

1 Q. **Asset Management**

2 Provide a list of the generators operated and maintained by Hydro's Transmission
3 and Rural Operations (TRO) group. Describe generators locations, sizes, fuel, and
4 general maintenance practices.

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7 A. The list of generators operated and maintained by Hydro's Transmission and Rural
8 Operations (TRO) group is provided in PUB-NLH-370 Attachment 1.

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10 The fuel used in all these generators is diesel fuel.

11

12 The general maintenance practices for the prime power diesel generators include:

- 13 • 250 operating hour inspection and service, including oil sampling and
14 analysis;
- 15 • 500 operating hour inspection and service, including oil change and coolant
16 sampling and analysis;
- 17 • Electrical preventative maintenance annually;
- 18 • Mechanical preventative maintenance annually; and
- 19 • Engine overhaul every 20,000 operating hours.

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21 The general maintenance practices for the gas turbine facilities include:

- 22 • Electrical and mechanical preventative maintenance inspection twice
23 annually;
- 24 • Over speed protection preventative maintenance inspection annually;
- 25 • Lubricating oil sampling and analysis annually;
- 26 • Glycol sampling and analysis annually;
- 27 • Hot section borescope inspection every two years;

- 1 • Five year preventative maintenance inspection including replacement of
- 2 lube oil filters, fuel filters and air filters; and
- 3 • Six year protection and control preventative maintenance inspection
- 4 including relays, switchgear, and station service transformer.

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6 The general maintenance practices for the standby diesel generators include:

- 7 • Annual coolant sampling and analysis;
- 8 • Oil sampling and analysis at 250 operating hours;
- 9 • Oil change at 1000 operating hours;
- 10 • Electrical preventive maintenance every two years;
- 11 • Mechanical preventative maintenance every two years; and
- 12 • Engine overhaul every 20,000 operating hours.

Gas Turbines Operated and Maintained by TRO

Location	Unit Number	Rating
Hardwoods	N/A	50 MW
Stephenville	N/A	50 MW
Happy Valley	N/A	25 MW

Prime Power Diesel Generating Units Operated and Maintained by TRO¹

Location	Unit Number	Rating, kW
Francois	588	150
	587	210
	570	275
Grey River	2026	250
	2062	136
	2067	136
Little Bay Islands	2023	450
	2058	205
	586	275
	2035	450
McCallum	2063	210
	2064	136
	589	100
Ramea	2045	925
	2077	925
	2047	925
St. Brendan's	578	277
	2055	210
	2056	225
Charlottetown	2087	545
	2088	910
	2079	759
	2034	300
	2089	725
L'Anse Au Loup	2041	1000
	2012	1100
	2005	800
	246	600
	247	600
	2082	1825
Mary's Harbour	2037	545
	2038	545
	2083	820
	2090	725
Norman Bay	584	40
	581	50
	583	70
Port Hope Simpson	2043	455
	2042	455
	2073	455
St. Lewis	2039	365
	2015	200
	2080	455
William's Harbour	580	80
	2075	210
	2057	90

Location	Unit Number	Rating, kW
Black Tickle	582	300
	579	250
	2066	455
Cartwright	2036	450
	2045	450
	2052	720
	2086	600
Hopedale	2053	545
	2054	448
	2074	569
Makkovik	2029	450
	3033	450
	2059	635
Nain	574	865
	576	865
	2085	1275
Paradise River	254	50
	324	48
	585	50
Postville	573	275
	577	252
	2084	365
Rigolet	2051	545
	2065	320
	2081	455
Mobile Unit	2044	600
Mobile Unit	2070	205
Mobile Unit	2071	205

¹Hydro also operates and maintains generators in the Natauashish dieseil plant which are owned by others.

Standby Diesel Generators Operated and Maintained by TRO

Location	Unit Number	Rating, kW
Hawke's Bay	547	2500
	548	2500
St. Anthony	521	1000
	522	1000
	523	1000
	525	1000
	544	2000
	546	2000
	229	850
	2003	850
Mud Lake	2050	130
Happy Valley	540	2500
	541	2500