

1 **Q. Asset Management**

2 Further to the responses to PUB-NLH-088 and PUB-NLH-095 does Hydro agree with
3 the following statements:

4 *“Hydro replaced about 1.14 percent of its transmission poles*
5 *(265 out of 23,350), and 6.09 percent of its distribution poles*
6 *(2,850 out of 46,790), over the last five years. On average, the*
7 *Company has been replacing transmission poles at about 0.23*
8 *percent per year and distribution poles at about 1.2 percent*
9 *per year. At these current annual replacement rates, each*
10 *transmission pole is being replaced, on average, about every*
11 *435 years (although Hydro treats its transmission poles to*
12 *extend pole life) and each distribution pole is being replaced,*
13 *on average, about every 83 years.”*

14
15
16 **A.** Hydro agrees that the data provided in Hydro's responses to PUB-NLH-088 and
17 PUB-NLH-095 is valid and correct. Hydro does not agree with the statement posed
18 in the question.

19
20 Transmission poles are replaced based upon a rigorous condition assessment
21 process that determines the remaining theoretical strength of the pole and
22 compares that with the design loads being applied. If the design load exceeds the
23 factor of safety for the pole, then the pole will be replaced. Replacement of a line
24 segment or an entire line is based upon the condition of the various line
25 components (poles, cross arms, anchors, insulators, conductor, dampers, etc.) and
26 the energy carrying capacity. Various options are considered in a cost benefit
27 analysis using condition data to determine the timing of an overall replacement or a

1 replacement of some of the components. For example, Hydro's 2015 Capital Budget
2 Application (currently before the Board) contemplates replacing a portion of TL218,
3 starting in 2016.

4
5 Distribution poles are replaced based upon a condition assessment that is visual
6 and intrusive (resistograph readings). Remaining strength of the pole is not
7 calculated, and therefore does not play a role in the decision to replace the pole. If
8 it is determined through inspection that a significant number of poles require
9 replacement then a separate capital project would be raised to upgrade an entire
10 line or segment of the line. It is normal for insulators and anchors to be replaced at
11 the same time. Load growth also plays a role in the replacement of a line usually
12 because of the heavier conductor being used and the inability of the existing
13 structures to carry the extra weight. Hydro's 20-year capital upgrade plan for
14 distribution is established by age then verified through condition assessments in the
15 current five-year window.

16
17 Hydro assumes that its condition assessments will at some point lead to the
18 requirement to replace more poles on an annual basis or to replace distribution
19 feeder lines or entire transmission lines. Hydro does not believe that a simple
20 extrapolation from the data as set out in the foregoing statement is correct.