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# Commission of Inquiry Respecting the Muskrat Falls Project

Review of the Federal Loan Guarantees and the Power Purchase Agreement

September 7, 2018

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September 7, 2018

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Commission of Inquiry Respecting the Muskrat Falls Project
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Dear Mr. Howe:

Please find enclosed our report of the review of the Federal Loan Guarantees and the Power Purchase Agreement, in response to your letter dated April 29, 2018 regarding additional scopes of work.

Please do not hesitate to contact me if you have any questions or concerns.

Yours sincerely,
Grant Thornton LLP

Tom Brockway, CPA, CA
Partner

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## Executive Summary

The Commission of Inquiry Respecting the Muskrat Falls Project (the "Commission") has requested us to review the Federal Loan Guarantees ("FLG-1" and "FLG-2", collectively referred to as "FLG") and the Power Purchase Agreement ("PPA") to highlight the terms and conditions of each agreement, amendments to Provincial legislation to facilitate the FLG and the impact each of these agreements have on Newfoundland and Labrador's ratepayers and taxpayers. In addition, the Commission has also requested we discuss the effect of the legislative monopoly (which was developed through a combination of various pre-conditions required prior to executing the FLG) and the PPA on the United States of America Federal Energy Regulatory Commission ("FERC") compliance.

<u>First Federal Loan Guarantee</u>

On November 30, 2012 an agreement was reached between the Government of Canada ("Canada") and the Governments of Newfoundland and Labrador ("NL") and Nova Scotia ("NS") as well as Nalcor Energy ("Nalcor") and Emera Inc. ("Emera") (collectively referred to as the "Parties") on the terms and conditions for the FLG-1 for the Lower Churchill Projects. This agreement consisted of:

- a guarantee of $5 billion to be borrowed in relation to the Nalcor projects which consisted of the Muskrat Falls Generation Facility ("MF"), Labrador Transmission Assets ("LTA") and Labrador Island Link ("LIL"); and
- a guarantee of $1.3 billion to be borrowed in relation to Emera's portion of the project which consisted of the Maritime Link ("ML").
    - Collectively the ML with the Nalcor projects are referred to as the "Projects".

As part of this agreement, Canada noted that it was essential that these Projects:

- have national and regional significance (which was met through the participation of NL and NS);
- have economic and financial merit; and
- significantly reduced greenhouse gas emissions.

In a press release issued by NL on November 30, 2012, it noted that "the Federal Government's loan guarantee will reduce the cost of financing for the project through reduced interest rates and this will result in stabilized electricity rates for consumers in the Province". Nalcor noted that the benefit to electricity consumers in the Province would be in excess of $1 billion.

The FLG-1 contained a number of pre-conditions to be met prior to the financing being released and the guarantee being issued. The pre-conditions were not fully met by the Parties until December 12, 2013 and the first round of public debt was subsequently issued on December 13, 2013. The most significant of the pre-conditions along with how they were met are as follows:

1. NL to provide the base level and contingent equity support required by Nalcor to support successful achievement of in-service for the components of the Nalcor projects. Base level equity is the amount of equity required to meet the required debt to equity ratios established in the FLG-1. Contingent equity is the amount of equity to cover further costs to achieve commissioning. This condition was achieved through the execution of the Equity Support Agreements and Equity Support Guarantees between Nalcor and NL.
2. NL would ensure that regulated rates for Newfoundland and Labrador Hydro ("NLH") would allow it to collect sufficient revenue to recover all costs. This was achieved through the passing of various agreements including the PPA, Generator Interconnection Agreement, Transmission Funding Agreement, as well as the passing of a number of amendments to the Newfoundland and Labrador Energy Corporation Act ("ECA") and the Electrical Power Control Act ("EPCA"). In particular, the legislation passed restricted the Newfoundland and Labrador Board of Commissioners of Public Utilities ("PUB") from performing its duties and exercising its powers, so that regulated rates could not result in insufficient revenues to recover the costs of the Nalcor projects.
3. All documents associated with finalizing the financing for the Projects had to be executed and as part of this, the Guarantee Assurance Agreements and Project Finance Documents were executed. When these were taken in combination with the Equity Support Agreements and Equity Support Guarantees, this presented Canada (as the Guarantor), the step-in right to ensure the completion of MF, LTA and LIL. In addition, Canada also had the ability to continue to call on NL for equity contributions in order to complete the Nalcor projects to in-service.

4. The FLG-1 required the formalization of a regulatory framework in Nova Scotia through legislation and /or regulation. This condition was satisfied through the passing of the Maritime Link Act by NS on December 12, 2013.
5. As part of obtaining the financing and satisfying the FLG-1 pre-conditions, an independent engineer was required to be obtained for the Projects. The role of the independent engineer was to provide reports to the lenders and Canada. The first of the reports were to confirm that the budgeting and maintenance of the Projects were being conducted based on normal industry standards in Canada. These reports were to be provided to the lenders, Canada as well as the borrowers of the financing.
6. The cost overruns for each of the projects was to be funded with equity and/or additional debt. A separate account for each of the projects was set-up as part of the financing documents signed which established funds for which the eligible project cost overruns would be funded. The funding of these accounts was agreed upon and if these accounts become nil, any eligible project costs would then be funded through contingency equity contributions or additional debt.

Prior to executing the FLG-1, NL passed an amendment to the EPCA that provided NLH the exclusive right to supply, transmit, distribute and sell electrical power or energy to the island portion of Newfoundland and Labrador. This restriction further ensured the recovery of the full costs of the Nalcor projects by providing NLH the exclusive right to collect sufficient revenues from island ratepayers. Ultimately the exclusive right passed through this amendment formed the basis for the creation of the legislative monopoly.

<u>Power Purchase Agreement</u>

On November 29, 2013 the PPA was signed between NLH and the Muskrat Falls Corporation ("MFCo") in which MFCo would sell and NLH would purchase energy, capacity, ancillary services and greenhouse gas credits. The payments for these services would allow MFCo to collect sufficient revenue each year to recover the amounts incurred for the purchase and delivery of energy from MF. This requirement ensured that Newfoundland and Labrador island ratepayers would have to pay for the full cost of the MF Plant through the rates charged by NLH over the 50 year term of the PPA.

In exchange for the payments, MFCo would provide NLH with three blocks of energy that allow NLH to meet the requirements of the Newfoundland and Labrador island ratepayers. The PPA further outlines specific requirements regarding energy and capacity management/scheduling, terms regarding MFCo's ability to sell to parties other than NLH and the mechanisms in place to recover the costs of MF.

<u>Second Federal Loan Guarantee</u>

Based on the significant cost increases incurred and updated projections of costs to complete the Nalcor projects, FLG-2 was signed and executed on March 30, 2017 between Canada and MFCo, Labrador Transmission Corporation and Labrador-Island Link Limited Partnership. The reasons for seeking and obtaining the FLG-2 was to secure an additional $2.9 billion of debt financing, to reduce the equity required by NL by $2.7 billion and to reduce the domestic electricity rates by 1.5 cents per KWh. Based on the commitments already made to the Projects by NL, seeking the additional FLG-2 was presented as a way to reduce the burden on Newfoundland and Labrador ratepayers and taxpayers.

The terms and conditions of the FLG-2 were consistent with those of FLG-1 with the exception of the following new conditions:

- guaranteed debt being up to $1.85 billion for MF and LTA and up to $1.05 billion for LIL;
- a guarantee fee of 0.5% of the net amount of the FLG-2 debt outstanding was introduced. This fee was to be included as part of the project costs to be recovered from ratepayers; and
- cost overrun escrow account payments ("COREA") were no longer required to be made and these payments were replaced with new annual equity prefunding requirements.

<u>Federal Energy Regulatory Commission ("FERC") compliance</u>

FERC is an independent agency in the United States that regulates the transmission and wholesale sale of electricity in interstate commerce. One of the mandates of FERC is to ensure that transmission providers have on file pro forma open access transmission tariffs ("OATTs"). Under the amendments and legislation passed by the Province of Newfoundland and Labrador upon sanctioning MF, LIL and LTA, there were potential implications on FERC compliance identified as a result of the legislative monopoly being created. As NLH had the exclusive right to supply, transmit, distribute and sell electrical power or energy to the island portion of Newfoundland and Labrador, this directly impacted the FERC requirements for open access transmission services. It was NLH's intention to ultimately export excess energy produced from MF to external markets (with the Northeastern United States being one of the potential markets). By not being in compliance with FERC, this limited NLH's ability to export to the United States markets.

In May 2018, new legislation was passed in Newfoundland and Labrador under a bill titled "Open Access Transmission Regulations" that introduced a framework that sought to bring the Province of Newfoundland and Labrador in compliance with FERC. It is unclear based on the available information how the framework has been or will be implemented from an operations perspective in the Province of Newfoundland and Labrador. Given the fact-specific requirements of FERC, we are not able to definitively conclude whether FERC compliance is now met. Assuming that NLH implements the framework in a manner similar to other Canadian transmission-owning utilities with OATTs and related open access requirements that have been found by FERC to be in compliance, FERC will likely make a similar determination with respect to NLH.

<u>Impact to Newfoundland and Labrador Ratepayers and Taxpayers</u>

The major ramifications to Newfoundland and Labrador's ratepayers and taxpayers from the various agreements are as follows:

- With respect to the FLG:
  - Given the significant expected costs to complete the Nalcor projects, obtaining Canada's AAA credit rating as part of the financing structure was expected to provide interest cost savings for ratepayers and contribute to stable electricity rates for consumers in the Province of Newfoundland and Labrador. These cost savings would be passed on directly to the Newfoundland and Labrador ratepayers once construction of the Nalcor projects were completed.
  - Further, the step-in rights of Canada to ensure the completion of MF, LTA and LIL resulted in the Newfoundland and Labrador taxpayers bearing the risk of increased equity contributions to fund the project costs until in-service is achieved, if the step-in rights were exercised.

- With respect to the PPA:
  - By entering into this agreement, the risks associated with the recovery of MF's costs were assumed by the Newfoundland and Labrador island ratepayers through the PPA mechanism for Nalcor to recover all constructions costs as well as future operating and maintenance costs of MF. Given the significant cost overruns and delays from the initial budget, at the time of signing the PPA, this increased the burden on the Newfoundland and Labrador island ratepayers as they are required to purchase energy from NLH under the exclusive rights on the island portion of the Province.
  - Further, as the legislation passed by NL limited the PUB's ability to regulate rates once MF achieved in-service, the PUB is not able to set rates or disallow costs incurred. This limitation ensures the full cost recovery will be assumed by the island ratepayers through the PPA mechanisms in place to recover the full costs of MF.
  - The potential for exporting excess energy to external markets represents an opportunity for Nalcor to earn increased revenues which would directly benefit the Newfoundland and Labrador taxpayers. Until it is determined whether the May 2018 regulations meet FERC compliance, it is unclear whether this full benefit will be realized.

## Introduction

The following analysis is in response to the request from the Commission dated April 29, 2018 to analyze:

1. The materials related to the FLG and the PPA and explain:
    a. The terms and conditions of the FLG-1:
        i. In particular the conditions related to sanction by the NS and those related to the monopoly and the PPA;
        ii. The effect of the FLG on financing interest rates and savings as reported by Nalcor and the NL.
    b. Explain the amendments to the ECA and the EPCA to facilitate the FLG;
    c. The terms of the PPA;
    d. The terms and conditions of the FLG-2 including the reasons for seeking as reported by Nalcor and NL;
    e. The effects of the PPA on the Newfoundland and Labrador ratepayers and taxpayers;
    f. The effect of the legislative monopoly and the PPA on FERC compliance.

## Background & Information on FLG-1

The FLG represents a guarantee by Her Majesty the Queen in Right of Canada ("Canada") of the Guaranteed Debt of the MF, LTA, LIL and the ML projects. The parties to the FLG-1 included Nalcor, Emera, NL, NS and Canada.

The terms and conditions of the FLG-1 were signed and agreed to by the Parties on November 30, 2012, with the first round of public debt being issued on December 13, 2013. As explained below, there were a number of pre-conditions required to be satisfied by NL and NS in order to facilitate the FLG-1 and due to the timing of when these were met, this resulted in the debt being issued approximately one year past the date the terms and conditions were originally signed. The FLG-1 was stated to be an absolute, continuing, unconditional and irrevocable guarantee covering all payment obligations associated with the Project's financing. All Parties agreed to work on a transaction structure that in conjunction with the FLG-1, would result in the Project's debt achieving Canada's AAA credit rating. Further the FLG-1, allowed for debt to be raised by number of different methods in order to pay for the project costs including construction costs, interest, fees and other associated costs.

The Borrowers to the financing are the following:

- MFCo: a special purpose wholly-owned subsidiary of Nalcor.
- Labrador Transmission Corporation (“LTACo”): a special purpose wholly-owned subsidiary of Nalcor.
- Labrador-Island Link Limited Partnership (“LILCo”): a special purpose limited partnership controlled by Nalcor and held by it alone or together with Emera. The obligations of LILCo will be guaranteed by Labrador-Island Link Operating Corporation (“LIL OpCo”), a special purpose wholly-owned subsidiary of Nalcor.
- Nova Scotia Power Maritime Link Inc. (“MLCo”): a special purpose wholly-owned subsidiary of Emera.

**<u>The Terms and Conditions of FLG-1</u>**

The terms and conditions of FLG-1 are as follows

- Guaranteed Debt
    - The Guaranteed Debt (“Guaranteed Debt”) was defined as the total maximum amount of borrowing and hedging obligations (including principal, interest, fees, and costs) that would be guaranteed by Canada with the amount guaranteed being the lessor of the following for each Project:
        - i) A fixed dollar-based cap of $6.3 billion, allocated as follows:
            - a. MF/LTA: up to $2.6 billion,
            - b. LIL: up to $2.4 billion; and
            - c. ML: up to $1.3 billion;
        - ii) The amount of debt implied by the maximum Debt to Equity Ratios for each Project as follows:
            - a. MF/LTA: 65:35

b. LIL: 75:25

c. ML: lower of Nova Scotia Utility and Review Board ("UARB") approval or 70: higher of UARB approval or 30; or

iii) The amount of debt that provides a minimum Debt Service Coverage Ratio ("DSCR") of 1.40x for each Project throughout the term of the FLG-1.

- o The terms and conditions of the Guaranteed Debt were subject to Canada's approval and include the following:

  i) Rate of interest that is no greater than the rate that would be offered by lenders to an entity with a "AAA" credit rating;

  ii) The proceeds from the Guaranteed Debt and the Additional Debt (defined within the FLG-1 and explained further below under the Permitted Debt section) shall be used for the sole purpose of the Project; and

  iii) Any long-term bond issued in connection with the Guaranteed Debt may carry a call feature.

- Term of the FLG
  - o The FLG Term was scheduled to begin once all relevant Financing Documents were executed ("Financial Close") and terminated on the earlier of: (a) payment in full of the Guaranteed Debt; or (b) the Maximum Term for each Project, as follows:

    i) MF/LTA: 35 years after Financial Close;

    ii) LIL: 40 years after Financial Close; and

    iii) ML: 40 years after Financial Close.

- Project Debt
  - o The debt of each Borrower is subject to a DSCR. The DSCR is a ratio that refers to the amount of cash flows available to meet annual interest and principal payments on debt.
  - o This ratio must be met within any 12 month period and the method for calculating this ratio based on the terms and conditions of FLG-1 is included within Appendix A.

- The DSCR for each Project has a minimum benchmark of 1.40x. If the DSCR falls below 1.40x, then a 30-day consultation process between Canada and the applicable Borrower is triggered. During this time, information is to be provided to Canada to advise of the reasons for the ratio falling below the benchmark and how the Borrower proposes to increase the DSCR. If the ratio falls below 1.20x, then no distributions to equity holders will occur. If it falls further below 1.10x, this represents an Event of Default (under section 4.4 of the FLG, a non-exhaustive list of 14 Events of Default are stated).
- The MF, LTA, and LIL will have cross-default provisions such that an event of default of any one Borrower will represent an event of default of each of the other two Borrowers. With respect to the ML, there were to be no cross-default provisions.

- Security
  - Security pledged to Canada as part of the FLG-1 includes:
    - The assets of the Borrowers (including Liquidity and Debt Service Reserves);
    - All contracts of the Borrowers, including key project agreements, as identified by Canada; and
    - The shares of the Borrowers provided that the shares of MFCo, LTACo, and LILCo, may only be pledged to Canada or an agent of Canada.
  - The Borrowers are required to take all necessary actions to maintain the priority, enforceability and validity of Canada's security.
- Permitted Debt
  - The Borrowers shall not incur debt during the Construction Period and the FLG-1 Term except for:
    - Guaranteed Debt;
    - Additional Debt:

            - This is specifically defined within the agreed upon terms and conditions and states that the Borrowers cannot incur additional debt during the term of the FLG-1 except for:
                - an operating line of credit (to a maximum of $10 million for each of MF/LTA, LIL, and ML);
                - additional debt to finance cost increases from the DG3 capital cost estimates (Decision Gate 3 cost estimate for MF released by NL on October 30, 2012) and the final estimates at Financial Close ("Cost Escalations"), to finance cost increases after Financial Close (these costs are referred to as "Cost Overruns"), and to finance costs associated with major repairs and refurbishments after the Commercial Operations Date ("COD") which was expected to be July 2017 based on the terms of FLG-1 (note below within Cost Overruns that these costs can also be funded through Equity and the mechanism for this is explained below);
        - Debt secured by a lien which is a Permitted Lien;
        - Trade payables or similar debt incurred in the ordinary course of business and for the purpose of carrying on same, representing the deferred purchase price of property or services;
        - Debt under purchase money obligations provided, however, that the aggregate principal amount of purchase money obligations outstanding at any time shall not exceed $15 million for each of MF/LTA, LIL and ML.
    - The Additional Debt is subject to the following conditions:
        - The debt will not be covered by the FLG-1;
        - It is subordinate to the Guaranteed Debt; and

        - It must satisfy the Debt Equity Ratios and DSCR-based tests on a prospective and combined basis throughout the term of the Additional Debt.

- Independent Engineer
    - The terms of the FLG-1 state that on the anniversary date following the COD and until the end of the FLG term, the Borrower or the Independent Engineer is to provide an Independent Engineer's Certificate (in form and substance acceptable to Canada). The purposes of this certificate is to confirm that budgeting and maintenance of the Project is being conducted with Good Utility Practice (a defined term within the terms and conditions). Failure of the Borrower to budget and maintain in accordance with Good Utility Practice that results in the Independent Engineer being unable to provide the necessary certification would constitute an Event of Default subject to a 30-day cure period.
    - An Independent Engineer Agreement referenced as Agreement No. LC-PM-082 for Independent Engineer and Operating and Maintenance Services signed between Nalcor and MWH Canada, Inc. (the independent engineers) on August 27, 2012, was obtained and summarized as follows:
        - The agreement included the scope of work for the independent engineer. The scope of work was identified as Phase 1 – prior to financial close, and Phase 2 – subsequent to financial close.
        - The Phase 1 report was to be issued in the third quarter of 2013 and the scope stated the report was to be on behalf of Nalcor with transition to the lenders and/or Canada once the financing documents associated with the FLG-1 were executed.
        - The Phase 1 report was to include a number of tasks which were explained within Attachment No. 1 of the agreement and included the following:
            - Initial project scope meeting and obtain project documentation
            - Site visit
            - Review project design and projected performance

- Review construction plan and schedule
- Review capital budget
- Review commercial operation and maintenance services
- Review of project agreements
- Review of permits and licenses
- Review of pro forma assumptions
- Financial closing support services
- Project management

- Under the Phase 1 reporting, the draft and final Independent Engineer's Report was to be provided in a format suitable to the lenders and Canada. The draft Independent Engineer's Report was to be submitted to MFCo, LTACo, LILCo, the lenders and Canada for review and comments. The Independent Engineer was, to the extent possible, address any issues raised by the lenders and Canada and to consider MFCo's, LTACo's and LILCo's comments, and include the status of these issues in the final issued Phase 1 Independent Engineers Report.
- Under the Independent Engineer Agreement, the Independent Engineer was to be initially retained and paid by Nalcor on behalf of the lenders and Canada. Once these lenders became known, and the agreements noted below were signed, the Independent Engineers would then report directly to the lenders and Canada. Prior to this, reporting was made to Nalcor on behalf of the lenders and Canada.
- The agreement also specifically states within the independence clause, that the Independent Engineer was to be retained by the lenders as its client, and at all times act as if they were retained by the lenders. The Independent Engineer was not to put itself in the position to compromise their ability to be fully independent.

o Subsequent to this agreement, two additional Independent Engineer agreements were signed with the first being the Interim Reliance Agreement dated June 4, 2013 and the second being the Reliance Agreement dated November 29, 2013. The Interim Reliance Agreement added Canada as a party to this agreement and enabled Canada to obtain and rely on any Independent Engineer reports. Further, this allowed the Independent Engineers to discuss these reports with Canada in order to satisfy the pre-conditions required to facilitate the FLG. The Interim Reliance Agreement was superseded by the Reliance Agreement on November 29, 2013. Nalcor assigned their rights and obligations under the Interim Reliance Agreement to the Project Entities (MFCo, LTACo, and LILCo) under the Reliance Agreement.

- Expected Costs to Complete
    - Costs Overruns for a Project must be funded with Equity and/or Additional Debt.
    - The expected costs to complete in respect of any Borrower at any given time was to be determined by the Borrowers and reviewed and confirmed by the Independent Engineer by way of an Independent Engineer certificate.
    - The DG3 Capital Cost Estimates was to form the basis for the Independent Engineer's review and confirmation of any proposed changes to such estimates on an ongoing basis as construction proceeds.
    - Expected Costs to Complete includes contingencies and escalation, as well as any interest during construction and costs associated with the Financing prior to COD.
    - Cost Overrun Escrow Account ("COREA")
        - Prior to the closing date of the financing agreements, a COREA was to be established for each Project. In accordance with the MF/LTA Project Finance Agreement and the LIL Project Finance Agreement (referred to collectively as the Project Finance Agreements), these accounts were to be funded on an annual basis based on the Initial and Annual Muskrat Cost Overrun Installment Payment (each of which are defined below based on the Project Finance Agreements).

- The calculation of these payments is explained within section 10.28 of the MF/LTA and LIL Project Finance Agreements and each of these agreements were signed and dated November 29, 2013. Section 10.28 in each agreement are consistent with the exception of references to the specific Project titles.
- The Project Finance Agreements state that on the anniversary date of the funds being released and on each subsequent anniversary date up to the Commissioning Date, that Lower Churchill Management Corporation is to provide reporting for each of MF, LTA and LIL on the Costs to Complete, changes to the Project Schedule and the expected Commissioning Date, confirmation of the amount of Cost Overruns and confirmation that the Cost Overruns have been funded in accordance with the terms stated with the Project Finance Agreements. The Independent Engineer was required to review the amounts included for each of the three Projects and would include comments on the reasonableness of the Costs to Complete and the adequacy of the funding of the Cost Overruns.
- The Project Finance Agreements further explain the methods for funding the Cost Overruns are as follows:
  - On the anniversary date of the funds being released, an amount equal to the aggregate Cost Overruns of each of MF, LTA and LIL (at the specific anniversary date) divided by the number of years remaining to the expected Commissioning Date (this is referred to the Initial Cost Overrun Instalment Payment), was to be funded. In addition, on each anniversary date thereafter, a similar payment was to be made until the Cost Overruns have been funded.
  - On the second anniversary date and each anniversary date thereafter (until the Commissioning Date), if the Costs to Complete each Project at that anniversary date plus the individual Project Costs incurred and paid since

the commencement of the Project, less the amount of the Project Budget exceeds the Cost Overruns relating to the Project, at the previous anniversary date, then an amount equal to the excess of these amounts is known as the additional Cost Overrun for that year. The Project Financing Agreements refers to this amount as the Additional Cost Overruns. This amount was then to be divided by the number of years remaining until the Commissioning Date, and this amount was referred to as the Annual Cost Overrun Instalment Payment. This payment was to be made on each anniversary date thereafter until the aggregate Additional Cost Overruns have been paid.

        - The Initial Cost Overrun Instalment Payment and the Annual Cost Overrun Instalment Payment for each Project was to be funded by a cash advance from MFCo, LTACo or LILCo, into the specific Project COREA. This account is under the control of the Toronto-Dominion Bank (as Collateral Agents to the financing), with the purpose to fund Cost Overruns.

    - Under the Project Finance Agreements, if the funds in the specific Project's Proceeds Account Balance (account where the financing funds are released) and the Working Capital Reserve Accounts (an account established to fund the project working capital requirements) are nil, all eligible Project costs will then be funded through the COREA. The agreements states if the COREA are nil, any eligible Project costs will then be funded through the specific Project Contingency Equity Contributions or Additional Debt (however still ensuring that the specific project's debt to equity ratios required under the FLG are still being met).

- Debt-Equity Contributions

    - Any construction costs incurred prior to the closing of the associated financing will be funded through equity by the Borrowers.
    - Once the financing has been received, future funds are to be invested as follows:
        - 100% debt until the target Debt Equity Ratio's (outlined above) are achieved; and
        - Once the ratios are achieved, the debt and equity funding are to be invested on a pro rata basis to ensure the target Debt Equity Ratios are met for each Project.
- Distributions
    - The FLG states there is to be no distributions to shareholders of the Borrowers when:
        (i) The DSCR falls below 1.20x;
        (ii) During the Construction Period; and
        (iii) When an Event of Default has occurred and the Borrower continues to be in default after the 30 day cure period.
- Debt Service Reserves and Liquidity Reserves
    - The Borrower shall maintain Debt Service Reserves in a dedicated service account.
    - This account will be funded by an amount equal to the debt service (principal and interest) obligations of the Borrower for the upcoming 6 month period.

**<u>FLG-1 Conditions Related to the Sanction by NS and Those Related to the Monopoly and PPA</u>**

Within the terms and conditions of the FLG-1, section 3.5 describes a number of conditions that must be completed and met to Canada's satisfaction prior to the FLG-1 being executed. Certain of these pre-conditions required the sanctioning by NS and led to the execution of PPA. For the purposes of this report, the pre-conditions have been separated into three categories that align with the scope of the Commission's request in this report. These three categories of pre-conditions and how they have been satisfied are as follows:

1. *<u>Conditions related to the sanction by NS</u>*

- Formalization of a regulatory framework by the Province of Nova Scotia in legislation and/or regulation.

    - This condition was satisfied through the Maritime Link Act passed by NS on December 12, 2013.
- Execution of an agreement between Canada and NS in which NS indemnifies Canada for any costs it may incur under the FLG-1 as a result of a regulatory decision or regulatory change (including through legislation or policy) that prevents a Borrower from recovering Project costs and fully servicing the Guaranteed Debt.
    - This agreement titled the Intergovernmental Indemnity Agreement-Maritime Link Project was executed on December 2, 2013. The indemnification is described within Section 3 of this agreement and only related to costs associated with the ML.
- Execution of an agreement (named the "Emera Guarantee Agreement") between Canada and Emera, whereby Emera guaranteed:
    - The payment of $60 million to Canada in the event that execution of the financing documents of ML are not completed within 90 days after the execution of similar documents for the Nalcor projects or by December 31, 2013, or funds are not drawn from Guaranteed Debt within a reasonable time after the execution of the financing documents; and
    - The completion of the ML or to provide required funds to complete the ML following the first draw of the Guaranteed Debt.
        - These conditions were met by the signing of the Emera Guarantee Agreement on November 29, 2013.

2. *Conditions related to the monopoly and PPA*

- Enactment of legislation, and execution of formal agreements between NL and Nalcor, which put into legal binding effects the commitments made by NL.
    - The enactment of legislation has been executed through the Orders in Council which are described below in the "Amendments to the ECA and the EPCA to facilitate the FLG" section.

   - The formal agreements executed between NL and Nalcor refer to the MF Equity Support Agreement, the MF Equity Support Guarantee, the LTA Equity Support Agreement, the LTA Equity Support Guarantee, the LIL Equity Support Agreement and the LIL Equity Support Guarantee.
   - Each of these formal agreements were signed and executed on November 29, 2013.
- Execution of an inter-governmental agreement between Canada and NL on November 29, 2013.
   - As part of this condition, there were three sub-conditions listed in the FLG but cross-referenced and explained in further detail within the Inter-governmental Agreement. Given the impact the terms and conditions of this agreement have on the facilitation of the FLG, the terms of this agreement have been summarized within the "Analysis of the Inter-governmental Agreement" section below.
   - One of these sub-conditions stated that NL committed to guarantee completion of MF, LTA and LIL to COD, if the non-completion was the result of NL failing to comply with the five specific commitments. These five commitments were stated within the FLG terms and conditions Schedule A and the Inter-governmental Agreement Schedule B. These commitments and how they were satisfied are specifically listed within an appendix to the Inter-governmental Agreement. Refer to the summary below within the "Analysis of the Inter-governmental Agreement" section as the methods for satisfying are explained.

*3. General conditions*

- Confirmation by the Credit Rating Agencies for each Project equal to or higher than investment grade (each Project on a non-guaranteed basis).
- Sanction of all Projects as well as all necessary environmental, legal and policy authorities, and necessary aboriginal consultations being completed.
   - These conditions have not been investigated further as they were beyond the scope of our report.

There were additional pre-conditions to the FLG that needed to be completed by the applicable Borrower and in a manner acceptable to Canada prior to the execution and delivery of the FLG for all Projects. These have been reviewed and included within Appendix B. Given not all these conditions relate to the sanction by NS or those related to the monopoly or the PPA, they have not been investigated further with the exception of the satisfaction by Canada of the all relevant financing documents, financing structure and transaction structure. Included within this condition are the signing and execution of the Guarantee Assurance Agreements.

Based on our review of the terms and conditions, the FLG does not state what steps can be taken as remediation measures if it is found at a later date that certain of the pre-conditions were not met to the level of satisfaction required.

*Guarantee Assurance Agreements*

There were two Guarantee Assurance Agreements signed and executed on November 29, 2013. The first of these agreements was signed by LIL Funding Trust, LIL Construction Project Trust, LILCo, the Toronto-Dominion Bank (as Collateral Agent) and Canada. The second agreement was signed between MF/LTA Funding Trust, MFCo, the Toronto-Dominion Bank (as Collateral Agent) and Canada. Both of these agreements were required to be executed by Canada in order to confirm the terms, warranties and covenants in order for Canada to execute the FLG. Both agreements had consistent terms and conditions included within.

In particular, Article IV of each agreement listed the Events of Default and Remedies, and included section 4.03 which stated that on any payment by Canada under the FLG or on the occurrence of any Event of Default included with the Guarantee Assurance Agreements, that Canada can exercise or can direct the Toronto-Dominion Bank as Collateral Agent to exercise the step in rights held by Toronto-Dominion Bank for the benefit of Canada under any agreement relating to the Projects, including the Equity Agreements (noted below within the commitment of NL to provide base level and contingent equity support) and the Project Financing Documents.  Further, based on the terms of the various Equity Agreements in combination with the Project Finance Agreements, MFCo, LTACo and LILCo, guaranteed to the Toronto-Dominion Bank as Collateral Agent to make all "Guaranteed Obligations", which are defined as the due and timely payment of all payment obligations under the Project Finance Documents at all times, in the currencies and in the manners provided for within the Project Finance Documents.

When taken in combination, if an Event of Default under the Guarantee Assurance Agreements were to occur, Canada as the Guarantor, has the right to step-in to the rights of the Toronto-Dominion Bank as Collateral Agent under section 4.03. In addition, under the terms agreed to, Canada would also have the right to require NL to make all necessary payments under the agreed upon obligations to the Toronto-Dominion Bank at Collateral Agent (through the Equity Agreements). When taken in combination of these two acts, Canada has the ability to step-in to ensure the completion of the Projects while continuing to call on equity from NL.

*Inter-governmental Agreement*

As referenced above, the execution of the Inter-governmental Agreement between Canada and NL was a required pre-condition of the FLG. The executed Inter-governmental Agreement was obtained and reviewed and the key terms and conditions were noted as follows:

- The agreement was signed and executed on November 29, 2013.
- Section 4 of the agreement states NL agreed to indemnify Canada for any Costs (in which these costs are specifically defined within Schedule A of the Inter-governmental Agreement) it may incur under the FLG as a result of Government Action (defined as regularity decision or regulatory change, noted as through legislation or policy) that prevents MFCo, LTACo or LILCo from being able to recover the applicable Project Costs (which are specially defined with the Master Definition Agreements) and fully servicing the debt guaranteed by Canada.
- Section 6 of the agreement also stated that if MFCo, LTACo or LILCo failed to complete their Project and this was the result of failure by NL to comply with the five specific commitments of the FLG and the Inter-governmental Agreement, NL agreed to:
  - Indemnify Canada for any costs that Canada may incur under the FLG as a result of any Project not achieving Commissioning;

    - Confirmation that the equity contribution obligations of Nalcor under the equity support agreements and of NL under the equity support guarantees (as referenced above with the pre-conditions of the FLG), remain in full force and effect in accordance with their respective terms.
- Canada and NL agree to consult and cooperate in an effort to attempt to resolve the situations potentially giving rise to the obligation of indemnity.

The five specific commitments noted within the FLG and the Inter-governmental Agreement and how these were satisfied are as follows:

- Creation of the Nalcor subsidiaries to facilitate MF, LIL and LTA and ensure the borrowing abilities of these subsidiaries are sufficient to implement the Projects and the related obligations that come with the Projects.
    - This commitment was satisfied through specific amendments to the NL ECA which are described below within the "Amendments to the ECA and EPCA to facilitate the FLG" section.
- Commitment of NL to provide the base level and contingent equity support to ensure the in-service of MF, LTA, and LIL. This support is for cases with or without Emera's participation.
    - This commitment was achieved through the execution of the MF Equity Support Agreement, the MF Equity Support Guarantee, the LTA Equity Support Agreement, the LTA Equity Support Guarantee, the LIL Equity Support Agreement and the LIL Equity Support Guarantee. Nalcor, NL and the Toronto-Dominion Bank (as Collateral Agents) were the parties to these agreements. These are referred to within this document as the Equity Agreements.
- Upon MF achieving in-service, the regulated rates for NLH will allow it to collect sufficient revenue each year to allow NLH to recover the amounts incurred for the purchase and delivery of energy from MF. This includes costs incurred by NLH as part of the PPA that will provide for a recovery of costs over the PPA term.

  - In order to satisfy this commitment, the PPA was executed. The terms of the PPA are noted below within the "Terms and Conditions of the PPA" section. The Generator Interconnection Agreement ("GIA") between MFCo, LTACo, and NLH was also executed to satisfy this requirement.
  - An amendment to the EPCA was also authorized through Order in Council ("OC") OC2013-342 to satisfy this commitment. The details of this OC are explained below as part of the "Amendments to the Energy Corporation Act and the Electrical Power Control Act to facilitate the FLG". Ultimately this OC restricted the PUB from exercising its powers and performing its duties upon MF achieving in-service which would result in regulated rates for NLH insufficient to collect the revenue required to recover the amounts incurred for the purchase and delivery of energy from MFCo.
- Upon LIL achieving in-service, the regulated rates for NLH would allow for it to collect sufficient revenue each year to allow NLH to recover the amounts incurred for transmission services, including those costs incurred by NLH in accordance with the applicable agreements between NLH, LILCo and the entity holding ownership of the LIL Assets.
  - This commitment was satisfied through the execution of the Transmission Funding Agreement and the LIL Assets Agreements. As well, within the scope of OC2013-342, the PUB's restrictions limited its power and duties upon LIL achieving in-service, where this would result in regulated rates for NLH being insufficient to collect the revenue required to recover the amounts incurred for the transmission services.
- Upon LTA achieving in-service, the regulated rates for provision of transmission service over the LTA will provide for a recovery of costs over the service life of the LTA.
  - This commitment was satisfied through the execution of the GIA. As well, within the scope of OC2013-342, the PUB's restrictions limited its power and duties upon LTA achieving in-service, where such exercise or performance would result in regulated rates insufficient to recover the costs over the life of the LTA.

**Amendments to the ECA and the EPCA to Facilitate the FLG**

In order for NL to satisfy their commitments to the Projects and to facilitate the terms of the FLG (and the related Inter-governmental Agreement), amendments were required to the ECA as well as the EPCA. The ECA is stated as an act to establish an energy corporation for the Province of NL and this act allows for the creation of a holding company to separate the regulated operations of NLH from the unregulated activities associated with their mandate. The EPCA is stated as an act to regulate the electrical power resources of Newfoundland and Labrador. Based on the review of the various agreements within the scope of this report as well as the Orders in Council Database per the NL Government website, the following amendments were noted. The amendments to both acts include those passed in 2012 through to 2017 and are listed in order by date passed within each Act below.

In summary, the passing of Bill 61 in 2012 which amended the EPCA to provide NLH exclusive rights to supply, transmit, distribute and sell electrical power or energy to the island portion of NL, formed the legislative monopoly held by NLH. These exclusive rights helped ensure the full recovery of the costs of the Nalcor projects by providing NLH exclusivity to island ratepayers which helped allow NLH to collect sufficient revenues through the rates being charged.

*Energy Corporation Act*

- OC2012-130
  - Authorization of the creation of:
    - The Labrador-Island Link General Partner Corporation
    - The Labrador-Island Link Holding Corporation
    - The Labrador-Island Link Operating Corporation
    - The Labrador Transmission Corporation
    - The Muskrat Falls Corporation
    - The Nalcor Energy Marketing Corporation
    - The Lower Churchill Management Corporation

        - Each to be incorporated under the Corporations Act as non-Crown agent subsidiaries of Nalcor Energy, to invest in, develop, own and operate the assets of the Muskrat Falls Project.

- OC2013-345
  - Authorization to sign separate Guarantees for the NL Equity Support Agreements for each of MF, LTA and LIL as well as the Master Definition Agreements. This Masters Definition Agreements contains all definitions associated in the various financing documents associated with each of the Projects.
- OC2013-354
  - Authorizing Nalcor and its subsidiaries in connection with the LIL, MF, and the LTA projects to:
    - Raise debt financing of up to $2.6 billion for the MF/LTA project through the issuance and sale of bonds by the MF/Labrador Transmission Funding Trust and up to $2.4 billion for the LIL project through the issuance and sale of bonds by the Labrador-Island Link Funding Trust; and
    - Secure payment and performance of all obligations arising in connection with the financings.
- OC2013-355
  - The Minister of Finance is authorized to approve:
    - The terms of the binding financing commitment with such institutions as the Minister shall approve to raise debt financing up to $2.6 billion for the MF/Labrador Transmission Funding Trust and up to $2.4 billion for the Labrador Island Link Funding Trust; and
    - Any necessary documentation related to the financing commitment with the institutions.
- OC2015-179

- Authorizes Nalcor Energy to enter into the following agreements, substantially as outlined in the draft agreements:
  - Labrador Island Link Amended and Restated Master Definition Agreement;
  - Muskrat Falls/Labrador Transmission Assets Amended and Restated Master Definitions Agreement; and
  - Labrador Island Link Amended and Restated Equity Support Agreement.

- OC2017-110
  - Authorizing the Minister of Natural Resources, the Minister of Finance, and the Minister for Intergovernmental Affairs to:
    - Enter into an agreement with the Government of Canada for an additional Federal Loan Guarantee; and
    - Approve and enter into an amendment and restatement of the Intergovernmental Agreement with the Government of Canada, dated November 29, 2013, pursuant to the terms of the enhanced federal loan guarantee.
- OC2017-113
  - Authorizing Nalcor and its subsidiaries in connection with the LIL, MF Facility, and the LTA projects to:
    - Raise debt financing of up to $1,850 million for the MF/LTA project and $1,050 million for the LIL project; and
    - Secure payment and performance of all obligations arising in connection with the debt financing.

*Electrical Power Control Act*

- In 2012 under Bill 61, an amendment to the EPCA was assented which added Part II.1 to the Act. This part was titled "Exclusive Right" and under newly assented section Part II.1, 14.1 of the EPCA provided NLH the ability for the exclusive right to supply, transmit, distribute and sell electrical power or energy to the island portion of NL. Further this section states a retailer or an industrial customer shall purchase electrical power or energy exclusively from NLH on the island portion of NL. This amendment formed the basis for the creation of the monopoly associated with the Projects given the rights provided to NLH.

In addition, the following OC's were noted in facilitating the FLG:

- OC2011-162
  - The PUB was referred the question of whether the development of MF and the LIL represented the least-cost option for the supply of power to Island Interconnected Customers over the period of 2011-2067, as compared to the Isolated Island Option.
- OC2013-342
  - This order is titled the Muskrat Falls Exemption Order.
  - To satisfy the commitments of the FLG regarding rate regulations and cost recoveries associated with MF, LTA and LIL achieving in-service, the passing of this order exempted MFCo, LTACo and LILCo from the Public Utilities Act and Part II of the EPCA.
  - This order stated a public utility (with the following being acknowledged as public utilities for the purposes of this order: LIL Holding Corporation, LIL GP Corporation, LIL Limited Partnership, LIL Operating Corporation, Labrador Transmission Corporation, and Muskrat Falls Corporation) are exempt from the application of the NL Public Utilities Act and Part II of the EPCA.
  - By passing the Muskrat Falls Exemption Order in combination with the signing and execution of the PPA, GIA, Transmission Funding Agreement, the LIL Assets Agreements and the LIL Lease Agreement, NL has satisfied its commitment under the FLG terms and conditions (as well as the Inter-governmental Agreement) to ensure the recovery of costs associated with MF, LTA, and LIL. This order restricted the PUB's ability to exercise its power and to perform their duties over MFCo, LTACo and LILCo by stating these entities are Public Utilities for the purposes of the MF Exemption Order and exempt from the NL Public Utilities Act (in combination with OC2013-343 noted below).

- OC2013-343
    - This order directed the PUB to adopt a policy that stated any costs, payments or compensation paid by NLH under any agreement within the scope of the Muskrat Fall Project Exemption Order including LILCo, LTACo, and MFCo shall be included as costs, expenses or allowances without any alterations, reductions or disallowances in NLH's cost of service calculation. This is to apply for any rate application or rate setting process to ensure that those amounts will be recovered in full by NLH in interconnected island rates charged to ratepayers.
    - Further, these costs noted in the point above, as well the NLH rates established, are not subject to subsequent review and will continue with no alterations, reductions or disallowances to these amounts.
    - Notwithstanding the two points above, no amounts paid by NLH as noted above will be included as expenditures or allowances in NLH's cost of service or any rate application or rate setting process whereby:
        i. The amounts are directly attributable to the marketing or sale of power or energy by NLH to individuals or business outside the Province of NL on behalf of and benefiting MFCo; and
        ii. For each of MF, LTA and LIL until the time the Project is commissioned or nearing commission, NLH is receiving services from these Projects.
- OC2013-350
    - The PUB is to adopt a policy that:
        i. An order under Section 8(2) of the Electrical Power Control Act shall not be made with respect to energy and capacity designated for delivery pursuant to the Energy and Capacity Agreement dated July 31, 2012 (this agreement was later amended on July 31, 2014 and was signed between Nalcor and Emera);

ii. This policy shall apply from the day that energy and capacity is first delivered pursuant to the Energy and Capacity Agreement until a day 35 years later; unless the initial terms of the Energy and Capacity Agreement is extended due to a forgivable event, but shall not apply to extensions or subsequent terms of the Energy and Capacity Agreement ; and

iii. For the purpose of this Order in Council, terms shall have the meaning ascribed to them in the Maritime Link Exemption Order.

In addition to the amendments noted above, there were additional amendments passed to the EPCA as well as the Public Utilities Act in May 2018 that was intended to bring the Province of Newfoundland and Labrador into compliance with FERC. These amendments did not relate to facilitating the FLG therefore have not been included for discussion within this section. Refer below to the section titled "The effect of the legislative monopoly and the PPA on FERC compliance" which further discusses these amendments.

**Effect of FLG on Financing Interest Rates and Savings to Project as Reported by Nalcor and NL**

As noted above, the guarantee by Canada through the FLG in conjunction with the agreed upon financing structure was presented as a way for the Project debt to achieve Canada's AAA credit rating. The AAA rating was deemed as advantageous for raising debt financing for the Projects, with respect to interest cost savings and market availability given the amount of debt to be issued for the Projects. As part of the announcement of the FLG-1, NL stated the FLG will result in projected savings of $1 billion in interest costs for ratepayers and taxpayers and will contribute to stable electricity rates for consumers in the Province of Newfoundland and Labrador. In turn, these benefits and cost savings would be fully passed directly onto NL ratepayers once construction was completed and Commercial Operations Date (initially stated as July 2017) was met.

Given the magnitude of the total debt required and NL's significant equity investments in the Projects, Nalcor stated this created an opportunity to secure financing at historically low Government of Canada base rates and spreads, which the FLG would further reduce. Further according to Nalcor, at the time of financing, forecasts had shown signs of rate increases over the planned construction period. Nalcor stated that in terms of the Financing Structure, an upfront bond structure would benefit significantly from the FLG, as it would provide certainty of the availability and cost of the total funding requirements from day one of the

Projects. Further it was stated that at the time of financing, given the significant risk present over the five year construction period and the potential for changes in the global or Canadian economic conditions over this period, these items could impact the ability to issue debt or potentially even impact Canada's AAA rating. Nalcor communicated that all of these benefits, on an overall basis, were expected to minimize the all-in costs for both the construction and long-term financing components based on the risk adjusted Net Present Value to Newfoundland and Labrador ratepayers.

**<u>Background & Information on FLG-2 and the Reasons for Seeking as Reported by Nalcor and NL</u>**

On March 30, 2017 MFCo, LTACo, LILCo and Canada executed the FLG-2 agreement. The proceeds of the additional debt issuance were to be used to complete the Projects being developed by Nalcor. The reasons noted by Nalcor for seeking and obtaining the FLG-2 was to secure an additional $2.9 billion of debt financing, to reduce the equity required by NL by $2.7 billion and to reduce the domestic electricity rates by 1.5 cents per KWh. This was publically stated within the June 23, 2017 MF Project Update Press Release. Given these comments and the commitment already made to the Project, seeking the additional FLG-2 was presented as a way to reduce the burden on Newfoundland and Labrador ratepayers and taxpayers.

**<u>Terms and Conditions of FLG-2</u>**

The terms and conditions of the FLG-2 are consistent with those of FLG-1 with the exception of the following significant amendments:

- Guaranteed Debt
  - Under FLG-2 the total maximum amount of borrowing to be guaranteed by Canada is a fixed dollar-based cap of $2.9 billion allocated among the Projects as: MF and LTA together ("MFLTA") up to $1.85 billion and LIL up to $1.05 billion.
- FLG Term and Amortization Profile
  - The maximum term for each of the Projects have remained consistent however the term end dates were extended to 2052 for MFLTA (35 year term) and 2057 for LIL (40 year term).
  - The MFLTA amortization period will end on June 1, 2052 with the first sinking fund payment with respect to the FLG-2 debt to be made in December 2020.

- The LIL amortization period will end on June 1, 2070 with the first sinking fund payment with respect to the FLG-2 debt to be made in December 2020.

- Guarantee Fee
    - Under FLG-2, a guarantee fee has been introduced whereby a fee of 0.5% of the net amount of the FLG-2 outstanding is to be paid. The Guarantee Fee is to be split proportionally between the MF/LTA Funding Trust and the LIL Funding Trust (the funders of FLG-2) based on the respective debt outstanding. The Guarantee Fee will be included as part of the project costs.
- COREA
    - The COREA payments stated within FLG-1 are no longer required to be made. These payments were replaced with new annual equity prefunding requirements ("New Annual Equity Prefunding Payments"). The scheduled payment dates were March 2017, December 2017, December 2018 and December 2019 and the payments for each Project are stated as:
        - MFLTA: $184 million
        - LIL: $0 million
- Date Certain
    - Included in the Project Finance Documents of FLG-1 was an event of default if commissioning of the Project's did not occur by the Date Certain (which was initially set as February 28, 2019) with the option to extend twice for up to six months each time.
    - This provision remains under FLG-2, however the date certain was amended to February 28, 2021 to align with the updated Project schedule at the time of signing. The Borrowers also have the option to extend this date by one additional six month period.

**<u>Power Purchase Agreement</u>**

*Background and Information*

The PPA was signed and made effective November 29, 2013. The agreement was signed between NLH and MFCo and the agreement states that MFCo is to design, develop, finance, construct, commission, own, operate, maintain and sustain the MF Plant and will make the MF Plant available for the generation of electricity. The terms of this agreement also state that NLH and MFCo have agreed to the purchase and sale of Capacity, Energy, Ancillary Services and Greenhouse Gas Credits based on the specific terms of the PPA.

*Terms of the PPA*

The PPA is subject to the terms and conditions described as follows:

- The term of the PPA is for 50 years starting on the Commissioning Date and ending January 1, 2068 (known as the "Supply Period").
- The agreement defines three blocks of energy provided by MFCo to NLH:
    - Base Block Energy: defined within the PPA as the annual amount of energy forecasted at November 29, 2013 by NLH from the MF Plant to meet the anticipated requirements of the cumulative electricity consumption of Newfoundland and Labrador Customers plus any associated losses of energy normally incurred in the transmission and distribution, during each Operating Year. Newfoundland and Labrador Customers is further specifically defined within the PPA as the wholesale and retail customers of electricity on the island portion of Newfoundland and Labrador directly or indirectly connected to the Newfoundland and Labrador Transmission System.
        - The PPA does not provide any specific characteristics in describing the Base Block Energy for items such as required timing of delivery during peak hours or capacity required during specific time of day.
    - Supplemental Block Energy: defined within the PPA as the an amount of Energy within each Operating Year, that is the lessor of:
        - The amount by which the Energy that the Newfoundland and Labrador Customers will consume for the particular Operating Year exceeds the Initial Load Forecast (with the Initial Load Forecast being the projected forecast for each operating year estimated by NLH at the time of this agreement being signed); and

        - The current estimated long term annual average energy production of the MF Plant less Base Block Energy and the amount of Energy and Capacity that has been committed to External Markets under the PPA (which includes the allocation agreed to under the Energy and Capacity Agreement between Nalcor and Emera).
        - Ultimately Nalcor states this is as an amount of energy available to NLH if load requirements exceed the predetermined Base Block Energy.
        - Over the Supply Period, Supplemental Block Energy will be sold by MFCo and purchased by NLH for $1.00 every Operating Year.
    - Commissioning Period Block Energy: defined within the PPA as an amount of energy available to NLH during the Commissioning Period. The Commissioning Period Payment is the amount that NLH will pay to MFCo for the Commissioning Period Block Energy. This amount is set at $1.00 or any greater amount as designated by NLH plus $1.00 for the services to support the transmission of Energy and Capacity.
- The PPA also states that MFCo must maintain an account of Energy (in GWh) for NLH which will never be less than zero during the term of the agreement. This is referred to within the PPA as the NLH Deferred Energy and how this amount is determined is explained within Article 3 of the PPA. Over the term of the agreement, Energy will be provided first from Base Block Energy, then from Supplemental Block Energy and then from NLH Deferred Energy.
- The agreement sets forth within Schedule 2 the Initial Load Forecast and Base Block Energy for operating years 2018 to 2068. The schedule outlines the various operating years with the assumption that the first operating year will begin on June 1, 2018 and the term will extend to May 31, 2068. For each operating year, the schedule states the projected electricity that will be consumed by Newfoundland and Labrador Customers (in GWh) and the Base Block Energy (also in GWh).
- NLH agrees to pay MFCo for the Base Block Energy each Operating Month. The amount payable is the total of the Base Block Capital Costs Recovery and the estimated monthly Operating and Maintenance costs.

- The Base Block Capital Costs Recovery is defined as the recovery over the supply period of the following (as set out in Schedule 1 of the PPA):
  - development capital costs, which shall provide for the repayment of principal under the financing and the return of equity capital to the equity holder;
  - development financing costs; and
  - distributions to equity holders sufficient to enable MFCo to achieve its Assigned Internal Rate of Return ("IRR"), which the PPA Schedule 1 sets at 8.4%.
- The agreement sets out the methodology for the Base Block Capital Costs Recovery calculation in each Operating Year but ultimately the payment (based on an escalating supply price) will provide for the full cost recovery (including capital, operating, maintenance, taxes, GIA payments, debt service costs and a defined return on equity).
- The payments include an adjustment clause to ensure debt service obligations of MF will be met. This adjustment is known as the Base Block Capital Costs Recovery Adjustment.
- The payments are also impacted by the Base Block Capital Supply Price. This Supply Price is determined on an escalating supply price in dollars per Megawatt Hour ("MWh") applied to the Base Block Energy for the purpose of calculating the Base Block Capital Costs Recovery.
- In summary:
  - a calculation is completed to determine what costs are required to be recovered over the term of the agreement. These costs include all development costs and cost of capital (debt and equity) incurred;
  - a price per MWh is calculated and is designed to recover these costs over the term of the agreement based on the Base Block Energy. The price increases at a rate of 2% per year.
- As the payment is based on the estimated monthly Operating and Maintenance costs, there is a clause in the PPA that allows for the true up of the Operating and Maintenance costs. Each quarter during which the payments are being paid, MFCo must provide the total actual

Operating and Maintenance costs incurred for the applicable quarter. If these costs exceed the estimated Operating and Maintenance costs collect by MF, NLH is required to pay MFCo the amount by which the actual costs exceed the estimates. If the actual costs were lower than budget, than MFCo can either elect to pay NLH for the difference or use the difference as a credit against the next Base Block Payment.

  - In totality, the mechanisms included in the PPA will adjust the amount paid for changes in costs to be recovered or if there are changes in the Base Block Energy. Ultimately, this ensures the full recovery from Newfoundland and Labrador island ratepayers over the 50 year term of the PPA irrespective of changes in costs or energy usage.

- NLH's obligations to pay the Base Block Payments is absolute, unconditional, irrevocable and is not subject to any reductions until the date in which the MFCo financing is paid in full.
- The PPA states that NLH will acquire and own all Green House Gas Credits related to the Energy delivered to NLH from MFCo. NLH has their own rights and discretion to sell any or all such Credits.
- The PPA provides specific remedies if Base Block Payments are not made.
  - In particular, if NLH fails to make the necessary Base Block Payments while MFCo continues to be in compliance with this agreement, MFCo may provide notice to NLH it is invoking their rights under the PPA which requires that within 10 days of providing such notice, if NLH has not paid the outstanding payment, NLH is required to pay a lump sum amount equal to the full repayment of the debt financing (including principal, accrued interest and any premiums) plus any associated costs (including legal, advisory, transaction and administrative costs).
  - Once this payment is made, MFCo will then recalculate the future Base Block Capital Costs Recovery and, with that, the future Base Block Energy Payments will be adjusted.
  - Further, this lump sum payment does not limit or impair MFCo's ability to seek further compensation for losses associated with the failure to pay the Base Block Payments.

- From MFCo's perspective, if the services stated under the PPA are not provided to NLH for a 24 hour consecutive period or 24 non-consecutive hours within a seven day period, NLH has the ability to provide notice that at the date specified in the notice, assume Operational Control of the MF Plant. If this were to occur, NLH will be entitled to the rights and will assume all responsibilities and obligations of MFCo based on terms of the PPA.
  - The return of MF Plant to MFCo may be done on no less than five business days' notice provided by NLH.
- The PPA will terminate at the earlier of the following:
  - A period of not less than 50 years from the date of commissioning; and
  - By written agreement of the parties (subject to the approval of the lenders).
- The PPA further explains sales to external markets under section 4.5 of the agreement titled "External Market Energy Sales". Under this section, MFCo is required to deliver at the end of each Operating Year, a monthly summary of the previous Operating Year, and based on this summary NLH can specify how much of the NLH Deferred Energy was sold on NLH's behalf by MFCo (which is defined as "NLH External Market Sales"). The PPA requires MFCo to use commercially reasonable efforts to maximize the price received when entering into energy sales outside of the Province of Newfoundland and Labrador.

**<u>The Effect of the PPA on NL Ratepayers and Taxpayers</u>**

Under the terms and conditions agreed upon under the PPA, the full cost recovery of MF will be ultimately achieved through the Base Block Energy payments and the mechanisms associated with this payment to continually ensure the debt service obligations are met. Upon initial signing of this agreement and based on the initial timelines and cost estimates, this agreement was supposed to provide a mechanism for Nalcor to recover all construction costs as well as future operating and maintenance costs, from Newfoundland and Labrador island ratepayers. Given the significant cost overruns and delays from the initial budget at the time of signing the PPA, this increased the burden on the Newfoundland and Labrador island ratepayers as they are required to purchase energy from NL under the exclusive rights on the island portion of the Province.

As the legislation passed by NL limited the PUB's ability to regulate rates once MF achieved in-service, the PUB is not able to set rates or disallow costs incurred. This limitation ensures the full cost recovery will be assumed by the island ratepayers through the PPA mechanisms in place to recover the full costs of MF. Further, from a Newfoundland and Labrador island ratepayer perspective, the PPA was designed to ensure that through the various blocks of energy, there would be sufficient levels of energy available to meet the future needs of Newfoundland and Labrador island ratepayers even after factoring in the energy committed to Emera. Estimations based on future growth and growing requirements over the term of the PPA were made when designing the load requirements, and through the NLH Deferred Energy mechanism, Muskrat was to maintain an amount of Energy that will never be less than zero, to ensure the needs of Newfoundland and Labrador ratepayers are met.

The potential for exporting of excess energy to external markets represents an opportunity for Nalcor to earn increased revenues which will directly benefit the Newfoundland and Labrador taxpayer. Until it is determined whether the May 2018 regulations meet FERC compliance, it is unclear whether the full benefit will be realized. We have further investigated this compliance as well as further assessed the impact of FERC on the Province of Newfoundland and Labrador in the next section of our report.

**The Effect of the Legislative Monopoly and the PPA on FERC Compliance**

As part of the scope of our report, we have been asked to explain the effect of the legislative monopoly and the PPA on FERC compliance. Our discussion on this subject matter keeps the analysis at a level that introduces what FERC is and what the FERC requirements are. Given the complexities and specific detailed requirements, we have not been able to definitively conclude on whether or not FERC compliance is currently met.

*FERC requirements*

FERC is an independent agency that regulates the transmission and wholesale sale of electricity in interstate commerce. In its landmark Order No. 888 decision (issued April 24, 1996), FERC sought to remedy undue discrimination in access to monopoly owned transmission facilities and mandated that transmission providers have on file pro forma open access transmission tariffs (OATTs) that "*contain minimum terms and conditions of non-discriminatory service" (Order No. 888 at 1, 4-5, and 21).* FERC's pro forma OATT includes a principle of reciprocity that requires a non-jurisdictional utility seeking to receive service under a jurisdictional FERC OATT to offer "comparable" open access transmission service on its own system to those entities it seeks to obtain transmission service from in the United States.

FERC also regulates wholesale sales of electricity in interstate commerce and requires all sales of electric energy to be at just and reasonable rates (16 U.S.C. § 824d (a)). In competitive markets, FERC authorizes entities to make wholesales of electricity at market-based rates. Applicants seeking market-based rate approval must demonstrate they lack or have properly mitigated market power in the generation and transmission of electric energy and cannot erect barriers to entry by potential competitors (*Louisiana Energy & Power Auth. v. FERC*, 141 F.3d 364, 365 (D.C. Cir. 1998)). To demonstrate the lack of transmission market power, FERC requires applicants to show that any transmission-owning affiliate has an OATT on file with FERC (*TransAlta Enters. Corp.*, 75 FERC ¶ 61,268, at 61,875 (1996)). FERC does not require foreign utilities to implement pro forma OATTs, but does require a demonstration that the applicant's "transmission-owning utility affiliate offers non-discriminatory access to its transmission system that can be used by competitors of the power marketer to reach United States markets" (*Id.* at 61,030-31). This is generally a fact-specific analysis.

*Current operations*

Based on publically available information from FERC applications, both Nalcor and Emera maintain market-based rate authorization through subsidiary entities. In 2009, Nalcor applied for and was approved for market-based rate authorization from FERC. In 2014, an application to cancel this was filed and subsequently, Nalcor Energy Marketing (another Nalcor subsidiary) filed for market-based rate authorization and was approved. Under the applications filed, both in 2009 and in 2014, Nalcor and its subsidiaries explained that they could not exercise market power with respect to the generation or transmission of electric energy in the United States and, similarly, could not restrict the transmission of electric energy into the United States because they did not own any transmission facilities directly interconnected to the United States. As a result, FERC found that Nalcor and its subsidiaries satisfied the requirements.

Nalcor Energy Marketing currently purchases available recapture energy from NLH (under a separate power purchase agreement signed between Nalcor Energy Marketing and NLH) for resale in export markets including the United States. This power purchase agreement also allows Nalcor Energy Marketing the use of

NLH's transmission service rights to deliver electricity. These rights include rights provided to NLH through a Transmission Service Agreement with Hydro-Quebec.

As noted above, at the time the previous applications were approved, the island portion of Newfoundland and Labrador was not connected to the North American transmission grid (as construction of the Projects was still on-going) and the exclusive access rights legislated to NLH were solely for the island portion of Newfoundland and Labrador. As a result, Nalcor was able to demonstrate that it could not restrict transmission of electric energy into the United States because NLH's transmission facilities were not directly interconnected to the United States. However, now that the island portion of Newfoundland and Labrador will be connected to the North American system through the sanctioning of the Projects, a determination must be made as to whether Nalcor will be in compliance with FERC's open access requirements once the Projects were commissioned. This will be important as it is Nalcor's intention to export excess energy from MF into external markets, with the Northeastern United States market being one of the key export markets.

*Impact to Projects upon facilitating the FLG and sanctioning the Projects*

Based on the initial executed agreements and the initial amendments to legislation to facilitate the FLG and sanction the Projects, NLH was provided exclusive access to supply, transmit, distribute and sell electrical power or energy on the island portion of the Province of Newfoundland and Labrador under section 14.1 of the EPCA. By NL legislating NLH's exclusive access on the island portion of the Province, this inherently restricted Newfoundland and Labrador's island ratepayers from accessing power from other suppliers from 2012 onwards, and similarly appeared to restrict the ability of third parties to secure open, non-discriminatory transmission service over the Projects into the United States. The exclusive access provided to NLH appeared to put the island portion of Newfoundland and Labrador offside with the requirement to offer "comparable" open access transmission services in the Province of Newfoundland and Labrador to third-party suppliers. This, in turn, could jeopardize the ability of Nalcor or its affiliates to maintain market-based rate approval and participate in the US wholesale energy markets.

*Impact of 2018 legislation on open access*

As a result of the restrictions to open access on the island portion of the Province of Newfoundland and Labrador, in May 2018 NL passed OC2018-088, which amended the regulations under the EPCA and the

Public Utilities Act. The purpose of OC2018-088 was to bring the Province of Newfoundland and Labrador into compliance with FERC's requirements by providing open access transmission services across the Province of Newfoundland and Labrador as a whole. The regulations passed under this OC were titled the "Open Access Transmission Regulations". Under these regulations, the Newfoundland and Labrador System Operator was established as a separate division of NLH. Although a division of NLH, the Newfoundland and Labrador System Operator is to act independent of NLH in its activities and responsibilities managing the use of Newfoundland and Labrador's transmission functions. Transmission functions under the regulations are defined as "the planning, directing, organizing or carrying out of day to day operations relating to the transmission service on the integrated electric system, including the granting and denying of transmission service requests".

These new regulations outline the system operator's and transmission owners' duties and functions, outline what is to be included in the transmission tariff, and outline the transmission information that the system operator is to make accessible to transmission customers. In totality, these regulations set out a framework that creates a systems operator, separates the transmission functions and outlines the transmission tariffs which appear to address the restrictions on the open access transmission services. Although these regulations have been legislated, it is unclear based on the available information how the framework has been or will be implemented from an operations perspective in the Province of Newfoundland and Labrador. Because FERC's analysis is fact-specific, the implementation of the framework and ensuring compliance with the legislation will ultimately determine whether or not NLH will be deemed to be in compliance with FERC's open access requirements under Order No. 888. Assuming that NLH implements the framework in a manner similar to other Canadian transmission-owning utilities with OATTs and related open access requirements that have been found by FERC to be in compliance with Order No. 888, FERC will likely make a similar determination with respect to NLH.

**Appendix A – Debt Service Coverage Ratio**

As specifically stated in the FLG terms and conditions, the debt of each Borrower is subject to a Debt Service Coverage Ratio ("DSCR") calculated as:

- DSCR = Base Cash Flow/Debt Service, where:
    - Base Cash Flow = Liquidity Reserve plus Contracted Revenues less Cash Operating Costs
    - Debt Service = Amortization plus Interest Expense
    - Amortization = The amortization amount corresponding to the FLG Amortization profile in respect of each Borrower
    - Interest Expense = The interest expense for the period
    - Contracted Revenues:
        - MF
            - (a) for the purposes of Initial Debt Servicing, DSCR shall include only the Base Block Revenue plus Liquidity Reserve; and
            - (b) for all other purposes, DSCR shall include the Base Block Revenue plus Liquidity Reserve, plus revenue from power purchase agreements with investment grade parties, based on the total annual energy sales not to exceed (P50) energy production for MF.
                - LTA: for all purposes, DSCR shall include LTA Tariff Revenue plus Liquidity Reserve.
                - LIL: for all purposes, DSCR shall include revenue from NLH under the LIL Assets Agreement plus any Liquidity Reserve.
                - ML: for all purposes, DSCR shall include revenues collected from ratepayers under the cost-recovery framework imposed by the UARB plus Liquidity Reserve.
    - Cash Operating Costs includes all cash costs of the Borrower, excluding interest and principal on any Guaranteed Debt.

**Appendix B – Additional Pre-conditions**

As noted with section 3.5 of the FLG, the following conditions had to be completed by the applicable Borrower in a manner that met Canada's satisfaction prior to the execution and delivery of the FLG.

- Execution of the FLG Agreements and all other relevant documents necessary to effect Financial Close;
- Provision by the Credit Rating Agencies of indicative credit ratings for ML equal to or higher than investment grade in the event that the UARB decision differs from the application submitted by MLCo;
- Satisfaction of any and all Project-related due diligence deemed necessary by Canada, including satisfactory review of all required revenue-producing agreements and other agreements including MF PPA, TFA, LIL Assets Agreement;
- Approval by Canada of the Financing, Financing Structure, Financing Documents, and Transaction Structure;
- Report provided by an Independent Engineer that the Projects have sufficient insurance coverage in place that is customary in Projects of this nature and size;
- An interest rate hedging program in place to hedge expected interest expense with respect to the Guaranteed Debt (as required by the nature of the Financing);
- Necessary permits, approvals, land-use agreements and other authorizations required at Financial Close;
- Execution and delivery of the Borrowers indemnifying and saving Canada harmless from and against any liability that Canada incurs solely by virtue of being found, in respect of the Projects, liable as a Partner or Joint Partner;
- Review of technical aspects of the Projects;
- Other Conditions Precedent customarily included in commercial project financing transactions.

## Appendix C – Glossary of Abbreviated Terms

| Abbreviations | Full Term |
|---|---|
| Canada | Government of Canada/Her Majesty the Queen in the Right of Canada |
| COD | Commercial Operations Date |
| Commission | The Commission of Inquiry Respecting the Muskrat Falls Project |
| COREA | Cost Overrun Escrow Account |
| DSCR | Debt Service Coverage Ratio |
| ECA | Energy Corporation Act |
| Emera | Emera Inc. |
| EPCA | Electrical Power Control Act |
| FERC | United States of America Federal Energy Regulatory Commission |
| FLG-1, FLG-2, (collectively "FLG") | Federal Loan Guarantees |
| GIA | Generator Interconnection Agreement |
| GWh | Gigawatt Hours |
| IRR | Internal Rate of Return |
| LIL | Labrador-Island Link |
| LILCo | Labrador-Island Link Limited Partnership |
| LIL OpCo | Labrador-Island Link Operating Corporation |
| LTA | Labrador Transmission Assets |
| LTACo | Labrador Transmission Corporation |
| MF | Muskrat Falls Generation Facility |
| MFCo | Muskrat Falls Corporation |
| MF/LTA | Muskrat Falls Generation Facility and Labrador Transmission Assets |
| ML | Maritime Link |
| MLCo | Nova Scotia Power Maritime Link Inc. |
| MWh | Megawatt Hours |
| Nalcor | Nalcor Energy |
| NL | Government of Newfoundland and Labrador |
| NLH | Newfoundland and Labrador Hydro |
| NS | Government of Nova Scotia |
| OATT | Open Access Transmission Tariffs |
| OC | Order in Council |
| PPA | Power Purchase Agreement |
| PUB | The Board of Commissioners of Public Utilities – Newfoundland and Labrador |
| UARB | Nova Scotia Utility and Review Board |