
Newfoundland & Labrador

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

**IN THE MATTER OF THE
2016 CAPITAL BUDGET APPLICATION**

**FILED BY
NEWFOUNDLAND POWER INC.**

**DECISION AND ORDER
OF THE BOARD**

ORDER NO. P.U. 28(2015)

BEFORE:

**Andy Wells
Chair and Chief Executive Officer**

**Darlene Whalen, P.Eng.
Vice-Chair**

**Dwanda Newman, LL.B.
Commissioner**

**James Oxford
Commissioner**

**NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

AN ORDER OF THE BOARD

NO. P.U. 28(2015)

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 (the “EPCA”) and the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the “Act”), as amended, and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland Power Inc. for an Order pursuant to Sections 41 and 78 of the *Act*:

- (a) approving its 2016 Capital Budget of \$107,028,000;
- (b) approving the purchase and construction of improvements or additions to its property in 2016 and 2017; and
- (c) fixing and determining its average rate base for 2014 in the amount of \$964,930,000.

BEFORE:

Andy Wells
Chair & Chief Executive Officer

Darlene Whalen, P. Eng
Vice-Chair

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James Oxford
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1 **I BACKGROUND**

2
3 **1. The Application**

4
5 Newfoundland Power Inc. ("Newfoundland Power") filed its 2016 Capital Budget Application
6 (the "Application") with the Board of Commissioners of Public Utilities (the "Board") on June
7 23, 2015. In the Application Newfoundland Power requests that the Board make an Order:

- 8
9 a) approving Newfoundland Power's 2016 Capital Budget in the amount of \$107,028,000;
10 b) approving Newfoundland Power's purchase and construction in 2017 of improvements or
11 additions to its property in the amount of \$4,957,000; and
12 c) fixing and determining Newfoundland Power's average rate base for 2014 in the amount
13 of \$964,930,000.

14
15 In accordance with the legislation, regulations and Board guidelines the Application includes a
16 detailed explanation of each proposed expenditure, setting out a description, justification, costing
17 methodology and future commitments, if applicable. Additional studies and reports, including
18 detailed engineering reports, are provided in relation to a number of projects.

19
20 In compliance with previous Board Orders the Application also includes specific information
21 required to be filed, including a status report on 2015 capital expenditures, a five-year capital
22 plan, as well as evidence relating to deferred charges and a reconciliation of average rate base to
23 invested capital.

24
25 **2. Board Authority**

26
27 Section 41 of the *Act* requires a public utility to submit an annual capital budget of proposed
28 improvements or additions to its property for approval of the Board no later than December 15th
29 in each year for the next calendar year. In addition, the utility is also required to include an
30 estimate of contributions toward the cost of improvements or additions to its property which the
31 utility intends to demand from its customers.

32
33 Subsection 41(3) prohibits a utility from proceeding with the construction, purchase or lease of
34 improvements or additions to its property without the prior approval of the Board where (a) the
35 cost of the construction or purchase is in excess of \$50,000, or (b) the cost of the lease is in
36 excess of \$5,000 in a year of the lease.

37
38 Section 78 gives the Board the authority to fix and determine the rate base for the service
39 provided or supplied to the public by the utility and also gives the Board the power to revise the
40 rate base. Section 78 also provides the Board with guidance on the elements that may be
41 included in the rate base.

42
43 **3. Application Process**

44
45 Notice of the Application, including an invitation to participate, was published on July 4, 2015.
46 Details of the Application and supporting documentation were posted on the Board's website.

Intervenor submissions were received from the Consumer Advocate, Mr. Thomas Johnson, and from Newfoundland and Labrador Hydro ("Hydro"). On July 20, 2015 a total of 40 Requests for Information ("RFIs") were issued to Newfoundland Power by the Consumer Advocate and the Board, which were answered by Newfoundland Power on July 30, 2015. The intervenors did not file additional evidence and did not request a technical conference or oral hearing of the Application.

Grant Thornton LLP ("Grant Thornton"), the Board's financial consultants, was retained to review the calculations of the 2014 average rate base. Grant Thornton filed a report dated July 31, 2015 and copies were provided to Newfoundland Power, the Consumer Advocate and Hydro.

Hydro advised on August 4, 2015 that it did not have any comments on the Application. The Consumer Advocate filed a written submission on August 7, 2015 and Newfoundland Power filed its reply submission on August 14, 2015.

II PROPOSED 2016 CAPITAL BUDGET

1. Overview

Newfoundland Power's proposed 2016 capital budget is \$107,028,000, which includes an estimated amount of \$1,500,000 in contribution in aid of construction that the utility intends to demand from its customers in 2016. The estimated expenditures by asset class are as follows:

<u>Asset Class</u>	<u>Budget (000s)</u>
1. Generation - Hydro	\$ 17,357
2. Generation - Thermal	1,738
3. Substations	17,940
4. Transmission	6,067
5. Distribution	45,055
6. General Property	1,840
7. Transportation	3,258
8. Telecommunications	514
9. Information Systems	8,009
10. Unforeseen Allowance	750
11. General Expenses Capitalized	4,500
Total	<u>\$ 107,028</u>

2. Evidence and Submissions

Newfoundland Power provided detailed information supporting the overall capital budget for 2016 as well as the proposed purchase and construction of improvements or additions to its property. The supporting information for each of the projects is comprehensive and consistent with the level of information filed in recent capital budget applications and in accordance with the Board's Capital Budget Guidelines. In addition, the Application sets out Newfoundland Power's initial assessment and associated spending for capital projects related to the

recommendations of the Board's consultants, The Liberty Consulting Group ("Liberty"), in its December 17, 2014 report filed as part of the Board's ongoing investigation and hearing into supply issues and power outages on the Island Interconnected system.

The Application proposes a 2016 capital budget in the amount of \$107,028,000, which includes forecast 2016 capital expenditures previously approved in Order No. P.U. 40(2014) as well as an estimated amount of \$1,500,000 in contributions in aid of construction which Newfoundland Power intends to recover from its customers in 2016. The Application also includes three multi-year projects involving future capital expenditures of \$4,957,000. The Application states that approximately 59% of the proposed 2016 capital expenditures is related to the replacement of plant and a further 25% is required to meet Newfoundland Power's obligation to serve new customers and meet the requirement for increased system capacity. The remaining 16% of forecast expenditures is related to information systems, general expenses capitalized, third party requirements and financial carrying costs.

As in previous years, distribution capital expenditures account for the greatest percentage of overall expenditures, at 42% of the proposed 2016 capital budget. According to Newfoundland Power these expenditures are primarily driven by customer requests for new connections to the system and rebuilding of aged and deteriorated infrastructure. Newfoundland Power advises that the Distribution Reliability Initiative will address reliability issues associated with one rural and two urban feeders in 2016.

With respect to generation projects Newfoundland Power will complete the second year of the project to replace the penstock at Pierre's Brook hydro plant. The 2016 expenditure of \$15.1 million for this project is the largest project expenditure in the 2016 capital budget. Newfoundland Power also proposes to complete a refurbishment of the Greenhill Olympus gas generator at a cost of \$1.5 million.

Capital expenditures are planned in 2016 for certain substations to address customer load growth. Newfoundland Power plans to install new power transformers at the Grand Falls substation and the King's Bridge Road substation in St. John's. The Lethbridge transformer will also be installed at the Doyles substation in the Codroy Valley.

Newfoundland Power will also continue with the multi-year projects approved in the 2015 capital budget application to rebuild two transmission lines; one in St. John's and one in the Stephenville area.¹ An additional 2-year project to rebuild the transmission line 57L operating between the Bay Roberts and Harbour Grace substations is proposed to begin in 2016.

According to the 2016 Capital Plan annual capital expenditures for the next five years (2016-2020) are forecast to average approximately \$107.6 million, with a low of \$105.8 million in 2019 and a high of \$109.3 million in 2017. Over the period 2011-2015 average annual capital expenditures are expected to be \$89.1 million. The increase in planned expenditures is related to projects to replace deteriorated facilities, meet customer and load growth, replace the SCADA system and acquire a new portable generator. Newfoundland Power states that the replacement of plant has been, and will continue to be, the dominant driver of its planned capital expenditures,

¹ The transmission lines being rebuilt are 30L which operates between Ridge Road and King's Bridge Road in St. John's and 400L which operates between Newfoundland and Labrador Hydro's Bottom Brook substation and Wheeler's substation on the Hansen Highway outside Stephenville.

accounting for approximately 58% of total expenditure for the period from 2016 through 2020, compared to 51% over the period 2011-2015. Capital expenditures related to customer and load growth are expected to be 25% of planned expenditures for 2016-2020, compared to an average of 33% for 2011-2015.

As part of the Application Newfoundland Power also filed a report *2015 Distribution Reliability Review* relating to Liberty's recommendations in its December 17, 2014 *Report on Island Interconnected System to Interconnection with Muskrat Falls addressing Newfoundland Power Inc.* Liberty's report was prepared as part of the Board's ongoing investigation into the adequacy and reliability of supply on the Island Interconnected system following a series of events and outages in January 2014. Newfoundland Power's report addresses the six recommendations made by Liberty relating to distribution reliability management for the utility. The proposed 2016 capital expenditure includes a number of projects to replace key operational technologies, including commencing the acquisition of an outage management system which will provide greater outage response functionality. In addition the 2016 capital budget includes a *Distribution Feeder Automation* capital project to add a further eight downline automated distribution feeder reclosers, which was recommended by Liberty to provide enhanced distribution system reliability.

In his submission the Consumer Advocate notes the increasing level of annual capital expenditures since 2012 and also notes that Newfoundland Power does not expect its annual capital expenditures to decrease in the coming years. The Consumer Advocate submits that the level of spending reinforces the imperative that approval should only be given to those projects or improvements demonstrated to be necessary for Newfoundland Power to provide service at the lowest possible cost while still providing reliable service. The Consumer Advocate raised specific concerns and objections in relation to the Vehicle Replacement Project.

In reply submission Newfoundland Power notes that no specific challenge has been made to the numerous engineering judgments and assessments that form the basis of the proposed capital expenditures and that no other evidence was presented to contradict this evidence. Newfoundland Power also notes that the forecast annual capital expenditure up to 2020 is broadly consistent on an inflation adjusted basis with that in the period 2011 through 2015. Newfoundland Power submits that the proposed 2016 Capital Budget represents the capital expenditures required to meet its statutory obligations, including the delivery of electrical power at the lowest possible cost consistent with reliable service.

3. Board Findings

The Board has reviewed the evidence filed in support of the proposed 2016 capital budget and each of the proposed capital expenditures in excess of \$50,000. The Consumer Advocate raises specific concerns in relation to the proposed capital expenditure to purchase vehicles and aerial devices, with a forecast project cost of \$3,258,000.² This project involves the addition and replacement of heavy fleet, passenger and off-road vehicles. Newfoundland Power proposes to replace 8 heavy fleet vehicles, 22 passenger vehicles, and 8 off-road vehicles. Newfoundland Power justifies this project on the basis of the vehicle replacement criteria it uses to determine the vehicles that have reached the end of their useful lives and must be replaced. Newfoundland

² Application, Schedule B, 2016 Capital Projects – Normal Capital (Identified Need); page 69 of 98

Power explains that new vehicles are acquired through competitive tendering to ensure lowest possible cost consistent with safe, reliable service.

The Consumer Advocate submits that comparisons to replacement practices for other Canadian utilities should be made for projects such as this, stating that *"if other utilities are able to save funds by using vehicles longer, these avenues should be pursued if at all possible by Newfoundland Power."* He pointed to the Board's finding in Order No. P.U. 40(2014) where the Board directed that, in its next capital budget application where expenditures are proposed in relation to vehicle replacements, Newfoundland Power will be expected to provide information on the vehicle replacement policies for other Canadian utilities.

Newfoundland Power filed the report *Vehicle Replacement Criteria*, dated June 2015, as directed by the Board in Order No. P.U. 40(2014). The report sets out the results of a survey completed by Newfoundland Power of vehicle replacement policies of Canadian utilities, including a comparison with Newfoundland Power's practices for vehicle replacements. The Consumer Advocate notes that the survey results show that, for passenger vehicles, Newfoundland Power's criteria is consistent with only one other utility. Further the Consumer Advocate states that, in comparison with all other utilities, Newfoundland Power assesses its passenger vehicles in terms of kilometers much earlier. For lighter duty vehicles Newfoundland Power's kilometer assessment criteria is lower than three of the Atlantic region, and for heavy duty vehicles the kilometers assessment criteria is lower than two other Atlantic region utilities. The Consumer Advocate submits that there is merit to moving Newfoundland Power's assessment criteria to be more in line with the other utilities canvassed. The Consumer Advocate also submits that additional information with respect to the actual age and kilometers of the vehicles being replaced at the utilities surveyed would be instructive, and also that the age and kilometers of the vehicles proposed to be replaced by Newfoundland Power should be provided in each capital budget application.

In reply submission Newfoundland Power submits that a higher usage threshold in terms of kilometers driven would not have resulted in later retirements as suggested by the Consumer Advocate. Newfoundland Power's 5-year age threshold for vehicle assessment means that, irrespective of kilometers driven, identified vehicles would have been assessed for overall condition, maintenance history and immediate repair requirements and a decision on retirement would be made on that basis. With respect to the Consumer Advocate's suggestion for a further survey Newfoundland Power submits that this comparison would not be instructive as its vehicle retirement policies are in line with other Canadian utilities. Newfoundland Power states:

The age and usage criteria used by Newfoundland Power are broadly consistent with the average of similar criteria used by the Canadian electrical utilities surveyed, and consistent with the average of those used by Atlantic Canadian electrical utilities.

Newfoundland Power also notes that it has implemented a process to ensure that the kilometer usage of all vehicles is recorded when they are retired and that it will provide that information as and when required by the Board.

The Board notes that the Consumer Advocate did not oppose the proposed vehicle replacements but questioned the criteria used for the decision on when and which vehicles are retired, and in particular how these criteria compare to those of other Canadian utilities. In the Board's view the additional information provided by Newfoundland Power with respect to the vehicle replacement

1 policies of other Canadian utilities supports Newfoundland Power's submission that its criteria
2 and practices are consistent with those used by Atlantic Canadian utilities, which would be
3 expected to operate under similar conditions as in this province. Newfoundland Power uses age
4 and kilometers driven in conjunction with an assessment of overall condition, maintenance
5 history and immediate repair requirements to determine whether the vehicle has reached the end
6 of its useful life.

7
8 The Board is satisfied that Newfoundland Power's vehicle replacement criteria and practices
9 provide an objective and sound basis for decision-making and that the evidence in the
10 Application supports the proposed capital expenditure for vehicle replacements for 2016. The
11 Board is not persuaded that any further information in relation to vehicle retirement at other
12 Canadian utilities, as proposed by the Consumer Advocate, would be helpful. The Board will not
13 require Newfoundland Power to undertake any additional surveys in this regard. The Board notes
14 Newfoundland Power's initiative to record the kilometer usage of vehicles being retired and, for
15 completeness, will expect this information to be provided in future applications where
16 expenditures are proposed in relation to vehicle replacements.

17
18 The Board notes that no other concerns were raised in relation to Newfoundland Power's
19 proposed 2016 Capital Budget. The Board finds that Newfoundland Power has demonstrated that
20 the proposed capital expenditures are necessary to maintain its electrical system and respond to
21 customer growth and requirements. The Board has examined each of the projects proposed by
22 Newfoundland Power and is satisfied that the proposed capital projects are adequately justified
23 and are appropriate and necessary in the circumstances.

24 25 **4. Conclusion**

26
27 The Board finds that the proposed purchases and construction projects in excess of \$50,000,
28 including the multi-year projects proposed to start in 2016, are prudent, reasonable and necessary
29 for Newfoundland Power to continue to provide safe and reliable service and should be
30 approved. The Board also finds that the proposed total capital budget for 2016 is prudent and
31 reasonable and will, therefore, approve Newfoundland Power's 2016 Capital Budget in the
32 amount of \$107,028,000.

III 2014 AVERAGE RATE BASE

The following table shows the calculation of the average rate base as of December 31 for 2014 compared with 2013:³

	(000s)	
	<u>2014</u>	<u>2013</u>
Net Plant Investment		
Plant Investment	\$1,592,616	\$1,501,729
Accumulated Amortization	(645,826)	(623,645)
Contributions in Aid of Construction	<u>(33,701)</u>	<u>(31,911)</u>
	913,089	846,173
Additions to Rate Base		
Deferred Pension Costs	103,939	101,159
Credit Facility Costs	72	-
Cost Recovery Deferral – Seasonal/TOD Rates	68	95
Cost Recovery Deferral – Hearing Costs	322	644
Cost Recovery Deferral – Regulatory Amortizations	1,107	2,214
Cost Recovery Deferral – 2012 Cost of Capital	588	1,177
Cost Recovery Deferral – 2013 Revenue Shortfall	1,126	2,252
Cost Recovery Deferral – Conservation	4,937	2,085
Customer Finance Programs	<u>1,136</u>	<u>1,363</u>
	113,295	110,989
Deductions from Rate Base		
Weather Normalization Reserve	1,640	5,058
Other Post Employment Benefits	32,435	23,515
Customer Security Deposits	660	840
Accrued Pension Obligation	4,635	4,325
Accumulated Deferred Income Taxes	2,529	1,872
Excess Earnings	49	-
Demand Management Incentive Account	<u>446</u>	<u>(272)</u>
	42,394	35,338
Year End Rate Base	983,990	921,824
Average Rate Base Before Allowances	952,907	903,849
Rate Base Allowances		
Materials and Supplies Allowance	5,619	5,445
Cash Working Capital Allowance	<u>6,404</u>	<u>6,526</u>
Average Rate Base at Year End	<u>\$964,930</u>	<u>\$915,820</u>

Grant Thornton reviewed the calculation of the average rate base for 2014 and provided an opinion that the calculation is accurate and in accordance with established practice and previous Board Orders. Grant Thornton also reviewed the additions, deductions and allowances included

³ Source: Application, Schedule D.

1 in the rate base and found no discrepancies or unusual items or non-compliance with Board
2 Orders.

3

4 The Board will approve all of the components of Newfoundland Power's average rate base for
5 2014 in the amount of \$964,930,000.

1 **IV ORDER**

2
3 **IT IS THEREFORE ORDERED THAT:**

- 4
- 5 1. Newfoundland Power's proposed construction and purchase of improvements or
6 additions to its property to be completed in 2016, as set out in Schedule A to this Order,
7 are approved.
- 8
- 9 2. Newfoundland Power's proposed multi-year construction and purchase of
10 improvements or additions to its property to begin in 2016, as set out in Schedule B to
11 this Order, are approved.
- 12
- 13 3. Newfoundland Power's 2016 Capital Budget for improvements or additions to its
14 property in an amount of \$107,028,000, as set out in Schedule C to this Order, is
15 approved.
- 16
- 17 4. Newfoundland Power's average rate base for the year ending December 31, 2014 is
18 hereby fixed and determined at \$964,930,000.
- 19
- 20 5. Unless otherwise directed by the Board, Newfoundland Power shall file an annual
21 report to the Board on its 2016 capital expenditures by March 1, 2017.
- 22
- 23 6. Unless otherwise directed by the Board, Newfoundland Power shall provide, in
24 conjunction with the 2017 Capital Budget Application, a status report on the 2016
25 capital budget expenditures showing for each project:
- 26
- 27 (i) the approved budget for 2016;
- 28 (ii) the expenditures prior to 2016;
- 29 (iii) the 2016 expenditures to the date of the application;
- 30 (iv) the remaining projected expenditures for 2016;
- 31 (v) the variance between the projected total expenditures and the approved
32 budget; and
- 33 (vi) an explanation of the variance.
- 34
- 35 7. Newfoundland Power shall pay all costs and expenses of the Board incurred in
36 connection with the Application.

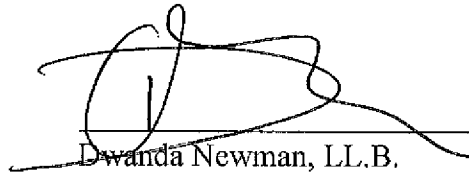
DATED at St. John's, Newfoundland and Labrador this 18th day of September, 2015.



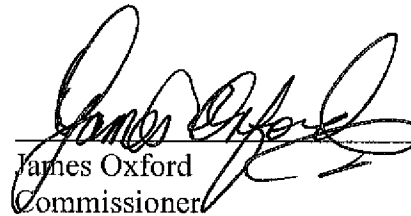
Andy Wells
Chair & Chief Executive Officer



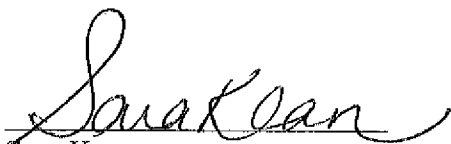
Darlene Whalen, P.Eng.
Vice-Chair



Dwanda Newman, LL.B.
Commissioner



James Oxford
Commissioner



Sara Kean
Assistant Board Secretary

**Newfoundland Power Inc.
2016 Capital Budget
Single-Year Projects Over \$50,000
(000s)**

<u>Project Description</u>	<u>2016</u>
<u>Generation - Hydro</u>	
Facility Rehabilitation	\$1,462
Public Safety Around Dams	883
Pierre's Brook Plant Refurbishment	15,012
Total Generation - Hydro	<u>\$17,357</u>
<u>Generation - Thermal</u>	
Facility Rehabilitation Thermal	\$238
Greenhill Gas Turbine Refurbishment	1,500
Total Generation - Thermal	<u>\$1,738</u>
<u>Substations</u>	
Substations Refurbishment and Modernization	\$7,871
Replacements Due to In-Service Failures	3,771
Additions Due to Load Growth	5,868
Substation Feeder Termination	430
Total Substations	<u>\$17,940</u>
<u>Transmission</u>	
Transmission Line Rebuild	\$4,546
Total Transmission	<u>\$4,546</u>
<u>Distribution</u>	
Extensions	\$10,439
Meters	4,582
Services	3,784
Street Lighting	2,245
Transformers	5,759
Reconstruction	4,599
Rebuild Distribution Lines	3,694
Relocate/Replace Distribution Lines for Third Parties	2,454
Trunk Feeders	1,607
Feeder Additions for Growth	1,708
Distribution Reliability Initiative	1,463
Distribution Feeder Automation	565
Allowance for Funds Used During Construction	206
Total Distribution	<u>\$43,105</u>

General Property

Tools and Equipment	\$682
Additions to Real Property	434
Company Buildings Renovations -- Duffy Place	724
Total General Property	<u>\$1,840</u>

Transportation

Purchase Vehicles and Aerial Devices	\$3,258
Total Transportation	<u>\$3,258</u>

Telecommunications

Replace/Upgrade Communications Equipment	\$105
Fibre Optic Network	409
Total Telecommunications	<u>\$514</u>

Information Systems

Application Enhancements	\$1,143
System Upgrades	1,718
Personal Computer Infrastructure	465
Shared Server Infrastructure	916
Network Infrastructure	294
SCADA System Replacement	2,842
Geographic Information System Improvements	482
Total Information Systems	<u>\$7,860</u>

Unforeseen Allowance

Allowance for Unforeseen Items	\$750
Total Unforeseen Allowance	<u>\$750</u>

General Expenses Capitalized

General Expenses Capitalized	\$4,500
Total General Expenses Capitalized	<u>\$4,500</u>

Total Expenditures Single-Year Projects over \$50,000	<u><u>\$103,408</u></u>
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**Newfoundland Power Inc.
2016 Capital Budget
Multi-Year Projects Over \$50,000
(000s)**

Multi-Year Projects Commencing in 2016

<u>Project Description</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
SJM Waterford River Ductbank Replacement	\$1,950	\$2,440	-
Transmission Line Rebuild (57L Bay Roberts to Harbour Grace Substations)	1,521	1,717	-
Outage Management System Placement	149	800	-
Total Expenditures Multi-Year Projects Commencing 2016	<u>\$3,620</u>	<u>\$4,957</u>	

**Newfoundland Power Inc.
2016 Capital Budget
(000s)**

Projects over \$50,000 to be completed in 2016	\$103,408
Multi-Year Projects over \$50,000 commencing in 2016	3,620
Total 2016 Capital Budget	<u>\$107,028</u>

Newfoundland & Labrador

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