Q. [Production Life] – Please provide the initial life expectation for each of the Company's generating units as originally reflected in depreciation rates, depreciation studies, etc., at the time each first went into service. Further, provide each subsequent change in life expectancy for each of the Company's generating facilities in subsequent depreciation studies, analyses, etc. Further, provide all underlying reasons for the change in the life span for each generating unit over time, including all underlying workpapers, assumptions, considerations, and material reviewed and/or relied upon in sufficient detail to permit verification of the basis for each change.

A. ***General***

Newfoundland Power's fleet of hydroelectric and thermal generating units range in age from 14 years to 102 years, or an average of over 60 years in service. Newfoundland Power does not have information that would enable it to provide the initial life expectation for each of the Company's generating units as originally reflected in depreciation rates, depreciation studies, etc., at the time each first went into service.

Similarly, Newfoundland Power does not have sufficient information in its records to provide each subsequent change in life expectancy for each of the Company's generating facilities in subsequent depreciation studies, analyses, etc. with all underlying reasons for the change in the life span for each generating unit over time, including all underlying workpapers, assumptions, considerations, and material reviewed and/or relied upon in sufficient detail to permit verification of the basis for each change.

Following is a description of the approach to estimated life expectancy of Newfoundland Power's hydroelectric and thermal generating units, and the reasons therefore, from 1995 to present.

Hydroelectric Generating Units

Commencing with the 1995 Depreciation Study, Newfoundland Power stopped using the life span approach for its hydroelectric plants and started treating the 23 hydroelectric plants as mass property.[1] In the 1995 Depreciation Study, and in each subsequent study, there has been no estimated end of life date for the Company's hydroelectric plants. Instead, it has been assumed that the plants will run indefinitely until their decommissioning is justified in light of ongoing developments or intervening events.

Interim retirements of hydro plant components will continue to take place, and will be dealt with appropriately.

Thermal Generating Units

Table 1 provides the probable retirement year for the Company's existing thermal

[1] In the life span approach each hydro plant had a specific life span and probable retirement date.

generating units as identified in each of the Company's depreciation studies since 1995.

Table 1
Probable Retirement Year – Thermal Generating Units

Generating Unit	1995 Study	2000 Study	2005 Study	2010 Study
Greenhill Gas Turbine	2016	2016	2016	2021
Port aux Basques Diesel	2006	2006	2016	2016
Wesleyville Gas Turbine[2]	2016	2016	2026	2021

2000 Depreciation Study
There was no change in probable retirement year for any of the Company's thermal generating units in the 2000 Depreciation Study.

2005 Depreciation Study
In the 2005 Depreciation Study, the retirement years for both the Port aux Basques diesel and the Wesleyville gas turbine were extended.

In the 2000 Depreciation Study, the probable retirement year for the Port aux Basques diesel had been set at 2006. Following the 2000 Depreciation Study, Newfoundland Power refurbished the generator enclosure and completed an overhaul of the governor. Based upon this work, the low operating hours of the unit and the continued availability of spare parts for the General Motors EMD generating set, the probable life was extended by 10 years to 2016.[3]

The Wesleyville gas turbine was originally located in the town of Salt Pond on the Burin Peninsula. In 2003, it was relocated to the town of New-Wes-Valley on the north coast of Bonavista Bay. As part of the relocation of the generator, a new powerhouse was constructed in New-Wes-Valley. Also, a number of components were replaced, including the air inlet filter and plenum, the exhaust transition piece, the external lube oil cooler, the fuel forwarding pumps and meters, switchgear, and the bulk of the instrumentation and controls. As well, some welding repairs were completed on the power turbine diffuser, and the power turbine and exhaust insulation was replaced. The extension in the probable retirement year to 2026 was a result of this major refurbishment which took place over the period between depreciation studies.

2010 Depreciation Study
In the 2010 Depreciation Study, the Company established a probable retirement year of 2021 for both of its gas turbine generating units. This resulted in a 5-year reduction in

[2] The former Salt Pond gas turbine was refurbished and relocated to Wesleyville in 2003.
[3] As of December 1, 2005, the total metered operating hours on the unit was 2,143 hours.

the probable retirement year of the Wesleyville gas turbine and a 5-year extension in the probable retirement year of the Greenhill gas turbine.

In the 2005 Depreciation Study, as noted above, the probable retirement year of the Wesleyville gas turbine had been extended to 2026. However, based on the Company's operating experience with the Wesleyville unit in the 5 years following the 2005 Depreciation Study, it was determined that the life expectancy of the gas generator and power turbine justifies a probable retirement year for the unit of 2021.

Subsequent to the 2005 Depreciation Study, several improvements were made to critical systems of the Greenhill gas turbine. The lube oil cooler was replaced in 2005/2006, and improvements were made to the compressed air supply in 2009. A fire suppression system was installed in 2009/2010, and a combustion air intake refurbishment was completed in 2010. As a result, the Company has extended the probable retirement year of the Greenhill gas turbine to 2021.