just as the billing demand is designed to account for changes in Newfoundland Power's generation that is treated in the generation credit.

Newfoundland Power's billing demand charge will increase or decrease if the amount of generation based on an annual generation test were to change between test years.³

² See Attachment B to response to Request for Information IC-NP-001 for a copy of Newfoundland Power's most recent Curtailable Service Option Report.

³ See Hydro's 2013 General Rate Application, Section B, page 1 of 47 for a description of Newfoundland Power's annual generation test.

1 If we also subtract a curtailable load based on an agreed upon test or the suggested
2 historical percentage amounts described above, the billing demand to Newfoundland
3 Power will also change appropriately between test years.

4
5 In other words, the billing demand to NP can be changed to be:

6
7 Billing Demand = Native Peak – Generation Credit – Curtailable Load Credit.

**Newfoundland Power Inc.
Curtailable Service Option
(for Rates #2.3 and #2.4 only)**

**NEWFOUNDLAND POWER INC.
CURTAILABLE SERVICE OPTION
(for Rates #2.3 and #2.4 only)**

Availability:

For Customers billed on Rate #2.3 or #2.4 that can reduce their demand ("Curtail") by between 300 kW (330 kVA) and 5000 kW (5500 kVA) upon request by the Company during the Winter Peak Period. The Winter Peak Period is between 8 a.m. and 9 p.m. daily during the calendar months of December, January, February and March. The ability of a Customer to Curtail must be demonstrated to the Company's satisfaction prior to the Customer's availing of this rate option.

Credit for Curtailing:

If the Customer Curtails as requested for the duration of a Winter, the Company shall credit to the Customer's account the Curtailment Credit during May billing immediately following that Winter. The Curtailment Credit shall be determined by one of the following options:

Option 1:

The Customer will contract to reduce demand by a specific amount during Curtailment periods (the "Contracted Demand Reduction"). The Curtailment Credit for Option 1 is determined as follows:

Curtailment Credit = Contracted Demand Reduction x \$29 per kVA

Option 2:

The Customer will contract to reduce demand to a Firm Demand level which the Customer's maximum demand must not exceed during a Curtailment period. The Curtailment Credit for Option 2 is determined as follows:

Maximum Demand Curtailed = (Maximum Winter Demand - Firm Demand)

Peak Period Load Factor =
$$\frac{\text{kWh usage during Peak Period}}{(\text{Maximum Demand during Peak Period} \times 1573 \text{ hours})}$$

Curtailment Credit = ((Maximum Demand Curtailed x 50%) + (Maximum Demand Curtailed x 50% x Peak Period Load Factor)) x \$29 per kVA

Limitations on Requests to Curtail:

Curtailment periods will:

1. Not exceed 6 hours duration for any one occurrence.
2. Not be requested to start within 2 hours of the expiration of a prior Curtailment period.
3. Not exceed 100 hours duration in total during a winter period.

The Company shall request the Customer to Curtail at least 1 hour prior to the commencement of the Curtailment period.

**NEWFOUNDLAND POWER INC.
CURTAILABLE SERVICE OPTION
(for Rates #2.3 and #2.4 only)**

Failure to Curtail:

Failure to Curtail under Option 1 occurs when a Customer does not reduce its demand by the Contracted Demand Reduction for the duration of a Curtailment period. Failure to Curtail under Option 2 occurs when a Customer does not reduce its demand to the Firm Demand level or below for the duration of a Curtailment period.

The Curtailment Credit will be reduced by 50% as a result of the first failure to Curtail during a Winter. For each additional failure to Curtail, the Curtailment Credit will be reduced by a further 25% of the Curtailment Credit. If the Customer fails to Curtail three times during a Winter, the Customer forfeits 100% of the Curtailment Credit and the Customer will no longer be entitled to service under the Curtailable Service Option.

Notwithstanding the previous paragraph, no Curtailment Credit will be provided if the number of failures to Curtail equals the number of Curtailment requests.

Termination/Modification:

The Company requires six months written notice of the Customer's intention to either discontinue Curtailable Service Option or to modify the Contracted Demand Reduction or Firm Demand level.

General:

Services billed on this Service Option will have approved load monitoring equipment installed. For a customer that Curtails by using its own generation in parallel with the Company's electrical system, all Company interconnection guidelines will apply, and the Company has the option of monitoring the output of the Customer's generation. All costs associated with equipment required to monitor the Customer's generation will be charged to the Customer's account.