

1 Q. (Re: Response to CA-NLH-53) In GRA, Volume II, Exhibit 3 it is stated certain facilities
2 for construction supply to Muskrat Falls "will be fully contributed and is assigned as
3 common due to the system capacity benefits". Please identify any assets that have
4 been assigned as common and quantify the system capacity benefits; i.e., capacitor
5 banks and other terminal station equipment.

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8 A. The facilities added at Muskrat Falls for construction power supply to Muskrat Falls
9 assigned as common assets include:

- 10 • Four 138 kV disconnect switches (B1L1301-1, B1L1302-1, B1L1302-2 and
11 B1T1-1);
- 12 • Two 138 kV circuit breakers (B1L1302 and B1T1);
- 13 • Two 138 kV ground switches (L1301G and L1302G);
- 14 • One 138/25 kV power transformer with an on-load tap changer;
- 15 • Two 25 kV disconnect switches (B2T1-1 and B2B3-1);
- 16 • Three 25 kVA single phase distribution transformers for station service;
- 17 • One 25 kV circuit breaker (B2B3);
- 18 • Six 25 kV vacuum circuit breakers for capacitor bank switching (B3C1, B3C2,
19 B3C3, B3C4, B3C5 and B3C6);
- 20 • Six 25 kV, 3.6 MVAR shunt capacitor banks; and
- 21 • Associated bus work, insulators, protection and control panels.

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23 As with Hydro's other general service customers, infrastructure before the point at
24 which the customer is metered is common.

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26 The total transfer capacity of the 138 kV transmission line east of Churchill Falls was
27 63 MW prior to the addition of the 138/25 kV station at Muskrat Falls. The addition

1 of the construction power facilities at Muskrat Falls increases the total transfer
2 capacity of the transmission line such that both the construction power load and
3 the Happy Valley-Goose Bay load can be supplied throughout the construction
4 phase. The total Labrador East transfer capability of the 138 kV transmission
5 system during the Muskrat Falls construction phase equals 76 MW. Following
6 completion of the Muskrat Falls development and removal of the construction
7 power load on the 138 kV transmission line, continued use of the facilities at
8 Muskrat Falls will enable supply of up to 73.5 MW to Happy Valley-Goose Bay.