

- 1 **Q. (Reference report 2.3; CA-NP-041; NLH-NP-004; PUB-NP-002; PUB-NP-**
2 **008(d)) The proposed fifth portable costs \$9.933 million, will not be available**
3 **until 2030, and no comparative cash-flow analysis was filed.**
- 4 **a) File the least-cost workpapers comparing: (i) a fifth portable; (ii) four**
5 **units with rescheduled work; (iii) two transformer replacements per**
6 **year through 2029; (iv) another spare; (v) Hydro's P2; and (vi)**
7 **rescheduling plus P2. Show cost, schedule, life, residual value,**
8 **deployment, reliability and NPV.**
- 9 **b) If no quantitative comparison exists, identify the evidence and criteria**
10 **supporting the least-cost conclusion.**
- 11 **c) Explain how and why the CEATI 1% to 6% range was applied and**
12 **identify the expected benefit of adding a fifth portable substation.**
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- 14 **A. a)** Newfoundland Power did not prepare comparative cash flow or net-present-value
15 analyses for each of the six scenarios identified in the Request for Information.
16 Newfoundland Power analyzed the viable alternatives in report *2.3 Portable*
17 *Substation*, section 5.0 Assessment of Alternatives, and evaluated those
18 alternatives considering the risks identified in section 4.0 Risk Assessment and
19 the operational requirements necessary to mitigate them. The assessment
20 considered the ability of each alternative to maintain emergency response
21 capability, support planned maintenance and capital activities, and mitigate
22 increasing pressure on the portable substation fleet.
- 23
- 24 Altering the timing or pacing of planned capital work as outlined in options (ii),
25 (iii), and (vi) above, including power transformer replacements, capital projects
26 such as refurbishments and modernizations, and maintenance activities, is not a
27 viable alternative. Substation assets are critical to electrical system reliability,
28 with a single substation outage potentially resulting in a loss of service to
29 thousands of customers.¹ Because of the critical role they play, substations must
30 be designed and maintained to provide a high degree of reliability. Additionally,
31 reducing planned transformer replacements through 2029 would not address the
32 identified requirement for additional portable substation capacity beginning in
33 2030.²
- 34
- 35 Newfoundland Power also does not consider the procurement of an additional
36 spare transformer as outlined in option (iv) above to be a technically viable
37 alternative to an additional portable substation. Spare transformers and portable
38 substations perform different functions within the Company's emergency
39 response strategy. Portable substations provide short-term emergency response
40 capability and support planned maintenance and capital work, whereas spare
41 transformers are intended to reduce the consequences of transformer failures by
42 providing a medium- or long-term replacement solution.

¹ See the *2027 Capital Budget Application*, report 2.1 *2027 Substation Refurbishment and Modernization*, page 1.

² See the response to Request for Information NLH-NP-016.

Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro") have an equipment sharing arrangement that allows for the rental of portable substations between the utilities. This arrangement allows for the deployment of portable substations by each utility to respond to emergencies and help facilitate capital and maintenance work when availability permits. Given that Hydro has only one portable substation, P2, this unit is regularly in use to complete maintenance, execute capital projects, or respond to emergencies.³ Therefore, it is not viable for Newfoundland Power to rely on this unit to eliminate the forecasted shortfall in portable substation availability as identified in options (v) and (vi).

Newfoundland Power's assessment concluded that procuring one additional portable substation is the only technically viable alternative that addresses the forecast gap between portable substation demand and existing fleet capability while maintaining emergency response capability and supporting planned maintenance and capital programs.

b) See part a).

c) The CEATI survey results were not applied as a formula for determining that Newfoundland Power requires five portable substations, nor were the percentages used to calculate the probability of insufficient emergency response capability.

The one to six percent range describes the portable transformer inventories reported by surveyed utilities that maintained portable capacity, expressed relative to their transformer fleet size. The survey also showed that utility practices vary depending on system configuration, available redundancy, reliability requirements, offload capability, and operating practices. Utilities reporting no portable-transformer capacity generally identified other means of managing transformer outages, including N-1 redundancy, load-transfer capability, the ability to accommodate extended maintenance outages, or external generation. The range was therefore used as an industry contextual benchmark rather than a prescriptive sizing criterion.

³ For example, in August 2026, Newfoundland Power deployed portable substation P4 to Hydro's Rocky Harbour Substation following a request from Hydro after portable substation P2 was unavailable and a Hydro power transformer issue resulted in an outage to customers supplied by this substation.