

1 **Q. (Reference Application, 4.2 Mobile Hydro Plant Refurbishment, page 3,**
2 **Footnote 8) Has Newfoundland Power or Hydro derived a system value for the**
3 **black-start capability of the Mobile plant? Does Hydro pay Newfoundland**
4 **Power for this capability?**
5

6 A. Neither Newfoundland Power or Hydro derived a system value for the black start
7 capability of the Mobile Plant.
8

9 In addition to energy and capacity benefits, the Mobile Plant provides reliability benefits
10 for customers on the Southern Shore of the Avalon Peninsula. There are approximately
11 4,500 customers in this area that are served by three substations supplied by radial
12 Transmission Line 24L. The Mobile Plant is one of seven hydro plants on the Southern
13 Shore. When maintenance is required and the transmission line is deenergized, or if
14 there is an unplanned outage on Transmission Line 24L, these plants can operate as an
15 isolated system to supply customers in the area.¹
16

17 Hydro does not pay Newfoundland Power for the black start capability of the Mobile
18 Plant or equivalent functionality at any of the Company's other hydro plants.
19 Newfoundland Power's small hydro plants were constructed before the interconnection
20 of the Island Interconnected System and provided electricity to proximate communities.
21 Like the Mobile Plant, most of the Company's small hydro plants are located on radial
22 transmission systems in rural parts of the Province. Newfoundland Power continues to
23 maintain black start capability with its small hydro plants to ensure they are able to
24 supply electricity during planned and unplanned transmission outages.
25

26 The Board has previously acknowledged the beneficial role of Newfoundland Power's
27 hydro production in the provision of least-cost reliable service to customers and the
28 prudence of capital expenditures required to maintain these assets.²

¹ Black start capability is of particular importance during unplanned outages. In a black start situation, the Mobile Plant's function as the isochronous generator on the Southern Shore provides the frequency control necessary to allow the other six hydro plants to be started. Without such a system to synchronize with, the other generators could not be started.

² See Order No. P.U. 36 (2021), Reasons for Decision, page 10, line 31.