Hydro One Distribution Rates 2015-2019 PWU Technical Conference Questions

Issue 3.2 Is the level of planned capital expenditures appropriate for the period 2015-2019 and is the rationale for the planning and pacing choices appropriate and adequately explained?

Reference 1: Exhibit I, Tab 3.02, Schedule 3 PWU 7

c) How many poles a year would Hydro One need to replace over the test period 2015-2019 in order to maintain the current level of poles beyond the Expected Service Life (ESL)?

Response

c) Between 2015 and 2019 approximately 28,000 poles per year will be reaching their expected service life.

Reference 2: Exhibit I, Tab 2.02, Schedule 11 EP 13 (response to Energy Probe IR #13-see next page)

Filed: 2014-07-04 EB-2013-0416 Exhibit I Tab 2.02 Schedule 11 EP 13 Page 1 of 1

1	<u>Energy Probe Research Foundation (EP) INTERROGATORY #13</u>		
2 3 4 5 6	Issue 2.2	Does Hydro One Distribution's Custom Application promote and incent acceptable outcomes for existing and future customers (including, for example, cost control, system reliability, service quality, bill impacts)?	
7 8	<u>Interrogator</u>	2	
10	Reference:	Exhibit D1, Tab 2, Schedule 1, Page 24	
11 12 13 14 15 16 17 18 19 20 21 22 23	Preamble: Hydro One c fully replace annually. Ye replacement p that will have a) Can Hydr b) Under su pole repla	urrently has around 1.6 million poles with an expected life of 62 years. To that fleet over 62 years, Hydro One should be replacing around 25,000 poles t in Exhibit D1, Tab 2, Schedule 1 Hydro One says it will ramp up its pole program to 15,200 poles annually. Doing so would ensure a backlog of poles to be replaced at a future date. To One explain why it is not replacing a greater number of poles? the a program is Hydro One not laying the foundation for a future backlog in mement?	
25 24 25	<u>Response</u>		
26 27 28 29 30 31	a) Hydro O wood pol poles in 2 to minim sufficient	ne is proposing a greater number of poles for replacement as part of the e replacement program; increasing the number of replacements from 11,000 2014 to 15,200 poles in 2019. Hydro One is proposing this gradual increase ize the financial impact to the customers and ensure the plan can be ly resourced.	
32 33 34 35 36 37 38 20	In addition or replace such as: growth, ju these oth added or Hydro On	In to the annual wood pole replacement program, wood poles are also added ed on the distribution system through Hydro One's other work programs capital trouble calls and storm demand response, upgrades driven by load oint use and line relocations, and lines sustainment initiatives. Historically, er work programs result in approximately 13,000 additional poles being replaced on the system annually. Therefore by the end of the test years, he should be at a sustainable replacement rate.	
40 41 42 43	b) The back over the Hydro Or One will	log of wood poles beyond the expected service life will continue to increase test years. However as stated above in part (a), by the end of the test years ne should be at a sustainable replacement rate and in the meantime Hydro continue to manage this backlog by prioritizing pole replacements.	

Issue 2.2 Does Hydro One Distribution's Custom Application promote and incent acceptable outcomes for existing and future customers (including, for example, cost control, system reliability, service quality, bill impacts)?

Reference 1: Exhibit I, Tab 2.02, Schedule 3 PWU 2, Page 4 of 4

	Fil EE Ex Ta Sci Paj	ed: 2014-07-04 B-2013-0416 hibit I b 2.02 hedule 3 PWU 2 ge 4 of 4
1	<u>Re</u>	<u>sponse</u>
3 4 5 6 7	a)	Hydro One's proposed spending levels are a balance between system needs and rate impacts. Hydro One is proposing the minimum spending increase to maintain current reliability service levels. Therefore, 2015-2019 targets for substation and distribution line equipment interruptions are equal to the average number of interruptions from 2009-2013.
9 10 11 12		The target number of vegetation related interruptions from 2014-2016 is equal to the average number of vegetation related interruption from 2009-2013. Hydro One Distribution expects that the number of vegetation related interruptions will slightly decrease beginning in 2017 due to the reduction in the number of backlogged feeders.
13 14 15	b)	Please see Exhibit I, Tab 2.04, Schedule 1 Staff 27, Part d.
16	c)	Please see the response to part a)
17 18	d)	Please see Exhibit I, Tab 2.04, Schedule 1 Staff 27, Part d.
20 21	e)	Table 5 contains a typographical error. The target in 2016 is 7,300 interruptions.
22 23 24 25	<mark>f)</mark>	Due to the increasing age and deteriorating condition of assets in the distribution system, Hydro One Distribution anticipates that maintaining historical spending will not be sufficient to maintain current reliability. Hydro One is proposing the minimum spending increase that will maintain this reliability.
26 27	g)	Please see Exhibit I, Tab 2.04, Schedule 1 Staff 27, Part d.

Reference 2: Exhibit I, Tab 3.02, Schedule 3 PWU 6, Pages 1-3

Issue 3.2

Is the level of planned capital expenditures appropriate for the period 2015-2019 and is the rationale for the planning and pacing choices appropriate and adequately explained?

Interrogatory

e) How many stations would be at a high risk of failure by 2020 assuming Hydro One's proposed stations refurbishments over the test period 2015-2019 are accomplished?

f) How many stations would be in a high risk of failure by 2020 assuming historical replacement or refurbishment rates are maintained?

Response

e) Assuming that Hydro One's proposed station 1 refurbishments over the test period of 2015 to 2019 are accomplished, it is expected that by 2020 the number of high risk stations will remain at approximately 27% of distribution station.

f) Assuming that historical refurbishment rate (average of 5 stations per year) are maintained over the 2015 to 2019 period, it is expected that by 2020 the number of stations that will be high risk will increase by the number of stations in the proposed plan that will not be refurbished and account for approximately 44% of the distribution station population.

Issue 3.2

Is the level of planned capital expenditures appropriate for the period 2015-2019 and is the rationale for the planning and pacing choices appropriate and adequately explained?

Reference 1: Exhibit I, Tab 3.02, Schedule 3, PWU 9

a) What percentage of station transformers are currently in "Poor" or "Very Poor"condition?

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15 **Response**

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Hydro One no longer uses the terminology "Very Good", "Good", "Fair", "Poor" and "Very Poor" of the Asset Condition Assessment applied in proceeding EB-2009-0096; rather Hydro One now utilizes an Asset Risk Assessment methodology that classifies equipment condition based on level of risk relative to the asset population. As mentioned in Exhibit D1, Tab 2, Schedule 1, Page 5, approximately 24% of Hydro One's distribution station transformer condition assessments fall into the high rick category.

distribution station transformer condition assessments fall into the high risk category.

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