

1 **Q. Further to the reply to CA-NP 125, please confirm that customers choosing electric**  
2 **hot water and/or heat see significant savings over a furnace oil alternative under**  
3 **both current and proposed rates, but the marginal cost of supplying hot water and**  
4 **heat to these customers is much higher for electricity than furnace oil. Is it fair to**  
5 **say that the electricity consumers on the Island Interconnected System are**  
6 **providing a significant subsidy to new customers choosing electric hot water or**  
7 **heating?**

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9 A. The response to Request for Information CA-NP-125 shows that the annual operating  
10 cost for space heating and water heating is currently less using electricity than furnace oil.

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12 The response to Request for Information CA-NP-125 also shows that the marginal cost of  
13 supply on the Island Interconnected System is materially greater than the cost to  
14 customers based on electricity rates. This relationship reflects the fact that the cost of  
15 Holyrood fuel is the *marginal* cost of supply, and customer rates reflect the recovery of  
16 the *average* cost of supplying customers.

17  
18 The marginal cost of supply is materially greater than the average cost reflected in rates  
19 for both existing customers and new customers. As a result, the marginal supply cost of  
20 any additional load requirements (either increased energy usage by *existing* customers or  
21 energy usage by *new* customers) is materially greater than the revenues resulting from the  
22 additional load requirements.

23  
24 In Newfoundland Power's assessment, it is not fair to say that existing electricity  
25 consumers on the Island Interconnected System are providing a significant subsidy to  
26 new customers choosing electric hot water or heating.

27  
28 Newfoundland Power assesses the fairness of its rates, and the degree of cross-  
29 subsidization, by comparing the revenue collected from each class with the cost to serve  
30 that class as determined through an embedded cost of service study (i.e., the "revenue to  
31 cost ratio"). The Rate Design Report provided an analysis of the embedded cost recovery  
32 for Domestic customers with electric heat separately from Domestic customers without  
33 electric heat. The results of the analysis indicated that the Domestic rate provides  
34 reasonable recovery of embedded costs for both sub-groups.<sup>1</sup>

35  
36 In addition, an analysis of cross-subsidization based on marginal costs was completed as  
37 part of a 2007 marginal cost study. The study provided no indication of cross-  
38 subsidization between Domestic customers with electric-heat and Domestic customers  
39 without electric heat.<sup>2</sup> The study results indicated the revenue to cost ratios for both  
40 customer groups on a marginal cost basis were approximately the same.

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<sup>1</sup> See Section 3.1.3 of the Rate Design Report provided in response to Request for Information CA-NP-144.

<sup>2</sup> In January 2007, NERA Economic Consulting completed the *Newfoundland Power Marginal Cost of Electricity Study*. The revenue to cost ratios by class on a marginal cost basis are provided in Schedule 27 of the study (2008 GRA, Volume 2, Supporting Materials, Tab 12, page 37).