

1 **Q. Please provide the Utilization Forced Outage Probability (UFOP) for each gas**
 2 **turbine and the Forced Outage Rate (FOR) for each hydraulic unit for the period**
 3 **2010 to 2015, inclusive and provide comparative CEA data for similar units of other**
 4 **utilities.**

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 6 A. Utilization Forced Outage Probability (UFOP) for each gas turbine and the Forced
 7 Outage Rate (FOR) for each hydraulic unit are not available. The Canadian Electricity
 8 Association (“CEA”) provides an annual report of equipment reliability information for
 9 13 participating Canadian utilities. Newfoundland Power is not a participating member
 10 of this CEA group. Forced outage rate data is only collected by CEA for hydroelectric
 11 units greater than 5 MW output.¹

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 13 Newfoundland Power’s annual power plant availability for the period 2010 to 2015 is
 14 provided in Table 1.
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Table 1
Annual Availability (%)

Plant	2010	2011	2012	2013	2014	2015
Avalon						
Cape Broyle G1	98.8	99.6	98.6	99.4	98.5	99.0
Heart's Content G1	99.1	98.4	95.8	96.6	97.1	99.0
Horse Chops G1	99.9	99.7	99.0	99.8	81.1	98.3
Mobile G1	99.6	99.3	99.1	99.9	99.8	99.4
Morris G1	99.3	95.7	98.8	94.8	99.2	94.4
New Chelsea G1	99.0	99.2	99.5	99.9	99.7	99.6
Petty Harbour G1	99.9	94.8	100.0	100.0	100.0	100.0
Petty Harbour G2	96.7	98.8	100.0	99.8	95.2	97.6
Petty Harbour G3	99.8	98.7	99.7	99.8	98.3	98.7
Pierre's Brook G1	99.5	99.9	100.0	100.0	98.3	99.8
Pittman's Pond G1	99.7	99.7	100.0	100.0	93.2	99.2
Rocky Pond G1	99.0	96.8	99.5	100.0	99.7	97.9
Seal Cove G1	97.7	97.2	98.8	99.7	98.2	98.8
Seal Cove G2	99.6	99.8	98.9	98.3	99.6	99.3
Topsail G1	99.2	99.0	99.5	99.3	99.7	99.4
Tors Cove G1	100.0	100.0	100.0	100.0	100.0	100.0
Tors Cove G2	98.9	99.9	100.0	96.1	99.5	99.7
Tors Cove G3	89.3	98.0	98.0	99.9	99.0	98.3
Victoria G1	99.9	99.8	98.6	95.3	97.9	98.2

¹ Newfoundland Power operates 32 hydro generators in 23 plants across the Province. Only 7 of the 32 generators are large enough for inclusion in the CEA database.

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Table 1
Annual Availability (%)
(Cont'd)

Plant	2010	2011	2012	2013	2014	2015
Burin						
Fall Pond G1	96.3	99.6	100.0	99.1	97.9	97.7
Lawn G1	99.9	99.8	98.2	98.9	99.6	99.5
West Brook G1	99.0	93.6	99.6	99.3	98.9	95.8
Central						
Lockston G1	99.3	100.0	99.3	99.3	93.8	99.7
Lockston G2	99.4	100.0	100.0	100.0	99.5	98.6
Port Union G1	100.0	100.0	100.0	99.9	99.0	97.5
Port Union G2	100.0	100.0	100.0	99.8	98.6	99.3
Rattling Brook G1	100.0	100.0	100.0	98.8	99.8	100.0
Rattling Brook G2	100.0	99.8	92.9	98.1	99.4	99.8
Sandy Brook G1	99.2	99.6	99.3	99.9	96.9	98.6
Western						
Lookout Brook G3	99.8	99.4	99.4	99.4	97.4	96.2
Lookout Brook G4	98.1	98.8	99.7	99.8	99.7	99.9
Rose Blanche G1	98.9	99.9	100.0	100.0	97.6	99.9
Total Hydro	98.9	98.9	99.1	99.1	97.9	98.7
Thermal						
Greenhill Gas Turbine	99.1	99.9	96.7	100.0	100.0	99.7
Mobile Gas Turbine						
MGT	100.0	100.0	100.0	100.0	100.0	100.0
Port Aux Basques						
Diesel	100.0	100.0	100.0	99.7	70.7 ²	95.9
Portable Diesel MD3	90.3	100.0	100.0	96.5	100.0	100.0
Wesleyville Gas						
Turbine	99.7	90.6	100.0	98.9	100.0	39.6 ³
Total Thermal	97.8	98.1	99.3	99.0	94.1	87.0

² Extended outage required to complete diesel engine overhaul following in-service failure on January 6, 2014.

³ Two extended outages required to address issues with the lubricating oil cooler in March/April and June/November.