

Only July 24, 2019, counsel for the Muskrat Falls inquiry solicited a response the Government of Newfoundland and Labrador (“GNL”) and Nalcor Energy (“**Nalcor**”) with respect to the following:

Page 30 – **Addressing potential challenges from interconnection.** Based upon the comments made by Mr. Goulding in his Report, the Commissioner would request some form of update or comment from the Government of NL and Nalcor Energy related to steps taken and progress to date made related to those issues.

The primary question posed by Mr. Goulding’s at Page 30 was:

Question: Is NL’s system of regulation adequate to deal with the new challenges that arise after interconnection, including energy marketing? Does it meet the needs of current players in our electrical system including ratepayers, and if not, what changes should be made?

1.0 **Background**

Interconnection of Newfoundland and Labrador’s (“**NL**”) interprovincial transmission system with Quebec and Nova Scotia gives rise to a reciprocity obligation under the Federal Energy Regulatory Commission (“**FERC**”). Open access over the NL interprovincial transmission system arises from the fact that each of the transmission owners within NL (CFLCo, LTC, LIL LP, Hydro and NSP Maritime Link (NSPML)) have affiliates that (i) take transmission service over other utility systems under open access regimes, and (ii) have affiliates holding market-based rate (“**MBR**”) authorizations from FERC.

From a historical perspective, the extension of open access transmission service into Canada was primarily driven by FERC’s adoption of a “reciprocity” requirement as part of its Order No. 888¹ open access rulemaking in 1996. The reciprocity requirement provides that:

A Transmission Customer receiving transmission service under [an open access transmission regime] agrees to provide comparable transmission service that it is capable of providing to the Transmission Provider on similar terms and conditions over facilities used for the transmission of electric energy owned, controlled, or operated by the Transmission Customer and over facilities used for the transmission of electric energy owned, controlled, or operated by the Transmission Customer’s corporate Affiliates.²

FERC has held that “foreign utilities...[taking] transmission service under a U.S. public utility’s [OATT] must comply with the reciprocity provision in the tariff.”³ Further, FERC also clarified that reciprocity for the provision of transmission service applies “not only to the Transmission Customer that obtains transmission service under the Tariff, but also to all parties to a

¹ *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh’g*, Order No. 888-A, 62 Fed. Reg. 12,274 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh’g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh’g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff’d in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff’d sub nom. New York v. FERC*, 535 U.S. 1 (2002) (“Order No. 888”).

² FERC Pro Forma Open Access Transmission Tariff, Section 6.

³ See *Order Clarifying Order No. 888 Reciprocity Condition*, 79 FERC ¶ 61,182 at p. 61,867 (1997).

transaction that involves the use of transmission service under the Tariff, including the power seller, buyer and any intermediary, such as a power marketer.”⁴ A party who sells power involved with the use of transmission service under the Tariff must itself provide reciprocity *with respect to transmission service* to the extent it owns, controls, or operates facilities capable of providing such transmission service. This reciprocity principle does not extend to the provision of generation, sale or distribution of power.

FERC has articulated three alternatives for satisfying the reciprocity condition: (1) satisfying the reciprocity obligation under a bilateral agreement, (2) adopting an open access transmission tariff (OATT), or (3) seeking a waiver of the OATT reciprocity condition.⁵

2.0 Open Access

Reciprocal open access does not require identical terms of service or the use of the same method (i.e., OATT, bilateral or other) as another system for compliance.⁶ Where a utility chooses to provide comparable service through bilateral agreements, the terms and conditions that may be necessary to provide reciprocal service . . . in a bilateral agreement is necessarily a fact-specific matter not susceptible to resolution in a generic rulemaking proceeding.”⁷

There are core elements to any open access transmission regime, including:

- Provision of network transmission service and point-to-point transmission service;
- Treatment of all users of the transmission system as customers, regardless of affiliate or third party status vis a vis the transmission provider;
- Treatment of all customers (affiliates and third parties) on an equal, non-discriminatory and non-preferential basis;
- Application of common terms of services, including comparable rates for services;
- Independence of the transmission system operations from affiliate operations, including clear independence of authority in the transmission provider’s management, scheduling and provision of transmission service;
- Functional separation between transmission service operations and other utility operations (such as generation, energy marketing and distribution activities), which involves independence in decision making as a unit, supported by physical separation of employees within an office, protection of electronic files and communications, and other similar actions to have the “functions” undertaken by the transmission system employees independent of other operations;

⁴ *Id.*

⁵ See Order No. 888-A at 30,285-86. The waiver process requires an explicit request by a transmission customer and an affirmative waiver by the transmission provider. This option has been rarely used.

⁶ Order No. 1000-A, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, 139 FERC ¶ 61,132 at P 773 (2011) (explaining that the transmission provider has the right to choose whether to provide reciprocal service via a bilateral agreement or an OATT, and that another transmission provider to whom reciprocity is owed cannot require the adoption of an OATT.)

⁷ *Id.* quoting Order No. 888-A at 30,289.

- Equal access to information, through a website, by customers regarding the availability of transmission capacity and terms and conditions of available transmission service;
- Protections against disclosure of non-public transmission system information and confidential transmission customer information by the transmission provider;
- Ability to segregate and account for transmission system costs for purposes of establishing an applicable transmission rate; and
- Independent regulatory oversight and a process for resolution of disputes between a transmission provider and transmission customers.

3.0 NL's Transmission System

In August 2011, Washington based law firm Van Ness Feldman LLP (“**Van Ness**”) was engaged to provide advice with respect to the design and implementation of the electrical transmission open access regime post-interconnection with the North American transmission grid. Nalcor believes the current interprovincial transmission service regime meets the requirement for open access in a manner that is adequate for the size and scope of the transmission system in which it operates.

The framework for open access transmission service within Newfoundland and Labrador has been developed and is now implemented through the NL System Operator (“NLSO”). This framework follows the core open access principles noted above and includes:

- Execution of a Multi-Party Pooling Agreement by which NSPML , LIL LP, LTC and Hydro⁸ have agreed to transfer operational control of their separately owned transmission facilities to the NLSO—under the condition that the NLSO coordinates the provision of open access and non-discriminatory transmission service over their respective transmission facilities.
- Establishment of the NLSO, as a separate and independent division of Hydro, which is responsible for:
 - managing applications for transmission service;
 - scheduling and providing transmission service over the NL Transmission System on an open, comparable and non-discriminatory basis;
 - maintaining and operating the transmission control center for the NL Transmission System;
 - monitoring security and maintaining reliability of the NL Transmission System;
 - coordinating maintenance of all transmission facilities;
 - establishing and implementing operating requirements applicable to all transmission elements; and
 - invoicing and collecting transmission service payments from transmission customers, and returning associated revenues, along with appropriate reports, to participating transmission owners.

⁸ CFLCo is considering execution of the MPPA and integration of its facilities into the broader NL transmission regime. The ability to meet FERC reciprocity requirements in support of NEM's ongoing export activities would be enhanced, but is not dependent upon, CFLCo's participation in the pooling arrangements established under the MPPA.

Notably, the NLSO has been authorized by each of the transmission-owning participants in the MPPA to act as the transmission provider for the granting and scheduling of transmission service over the pooled, NL Transmission System.

- Initiation of an Open Access Same-Time Information System (“OASIS”) portal through which third parties seeking transmission service can obtain necessary information, applications, forms of agreement and other relevant data necessary for the registering to become a transmission customer and, therefore, eligible transmission service over the NL Transmission System;
- Offering firm and non-firm transmission service as well as network transmission service on terms and conditions of service that are universally applied to all transmission customers, including Hydro;
- Submission of an application to the PUB for review and approval rates for the firm, non-firm and network transmission service—with the proposed rates having been approved, on an interim basis, pending further review by the PUB;
- Adoption and implementation of a Code of Conduct for the NLSO and each of the NL Transmission Owners;
- Adoption of the NL Transmission Policies and Procedures which includes the process for application of service, credit requirements, transmission scheduling procedures, billing terms and a dispute resolution process.
- Adoption of pro forma bilateral transmission service agreements for short-term and long-term agreements for firm, non-firm and network transmission service that have terms comparable to the transmission service agreements that Hydro has executed with the NLSO.

Through these steps, the NLSO has consulted with its U.S. regulatory counsel, Van Ness to ensure that the open access transmission service for the NL Transmission System that has been implemented using the “bilateral agreement” option and augmented by the parallel adoption of common terms of service within the NL Transmission Policies and Procedures meets its reciprocity obligations. Further, Van Ness monitors and advises the NLSO on developments relating to FERC’s open access policies and the implications of such matters for the NL Transmission System framework.

4.0 Section 3.2 (New Challenges likely to arise as a consequence of Interconnection)

Brief History of Nalcor Energy Marketing Activities

An energy marketing function within the unregulated division of Hydro was established in 2009 to sell excess energy supplies from existing and future resource developments. Specifically, Hydro had excess energy from the 300 MW of recall power it had available to sell to Labrador residents (regulated) and industrial customers (unregulated).

In April 2009, Hydro entered into an agency agreement with Emera Inc. in order to gain access to competitive electricity markets and sell surplus recall power in Canada and the northeastern United States. In addition to marketing existing surplus recall power, the Provincial long-term Energy Plan identified additional surplus energy and generating capacity to be sold as a result of the potential development of hydroelectric generation facilities along the lower Churchill River.

In 2010, Nalcor engaged the services of KPMG to assist with advancing its energy marketing business and a detailed report titled “Risk Considerations for Energy Marketing Structures” was provided September 28, 2010.

In 2014, Nalcor Energy Marketing Corporation (“NEM”), a 100% owned subsidiary of Nalcor, was formed. The rationale behind forming a stand alone energy marketing company included:

- shielding Nalcor from being a taxable entity in the United States,
- removing Hydro’s exposure to energy marketing activities and segregating regulated and non-regulated portions of its electricity business,
- creating an external face of Nalcor to the North American energy markets, and
- stand alone energy marketing corporations had become the market standard for organizing energy and marketing activities in Canada.

NEM commenced full service 24-hour energy marketing operations in April 2015. Since that time, NEM has developed considerable in-house expertise with the retention of 25 employees, had annual revenues of approximately \$58 million in 2018 and currently holds the following authorizations:

- FERC Market Based Rate Authority (MBR) allowing it to participate in the organized electricity markets in the US.
- National Energy Board Export Permit allowing it to export its energy and related products from Canada.
- US DOE Export Authorization allowing it to export energy from the US to Canada.
- Registered and active participant in the wholesale energy markets operated by NYISO, ISO-NE, and Ontario.

In addition to the above authorizations, NEM has entered into a variety of trade enabling agreements with multiple counterparties in the bilateral markets in Ontario, Quebec, New Brunswick and Nova Scotia and continues to pursue other market opportunities in anticipation of having availability to surplus energy and capacity from Muskrat Falls in 2020.

Compliance with Rules and Standards

With respect to present and future monitoring and compliance with NERC, FERC and ISO rules and standards, NEM relies primarily on external subject matter experts to provide this advice and is developing its own in-house knowledge and expertise over time.

Regarding NERC standards specifically, there is no requirement for Nalcor, Hydro or CFLCo to implement mandatory NERC standards compliance. The NERC standards are designed for the reliability of the North American interconnected grid. Given that interconnection with Nova Scotia is HVdc, reliability issues within NL will not cause disruptions into Nova Scotia except for the loss of power flow transfers. Nova Scotia Power and the Nova Scotia System Operator are able to manage impacts through its own NERC compliance practices. Similarly in Quebec, Hydro Quebec manages reliability risks through its operating practices and its relationship with CFLCo. Nalcor is working with Nova Scotia and Quebec system operators to keep them informed of changes to the NL system and the establishment of practices to meet reliability

requirements. These practices implemented in NL meet or will meet reliability requirements as production at Muskrat Falls begins and increased power transfers occur within NL.

The NLSO has an interconnection operators agreement with the Nova Scotia System Operator and is currently working to establish similar arrangements with CFLCo and the Quebec System Operator. Such arrangements establish practices to ensure the reliable operation of both interconnections.

Nalcor is currently using external subject matter experts to draft policies and procedures that will meet NERC reliability standards. The decision to adopt such policies and procedures will consider cost to adopt and maintain versus the benefits provided to NL stakeholders. In the meantime, Hydro and the NLSO have implemented practices of cyber security and NLSO operating practices that are consistent with NERC standards to ensure strong reliability practices in the operation, maintenance and planning of the interconnection with Nova Scotia and the interconnection between Labrador and the Island.

5.0 Section 3.3 (Specific challenges that energy marketing poses)

Cyber-Security

As indicated above, Hydro and the NLSO have implemented practices of cyber security and NLSO operating practices that are consistent with NERC standards to ensure strong reliability practices in the operation, maintenance and planning of the interconnection with Nova Scotia and the interconnection between Labrador and the Island.

Ability to Post Credit

NEM has posted and holds the necessary credit facilities to enable trade with its various counterparties with support from its parent. This is a prerequisite to qualifying to sell and purchase energy in the NYISO, ISO-NE and Ontario markets. Each of these market operators maintain extensive financial assurance policies that NEM complies with under its market participant agreements for the respective market. The ability to post credit has not been nor is it expected to be an issue for NEM as its business and activities expand over the coming years.

Risk Management

NEM is structured to be aligned with industry best practices, including the functional separation of the front (trading operation), middle (risk management) and back (settlement) offices and operates under a comprehensive risk management framework complete with operational manuals for each office. The trading operation is monitored daily by the middle office and is guided by a strict set of trading guidelines identifying accepted and unaccepted trade practices, approved counterparties, delegation of trade authority, counterparty credit monitoring, etc.

NEM has a full time employee dedicated to market monitoring, and to ensuring market and contract compliance.

With respect to the export quantity, NEM was established and is designed to pool and market all of Nalcor's surplus electricity assets. Following completion of the Muskrat Falls generating station, exports will average approximately 4 TWh annually under average inflow (rain/snow) conditions. Annual energy can vary by approximately +/- 1 TWh between wet and dry conditions.

6.0 Section 3.4 – 3.7

What are the needs of current players?

In May 2018, the Government of Newfoundland and Labrador established through amendments to the *Electric Power Control Act* and the *Public Utilities Act* an open access transmission framework in the Province. Under such legislation, the Public Utilities Board will regulate the operation of the NLSO through PUB practices with stakeholder engagement. The establishment of the open access transmission framework addresses the primary need, that being to ensure that there is open access to transmission in the Province. The purpose of the framework is to address the needs of transmission system stakeholders and the open access principles outlined above.

Which of these needs are not met by the current regulatory system?

The open access transmission framework adopted by the PUB and implemented by the NLSO meets the reciprocity requirements for comparable open access transmission service, while also ensuring coordinated operations of the NL transmission system to reliably meet native load demand. The current bilateral transmissions service agreements and common terms of service in the Policies and Procedures have been approved on an interim basis by GNL direction. Until the PUB undertakes a proceeding to review and finalize the TSAs and the Policies and Procedures, full stakeholder input will not have been received. In the meantime there are mechanisms for stakeholders to engage with the NLSO to apply and receive transmission access and to make complaints. As of mid-year 2019, there are no reported complaints made by stakeholders.

What changes should be made?

The NLSO and Hydro will work with neighbouring utilities to seek cooperative means to work together to reduce costs and enable efficient operation. As a result of interconnection, Hydro periodically meets with NB Power, NS Power and Maritime Electric to explore opportunities to cooperate to reduce the cost of meeting customer demands in the region.