

Q. Reference: "2026 Capital Budget Application," Newfoundland Power Inc., June 27, 2025, Supporting Materials, Substations: 2.2, p. 8.

Newfoundland Power utilizes Electric Power Research Institute's ("EPRI") Power Transformer Expert System ("PTX") to diagnose and assess the condition of its power transformer fleet.

a) Please provide a listing of power transformers in Newfoundland Power's fleet, along with their respective PTX index values.

b) How does Newfoundland Power prioritize Power Transformers for replacement?

A. a) Table 1 provides a listing of power transformers in Newfoundland Power's fleet with their respective PTX values.

Table 1 Power Transformer PTX Summary ¹			
Station	Designation	Normal Degradation Index	Abnormal Condition Index
ISL	T1	0.47	0.05
FER	T1	0.45	0.05
HCT	T1	0.07	0.05
PHR	T3	0.07	0.05
PAB	T3	0.25	0.05
JON	T1	0.03	0.05
PUN	T1-A	0	0.74
PUN	T1-B	0.11	0.59
PUN	T1-C	0	0.39
BHD	T1	0.04	0.05
CAB	T1	0.33	0.05
LBK	T1	0.27	0.05
LGL	T1	0.3	0.05
SCV	T2	0.32	0.1
GOU	T1	0.54	0.05
SLA	T2	0.31	0.05

¹ Index values of "0" indicate high confidence that no normal degradation issues or abnormal conditions are present in the transformer. Blank values indicate that insufficient information was available to make an assessment.

MUN	T1	0.02	0.05
TRP	T1	0.2	0.05
BVS	T2	0.08	0.06
GFS	T1	0.15	0.05
OPL	T1	0.19	0.05
MOP	T1	0.63	0.05
SPO	T1	0.23	0.05
GAN	T2	0.39	0.73
LOK	T1	0.52	0.05
LOK	T4	0.5	0.05
SBK	T1	0.48	0.05
HCT	T3	0.59	0.05
QTZ	T1	0.48	0.05
GFS	T5	0.21	0.05
WES	T2	0.2	0.05
BIG	T1	0.18	0.05
GAR	T1	0.07	0.05
GBE	T1	0.08	0.05
PJN	T1	0.04	0.05
HAR	T1	0.63	0.05
LOK	T2	0.5	0.05
GPD	T1	0.58	0.05
GAM	T1	0.2	0.05
WBC	T1	0.23	0.05
VIC	T1	0.43	0.05
SLA	T1	0.34	0.05
LOK	T3	0.66	0.05
CLK	T1	0.16	0
RRD	T2	0.45	0.05
SMV	T1	0.06	0.05
HBS	T1	0.23	0.05
WAV	T6	0.31	0.05
SPO	T4	0.52	0.05
TNS	T1	0.47	0.05
HWD	T2	0.23	0.05
TRN	T1	0.34	0.05

CAT	T1	0.33	0.05
BLA	T1	0.43	0.05
RBK	T2	0	0.05
SLA	T3	0.56	0.38
PAB	T5	0.18	0.05
NHR	T1	0.02	0.05
GBY	T1	0.06	0.05
GAN	T1	0.33	0.05
PAS	T1	0.56	0.05
NCH	T1	0.37	0.05
NCH	T2	0.47	0.05
VIR	T1	0.11	0.05
GOU	T3	0.32	0.05
WES	T1	0.3	0.05
ABC	T1	0.11	0.05
TWG	T1	0.21	0.05
MOB	T2	0.12	0.05
ILC	T1	0.18	0
SUM	T1	0.41	0.05
GAL	T2	0.39	0.05
MMT	T1	0.19	0.05
CLV	T2	0.11	0.77
HWD	T1	0.28	0
RRD	T3	0.56	0
GFS	T2	0.16	0
GLV	T1	0.31	0
WAL	T1	0.31	0
SPF	T1	0.55	0
GAL	T1	0.54	0
OXF	T1	0.12	0
BOT	T1	0.22	0
LLK	T1	0.19	0
GRH	T1	0.13	0
SCV	T1	0.22	0.3
SCT	T1	0	0
FRN	T1	0.02	0

STX	T1	0.03	0
CLK	T2	0.25	0
GIL	T1	0.11	0
DOY	T2	0.27	0
CAB	T2	0.18	0
ROB	T1	0.02	0
GOU	T2	0.14	0
KBR	T3	0.88	0
SJM	T1	0.59	0.01
MOL	T2	0.56	0
BLK	T2	0.36	0
CAT	T2	0.31	0
LAU	T1	0.44	0
GLN	T1	0.15	0
GAM	T2	0.13	0
BRB	T2	0.08	0
BRB	T1	0.27	0
COB	T1	0.26	0
BFS	T1	0.06	0
HOL	T1	0.01	0
BVS	T1	0.26	0
PEP	T1	0.31	0
GRH	T2	0.18	0
MSY	T1	0.04	0
COB	T2	0.21	0
BLK	T3	0.14	0
SCT	T2	0.25	0
STG	T1	0.35	0
SJM	T2	0.36	0
NWB	T1	0.25	0.05
BVJ	T1	0.47	0.28
MKS	T1	0.4	0.05
SCR	T1	0.27	0
MOL	T1	0.35	0
PHR	T1	0.01	0
MRP	T1	0.28	0.02

BCV	T1	0.3	0
KEN	T1	0.21	0
BRB	T3	0.22	0
PUL	T2	0.39	0.69
GDL	T2	0.41	0.01
CAR	T1	0.28	0
PBD	T1	0.01	0
MIL	T1	0.2	0
DUN	T1	0.09	0
VIR	T2	0.49	0.46
SJM	T3	0.55	0.19
BVA	T1	0.32	0.15
GDL	T1	0.28	0.01
PUL	T1	0.12	0
COL	T1	0.03	0
SPR	T1	0.21	0
SUN	T5	0.05	0
CLV	T1	1	0.32
RBH	T1	0.16	0
RBK	T1	0.3	0
SPO	T5	0.03	0
CHA	T2	0.03	0
VIR	T3	0.01	0
WAL	T2	0.06	0
PBK	T1	0.24	0
HCP	T1	0.09	0.02
DLK	T1	0	0
SLA	T4	0.02	0
KEL	T1	0.05	0
COB	T3	0.12	0
GDL	T3	0.2	0
HWD	T3	0.13	0
BRB	T4	0.07	0
ROP	T1	0.1	0
KEN	T2	0.09	0
CLV	T3	0.04	0

LET	T1	0.04	0
GAN	T3	0	0
GFS	T3	0.17	0
KBR	T4	0.15	0
CHA	T1	0.11	0
RVH	T1	0.08	0
HGR	T1	0.05	0
LEW	T1	0.05	0
PEP	T2	0.05	0
LPD	T1	0.1	0
GBS	T1	0.05	0
APT	T1	0.07	0
RBK	T3	0.09	0
HUM	T1	0.07	0
TCV	T1	0	0
LPD	T2	0	0
MUN	T2		0
HOW	T3	0.13	0.05
VIC	T2	0.15	0.05
WBK	T1-A		
WBK	T1-B		
WBK	T1-C		
FPD	T1-A		
FPD	T1-B		
FPD	T1-C		
TOP	T1-A		
TOP	T1-B		
TOP	T1-C		
PIT	T1-A	0.12	0
PIT	T1-B	0.08	0
PIT	T1-C	0.11	0

- 1 b) Newfoundland Power prioritizes power transformers for replacement using a risk-
2 based approach that considers:
3
4 (i) Condition assessment: PTX index values, results of dissolved gas analysis and
5 routine oil testing, routine electrical transformer testing, and visual inspections.
6 (ii) Criticality: the transformer's role in system reliability, customer or generation
7 impact in the event of failure, and emergency response options.
8 (iii) Age and service history: while age alone is not the sole criteria, older units
9 with significant operational or maintenance history are considered higher
10 priority if condition indicators suggest elevated risk.

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12 Overall, transformers are prioritized for replacement based on the combination of
13 condition, criticality and service history to ensure that investment is directed to assets
14 presenting the greatest risk to system reliability and customer service.