

1 **Q. Re: Automatic Vehicle Location (AVL), page 3-19, lines 9-11**
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3 **Please provide details of the costs and benefits of the AVL system including capital**
4 **and associated O&M costs as well as the benefits in terms of increased productivity.**
5 **Please quantify the value of the productivity gains.**
6

7 A. The initial capital cost for Newfoundland Power to deploy automatic vehicle location
8 (“AVL”) to approximately 70 line trucks was approximately \$6,700 for software and
9 licencing. The annual software support & maintenance cost for the AVL system was
10 approximately \$1,600 in 2015.

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12 The principal benefit associated with AVL is more prompt response to trouble on the
13 electrical system. For example, using AVL information, the Company’s dispatch system
14 can provide the location of line trucks on a map relative to the location of an outage call.
15 This allows dispatchers to determine the closest available truck to the outage call and
16 dispatch the call electronically to the computer in the truck.

17
18 Newfoundland Power crews are required to respond to approximately 10,000 trouble calls
19 annually. Improving response time by an average of only 30 seconds per trouble call
20 would recover the complete initial capital cost and 1 year’s operating cost of the AVL
21 system in a single year.¹

¹ (30 seconds x 10,000 calls x \$127/hour)/(3600 seconds/hour) = \$10,583 annual savings based on a 2 person line crew without overtime premium.