

1 Q. **Reference: 2018 Cost of Service Methodology Review Report dated November 15, 2018**

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3 On page 14 (lines 24 to 25) it is stated “*Hydro recommends that all functionalized*
4 *transmission costs be classified as 100% demand related. This is consistent with the*
5 *approach currently used in the cost of service study.*” Please provide documentation
6 showing that each transmission line connecting the Avalon Peninsula with the remainder of
7 the Island system has been committed to meet growing demand.

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10 A. There are no specific document(s) showing that each transmission line connecting the
11 Avalon Peninsula with the remainder of the Island Interconnected System was built to meet
12 growing demand in the context of functionalization for Cost of Service purposes.

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14 During Stage I of the Bay d’Espoir Development, the 230 kV transmission lines that are now
15 numbered as TL 201,¹ TL 202,² TL 203,³ TL 266,^{4,5} and TL 236⁶ were completed between
16 1965 and 1966 to connect hydroelectric generation at Bay d’Espoir to demand on the
17 Avalon Peninsula (specifically Sunnyside, Western Avalon and Oxen Pond Terminal
18 Stations). Had the existing Cost of Service principles applied, this radial transmission system
19 would have connected remotely located generation to load and, therefore, the lines would
20 have been functionalized as generation.

¹ Western Avalon Terminal Station to Soldiers Pond Terminal Station.

² Bay D’Espoir Terminal Station to Sunnyside Terminal Station.

³ Western Avalon Terminal Station to Sunnyside Terminal Station.

⁴ Soldiers Pond Terminal Station to Hardwoods Terminal Station.

⁵ During Stage I of the Bay d’Espoir Development, TL 201 connected Western Avalon Terminal Station and Hardwoods Terminal Station. With the addition of the Soldiers Pond Terminal Station into the grid, the western section of TL 201 between Western Avalon Terminal Station and Soldiers Pond Terminal Station remained TL 201, and the eastern section between Soldiers Pond Terminal Station and Hardwoods Terminal Station was renamed TL 266. TL 266 was rebuilt in 2017-2018 with a new higher-capacity steel line.

⁶ Hardwoods Terminal Station to Oxen Pond Terminal Station.

1 During Stage II of the Bay d’Espoir Development, the 230 kV lines that are now numbered
2 as TL 206,⁷ TL 207,⁸ TL 237,⁹ TL 217,¹⁰ TL 265,^{11,12} TL 242,^{13,14} TL 268,^{15,16} and TL 236¹⁷ were
3 completed between 1968 and 1970. These line additions formed the basis of the 230 kV
4 transmission system east of Bay d’Espoir. With the addition of the Long Harbour Reduction
5 Plant and the Come By Chance Oil Refinery, the 230 kV system east of Bay d’Espoir supplied
6 both residential and industrial customers. Applying today’s Cost of Service principles, the
7 two 230 kV transmission lines connecting the Avalon Peninsula to the system, at the
8 Western Avalon Terminal Station (i.e., TL 203 and TL 237), are functionalized as common
9 transmission and classified as 100% demand. In fact, all 230 kV lines to the east of Bay
10 d’Espoir, with the exception of the 230 kV line TL 208 supplying Vale Newfoundland and
11 Labrador Limited, are functionalized as common transmission. This is further supported by
12 the addition of the Holyrood Thermal Generating Station in the early 1970’s, providing the
13 ability to flow generation east or west from Bay d’Espoir or Holyrood.

⁷ Bay D’Espoir Terminal Station to Sunnyside Terminal Station.

⁸ Sunnyside Terminal Station to Come By Chance Terminal Station.

⁹ Come By Chance Terminal Station to Western Avalon Terminal Station.

¹⁰ Western Avalon Terminal Station to Soldiers Pond Terminal Station.

¹¹ Soldiers Pond Terminal Station to Holyrood Terminal Station.

¹² During Stage II of the Bay d’Espoir Development, TL 217 connected Western Avalon Terminal Station and Holyrood Terminal Station. With the addition of Soldiers Pond Terminal Station into the grid, the western section of TL 217 between Western Avalon Terminal Station and Soldiers Pond Terminal Station remained TL 217, and the eastern section between Soldiers Pond Terminal Station and Holyrood Terminal Station was renamed TL 265.

¹³ Originally Holyrood Terminal Station to Oxen Pond Terminal Station.

¹⁴ During the Avalon Upgrade TL 218, TL236, and TL 242 were renumbered. Original TL 218 (Holyrood Terminal Station to Oxen Pond Terminal Station) built in the late 1960s became TL 242 between Holyrood Terminal Station and Hardwoods Terminal Station and TL 236 between Hardwoods Terminal Station and Oxen Pond Terminal Station. Original TL 242 built in the early 1980s was renumbered as TL 218 during the Avalon Upgrade and, using the old section of TL 236, connected Holyrood Terminal Station and Oxen Pond Terminal Station.

¹⁵ Soldiers Pond Terminal Station to Holyrood Terminal Station.

¹⁶ During Stage II of the Bay d’Espoir Development the line originally numbered TL 218 in the late 1960s connected Holyrood Terminal Station and Oxen Pond Terminal Station. Please refer to footnote 3 for line numbering changes. That line, now numbered TL 242 between Holyrood Terminal Station and Hardwoods Terminal Station, was split with the addition of Soldiers Pond Terminal Station into the grid, with the eastern section of TL 242 between Soldiers Pond Terminal Station and Hardwoods Terminal Station remaining TL 242, and the eastern section between Holyrood Terminal Station and Soldiers Pond Terminal Station was renamed TL 268.

¹⁷ Hardwoods Terminal Station to Oxen Pond Terminal Station.

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- 1 TL 267¹⁸ is the most recent line to be built to connect the Avalon Peninsula to the rest of
2 the Island transmission system. The rationale for the functionalization of TL 267 is discussed
3 in Hydro's response to CA-NLH-014.

¹⁸ Bay D'Espoir Terminal Station to Western Avalon Terminal Station.