

1 Q. What is Hydro's estimate of the annual penetration rate for heat pumps by island
2 interconnected customers? Has any trend in the reliance on heat pumps been
3 incorporated in Hydro's load forecast for the island interconnected system?
4

5 A. Hydro does not have statistics on the annual penetration rate for heat pumps by
6 Island Interconnected customers. Hydro is monitoring the residential consumer
7 market activity for heat pumps through dialogue and information sharing with
8 Newfoundland Power. Both the 2015 Conservation and Demand Management
9 (CDM) Potential Study and the results from a study by Newfoundland Power of
10 customers using heat pumps indicate the potential for reduced electricity
11 consumption by customers for heating purposes associated with the installation of
12 this technology.
13

14 Hydro's load forecast for the Island Interconnected System does not currently
15 incorporate an explicit trend on the reliance on heat pumps; however, Hydro's load
16 forecast methodology implicitly reflects the adoption of heat pumps through
17 changes in customer consumption levels associated with increasing electricity price
18 levels. The recently prepared load forecasts for the Island Interconnected System
19 reflect projected electricity price levels that result in reduced customer
20 consumption levels that generally reflect increased saturation levels of heat pumps
21 in the customer base.
22

23 It is Hydro's opinion that it is early in the adoption stage for heat pump
24 technologies within the Island Interconnected System customer base. The impacts
25 due to increased market saturation levels of heat pumps on the overall Island
26 Interconnected System energy and demand levels requires further analysis and

- 1 study before incorporating any explicit trend on the reliance on heat pumps in the
- 2 load forecast models.