

- 1 Q. With regard to the response to CA 14 NLH concerning the treatment of NP
2 generation (Exhibit RDG-2):
- 3 (a) Was an option considered where costs would be assigned in the cost
4 of service study on the basis of “net” rather than “gross” customer
5 demand (referred to as native load) with no generation credit?
- 6 (b) Would this approach be more consistent with treatment in other
7 jurisdictions?
- 8 (c) Would this approach avoid the need to derive a “value” of NP
9 generation?
- 10 (d) What are the pros and cons of this alternative with respect to NP- and
11 IC-owned generation?
- 12 (e) What would be the impact on cost allocations to Rural, IC and NP
13 customer classes?
- 14 (f) How might such an alternative be implemented?
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- 17 A. (a) Yes, this option was considered as Option C in the document “Review
18 of Rate Design for Newfoundland Power”, dated April 9, 2003 (“NP
19 Rate Design Report”) and filed as part of Hydro’s 2003 GRA.
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- 21 (b) The treatment accorded customer-owned generation in various
22 jurisdictions is specific to the circumstances of each utility and, as
23 such, it would not be prudent for Hydro to advocate a specific
24 treatment of customer-owned generation based solely on which
25 method was more prevalent without a full understanding of the
26 particular details and policy in each and how it pertains to its own
27 system.

1 (c) Yes.

2
3 (d) The concerns with this approach are that the net price signal may
4 result in NP not operating its hydroelectric and thermal generation
5 assets to result in the most efficient use of the Province's natural
6 resources and the least cost reliable supply of electricity. Hydro
7 believes that except during periods when the Island Interconnected
8 System is constrained and is exposed to security risks or higher
9 supply costs, the least cost supply of electricity to all consumers can
10 be achieved by NP operating its hydroelectric generators in a manner
11 to maximize energy production and for it not to operate its thermal
12 generators. The power system operators at Hydro's Energy Control
13 Centre are best suited to make the assessment of when such
14 exceptions occur.

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16 With respect to the approach to the ICs, Hydro has concerns that the
17 ICs may not be operating their hydroelectric units in the most efficient
18 manner because they are operating to minimize their demand costs.
19 In fact, Hydro has approached Corner Brook Pulp and Paper to
20 consider modifications to their contract provisions that would
21 encourage more efficient use of their hydroelectric plants. Corner
22 Brook Pulp and Paper is the only IC with flexibility in its generation
23 operation to take advantage of such provisions. The nature of the
24 Exploits River hydroelectric generation facilities owned by ACI does
25 not lend it to hydroelectric generation efficiency improvements by
26 flexible demand billing provisions. The ACI generation cannot be
27 increased or decreased to follow hourly demand.

1 If a net billing approach is taken, NP will receive a price signal that
2 would encourage them to operate their hydroelectric generators at
3 maximum output and place all available thermal generation in
4 operation on every day they approach peak conditions. This could
5 occur when the Island Interconnected System is not operating under
6 any constraints necessitating such action and therefore results in
7 higher costs through less efficient use of the hydroelectric resources
8 and the burning of fossil fuels.

9
10 The benefits of the net approach from Hydro's perspective are
11 simplicity in billing/metering and clarity in the cost allocations in the
12 cost of service. Under the current scenario additional meter
13 infrastructure is required on NP's generators and the billing process is
14 a little more complex in order to obtain and verify the additional
15 metering data. The controversy surrounding the value of NP
16 Generation and the perceived inequity in the treatment of NP and IC
17 generation would also be reduced if not eliminated using the net
18 approach.

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20 Hydro believes that the costs of less efficient use of NP generation
21 outweigh the benefits of the simplicity in billing/metering and that the
22 issue can be resolved in this proceeding.

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24 (e) The impact on rural, IC and NP customer classes of assigning costs
25 based on net generation is dependent on: (1) the net peak load
26 magnitude Hydro forecasts for NP and the IC; and (2) how NP and the
27 IC respond in relation to Hydro's peak forecast. If the net generation
28 is implemented as illustrated under Option C in the NP Rate Design
29 Report, it will require that NP run its thermal generation at full capacity

1 during Hydro's system peak in order to not incur additional demand
2 charges. It will also encourage NP to dispatch their hydraulic
3 generation in a less than optimal fashion during potential peak periods
4 in order to avoid demand charges. However, in doing so, as
5 discussed in the report and in response to part (d) of this question, the
6 overall effect of net generation will be to cause inefficient operation of
7 Hydro's system; additional costs to the Island Interconnected
8 customers; and potential loss of revenues to Hydro. The current
9 demand and energy rate to NP in conjunction with the generation
10 credit makes the rate to NP generation-independent, and, in doing so,
11 encourages more efficient generation and mitigates Hydro's risk of lost
12 revenues.

13
14 (f) In order to avoid the concerns expressed in (d) above, constraints
15 would have to be placed on NP through an agreement or Board order
16 to cause NP to operate their generators in the same manner as is
17 encouraged in the current approach. It would also require provisions
18 to examine NP's generation operation to ensure compliance due to
19 the obvious financial motives for NP to avoid higher demand costs.

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21 Alternatively, complex real-time pricing signals similar to what occurs
22 in unregulated jurisdictions could be implemented. In this manner, NP
23 and IC would track hourly costs and decide, based on those costs,
24 what and how to operate. Hydro believes the complexity of such an
25 approach would add to the overall system cost and would not result in
26 any significant benefit over the current approach.