

1 **Q. Re: Liberty Report, Conclusion 2.21 (pp.33)**

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3 **Citation:**

4 **Thus, without being critical of efforts that have been undertaken, it is clear**
5 **that a focus on demand (versus energy) reduction has particular**
6 **importance. A variety of efforts planned for this upcoming year recognize**
7 **the need to add that focus. We underscore the importance of promptly and**
8 **comprehensively pursuing them.**

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10 **Preamble: It appears that NP has little experience with respect to CDM programs**
11 **focussed on demand reduction.**

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13 **Please confirm or correct the affirmation in the Preamble.**

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15 **Given its limited experience in capacity-focused CDM, how will NP proceed in order**
16 **to develop aggressive and cost-effective demand reduction CDM programs as**
17 **quickly as possible?**

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19 **A.** Newfoundland Power's current curtailable service option for customers is an example of
20 a cost effective demand reduction program. It has been available to customers for 20
21 years.

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23 Newfoundland Power's and Newfoundland and Labrador Hydro's ("Hydro") more recent
24 joint 5-year plans have focussed primarily on energy conservation because high marginal
25 energy costs (which predominately reflect fuel costs at Hydro's Holyrood Thermal
26 Station) justified such a focus.¹ Prior to the events of December 2013-January 2014, the
27 insufficiency of generation on the Island Interconnected system was not evident.² For
28 these reasons, Newfoundland Power's recent conservation planning has not been capacity
29 focussed.

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31 Since the events of December 2013-January 2014, Newfoundland Power has given
32 greater consideration to possible cost effective demand based programs. In October
33 2014, Newfoundland Power commenced a pilot program to reduce peak demand by
34 controlling hot water tanks in residential customers' homes. Hot water heating is the
35 second single biggest end use of electricity in the residential sector. The residential
36 sector accounts for an estimated 69% of Newfoundland Power's customers' aggregate
37 demand. The objective of this of this pilot program is to assess the economic and
38 technical feasibility of demand load control to reduce overall peak demand. By mid-

¹ See *5-year Energy Conservation Plan: 2008-2013* at page 8 and *5-year Energy Conservation Plan: 2012-2016* at page 15.

² The circumstances surrounding resource planning for the Island Interconnected System and the contextual role of those circumstances is described at *C.I.1 Supply Planning for the Island Interconnected System* at page 47 *et seq* of Newfoundland Power's Interim Report of March 24th, 2014.

1 2015, Newfoundland Power expects to fully understand the costs and technical feasibility
2 of this technology.

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4 As the Liberty Consulting Group has indicated, marginal costs analyses are critical to the
5 determination of whether demand reduction programs are cost effective. In addition, a
6 revised study of current potential for conservation and demand management on the Island
7 Interconnect System is underway.³ These analyses and study are key tools in the
8 development of *cost-effective* CDM programs.

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10 Since 2008, Newfoundland Power has developed significant CDM assessment, program
11 development and implementation capabilities. The Company does not view energy
12 conservation program development and implementation to be materially different from
13 demand conservation program development and implementation in a conceptual sense.⁴

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15 Once (1) current demand conservation potential, (2) economic and technical feasibility of
16 technologies, and (3) electrical system cost dynamics are known, cost effective demand
17 reduction programs can, in Newfoundland Power's view, be expeditiously developed and
18 implemented.

³ See generally the Liberty Consulting Group Report addressing Newfoundland and Labrador Hydro, December 17th, 2014 at pp. 27-30. The revised conservation and demand management potential study is expected to be complete by mid-year 2015.

⁴ Perhaps the biggest difference between demand conservation/response programs and energy conservation programs relates to the degree of utility control over customer electricity usage. For example, the current hot water tank pilot program practically requires Newfoundland Power to be able to switch off customers' hot water tanks. By contrast, energy conservation programs tend to focus on voluntary alteration of customers' electricity usage patterns.