

1 **Q.** (Reference NLH-NP-002) The question notes "Newfoundland Power states
2 that its existing fleet of four portable substations has historically been
3 adequate to meet operational requirements, while also noting that
4 overlapping planned deployments have periodically reduced available fleet
5 flexibility while maintaining emergency response coverage." Footnote 38
6 references an Electricity Canada statement (List of Worst Performing Feeders,
7 Appendix D, page 1) "While performing an analysis of feeder outages, it is
8 highly recommended that specific outages related to events outside of the
9 utility's control be excluded. Standard practice is to exclude outages due to
10 loss of supply, as well as scheduled events. Most Prominent Events are also
11 excluded, as these are events outside the utility's control and significantly
12 impact utility performance measures."

- 13 a) Please confirm that the proposed portable substation is not expected
14 to impact NP's SAIFI performance. If not confirmed, please explain
15 why.
16 b) Is there an expectation that the proposed portable substation will
17 improve NP's SAIDI performance? Please explain why or why not.
18 c) Please identify the "prominent events" that have taken place over the
19 past 10 years that have been excluded from NP's SAIDI statistics and
20 provide an explanation of why these events were outside of NP's
21 control.
22 d) In the past, has NP classified any transformer outages as "prominent
23 events"? If so, please explain why the transformer outage was outside
24 of NP's control.
25

26 **A.** In discussing analysis of system reliability, Electricity Canada states:

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28 *To ensure these analyses accurately reflect the typical performance of a utility,*
29 *extenuating circumstances which can significantly skew the results must be removed.*
30 *This is typically done by identifying Major Event Days (MED).¹*
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32 A Major Event is defined by IEEE as:

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34 *An event that exceeds reasonable design and/or operational limits of the electric power*
35 *system. A Major Event includes at least one Major Event Day.²*
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37 The IEEE standard 1366-2012 defines a Major Event Day as:

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39 *A day in which the daily System Average Interruption Duration Index (SAIDI) exceeds a*
40 *Major Event Day threshold value.*
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¹ See *Major Event Day Determination Reference Guide*, Electricity Canada, 2015, page 5.

² IEEE Std 1366-2012, "IEEE Guide for Electric Power Distribution Reliability Indices", IEEE, May 2012.

1 Newfoundland Power uses the "2.5-Beta Method" to determine the MED threshold, and
2 days with daily SAIDI values exceeding this threshold are denoted as Major Events.³
3

4 Newfoundland Power excludes Major Events or Most Prominent Events from its reported
5 normal operations SAIDI statistics.⁴ This is on the basis of statistical analysis and
6 industry best practice. These events are typically the result of extreme weather.
7

8 a) It is confirmed.
9

10 b) It is not expected that the proposed portable substation will materially improve
11 Newfoundland Power's overall SAIDI performance. The proposed portable
12 substation is being purchased to facilitate substation maintenance and an
13 increasing number of planned substation capital projects while still providing the
14 same level of emergency response capability. The Company is not proposing the
15 portable substation to improve levels of overall reliability, nor is it targeting
16 overall improvements in reliability.

³ See *Major Event Day Determination Reference Guide*, Electricity Canada, 2015, page 7.

⁴ Major Events as defined by IEEE and Most Prominent Events as defined by Electricity Canada are used interchangeably.

- c) Table 1 contains a list of Most Prominent Events ("Major Events") from 2016-2025. All Major Events in Table 1 are a direct result of weather events, over which Newfoundland Power has no control. These events have been excluded from NP's reported normal operations SAIDI statistics.

Table 1 Major Events 2016 to 2025		
Year	Event	Start Date
2016	Windstorm	16-Dec
2017	Snowstorm	11-Mar
2017	Snowstorm	26-Dec
2018	Windstorm	09-Apr
2018	Windstorm	04-Nov
2018	Windstorm	14-Nov
2018	Windstorm	28-Nov
2019	Blizzard	10-Feb
2019	Hurricane Dorian	07-Sep
2019	Wind/ice storm	30-Nov
2020	Blizzard	05-Jan
2020	"Snowmageddon"	17-Jan
2021	Blizzard	02-Feb
2021	Hurricane Larry	11-Sep
2021	Windstorm	09-Dec
2022	Windstorm	18-Jan
2022	Hurricane Fiona	24-Sep
2023	Ice storm	14-Jan
2023	Blizzard	21-Jan
2023	Windstorm	18-Dec
2023	Blizzard	21-Dec
2025	Blizzard	05-Jan
2025	Lightning storm	30-Jul
2025	Kingston Wildfire	08-Aug
2025	Windstorm	04-Nov

2025	Blizzard	05-Dec
2025	Windstorm	15-Dec
2025	Blizzard	25-Dec

- 1 d) Newfoundland Power has not classified any transformer outages as “prominent
2 events”. No transformer outages have resulted in a daily SAIDI exceeding the
3 Major Event Day threshold, and thus none have been excluded as Most
4 Prominent/Major Events.