

- 1 **Q. (Reference Application, 2.1 2024 Substation Refurbishment and**
 2 **Modernization)**
 3 **a) Do supply chain constraints (page 1) still exist, and if so, for how long are**
 4 **supply chain issues expected to be a problem?**
 5 **b) There have been 7 major power transformer failures in the past 5 years**
 6 **(page 5). How many major power transformer failures were there in the**
 7 **previous 5-year period?**
 8 **c) Please provide evidence that this program is needed to supply customers in**
 9 **an environmentally responsible manner.**
 10 **d) Please confirm the following: i) the GAM substation serves 4,870 customers,**
 11 **1,370 in the Gambo area via a single transformer GAM-T1, and 3,500 via a**
 12 **single transformer GAM-T2 supplying the radial transmission line 115L, ii)**
 13 **the MUN substation serves 1 customer (Memorial University's St. John's**
 14 **campus) via two transformers, MUN-T1 and MUN-T2. There are two**
 15 **transmission lines supplying the MUN substation, 12L and 14L, iii) the OPL**
 16 **substation serves 1,800 customers (in the Old Perlican, Bay de Verde and**
 17 **Lower Island Cove areas) via a single transformer, OPL-T1, and iv) the ISL**
 18 **substation serves 1,100 customers in the Islington area via a single**
 19 **transformer, ISL-T1.**
 20 **e) Please identify any General Service Rate 2.4 customers served by these**
 21 **substations.**
 22 **f) Will there be customer contributions toward the cost of any of the proposed**
 23 **Substation Refurbishment and Modernization projects in 2024 and through**
 24 **to 2028?**
 25 **g) Do the looped 66 kV lines between MUN and the King's Bridge substation,**
 26 **and between MUN and the Stamp's Lane substation serve only the Memorial**
 27 **University's St. John's campus substation?**
 28 **h) Why doesn't the University own the MUN-T1 and MUN-T2 transformers and**
 29 **all equipment downstream from the transformers?**
 30
 31 **A.** a) Procurement lead times for substation equipment have not returned to pre-pandemic
 32 durations. Newfoundland Power considers this to be a supply chain constraint and
 33 has adapted to increased procurement lead times by, among other things, moving to
 34 multi-year projects for some *Substation Refurbishment and Modernization* projects.
 35 The Company cannot predict the duration of supply chain constraints.¹
 36
 37 b) There were four major power transformer failures in the five-year period from 2013
 38 to 2017.
 39
 40 c) Newfoundland Power's substations are critical infrastructure in the supply of reliable
 41 electricity service to customers. The Company's substations have a relatively small
 42 environmental footprint.
 43
 44 Newfoundland Power is committed to providing electrical service to its customers in
 45 an environmentally responsible manner. Following completion of the four identified

¹ See the response to Request for Information CA-NP-141 for more information on supply chain issues.

1 *Substation Refurbishment and Modernization* projects in 2024 and 2025, the
 2 environmental footprint of the substations will be reduced through the removal of
 3 asbestos in control buildings, the addition of oil spill containment for power
 4 transformers and voltage regulators, and the replacement of oil-filled breakers.
 5 Replacement of equipment that requires insulating oil with non-oil technologies and
 6 installing spill containment beneath equipment that still requires insulating oil are
 7 techniques used to mitigate the risk of an environmental incident related to oil spills.

- 8
 9 d) All four statements are confirmed.
 10
 11 e) Table 1 below shows the number of General Service Rate #2.4 customers served by
 12 each of the requested substations:

Table 1 General Service Rate #2.4 Customers by Substation	
Substation	Number of Customers
GAM	0
MUN	1
OPL	3
ISL	0

- 13 f) No, there will not be any customer contributions toward any of the proposed
 14 *Substation Refurbishment and Modernization* projects from 2024 to 2028.
 15
 16 g) No, the looped 66 kV transmission lines between Memorial and King’s Bridge
 17 substations and between Memorial and Stamp’s Lane substations do not only provide
 18 electrical service to Memorial University’s St. John’s campus. These two
 19 transmission lines, 12L and 14L, form part of the looped 66 kV transmission system
 20 required to provide service to customers throughout the greater St. John’s area. For
 21 example, under normal operating conditions, approximately half of the King’s Bridge
 22 Substation load is supplied over transmission lines 12L and 14L.
 23
 24 h) See part a) of the response to Request for Information PUB-NP-013.