

1 **Q. Re: Tab 2.1 - 2013 Substation Refurbishment and Modernization – Stephenville Gas**
2 **Turbine**

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4 **Newfoundland Power outlines that for the Stephenville Gas Turbine Substation the**
5 **ground grid will be extended. How large is the ground grid currently? What is the**
6 **industry practice?**

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8 A. The existing ground grid covers an area of 205 m².
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10 Newfoundland Power designs substation ground grids using the *ANSI/IEEE standard 80-*
11 *2000 Guide for Safety in AC Substation Grounding*. This standard is considered industry
12 best practise for designing substation ground grids.
13

14 The Stephenville Gas Turbine Substation including ground grid was constructed in 1976,
15 predating the current version of the standard. As part of the detailed engineering for this
16 project the ground grid will be designed to meet ANSI/IEEE 80-2000. Based on recent
17 engineering experience the Company anticipates that an extension to the existing ground
18 grid will be required.