

1 Q. **Re: Labrador Expansion Study, p. 12 (pdf), note 3**

2 Citation:

3 As the L1301 transmission line was planned as a temporary installation, the towers
4 between Churchill Falls and Gull Island were not designed to Hydro standards.
5 Rather, phase spacing was shortened to 3.2 m as opposed to the standard value of
6 4.3 m.

7
8 Please explain the significance or consequences, if any, of phase spacing of 3.2 m
9 instead of 4.3 m.

10

11

12 A. From a maintenance point of view, L1301 between Churchill Falls and Gull Island
13 was constructed as a temporary construction power line, and hence maintenance
14 clearances to ensure a safe work clearance were not factored into the design.
15 Design with maintenance clearances would have included standard phase spacing
16 for line crews to perform inspections while the line is in service. Not having the
17 ability to climb the structures between the phases while still maintaining safe limits
18 of approach, offers a higher potential of missing a defect during regular inspections,
19 leading to a potential failure of the line

20

21 In addition, maintenance can be more expensive on a section of line if hot line
22 techniques are utilized with the line in service or outages are required if hot line
23 techniques are not possible. The wider phase spacing between Gull Island and
24 Happy Valley provides the necessary electrical clearance for effective maintenance
25 to be performed.