1 Q. Please provide Newfoundland Power's resource plans to meet customer needs in a 2 reliable manner, including the methods and assumptions used in developing the 3 plans. 4 5 Meeting customers' needs in a reliable and responsive manner requires the deployment of A. 6 a skilled and adequately resourced workforce throughout the Company's service territory. 7 Resource plans to meet customer needs therefore begin with determining the Company's 8 annual labour requirements to complete operating and capital work requirements. 9 10 Annual operating work requirements are principally focused on the maintenance and operation of the electrical system, response to customer inquiries, and commercial 11 12 functions such as meter reading and billing. Annual capital work requirements are principally based on specific expenditures required to replace deteriorated, defective or 13 14 obsolete equipment, and to serve forecast customer and sales growth. 15 16 Newfoundland Power's annual work requirements are met using a combination of regular 17 employees, temporary employees and contractors. This approach permits the Company to maintain a highly skilled core workforce and reasonable flexibility to respond to 18 19 variations in work requirements on a least-cost basis. 20 21 Annual operating work requirements tend to be met by Newfoundland Power's internal workforce. This is partly attributable to the stability of these work requirements on a year 22 23 over year basis. Annual capital work requirements tend to be met by a combination of 24 the Company's internal workforce and contractors. This is partly attributable to the 25 variable nature of these work requirements. 26

Attachment A to this response provides Newfoundland Power's *Labour Forecast: 2018-2020.*¹

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The Labour Forecast: 2018-2020 was provided as part of the Company's 2019/2020 General Rate Application in Volume 2, Supporting Materials, Reports, Tab 1.

Labour Forecast 2018 - 2020

Labour Forecast 2018-2020

June 2018



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1.0. BACKGROUND

This report contains detailed information concerning the method used by Newfoundland Power to forecast its test year full-time equivalents ("FTEs") and labour expense. In addition, it explains the assumptions used to determine forecast vacancies.¹

Newfoundland Power's current labour requirements tend to be consistent from year to year.² In managing its workforce, the Company matches overall capacity and capability with anticipated work requirements.

The method used to forecast labour requirements and FTEs for a test year reflects this basic workforce management philosophy.

2.0 FORECASTING WORKFORCE REQUIREMENTS

Forecasting the Work

The starting point in forecasting Newfoundland Power's annual labour requirements is the Company's annual capital and operational work requirements.³

Annual capital work requirements are principally based on specific expenditures required to replace deteriorated, defective or obsolete equipment, and to serve forecast customer and sales growth.⁴

Annual operating work requirements are principally focused on the maintenance and operation of the electrical system, response to customer inquiries, and commercial functions such as meter reading and billing.⁵ These requirements tend to be stable over time. For this reason, historical expenditures, adjusted for changes in operating requirements, are the foundation for forecasting annual operating work requirements.

Workforce Options

Having determined the annual work requirements, the Company considers the amount of internal labour available to meet these requirements.

The Company's annual work requirements are met using a combination of regular employees, temporary employees and contractors. This approach permits Newfoundland Power to maintain a highly skilled core workforce and reasonable flexibility to respond to variations in work requirements on a least-cost basis.

In Order No. P.U. 32 (2007), the Board directed Newfoundland Power to include this information as part of its next general rate application.

For the period of 2017 through 2020F, Newfoundland Power's workforce is forecast to increase by 1.9%, or 11.9 FTEs.

In addition to capital and operating requirements, there are labour requirements for rechargeable and recoverable items. These items include labour associated with material handling (i.e. stores) and vehicle service centre labour costs, which are recharged as overheads on operating and capital work. It also includes customer jobbing, third-party provisioning services, and inter-affiliate labour charges.

These requirements are approved by the Board on a prospective basis each year through the Company's capital budget applications.

Annual operating work requirements also include general support functions, such as information services, human resources, and finance.

Annual capital work requirements tend to be met by a combination of the Company's internal workforce and contractors. This is partly attributable to the variable nature of these work requirements.⁶ It is also consistent with the deployment of the Company's internal workforce.⁷

Annual operating work requirements tend to be met by the Company's internal workforce.⁸ This is partly attributable to stability of these work requirements on a year over year basis. It is also partly attributable to the specialized nature of these work requirements.⁹

Vacancy Assumptions

In determining the internal workforce available to execute the annual capital and operating work requirements, the Company assesses its internal workforce on an FTE basis.¹⁰

The actual FTEs for the most recently completed year reflect the impact of all vacancies in that year. In other words, the FTEs for the most recently completed year include only the actual paid hours *worked in that year*. For this reason, the FTEs for the most recently completed year are the basis Newfoundland Power uses for forecasting FTEs.

In forecasting FTEs, Newfoundland Power will make adjustments for future years. This is done to better predict availability of the internal workforce to meet work requirements. This, in turn, permits the Company to assess its workforce options.¹¹

The typical adjustments to an FTE forecast include anticipated retirements, leaves of absence, terminations and new hires.¹² These adjustments reflect the timing and salary impacts of workforce changes. For example, in the case of retirements, differences in salary and timing gaps or overlaps among employees entering and leaving the workforce can be incorporated into

The specific requirements of annual capital work have different labour requirements depending on the projects involved. For example, penstock construction requires riggers and welders. However, electrical system operations have no ongoing requirement for those skilled trades. Accordingly, such work would be performed by contractors.

Deployment of Powerline Technicians ("PLTs") is an example of this. PLTs perform a mixture of operating and capital maintenance. In winter, Newfoundland Power's service obligations practically require it to have PLTs deployed throughout its service territory in sufficient numbers to respond to seasonal electrical system trouble. In the construction season, PLTs can be deployed to construction sites across the province, as necessary.

Approximately 8% of Newfoundland Power's internal workforce is temporary labour. Use of temporary labour provides operating flexibility.

Specialized knowledge of electrical system operations is required for a great deal of operational work and is a core competency of Newfoundland Power's workforce. This specialized knowledge is typically not required to perform much of the capital work requirements of the Company.

Newfoundland Power calculates FTEs based on employee hours worked divided by total working hours in a year. For approximately 56% of the workforce, the total working hours in a year are 2,080. For the remainder, the total working hours in a year are 1,950. The FTE calculation reflects only hours worked and permits a better matching of work requirements to available workforce options than forecasting positions and applying a vacancy allowance.

From a practical perspective, forecast FTEs will become the basis for the Company's determination of hiring requirements and contract labour requirements.

Leaves of absence include maternity leave, absences due to long-term disability or workplace injury, education leave and other leaves of absence approved by the Company.

the adjustments. 13 A similar approach is used for employees commencing leaves of absence and those returning from leave.

These adjustments are fully reflected in both forecast FTEs and labour costs. The forecast FTEs are a tool to assess the *internal* workforce available to meet overall work requirements. The forecast labour costs reflect salary and timing differences associated with changes in the internal workforce.

Newfoundland Power's assessment of its internal workforce is undertaken in the context of its total forecast labour requirements. These total labour requirements are a function of forecast capital and operating work requirements.¹⁴

Reconciling Work and Labour

Newfoundland Power's total labour requirements for 2017 were \$76.3 million. For 2018, 2019 and 2020, the total forecast labour requirements are \$76.5 million, \$76.3 million and \$77.5 million, respectively. These requirements reflect forecast capital and operational work requirements for each year and include internal labour and contract labour.

The Company's internal labour expense for 2017 was \$61.4 million. For 2018, 2019 and 2020, forecast internal labour expense is \$62.6 million, \$64.2 million and \$65.6 million, respectively. The difference between the total forecast labour requirements and the Company's available internal labour will be addressed using contract labour.

3.0 2018 to 2020 LABOUR FORECASTS

2018 FTEs and Internal Labour Expense

The 2018 FTEs and internal labour expense were calculated using the actual 2017 FTE results as the starting point. In 2017, the number of FTEs, based on the *actual hours worked*, was 611.2. The associated internal labour expense was \$61.4 million. To account for the impact of inflation, the 2017 internal labour expense is adjusted to reflect salary increases applicable to 2018.

The 2018 labour forecast reflects 36 projected retirements, with all 36 of these employees to be replaced, plus 11 new hires. The new hires will meet increased requirements for engineering associated with third-party work and allow for future PLT replacements through the addition of PLT Apprentices. The 2018 labour forecast and FTEs also reflect decreases associated with the completed deployment of automated meter reading technology. In addition, the 2018 FTEs and internal labour expense includes employees working a partial year in 2017, but are anticipated to be in the workforce for a full year in 2018, offset by employees who left in 2017.

The time period between employees entering and leaving the workforce can be either negative or positive. For example, if a replacement employee arrives before a senior employee retires to avail of a training opportunity, this will increase the FTE count and labour expense. However, if there is a period of time a position remains vacant awaiting a replacement employee to enter the workforce, this will decrease the FTE count and labour expense.

The loss of an employee in any year will typically result in the work being performed by temporary labour or a contractor. It is unusual that either capital or operating work would not be performed in any given year due to the loss of an employee.

Schedule A presents the detailed breakdown of forecast internal labour expense and FTEs for 2018.

2019 FTEs and Internal Labour Expense

The 2019 FTEs and internal labour expense were calculated using the 2018 forecast as the starting point. To account for the impact of inflation, the 2018 internal labour expense is adjusted to reflect forecast salary increases applicable to 2019.

The 2019 test year labour forecast reflects an overall increase of 5.4 FTEs, primarily due to the addition of 4 new PLT Apprentices and additional labour associated with the replacement of the Company's Customer Service System.

Schedule B presents the detailed breakdown of forecast internal labour expense and FTEs for 2019.

2020 FTEs and Internal Labour Expense

The 2020 FTEs and internal labour expense were calculated using the 2019 forecast as the starting point. To account for the impact of inflation, the 2019 internal labour expense is adjusted to reflect forecast salary increases applicable to 2020.

The 2020 test year labour forecast reflects an overall decrease of 1.1 FTEs, primarily due to the forecast conclusion of the *Five-Year Conservation Plan: 2016-2020*, partially offset by the addition of 4 new PLT Apprentices.

Schedule C presents the detailed breakdown of forecast internal labour expense and FTEs for 2020.

Schedule A 2018 Internal Labour Forecast

	Labour Expense (\$000s)	FTEs	Notes
2017 Workforce			
Operating	32,375		1
Capital	20,828		
Rechargeable & Recoverable	8,243		
Total	61,446	611.2	2
2018 Salary Increase	1,075		3
Extra Work Day in 2018	236		4
Adjustments for 2018			
2018 Retirements			
Employee Retirement ¹⁵	(2,160)	(18.0)	5
Retirement Replacement	1,350	13.5	6
2018 Leaves of Absence			
Employees Taking Leave	(673)	(7.0)	7
Employees Returning from Leave	570	6.0	8
Terminations	(840)	(8.4)	9
New Hires	588	8.4	10
Partial Year Adjustments ¹⁶	1,033	13.1	11
2018 Adjusted Workforce	62,626	618.8	12
2018 Workforce			
Operating	32,331		
Capital	21,118		
Rechargeable & Recoverable	9,177		
Total	62,626		13

Retirement estimates are based upon employees reaching age 65, or reaching age 60 with the combination of 95 years of age plus service, or have expressed interest in retiring prior to reaching this milestone.

Partial year adjustments include FTE and labour adjustments necessary to account for employees who started or resumed their employment in 2018. These employees would not have accounted for full annual salaries in the 2017 labour expense, nor would they have accounted for full FTEs in 2017. These adjustments also include employees who left the Company in 2017. These employees do not account for full annual salaries in the 2018 labour expense, nor would they account for full FTEs in 2018.

Notes for Schedule A

No.	Description
1	The operating labour cost for 2017. It includes the impact of all retirements, leaves of absence, terminations and new hires experienced in 2017.
2	The 2017 FTEs are reflective of the 2017 work requirement. It reflects the impacts, including timing, of all retirements, leaves of absence, terminations and new hires of regular and temporary employees in 2017. Total labour expense includes payroll loading.
3	The 2018 salary increase is based upon a weighted average salary increase of 1.75%.
4	In 2018, there are 261 work days versus 260 in 2017, resulting in a labour increase of \$236,000.
5	In 2018, there are 36 employees expected to retire. The 2018 labour cost reduction for retirements is \$2,160,000. The 2018 reduction in FTEs of 18.0 reflects the timing of the forecast retirements.
6	Thirty-six of the retiring employees will be replaced in 2018, which results in a \$1,350,000 labour cost increase and a 13.5 FTE increase for 2018.
7	In 2018, the Company forecasts 14 employees taking leaves of absence based on past experience. The 2018 labour reduction for leave is \$673,000, with a corresponding FTE reduction of 7.0.
8	In 2018, the Company forecasts 12 employees returning from leaves of absence based on past experience. The 2018 labour increase for employees returning from leave is \$570,000, with a corresponding FTE increase of 6.0.
9	The completed deployment of automated meter reading technology is expected to result in an FTE reduction of 8.4 and a corresponding labour cost reduction of \$840,000.
10	In 2018, the addition of 4 new Engineering Technologists, a Regulatory Analyst, 4 PLT Apprentices, a Human Resources Analyst and a Team Lead in IT is expected to increase FTEs by 8.4 and labour costs by \$588,000.
11	The 2018 labour increase for partial year adjustments is an increase of \$1,033,000, with a corresponding FTE increase of 13.1.
12	The 2018 forecast FTE count.
13	The 2018 forecast labour cost, excluding overtime.

Schedule B 2019 Internal Labour Forecast

	Labour Expense (\$000s)	FTEs	Notes
2018 Forecast Workforce			
Operating	32,331		1
Capital	21,118		
Rechargeable & Recoverable	9,177		
Total	62,626	618.8	2
2019 Salary Increase	1,096		3
Adjustments for 2019			
2019 Retirements			
Employee Retirement ¹⁷	(1,320)	(11.0)	4
Retirement Replacement	840	8.0	5
2019 Leaves of Absence			
Employees Taking Leave	(595)	(7.0)	6
Employees Returning from Leave	612	6.0	7
Terminations	(81)	(0.9)	8
New Hires	480	5.5	9
Partial Year Adjustments ¹⁸	608	4.8	10
2019 Adjusted Workforce	64,266	624.2	11
2019 Forecast Workforce			
Operating	33,474		
Capital	21,463		
Rechargeable & Recoverable	9,329		
Total	64,266		12

Retirement estimates are based upon employees reaching age 65, or reaching age 60 with the combination of 95 years of age plus service.

Partial year adjustments include FTE and labour adjustments necessary to account for employees who started or resumed their employment in 2019. These employees would not have accounted for full annual salaries in the 2018 labour expense, nor would they have accounted for full FTEs in 2018. These adjustments also include employees who left the Company in 2018. These employees do not account for full annual salaries in the 2019 labour expense, nor would they account for full FTEs in 2019.

Notes for Schedule B

No. **Description** The operating labour cost for 2018. It includes the impact of all retirements, leaves of absence, terminations 1 and new hires in 2018. 2 The 2018 forecast FTEs are reflective of the 2018 work requirement. It reflects the impacts, including timing, of all retirements, leaves of absence, terminations and new hires of regular and temporary employees in 2018. Total labour expense includes payroll loading. The 2019 salary increase is based upon a weighted average salary increase of 1.75%. 3 4 In 2019, there are 22 employees expected to retire. The 2019 labour cost reduction for retirements is \$1,320,000. The 2019 reduction in FTEs of 11.0 reflects the timing of the forecast retirements. 5 Sixteen of the retiring employees will be replaced in 2019, which results in an \$840,000 labour increase and an 8.0 FTE increase for 2019. In 2019, the Company forecasts 14 employees taking leaves of absence based on past experience. The 2019 6 labour reduction for leave is \$595,000, with a corresponding FTE reduction of 7.0. 7 In 2019, the Company forecasts 12 employees returning from leaves of absence based on past experience. The 2019 labour increase for employees returning from leave is \$612,000, with a corresponding FTE increase of 6.0. 8 In 2019, the Company expects 1 termination as a result of completing the deployment of automated meter reading technology. This will result in a 0.9 FTE reduction and a cost decrease of \$81,000. 9 In 2019, the Company forecasts 4 new PLT Apprentices and 4 hires related to the replacement of the Company's Customer Service System. The 2019 labour increase for new hires is \$480,000, with a corresponding FTE increase of 5.5. 10 The 2019 labour increase for partial year adjustments is \$608,000, with a corresponding FTE increase of 4.8. 11 The 2019 forecast FTE count. 12 The 2019 forecast labour cost, excluding overtime.

Schedule C 2020 Internal Labour Forecast

	Labour Expense (\$000s)	FTEs	Notes
2019 Forecast Workforce			
Operating	33,474		1
Capital	21,463		
Rechargeable & Recoverable	9,329		
Total	64,266	624.2	2
2020 Salary Increase	1,285		3
Extra Work Day in 2020	245		4
Adjustments for 2020			
2020 Retirements			
Employee Retirement ¹⁹	(1,320)	(11.0)	5
Retirement Replacement	840	8.0	6
2020 Leaves of Absence			
Employees Taking Leave	(679)	(7.0)	7
Employees Returning from Leave	600	6.0	8
Terminations	(440)	(4.4)	9
New Hires	315	3.5	10
Partial Year Adjustments ²⁰	342	3.8	11
2020 Adjusted Workforce	65,454	623.1	12
2020 Forecast Workforce			
Operating	33,873		
Capital	22,091		
Rechargeable & Recoverable	9,490		
Total	65,454		13

Retirement estimates are based upon employees reaching age 65, or reaching age 60 with the combination of 95 years of age plus service.

Partial year adjustments include FTE and labour adjustments necessary to account for employees who started or resumed their employment in 2020. These employees would not have accounted for full annual salaries in the 2019 labour expense, nor would they have accounted for full FTEs in 2019. These adjustments also include employees who left the Company in 2019. These employees do not account for full annual salaries in the 2020 labour expense, nor would they account for full FTEs in 2020.

Notes for Schedule C

No.	Description
1	The operating labour cost for 2019. It includes the impact of all retirements, leaves of absence, terminations and new hires in 2019.
2	The 2019 forecast FTEs are reflective of the 2019 work requirement. It reflects the impacts, including timing, of all retirements, leaves of absence, terminations and new hires of regular and temporary employees in 2019. Total labour expense includes payroll loading.
3	The 2020 salary increase is based upon a weighted average salary increase of 2.00%.
4	In 2020, there are 262 work days versus 261 in 2019, resulting in a labour increase of \$245,000.
5	In 2020, there are 22 employees expected to retire. The 2020 labour cost reduction for retirement is \$1,320,000. The 2020 reduction in FTEs of 11.0 reflects the timing of the forecast retirements.
6	Sixteen of the retiring employees will be replaced in 2020, which results in an \$840,000 labour increase and an 8.0 FTE increase for 2020.
7	In 2020, the Company forecasts 14 employees taking leaves of absence based on past experience. The 2020 labour reduction for leave is \$679,000, with a corresponding FTE reduction of 7.0.
8	In 2020, the Company forecasts 12 employees returning from leaves of absence based on past experience. The 2020 labour increase for employees returning from leave is \$600,000, with a corresponding FTE increase of 6.0.
9	In 2020, the Company expects an FTE reduction of 4.4 FTEs as a result of the conclusion of the <i>Five-Year Conservation Plan: 2016-2020</i> . This will result in a labour reduction of \$440,000.
10	In 2020, the Company forecasts 4 new PLT Apprentices and 2 hires related to the replacement of the Company's Customer Service System. The 2020 labour increase for new hires is \$315,000, with a corresponding FTE increase of 3.5.
11	The 2020 labour increase for partial year adjustments is \$342,000, with a corresponding FTE increase of 3.8.
12	The 2020 forecast FTE count.
13	The 2020 forecast labour cost, excluding overtime.