

1 Q. With regard to the report filed with CA -13 NLH titled *A Review of the*
2 *Adequacy of the Lifeline Block on Diesel Electric Systems*, on page 8 of 10 it
3 is indicated that short run marginal costs on the diesel systems are about
4 12.7 cents/kWh, and NLH is recovering about 65% of its short run marginal
5 costs. In response to CA -7 NLH, page 2 of 2, it is indicated that that the cost
6 to supply water heating for Labrador Diesel and Island Diesel customers is
7 \$1733 and \$2751, respectively, compared to customer costs of \$280. Please
8 reconcile these figures.

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11 A. Hydro incurs a short run marginal cost and a total cost of production for every
12 kWh produced on the diesel systems.

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14 The short run marginal cost refers to the variable cost of production, which is
15 the cost of diesel fuel. The 12.7 cents/kWh referenced in CA-13 NLH was
16 Hydro's average variable, or short run marginal cost of production, per kWh,
17 during 2002. The marginal revenue received from a diesel customer for the
18 electricity used in a water heater is about the average of the first and second
19 block domestic diesel tariffs, which as of September 1, 2002 was 8.4
20 cents/kWh. The revenue received from a domestic customer therefore
21 covered about 65% (i.e. $8.4 / 12.7$) of NLH's short run marginal cost in 2002.

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23 The reference to CA -7 NLH and the cost of supplying electricity for water
24 heating is Hydro's total cost of electricity production on the Island or Labrador
25 diesel systems. It is Hydro's total cost of service and includes all variable and
26 fixed costs. As an illustration of the cost relationship, and assuming that the
27 total cost of service in 2004 were applicable in 2002, the variable cost of
28 production of about \$420 (i.e. 12.7 cents/kWh multiplied by 3,300 kWhs for

1 water heating) accounted for almost 25% of the total cost of supplying
2 electricity for the Labrador diesel systems (i.e. \$420 / \$1733)

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4 The reference to customer costs of \$280 (from CA-7 NLH) represents the
5 marginal cost to a customer for electricity purchased from Hydro for water
6 heating. As above, the average unit electricity cost for the customer is about
7 the average of the first and second block domestic diesel tariffs, which as of
8 July 1, 2003 was 8.5 cents/kWh. The \$280 is derived using unit price and
9 annual electricity usage for water heating (i.e. 8.5 cents/kWh multiplied by
10 3,300 kWhs).