Q. Reference: Attachment 1- Long-Term Supply for Southern Labrador - Economic and Technical 1 2 **Assessment** 3 Further to the response to PUB-NLH-023, page 2 of 2, Table 1 indicates that for the past 27 years 4 the primary driver for diesel generating station replacement has been either a catastrophic 5 event (e.g., fire) or load growth in the community resulting in supplemental space being required in the station to house additional generation. 6 7 a) Please confirm that no diesel generating stations have been replaced due simply to age 8 and/or condition of the building in the last 27 years. If not confirmed please identify the 9 diesel generating stations that were replaced due to the age and/or condition of the building. 10 11 b) Please confirm that when major repairs are required to a diesel generating station 12 structure (e.g., roof replacement, upgrades to building exterior, etc.), such repairs are typically proposed through capital budget applications without the need to replace the 13 entire diesel generating station. 14 15 16 a) Since 1994, the replacement of Newfoundland and Labrador Hydro ("Hydro") diesel 17 Α. generating stations has come as a result of load growth or a catastrophic event. 18 Hydro considers a number of factors when considering the replacement of a diesel 19 20 generating station, including the role of the diesel generating station (i.e., standby versus 21 prime power), condition, age, and future requirements. While replacements in the past 22 were triggered primarily by load growth or a catastrophic event, many of these diesel 23 generating stations were in poor condition at the time of replacement. In the absence of load growth or a catastrophic event, these diesel generating stations would likely have 24 25 required replacement or substantial refurbishment to address their deteriorated condition

in the near term. Many of Hydro's existing diesel generating stations were constructed in

the 1970s, and are therefore approaching replacement age in the next decade.

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b) Hydro confirms that when major refurbishment is required for existing diesel generating station building envelopes, it is typically proposed through the capital budget process.

As discussed in Hydro's responses to PUB-NLH-001, PUB-NLH-020, and NP-NLH-021 of this proceeding, while Hydro believes replacement of the existing southern Labrador diesel generating station would occur in the time frames identified within its analysis, should the replacement costs decrease by 80% Hydro's sensitivity analysis indicates that the proposed interconnected solution would remain the least-cost alternative. Hydro fully expects the cost of a refurbishment/extension to be far more expensive than 20% of the cost of a new diesel generating station; therefore, the proposed interconnection would remain the least-cost alternative even if diesel generating station replacement could be avoided in the absence of an interconnection.