

1 **Q. Reference: p. 2-13 when it stated, “Part of the forecast increase in Newfoundland**  
2 **Power’s workforce through 2010 is attributable to the need to address workforce**  
3 **demographics primarily the aging workforce.” Please explain what this statement**  
4 **means and how it relates specifically to NP’s 2010 labour cost forecast.**  
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6 **A. *Introduction***

7 Demographics are a prominent feature of workforce management at Newfoundland  
8 Power (“the Company”). Management of workforce demographics is increasing the cost  
9 of service delivery to customers in the short term. This is the result of on the job training  
10 for new employees in the core technical workforce whose inexperience increases cost in  
11 the short term while ensuring the Company maintains the skills necessary to efficiently  
12 operate the electricity system in the longer term.  
13

14 The average age of the Company’s workforce is 47.6 years. Approximately 46% of the  
15 workforce is 50 years of age or older. Skilled and technical labour is at the core of the  
16 Company’s capability to provide service to its customers. Powerline Technicians,  
17 Engineers and Technologists comprise approximately 52% of the entire workforce. The  
18 expertise of these skilled and technical employees must be transferred to a new  
19 generation of employees over the short term ensuring the efficient operation of the  
20 electricity system in the longer term.  
21

22 *Engineers and Technologists*

23 Replacement of senior technical staff including Engineers and Technologists is typically  
24 done through the hiring of recent graduates and developing them over time. Occasionally  
25 specific expertise is required immediately and an experienced person is hired to replace a  
26 senior person.  
27

28 From a cost perspective the replacement of senior technical staff with a recent graduate  
29 reduces salary expense by as much as 40%. The recent graduate has very little  
30 experience and as a result their productivity would not be at the same level as the senior  
31 person.  
32

33 With technical work, learning is typically accomplished through the design and  
34 construction of new infrastructure. Working on a project from conception, through  
35 design, construction and eventual commissioning, gives the recent graduate valuable  
36 experience with that particular type of asset. The knowledge gained through this process  
37 is transferable to operating the asset into the future. For this reason, technical  
38 assignments for recent graduates typically involves a high proportion of construction  
39 work.  
40

41 *Apprentice Powerline Technicians*

42 Over the five year period 2004 to 2008 the Company has hired an average of 7  
43 Apprentice Powerline Technicians per year. Over the five year period 2009 to 2013 the  
44 Company plans to hire an average of 8 Apprentice Powerline Technicians per year.  
45 Apprentice employment at this level will be necessary for the foreseeable future to ensure

continuity in this skilled trade. The increase in hiring of apprentices is attributable to the lead-time required in response to anticipated retirements.<sup>1</sup> An average annual attrition rate of 8 Powerline Technicians is anticipated over the period 2009 to 2013.

The Apprentice Powerline Technician program provides for 5 years of education and on the job training to achieve Journeyperson qualification. Full development of a Powerline Technician typically requires more experience.<sup>2</sup> The on the job training is organized into 4 blocks, each taking typically one year to complete.

The on the job training typically starts with construction of distribution feeders to Company standards in Block 1. A group of apprentices in Block 1, typically work under the supervision of a single training foreperson on de-energized sections of the distribution network.

As the Apprentice Powerline Technician gains experience and progresses through the training blocks, the amount of time they spend operating and maintaining the electricity system increases. All time spent working on the energized electricity system is under the supervision of a qualified Powerline Technician.

The Apprentice Powerline Technician is less productive than a fully qualified Powerline Technician. This is only partially offset by the lower rate of pay for the Apprentice Powerline Technician. In addition, the supervision of the Apprentice also impacts the productivity of the supervising Powerline Technician. The productivity of the Apprentice Powerline Technician and the supervising Powerline Technician increase operating labour cost compared to having all work completed by qualified Powerline Technicians.

From the Company's operating cost perspective, the impact of Apprentice Powerline Technicians is less in the early stages of their on the job training. As the Apprentice Powerline Technician moves through the training blocks and spends more time operating and maintaining the electricity system, their operating labour cost impact increases. As a result the impact on annual operating cost labour will vary with the number of Apprentice Powerline Technicians in Block 3 and Block 4 of their training.<sup>3</sup>

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<sup>1</sup> For example, Apprentice Powerline Technicians hired in 2006 will become Journeyperson Powerline Technicians in the test year 2010. Apprentice Powerline Technicians hired in the test year 2010 will become Journeyperson Powerline Technicians in 2014.

<sup>2</sup> The *International Brotherhood of Electrical Workers* has observed that it takes 10 years to become a well-rounded Powerline Technician.

<sup>3</sup> The increase in operating labour cost for apprentices and supervisory labour from 2008 to 2009 is approximately \$140,000. The increase in operating labour cost for apprentices and supervisory labour from 2009 to 2010 is approximately \$130,000. In 2008, there were a total of 7 apprentices in Blocks 3 and 4. In 2009, there are a total of 14, and in 2010 a total of 17 Block 3 and 4 apprentices. Please refer to the response to Request for Information CA-NP-112.

1       *Concluding*

2       The employment and development of the skilled and technical labour necessary to  
3       operate the electricity system into the future will tend to increase cost in the short term.  
4       This simply reflects training and development.

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6       Powerline Technicians represent the single biggest skill requirement in the Company's  
7       workforce. However, this dynamic applies in varying degrees to Newfoundland Power's  
8       other skill requirements.