

1.0 Introduction

The Newfoundland and Labrador System Operator's (NLSO) *Generator Interconnection Procedures* (GIP) document the steps required for an applicant to request, and for the NLSO to study, the establishment of a new or modified generator interconnection with the NL Transmission System or NL Sub-Transmission System under the operational control of the NLSO. Upon successful completion of these procedures and execution of an Interconnection Agreement, the interconnection applicant shall be deemed an Interconnection Customer.

Nothing in this GIP, or any application for interconnection service under the GIP, shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive Transmission Service.

2.0 Definitions

Adverse System Impact: means the negative effect of technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the NL Transmission System or NL Sub-Transmission System.

Affected System: means an electric system other than the NL Transmission System or NL Sub-Transmission System that may be affected by the proposed interconnection.

Affected System Operator: means the entity that operates an Affected System.

Business Day: means any day that is not a Saturday, Sunday or legal holiday recognized in the City of St. John's.

Completed Interconnection Application: An Interconnection Application that satisfies the information and other requirements, including payment of any required security, set forth in Section 7.0.

Confidential Information: means any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Facilities Study: means a study conducted by the NLSO to determine a list of facilities (including the NLSO's Interconnection Facilities and Network Upgrades as identified in the System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the NL Transmission System or NL Sub-Transmission System.

Facilities Study Agreement: means the form of agreement available on the NLSO OASIS for conducting the Facilities Study.

Generating Facility: means an Interconnection Customer's device for the production of electricity identified in the Interconnection Application, but shall not include the Interconnection Customer's Interconnection Facilities.

Good Utility Practice: means those project management, design, procurement, construction, operation, maintenance, repair, removal and disposal practices, methods, and acts that are engaged in by a significant portion of the electric utility industry in Canada during the relevant time period, or any other practices, methods or acts that, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish a desired result at a reasonable cost consistent with good business practices, Reliability, safety and expedition. Good Utility Practice is not intended to be the optimum practice, method or act to the exclusion of others, but rather to be a spectrum of acceptable practices, methods, or acts generally accepted in such electric utility industry for the project management, design, procurement, construction, operation, maintenance, repair, removal and disposal of electric utility facilities in Canada. Good Utility Practice shall not be determined after the fact in light of the results achieved by the practices, methods or acts undertaken but rather shall be determined based upon the consistency of the practices, methods, or acts when undertaken with the standard set forth in the first two sentences of this definition at such time.

Interconnection Agreement: means the form of interconnection agreement applicable to an Interconnection Application pertaining to a Generating Facility that is available on the NLSO OASIS.

Interconnection Application: A request for Interconnection Service pursuant to the provisions herein.

Interconnection Customer: means any entity that proposes to interconnect its Generating Facility with the NL Transmission System or NL Sub-Transmission System.

Interconnection Customer's Interconnection Facilities: means all facilities and equipment, that are located between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades to such facilities and equipment necessary to physically

and electrically interconnect the Generating Facility to the NL Transmission System or NL Sub-Transmission System.

Interconnection Facilities: means all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the NL Transmission System or NL Sub-Transmission System, and shall not include distribution upgrades or Network Upgrades.

Interconnection Service: means the service provided by the NLSO associated with interconnecting the Interconnection Customer's Generating Facility to the NL Transmission System or NL Sub-Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Interconnection Agreement and these procedures.

Interconnection Study: means any of the following studies: the System Impact Study, and the Facilities Study.

Material Modification: means those modifications that have a material impact on the cost, timing or location of any Interconnection Application with a later queue priority date.

Multi-Party Pooling Agreement: The agreement, first executed on April 13, 2015, which provides for the pooling of certain bulk transmission facilities within NL under the operational control of the NLSO for the purposes of providing open access and non-discriminatory Transmission Service.

Network Upgrades: means the additions, modifications, and upgrades to the NL Transmission System or NL Sub-Transmission System required at or beyond the point at which the Interconnection Customer interconnects to the NL Transmission System or NL Sub-Transmission System to accommodate the interconnection of the Generating Facility to the NL Transmission System or NL Sub-Transmission System.

Newfoundland Labrador System Operator (NLSO): The entity responsible for the safe and reliable operation of the bulk electric system in NL, including the administration and provision of Transmission Service on the NL Transmission System or NL Sub-Transmission System pursuant to the Multi-Party Pooling Agreement. The NLSO is a department of Newfoundland and Labrador Hydro.

NL: The Province of Newfoundland and Labrador.

NLSO's Interconnection Facilities: means all facilities and equipment owned, controlled or operated by the NLSO from the Point of Interconnection, including any modifications, additions, or upgrades to such facilities and equipment.

NL Sub-Transmission System: Those transmission facilities located in NL, operating at a voltage level of 46 kV and above, but below 230 kV.

NL Transmission Study Area: All transmission facilities located in NL, operating at a voltage level of 46 kV and above.

NL Transmission System: The transmission facilities located in NL, primarily operating at a voltage level of 230 kV or higher, including, without limitation, the Labrador-Island Link, the Labrador Transmission Assets and Island Interconnected System, but excluding the high voltage direct current portion of the Maritime Link transmission line owned by NSP Maritime Link Incorporated.

Open Access Same-Time Information System (OASIS): The real time information sharing system used to communicate with Transmission Customers, provide transmission system information, process requests for Transmission Service and post certain Code of Conduct requirements.

Point of Interconnection: means the point where the Interconnection Facilities connect to the NL Transmission System or NL Sub-Transmission System.

Queue Position: means the order of a Completed Interconnection Application relative to other pending Completed Interconnection Applications that is initially established based upon the date and time of receipt of the Completed Interconnection Application by the NLSO.

System Impact Study: means an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the NL Transmission System or NL Sub-Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, or to study potential impacts.

System Impact Study Agreement: means the form of agreement available on the NLSO OASIS for conducting the System Impact Study.

Transmission Service: The delivery of energy and capacity through network integration transmission service or point-to-point transmission service as further provided for under the NL Transmission Policies and Procedures.

3.0 Applicability

The NLSO's Generator Interconnection Procedures apply to:

- The evaluation of an Interconnection Application for a new Generating Facility proposing to interconnect to the NL Transmission System or NL Sub-Transmission system, as applicable, taking into account the effect of such interconnection upon the NL Transmission Study Area.
- The evaluation of a modification of an existing Generating Facility that is interconnected with the NL Transmission System or NL Sub-Transmission System and will result in an increase in the capacity for the existing Generating Facility or otherwise would require modifications to the location, configuration, or capacity of an existing Point of Interconnection. Such a modification is considered to be a Material Modification and will require the submission of a new Application. In such instances, the Application related to the proposed modifications shall be evaluated on the basis of the new total capacity of the facility as well as the new, maximum rated capabilities of the Point of Interconnection (as applicable).
- The evaluation of an Interconnection Application includes multiple energy production devices at a site for which a single Point of Interconnection is requested. In such instances, the Interconnection Application shall be evaluated on the basis of the aggregate capacity at the Point of Interconnection necessary to facilitate the interconnection of the multiple devices at their combined maximum rated capability.

4.0 Pre-Application

The NLSO shall designate an employee or office from which an Interconnection Customer can obtain information on the application process. The name, telephone number, and email address of the contact shall be posted on the NLSO OASIS.

Interconnection Customers may contact the Manager, Reliability Standards and Commercial Compliance to obtain information on the application process prior to submitting its Interconnection Application as follows:

Phone: 709-570-5906
Fax: 709-737-1318
E-Mail: transmissionservices@nlh.nl.ca

5.0 Applicant and Eligible Customer Requirements

To qualify for Interconnection Service from the NLSO an Interconnection Customer shall submit an *Application for Eligible Customer Status*, in the form available on the NLSO OASIS, and be deemed an Eligible Customer under Section 4.0 of the *NL Transmission Policies and Procedures. Guidelines for Completing an Application for Eligible Customer Status* shall be posted on the NLSO OASIS.

6.0 Application for Generator Interconnection

A prospective Interconnection Customer may apply for Interconnection Service through the submission of an Interconnection Application in the form of application available on the NLSO OASIS, namely the *Application for Generator Interconnection*, with a security deposit of \$10,000 plus applicable taxes. The NLSO shall apply the security deposit towards the cost of any Interconnection Study. The security deposit may be refundable upon withdrawal of the Application if no further studies are required. The applicant shall submit a separate Interconnection Application for each proposed Point of Interconnection. Each Interconnection Application shall be date- and time-stamped upon receipt for the purposes of establishing the priority for the study of the requested Interconnection Service. Interconnection Applications shall be submitted at least three (3) years in advance of the proposed commencement of the Interconnection Service being applied for. *Guidelines for Completing an Application for Generator Interconnection* shall be posted on the NLSO OASIS.

The NLSO shall notify the applicant of receipt of the Interconnection Application within five (5) Business Days of receiving the request. Within fifteen (15) Business Days of receipt of the Interconnection Application, the NLSO will notify the applicant as to whether the Interconnection Application is complete or incomplete. If the Interconnection Application is incomplete, the NLSO will inform the applicant of the identified deficiencies and, first, attempt to remedy deficiencies through informal communications with the applicant. To the extent that such informal measures do not remedy the deficiencies, the NLSO shall provide a written list of the specific information required in order to complete the Interconnection Application. Upon issuance of any written notification of deficiencies and requests for information, the applicant shall provide the NLSO with the additional requested information within ten (10) Business Days, or request an extension of time to provide such information. The NLSO, in its sole discretion and for good cause, may extend the deadline for submission of the requested information. If the applicant does not provide the listed information or request an extension within the deadline the Interconnection Application will be deemed withdrawn. An Interconnection Application will be deemed a Completed Interconnection Application upon submission of the listed information to the NLSO.

7.0 Minimum Requirements for a Completed Application

For the purpose of having a Completed Interconnection Application that initiates the study process described herein, the applicant must have submitted, and the NLSO must determine, in its sole discretion, exercising reasonable judgement, that the following minimum requirements have been met:

- i. the applicant has been deemed to be an Eligible Customer under Section 4.0 of the *NL Transmission Policies and Procedures*;
- ii. the Interconnection Application has been fully completed, including the following information:
 - The identity, address, telephone number, facsimile number and e-mail address of the entity requesting service
 - The address or location of the proposed new (to the extent known) or existing Generating Facility
 - The specific location of the Point of Interconnection
 - The requested date and time for commencement of Interconnection Service
 - A description of the equipment configuration
 - Generating Facility data
 - One-line diagram of the Generating Facility showing all existing and proposed Interconnection Facilities
- iii. the required \$10,000 deposit per Section 6.0 has been submitted to the NLSO; and
- iv. the applicant has provided documentation of ownership, a right to develop, or an option to purchase or acquire an interest in a land area equal to at least 50% of that required for the purpose of constructing the proposed Generating Facility, or a posting of an additional deposit of \$20,000.

8.0 Response to a Completed Interconnection Application

Upon receipt of all requested information, the NLSO will review the adequacy of such responses and, within fifteen (15) Business Days of receipt, notify the applicant as to whether the Interconnection Application, as supplemented by the requested information, meets the requirements for designation as a Completed Interconnection Application or if any further deficiencies remain. The procedures set forth in Section 6.0 shall be followed for any further required supplementation.

9.0 Queue Position

The NLSO shall assign a Queue Position to each Completed Interconnection Application based upon the date- and time- stamp of its submission pursuant to the NLSO's Queue Management Procedures set Forth in Section 3.0 of the *Methodology for Completing a System Impact Study*. The Queue Position of each Completed Interconnection Application will be used to determine the order of performing any Interconnection Studies and determination of cost responsibilities for any upgrades or facilities necessary to accommodate the requested Interconnection Service. The NLSO shall maintain a single queue.

10.0 Modification or Withdrawal of a Completed Application

If the applicant requests, in writing, a change to its Completed Interconnection Application, the NLSO shall review whether such request is a Material Modification, or is otherwise likely to introduce new material Adverse System Impact on NL Transmission Study Area. The Completed Interconnection Application shall retain its Queue Position if the modifications are not determined to be Material Modifications. A Material Modification of the Completed Interconnection Application shall be deemed a withdrawal of the Completed Interconnection Application and shall require submission of a new Interconnection Application, unless proper notification of each party by the other and a reasonable time to cure the problems created by the change are undertaken. Further, the Completed Interconnection Application may be assigned a new Queue Position.

An applicant may withdraw its Interconnection Application at any time by written notice of such withdrawal to the NLSO. In addition, if the applicant fails to adhere to all requirements of these Generator Interconnection Procedures, the NLSO may deem the Interconnection Application to be withdrawn and provide written notice to the applicant of the deemed withdrawal, including the reasons for such deemed withdrawal. Upon receipt of such notice, the applicant shall have fifteen (15) Business Days to respond with information or actions that cure the deficiency, or notify the NLSO of its intent to pursue dispute resolution under Section 18.0. Withdrawal shall result in the loss of the Completed Application's assigned Queue Position. Upon withdrawal, the NLSO shall retain all deposits previously provided by the applicant with respect to the requested Interconnection Service in order to conduct re-studies of lower-queued projects deemed necessary as a result of the withdrawal. The NLSO shall refund any portion of the deposits that exceed the costs the NLSO incurs. The withdrawn applicant shall pay to the NLSO all costs that exceed the deposits previously provided.

11.0 Scoping Meeting

Within ten (10) Business Days of confirmation that a Completed Interconnection Application has been received, the NLSO will arrange a scoping meeting at a date agreeable to the prospective Interconnection Customer, the purpose of which is to discuss the Interconnection Application, review existing information relevant to the requested Interconnection Service, and determine whether or not a System Impact Study is required. The scoping meeting may be omitted by mutual agreement.

12.0 System Impact Study

12.1 System Impact Study Agreement

If, through the scoping meeting conducted under Section 11.0, the NLSO determines that there is a potential for Adverse System Impacts to the NL Transmission Study Area from the proposed Interconnection Service, the NLSO will tender to the applicant, within ten (10) Business Days of the scoping meeting, a System Impact Study Agreement that includes an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, as per Section 4.2 of the *Methodology for Completing a System Impact Study*. The System Impact Study Agreement shall provide that the applicant shall compensate the NLSO for the actual cost of the System Impact Study. In order to remain under consideration for Interconnection Service, the applicant must return the executed System Impact Study Agreement, with the security deposit specified in the System Impact Study Agreement, to the NLSO within thirty (30) Business Days. If the applicant elects not to execute the System Impact Study Agreement, the Interconnection Application will be deemed withdrawn.

If, through the scoping meeting conducted under Section 11.0, the NLSO determines that there is no potential for Adverse System Impacts to the NL Transmission Study Area from the proposed Interconnection Service, the NLSO will tender to the applicant, within five (5) Business Days of the scoping meeting, an Interconnection Agreement pursuant to Section 14.0 and as set forth in Section 6.0 of the *Methodology for Completing a System Impact Study*.

12.2 System Impact Study Methodology

Upon execution of the System Impact Study Agreement, the System Impact Study will be conducted consistent with Section 4.3 of the *Methodology for Completing a System*

Impact Study. The System Impact Study will evaluate the impact of the proposed interconnection on the reliability of the NL Transmission Study Area that would result if the Generating Facility were interconnected without project modifications or electric system modifications, focusing on, but not limited to, the potential Adverse System Impacts identified in the scoping meeting. Once the System Impact Study is completed, a System Impact Study report shall be prepared and transmitted to the applicant.

13.0 Facilities Study

13.1 Facilities Study Agreement

If upon completion of any required System Impact Study the NLSO determines that Interconnection Facilities or Network Upgrades are required to meet the interconnection request, then the NLSO will tender to the applicant, within fifteen (15) Business Days of completion of the System Impact Study, a Facilities Study Agreement that includes an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, as per Section 5.1 of the *Methodology for Completing a System Impact Study*. The Facilities Study Agreement shall provide that the applicant shall compensate the NLSO for the actual cost of the Facilities Study. In order to remain under consideration for Interconnection Service, the applicant must return the executed Facilities Study Agreement, with the security deposit specified in the Facilities Study Agreement, to the NLSO within thirty (30) Business Days. If the applicant elects not to execute the Facilities Study Agreement, the Interconnection Application shall be deemed withdrawn.

If Interconnection Facilities or Network Upgrades are not required to meet the Interconnection Application, the NLSO will tender to the applicant an Interconnection Agreement for execution pursuant to Section 14.0 and as set forth in Section 6.0 of the *Methodology for Completing a System Impact Study*.

13.2 Facilities Study Methodology

Upon execution of the Facilities Study Agreement, the Facilities Study will be conducted consistent with Section 5.2 of the *Methodology for Completing a System Impact Study*. The Facilities Study shall specify and estimate the cost of equipment, engineering, procurement, and construction work needed to implement the conclusions of any System Impact Studies. Design for any required Interconnection Facilities and/or Network Upgrades shall be performed under the Facilities Study Agreement. The NLSO

may contract with consultants to perform the activities required under the Facilities Study Agreement. Once the Facilities Study is completed, a Facilities Study report shall be prepared and transmitted to the applicant.

14.0 Interconnection Agreement

Upon completion of the Facilities Study report, the NLSO will tender to the applicant, within five (5) Business Days of issuance of the Facilities Study report, an executable Interconnection Agreement as per Section 6.0 of the *Methodology for Completing a System Impact Study*. In order to remain under consideration for Interconnection Service, the applicant must return the executed Interconnection Agreement, with security equivalent to the costs of any required Interconnection Facilities and/or Network Upgrades, to the NLSO within thirty (30) Business Days. Upon execution of the Interconnection Agreement, and provision of security, the applicant will be deemed an Interconnection Customer and the NLSO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the Interconnection Agreement.

15.0 Minimum Interconnection Standards

The Interconnection Customer's Interconnection Facilities must comply with all applicable codes, standards, and rules and with Good Utility Practice, as well as the technical requirements outlined in the *NLSO Standard – Technical Requirements for Connection to the NL Transmission System*, posted on the NLSO OASIS.

16.0 Interconnection Metering

Any metering necessitated by the use of the Generating Facility shall be installed at the Interconnection Customer's expense.

17.0 Coordination with Affected Systems

The NLSO shall coordinate the conduct of any Interconnection Studies required to determine the impact of the Interconnection Application on Affected Systems with Affected System

Operators and, if possible, include those results (if available) in its applicable Interconnection Study. For any discussion with the Interconnection Customer regarding impacts to Affected Systems, the NLSO will invite Affected System Operators to participate in such discussions. The Interconnection Customer will cooperate with the NLSO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

18.0 Dispute Resolution

Disputes involving the application of these Generator Interconnection Procedures, including the evaluation of applications for Interconnection Service, shall be resolved as follows:

- a. To the extent that a dispute is between the NLSO and another party to the Interconnection Agreement, the dispute resolution procedures of the executed Interconnection Agreement shall apply.
- b. For any other disputes, the NLSO and disputing party shall:
 - i. First attempt to resolve such dispute through negotiation between senior officers of each party;
 - ii. Where negotiations have extended beyond sixty (60) Business Days and have not resolved the dispute, the parties may agree to initiate non-binding mediation or binding arbitration procedures as set forth in Section 4.0 or 5.0 of the *Dispute Resolution Procedures*; and
 - iii. In the event that the parties are unable to resolve the dispute pursuant to the procedures specified in Section (a) or (b), the dispute may be submitted to a court of competent jurisdiction or the Public Utilities Board pursuant to Section 5.0 of the *Dispute Resolution Procedures*.

19.0 Confidentiality

To the extent that Confidential Information is submitted by the applicant, the applicant is responsible for clearly identifying such Confidential Information. All Confidential Information (as designated by the NLSO or by the applicant) will be subject to the NLSO's *Code of Conduct* and its *Confidential Information Policy* as set forth in Section 21.0 of the *NL Transmission Policies and Procedures*.