



New Brunswick Electricity Business Rules



Chapter 2 Transmission Planning and Connections

TABLE OF CONTENTS

CHAPTER 2 – TRANSMISSION PLANNING AND CONNECTIONS..... 2

2.0 ROLES AND RESPONSIBILITIES..... 2

2.1 TRANSMISSION SYSTEM PLANNING, INVESTMENT AND OPERATIONS..... 3

2.2 CONNECTION OF NEW AND MODIFIED FACILITIES..... 6

CHAPTER 2 – TRANSMISSION PLANNING AND CONNECTIONS

The provisions of Chapter 2 are intended to take effect as Electricity Business Rules (the “Business Rules”) on an interim basis during the period in which the transitional Open Access Transmission tariff (the “Tariff”) will be in effect under the Electricity Act. The Transmission Provider intends to amend the Business Rules in Chapter 2, in conjunction with the new Tariff filing required to be made within one year of the effective date of the Electricity Act. The Business Rules changes that are made at that time will reflect and complement any Board rulings with respect to transmission planning. The changes, where appropriate, will include moving provisions of these Chapter 2 Business Rules into the new Tariff or an Attachment.

2.0 ROLES AND RESPONSIBILITIES

- 2.0.1 The Transmission Provider is responsible for planning and coordinating all changes to the Integrated Electrical System (the “IES”). In doing so, the Transmission Provider will maintain and ensure the Adequacy and Reliability of the IES.
- 2.0.2 The Transmission Provider is responsible to ensure that the transmission planning process allows for an efficient, non-discriminatory, coordinated and transparent forum open to all existing and prospective Transmission Customers. The Transmission Provider's process and its conduct shall be consistent with its Standards of Conduct.
- 2.0.3 The Transmission Provider may establish Adequacy criteria for the IES. Such criteria shall be included in the Reliability Requirements of section 3.7, or the Transmission Provider's transmission planning criteria.
- 2.0.4 The Transmission Provider shall work with responsible authorities including those outside of New Brunswick to coordinate the Transmission Provider's planning activities with their activities.

2.1 TRANSMISSION SYSTEM PLANNING, INVESTMENT AND OPERATIONS

2.1.1 Long-term Integrated Electricity System Development Plan

2.1.1. In each calendar year the Transmission Provider shall prepare and publish a plan for the development of the IES, referred to as the 10-Year Outlook. Each plan shall cover at least the following ten years, commencing on April 1 of the calendar year in which the plan is Published.

2.1.1.2 Upon completion of the 10-Year Outlook, the Transmission Provider shall, at a minimum:

- a) Publish the 10-Year Outlook;
- b) Notify Transmission Customers of the publication of the document;
- c) Solicit comments on the contents of the 10-Year Outlook;
- d) Host an open session for discussion of the 10 Year Outlook within 30 days of its publication, having provided Transmission Customers with at least 14 days notice;
- e) Reflect comments received within 45 days of the Publication of the 10-Year Outlook in a Published summary of comments;
- f) Publish a revised 10-Year Outlook if required to correct material errors, omissions; and compelling requests for enhancements; and
- g) Ensure that relevant comments are reflected in subsequent 10-Year Outlooks.

2.1.1.3 The 10-Year Outlook is generally comprised of:

- a) The basic methodology, criteria, and processes used to develop transmission plans;
- b) The Baseline Plan as described in section 2.1.2;
- c) The summarized results of studies performed under section 2.1.3;

- d) The summarized results of other non-confidential studies of the Integrated Electricity System; and
- e) The identification of upgrades as committed pending Board approval, under study, or proposed.

2.1.1.4 Nothing in this section shall prevent the Transmission Provider from preparing, in addition to the 10-Year Outlook, alternative plans based on differing assumptions as to the likelihood of implementation of the connection of new or modified Facilities to the IES.

2.1.2 Baseline Plan

2.1.2.1 The Transmission Provider shall prepare each Baseline Plan using:

- a) Data and information submitted by Transmission Customers under section 3.1, Reliability Assessments;
- b) Information contained in Requests for Connection Assessment filed with the Transmission Provider under the Tariff;
- c) The preceding year's Baseline Plan prepared under this section;
- d) Data received from Transmitters that own or operate neighbouring transmission systems; and
- e) Such other information as the Transmission Provider considers appropriate.

2.1.2.2 Each Baseline Plan shall reflect:

- a) Committed and scheduled investments in Transmission Facilities and Transmission System expansion plans;
- b) All connections of new or modified Facilities that have been approved by the Transmission Provider; and

- c) All investments in Transmission Facilities required for reasons of Reliability of the IES.

2.1.2.4 The Transmission Provider shall use the Baseline Plan as the basis for the determination of incremental, decremental, deferred, or advanced costs as required in allocating costs associated with transmission expansion. Any such allocation shall be performed in compliance with the Tariff.

2.1.3 Assessment of Adequacy of the Integrated Electricity System

2.1.3.1 The Transmission Provider shall perform an annual assessment to identify the potential need for investments in Transmission Facilities and other actions that may be required to maintain Reliability of the IES, and to reduce the costs associated with transmission constraints on the IES. Where applicable, each such annual assessment shall identify the impact of existing and emerging shortages of transmission capacity on the IES, any significant existing, emerging or potential transmission constraints on the IES, the impact of the connection of new or modified Facilities and the Adequacy of Interconnections.

2.1.3.2 Where the Transmission Provider has identified in an annual assessment the need to alleviate an existing or emerging transmission constraint on the IES, it shall develop and study technically feasible options for alleviating the constraint in consultation with existing and potential Transmission Customers.

2.1.3.3 Each calendar year, Transmission Customers are requested to submit to the Transmission Provider any projections that identify a need for Transmission service over the next 10 years. Such good faith projections of a need for service, even though they may not yet be subject to a transmission reservation, are useful in transmission planning. Such projections may be used to determine potential transmission constraints on the IES.

- 2.1.3.4 Where an annual assessment referred to in section 2.1.3.1 identifies a potential transmission constraint on the IES, the Transmission Provider may, depending upon the nature and the probability of the constraint,
- a) utilize the process as described in section 2.1.3.2; or
 - b) request further supporting information.
- 2.1.3.5 For the purposes of this section a transmission constraint shall be considered to be emerging if it is identified by the Transmission Provider as likely to arise within one to five years and a transmission constraint shall be considered to be potential if it is identified by the Transmission Provider as likely to arise, which may be based upon good faith projections of transmission customers of section 2.1.3.3, within five to ten years.

2.2 CONNECTION OF NEW AND MODIFIED FACILITIES

2.2.1 Connection Requirements of New and Modified Facilities

- 2.2.1.1 All new or modified Facilities must be approved by the Transmission Provider before connecting to the IES.
- 2.2.1.2 Each Generation Facility that is connected to the IES must be the subject of a Connection Agreement in substantially the form of the agreement set forth in Attachment J, Generation Connection Agreement, of the Tariff.
- 2.2.1.3 Each Load Facility, including for greater certainty a Distribution System, that is connected to the IES must be the subject of a connection agreement with the applicable Transmitter in substantially the form of the Attachment G, Network Operating Agreement, set forth in the Tariff. Power supply agreements between the Corporation and Load Facilities connected at the time the Business Rules came into effect are deemed to qualify to fulfill this obligation.

2.2.1.4 Each new Facility that is connecting to the IES shall comply with the applicable technical requirements defined in the Transmission Provider's Facility Connection Requirements.

2.2.2 General Connection Assessment Process for New or Modified Generation and Interconnection Facilities

2.2.2.1 A person that wishes to connect a new or modified Facility to the IES shall file a Request for Connection Assessment with the Transmission Provider in the form set forth in Appendix B, Connection Assessment Procedure, together with the supporting materials and deposit.

2.2.2.2 Without a request for Transmission Service a new generation connection request is exploratory in nature and does not entail any commitment on behalf of the Transmission Provider for Transmission Service. Formal requests for a transmission service must come in the form of a Transmission Service request under the terms and conditions of the Tariff. In this section, approval of a new generation connection request is conditional on such service request.

2.2.2.3 The Transmission Provider shall assign a priority to each Request for Connection Assessment that it receives based on the date of receipt of the completed Request for Connection Assessment and in accordance with Appendix B of the Business Rules. Requests for Transmission Service shall be processed in accordance with the Tariff with further detail provided in Appendix B.

2.2.2.4 Following receipt and review of a completed Request for Connection Assessment, the Transmission Provider will approve the request or conduct a Feasibility Review in respect of the connection of the new or modified Facility where the Transmission Provider considers whether such connection:

- a) May have an adverse impact on the Reliability of the IES; or

- b) May create a probability of additional constraints by causing the IES to operate at or close to its normal operating limits.

2.2.2.5 Where the Transmission Provider concludes in its Feasibility Review that the connection of the new or modified Facility to the IES will not have either of the effects referred to in sections 2.2.2.4(a) and 2.2.2.4(b), the Transmission Provider shall approve the request.

2.2.2.6 Where the Transmission Provider concludes in its Feasibility Review that the connection of a new or modified Facility to the IES will have an adverse impact on the Reliability of the IES in a Proximate Area only, the Transmission Provider shall:

- a) Identify the upgrades to the elements of the IES in the Proximate Area that are required to mitigate the adverse impact of the connection of the new or modified Facility on the Reliability of the IES; and
- b) Approve the connection of the new or modified Facility upon receipt of an undertaking by the Connection Applicant to pay its portion of the costs of such upgrades as assigned or allocated by the Transmission Provider in accordance with the Tariff.

2.2.2.7 Where the Transmission Provider concludes in its Feasibility Review that the connection of the new or modified Facility to the IES may have (i) an adverse impact on the Reliability of the IES beyond a Proximate Area; or (ii) the effect referred to in section 2.2.2.4(b), the Transmission Provider shall conduct a System Impact Study. Where the Transmission Provider conducts a System Impact Study and concludes that the connection of the new or modified Facility:

- a) will have an adverse impact on the reliability of the IES, then the Transmission Provider shall not approve the connection unless the Connection Applicant agrees, in a form satisfactory to the Transmission Provider, to bear its portion of the costs of all upgrades to the IES that may

be required to mitigate such adverse Reliability impact as assigned or allocated by the Transmission Provider in accordance with the Tariff; or

- b) if the Facility is a Generation Facility, will create the probability of additional constraints by causing the IES to operate at or close to its normal operating limits, then the Transmission Provider shall not approve the connection unless:
- i. where the Transmission Provider is satisfied that the imposition of conditions on the operation of the new or modified Facility can mitigate the probability of such additional constraints, the Connection Applicant agrees to include in its Generation Connection Agreement provisions that require the Connection Applicant to operate the new or modified Facility in accordance with those conditions;
 - ii. in all other cases, the Connection Applicant agrees, in a form satisfactory to the Transmission Provider, to bear its portion of the costs of all upgrades to the IES that may be required to mitigate the probability of such additional constraints as assigned or allocated by the Transmission Provider in accordance with the Tariff.

2.2.2.8 Where the Transmission Provider determines that it will not approve the connection of a new or modified Facility to the IES under section 2.2.2.7(a), the Connection Applicant may modify its connection proposal and request that the Transmission Provider conduct a new System Impact Study on the basis of the modified connection proposal. A change in Point-of-Receipt/Point-of-Delivery will be treated as a new proposal for queuing purposes.

2.2.3 General Connection Assessment Process for New or Modified Load Facilities

2.2.3.1 A person that wishes to connect a new or modified Load Facility to the IES shall file a Request for Connection Assessment with the Transmission Provider in the form set forth in Appendix B, Connection Assessment Procedure, together with the supporting material.

2.2.3.2 Relating to section 2.2.3.1, for modified facilities, the Transmission Provider will advise the Connection Applicant if the modification may be materially impactful requiring such submission for preliminary review and, as necessary, an in-depth review.

2.2.3.3 Following receipt of a completed Request for Connection Assessment and subsequent preliminary review the Transmission Provider will either

- a) Approve the request; or
- b) Conduct an in-depth review where the impact of such connection may have an adverse impact on the Reliability of the IES.

2.2.3.4 Where the Transmission Provider concludes that the connection of the new or modified Facility does not have adverse impact on the IES the Transmission Provider will approve the request. Otherwise the Transmission Provider shall:

- a) Identify the upgrades to the elements of the IES that are required to mitigate the adverse impact of the connection of the new or modified Facility on the Reliability of the IES; and
- b) Approve the connection of the new or modified Facility upon receipt of an undertaking by the Connection Applicant to pay its portion of the costs of such upgrades in accordance with the Tariff.

Where the Transmission Provider, in consultation with the Connection Applicant, determines that such a connection is not practical the Connection Applicant may

modify its connection proposal and request that the Transmission Provider conduct a new review on the basis of the modified connection proposal. A modified connection proposal will be treated as a new request for queuing purposes.

2.2.3 Costs of Connection Assessments

2.2.3.1 The Transmission Provider shall invoice a Connection Applicant for the costs incurred by the Transmission Provider in conducting a Feasibility Review in respect of the Connection Applicant's Request for Connection Assessment, less the amount paid by the Connection Applicant as a deposit required by Appendix B.

2.2.3.2 The Transmission Provider shall invoice a Connection Applicant for:

- a) the costs incurred by the Transmission Provider in conducting a System Impact Study in respect of the Connection Applicant's Request for Connection Assessment, less the amount paid by the Connection Applicant as a deposit as per Appendix B, where the System Impact Study relates solely to such Request for Connection Assessment; or
- b) for the Connection Applicant's share of the costs incurred by the Transmission Provider in conducting a System Impact Study in respect of the Connection Applicant's Request for Connection Assessment, less the amount paid by the Connection Applicant as a deposit as per Appendix B, where the System Impact Study relates to such Request for Connection Assessment and to one or more other Requests for Connection Assessment. Such share shall be determined by the Transmission Provider in accordance with Appendix B.

2.2.3.3 An invoice referred to in section 2.2.3.1 or 2.2.3.2, shall include any costs incurred by a Transmitter in complying with a request for assistance under Section 2.2.2.6.

2.2.3.4 An invoice referred to in section 2.2.3.1 or 2.2.3.2, shall be payable in full by the Connection Applicant within 20 Business Days of the date of the invoice. For greater

certainty, such invoice shall be considered to create an obligation under the Business Rules to pay the amount stated in the invoice and such amount may, without prejudice to any other manner of recovery available at law, be recovered accordingly.

2.2.3.5 The principles of cost sharing as described in the Tariff, Attachment K, Transmission Expansion Policy, shall also apply to the Connection Assessment Costs.

2.2.4 Allocation of Costs of Connection and of Associated Changes to the IES

2.2.4.1 The allocation of the costs of connections and of associated changes to the IES shall be in accordance with the Tariff.

2.2.5 Implementation of Connection

2.2.5.1 Each Connection Applicant shall ensure that the connection of its new or modified Facility is effected in a manner that does not represent a material change from:

- a) any technical requirements that are identified in the applicable Connection Assessment as being required to be met in respect of the connection of the new or modified Facility; or
- b) the configuration or technical parameters that were used by the Transmission Provider as the basis upon which it approved such connection or that were imposed as a condition in approval of such connection, unless the Connection Applicant has obtained the prior approval of the Transmission Provider for the material change.

2.2.5.2 The Transmission Provider shall approve a material change referred to in section 2.2.5.1, unless it determines that such deviation will have an adverse effect on the reliability of the IES. Where the Transmission Provider does not approve such a material change, the Connection Applicant may propose to the Transmission Provider measures designed to mitigate the adverse effects of the material change on the Reliability of the IES.