BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF THE

2009 CAPITAL BUDGET APPLICATION

FILED BY

NEWFOUNDLAND POWER INC.

DECISION AND ORDER OF THE BOARD

ORDER No. P. U. 27(2008)

BEFORE:

Andy Wells Chair and Chief Executive Officer

Darlene Whalen, P.Eng. Vice-Chair

Dwanda Newman, LL.B. Commissioner

P. U. 27(2008)

IN THE MATTER OF the *Public Utilities Act*, RSNL 1990, c. P-47 (the "*Act*");

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 2009 Capital Budget of \$61,571,000;
- (b) approving 2009 leases of \$11,000 per year; and
- (c) fixing and determining its average rate base for 2007 in the amount of \$793,703,000.

BEFORE:

Andy Wells Chair and Chief Executive Officer

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I BACKGROUND

1. The Application

In accordance with the provisions of the *Act* Newfoundland Power filed its 2009 Capital Budget Application (the "Application") with the Board of Commissioners of Public Utilities (the "Board") on July 11, 2008. In the Application Newfoundland Power requests that the Board make an Order:

- (i) approving its 2009 Capital Budget of \$61,571,000;
- (ii) approving 2009 leases in the amount of \$11,000 per year; and
- (iii) fixing and determining its average rate base for 2007 in the amount of \$793,703,000.

The Application, in accordance with historical practice, Board guidelines and relevant legislation, includes a detailed explanation of each proposed expenditure setting out a description, justification, projected expenditures, costing methodology and future commitments, if applicable. Additional studies and reports, including detailed engineering reports, are provided in relation to a number of projects.

2. Board Authority

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

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

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

Board procedures and process are established by regulation, guidelines or rules of procedure established in accordance with this legislation. Capital Budget Guidelines applicable to this Application were established provisionally by the Board in June of 2005 and finalized in October 2007.

3. Application Process

Notice of the Application was published on July 22, 2008 in newspapers in the Province inviting participation in the Application process. Details of the Application and supporting documentation were posted on the Board's website.

Interventions were received from the Consumer Advocate, Mr. Thomas Johnson, and from Newfoundland and Labrador Hydro. A total of 39 Requests for Information (RFIs) were issued to Newfoundland Power by the Consumer Advocate and the Board. No intervenor evidence was filed and no intervenor requested a technical conference or formal hearing of the Application.

Grant Thornton, the Board's financial consultants, were retained by the Board to review the calculations of the 2007 actual average rate base and the calculations of the 2008 and 2009 forecast deferred charges. Grant Thornton filed a report on September 19, 2008 and copies were provided to the intervenors.

- 17 The Consumer Advocate filed a written submission on September 24, 2008 and Newfoundland
- Power filed its written submission on October 3, 2008. Hydro did not file any RFIs or a written
- 19 submission.

II PROPOSED 2009 CAPITAL BUDGET

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1. Overview

Newfoundland Power's proposed total capital budget for 2009 is \$61,571,000. The proposed expenditures by asset class are as follows:

Asset Class	Budget (000s)
Generation-Hydro	\$ 8,899
Generation-Thermal	100
Substations	7,172
Transmission	4,507
Distribution	30,178
General Property	835
Transportation	2,255
Telecommunications	350
Information Systems	3,725
Unforeseen Allowance	750
General Expenses Capitalized	<u>2,800</u>
Total	<u>\$ 61,571</u>

The proposed 2009 capital budget is 21% larger than the 2008 unadjusted capital budget of \$50.7 million approved by the Board in Order No. P. U. 27(2007). Two projects, the replacement of the Rocky Pond hydroelectric plant penstock and the replacement of the power transformer at the Horsechops hydroelectric plant, account for \$7.9 million of the budget increase over last year.

 Newfoundland Power has provided detailed information supporting the proposed expenditures. 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.

2. Consumer Advocate's Submissions

The Consumer Advocate's written submission addressed (1) the condition assessment of the Rocky Pond forebay intake structure and (2) the deferral of the plant control system component of the Horsechops Protection, Control and Governor Replacement Project. In relation to the Rocky Pond Plant Refurbishment Project the Consumer Advocate also argued that the Board should require post demolition assessments for penstock replacement projects as part of the capital budget approval process. These issues along with the Board's findings are set out in the following sections.

i) Rocky Pond Hydro Plant Refurbishment

Newfoundland Power has proposed a major refurbishment of the Rocky Pond hydroelectric generating plant, which will include upgrades to the civil, electrical and mechanical systems of the plant in 2009. The components proposed for replacement or refurbishment include the woodstave penstock, generator windings, intake gate and guides, governor controls and main inlet valve. Also included in the project is the replacement of the forebay line which provides both electricity and communications to the forebay intake gate. The total proposed expenditure for the refurbishment of the Rocky Pond hydroelectric plant is \$6,517,000.

Forebay Intake Structure

In written submission the Consumer Advocate questioned whether certain aspects of this proposed project could be deferred, specifically the intake gate and gate guides at the forebay intake structure (\$231,000).

The Consumer Advocate states that he is unsure of the basis for the assertion by Newfoundland Power in its report *Rocky Pond Hydro Plant Refurbishment* filed with the Application that the intake gate and gate guides are in poor condition. He referenced three specific Inspection Reports/Assessments that were completed for Rocky Pond Dam, Spillway and Intake on August 17, 2007, October 4, 2007 and April 28, 2008 and provided in response to CA-NP-12. These reports identify the condition of the intake/walkway, gate operation and gatehouse as "good". Based on these reports the Consumer Advocate questions the need for their replacement at this time as proposed by Newfoundland Power. (Consumer Advocate, Written Submission, pgs. 7-8)

In its reply Newfoundland Power states that the project is necessary at this time due to the age and physical condition of plant assets. Newfoundland Power clarified that the engineering condition assessment in the *Rocky Pond Hydro Plant Refurbishment* report is a professional assessment of all relevant factors while the Inspection/Assessment Reports referenced by the Consumer Advocate are in effect observations of power plant maintenance staff relative to the last time the site was visually inspected. The engineering condition assessment is a more in depth analysis and included a review of all inspection reports and maintenance logs and also considered the performance of the intake gate in the closed position. Newfoundland Power points out that the maintenance logs identify the performance of the gate in the closed position as poor, requiring intervention by divers to seal the gate. Newfoundland Power states that, because of the condition of penstock as well as the poor performance of the intake gate, the Rocky Pond plant is currently operated with a view to avoiding the de-watering of the penstock unless absolutely necessary. This places serious operating limitations on the plant. According to Newfoundland Power with the installation of a new penstock the intake gate will be operated more frequently to complete maintenance of turbine components.

Based on the information filed to support this capital project, including the *Rocky Pond Hydro Plant Refurbishment* report, the Board is satisfied that this project should proceed as proposed. This hydro plant is an important asset on the system and many of the components are original to the 1942 construction. The plant refurbishment will provide energy at a significantly lower cost

than Holyrood over the next 50 years. The Board accepts Newfoundland Power's position that a properly functioning intake gate will be critical to the future operation and maintenance of the plant. In particular the Board is satisfied that replacement of the intake gate and gate guides is necessary for the safe and reliable operation of the plant.

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Post Demolition Assessments

 With respect to the woodstave penstock at Rocky Pond the Consumer Advocate questioned whether information from a post demolition assessment of the Rattling Brook penstock, which was replaced in 2007, would have provided relevant information on the actual condition of demolished penstocks as compared to the condition indicated by engineering assessments. According to the Consumer Advocate, since Newfoundland Power did not undertake a follow-up report with respect to the Rattling Brook penstock, any information that might have been brought to bear on this question has been lost. The Consumer Advocate requested that, in light of the fact that Newfoundland Power has stated in its 2009 Capital Plan that it intends to bring forward other such penstock projects over the next five years, the Board should direct Newfoundland Power to provide a follow-up report on the Rocky Pond penstock.

Newfoundland Power states that the justification for the replacement of the Rocky Pond penstock is not related to other penstock replacements. The decision to replace the Rocky Pond penstock is based upon an engineering assessment which recommended replacement based on its poor condition. Newfoundland Power submits that any reporting such as proposed by the Consumer Advocate should have a reasonable clear purpose and that no such purpose is evident on the record of this proceeding to justify the follow-up report recommended by the Consumer Advocate.

The Board is not persuaded that a requirement for post demolition assessments should be put in place at this time. In the Board's view the decision to replace any asset should be made based on a complete engineering assessment of the asset itself in its current operating circumstances along with consideration of the operational, safety and reliability issues associated with any potential failure of the asset. It is not clear how information from post demolition assessments of similar assets in other locations and under other operating conditions would inform this decision.

ii) Facility Rehabilitation – Horsechops Protection, Control and Governor Refurbishment

Newfoundland Power has proposed a capital expenditure of \$947,000 to refurbish protection, control and governor equipment at the Horsechops generating plant. The work will include the replacement of the control portion of the 54-year old gate shaft governor, upgrading of the electromechanical protective relays to modern digital multifunction relays, upgrading of the switchgear, installation of a programmable logic controller to control the plant, and the upgrading of the AC and DC electrical distribution systems inside the plant.

The Consumer Advocate submits that Newfoundland Power has not established that the refurbishment of the Horsechops governor control system (\$127,000) and the plant control system (\$422,000) cannot be reasonably deferred. The Consumer Advocate points to the high

plant availability statistics for the period 2006 through 2008 (95.54%, 98.73%, 98.77%) as evidence that the existing plant is in good condition and that some aspects of this project can be deferred. According to the Consumer Advocate there is insufficient evidence on the record to support the contention of Newfoundland Power that the governor control system is deteriorated and needs to be replaced. As well, with respect to the plant control system, the Consumer Advocate submits that the case has not been made for this expenditure. (Consumer Advocate, Written Submission, pgs. 12-13)

Newfoundland Power argues that the governor control system at Horsechops has been in service for 55 years, which is twice as long as the average life indicated by the US Army Corps of Engineers and 40% longer than the upper range service life indicated by the US Army Corps of Engineers. According to Newfoundland Power the long life of the existing governor control system relative to recognized engineering experience is persuasive evidence supporting Newfoundland Power's engineering assessment of the deterioration of the governor control system. In terms of the plant availability statistics Newfoundland Power submits that plant availability, particularly over relatively short periods of time, is not an indicator of plant condition. According to Newfoundland Power the 2009 proposed capital expenditures to refurbish the Horsechops governor control system and plant control system are necessary to replace deteriorated equipment.

Based on the information filed in support of this project the Board is satisfied that this project should proceed as proposed. The Horsechops generating plant, which was commissioned in 1954, is an important asset on the system representing over 10% of Newfoundland Power's hydro generating capacity. Newfoundland Power has completed major upgrades at this facility in recent years and the refurbishment work proposed for 2009 will replace much of the remaining obsolete and deteriorated equipment that is critical to plant operations. As well the Board notes that the 2009 Facility Rehabilitation report indicates that the voltage regulator in the plant control system has corrosion damage making its operation unreliable.

3. Board Findings

The Board has reviewed the extensive documentation and evidence presented by Newfoundland Power in support of the Application and finds that the proposed capital purchases and construction projects in excess of \$50,000 are necessary for Newfoundland Power to provide service and facilities which are reasonably safe and adequate and just and reasonable as required pursuant to s. 37 of the *Act* and should be approved. The Board also finds that the proposed total capital budget for 2009 is prudent and reasonable and will, therefore, approve Newfoundland Power's 2009 Capital Budget in the amount of \$61,571,000.

III. 2007 AVERAGE RATE BASE

The following table shows the calculation of the actual average rate base for 2007 compared with 2006:

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	(\$000s)		
	<u>2006</u>	<u>2007</u>	
Plant Investment	\$1,186,614	\$1,239,186	
Deduct:			
Accumulated Depreciation	494,851	516,478	
Contributions in Aid of Construction	23,142	24,217	
Weather Normalization Reserve	(11,808)	(10,516)	
Purchased Power Unit Cost Variance Reserve	1,342	1,650	
	507,527	531,829	
	679,087	707,357	
Add Contributions- Country Homes	1,001	1,346	
Balance – Current Year	680,088	708,703	
Balance – Previous Year	659,797	680,088	
Average	669,943	694,396	
Deferred Energy Replacement Cost	-	574	
Deferred Regulatory Cost	-	8,690	
Cash Working Capital Allowance	5,522	6,669	
Materials and Supplies	4,510	4,393	
Average Deferred Charges	94,338	96,784	
Average Unrecognized 2005 Unbilled Revenue	(21,396)	(17,803)	
Average Rate Base at Year End	\$ 752,917	\$ 793,703	

Source: Newfoundland Power 2009 Capital Budget Application, Schedule E, 1st Revision

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The actual average rate base for 2007 has increased by \$40,786,000 from 2006. This increase is primarily due to an increase in net plant investment of \$30,945,000 leading to an increase in average net plant investment of \$25,511,000. These increases result from additions during the year, an increase in actual and average deferred charges of \$11,710,000, a decrease of \$3,593,000 in the Average Unrecognized 2005 Unbilled Revenue, as well as a net transfer to the Purchased Power Unit Cost Variance Reserve of \$308,000.

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Grant Thornton reviewed the calculation of the actual average rate base for 2007 as set out in Schedule E, 1st Revision and concluded that the calculation is accurate and in accordance with previous Board Orders. The Board will approve all of the components of and Newfoundland Power's average rate base for 2007 in the amount of \$793,703,000.

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Forecast Deferred Charges for 2008 and 2009

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In compliance with Order No. P. U. 19(2003) Newfoundland Power filed evidence relating to its forecast deferred charges, including pension costs, to be included in the calculation of the forecast average rate base for 2008 and 2009.

Newfoundland Power's actual deferred charges for 2007 and forecast deferred charges for 2008 and 2009 are as follows:

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	(000s)			
	Forecast 2007	Actual 2007	Forecast 2008	Forecast 2009
Deferred Pension Cost	\$ 96,656	\$ 96,654	\$ 100,196	\$ 103,400
Weather Normalization Account	10,683	10,516	9,150	7,784
Unamortized Debt Discount & Issue Expense	3,433	3,111	2,934	3,355
Unamortized Capital Stock Issue Expense	137	137	75	37
Deferred Credit Facility Issue Costs	58	59	69	44
Deferred Depreciation Expenses	11,586	11,586	7,724	3,862
Deferred Replacement Energy Cost	1,147	1,147	764	381
Deferred General Rate Application Costs	-	1,250	398	199
Total Deferred Charges	\$ 123,700	\$ 124,460	\$ 121,310	\$ 119,062

Source: Newfoundland Power 2009 Capital Budget Application, Report on Deferred Charges and Rate Base – Table 1

The total deferred charges as at December 31, 2007 were \$760,000 higher than forecast in the 2008 Capital Budget Application. This increase is primarily due to the deferral of \$1,250,000 related to Newfoundland Power's 2007 General Rate Application pursuant to Order No. P. U. 32(2007), which was offset partially by lower Unamortized Debt Discount & Issue Expense of \$322,000 and a reduction in the balance in the Weather Normalization Account of \$167,000.

Deferred pension costs represent the most significant component of the deferred charges. The increase in forecast deferred pension costs for 2008 and 2009 is the result of the difference between the funding and the expense as determined in accordance with the recommendations of the Canadian Institute of Chartered Accountants (CICA). Grant Thornton reviewed the calculations related to the deferred pension cost and confirmed that no discrepancies were noted and that the information filed is consistent with prior years and is calculated in accordance with recommendations of the CICA and relevant Board Orders.

The forecast deferred charges reflects a number of decisions and approvals arising from Newfoundland Power's 2007 General Rate Application and the resultant Order No. P. U. 32(2007). The deferral of depreciation expense relates to the increase in depreciation expense arising from the conclusion of the amortization period for the 2003 depreciation reserve variance. The forecast for 2008 and 2009 reflects the amortization of the deferred depreciation expense over a three-year period beginning January 1, 2008 pursuant to Order No. P. U. 32(2007). The deferral of replacement energy costs (after tax costs) is associated with the refurbishment of the Rattling Brook Hydroelectric Plant and was approved by the Board in Order No. P. U. 39(2006). The forecast for 2008 and 2009 reflects the amortization of the deferred replacement energy costs over a three-year period beginning January 1, 2008 pursuant to Order No. P. U. 32(2007). The forecast for 2008 and 2009 also reflects the amortization over a three-year period starting January 1, 2008 of \$597,000 in actual costs related to Newfoundland Power's 2007 General Rate Application, pursuant to Order No. P. U. 32(2007).

Grant Thornton reviewed Newfoundland Power's calculations of deferred charges and, where appropriate, agreed the calculations to supporting documentation. No issues were identified with respect to the actual or forecast deferred charges as set out by Newfoundland Power in the Application. The Board is satisfied that the amount as proposed by Newfoundland Power for deferred charges is appropriately included in the calculation of the forecast average rate base for 2008 and 2009.

IV ORDER

IT IS THEREFORE ORDERED THAT:

1. Pursuant to Section 41 of the *Act* Newfoundland Power's capital purchases and construction projects in excess of \$50,000, as set out in Schedule A to this Order, are approved.

2. Pursuant to Section 41 of the *Act* the 2009 Capital Budget for improvements and additions to Newfoundland Power's property in an amount of \$61,571,000 is approved.

3. Pursuant to Section 41 of the *Act* the 2009 leases of \$11,000 per year, as set out in Schedule B to this Order, are approved.

4. Pursuant to Section 78 of the *Act* the average rate base for the year ending December 31, 2007 is hereby fixed and determined at \$793,703,000.

5. Unless otherwise directed by the Board, Newfoundland Power shall file an annual report to the Board on its 2009 capital expenditures by March 1, 2010.

6. Unless otherwise directed by the Board, Newfoundland Power shall provide in conjunction with the 2010 Capital Budget Application, a status report on the 2009 capital budget expenditures showing for each project:

- (i) the approved budget for 2009;
- (ii) the expenditures prior to 2009;
- (iii) the 2009 expenditures to the date of the Application;
- (iv) the remaining projected expenditures for 2009;
- (v) the variance between the projected total expenditures and the approved budget; and
- (vi) an explanation of the variance.

7. Newfoundland Power shall pay all costs and expenses of the Board incurred in connection with the Application.

Dated at St. John's, Newfoundland and Labrador this 12th day of November 2008.

Andy Wells

Chair and Chief Executive Officer

Darlene Whalen, P.Eng.

Vice-Chair

Dwanda Newman, LL.B.

Commissioner

G. Cheryl Blundon Board Secretary

2009 CAPITAL BUDGET SUMMARY

Asset Class	Budget (000s)
Generation - Hydro	\$ 8,899
2. Generation - Thermal	100
3. Substations	7,172
4. Transmission	4,507
5. Distribution	30,178
6. General Property	835
7. Transportation	2,255
8. Telecommunications	350
9. Information Systems	3,725
10. Unforeseen Allowance	750
11. General Expenses Capitalized	2,800
Total	\$ 61,571

2009 CAPITAL PROJECTS (BY ASSET CLASS)

Capital Projects		Budget (000s)	Description ¹
1.	Generation - Hydro		
	Rocky Pond Plant Refurbishment Facility Rehabilitation Raise Rose Blanche Spillway to Increase Production	\$ 6,517 1,917 465	2 4 6
	Total – Generation - Hydro	\$ 8,899	
2.	Generation - Thermal		
	Facility Rehabilitation Thermal	\$ 100	9
	Total – Generation – Thermal	\$ 100	
3.	Substations		
	Substations Refurbishment and Modernization	\$ 4,102	12
	Replacements Due to In-Service Failures Horse Chops Transformer Replacement	1,729 1,341	14 16
	Total - Substations	\$ 7,172	
4.	Transmission		
	Transmission Line Rebuild	\$ 4,507	19
	Total - Transmission	\$ 4,507	

Project descriptions can be found in Schedule B of the Application at the page indicated.

2009 CAPITAL PROJECTS (BY ASSET CLASS)

Capital Projects		Budget (00	Os) Description ²
5.	Distribution		
	Extensions	\$ 8,786	22
	Meters	1,127	24
	Services	2,373	27
	Street Lighting	1,646	30
	Replace Mercury Vapour Street Lights	806	33
	Transformers	6,406	35
	Reconstruction	3,229	37
	Rebuild Distribution Lines	3,541	39
	Relocate/Replace Distribution Lines for Third Parties	622	42
	Distribution Reliability Initiative	1,266	44
	Feeder Additions for Growth	244	47
	Allowance for Funds Used During Construction	132	49
	Total - Distribution	\$ 30,178	
6.	General Property		
	Tools and Equipment	\$ 691	52
	Additions to Real Property	144	54
	Total - General Property	\$ 835	
7.	Transportation		
	Purchase Vehicles and Aerial Devices	\$ 2,255	57
	Total - Transportation	\$ 2,255	

Project descriptions can be found in Schedule B of the Application at the page indicated.

2009 CAPITAL PROJECTS (BY ASSET CLASS)

Capital Projects		Bu	dget (000s)	$\underline{Description}^3$
8.	Telecommunications			
	Replace/Upgrade Communications Equipment Fibre Optic Circuit Replacement	\$	135 215	60 62
	Total - Telecommunications	\$	350	
9.	Information Systems			
10	Application Enhancements System Upgrades ⁴ Personal Computer Infrastructure Shared Server Infrastructure Network Infrastructure Vehicle Mobile Computing Infrastructure Total – Information Systems Unforeseen Allowance Allowance for Unforeseen Items Total – Unforeseen Allowance		1,438 679 409 700 149 350 3,725 750	65 67 69 72 74 76
11. General Expenses Capitalized				
	General Expenses Capitalized	\$	2,800	81
	Total – General Expenses Capitalized	\$	2,800	

Project descriptions can be found in Schedule B to the Application at the page indicated.

Includes the Microsoft Enterprise Agreement; included as a multi-year project in Schedule D of the Application.

Issued: November 12, 2008

2009 CAPITAL PROJECTS: MULTI-YEAR

<u>Capital Project</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Microsoft Enterprise Agreement ⁵	\$200,000	\$200,000	\$200,000

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The Microsoft Enterprise Agreement is a multi-year project included in Schedule D of the Application.

Issued: November 12, 2008

Newfoundland Power Inc. 2009 Capital Budget Leases

Lease	Annual Cost	Term
Postage Meter	\$11,000	60 Months

Newfoundland & Labrador

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