1	Q.	Please provide the projected internal energy costs on a monthly basis for the years 2021-
2		2029.
3		
4		
5	A.	Newfoundland and Labrador Hydro's internal marginal energy costs for the years 2021–
6		2029 are zero if market opportunity is not considered. This is because under the Muskrat
7		Falls Power Purchase Agreement, Newfoundland and Labrador Hydro is not required to pay
8		either an increase or a decrease in power purchase charges as a result of an increase or
9		decrease in customer load requirements. Please refer to PUB-NLH-031, Attachment 1.



Hydro Place. 500 Columbus Drive. P.O. Box 12400. St. John's. NL Canada A1B 4K7 t. 709.737.1400 f. 709.737.1800 www.nlh.nl.ca

June 15, 2016

The Board of Commissioners of Public Utilities Prince Charles Building 120 Torbay Road, P.O. Box 21040 St. John's, NL A1A 5B2

Attention: Ms. Cheryl Blundon

Director Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Supply Cost Recovery Mechanism Review

Further to the 2013 GRA Settlement Agreement and Hydro's Final Submission, please find enclosed the original and 12 copies of the above-noted report.

Should you have any questions, please contact the undersigned.

NEWFOUNDLAND AND LABRADOR HYDRO

Tracey L. Pennell

Senior Counsel, Regulatory

TLP/bds Encl.

cc: Gerard Hayes – Newfoundland Power

Paul Coxworthy – Stewart McKelvey Stirling Scales

Sheryl Nisenbaum – Praxair Canada Inc.

Thomas Johnson – Consumer Advocate Thomas J. O'Reilly, Q.C. – Cox & Palmer Larry Bartlett – Teck Resources Limited

NEWFOUNDLAND AND LABRADOR HYDRO

SUPPLY COST RECOVERY MECHANISM REVIEW

June 15, 2016



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1.0 BACKGROUND

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2 The commissioning of the Muskrat Falls (MF) Project and the subsequent interconnection of the 3 Island Interconnected System with Labrador by way of the Labrador Island Link (LIL) and the 4 North American grid by way of the Maritime Link (ML) will result in a major change in the 5 source of supply of electricity to the Island of Newfoundland. For many years, load growth on the Island Interconnected System has been supplied by the Holyrood Thermal Generating 6 7 Station (Holyrood TGS). Upon the commissioning of the MF Project, supply cost payments will 8 commence under the Transmission Funding Agreement (TFA) and Muskrat Falls Power 9 Purchase Agreement (MF PPA), and the Holyrood TGS will be phased-out.¹ 10 11 At present, fuel costs required to operate the Holyrood TGS comprise the largest single portion 12 of the supply costs incurred by Newfoundland and Labrador Hydro (Hydro). As a result, Hydro 13 has maintained a Rate Stabilization Plan (RSP) to stabilize customer rates from monthly 14 variations in Holyrood TGS fuel costs due to price variances, volume variances, and load 15 variations. The purpose of the RSP is to ensure that rates reasonably recover Holyrood No. 6 16 fuel costs and moderate customer bill variability between Test Years. The Labrador-Island 17 Interconnection will result in the eventual discontinuance of the use of No. 6 fuel at the 18 Holyrood TGS. The elimination of Holyrood fuel expense will mitigate the need for the RSP, as 19 currently designed. 20 21 Hydro proposed in its Amended 2013 General Rate Application (GRA) to conduct a review of 22 the requirements for regulatory mechanisms to deal with variability in supply costs prior to its 23 next GRA. The Settlement Agreements to the 2013 GRA require Hydro to file its review of the 24 regulatory mechanisms to provide supply cost recovery with the Board of Commissioners of 25 Public Utilities (the Board) by June 15, 2016.

¹ Holyrood TGS will function as a fully capable standby facility during the early years of operation of the Muskrat Falls Generating Plant and the Labrador-Island Link between Labrador and the Island. Thereafter, the Holyrood facility will be used as a synchronous condenser.

1.1 Introduction

- 2 This report provides a review of the requirement for a deferral mechanism to provide Hydro
- 3 the opportunity to recover variations in supply costs from those reflected in customer rates
- 4 subsequent to the commissioning of the MF Project. This report provides a review of the:
 - (i) legislative considerations;
 - (ii) cost implications of the contractual provisions of the MF Project agreements; and
- 7 (iii) requirements for a supply cost deferral mechanism.

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- 9 The forecast annual revenue requirements required to recover the costs of the MF Project from
- 10 Hydro customers will be updated to reflect the revised construction schedule and cost
- estimates. Hydro believes it is appropriate to have updated cost information for consideration
- in developing and illustrating the recovery mechanisms prior to finalizing its deferral account
- proposals. As a result, Hydro has not included the proposed deferral account definitions with
- this report. Hydro will file, prior to filing its next GRA planned for March 31, 2017, the proposed
- supply cost deferral accounts and recovery mechanisms that are required to permit Hydro to
- 16 recover supply cost payments resulting from the commissioning of the MF Project assets.

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2.0 **LEGISLATION**

- 19 Sub-section 80(2) of the Public Utilities Act permits a public utility to recover those operating
- 20 expenses that the Board may allow as prudently incurred in providing electrical service. Supply
- 21 costs such as power purchases and fuel costs are generally considered prudent and included in
- 22 setting customer rates. Actual supply costs often vary from forecasted costs for reasons beyond
- 23 the control of the utility. Permitting recovery of supply cost variances from the approved supply
- 24 costs reflected in customer rates through deferral mechanisms is common practice in
- 25 regulatory jurisdictions across Canada.²

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- 27 For the MF Project, the Government of Newfoundland and Labrador (Government) provided
- 28 specific direction on supply cost recovery. In OC2013-343, the Government set forth the

² See Response to Request for information PUB-NLH-388 in the 2013 Hydro GRA.

1 requirement for the cost of supply from the MF Project (including the Muskrat Falls generation, 2 Labrador Island Link and the Labrador Transmission Assets (LTA)) to be recovered in full through Island Interconnected rates charged to the appropriate classes of ratepayers.³ 3 4 5 OC2013-343 also requires that any expenditures, payments or compensation paid directly or 6 indirectly by Hydro under an agreement or arrangement to which the Muskrat Falls Exemption Order applies, shall be included as costs in Hydro's cost of service, without disallowance, to be 7 recovered through Island Interconnected System customer rates. In order for Hydro to fully 8 9 recover annual costs resulting from charges related to the MF Project, Hydro will be required to 10 establish a supply cost recovery mechanism to replace the RSP and provide for recovery of 11 supply cost variances relative to these included in approved Test Year rates. 12 13 Appendix 1 to this report provides the Muskrat Falls Exemption Order and Orders in Council 14 related to the Muskrat Falls Exemption Order. 15 SUPPLY COSTS FROM THE MUSKRAT FALLS PROJECT 16 3.0 3.1 17 General 18 Two main contracts provide for the recovery of the MF Project costs from Hydro: (i) the MF PPA 19 between Hydro and the Muskrat Falls Corporation (MF Corporation); and (ii) the TFA between 20 Hydro, the LIL Limited Partnership and Labrador-Island Link Operating Corporation (LIL-Opco). 21 3.2 22 **Muskrat Falls Power Purchase Agreement** 23 3.2.1 Overview 24 The initial MF generation and LTA project capital costs are collected by way of a Base Block 25 Capital Costs Recovery payment through the MF PPA. The LTA are the transmission facilities of

the MF Project that are being constructed by Labrador Transmission Corporation (Labrador

⁴ OC2013-343 sections 1(a)(iii) and 2.

26

³ Section 5.1(2) of the *EPCA also* sets forth the authority of the Government to direct the Board to implement policies, procedures and directives with respect to the MF Project.

1 Transco) to interconnect the MF generation assets with the grid. The Base Block Capital Costs 2 Recovery payments for MF generation and LTA assets reflect an internal rate of return approach to derive a payment schedule which escalates annually at a rate of 2%. The required 3 payment amounts by year are provided in Schedule 1 of the MF PPA and provide for the 4 5 recovery of the original cost of the MF generation and LTA assets. These payment amounts do 6 not provide for the recovery of Operating and Maintenance (O&M) costs or the investment 7 required for sustaining capital for the assets over the 50-year supply period reflected in the contract.5 8 9 10 In addition to the original capital cost recovery described above, MF Corporation will estimate 11 and bill a separate charge monthly to Hydro, with quarterly true-ups, to recover the actual 12 O&M Costs, including the cost of sustaining capital, for MF generation and the LTA. These costs will be recovered through a charge to Hydro for "O&M Costs". 6 Charges to Hydro for O&M 13 Costs also include other costs incurred by MF Corporation such as: payments to aboriginal 14 15 peoples pursuant to impact and benefit agreements; payments pursuant to the water lease; payments pursuant to the Water Management Agreement; and administrative costs and taxes. 16 17 18 The LTA payments made by MF Corporation to Labrador Transco are included in the O&M Costs charged to Hydro in the MF PPA. The LTA payments include amounts to provide for the 19 20 recovery of both the initial capital cost recovery of the LTA, the LTA sustaining capital as incurred, and the O&M Costs for the LTA.8 21

⁵ Schedule 1 of the MF PPA will be updated to reflect the costs as of the in-service date of the MF Project. The Generation Interconnection Agreement (GIA) also includes a Schedule 1 providing the original capital cost recovery schedule for charges from LTA to MF Corporation for the LTA. The GIA Schedule 1 will also be updated to reflect new cost information.

 $^{^{6}}$ The complete description of O&M Costs is provided on page 15 of 76 of the MF PPA.

⁸ See Section 8.1(b) of the GIA between Hydro (in its capacity as the system operator) and MF Corporation and Labrador Transco.

- 1 The MF PPA requires Hydro to fund the sustaining capital costs for the MF generation and the
- 2 LTA assets as these costs are not reflected in the Base Block Capital Costs Recovery amounts.
- 3 The sustaining capital funding by Hydro will require one of two recovery methods: either a
- 4 regulatory deferral account to recover capital costs from Hydro's customers over the period for
- 5 which these assets are expected to provide service, or full cost recovery from Hydro's
- 6 customers in the period in which the sustaining capital charges are billed to Hydro. The second
- 7 approach which would charge full cost to customers in the period in which Hydro pays the costs
- 8 could result in material rate volatility to customers. Further, this approach would not provide a
- 9 reasonable matching of cost recovery from customers with the period for which the assets are
- in service. Therefore, Hydro recommends adoption of the regulatory deferral account
- 11 approach, which will allow Hydro to amortize these costs for recovery from its customers in the
- 12 same manner as if Hydro owned the assets. 10

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3.2.2 Relationship of Load Requirements to Supply Costs

- 15 Schedule 2 to the MF PPA provides the forecast of customer load requirements on the Island
- 16 (NL Native Load)¹¹ and the forecast load requirements from MF generation for each operating
- 17 year of the contract to serve the NL Native load (the Base Block Energy). If Hydro's customer
- 18 load requirements in an operating year require Hydro's purchases from MF Corporation to
- 19 exceed the Base Block Energy and MF Corporation has the additional amount of energy
- available (i.e., available Supplemental Block Energy¹²), Hydro is not required to pay additional
- 21 charges for the increased purchases to supply customer load. Similarly, if reduced customer
- 22 load requirements result in Hydro's purchases being lower than the Base Block Energy in the
- 23 operating year, Hydro's required payment amounts under the MF PPA are not reduced for the
- 24 operating year.

¹⁰ Section 78(f) of the Public Utilities Act permits assets funded but not owned by Hydro to be included in rate base.

⁹ Ibid, 6.

¹¹ A definition of NL Native Load is provided on page 14 and Schedule 2 of the MF PPA.

¹² The Supplemental Block Energy represents the amount by which the actual NL native load in any operating year exceeds the Initial Load Forecast as defined in the MF PPA.

 $^{^{13}}$ This assumes no change in Hydro's energy supply from the forecast reflected in Schedule 2 to the MF PPA.

1 Changes in customer load requirements impact the amount of MF generation available for

2 export sales. ¹⁴ In the scenario in which Hydro is required to access the Supplemental Block

Energy to meet customer load requirements, there is reduced MF generation available for

export sales. In the scenario in which Hydro purchases less than the Base Block Energy as a

result of lower customer load requirements, there is increased MF generation available for

export sales. In this scenario, Hydro has the opportunity to either monetize the unused portion

of the Base Block Energy based on the value that can be obtained through the export market or

defer such energy for future use (NLH Deferred Energy). 15 Transactions between Hydro and MF

Corporation will use the Average Annual Sales Price in computing charges for transactions to

10 external markets. 16

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On average, the embedded cost of service on a unit cost basis to be recovered from customers

upon commissioning of the MF Project is forecast to be materially higher than the marginal cost

of serving customers (i.e., the external market value). Based on the results of the Cost of

Service Methodology Review and the Marginal Cost Study, the average embedded cost of

providing service (i.e., generation and transmission) is forecast to be more than 11¢ per kWh,

which is more than 6¢ per kWh higher than the forecast 2019 average marginal cost of

approximately 5¢ per kWh. 17 The material difference between the forecast average embedded

cost of service and the marginal cost on a unit cost basis is an important factor when

considering rate design alternatives.

Premier to the Minister of Natural Resources dated December 14, 2015.

indicated that export sales will be used to mitigate potential increases in electricity rates. See letter from the

There is no explicit provision in legislation requiring the value of export sales related to MF generation to be credited back to ratepayers to offset the cost of supply from Muskrat Falls. However, the current Government has

¹⁵ See Article 3.1(c) on page 25 of 76 of the MF PPA.

¹⁶ See Article 4.5(d), page 34 of 67 of the MF PPA.

¹⁷ Based on a comparison of average unit costs derived from Attachment 1 (Row, 4) of the Cost of Service Methodology Review Report filed March 31, 2016 and the Marginal Cost Report, Part II, Table 1 on page 4. The average embedded cost will change when the MF Project costs are updated.

- 1 Aside from decisions about rate structure and pricing, the issue arises as to whether there
- 2 should be a requirement for the financial impact of customer load variations to be dealt with in
- 3 a supply cost recovery mechanism. 18

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3.2.3 Relationship of Island Interconnected Generation to Supply Costs

- 6 As indicated in the previous section, if customer load requirements increase beyond the Base
- 7 Block Energy for an operating year, Hydro does not incur additional purchases costs in the
- 8 MF PPA if MF generation is available for export. The additional customer requirements are
- 9 provided through the Supplemental Block Energy and exports are reduced. ¹⁹ However, Hydro
- 10 does incur additional purchased power costs if Hydro requires additional MF generation due to
- reduced energy generation being available to Hydro from other sources (i.e., total of self-
- generation, power purchases, and customer owned-generation). The Base Block Energy was
- 13 determined based on Hydro's current Island Interconnected energy supply carried forward for
- 14 the term of the MF PPA with increases to the Base Block Energy made in 2022 and 2028 to
- reflect the forecast retirement of the Corner Brook Pulp and Paper Co-gen in 2022 and the 2028
- 16 retirements of the wind farms in St. Lawrence and Fermeuse.²¹

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- As stated earlier, the MF PPA makes the option available for Hydro to defer unused Base Block
- 19 Energy as a result of lower customer load requirements resulting in Hydro not requiring the full
- amount of the available Base Block Energy in an operating year. This option is also available in
- 21 years when Hydro requires less than the Base Block Energy as a result of higher than normal
- 22 total hydraulic energy supply (e.g., a year of high precipitation) or above average energy

¹⁸ This is evident in the pricing structures currently in place for Newfoundland Power and Island Industrial Customers. The load variation component of the RSP is currently required to deal with the earnings impacts of load variations of Island Industrial Customers because the energy price is derived based on the average embedded cost which is materially lower than the marginal cost (i.e., No. 6 fuel at Holyrood). However, no load variation component is required to deal with load variations from Newfoundland Power because the end block is priced at the Test Year Holyrood fuel price.

¹⁹ If the full MF generation is being utilized and no Supplemental Block Energy is available, additional customer load requirements would require additional purchase costs to be incurred by Hydro based on market rates which would be included in the SCRUM.

²⁰ Assumed annual generation at Corner Brook Pulp and Paper is 880.1 GWh and Newfoundland Power is 437 GWh. These amounts are included in the NL Native Load Forecast in Schedule 2 of the MF PPA.

²¹ See footnotes on page 2 of 2, Schedule 2 to MF PPA.

- 1 purchases being available to Hydro on the Island. The NLH Deferred Energy option permits
- 2 Hydro to carry an energy reserve to avoid increased purchased power costs from MF
- 3 Corporation in years when lower energy supply requires Hydro to purchase more than the
- 4 designated Base Block Energy.

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- 6 Hydro is also provided the opportunity to manage hydraulic production variability in years
- 7 when water levels are low due to dry conditions on the Island by effectively borrowing Base
- 8 Block Energy from a future year to a current year. 22 The MF PPA does not permit the NLH
- 9 Deferred Energy balance to be negative. If no NLH Deferred Energy is available, Hydro has
- reduced energy supply available from other sources, and Hydro does not transfer Base Block
- 11 Energy from a future year, then Hydro will incur purchased power cost at the external market
- 12 Average Annual Sales Price for the additional purchases required from MF generation. Hydro
- would propose to recover these additional purchased power costs that would not have been
- reflected in Test Year rates from its customers through a supply cost recovery mechanism.
- 15 The availability to Hydro of NLH Deferred Energy within the MF PPA limits the potential for
- supply cost variations as a result of year-over-year variations in Hydro's energy supply. 23 This
- 17 option for supply cost deferral within the MF PPA influences whether Hydro requires a deferral
- 18 account to deal with energy supply variances related to variability in hydrology.

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3.2.4 MF Cost Reporting and True-ups

- 21 The terms of the MF PPA require Hydro to pay the Base Block Payments and the estimated
- 22 O&M Costs on the first day of each operating month for service provided during that operating
- 23 month. The MF PPA provides for a true-up to actual O&M Costs on a quarterly basis.

²² See Article 3.1(f) in the MF PPA.

²³ This does not include the potential for cost variations from the required operation of Hydro's thermal generation facilities.

Further, MF Corporation must provide an Annual Energy Report²⁴ to Hydro on External Market 1 Energy Sales within 30 days of each operating year-end. This report will provide details from the 2 3 previous operating year on the following: 4 (i) Delivered energy; 5 (ii) Delivered capacity; 6 (iii) NLH Deferred Energy; 7 (iv) Contracted Commitments; 8 (v) Amount of delivered energy to Hydro for which Hydro is required to pay when it 9 uses in excess of the Base Block Energy giving consideration to available 10 Supplemental Block Energy and accumulated NLH Deferred Energy; (vi) Energy that was scheduled by Hydro for delivery but was not delivered, with 11 12 reasons for such non-deliveries; Amount of Residual Block Energy²⁵ and Capacity sold into External Markets 13 (vii) ("Residual Block Sales"); 14 15 (viii) Average Annual Sales Price, including the calculation; and 16 Water spilled. (ix) 17 18 Hydro must decide within five business days of receipt of the Annual Energy Report how much of the NLH Deferred Energy shall be deemed to be sold on Hydro's behalf. Hydro will receive 19 20 payment from MF Corporation within 45 days after the operating year-end based on the 21 Average Annual Sales Price for the operating year. 22 23 Correspondingly, Hydro must pay MF Corporation within 45 days after the operating year-end 24 for any amount by which delivered energy exceeds the total of the Base Block Energy, the 25 Supplemental Block Energy and the NLH Deferred Energy. The price paid will be based on the 26 Average Annual Sales Price for the operating year.

²⁴ See Article 4.5 on pages 33 and 34 of the MF PPA.

²⁵ Residual Block Energy refers to energy in an operating period that is forecast to be not required to serve NL Native Load or the Nova Scotia Block and is available for making non-firm sales and Contracted Commitments. See Article 3.1(e) on page 26 of 76 of the MF PPA.

1 Because each fiscal operating year is concluded prior to the finalization of the MF PPA 2 transactions for that year, Hydro will be required to estimate an accrual of its purchased power 3 expense from MF Corporation for financial reporting. 4 5 3.3 **Transmission Funding Agreement** 6 The TFA recovers costs associated with the LIL facilities through payments by Hydro to LIL Opco, 7 the operating entity. The payments to LIL Opco are based on a cost of service approach in which the annual cost recovery amount is based on return on equity plus operating costs, 8 9 depreciation and taxes. 10 11 Under the cost of service approach, cost recovery in the TFA is higher in the early years of the 12 service period, reflecting high early levels of return due to the higher net book value of the 13 plant. As the assets age and the net book value declines, the annual cost recovery declines. The 14 return on equity in the TFA will reflect the approved return on equity for Newfoundland Power 15 Inc. (Newfoundland Power). As a result, changes in the allowed return on equity for 16 Newfoundland Power will require a change in the annual cost recovery amount in the TFA. 17 18 Like the MF PPA, the initial forecast for cost recovery under the TFA does not provide for the 19 recovery of investment required for sustaining capital over the term of the contract. There is a 20 provision for a separate charge to be estimated and billed monthly to Hydro covering the cost 21 of sustaining capital for LIL assets in addition to true-up adjustments to recover the difference 22 between the actual and forecast O&M Costs reflected in the charge for the annual cost 23 recovery. These costs will be recovered through the charge from LIL Opco to Hydro for O&M 24 Activities. Unlike MF Corporation, the LIL Limited Partnership will internally finance sustaining

capital. LIL Opco will amortize the associated costs and bill Hydro for the capital cost recovery

on a monthly basis.

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3.4 Power Availability in Advance of Full Commissioning

2 It is expected that the LIL and the ML will be completed in advance of generation being

available from the MF Project. The availability of the LIL will provide the opportunity to

purchase energy to reduce Holyrood TGS production.²⁶

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6 Also, during the construction of the MF facilities, power and energy will be produced between

7 the period when the first generating unit is available to reliably generate power until the full

commissioning of the MF plant. Contractually, this energy is termed as the Commissioning

Period Block.²⁷ MF Corporation will make such power and energy available to Hydro during this

commissioning period at no cost. However, Hydro has the option to pay for the Commissioning

Period Block based on its own terms and these payments will be applied as a contribution to

reduce the development capital costs and reduce the charge to be reflected in the Base Block

13 Capital Costs Recovery.²⁸

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Hydro also has the option to either take delivery of such energy immediately to meet NL Native

16 Load or choose to defer delivery until some later date. Due to construction delays, Hydro is

uncertain of the timing and the amount of the available energy; this will be determined when

18 the construction schedule for the MF Project assets is updated.

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Hydro anticipates it will achieve savings relative to the Holyrood TGS fuel costs reflected in

21 current customer rates as a result of the ability to access other supply sources prior to full

commissioning of the MF Project. The manner in which these savings will be used to benefit

customers is an element in an ongoing review with respect to developing a rate

implementation plan for recovery of the costs of the MF Project assets.

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²⁶ The contract terms with respect to payments being required from Hydro for using LIL in advance of any generation being available from MF are currently under review.

²⁷ See page 4 of 76 of the MF PPA.

²⁸ See Article 4.1, pages 31 to 32 of the MF PPA.

3.5 Variability in Supply Costs from the MF Project

- 2 Chart 1 provides an illustration of the change in revenue requirement for the period 2019 to
- 3 2028 for the MF Project assuming full commissioning has been achieved prior to 2019. This
- 4 chart assumes a total MF project construction cost of \$7.652 billion plus interest and other
- 5 carrying charges. The annual revenue requirements required to recover the MF Project costs
- 6 will change based on updated construction schedule and updated costs of the MF Project.

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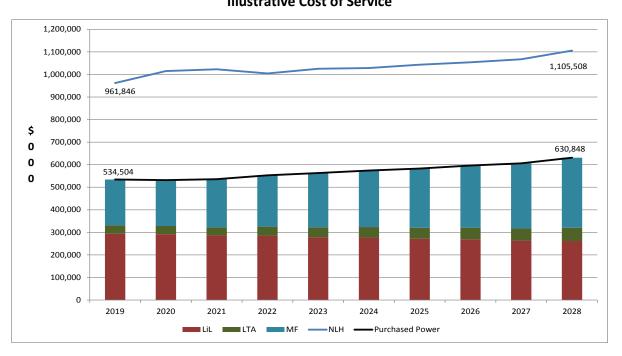
Chart 1 is provided to demonstrate that Hydro's MF supply costs will increase annually after the initial rate change which is required to include MF Project costs in customer rates. These annual cost changes beyond the MF Project commissioning reflect the structure of the contractual agreements that provide for the increased annual payments by Hydro to recover the capital and operating costs of the MF Project.²⁹

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Chart 1: Island Interconnected System
Illustrative Cost of Service





²⁹ The forecast annual revenue requirement for MF Project Costs excludes the required investment for sustaining capital. However, the sustaining capital investment is expected to be minimal over the time period presented in Chart 1.

1 Chart 1 shows Hydro's increased annual costs of approximately \$14 million per year 2 (approximately 1.5% per year) of which approximately \$10 million additional costs per year are 3 required to recover changes in the capital and operating costs of the MF Project assets. The 4 increases in charges to Hydro through the MF Project contracts are related to the project's 5 capital and operating costs and do not vary with customer load requirements. 6 Hydro is forecasting approximately 3.0% cumulative load growth for the period 2019 to 2028 7 (i.e., approximately 0.33% per year). 30 The annual rate of increase in the cost to serve per year 8 9 illustrated in Chart 1 exceeds the forecast annual rate of customer growth. Most of the cost 10 increase per year is a result of the change in the cost of supply from the MF Project. The 11 increase in year-over-year costs combined with minimal load growth will contribute to a 12 revenue deficiency between Test Years unless a deferral account is implemented to provide 13 recovery of the costs of the MF Project. 14 15 As stated earlier, recovery of supply cost variances from those reflected in customer rates 16 through deferral mechanisms is common in regulatory jurisdictions across Canada and, for the 17 MF Project, Government has provided direction that the charges to Hydro for the cost of supply 18 from the MF Project be recovered in full through Island Interconnected rates. Hydro would 19 expect a GRA filing every three years. However, Hydro's cost increases between Test Years are 20 forecast to exceed additional revenues from rates that result from load growth between Test 21 Years. The implementation of a deferral account to permit Hydro to recover cost increases 22 resulting from changes in capital and operating costs related to the MF Project is consistent 23 with OC 2013-343. 24 4.0 MF SUPPLY COST DEFERRAL ACCOUNT 25 26 4.1 **MF Project Supply Cost Deferrals** 27 Based on the discussion of the MF PPA and the TFA in the previous sections, Hydro will require 28 a supply cost variance account and recovery mechanism to permit recovery of annual variances

Newfoundland and Labrador Hydro

³⁰ Hydro long-term load forecast dated June 1, 2016.

- in MF Project costs from those reflected in Test Year rates. This deferral account and recovery
- 2 mechanism will replace the RSP upon commissioning of the MF Project.

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4.1.1 MF PPA Cost Variances

5 Capital Cost Recovery

- 6 Hydro will incur annual cost increases each year as a result of the requirement for annual
- 7 changes in the Base Block Capital Costs Recovery amounts stated in Appendix A to Schedule 1
- 8 of the MF PPA. 31 The Muskrat Falls supply cost deferral account (MFSCDA) would permit Hydro
- 9 to defer the increases in the Base Block Capital Costs Recovery amounts from those reflected in
- the Test Year rates for future disposition through a recovery mechanism.

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- 12 MF Corporation is permitted to apply an additional charge to the Base Block Capital Costs
- 13 Recovery amount if the amounts charged to Hydro for capital cost recovery in any month are
- insufficient to enable MF Corporation to meet all its financing obligations.³² MF Corporation is
- 15 required to reimburse Hydro for additional capital cost recovery payments, including interest,
- 16 at a rate equal to Hydro's regulated cost of capital. Hydro considers these additional capital cost
- 17 recovery payments to MF Corporation to be affiliate loans and is proposing not to recover the
- 18 additional payment obligation from customers.

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Operating and Maintenance Costs

- 21 The MF PPA also provides for charges to Hydro from MF Corporation for the actual cost of the
- 22 operating activities each quarter. The MFSCDA would permit Hydro to defer changes in O&M
- 23 Costs from the level reflected in the Test Year rates for future disposition.³³ The differences in
- O&M charges to Hydro relative to the O&M Costs reflected in customer rates will result from an

³¹ These annual increases also reflect changes in Schedule 1 of the GIA for the capital cost recovery of the LTA assets.

³² See Section 4, page 3 of 6 of Schedule 1 entitled "Base Block Capital Costs Recovery Adjustment".

³³ Operating and maintenance costs would include all charges referred to as "O&M Costs" in the MF PPA with the exception of charges for sustaining capital for MF generation and LTA. Hydro will determine what charges are related to sustaining capital based on the regulatory accounting standards which apply to Hydro in defining a capital expenditure.

annual revision to the forecast O&M Cost to be charged to Hydro as well as the true-up to actual costs.

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Sustaining Capital

5 Under the MF PPA, Hydro is required to fund the investment for sustaining capital for MF

6 generation and the LTA through O&M Cost payments. Hydro proposes to establish a regulatory

asset to record these sustaining capital investments. Hydro would then determine the annual

cost recovery for the sustaining capital asset charges in the MF PPA based on the annual cost

that would be charged to customers in the most recent Test Year if the sustaining capital was

owned by Hydro. This would include reflecting the MF generation and LTA sustaining capital

11 regulatory asset in Hydro's rate base.³⁴

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Hydro would reflect a forecast of sustaining capital investments for the MF generation assets

14 and LTA in setting its Test Year revenue requirement. Differences from the actual sustaining

capital investment by Hydro and that forecast in the approved Test Year would result in

sustaining capital cost recovery differences relative to the approved Test Year. 35 The MFSCDA

would defer for future disposition the difference between the actual annual cost of sustaining

capital and the annual cost of sustaining capital reflected in customer rates.

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In Hydro's subsequent GRA proceedings, Hydro would update its sustaining capital regulatory

asset to include the cumulative change from the previous Test Year and the forecast sustaining

capital investment for the new Test Year. The forecast sustaining capital regulatory asset would

be included in Hydro's rate base for use in determining the Test Year revenue requirement.

^{3/}

³⁴ Hydro would base its annual costs on its approved depreciation rates and its approved rate of return and include the unamortized portion of sustaining capital investment in rate base in accordance with Section 78(e) of the Public Utilities Act.

³⁵ The impact of sustaining capital investments on costs between Test Years will depend on the annualized cost of the variance from the Test Year amount of sustaining capital investment reflected in the approved Test Year. The Base Block Capital Costs Recovery amounts in Schedule 1 of the MF PPA and GIA reflect recovery of the original costs of the assets.

4.1.2 TFA Cost Variances

2 TFA Annual Cost Recovery

- 3 Hydro will incur a cost variance each year reflecting increased accumulated depreciation and
- 4 declining net book value of the transmission assets. The annual cost recovery amount can also
- 5 change as a result of possible changes in allowed return on equity, depreciation rates and tax
- 6 rates.

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- 8 Hydro will incur variances in O&M charges relative to the O&M Costs reflected in customer
- 9 rates for the TFA as a result of (i) an annual revision to the forecast O&M Cost to be charged to
- 10 Hydro and (ii) the true-up to actual O&M costs each quarter. The MFSCDA would permit Hydro
- to defer changes in TFA O&M Costs from the level reflected in the Test Year rates for future
- 12 disposition.³⁶

13

14

Sustaining Capital

- 15 Hydro would reflect a forecast of the recovery for the LIL sustaining capital investments in
- setting Hydro's Test Year revenue requirement. Differences from the actual capital recovery
- 17 costs incurred by the LIL Limited Partnership and that forecast in Hydro's most recent Test Year
- 18 would result in cost recovery differences relative to the approved Test Year. Variances from
- 19 forecast can result from changes from the Test Year for such items as the amount of sustaining
- 20 capital investment, return on equity, depreciation and taxes.

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- 22 Under the TFA, Hydro will pay a true-up adjustment quarterly to reflect the actual capital
- 23 recovery cost resulting from sustaining capital investments in the LIL. The MFSCDA would defer
- 24 for future disposition the difference between the annual charges for sustaining capital and the
- annual cost of sustaining capital reflected in customer rates.

exception of charges for sustaining capital.

³⁶ Operating and maintenance costs would include all charges referred to as "O&M Costs" in the TFA with the

4.2 Energy Supply Variances

- 2 Hydro's purchased power costs under the MF PPA are also impacted by variances in Hydro's
- 3 other energy sources; the largest variance would be related to hydraulic production on the
- 4 Island.

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- 6 The MF PPA has effectively created a deferral mechanism to limit the impacts of hydraulic
- 7 production variability by permitting Hydro to defer energy accumulated in years with above
- 8 normal hydraulic production to offset the additional energy requirements in years when
- 9 hydraulic production on the Island is below normal. Hydro can also borrow Base Block Energy
- 10 from future years to deal with low hydrology periods.

11

- 12 Therefore, Hydro is not proposing a regulatory deferral account to deal with cost variances
- 13 resulting from hydraulic production variations. However, as export sales opportunities diminish
- over time with customer load growth, Hydro may need to re-evaluate the requirement for a
- deferral account mechanism to deal with hydraulic production variations.

16

- 17 It is anticipated that Hydro will experience some purchased power cost variability as a result of
- 18 energy supply variability for an operating year. Any cost variances that result from reduced
- availability of energy supply from that approved in the Test Year would be recorded in the
- 20 MFSCDA for future disposition.

21

22

4.3 Customer Load Variances

- 23 As long as MF generation output is available for exports, Hydro's purchased power costs under
- the MF PPA do not vary as a result of customer load requirements being above forecast. Hydro
- 25 plans to implement a rate design for Newfoundland Power and Island Industrial Customers so
- that changes in customer load requirements in a month are priced based on an estimate of the
- 27 market value of exports. In years when customer load requirements are lower than forecast,
- 28 Hydro can recover its revenue shortfall through the sale of the load variation to export markets.

- The use of the forecast market value to deal with load variations in rate design would avoid the requirement for a deferral account to provide recovery of the financial impacts on Hydro of customer load variations. This is because changes in customer load requirements would impact
- 4 Hydro's revenues by a similar amount as the resulting variance in export revenues. However, as
- 5 market costs can change materially from forecast throughout the year, Hydro believes a
- 6 mechanism is needed to permit a change in the market rate to be reflected in the wholesale
- 7 and Industrial Customer rate designs.

8

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4.4 Export Sales Credits

Currently there is no explicit provision requiring the value of export sales generated from MF generation to be credited back to ratepayers to offset the cost of the MF Project. The current Government has, however, indicated that export sales will be used to mitigate potential increases in electricity rates.³⁷ Due to the uncertainty with respect to the amount of an export sales credit that may be available annually, Hydro recommended in its Cost of Service Methodology Review Report that disposition of any export sales credit should be handled through a deferral mechanism outside the Cost of Service Study.³⁸

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To implement this approach, the MFSCDA would require a provision to allocate an export sales credit to customers. Hydro recommends that the export sales credit be a separate rate component in the wholesale rate to Newfoundland Power and the rates to Island Industrial Customers. For the initial year of implementation, the export sales credit would be based on a forecast. The export sales credit would be updated annually based on the actual export value achieved in the previous operating year and an adjustment to reflect the forecast exports for the subsequent operating year.³⁹ Hydro recommends the export sales credit be allocated

³⁷ See letter from the Premier to the Minister of Natural Resources dated December 14, 2015.

³⁸ The Cost of Service Methodology Review Report was filed March 31, 2016.

³⁹ The forecast export sales credit for the subsequent operating year would need to be updated to reflect an updated market forecast to be reflected in Average Annual Sales Price which forms the basis for the marginal rate to be charged to Newfoundland Power and the Island Industrial Customers.

among customer classes based on the most recently approved Test Year allocation percentages

2 of supply costs from the MF Project.⁴⁰

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4.5 Deferral Account Disposition

- 5 The Annual Report from MF Corporation is provided to Hydro within 30 days following the end
- 6 of an operating year. The report covers items including NLH Deferred Energy, Average Annual
- 7 Sales Price, payments to Hydro for External Market Sales and payments by Hydro for energy
- 8 requirements in excess of the aggregate of Base Block Energy, Supplemental Block Energy and
- 9 accumulated NLH Deferred Energy. This information, along with the balances in the deferral
- 10 accounts discussed in the previous section would form the basis for determining the annual MF
- 11 Project purchase cost variance relative to the Test Year revenue requirement.

12

- 13 Hydro believes it is appropriate that variances from Test Year costs be recovered annually with
- the implementation of rate adjustments to occur on the same effective date for Newfoundland
- 15 Power and Island Industrial Customers. 41

16

- 17 As previously noted, Hydro will provide deferral account definitions and propose a recovery
- 18 mechanism to permit recovery of supply costs related to the MF Project prior to filing its next
- 19 GRA. This will provide Hydro the opportunity to have available updated MF Project forecast
- 20 costs for consideration in developing and illustrating the recovery mechanisms.

Newfoundland Power rate changes.

The allocation of the export sales to Newfoundland Power and Hydro's Island Interconnected Rural Customers would be combined as the rate adjustment would flow through to Hydro's Rural Customers through

⁴¹ Hydro rates are currently required to be updated for RSP adjustments on each July 1 for Newfoundland Power and each January 1 for Island Industrial Customers. It may also be practical from an administrative perspective to implement the annual recovery adjustment earlier in the year (i.e., either May 1 or June 1) than is currently the case for the RSP (i.e., July 1).

5.0 OTHER SUPPLY COST VARIANCE DEFERRAL ACCOUNTS

1

Island Interconnected Supply Costs 2 5.1 3 Hydro will continue to operate the Holyrood TGS for generation for a period of time beyond the 4 initial availability of MF generation. All generating units at the MF generation facility will not be 5 available to provide power on the same date. The timing of the availability of MF generation 6 and the availability of supply from other sources through the LIL and ML prior to full availability 7 of MF generation creates uncertainty in the amount of generation required from the Holyrood 8 TGS. Hydro will also continue to ensure that its gas turbines and diesel generation on the Island 9 Interconnected System are available to serve customers, as required. 10 11 Hydro will propose to implement a deferral account to permit recovery of Island 12 Interconnected fuel cost variances between Test Years (i.e., Island Interconnected Supply Cost 13 Deferral Account). The deferral account will provide for the recovery of the cost variance on the 14 Island Interconnected System between the Test Year fuel cost and the actual fuel cost. The 15 deferral account should also provide Hydro the opportunity to recover the additional supply 16 costs resulting from use of customer resources to minimize the cost of providing service (e.g., 17 capacity assistance agreements). 18 5.2 **Isolated System Supply Costs** 19 20 5.2.1 Background 21 In Hydro's 2013 GRA, Hydro proposed an Isolated Systems Energy Supply Cost Variance Deferral 22 Account. The Board has not yet ruled on Hydro's 2013 GRA. Hydro continues to believe a 23 deferral account is required to permit Hydro to recover supply cost variances on its Isolated 24 Systems. The following section updates the evidence provided in the 2013 GRA. 25 26 Hydro will propose a modification from the deferral account proposed in the 2013 GRA to 27 reflect in this account the impact of the changes in Hydro's Rural revenues that result from 28 Newfoundland Power GRA rate changes. This is currently dealt with in the Rural Rate Alteration 29 of the RSP which Hydro proposes to discontinue on full commissioning of the MF Project assets.

- 1 Hydro considers it appropriate to apply the revenue impacts of rate changes that result from
- 2 Newfoundland Power GRA rate changes against the isolated systems supply cost variance prior
- 3 to determining the amount for disposition. In general, this approach looks at both the revenue
- 4 change as well as the cost change in determining the cost variance to be considered for
- 5 disposition to Newfoundland Power.

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5.2.2 Isolated Systems Supply Cost Variance

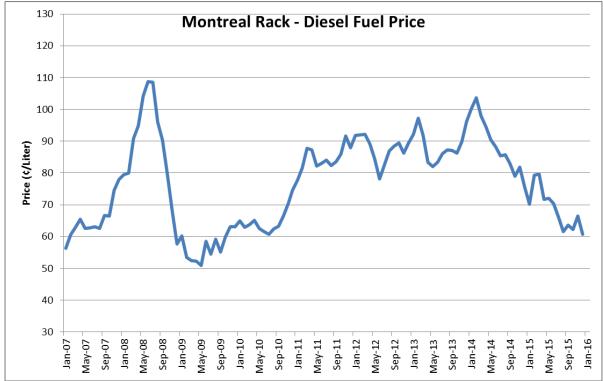
- 8 Over the past several years, diesel fuel and certain power purchase prices have been subject to
- 9 the same variability as Holyrood fuel costs.

Chart 2 illustrates the National Resources Canada (NRCan) reported Montreal rack prices for

12 diesel fuel from 2007-2015.

14 Chart 2

15 Diesel Fuel Price Variability⁴²



⁴² Data obtained from NRCan – Montreal Rack Prices January 2007 - December 2015.

As shown in Chart 2, the year-over-year average price has varied by more than 50%. 43 Variances 1 2 of this magnitude relative to the price reflected in customer rates exposes Hydro to material 3 risk in recovery of Isolated System supply costs. Hydro's Isolated System supply cost variances 4 from 2007 to 2015 relative to the 2007 Test Year have ranged from \$0.3 million to 5 approximately \$6.0 million. These cost variances are beyond Hydro's control. As a result, Hydro 6 proposed an Isolated Systems Supply Cost Variation Deferral Account in its 2013 GRA to provide Hydro a reasonable opportunity to recover its supply costs on the Isolated Systems. 7 8 9 The current RSP provides for Hydro to credit back to the customers of Newfoundland Power 10 additional revenue that accrues to Hydro as a result of Newfoundland Power rate changes. 11 Hydro proposes that these annual revenue changes to Hydro as a result of Newfoundland 12 Power GRA base rate changes be recorded in the Isolated System supply cost deferral account. 13 As such, both changes in Hydro's Isolated Systems fuel costs and revenue changes, as a result of 14 Newfoundland Power base rates changes, would be recorded in a single account to be 15 recovered and/or refunded to customers of Newfoundland Power. 16 6.0 **SUMMARY** 17 18 Hydro anticipates it will achieve savings relative to the Holyrood TGS fuel costs reflected in 19 current customer rates as a result of the ability to access other supply sources prior to full 20 commissioning of the MF Project assets. The manner in which these savings will be used to 21 benefit customers is an element in an ongoing review with respect to developing a rate 22 implementation plan for recovery of the costs of the MF Project assets. Hydro will keep the 23 Board informed as this process progresses. 24 25 Based on a review of anticipated annual supply cost changes reflecting the MF Project 26 contractual agreements subsequent to the full commissioning of the MF Project assets, Hydro 27 will require approval of a deferral account and recovery mechanism to provide Hydro the 28 opportunity for full recovery of MF Project supply costs, consistent with Government direction.

⁴³ The 2008 annual average was 88.18 cents per litre and 2009 annual average was 56.89 cents per litre.

2 base that reflects the sustaining capital investments by Hydro as required under the MF PPA, 3 less accumulated amortization. 4 Hydro recommends that a separate rate component to reflect a credit for export sales be 5 implemented and updated annually in the wholesale rate to Newfoundland Power and the 6 rates to Island Industrial Customers. Hydro supports the allocation of export sales credits 7 among customer classes based on the most recently approved Test Year allocation percentages 8 of supply costs from the MF Project. 9 10 After the full commissioning of the MF Project assets, Hydro will continue to require a deferral 11 account recovery mechanism to provide Hydro a reasonable opportunity to recover fuel cost 12 variances on the Island Interconnected System and supply cost variances on its Isolated 13 Systems. 14 15 The forecast annual revenue requirements required to recover the costs of the MF Project from 16 customers will be updated to reflect the revised construction schedule and cost estimates. 17 Hydro believes it is appropriate to have updated cost information for consideration in developing and illustrating the recovery mechanisms prior to finalizing its deferral account 18 19 proposals. As a result, Hydro has not included the proposed deferral account definitions with 20 this report. Hydro will file, prior to filing its next GRA planned for March 31, 2017, the proposed 21 supply cost deferral accounts and recovery mechanisms that are required to permit Hydro to 22 recover supply cost payments resulting from the commissioning of the MF Project assets.

Hydro will also propose that the Board approve a regulatory asset for inclusion in Hydro's rate

1

PUB-NLH-031, Attachment 1 Cost of Service Methodology Page 27 of 48

Appendix 1

Muskrat Falls Exemption Order and Orders in Council

NLR 120/13 - Muskrat Falls Project Exemption Order under the Electrical ... Page 1 of 4

Appendix 1

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Important Information

(Includes details about the availability of printed and electronic versions of the Statutes.)

<u>Table of Regulations</u> <u>Main Site</u> <u>How current is this regulation?</u>

NEWFOUNDLAND AND LABRADOR REGULATION 120/13

Muskrat Falls Project Exemption Order under the Electrical Power Control Act, 1994 and the Public Utilities Act (O.C. 2013-342)

(Filed November 29, 2013)

Under the authority of section 5.2 of the *Electrical Power Control Act, 1994* and section 4.1 of the *Public Utilities Act,* the Lieutenant-Governor in Council makes the following Order.

Dated at St. John's, November 29, 2013.

Julia Mullaley Clerk of the Executive Council

REGULATIONS

Analysis

- 1. Short title
- 2. Interpretation
- 3. Public utilities
- 4. Exemption

Short title

NLR 120/13 - Muskrat Falls Project Exemption Order under the Electrical ... Page 2 of 4

Appendix 1

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1. This Order may be cited as the *Muskrat Falls Project Exemption Order*.

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Interpretation

- 2. (1) In this Order
 - (a) "LiL" means the transmission line and all related components of the Muskrat Falls Project described in section 2.1(1)(a)(ii) of the *Energy Corporation Act*, and for greater certainty "all related components" in that subparagraph includes converter stations, synchronous condensers, and terminal, telecommunications, and switchyard equipment;
 - (b) "LilParty" means Labrador-Island Link Holding Corporation, the Labrador-Island Link General Partner Corporation, the Labrador-Island Link Limited Partnership, or Labrador-Island Link Operating Corporation, or any combination of them as the context may require;
 - (c) "LTA" means the transmission facilities of the Muskrat Falls Project described in subparagraph 2.1(1)(a)(iii) of the *Energy Corporation Act*;
 - (d) "LTACo" means the Labrador Transmission Corporation;
 - (e) "MFCo" means the Muskrat Falls Corporation;
 - (f) "Muskrat Falls " means the hydroelectric facilities of the Muskrat Falls Project as described in subparagraph 2.1(1)(a)(i) of the *Energy Corporation Act*.
 - (2) In this Order, references
 - (a) to a public utility or an activity being "exempt" means the public utility or the activity is exempt from the application of
 - (i) the Public Utilities Act, and
 - (ii) Part II of the Electrical Power Control Act, 1994; and
 - (b) to a corporation or limited partnership, where the corporation or limited partnership does not exist as of the date of this Order coming into force, shall be valid upon the creation of the corporation or limited partnership under the *Energy Corporation Act* and the *Corporations Act* or the *Limited Partnership Act*.

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Public utilities

3. LilParty, LTACo and MFCo are acknowledged to be public utilities under the *Public Utilities Act* for the purpose of this Order.

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Exemption

- 4. (1) Newfoundland and Labrador Hydro is exempt in respect of
 - (a) any

NLR 120/13 - Muskrat Falls Project Exemption Order under the Electrical ... Page 3 of 4

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- expenditures, payments, or compensation paid to MFCo by Newfoundland and Labrador Hydro relating to the purchase and storage of electrical power and energy, the purchase of interconnection facilities, ancillary services, and greenhouse gas credits,
- (ii) obligations of Newfoundland and Labrador Hydro in addition to subparagraph (i) to ensure MFCo's and LTACo's ability to meet their respective obligations under financing arrangements related to the construction and operation of Muskrat Falls and the LTA, and
- (iii) expenditures, payments, or compensation paid to MFCo and revenues, proceeds or income received by Newfoundland and Labrador Hydro relating to the sale of electrical power and energy acquired from MFCo to persons located outside of the province

whether under one or more power purchase agreements or otherwise;

- (b) any activity relating to the receipt of delivery, use, storage or enjoyment by Newfoundland and Labrador Hydro of any electrical power and energy, interconnection facilities, ancillary services, and greenhouse gas credits under paragraph (a);
- (c) any expenditures, payments, or compensation paid to LilParty and claimed as costs, expenses or allowances by Newfoundland and Labrador Hydro relating to the design, engineering, construction and commissioning of transmission assets and the purchase of transmission services and ancillary services, electrical power and energy, from LilParty or otherwise with respect to the LiL, under one or more transmission services agreements, transmission funding agreements, or otherwise; and
- (d) any activity relating to the receipt of delivery, use, storage or enjoyment by Newfoundland and Labrador Hydro of any transmission services and ancillary services, electrical power and energy, with respect to the LiL under paragraph (c).
- (2) MFCo is exempt in respect of any activity, and any expenditures, payments or compensation, or any revenues, proceeds or income, relating to the following:
 - (a) the design, engineering, planning, construction, commissioning, ownership, operation, maintenance, management and control of Muskrat Falls;
 - (b) producing, generating, storing, transmitting, delivering or providing electric power and energy, capacity, ancillary services, and greenhouse gas credits, to or for Newfoundland and Labrador Hydro or any other person or corporation for compensation;
 - (c) any activity required or related to an agreement under section 5.4 or 5.5 of the *Electrical Power Control Act*, 1994;
 - (d) negotiating, concluding, executing and performing any and all agreements for any activity referred to in paragraph (a), (b) or (c);
 - (e) raising and securing financing necessary to conduct any activity in paragraph (a), (b), (c) or (d), including without limitation the negotiation, conclusion, execution and performance of any and all agreements and security documentation with any lender providing that financing; and
 - (f) any agreements, contracts or instruments necessary or incidental to any activity described in this exemption, including agreements with LTACo.
- (3) LilParty is exempt in respect of any activity, and any expenditures, payments or compensation, or any revenues, proceeds or income, relating to the following:

NLR 120/13 - Muskrat Falls Project Exemption Order under the Electrical ... Page 4 of 4

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- (a) the design, engineering, planning, construction, commissioning, ownership, operation, maintenance, management and control of the LiL;
- (b) producing, generating, storing, transmitting, delivering or providing electric power and energy to or for Newfoundland and Labrador Hydro or any other person or corporation for compensation;
- (c) negotiating, concluding, executing and performing any and all agreements for activities referred to in paragraph (a) or (b);
- (d) raising and securing any financing necessary to conduct any activity in paragraph (a), (b) or (c), including without limitation the negotiation, conclusion, execution and performance of any and all agreements and security documentation with any lender providing that financing; and
- (e) any agreements, contracts or instruments necessary or incidental to any activity described in this exemption, including agreements between one or more LilParty.
- (4) LTACo is exempt in respect of any activity, and any expenditures, payments or compensation, or any revenues, proceeds or income, relating to the following:
 - (a) the design, engineering, planning, construction, commissioning, ownership, operation, maintenance, management and control of the LTA;
 - (b) producing, generating, storing, transmitting, delivering or providing electric power and energy to or for Newfoundland and Labrador Hydro or any other person or corporation for compensation;
 - (c) negotiating, concluding, executing and performing any and all agreements for activities referred to in paragraphs (a) and (b);
 - (d) raising and securing any financing necessary to construct the LTA, including without limitation the negotiation, conclusion, execution and performance of any and all agreements and security documentation with any lender providing that financing to the projects; and
 - (e) any agreements, contracts or instruments necessary or incidental to any activity described in this exemption, including agreements with MFCo.

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Government of Newfoundland and Labrador

Executive Council

November 29, 2013

I, Julia Mullaley, do hereby make oath and say as follows:

- 1. That I am the Clerk of the Executive Council of the Province of Newfoundland and Labrador.
- 2. That I have access to the signed original copies of all orders of the Lieutenant Governor in Council of the Province of Newfoundland and Labrador.
- 3. That I have examined the attached copies of Orders in Council 2013-341, 2013-342, 2013-343, 2013-344, 2013-345, 2013-346, 2013-347, 2013-348, 2013-349, 2013-350, 2013-351, 2013-354, 2013-355 and certify that they are true copies of the content of those Orders in Council approved by His Honour, the Lieutenant Governor on the 29th day of November, 2013.

SWORN TO before me at St. John's in the Province of Newfoundland and Labrador

This 29th day

of November, 2013

Barrister Newfoundland and Labrador

Clark of the Even

Clerk of the Executive Council

Executive Council



OC2013-341

NR/DM Asst. Sec/EPC E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 6 of 21

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2013/11/29

MC2013-0534. NR2013-021. EPC2013-060.

Under the authority of section 17 of An Act to Amend the Electrical Power Control Act, 1994, the Energy Corporation Act and the Hydro Corporation Act, 2007, Statutes of Newfoundland and Labrador 2012, Chapter 47, the Lieutenant Governor in Council is pleased to cause a proclamation to be issued for the signature of His Honour the Lieutenant Governor to bring An Act to Amend the Electrical Power Control Act, 1994, the Energy Corporation Act and the Hydro Corporation Act, 2007 into force upon publication of a proclamation in the Gazette.

Julia Mullaley

Clerk of the Executive Council

Executive Council



and Labrador

OC2013-342

NR/DM Asst. Sec/EPC E. Martin/Nalcor A. Wells/PUB AG Deputy Clerk File

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2013/11/29

MC2013-0534. NR2013-021. EPC2013-060.

Under the authority of section 5.2 of the Electrical Power Control Act, 1994 and section 4.1 of the Public Utilities Act, the Lieutenant Governor in Council is pleased to make the Muskrat Falls Project Exemption Order, a copy of which is on file with the Clerk of the Executive Council.

Clerk of the Executive Council

Julia Mullaley



OC2013-343

NR/DM TB/Secretary FIN/DM E.Martin/Nalcor A. Wells/PUB AG Deputy Clerk File Appendix 1
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2013/11/29

MC2013-0534. NR2013-021. TBM2013-180.

Under the authority of section 5.1 of the Electrical Power Control Act, 1994, the Lieutenant Governor in Council is pleased to direct the Board of Commissioners of Public Utilities to adopt a policy, subject to section 3, that:

1) Any expenditures, payments or compensation paid directly or indirectly by Newfoundland and Labrador Hydro, under an agreement or arrangement to which the

Muskrat Falls Project Exemption Order applies, to:

- a) a LiLParty,
- a system operator in respect of a tariff for transmission services or ancillary services in respect of the LiL, that otherwise would have been made to a LiLParty, or
- c) Muskrat Falls Corporation, in respect of:
 - i) electrical power and energy forecasted by Muskrat Falls Corporation and Newfoundland and Labrador Hydro to be delivered to, consumed by, or stored by or on behalf of Newfoundland and Labrador Hydro for use within the province, whether or not such electrical power and energy is actually delivered, consumed, or stored within the province,
 - ii) greenhouse gas credits, transmission services and ancillary services, and
 - iii) obligations of Newfoundland and Labrador Hydro in addition to those in paragraphs (i) and (ii) to ensure the ability of Muskrat Falls

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2013/11/29

Corporation and Labrador Transmission Corporation to meet their respective obligations under financing arrangements related to the construction and operation of Muskrat Falls and the LTA

shall be included as costs, expenses or allowances, without disallowance, reduction or alteration of those amounts, in Newfoundland and Labrador Hydro's cost of service calculation in any rate application and rate setting process, so that those costs, expenses or allowances shall be recovered in full by Newfoundland and Labrador Hydro in Island interconnected rates charged to the appropriate classes of ratepayers; 2) The costs, expenses or allowances of Newfoundland and Labrador Hydro described above, and the rates for Newfoundland and Labrador Hydro established by the Board of Commissioners pursuant to the direction under section 1, shall not be subject to subsequent review, and shall persist without disallowance, reduction or alteration of those costs, expenses or allowances or rates, throughout any processes for any public utility, including Newfoundland Power Inc., or any other process under the Electrical Power Control Act, 1994 or the Public Utilities Act;

- 3) Notwithstanding sections 1 and 2, no amounts paid by Newfoundland and Labrador Hydro described in those sections shall be included as costs, expenses or allowances in Newfoundland and Labrador Hydro's cost of service calculation or in any rate application or rate setting process, and no such costs, expenses or allowances shall be recovered by Newfoundland and Labrador Hydro in rates:
 - a) where such amounts are directly attributable to the marketing or sale of electrical power and energy by Newfoundland and Labrador Hydro to persons

Executive Council Newfoundland and Labrador Appendix 1 Page 10 of 21

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located outside of the province on behalf of and for the benefit of Muskrat Falls Corporation and not Newfoundland and Labrador Hydro; and

- b) in any event, in respect of each of Muskrat Falls, the LTA or the LiL, until such time as the project is commissioned or nearing commissioning and Newfoundland and Labrador Hydro is receiving services from such project.
- 4) In this Order in Council, terms shall have the same meaning ascribed to them in the Muskrat Falls Project Exemption Order.

Clerk of the Executive Council



OC2013-344

NR/DM Asst. Sec/EPC Hon. S. Kent S. Dutton FIN/DM E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 11 of 21

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2013/11/29

MC2013-0535. NR2013-022. EPC2013-064.

Under the authority of sections 10 and 11 of the Executive Council Act and section 7 of the Intergovernmental Affairs Act, the Lieutenant Governor in Council is pleased to authorize the Minister of Natural Resources, the Minister of Finance, and the Minister of Municipal and Intergovernmental Affairs to sign the Inter-Governmental Agreement Pursuant to the Federal Loan Guarantee, substantially as outlined in the draft on file with the Clerk of the Executive Council.

Clerk of the Executive Council



OC2013-345

NR/ DM FIN/DM Asst. Sec/EPC Hon. S. Kent S. Dutton E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 12 of 21

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2013/11/29

MC2013-0536. NR2013-023. FIN2013-016. EPC2013-065. XX2013-098.

Under the authority of sections 10 and 11 of the Executive Council Act, section 7 of the Intergovernmental Affairs Act and sections 25 and 27 of the Energy Corporation Act, the Lieutenant Governor in Council is pleased to authorize the Minister of Finance, as designate for the Minister of Municipal and Intergovernmental Affairs, to sign separate Guarantees for the NL Equity Support Agreements for each of Muskrat Falls, Labrador Transmission Assets, and the Labrador Island Link and the Master Definition Agreements, substantially as outlined in the drafts on file with the Clerk of the Executive Council.

Clerk of the Executive Council



OC2013-346

NR/DM TW/DM SNL/DM ENVC/DM Asst. Sec/EPC E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 13 of 21

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2013/11/29

MC2013-0537. NR2013-024. TW2013-033. SNL2013-028. ENVC2013-044. EPC2013-066.

Under the authority of sections 11, 47 and 58 of the Muskrat Falls Project Land Use and Expropriation Act, the Lieutenant Governor in Council is pleased to make the Muskrat Falls Project Land Use and Expropriation Regulations, a copy of which is on file with the Clerk of the Executive Council.

Julia Mullaley

Clerk of the Executive Council



OC2013-347

NR/DM TW/DM SNL/DM ENVC/DM Asst. Sec/EPC E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 14 of 21

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2013/11/29

MC2013-0537. NR2013-024. TW2013-033. SNL2013-028. ENVC2013-044. EPC2013-066.

Under the authority of section 5 of the Executive Council Act and the Prerogative of the Crown, the Lieutenant Governor in Council hereby assigns ministerial responsibility for the Muskrat Falls Project Land Use and Expropriation Act, as follows:

- a) Part I Minister of Environment and Conservation;
- b) Part II Minister of Transportation and Works;
- c) Part III Minister of Natural Resources:
- d) Part IV Minister of Service NL; and
- e) Part V Minister of Environment and Conservation, Minister of Transportation and Works, and Minister of Service Newfoundland and Labrador as required by the context and in accordance with a), b) and c) above.

Clerk of the Executive Council



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NR/DM TW/DM SNL/DM ENVC/DM Asst. Sec/EPC E. Martin/Nalcor AG Deputy Clerk File Appendix 1 Page 15 of 21

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MC2013-0537. NR2013-024. TW2013-033. SNL2013-028. ENVC2013-044. EPC2013-066.

Under the authority of section 5 of the Executive Council Act and the Prerogative of the Crown, the Lieutenant Governor in Council hereby assigns ministerial responsibility for the Muskrat Falls Project Land Use and Expropriation Regulations as follows:

- a) Part I Minister of Environment and Conservation;
- b) Parts II, III and IV Minister of Transportation and Works; and
- c) Part V Minister of Service NL.

Clerk of the Executive Council



Newfoundland and Labrador

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MC2013-0539. NR2013-026. EPC2013-067.

Under the authority of section 5.2 of the Electrical Power Control Act, 1994 and section 4.1 of the Public Utilities Act, the Lieutenant Governor in Council is pleased to make the Maritime Link Exemption Order, a copy of which is on file with the Clerk of the Executive Council. Julia Mullaley

Clerk of the Executive Council



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MC2013-0539. NR2013-026. EPC2013-067.

Under the authority of section 5.1(2) of the Electrical Power Control Act, 1994, the Lieutenant Governor in Council is pleased to direct the Board of Commissioners of Public Utilities to adopt a policy that:

- 1) An order under section 8(2) of the Electrical Power Control Act, 1994 shall not be made with respect to energy and capacity designated for delivery pursuant to the Energy and Capacity Agreement dated July 31, 2012 ("the ECA");
- 2) This policy shall apply from the day that energy and capacity is first delivered pursuant to the ECA until a day 35 years later, unless the initial term of the ECA is extended due to a forgivable event, but shall not apply to extensions or subsequent terms to the ECA; and
- 3) For the purposes this Order in Council, terms shall have the meaning ascribed to them in the Maritime Link Exemption Order.

Clerk of the Executive Council

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MC2013-0540. NR2013-027. EPC2013-068.

Under the authority of sections 10 and 11 of the Executive Council Act, section 6 of the Energy Corporation of Newfoundland and Labrador Water Rights Act and the Prerogative of the Crown, the Lieutenant Governor in Council is pleased to authorize the Minister of Natural Resources, Nalcor Energy and Muskrat Falls Corporation to enter into an Assignment and Assumption Agreement, substantially along the lines of the draft on file with the Clerk of the Executive Council.

Clerk of the Executive Council



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MC2013-0504. XX2013-087.

Under the authority of sections 18 and 14.1 of the Energy Corporation Act, the Lieutenant Governor in Council is pleased to authorize the Energy Corporation and its subsidiaries established in connection with the Labrador-Island Link, the Muskrat Falls Generation Facility/Labrador Transmission Assets projects to:

- (a) raise debt financing of up to \$2.6 billion for the Muskrat Falls/Labrador
 Transmission Assets project through the issuance and sale of bonds by the
 Muskrat Falls/Labrador Transmission Funding Trust and up to \$2.4 billion
 for the Labrador-Island Link project through the issuance and sale of bonds
 by the Labrador-Island Link Funding Trust; and
- (b) secure payment and performance of all obligations arising in connection with the financings referenced in paragraph (a) above through the issuance of bonds, debentures or other securities; execution and delivery of mortgages, assignments, conveyances, charges, pledges, security interests or other encumbrances of and over property of every nature and kind, both present and future; and the entry into, execution, delivery and performance of trust deeds, trust indentures, debentures, pledges, assignments and all other agreements with respect to the financings (including without limitation, project finance agreements, master definitions agreements, collateral agency agreements, equity support agreements, guarantees, guarantee assurance agreements, blocked account agreements, step in agreements and related financing documentation) with lenders, a trustee or



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collateral agent acting for the lenders, the holders of bonds and debentures or other person providing or extending credit or directly with any person providing or extending credit in connection with such financing, or providing a guarantee or assurance thereof;

subject to:

- (c) except with respect to its equity support agreements with respect to each Project and its limited recourse pledge of its ownership interests in its subsidiaries, the debt financing structure having no ultimate liability accrue to the Energy Corporation; and
- (d) the receipt of approval from the Minister of Finance as to the terms of such financing.

Clerk of the Executive Council



and Labrador

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Certified to be a true copy of a Minute of a Meeting of the Committee of the Executive Council of Newfoundland and Labrador approved by His Honour the Lieutenant-Governor on

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MC2013-0504. XX2013-087.

Under the authority of section 18 of the Energy Corporation Act, the Lieutenant Governor in Council is pleased to delegate to the Minister of Finance, the authority to approve:

- The terms of the binding financing commitment with such institution(s) as the Minister shall approve in order to raise debt financing up to \$2,600,000,000 for the Muskrat Falls/Labrador Transmission Funding Trust and up to \$2,400,000,000 for the Labrador Island Link Funding Trust; and
- Any necessary documentation related to the financing commitment with such institution(s).

Clerk of the Executive Council