

1 Q. Exhibit RDG-2 relating to the report on the treatment of NP generation:

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3 a. How is embedded generation (i.e., generation embedded in a  
4 distribution system) treated in cost of service/rate design in other  
5 jurisdictions?

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7 b. What lessons have been learned on the treatment of embedded  
8 generation in competitive electricity markets?

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10 c. Page 15 of the report includes an alternative where Hydro would  
11 purchase NP thermal generation. Was an alternative considered  
12 where instead of purchasing the thermal generation assets, Hydro  
13 would purchase the power from NP thermal generation assets while  
14 the assets would remain under the ownership of NP; i.e., similar to  
15 purchases from IPPs?

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17 d. On page 14 it is stated that “uncertainty as to the Board’s desire to  
18 introduce marginal cost principles in the costing process” is a  
19 disadvantage. Why is this considered a disadvantage, and how does it  
20 relate to the design standards listed on page 5?

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22

23 A. Exhibit RDG-2 relating to the report on the treatment of NP generation:

24 a. In other jurisdictions that Mr. Greneman is familiar with, customer-  
25 owned generation is generally run to serve the customer’s own load or  
26 for backup purposes and therefore is not included in the utility’s cost to  
27 serve. However, if there is a system emergency, the utility may  
28 request that the customer ensure that its generation is running. In

1 return for providing support during system emergency, the customer  
2 can receive credit under a special contract that recognizes the  
3 emergency value of the backup generation or by means of a load  
4 management type of incentive. In order to encourage alternative  
5 generation resources, such as wind and solar, embedded generation  
6 less than a nominal threshold level, e.g., 75 kW, is typically addressed  
7 through net metering.

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9 b. There is not currently standard treatment for embedded generation  
10 except as noted in (a), above, when a unit is of a nominal size such  
11 that it is treated through net metering. In a competitive electricity  
12 market where the utility also has an obligation for the supply of power  
13 to customers, the value of embedded generation may increase or  
14 decrease in relation to competitive locational market prices. If the  
15 utility is a distribution-only utility, the value of embedded generation to  
16 the utility would be dependent on the ability of the generation to  
17 provide necessary service to the delivery system. Embedded or  
18 distributed generation in the competitive market is under investigation  
19 in some jurisdictions to understand its appropriate treatment by  
20 regulated distribution entities (e.g., need for standby rates) and within  
21 the competitive market. As noted above, net metering is still in place  
22 in many jurisdictions for smaller facilities.

23  
24 c. Yes, this alternative was considered. Table 6 in the Treatment of NP  
25 Generation report provides sufficient alternatives for the eventual  
26 value that might be negotiated as part of the contract discussions.

27  
28 d. In an embedded cost environment, fully-allocated cost of service is the  
29 standard to assess the degree to which revenue requirement is

1                   equitably apportioned among customer classes. The avoided cost  
2                   alternative was listed as a potential disadvantage with respect to  
3                   uncertainty of acceptance by the Board of marginal cost principles in  
4                   the costing process. With respect to the design standards on page 5,  
5                   the introduction of marginal cost principles in embedded costing  
6                   relates to equitability among customer classes, relationship to cost  
7                   causation and practical implications.