

1 **Rules and Regulations**

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3 **Q. (Rules and Regulations, para. 5(i)) Please provide the results of all tests conducted**
 4 **over the past 10 years at Long Pond and MUN Substations to measure power factor**
 5 **of the Memorial University load. Who pays for these tests?**

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7 A. Power factor data for Newfoundland Power’s (“the Company”) substations, including
 8 Long Pond (“LPD”) and Memorial University (“MUN”) substations, is readily available
 9 through the Company’s Supervisory Control and Data Acquisition (“SCADA”) system.
 10 Historical load data is compiled on an annual basis as part of the Company’s normal
 11 operations for the purposes of data trending and load forecasting. There is no direct cost
 12 associated with power factor data collection specific to LPD and MUN substations.

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14 Historical power factor data for substation loads prior to 2017 are not available. Prior to
 15 2017, power factor information would have been available to system operators and
 16 engineers on an *ad-hoc* basis. Commencing in 2017, the Company began collecting larger
 17 amounts of power system data, including system power factors.

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19 Annual average power factors for LPD and MUN for the 2017-2023 period are provided
 20 in Table 1.

Table 1:
Annual Average Power Factors for LPD and MUN substations

<u>Year</u>	<u>Power Factor</u>	
	<u>MUN</u>	<u>LPD</u>
2017	0.93	N/A
2018	0.93	N/A
2019	0.93	N/A
2020	0.93	0.92
2021	0.94	0.93
2022	0.94	0.93
2023	0.96	0.94