Page 1 of 1

1	Q.	Reference: Response to the Request for Information NP-NLH-005 (Revision 1,
2		June 3-15), page 4, lines 13-15.
3		
4		"In the case of the Labrador-Island transmission Link, engineering design has been
5		completed, including tower design, prototype assembly and full scale testing, and
6		materials have been ordered for the line."
7		
8		Please describe in detail the testing that was conducted on the Labrador-Island
9		transmission Link including the design, prototypes, and full scale testing.
10		
11		
12	Α.	The tower family for the Labrador-Island Transmission Link includes 11 different
13		towers. The tower types are A1, A2, A3, A4, B1, B2, C1, C2, D1, D2, and E1.
14		
15		A prototype was manufactured and assembled for each tower type in order to
16		assist in detailing of the tower and fitment of the various parts, and to ensure no
17		errors occurred as designs were translated to manufacturing.
18		
19		Of the 11 types, five were full-scale tested, which were each representative of other
20		towers in the family. The towers tested were A1 (representing A1 and A3), A2
21		(representing A2, A4 and B1), B2 (representing B2), D1 (representing C1, C2, D1 and
22		D2), and E1 (representing E1). During testing, each tower was subjected to 10 to 13
23		load cases, which covered all aspects of the tower components, and one failure load
24		case up to 125% of the design load.
25		
26		All final tower designs used for mass manufacture exceeded 100% of each critical
27		load case, and at least 115% of the failure load case.