

Distribution

- Q. Reference: “2025 Capital Budget Application,” Newfoundland Power Inc., June 28, 2024, sch. B, Feeder Additions for Load Growth, pp. 6–9.**
- a) When did Newfoundland Power first determine that APT-02 and GOU-03 were overloaded?**
 - b) Please provide the capacity and peak demand on APT-02 and GOU-03 for each year from 2019 to 2023.**
 - c) Please provide the forecasted load growth on APT-02 and GOU-03 for each year from 2025 to 2029.**

- A. a) The three-phase trunks of distribution feeders APT-02 and GOU-03 are not overloaded. Both feeders have two-phase tap sections that are overloaded as they exceed the Company’s planning criteria for single and two-phase taps.¹

Loading on individual single and two-phase sections of distribution line are examined and prioritized on a case-by-case basis when warranted by operational concerns. Newfoundland Power first identified potentially overloaded sections of APT-02 and GOU-03 in the Company’s five-year capital plan as part of its *2022 Capital Budget Application*. At the time, the Company identified other feeders as having overload conditions of greater magnitude and severity. As such, upgrades to APT-02 and GOU-03 were deferred to a future year.

- b) Table 1 provides the five-year historical peak demand for distribution feeders APT-02 and GOU-03. The planning capacity for both feeders is 12.7 MVA. Newfoundland Power does not track historical peak data for single and two-phase sections of distribution feeders.

Table 1 Five-Year Historical Peak Demand for Select Distribution Feeders (MVA)					
Feeder	2019	2020	2021	2022	2023
APT-02 ²	-	-	-	-	6.3
GOU-03	8.7	8.6	8.4	9.3	9.4

¹ Newfoundland Power’s limit for one and two-phase taps on three-phase distribution lines is 85A.
² The Airport (“APT”) Substation was constructed in 2022 as part of the *St. John’s North- Portugal Cove Planning Study* included in the Company’s *2021 Capital Budget Application*. Distribution feeder APT-02 was first energized in March 2023. Prior to this, customers served by the overloaded two-phase section were served by Pulpit Rock (“PUL”) distribution feeder PUL-04. This overloaded section of line was included in the Company’s *2022 Capital Plan*, as part of its *2022 Capital Budget Application*.

- 1 c) Table 2 provides the five-year load forecast for distribution feeders APT-02 and
 2 GOU-03. Forecast data for the 2029 planning year is not yet available.

Table 2 Five-Year Forecasted Peak Demand for Select Distribution Feeders (MVA)					
Feeder	2024	2025	2026	2027	2028
APT-02	6.3	6.3	6.3	6.3	6.3
GOU-03	10.2	10.1	10.1	10.1	10.1