

1 Q. Reference: Response to the Request for Information NP-NLH-005 (Revision 1,
2 June 3-15).

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4 Please provide in the table below the effective return periods of failure that best
5 describes the transmission lines listed below since 1996.

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230kV Transmission Line Return Periods	
Transmission Line	Effective Return Period of Failure (years)
TL-201	
TL-203	
TL-207	
TL-217	
TL-218	
TL-236	
TL-237	
TL-242	

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9 A. Hydro interprets the question to be asking for the effective design period for wind
10 and ice loads. Below are the effective design period applying the current CSA
11 standard. The original design return period for each of the lines noted is 50 years.
12 However, a major upgrade was completed on the following steel tower lines using a
13 25-year design return period. The upgrades were completed using a 25-year return
14 due to the fact that the lines were upgraded and not fully rebuilt, which basically
15 means that a combination of new and existing components were utilized for the
16 project, thereby limiting the life span of the existing components, resulting in a
17 blended return period.

Island Interconnected System Supply Issues and Power Outages

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Transmission Line	Original Return Period	Additional Comments
TL 201	50 year	
TL 203	50 year	
TL 207	50 year	Replacement designed for 50 year return period
TL 217	50 year	Upgrade work designed for 25 year return period
TL 218	50 year	
TL 236	50 year	Replacement designed for 50 year return period
TL 237	50 Year	Upgrade work designed for 25 year return period
TL 242	50 Year	Upgrade work designed for 25 year return period