

Q. (Reference CA-NP-027; CA-NP-028(d); PUB-NP-003; PUB-NP-004) For the 69 feeders exceeding the corporate average on at least three reliability metrics, provide the four metrics and GLV-02's position. For the five 2027 feeder-refurbishment projects, provide the selection basis, expected reliability or condition improvement, post-completion measurement and priority if fewer than five proceed.

A. The 69 feeders that exceed the corporate average on at least three reliability metrics and their associated metrics are provided in Attachment A.¹

The relative position of distribution feeder GLV-02 on each of these metrics is provided in Table 1.

Table 1 Comparison of Reliability of GLV-02 to All Newfoundland Power Feeders			
Reliability Metric	Corporate Average	GLV-02 Score	GLV-02 Position
SAIDI	1.74	10.85	2 nd
SAIFI	1.23	5.64	1 st
CHIKM	49	133	19 th
CIKM	35	69	42 nd

With respect to the five proposed 2027 feeder refurbishment projects, each of these were selected on the basis of detailed engineering and condition assessments. Detailed inspections identified deteriorated, non-standard or otherwise deficient distribution assets in poor condition that are beyond the scope of routine maintenance and require refurbishment, as follows:

- i) GBY-01 was built in the 1960s and was identified as having deteriorated poles and crossarms, vintage insulators, non-standard 2/0 ACSR conductor with corrosion and bird-caging, and severely leaning and bending poles with excessive span lengths;²

¹ A list of the 15 worst-performing feeders broken out by each metric can be found in the *2027 Capital Budget Application*, report *1.1 Distribution Reliability Initiative, Appendix A*. Further discussion of each of these worst-performing feeders can be found in *Appendix B* of the referenced report.

² See *2027 Capital Budget Application, Schedule B*, pages 9-15.

- 1 ii) ILC-02 was built in 1971 and was identified as having deteriorated poles and
2 hardware, and non-standard and overloaded #4 copper conductor;³
3 iii) CAB-01 was built in the 1950s and was identified as having non-standard and
4 overloaded #4 copper conductor, deteriorated poles, and legacy insulators that
5 are prone to failure;⁴
6
7 iv) GDL-02 Loop 10 and 20 were built in 1975 and 1976, respectively, and consist of
8 underground cables that have experienced a total of 11 failures since 2010,
9 indicating advanced asset degradation;⁵ and
10
11 v) MIL-02 was built in the 1960s and was identified as having deteriorated poles and
12 crossarms, and non-standard 1/0 AASC conductor.⁶
13

14 Completion of the proposed feeder refurbishment projects will maintain adequate and
15 reliable service to customers served by these feeders by addressing deteriorated, non-
16 standard and otherwise deficient equipment. The proposed feeder refurbishment projects
17 are not justified based on expected reliability improvements, but on addressing
18 deteriorated infrastructure and bringing non-standard equipment to current standards.
19

20 The expected result from each refurbishment project is improved condition and
21 standardization of the identified sections of feeder as these projects are intended to
22 replace deteriorated electrical equipment and support continued reliable service. These
23 distribution feeders will continue to be inspected and monitored on a seven-year cycle in
24 accordance with the Company's *Distribution Inspection and Maintenance Practices* to
25 capture the overall condition of the distribution feeder.⁷ The reliability performance of all
26 distribution feeders will continue to be monitored using the Outage Management System
27 and reported on annually as part of the Company's capital budget applications, as
28 required by the Provisional Guidelines.⁸
29

30 Newfoundland Power submits that all five proposed feeder refurbishment projects have
31 been prioritized through the Company's capital planning process as being necessary to
32 address known deficiencies and to ensure the safe and reliable provision of electricity to
33 customers supplied by these feeders. With respect to individual projects, Newfoundland
34 Power's risk matrix methodology assesses the risks of not proceeding with an identified
35 capital project or program.⁹

³ *Ibid.*, pages 19-26.

⁴ *Ibid.*, pages 27-31.

⁵ *Ibid.*, pages 32-35.

⁶ See the *2027 Capital Budget Application, Schedule C*, page 1.

⁷ See the responses to Requests for Information PUB-NP-004 and PUB-NP-022.

⁸ See the Provisional Guidelines, Appendix A, section I.B.

⁹ Newfoundland Power developed a risk matrix methodology in 2022 to comply with the spirit and intent of the Board's Provisional Guidelines. The risk matrix methodology is designed to assess the risks of not proceeding with capital projects and programs in the Renewal, Service Enhancement and General Plant investment classifications, and provides a consistent methodology for communicating these risks.

Table 2 provides the risk scores outlined in Schedule B for the feeder refurbishment projects proposed beginning in 2027 with materiality greater than \$750,000. The Company does not provide detailed risk assessments and risk scores for proposed capital projects under \$750,000.

Table 2 Risk Scores for 2027 Feeder Refurbishment Projects		
Feeder	Risk Score	Risk Description
GBY-01	12	Medium-High
ILC-02	16	Medium-High
CAB-01	16	Medium-High
GDL-02 Loop 10 and 20	10	Medium-High

Newfoundland Power considers all proposed capital projects as necessary to provide safe and adequate facilities at the lowest possible cost consistent with reliable service.



ATTACHMENT A:

List of Feeders Exceeding Company Average
on SAIDI, SAIFI, CHIKM and CIKM Metrics

Table A-1
Feeder's That Exceed the Company's Average on
At Least 3 Reliability Metrics
5-Year Average
(2021-2025)

Feeder	SAIDI	SAIFI	CHIKM	CIKM
ABC-02	4.68	2.48	74	39
BHD-01	3.74	3.44	53	49
BIG-02	1.27	1.34	51	53
BLK-01	4.81	2.67	88	49
BOT-01	4.06	3.20	44	35
BOT-02	1.51	1.48	90	89
BOT-03	2.16	1.95	54	49
BRB-02	1.22	1.52	49	61
BVA-01	3.08	1.95	82	52
BVA-02	2.32	1.07	116	54
BVS-01	2.80	1.87	90	61
BVS-04	7.44	2.47	124	41
CAT-02	2.51	1.68	91	61
DLK-03	5.18	3.92	54	41
DLK-04	2.12	2.04	80	77
DOY-01	5.98	3.08	68	35
FRN-02	4.08	1.26	66	20
GBS-01	2.98	1.54	57	30
GBY-02	4.77	1.77	71	27
GDL-01	1.93	1.03	126	67
GIL-01	2.87	1.25	89	38
GIL-02	5.98	2.28	158	60
GLV-02	10.85	5.64	133	69
GOU-01	1.67	1.55	135	125
GOU-03	1.13	1.64	70	103
GRH-01	2.13	1.79	101	86
GRH-02	1.92	1.83	48	45
HBS-02	1.53	1.83	52	62
HOL-03	5.03	2.99	60	36
HUM-09	3.38	2.36	198	138
HWD-08	1.13	1.75	89	139
HWD-09	1.05	1.36	57	74
KBR-15	2.24	0.63	218	61
KEN-01	1.70	1.73	144	146

Table A-1
Feeder's That Exceed the Company's Average on
At Least 3 Reliability Metrics
5-Year Average
(2021-2025)

Feeder	SAIDI	SAIFI	CHIKM	CIKM
KEN-02	1.37	1.82	66	88
KEN-03	1.22	1.58	104	135
LEW-02	3.72	3.22	59	51
LEW-03	1.68	1.70	60	60
LGL-01	6.74	1.75	170	44
LGL-02	7.75	3.96	128	65
MKS-01	6.99	2.24	57	18
MMT-01	2.57	2.45	36	35
MSY-04	1.22	2.32	70	134
NWB-01	7.11	2.26	63	20
NWB-02	4.82	1.64	67	23
PAB-03	1.68	2.27	149	203
PAB-05	4.37	2.03	227	104
PAS-02	3.25	2.79	71	61
ROB-01	9.11	2.81	86	27
ROB-02	11.76	2.89	87	21
SCR-01	5.71	2.50	95	41
SCT-02	6.33	3.09	65	32
SJM-11	1.60	1.47	77	71
SLA-08	1.26	1.37	106	114
SMV-01	6.12	4.91	63	50
SPO-01	2.49	2.30	53	49
SPO-02	1.80	2.14	32	38
SPO-03	1.84	1.86	40	40
SPR-01	1.48	2.03	64	88
SUM-01	7.84	3.00	130	50
SUN-01	3.98	2.51	58	37
TRN-02	3.07	1.72	89	50
TWG-01	3.68	1.80	134	65
TWG-02	4.35	2.73	178	112
TWG-03	5.49	1.53	78	22
VIC-02	3.22	2.32	66	49
WAL-02	2.70	2.41	129	115
WAL-05	1.64	3.47	184	390

Table A-1 Feeders That Exceed the Company's Average on At Least 3 Reliability Metrics 5-Year Average (2021-2025)				
Feeder	SAIDI	SAIFI	CHIKM	CIKM
WBC-01	3.83	2.64	49	34
Company Average	1.74	1.23	49	35