

1 **Reference: "2023 Capital Budget Application," Newfoundland Power Inc., June 29,**
 2 **2022, Schedule B, p. 15, para. 3 (Distribution Feeder Automation).**
 3

4 **For example, the operation of five downline reclosers during a**
 5 **severe blizzard in January 2020 avoided approximately 3.5**
 6 **million customer outage minutes without the assistance of field**
 7 **crews.**
 8

9 **Q. a) For this example, please indicate the improvements in five-year**
 10 **average SAIDI and SAIFI expected due to the operation of five**
 11 **downline reclosers. Please compare this to the corporate and**
 12 **Electricity Canada Region 2 averages.**
 13

14 **b) Please provide the cost savings associated with not having to use field**
 15 **staff to manually operate devices in the locations of the downline**
 16 **reclosers.**
 17

18 A. a) The efficiency and reliability benefits of downline reclosers are most pronounced
 19 during significant events. In the example provided, the outage occurred during a
 20 significant event. The improvement in the five-year average SAIDI and SAIFI for
 21 the operation of the five reclosers referenced is not available. However, the
 22 average avoided SAIDI by the operation of the five downline reclosers in January
 23 2020 was 9.84. The average SAIFI avoided was 0.69. By comparison, the
 24 Electricity Canada Region 2 average SAIDI during Significant Events over the
 25 past five years was 2.10 and the average SAIFI during significant events was
 26 0.24. Newfoundland Power's corporate average SAIDI during significant events
 27 over the past five years was 2.37 and the average SAIFI during significant events
 28 was 0.57.
 29

30 b) Newfoundland Power is unable to provide the cost savings associated with the
 31 operation of five downline reclosers during the severe blizzard in January 2020
 32 referenced.
 33

34 Downline reclosers provide efficiencies through their ability to be controlled
 35 without dispatching field crews. They also provide efficiencies in outage
 36 response as sections of line no longer need to be patrolled to identify the cause
 37 and location of outages. The approximate overtime cost of a two-person line
 38 crew is \$240/hour; the approximate overtime cost of a technologist is \$105/hour.
 39 So, for example, reducing the response time required to locate an outage and
 40 manually operate a device at night using a line crew and a technologist by just
 41 two hours would yield savings of approximately \$690 for a single routine outage
 42 call.¹

¹ (\$240 + \$105) x 2 = \$690.