

- 1 **Q. (Reference Application, 2.2 Substation Power Transformer Replacements,**
 2 **page 3) It is stated "*The Company has had seven major power transformer***
 3 ***failures in the past five years.*"**
- 4 **a) How many substation power transformer failures did NP experience in the**
 5 **previous two five-year periods?**
- 6 **b) How many substation power transformers in total is NP proposing to**
 7 **replace in the 2025 CBA?**
- 8 **c) What is done with the substation power transformers that have been**
 9 **replaced?**
- 10 **d) When are the high cost and long delivery issues associated with new**
 11 **substation power transformers expected to go back to normal?**
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- 13 A. a) Newfoundland Power experienced two major power transformer failures between
 14 2009 to 2013, and three major power transformer failures between 2014 to 2018.¹
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- 16 b) Newfoundland Power is proposing the replacement of five existing power
 17 transformers with three new power transformers in the *2025 Capital Budget*
 18 *Application.*²
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- 20 c) Substation power transformers are assessed and, depending on the condition of the
 21 transformer, it may be used for a spare, considered for repair, or scrapped.
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- 23 d) The high costs and long lead times for new power transformers are influenced by
 24 global supply chain issues, labour shortages, and material costs. Inflation and the
 25 demand for grid modernization and electrification have contributed to an increase in
 26 pricing and lead times. Based on recent quoted prices and delivery times, and
 27 through discussions with vendors, it is anticipated that these pressures will continue
 28 to exist in the near future. Newfoundland Power will continue to monitor industry
 29 trends and will be in communication with suppliers to manage procurement timelines
 30 and costs.

¹ A major power transformer failure requires either transformer replacement, transportation off site for repairs, or removal from service for six months or longer. The two major power transformers failures from 2009-2013 include KEN-T1, and HCP-T1. The three major power transformers failures from 2014-2018 include RVH-T1, TRP-T1, and VIR-T2.

² The five transformers replacements include PUL-T2, GAN-T2, LOK-T1, LOK-T2, and LOK-T4. Note that LOK-T1, LOK-T2, and LOK-T4 will be replaced with one single transformer.