

Q. Describe the approximate accuracy of equipment data and locations in the GIS system. Please describe any programs and processes to improve the accuracy or correct inadequate equipment data.

A. Newfoundland Power purchased and installed its Geographical Information System (“GIS”) in 2013. The GIS currently displays equipment data and locations of primary distribution lines, streetlights and poles.¹ This information originated from a number of sources with varying degrees of accuracy. The original source for primary distribution line information was the Company’s distribution modeling software, *CYME*. Much of this information was collected in the late 1990’s. Streetlight information is from the Company’s Streetlight Management System (“SLMS”), which was collected in a streetlight survey completed in 2009. Information about pole locations and specifications is provided from Bell Aliant’s GIS database, which was collected in a pole survey completed as part of the Bell Aliant pole sale in 2011.²

As would be expected, there are inherent discrepancies between each source of information.³ However, the level of accuracy in the GIS is currently sufficient for crews to determine electrical connectivity of the distribution system and to locate equipment in the field. The Company also has processes in place to update the GIS when new equipment is installed in the field.

In its 2015 Capital Budget Application, the Company has identified two projects that will contribute to improving the accuracy of the GIS.⁴ Starting in 2015 the Company will complete a field survey to collect customer premise locations and add electrical connectivity information of its customers to the GIS database. In 2015 the Company will also install software on computers in line trucks that will provide field staff with the ability to update GIS information in the field, increasing the timeliness of updates and reducing the manual effort required to update this data.

¹ Primary distribution lines include equipment data and locations of primary conductors, switches, fuses, pole mounted transformers, capacitor banks, voltage regulators and reclosers.

² Location information gathered during the 2011 pole survey and 2009 streetlight survey was collected with GPS equipment with an accuracy within 3 meters.

³ For example, primary distribution line locations from *CYME* do not match exactly with the most recent pole locations collected in the 2011 survey. The Company is currently completing a review of all primary distribution lines to update conductor locations and switch information.

⁴ See report 6.5 *Geographical Information System Improvements* included as part of Newfoundland Power’s 2015 Capital Budget Application.