

1 Q. Provide a detailed explanation of the communication and coordination that occurs  
2 with Newfoundland Power regarding the Island Interconnected system demand and  
3 availability of generation, including Newfoundland Power's, to meet the system  
4 load.

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7 A. Hydro is responsible for managing generation resources in order to meet the Island  
8 Interconnected System demand. Hydro coordinates this with Newfoundland  
9 Power.

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11 On an ongoing basis, Hydro and Newfoundland Power share real-time data  
12 between the control centres' energy management systems. Data that is shared  
13 between the utilities include individual generating unit output levels, the system  
14 demand and the system frequency. The data that is shared in real-time is  
15 presented in consolidated reports, allowing Hydro's control room operators to see  
16 at a glance the status of Newfoundland Power generating units, their regional  
17 generation totals and company generation total.

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19 In addition, on an ongoing basis, Hydro and Newfoundland Power coordinate  
20 planned equipment outages to minimize the impact on customers and ensure  
21 power system security.

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23 Annually, Newfoundland Power provides to Hydro its five-year forecast, by month,  
24 of its energy and peak requirements from Hydro, net of their generation supply.  
25 Hydro uses this forecast, together with forecasts for Hydro's Industrial and Rural  
26 Customers, to develop a five-year forecast, by month, of the Island Interconnected  
27 System energy and peak demands. As well, each year Hydro and Newfoundland

Power discuss and coordinate the performance of Newfoundland Power's generation test to prove the availability of their generation plants for the winter period.

Monthly, Hydro issues a report to its control room operators regarding the cost and start-up times associated with all standby resources, including gas turbines and diesels owned by Newfoundland Power. This report presents the status of all standby generation and the time required to start them.

Daily, Hydro and Newfoundland Power communicate and coordinate generation resources in order to meet the system demands. Newfoundland Power reports to Hydro on the availability of their generating units. As required, Hydro's control centre discusses with Newfoundland Power's the availability of water resources in their small hydroelectric facilities to ensure timely use of their generation and to maximize the benefits in maintaining customer supply. Hydro also makes requests to Newfoundland Power, as required, to change the level of production output of their hydroelectric units.

During periods when the system demand is expected to be high or when system generation reserves are at risk, Hydro and Newfoundland Power coordinate some additional activities. When cold weather and high system demands are on the forecast horizon, hourly forecasts of system demand are shared with Newfoundland Power. Following Hydro's instruction titled "Generation Loading Sequence and Generation Shortages", as attached in PUB-NLH-033 Attachment 1, Hydro may request Newfoundland Power to curtail their interruptible customers and request Newfoundland Power to place in service their standby gas turbine and diesel units to help meet the system demand. Hydro and Newfoundland Power discuss the

1 appropriate timing associated with each of these requests to ensure the maximum  
2 benefit to the system and to minimize impacts to customer service.

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4 Though rarely used, there are other activities that Hydro and Newfoundland Power  
5 coordinate to ensure a balance between system supply and demand. Hydro and  
6 Newfoundland Power coordinate delivery point voltage reduction strategies by  
7 reducing the voltage on certain power system elements to reduce the system  
8 demand. Hydro and Newfoundland Power coordinate public conservation requests,  
9 using a consistent message. As well, both utilities coordinate the rotating outage  
10 process to ensure the reliability and integrity of the power system, maintain a  
11 balance between supply and demand and minimize impacts to customers.