

1 **5.1 Port Union Building Replacement**
2

3 **Q. Page 1. Given the proximity of Bonavista to Clarenville (i.e., less than 120**
4 **kilometres) it would appear to be well within Newfoundland Power’s target**
5 **response time of two hours, 85% of the time. Has Newfoundland Power**
6 **considered the alternatives of:**
7 **(i) operating out of the Clarenville area office; or**
8 **(ii) maintaining the material storage area at Port Union?**
9

10 **If Newfoundland Power has conducted an analysis into these or any other**
11 **alternative operating arrangements, please provide the details. If no other**
12 **alternatives have been considered, please explain the rationale for not doing**
13 **so.**
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15 A. (i) Newfoundland Power did consider operating out of the Clarenville area office as an
16 alternative to replacing the Port Union building. This alternative was determined at an
17 early stage to not be the least cost approach to serving customers and operating the
18 electricity system on the Bonavista Peninsula.
19

20 The Port Union facility is used to provide service to 5,903 customers on the Bonavista
21 Peninsula and supports the operation of five substations,¹ eight distribution feeders² and
22 four transmission lines.³
23

24 On average, crews in Port Union complete 884 work orders annually.⁴ Work orders
25 consist of items including but not limited to responding to trouble calls, installation of
26 new services, street light replacements, preventative maintenance and capital projects.
27 This volume of work has required the use of two crews, consisting of a total of two
28 Powerline Technician Lead Hands and two Powerline Technicians, that operate from the
29 Port Union facility on a permanent basis.
30

31 The geographic distribution of work orders completed by Port Union employees can be
32 associated with each substation in the region. Although not all work orders occur at a
33 substation, the substation location can be used as a proxy for geographic location of
34 work orders as substations are centrally located near customers.
35

36 If Port Union’s employees were relocated to Clarenville, travel time to work locations
37 would increase. Table 1 provides details on how much additional travel time would be
38 incurred to travel to each substation location.

1 The following five substations are serviced from the Port Union facility: (i) Bonavista; (ii) Catilina; (iii) Port Union; (iv) Lockston; and (v) Summerville.

2 The following eight distribution feeders are serviced from the Port Union facility: (i) BVA-01; (ii) BVA-02; (iii) BVA-03; (iv) CAT-01; (v) CAT-02; (vi) CAT-03; (vii) LOK-01; and (viii) SMV-01.

3 The following four transmission lines are serviced from the Port Union facility: (i) 113L; (ii) 123L; (iii) 111L; and (iv) 117L.

4 The total number of work orders from the last five years are as follows: 849 (2019); 927 (2020); 778 (2021); 987 (2022); and 877 (2023).

Table 1: Calculation of Additional Travel Time Required			
Substation	Travel time from Clarenville (minutes)	Travel time from Port Union (minutes)	Additional travel time per work order (minutes)
Bonavista (BVA)	84	16	68
Catalina (CAT)	74	5	69
Lockston (LOK)	53	23	30
Summerville (SMV)	36	35	1

1 Based on the additional travel time and the volume of work to be completed in each
 2 substation area currently served by the Port Union building, there would be an average
 3 of 48 additional minutes per crew to travel to or from the Clarenville building. Table 2
 4 provides a breakdown of this calculation.

Table 2: Calculation of Additional Travel Time			
Substation	Average # of annual work orders ⁵	Percentage of total work orders	Weighted average travel time (minutes) ⁶
Bonavista (BVA)	389	44%	30
Catalina (CAT)	161	18%	13
Lockston (LOK)	165	19%	6
Summerville (SMV)	169	19%	0.2
Total	884	100%	48

5 The anticipated annual cost of additional travel time for PLT crews to relocate to the
 6 Clarenville office has been calculated as \$134,900.⁷ Over the estimated life of the Port

⁵ The average number of annual work orders associated with each substation is calculated by multiplying the percentage of customers serviced by each substation by the average annual number of work orders serviced by Port Union employees.

⁶ The weighted average travel time is determined by multiplying the additional travel time per work order from Table 1 by the percentage of total work orders in Table 2.

⁷ A blended loaded hourly rate of \$81.07 is used for each PLT. This rate is based upon the current Collective Agreement.

48 minutes x 2 = 1.6 hours per day per PLT.
 1.6 hours x 4 PLTs x \$81.07 per hour = \$518.85 per day
 \$518.85 per day x 260 working days per year = \$134,900 per year

1 Union building, the estimated additional labour cost to service the Bonavista Peninsula
2 from the Clarenville office is approximately \$4,991,000.⁸ This amount is significantly
3 greater than the estimated cost of \$1,281,000 to replace the Port Union building.
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5 (ii) Additional alternatives, including maintaining only a material storage area at Port
6 Union have not been considered. Maintaining a material storage area in Port Union
7 implies that the PLT crews would be relocated to another facility. Since Clarenville is the
8 closest possible facility that the PLT crews could be relocated to, and relocation to that
9 facility is not least cost, as detailed above, no additional alternatives were considered.

⁸ Newfoundland Power's *2019 Depreciation Study* estimates the service life for the Small Building and Structures category, which would include the proposed Port Union building replacement, at 37 years.