

**NEW BRUNSWICK POWER CORPORATION** 

**OPEN ACCESS TRANSMISSION TARIFF** 

September 1, 2018

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## I. COMMON SERVICE PROVISIONS

## 1 <u>DEFINITIONS</u>

#### 1.1 Affiliate

With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

## 1.2 Ancillary Services

Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

# 1.3 Annual Transmission Costs(not used)

#### 1.4 Application

A request by an Eligible Customer for transmission service pursuant to the provisions of the Tariff.

#### 1.5 Board

The New Brunswick Energy and Utilities Board.

## 1.6 Business Day

A Business Day is Monday to Friday, inclusive, excluding statutory holidays for the Transmission Provider

## 1.7 Completed Application

An Application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

#### 1.8 Control Area

An electric power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

- match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- 2. maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- 3. maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
- 4. provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

#### 1.9 Curtailment

A reduction in firm or non-firm transmission service in response to a transfer capability shortage as a result of system reliability conditions.

## 1.10 Delivering Party

The entity supplying capacity and energy to be transmitted at Point(s) of Receipt.

## 1.11 Designated Agent

Any entity that performs actions or functions on behalf of the Transmission Provider, an Eligible Customer, a Transmitter, or the Transmission Customer required under the Tariff.

### 1.12 Direct Assignment Facilities

Facilities or portions of facilities that are constructed by a Transmitter for the sole use/benefit of a particular Transmission Customer requesting service under the Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Board approval.

## 1.13 Eligible Customer

- i. Any electric utility (including the Transmission Provider, Transmitter, and any power marketer), power marketing agency, or any person generating electric energy for sale for resale; Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico; and
- ii. Any retail customer taking, or eligible to take, unbundled transmission service pursuant to a provincial or state retail access program or pursuant to a voluntary offer of unbundled retail transmission service by the Transmission Provider.

#### 1.14 Facilities Study

An engineering study conducted by the Transmission Provider to determine the required modifications to the Transmission Provider's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service.

#### 1.15 Firm Point-To-Point Transmission Service

Transmission Service under this Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Part II of this Tariff.

### 1.16 Good Utility Practice

Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region, including those practices required by law.

### 1.17 Interruption

A reduction in non-firm transmission service due to economic reasons pursuant to Section 14.7.

#### 1.18 Load Ratio Share

Ratio of a Transmission Customer's Network Load to the total Network Load computed in accordance with Section 34.2 of the Network Integration Transmission Service under Part III of the Tariff and calculated on a rolling twelve month basis.

#### 1.19 Load Shedding

The systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations under Part III of the Tariff.

## 1.20 Long-Term Firm Point-To-Point Transmission Service

Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of one year or more.

## 1.21 Monthly Demand

The net non-coincident peak demand at the point of delivery on the transmission system to which a load is directly connected.

#### 1.22 Native Load Customers

The wholesale and retail power customers of a Transmitter on whose behalf the Transmitter, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate the Transmitter's system to meet the reliable electric needs of such customers.

#### 1.23 Network Customer

An entity receiving transmission service pursuant to the terms of the Transmission Provider's Network Integration Transmission Service under Part III of the Tariff.

## 1.24 Network Integration Transmission Service

The transmission service provided under Part III of the Tariff.

#### 1.25 Network Load

The load that a Network Customer designates for Network Integration Transmission Service under Part III of the Tariff. The Network Customer's Network Load shall include all load served by the output of any Network Resources designated by the Network Customer. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Part II of the Tariff for any Point-To-Point Transmission Service that may be necessary for such non-designated load.

### 1.26 Network Operating Agreement

An executed agreement that contains the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service under Part III of the Tariff.

### 1.27 Network Operating Committee

A group made up of representatives from the Network Customer(s) and the Transmission Provider, established to coordinate operating criteria and other technical considerations required for implementation of Network Integration Transmission Service under Part III of this Tariff.

#### 1.28 Network Resource

Any designated generating resource owned, purchased or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program.

## 1.29 Network Upgrades

Modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System.

#### 1.30 Non-Dispatchable Generator

A generator that is subject to instantaneous or near-instantaneous limitation on its output by wind speed, river flows, or other non-controllable inputs.

#### 1.31 Non-Firm Point-To-Point Transmission Service

Point-To-Point Transmission Service under the Tariff that is reserved and scheduled on an as-available basis and is subject to Curtailment or Interruption as set forth in Section 14.7 under Part II of this Tariff. Non-Firm Point-To-Point Transmission Service is available on a stand-alone basis for periods ranging from one hour to one month.

#### 1.32 Non-Firm Sale

An energy sale for which receipt or delivery may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.

## 1.33 Open Access Same-Time Information System (OASIS)

The information system and standards of conduct contained in the Transmission Provider's OASIS standards as posted on the Transmission Provider's OASIS and all additional requirements implemented by subsequent Board orders dealing with OASIS.

#### 1.34 OATT

Open Access Transmission Tariff.

#### 1.35 Part I

Tariff Definitions and Common Service Provisions contained in Sections 2 through 12.

#### 1.36 Part II

Tariff Sections 13 through 27 pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

#### 1.37 Part III

Tariff Sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

#### 1.38 Parties

The Transmission Provider and the Transmission Customer receiving service under the Tariff.

### 1.39 Point(s) of Delivery

Point(s) on the Transmission Provider's Transmission System where capacity and energy transmitted by the Transmission Provider will be made available to the Receiving Party under Part II of the Tariff. The Point(s) of Delivery shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

# 1.40 Point(s) of Receipt

Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider by the Delivering Party under Part II of the Tariff. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

#### 1.41 Point-To-Point Transmission Service

The reservation and transmission of capacity and energy on either a firm or nonfirm basis from the Point(s) of Receipt to the Point(s) of Delivery under Part II of the Tariff.

#### 1.42 Power Purchaser

The entity that is purchasing the capacity and energy to be transmitted under the Tariff.

## 1.43 Pre-Confirmed Application:

An Application that commits the Eligible Customer to execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

### 1.44 Receiving Party

The entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.

## 1.45 Regional Transmission Group (RTG)

A voluntary organization of transmission owners, transmission users and other entities formed to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis.

### 1.46 Reserved Capacity

The maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Part II of the Tariff. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

#### 1.47 Service Agreement

The initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

#### 1.48 Service Commencement Date

The date the Transmission Provider begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider begins to provide service in accordance with Section 15.3 or Section 29.1 under the Tariff.

#### 1.49 Short-Term Firm Point-To-Point Transmission Service

Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of less than one year.

## 1.50 System Condition

A specified condition on the Transmission Provider's system or on a neighbouring system, such as a constrained transmission element or flowgate that may trigger Curtailment of Long-Term Firm Point-to-Point Transmission Service using the curtailment priority pursuant to Section 13.6. Such conditions must be identified in the Transmission Customer's Service Agreement.

## 1.51 System Impact Study

An assessment by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.

# 1.52 Third-Party Sale

Any sale for resale in interprovincial or interstate commerce to a Power Purchaser that is not designated as part of Network Load under the Network Integration Transmission Service.

#### 1.53 Transmission Customer

Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider file with the Board, a proposed unexecuted Service Agreement to receive transmission service under Part II of the Tariff. This term is used in the Part I Common Service Provisions to include customers receiving transmission service under Part II and Part III of this Tariff.

#### 1.54 Transmission Provider

New Brunswick Power Corporation or its successor (or its Designated Agent) that controls and directs the operation of facilities used for the transmission of electric energy and provides transmission service.

#### 1.55 Transmitter

An entity (or its Designated Agent) that owns or operates transmission facilities that are a part of the Transmission System.

## 1.56 Transmission Provider's Monthly Transmission System Peak

The maximum hourly usage of the Transmission Provider's Transmission System in a calendar month, defined as the sum of primary demand (i.e. load plus losses) and exports.

#### 1.57 Transmission Service

Point-To-Point Transmission Service provided under Part II of the Tariff on a firm and non-firm basis.

## 1.58 Transmission System

The facilities owned, controlled or operated by the Transmission Provider that are used to provide transmission service under Part II and Part III of the Tariff.

## 2 INITIAL ALLOCATION AND RENEWAL PROCEDURES

## 2.1 Initial Allocation of Available Transfer Capability

For purposes of determining whether existing capability on the Transmission Provider's Transmission System is adequate to accommodate a request for firm service under this Tariff, all Completed Applications for new firm transmission service received during the initial sixty (60) day period commencing with the effective date of the Tariff will be deemed to have been filed simultaneously.

The Transmission Provider follows an open season process that begins with the publication of notification. All Completed Applications received during an open season are deemed to have been filed simultaneously. The Transmission Provider evaluates Transmission Service requests such that the combination that maximizes the total net present value of their stream of revenues will be selected. However, once selected, each of these reservations becomes independent of the others. In the event that either (i) the maximizing combination leaves some transmission unfilled, or (ii) one or more of the parties that were awarded transmission service withdraws leaving some transmission unfilled, the Transmission Provider will make the unfilled transmission service available to all parties that participated in the open season. The evaluation of these requests will also be based on the maximization of the total net present value. If there is not enough remaining transmission service capability to accommodate all of the requests equally ranked, a lottery system conducted by an independent party shall be used to assign priorities for such requests. This concludes the open season.

Subsequent to this initial sixty (60) day period, when new available transfer capability is identified that is not a direct consequence of a request or requests for Transmission Service or that is in excess of the requested service that resulted in the increased capability the above noted open season process will be repeated.

All Completed Applications for firm transmission service received after the initial sixty (60) day period and that are not subject to a subsequent open season shall be assigned a priority pursuant to Section 13.2.

### 2.2 Reservation Priority For Existing Firm Service Customers

Existing firm service customers (wholesale requirements and transmission-only, with a contract term of five years or more), have the right to continue to take transmission service from the Transmission Provider when the contract expires, rolls over or is renewed. This transmission reservation priority is independent of whether the existing customer continues to purchase capacity and energy from the Transmission Provider or elects to purchase capacity and energy from another supplier. If at the end of the contract term, the Transmission Provider's Transmission System cannot accommodate all of the requests for transmission service, the existing firm service customer must agree to accept a contract term at least equal to a competing request by any new Eligible Customer and to pay the current just and reasonable rate, as approved by the Board, for such service provided that, the firm service customer shall have a right of first refusal at the end of such service only if the new contract is for five years or more. The existing firm service customer must provide notice to the Transmission Provider whether it will exercise its right of first refusal no less than one year prior to the expiration date of its transmission service agreement. This transmission reservation priority for existing firm service customers is an ongoing right that may be exercised at the end of all firm contract terms of five years or longer. Service agreements subject to a right of first refusal entered into prior to the date of the Transmission Provider's filing of a revised tariff adopting the reformed rollover language herein, unless terminated, will become subject to the five year/one year requirement on the first rollover date after the date of that filing, provided that, the one-year notice requirement shall apply to all such service agreements with five years or more left in their terms.

#### 2.3 Amendments

Subject to the approval of the Board, the Tariff may be amended as required. Nothing in the Tariff or any Completed Application shall be construed as affecting in any way the right of the Transmission Provider to amend the Tariff, including but not limited to a change in rates, charges and terms and conditions (including applicable rates) of Transmission Service. Transmission Customers shall take Transmission Service under the Tariff as amended.

## 2.4 Replacement Tariff

In the event that the Tariff is replaced by a subsequent transmission tariff and subject to the approval of the Board, Transmission Customers that have been receiving Transmission Service under the Tariff shall take service under the terms and conditions (including applicable rates) of the replacement transmission tariff.

## 2.5 **Legislation**

The Tariff is subject to legislation and regulations which govern the operations of the Transmission Provider and may be subject to change as such legislation or regulations evolve. Transactions arising from the Tariff shall be governed by the laws of New Brunswick.

## 2.6 Reliability Compliance

All rights and obligations of the Transmission Provider and Transmission Customers receiving Transmission Service under the Tariff shall be subject to the Board approved reliability standards.

## 3 **ANCILLARY SERVICES**

Ancillary Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. The Transmission Provider is required to provide (or offer to arrange with the local Control Area operator as discussed below), and the Transmission Customer is required to purchase, the following Ancillary Services

- (i) Scheduling, System Control and Dispatch, and
- (ii) Reactive Supply and Voltage Control from Generation or other Sources.

The Transmission Provider is required to offer to provide (or offer to arrange with the local Control Area operator as discussed below) the following Ancillary Services only to the Transmission Customer serving load within the Transmission Provider's Control Area

- (i) Regulation and Frequency Response,
- (ii) Energy Imbalance,
- (iii) Operating Reserve Spinning, and
- (iv) Operating Reserve Supplemental.

The Transmission Customer serving load within the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply. The Transmission Customer may not decline the Transmission Provider's offer of Ancillary Services unless it demonstrates that it has acquired the Ancillary Services from another source. The Transmission Customer must list in its Application which Ancillary Services it will purchase from the Transmission Provider. A Transmission Customer that exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery or an Eligible Customer that uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved is required to pay for all of the Ancillary Services identified in this section that were provided by the Transmission Provider associated with the unreserved service. The Transmission Customer or

Eligible Customer will pay for Ancillary Services based on the amount of transmission service it used but did not reserve.

If the Transmission Provider is a public utility providing transmission service but is not a Control Area operator, it may be unable to provide some or all of the Ancillary Services. In this case, the Transmission Provider can fulfill its obligation to provide Ancillary Services by acting as the Transmission Customer's agent to secure these Ancillary Services from the Control Area operator. The Transmission Customer may elect to

- i. have the Transmission Provider act as its agent,
- ii. secure the Ancillary Services directly from the Control Area operator, or
- iii. secure the Ancillary Services (discussed in Schedules 3, 4, 5, 6 and 9) from a third party or by self-supply when technically feasible.

The Transmission Provider shall specify the rate treatment and all related terms and conditions in the event of an unauthorized use of Ancillary Services by the Transmission Customer.

The specific Ancillary Services, prices and/or compensation methods are described on the Schedules that are attached to and made a part of the Tariff. If the Transmission Provider offers an Eligible Customer a rate discount, or

attributes a discounted Ancillary Service rate to its own transactions, the Transmission Provider must offer at the same time the same discounted Ancillary Service rate to all Eligible Customers. Information regarding any discounted Ancillary Service rates must be posted on the OASIS pursuant to the following:

- Any Transmission Provider initiated discount must only be offered over OASIS.
- Any Transmission Customer initiated discount must only be requested over OASIS.

- Once details of a negotiated discount have been finalized (service, price, length of service) they must be posted immediately on the OASIS.
- Discounts may be limited to particular time periods.
- Discounts must apply for the same time period and must be offered to all Transmission Customers.
- The Transmission Provider may discount only if necessary to increase usage of the ancillary services or to reflect reduced cost of procurement to the Transmission Provider.

In addition, discounts to non-affiliates must be offered in a not unduly discriminatory manner. Sections 3.1 through 3.7 below list the seven Ancillary Services.

## 3.1 Scheduling, System Control and Dispatch Service

The rates and/or methodology are described in Schedule 1.

# 3.2 Reactive Supply and Voltage Control from Generation or Other Sources Service

The rates and/or methodology are described in Schedule 2.

# 3.3 Regulation and Frequency Response Service

Where applicable the rates and/or methodology are described in Schedule 3.

# 3.4 Energy Imbalance Service

Where applicable the rates and/or methodology are described in Schedule 4.

# 3.5 Operating Reserve - Spinning Reserve Service

Where applicable the rates and/or methodology are described in Schedule 5.

# 3.6 Operating Reserve - Supplemental Reserve Service

Where applicable the rates and/or methodology are described in Schedule 6.

#### 3.7 Incremental Reserves

In addition to the Ancillary Services noted above, the Transmission Provider has established and will update from time to time an incremental operating reserve threshold as 10 percent of the nominal peak load for the Control Area. Operating reserve requirements arising from contingencies in excess of the incremental reserve threshold, as posted on the Transmission Provider's website, shall be the obligation of the parties responsible for the contingency and such responsibility shall be shared by those parties on a *pro rata* basis.

# 4 OPEN ACCESS SAME-TIME INFORMATION SYSTEM (OASIS)

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in Attachment P and the Transmission Provider's Standards of Conduct. In the event available transfer capability as posted on the OASIS is insufficient to accommodate a request for firm transmission service, additional studies may be required as provided by this Tariff pursuant to Sections 19 and 32.

The Transmission Provider shall post on OASIS and its public website an electronic link to all rules, standards and practices that (i) relate to the terms and conditions of transmission service, (ii) are not subject to a North American Energy Standards Board (NAESB) copyright restriction, and (iii) are not otherwise included in this Tariff. The Transmission Provider shall post on OASIS and on its public website an electronic link to the NAESB website where any rules, standards and practices that are protected by copyright may be obtained. The Transmission Provider shall also post on OASIS and its public website an electronic link to a statement of the process by which the Transmission Provider shall add, delete or otherwise modify the rules, standards and practices that are not included in this tariff. Such process shall set forth the means by which the Transmission Provider shall provide reasonable advance

notice to Transmission Customers and Eligible Customers of any such additions, deletions or modifications, the associated effective date, and any additional implementation procedures that the Transmission Provider deems appropriate.

# 5 LOCAL FURNISHING BONDS (NOT USED AT THIS TIME)

## 6 RECIPROCITY

A Transmission Customer receiving transmission service under this Tariff agrees to provide comparable transmission service that it is capable of providing to the Transmission Provider, Transmitters, and other Transmission Customers on similar terms and conditions over facilities used for the transmission of electric energy in interstate or interprovincial commerce owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy in interstate or interprovincial commerce owned, controlled or operated by the Transmission Customer's corporate Affiliates. A Transmission Customer that is a member of, or takes transmission service from, a power pool, Regional Transmission Group, Independent System Operator, or other transmission organization also agrees to provide comparable transmission service to the transmission-owning members of such power pool, Regional Transmission Group, Independent System Operator, or other transmission organization, on similar terms and conditions over facilities used for the transmission of electric energy in interstate or interprovincial commerce owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy in interstate or interprovincial commerce owned, controlled or operated by the Transmission Customer's corporate Affiliates.

This reciprocity requirement also applies to any Eligible Customer that owns controls or operates transmission facilities that uses an intermediary, such as a

power marketer, to request transmission service under the Tariff. If the Transmission Customer does not own, control or operate transmission facilities, it must include in its Application a sworn statement of one of its duly authorized officers or other representatives that the purpose of its Application is not to assist an Eligible Customer to avoid the requirements of this provision.

### 7 BILLING AND PAYMENT

### 7.1 Billing Procedure

Within five Business Days after the first day of each month, the Transmission Provider, or its Designated Agent, shall submit an invoice to the Transmission Customer for the charges for all services furnished under the Tariff during the preceding month. Such charges shall be calculated using the current rates in effect.

The invoice will be stated in the fund as specified in the Service Agreement. For payments in U.S. funds, the noon-time exchange rate on the last banking day of the preceding month shall be used for currency conversion. The invoice is due and shall be paid by the Transmission Customer by the twentieth (20th) day of each month, or if the twentieth day of the month is a Saturday, Sunday or statutory holiday for either Party, the closest previous common working day to the twentieth day. Payments shall be made by wire transfer to a bank named by the Transmission Provider. If the rendering of an invoice is unavoidably delayed, an interim invoice based on estimated charges may be issued by the Transmission Provider or its Designated Agent. The Transmission Customer has the option to pay in either Canadian or U.S. funds; such option shall be specified in the Service Agreement. Each invoice shall be subject to adjustment for any errors in calculations, meter readings, estimating or otherwise. Any such billing adjustments shall be made as promptly as practical, but in no event later than twelve (12) months after issuing the invoice.

### 7.2 Interest on Unpaid Balances

Any amounts not paid by the due date, including amounts placed in escrow pursuant to Section 7.3, shall be subject to interest, calculated on a daily basis, from the due date to the date of payment, at an interest rate equal to the sum of (a) the prime rate per annum as charged by the Royal Bank in Fredericton, or any other bank designated by the Transmission Provider or its Designated Agent, on the last banking day of the month for which payment is due; and (b) five percent per annum.

#### 7.3 Customer Default

In the event the Transmission Customer fails, for any reason other than a billing dispute as described below, to make payment to the Transmission Provider on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after the Transmission Provider notifies the Transmission Customer to remedy such failure, a default by the Transmission Customer shall be deemed to exist. Upon the occurrence of a default, the Transmission Provider may suspend Transmission Service without further notice. In the event of a billing dispute between the Transmission Provider and the Transmission Customer, the Transmission Provider will continue to provide service under the Service Agreement as long as the Transmission Customer (i) continues to make all payments not in dispute, and (ii) pays into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Transmission Customer fails to meet these two requirements for continuation of service, then the Transmission Provider may provide notice to the Transmission Customer of its intention to suspend Transmission Service seven (7) calendar days following such notice.

# 8 ACCOUNTING FOR THE TRANSMISSION PROVIDER'S AND TRANSMITTERS' USE OF THE TARIFF

The Transmission Provider and Transmitters shall record the following amounts, as outlined below.

#### 8.1 Transmission Revenues

Include in a separate operating revenue account or sub account the revenues it receives from Transmission Service including when making Third-Party Sales under Part II of the Tariff.

### 8.2 Study Costs and Revenues

Include in a separate transmission operating expense account or sub account, costs properly chargeable to expense that are incurred to perform any System Impact Studies or Facilities Studies which the Transmission Provider or a Transmitter conducts to determine if a Transmitter must construct new transmission facilities or upgrades necessary for its own uses, including making Third-Party Sales under the Tariff, or others' uses; and include in a separate operating revenue account or sub account the revenues received for System Impact Studies or Facilities Studies performed when such amounts are separately stated and identified in the Transmission Customer's billing under the Tariff.

## 9 REGULATORY FILINGS

Nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the right of the Transmission Provider to unilaterally make application to the Board for a change in rates, terms and conditions, charges, classification of service, Service Agreement, rule or regulation under the *Electricity* Act and pursuant to the Board's rules and regulations promulgated there under. Nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the ability of any Party receiving service under

the Tariff to exercise its rights under the *Electricity* Act and pursuant to the Board's rules and regulations promulgated there under.

## 10 FORCE MAJEURE AND INDEMNIFICATION

### **10.1 Force Majeure**

An event of Force Majeure means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any Curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing. Neither the Transmission Provider nor the Transmission Customer will be considered in default as to any obligation under this Tariff if prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Tariff is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Tariff.

#### 10.2 Indemnification

The Transmission Customer shall at all times indemnify, defend, and save the Transmission Provider harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, legal fees, and all other obligations by or to third parties, arising out of or resulting from the Transmission Provider's performance of its obligations under this Tariff on behalf of the Transmission Customer, except in cases of negligence or intentional wrongdoing by the Transmission Provider.

## 11 CREDITWORTHINESS

The Transmission Provider will specify its Creditworthiness Procedures in Attachment O.

# 12 <u>DISPUTE RESOLUTION PROCEDURES</u>

### **12.1 Internal Dispute Resolution Procedures**

Any dispute between a Transmission Customer and the Transmission Provider involving transmission service under the Tariff (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Board for resolution) shall be referred to a designated senior representative of the Transmission Provider and a senior representative of the Transmission Customer for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days [or such other period as the Parties may agree upon] by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

#### 12.2 External Arbitration Procedures

Any arbitration initiated under the Tariff shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the New Brunswick Arbitration Act and any applicable Board regulations or Regional Transmission Group rules.

#### 12.3 Arbitration Decisions

Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Tariff and any Service Agreement entered into under the Tariff and shall have no power to modify or change any of the above in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the *New Brunswick Arbitration Act*.

#### **12.4 Costs**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable:

- (A) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or
- (B) one half the cost of the single arbitrator jointly chosen by the Parties. In the event that it is necessary to enforce such award, all costs of enforcement shall be payable and paid by the Party against whom such award is enforced.

# 12.5 Referral of Dispute to the Board

Notwithstanding anything contained in this section 12, a Transmission Customer may:

- (A) instead of proceeding through the External Arbitration Procedures outlined in Sections 12.2 to 12.4 above, elect to refer a dispute directly to the Board by filing a Complaint with the Board in the manner set out below and the decision of the Board with respect to the matter shall be final and binding and the matter in dispute cannot thereafter proceed to the dispute resolution process;
- (B) if the Transmission Customer is dissatisfied with the results of an arbitration decision rendered pursuant to Section 12.3, refer a complaint to the Board for determination and the decision of the Board with respect to the matter shall be final and binding.

No complaint may be referred to the Board pursuant to Section 12.5 (A) or (B) until the Internal Dispute Resolution procedures set out in Section 12.1 have been concluded.

Complaints filed with the Board must be in writing and must include reasons and evidence in support of the Transmission Customer's position. A copy of the complaint, together with the supporting reasons and evidence, must be filed with the Transmission Provider.

The Board may require a complainant to provide such security for the costs incurred or to be incurred by the Board, as it considers reasonable, and such security may be forfeited to the Board if the complaint is not substantiated.

#### 12.6 Enforcement of Arbitration Decision

The *New Brunswick Arbitration Act* shall govern the procedures to apply in the enforcement of any award made pursuant to Section 12.3.

#### II. POINT-TO-POINT TRANSMISSION SERVICE

#### **Preamble**

The Transmission Provider will provide Firm and Non-Firm Point-To-Point Transmission Service pursuant to the applicable terms and conditions of this Tariff. Point-To-Point Transmission Service is for the receipt of capacity and energy at designated Point(s) of Receipt and the transfer of such capacity and energy to designated Point(s) of Delivery.

# 13 NATURE OF FIRM POINT-TO-POINT TRANSMISSION SERVICE

#### 13.1 Term

The minimum term of Firm Point-To-Point Transmission Service shall be one day and the maximum term shall be specified in the Service Agreement.

# 13.2 Reservation Priority

- (i) Long-Term Firm Point-To-Point Transmission Service shall be available on a first-come, first-served basis, <u>i.e.</u>, in the chronological sequence in which each Transmission Customer has requested service.
- (ii) Reservations for Short-Term Firm Point-To-Point Transmission Service will be conditional based upon the length of the requested transaction or reservation. However, Pre-Confirmed Applications for Short-Term Pointto-Point Transmission Service will receive priority over earlier-submitted requests that are not Pre-Confirmed and that have equal or shorter duration. Among requests or reservations with the same duration and, as relevant, pre-confirmation status (pre-confirmed, confirmed, or not confirmed), priority will be given to an Eligible Customer's request or reservation that offers the highest price, followed by the date and time of the request or reservation.
- (iii) If the Transmission System becomes oversubscribed, requests for service may preempt competing reservations up to the following conditional

reservation deadlines: one day before the commencement of daily service, one week before the commencement of weekly service, and one month before the commencement of monthly service. Before the conditional reservation deadline, if available transfer capability is insufficient to satisfy all requests and reservations, an Eligible Customer with a reservation for shorter term service or equal duration service and lower price has the right of first refusal to match any longer term request or equal duration service with a higher price before losing its reservation priority. A longer term competing request for Short-Term Firm Point-To-Point Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in section 13.8) from being notified by the Transmission Provider of a longer-term competing request for Short-Term Firm Point-To-Point Transmission Service. When a longer duration request preempts multiple shorter duration reservations, the shorter duration reservations shall have simultaneous opportunities to exercise the right of first refusal. Duration, price and time of response will be used to determine the order by which the multiple shorter duration reservations will be able to exercise the right of first refusal. After the conditional reservation deadline, service will commence pursuant to the terms of Part II of the Tariff.

(iv) Firm Point-To-Point Transmission Service will always have a reservation priority over Non-Firm Point-To-Point Transmission Service under the Tariff. All Long-Term Firm Point-To-Point Transmission Service will have equal reservation priority with Native Load Customers and Network Customers. Reservation priorities for existing firm service customers are provided in Section 2.2.

# 13.3 Use of Firm Transmission Service by the Transmission Provider and Transmitters

The Transmission Provider and Transmitters will be subject to the rates, terms and conditions of Part II of the Tariff including when making Third-Party Sales. The Transmission Provider and Transmitters will maintain separate accounting, pursuant to Section 8, for any use of the Point-To-Point Transmission Service including to make Third-Party Sales.

# **13.4 Service Agreements**

The Transmission Provider shall offer a standard form Firm Point-To-Point Transmission Service Agreement (Attachment A) to an Eligible Customer when it submits a Completed Application for Long-Term Firm Point-To-Point Transmission Service. The Transmission Provider shall offer a standard form Firm Point-To-Point Transmission Service Agreement (Attachment A) to an Eligible Customer when it first submits a Completed Application for Short-Term Firm Point-To-Point Transmission Service pursuant to the Tariff. Service Agreements that contain the information required under the Tariff shall be filed with the Board. An Eligible Customer that uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved and that has not executed a Service Agreement will be deemed, for purposes of assessing any appropriate charges and penalties, to have executed the appropriate Service Agreement. The Service Agreement shall, when applicable, specify any conditional curtailment options selected by the Transmission Customer. Where the Service Agreement contains conditional curtailment options and is subject to a biennial reassessment as described in Section 15.4, the Transmission Provider shall provide the Transmission Customer notice of any changes to the curtailment conditions no less than 90 days prior to the date for imposition of new curtailment conditions. Concurrent with such notice, the Transmission Provider shall provide the Transmission Customer with the reassessment study and a narrative description of the study, including the reasons for changes to the number of hours per year or System Conditions under which conditional curtailment may occur.

# 13.5 Transmission Customer Obligations for Facility Additions or Redispatch Costs

In cases where the Transmission Provider determines that the Transmission System is not capable of providing Firm Point-To-Point Transmission Service without (1) degrading or impairing the reliability of service to Native Load Customers, Network Customers and other Transmission Customers taking Firm Point-To-Point Transmission Service, or (2) interfering with the Transmission Provider's ability to meet prior firm contractual commitments to others, the Transmission Provider will be obligated to have a Transmitter expand or upgrade its Transmission System pursuant to the terms of Section 15.4. The Transmission Customer must agree to compensate the Transmission Provider for any necessary transmission facility additions pursuant to the terms of Section 27. To the extent the Transmission Provider can relieve any system constraint by redispatching the Transmission Provider's resources, it shall do so, provided that the Eligible Customer agrees to compensate the Transmission Provider pursuant to the terms of Section 27 and agrees to either (i) compensate the Transmission Provider for any necessary transmission facility additions or (ii) accept the service subject to a biennial reassessment by the Transmission Provider of redispatch requirements as described in Section 15.4. redispatch, Network Upgrade or Direct Assignment Facilities costs to be charged to the Transmission Customer on an incremental basis under the Tariff will be specified in the Service Agreement prior to initiating service.

#### 13.6 Curtailment of Firm Transmission Service

In the event that a Curtailment on the Transmission Provider's Transmission System, or a portion thereof, is required to maintain reliable operation of such system, and the system directly and indirectly interconnected with the Transmission Provider's Transmission System Curtailments will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the

constraint. Transmission Provider may elect to implement such Curtailments pursuant to the Transmission Loading Relief procedures specified in Attachment J. If multiple transactions require Curtailment, to the extent practicable and consistent with Good Utility Practice, the Transmission Provider will curtail service to Native Load Customers, Network Customers and Transmission Customers taking Firm Point-To-Point Transmission Service on a similar basis. All Curtailments will be made on a non-discriminatory basis, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. Long-Term Firm Point-to-Point Service subject to conditions described in Section 15.4 shall be curtailed with secondary service (as defined in Section 28.4) in cases where the conditions apply, but otherwise will be curtailed on a pro rata basis with other Firm Transmission Service. When the Transmission Provider determines that an electrical emergency exists on its Transmission System and implements emergency procedures to Curtail Firm Transmission Service, the Transmission Customer shall make the required reductions upon request of the Transmission Provider. However, the Transmission Provider reserves the right to Curtail, in whole or in part, any Firm Transmission Service provided under the Tariff when, in the Transmission Provider's sole discretion, an emergency or other unforeseen condition impairs or degrades the reliability of its Transmission System. The Transmission Provider will notify all affected Transmission Customers in a timely manner of any scheduled Curtailments.

#### 13.7 Classification of Firm Transmission Service

- (a) The Transmission Customer taking Firm Point-To-Point Transmission Service may (1) change its Receipt and Delivery Points to obtain service on a non-firm basis consistent with the terms of Section 22.1 or (2) request a modification of the Points of Receipt or Delivery on a firm basis pursuant to the terms of Section 22.2.
- (b) The Transmission Customer may purchase transmission service to make sales of capacity and energy from multiple generating units that are on the Transmission Provider's Transmission System. For such a purchase

- of transmission service, the resources will be designated as multiple Points of Receipt, unless the multiple generating units are at the same generating plant in which case the units would be treated as a single Point of Receipt.
- The Transmission Provider shall provide firm deliveries of capacity and (c) energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm transmission capacity is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Receipt. Points of Receipt and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of Schedule 7. The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in Section 22. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that Transmission Customer (including Third-Party Sales Transmission Provider) exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved.

#### 13.8 Scheduling of Firm Point-To-Point Transmission Service

Schedules for the Transmission Customer's Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 11:00 a.m. Atlantic Time of the Business day prior to commencement of such service. Schedules submitted after 11:00 a.m. Atlantic Time will be accommodated, if practicable. Hour-to-hour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of any capacity and energy that is to be delivered must be stated in increments of 1,000 kW per hour. Transmission Customers within the Transmission Provider's service area with multiple requests for Transmission Service at a Point of Receipt, each of which is under 1,000 kW per hour, may consolidate their service requests at a common point of receipt into units of 1,000 kW per hour for scheduling and billing purposes. Scheduling changes will be permitted up to thirty (30) minutes before the start of the next scheduling interval provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

# 14 NATURE OF NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

# 14.1 Term

Non-Firm Point-To-Point Transmission Service will be available for periods ranging from one (1) hour to one (1) month. However, a Purchaser of Non-Firm Point-To-Point Transmission Service will be entitled to reserve a sequential term of service (such as a sequential monthly term without having to wait for the initial

term to expire before requesting another monthly term) so that the total time period for which the reservation applies is greater than one month, subject to the requirements of Section 18.3.

# 14.2 Reservation Priority

Non-Firm Point-To-Point Transmission Service shall be available from transfer capability in excess of that needed for reliable service to Native Load Customers, Network Customers and other Transmission Customers taking Long-Term and Short-Term Firm Point-To-Point Transmission Service. A higher priority will be assigned first to requests or reservations with a longer duration of service and second to Pre-Confirmed Applications. In the event the Transmission System is constrained, competing requests of the same Pre-Confirmation status and equal duration will be prioritized based on the highest price offered by the Eligible Customer for the Transmission Service. Eligible Customers that have already reserved shorter term service have the right of first refusal to match any longer term request before being preempted. A longer term competing request for Non-Firm Point-To-Point Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request within the time limits indicated by the Transmission Provider's published practices. Transmission service for Network Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have the lowest reservation priority under the Tariff.

# 14.3 Use of Non-Firm Point-To-Point Transmission Service by the Transmission Provider and Transmitters

The Transmission Provider and Transmitters will be subject to the rates, terms and conditions of Part II of the Tariff including when making Third-Party Sales. The Transmission Provider and Transmitters will maintain separate accounting, pursuant to Section 8, for any use of Non-Firm Point-To-Point Transmission

Service including to make Third-Party Sales.

# 14.4 Service Agreements

The Transmission Provider shall offer a standard form for Short-Term Firm and Non-Firm Point-To-Point Transmission Service Agreement (Attachment B) to an Eligible Customer when it first submits a Completed Application for Non-Firm (or Short-Term Firm) Point-To-Point Transmission Service pursuant to the Tariff. Executed Service Agreements that contain the information required under the Tariff shall be filed with the Board.

#### 14.5 Classification of Non-Firm Point-To-Point Transmission Service

Non-Firm Point-To-Point Transmission Service shall be offered under terms and conditions contained in Part II of the Tariff. The Transmission Provider undertakes no obligation under the Tariff to plan its Transmission System in order to have sufficient capacity for Non-Firm Point-To-Point Transmission Service. Parties requesting Non-Firm Point-To-Point Transmission Service for the transmission of firm power do so with the full realization that such service is subject to availability and to Curtailment or Interruption under the terms of the Tariff. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Transmission Customer (including Third-Party Sales by the Transmission Provider or a Transmitter) exceeds its non-firm capacity reservation (See Section 14.8). Non-Firm Point-To-Point Transmission Service shall include transmission of energy on an hourly basis and transmission of scheduled short-term capacity and energy on a daily, weekly or monthly basis, but not to exceed one month's reservation for any one Application, under Schedule 8.

# 14.6 Scheduling of Non-Firm Point-To-Point Transmission Service

Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 11:00 a.m. Atlantic Time of the Business day prior to commencement of such service. Schedules submitted

after 11:00 a.m. Atlantic Time will be accommodated, if practicable. Hour-tohour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of energy that is to be delivered must be stated in increments of 1,000 kW per hour. Transmission Customers within the Transmission Provider's service area with multiple requests for Transmission Service at a Point of Receipt, each of which is under 1,000 kW per hour, may consolidate their schedules at a common Point of Receipt into units of 1,000 kW per hour. Scheduling changes will be permitted up to thirty (30) minutes before the start of the next scheduling interval provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

# 14.7 Curtailment or Interruption of Service

The Transmission Provider reserves the right to Curtail, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for reliability reasons when an emergency or other unforeseen condition threatens to impair or degrade the reliability of its Transmission System. The Transmission Provider reserves the right to Interrupt, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for economic reasons in order to accommodate (1) a request for Firm Transmission Service, (2) a request for Non-Firm Point-To-Point Transmission Service of greater duration, (3) a request for Non-Firm Point-To-Point Transmission Service of equal duration with a higher price, (4) transmission service for Network Customers from non-designated resources, or (5) transmission service for Firm Point-to-Point

Transmission Service during conditional curtailment periods as described in Section 15.4. The Transmission Provider also will discontinue or reduce service to the Transmission Customer to the extent that deliveries for transmission are discontinued or reduced at the Point(s) of Receipt. Where required, Curtailments or Interruptions will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. If multiple transactions require Curtailment or Interruption, to the extent practicable and consistent with Good Utility Practice, Curtailments or Interruptions will be made to transactions of the shortest term (e.g., hourly nonfirm transactions will be Curtailed or Interrupted before daily non-firm transactions and daily non-firm transactions will be Curtailed or Interrupted before weekly non-firm transactions). Transmission service for Network Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under the Tariff. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have a lower priority than any Non-Firm Point-To-Point Transmission Service under the Tariff. The Transmission Provider will provide advance notice of Curtailment or Interruption where such notice can be provided consistent with Good Utility Practice.

#### 15 SERVICE AVAILABILITY

#### 15.1 General Conditions

The Transmission Provider will provide Firm and Non-Firm Point-To-Point Transmission Service over, on or across its Transmission System to any Transmission Customer that has met the requirements of Section 16.

#### 15.2 Determination of Available Transfer Capability

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Section 4) is contained in Attachment C of the Tariff. In the event sufficient

transfer capability may not exist to accommodate a service request, the Transmission Provider will respond by performing a System Impact Study.

# 15.3 Initiating Service in the Absence of an Executed Service Agreement

If the Transmission Provider and the Transmission Customer requesting Firm or Non-Firm Point-To-Point Transmission Service cannot agree on all the terms and conditions of the Point-To-Point Service Agreement, the Transmission Provider shall file with the Board, within thirty (30) days after the date the Transmission Customer provides written notification directing the Transmission Provider to file, an unexecuted Point-To-Point Service Agreement containing terms and conditions deemed appropriate by the Transmission Provider for such requested Transmission Service. The Transmission Provider shall commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Provider at whatever rate the Board ultimately determines to be just and reasonable, and (ii) comply with the terms and conditions of the Tariff including posting appropriate security deposits in accordance with the terms of Section 17.3.

# 15.4 Obligation to Provide Transmission Service that Requires Expansion or Modification of the Transmission System, Redispatch or Conditional Curtailment

(a) If the Transmission Provider determines that it cannot accommodate a Completed Application for Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to have a Transmitter expand or modify its Transmission System to provide the requested Firm Transmission Service, consistent with its planning obligations in Attachment K, provided the Transmission Customer agrees to compensate the Transmission Provider and Transmitters for such costs pursuant to the terms of Section 27. The Transmission Provider and Transmitters will conform to Good Utility Practice and its planning obligations in Attachment

- K, in determining the need for new facilities and in the design and construction of such facilities. The obligation applies only to those facilities that the Transmission Provider has the right to expand or modify.
- (b) If the Transmission Provider determines that it cannot accommodate a Completed Application for Long-Term Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to provide redispatch from its own resources until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide the redispatch, or (iii) the Transmission Customer terminates the service because of redispatch changes resulting from the reassessment. A Transmission Provider shall not unreasonably deny self-provided redispatch or redispatch arranged by the Transmission Customer from a third party resource.
- (c) If the Transmission Provider determines that it cannot accommodate a Completed Application for Long-Term Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will offer the Firm Transmission Service with the condition that the Transmission Provider may curtail the service prior to the curtailment of other Firm Transmission Service for a specified number of hours per year or during System Condition(s). If the Transmission Customer accepts the service, the Transmission Provider will use due diligence to provide the service until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide such service, or (iii) the Transmission Customer terminates the service because the reassessment increased the number of hours per year of conditional curtailment or changed the System Conditions.

#### 15.5 Deferral of Service

The Transmission Provider may defer providing service until completion of construction of new transmission facilities or upgrades needed to provide Firm Point-To-Point Transmission Service whenever the Transmission Provider determines that providing the requested service would, without such new facilities or upgrades, impair or degrade reliability to any existing firm services.

#### 15.6 Other Transmission Service Schedules

Eligible Customers receiving transmission service under other agreements not subject to the January 1998 Tariff or subsequent OATT may continue to receive transmission service under those agreements until such time as those agreements may be modified by the Board.

#### 15.7 Real Power Losses

Real Power Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Transmission Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider. The applicable Real Power Loss factors are based on system average losses. The system average loss factor is 3.30%.

# 16 TRANSMISSION CUSTOMER RESPONSIBILITIES

# **16.1 Conditions Required of Transmission Customers**

Point-To-Point Transmission Service shall be provided by the Transmission Provider only if the following conditions are satisfied by the Transmission Customer:

- (a) The Transmission Customer has pending a Completed Application for service;
- (b) The Transmission Customer meets the creditworthiness criteria set forth in

#### Section 11;

- (c) The Transmission Customer will have arrangements in place for any other transmission service necessary to effect the delivery from the generating source to the Transmission Provider prior to the time service under Part II of the Tariff commences;
- (d) The Transmission Customer agrees to pay for any facilities constructed and chargeable to such Transmission Customer under Part II of the Tariff, whether or not the Transmission Customer takes service for the full term of its reservation;
- (e) The Transmission Customer provides the information required by the Transmission Provider's planning process established in Attachment K; and
- (f) The Transmission Customer has executed a Point-To-Point Service Agreement or has agreed to receive service pursuant to Section 15.3.

# 16.2 Transmission Customer Responsibility for Third-Party Arrangements

Any scheduling arrangements that may be required by other electric systems shall be the responsibility of the Transmission Customer requesting service. The Transmission Customer shall provide, unless waived by the Transmission Provider, notification to the Transmission Provider identifying such systems and authorizing them to schedule the capacity and energy to be transmitted by the Transmission Provider pursuant to Part II of the Tariff on behalf of the Receiving Party at the Point of Delivery or the Delivering Party at the Point of Receipt. However, the Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in making such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

# 17 PROCEDURES FOR ARRANGING FIRM POINT-TO-POINT TRANSMISSION SERVICE

# 17.1 Application

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must contain a written Application (Attachment A: Form For Service Agreement for Firm Point-to-Point Transmission Service) to: New Brunswick Power Corporation, 77 Canada Street, Fredericton, NB, Canada, E3A 3Z3, at least sixty (60) days in advance of the calendar month in which service is to commence. The Transmission Provider will consider requests for such firm service on shorter notice when feasible. Requests for firm service for periods of less than one year shall be subject to expedited procedures that shall be negotiated between the Parties within the time constraints provided in Section 17.5. Submission of an enabling agreement (Attachment B: Form for Short-Term Firm and Non-Firm Point-to-Point Transmission Service Agreement) must precede or accompany a Transmission Customer's first request for Short-Term Firm (or Non-Firm) Transmission Service. All Firm Point-To-Point Transmission Service requests for periods of less than one year should be submitted by entering the information listed below on the Transmission Provider's OASIS.

# 17.2 Completed Application

A Completed Application shall provide all of the required information including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The location of the Point(s) of Receipt and Point(s) of Delivery and the identities of the Delivering Parties and the Receiving Parties;
- (iv) The location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted. The Transmission Provider will treat this information

as confidential except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the approved standards of conduct;

- A description of the supply characteristics of the capacity and energy to be delivered;
- (vi) An estimate of the capacity and energy expected to be delivered to the Receiving Party;
- (vii) The Service Commencement Date and the term of the requested Transmission Service:
- (viii) The transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission Provider's Transmission System; customers may combine their requests for service in order to satisfy the minimum transmission capacity requirement;
- (ix) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service; and
- (x) Any additional information required by the Transmission Provider's planning process established in Attachment K.

The Transmission Provider shall treat this information consistent with the standards of conduct.

# 17.3 Deposit

A Completed Application for Firm Point-To-Point Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, or in the case of requests for service arising in connection with losing bidders in a Request For Proposals (RFP), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decides not to enter into a Service Agreement for Firm Point-To-Point Transmission Service, the deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. Deposits associated with construction of new facilities are subject to the provisions of Section 19. If a Service Agreement for Firm Point-To-Point Transmission Service is executed, the deposit, with interest, will be returned to the Transmission Customer upon expiration or termination of the Service Agreement for Firm Point-To-Point Transmission Service. Applicable interest shall be calculated on a daily basis, at an interest rate equal to the prime rate per annum minus two percent (2%) as charged by the Royal Bank in Fredericton, or any other bank designated by the Transmission Provider or its Designated Agent, on the last banking day of the month for which payment is due, calculated from the day the deposit check is credited to the Transmission Provider's account.

# 17.4 Notice of Deficient Application

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, with interest. Upon receipt of a new or revised Application that fully complies with the requirements of Part II of the Tariff, the Eligible Customer shall be assigned a new priority consistent with the date of the new or revised Application.

# 17.5 Response to a Completed Application

Following receipt of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider shall make a determination of available transfer capability as required in Section 15.2. The Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application either (i) if it will be able to provide service without performing a System Impact Study or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Section 19.1. Responses by the Transmission Provider must be made as soon as practicable to all completed applications (including applications by its own or a Transmitter's merchant function) and the timing of such responses must be made on a non-discriminatory basis.

# 17.6 Execution of Service Agreement

Whenever the Transmission Provider determines that a System Impact Study is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a System Impact Study is required, the provisions of Section 19 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or

request the filing of an unexecuted service agreement pursuant to Section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

#### 17.7 Extensions for Commencement of Service

The Transmission Customer can obtain, subject to availability, up to five (5) one-year extensions for the commencement of service. The Transmission Customer may postpone service by paying a non-refundable annual reservation fee equal to one-month's charge for Firm Transmission Service for each year or fraction thereof within 15 days of notifying the Transmission Provider it intends to extend the commencement of service. If during any extension for the commencement of service an Eligible Customer submits a Completed Application for Firm Transmission Service, and such request can be satisfied only by releasing all or part of the Transmission Customer's Reserved Capacity, the original Reserved Capacity will be released unless the following condition is satisfied. Within thirty (30) days, the original Transmission Customer agrees to pay the Firm Point-To-Point transmission rate for its Reserved Capacity concurrent with the new Service Commencement Date. In the event the Transmission Customer elects to release the Reserved Capacity, the reservation fees or portions thereof previously paid will be forfeited.

# 18 PROCEDURES FOR ARRANGING NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

# 18.1 Application

Eligible Customers seeking Non-Firm Point-To-Point Transmission Service must submit a Completed Application (Attachment B: Form For Short-Term Firm and Non-Firm Point-To-Point Transmission Service Agreement) to the Transmission

Provider prior to or accompanying the first request for Non-Firm (or Short-Term Firm) Transmission Service. Specific requests for Non-Firm Transmission Service should be submitted by entering the information listed below on the Transmission Provider's OASIS.

# **18.2 Completed Application**

A Completed Application shall provide all of the required information including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The Point(s) of Receipt and the Point(s) of Delivery;
- (iv) The maximum amount of capacity requested at each Point of Receipt and Point of Delivery; and
- (v) The proposed dates and hours for initiating and terminating transmission service hereunder.
  - In addition to the information specified above, when required to properly evaluate system conditions, the Transmission Provider also may ask the Transmission Customer to provide the following:
- (vi) The electrical location of the initial source of the power to be transmitted pursuant to the Transmission Customer's request for service; and
- (vii) The electrical location of the ultimate load.
  - The Transmission Provider will treat this information in (vi) and (vii) as confidential at the request of the Transmission Customer except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice, or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the approved standards of conduct.
- (viii) A statement indicating that, if the Eligible Customer submits a Pre-

Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

#### 18.3 Reservation of Non-Firm Point-To-Point Transmission Service

Requests for monthly service shall be submitted no earlier than sixty (60) days before service is to commence; requests for weekly service shall be submitted no earlier than fourteen (14) days before service is to commence, requests for daily service shall be submitted no earlier than two (2) Business days before service is to commence, and requests for hourly service shall be submitted no earlier than 09:00 (Atlantic) the Business day before service is to commence with the exception of the first hour of each day which can be requested as early as, but no earlier than, 09:00 (Atlantic) two Business Days before service is to commence. Requests for service received later than 16:00 (Atlantic) of the Business Day prior to the day service is scheduled to commence will be accommodated if practicable.

# 18.4 Determination of Available Transfer Capability

Following receipt of a tendered schedule the Transmission Provider will make a determination on a non-discriminatory basis of available transfer capability pursuant to Section 15.2. Such determination shall be made as soon as reasonably practicable after receipt, but not later than the following time periods for the following terms of service

- (i) thirty (30) minutes for hourly service,
- (ii) thirty (30) minutes for daily service,
- (iii) four (4) hours for weekly service, and
- (iv) two (2) days for monthly service.

# 19 ADDITIONAL STUDY PROCEDURES FOR FIRM POINT-TO-POINT TRANSMISSION SERVICE REQUESTS

# 19.1 Notice of Need for System Impact Study

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as soon as practicable. Once informed, the Eligible Customer shall immediately notify the Transmission Provider if it elects to have the Transmission Provider study redispatch or conditional curtailment as part of the System Impact Study. If notification is provided prior to tender of the System Impact Study Agreement, the Eligible Customer can avoid the costs associated with the study of these options. The Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Section 17.3, shall be returned with interest.

# 19.2 System Impact Study Agreement and Cost Reimbursement

(i) The System Impact Study Agreement will clearly specify the Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for

- such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the requests for service, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf or on behalf of a Transmitter, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 20.

# 19.3 System Impact Study Procedures

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including an estimate of the cost of redispatch, (3) conditional curtailment options (when requested by an Eligible Customer) including the number of hours per year and the System Conditions during which conditional curtailment may occur, and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission Provider is unable to

complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Section 15.3, or the Application shall be deemed terminated and withdrawn.

# 19.4 Facilities Study Procedures

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its application shall be deemed withdrawn and its deposit, pursuant to Section 17.3, shall be returned with interest. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period.

If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Transmission Customer, (ii) the Transmission Customer's appropriate share of the cost of any required Network Upgrades as determined pursuant to the provisions of Part II and Attachment K of the Tariff, and (iii) the time required to complete such construction and initiate the requested service. The Transmission Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the Eligible Customer's share of the costs of new facilities or upgrades. The Transmission Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request will no longer be a Completed Application and shall be deemed terminated and withdrawn.

# 19.5 Facilities Study Modifications

Any change in design arising from inability to site or construct facilities as proposed will require development of a revised good faith estimate. New good faith estimates also will be required in the event of new statutory or regulatory requirements that are effective before the completion of construction or other circumstances beyond the control of the Transmission Provider that significantly affect the final cost of new facilities or upgrades to be charged to the Transmission Customer pursuant to the provisions of Part II of the Tariff.

# 19.6 Due Diligence in Completing New Facilities

The Transmission Provider shall use due diligence to have a Transmitter add necessary facilities or upgrade its Transmission System within a reasonable time. The Transmission Provider will not have a Transmitter upgrade its existing or planned Transmission System in order to provide the requested Firm Point-To-Point Transmission Service if doing so would impair system reliability or otherwise impair or degrade existing firm service.

#### 19.7 Partial Interim Service

If the Transmission Provider determines that it will not have adequate transfer capability to satisfy the full amount of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider nonetheless shall be obligated to offer and provide the portion of the requested Firm Point-To-Point Transmission Service that can be accommodated without addition of any facilities and through redispatch. However, the Transmission Provider shall not be obligated to provide the incremental amount of requested Firm Point-To-Point Transmission Service that requires the addition of facilities or upgrades to the Transmission System until such facilities or upgrades have been placed in service.

# 19.8 Expedited Procedures for New Facilities:

In lieu of the procedures set forth above, the Eligible Customer shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the Eligible Customer would agree to compensate the Transmission Provider for all costs incurred pursuant to the terms of the Tariff. In order to exercise this option, the Eligible Customer shall request in writing an expedited Service Agreement covering all of the above-specified items within thirty (30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs incurred in providing the requested service. While the Transmission Provider agrees to

provide the Eligible Customer with its best estimate of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer's request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

# 19.9 Failure to Meet Study Deadlines:

Sections 19.3 and 19.4 <u>require</u> a Transmission Provider to use due diligence to meet 60-day study completion deadlines for System Impact Studies and Facilities Studies.

- (i) The Transmission Provider is required to file a notice with the Board in the event that more than twenty (20) percent of non-Affiliates' System Impact Studies and Facilities Studies completed by the Transmission Provider in any two consecutive calendar quarters are not completed within the 60-day study completion deadlines. Such notice must be filed within thirty (30) days of the end of the calendar quarter triggering the notice requirement.
- (ii) For the purposes of calculating the percent of non-Affiliates' System Impact Studies and Facilities Studies processed outside of the 60-day study completion deadlines, the Transmission Provider shall consider all System Impact Studies and Facilities Studies that it completes for non-Affiliates during the calendar quarter. The percentage should be calculated by dividing the number of those studies which are completed on time by the total number of completed studies. The Transmission Provider may provide an explanation in its notification filing to the Board if it believes there are extenuating circumstances that prevented it from meeting the 60-day study completion deadlines.

# 20 PROCEDURES IF THE TRANSMISSION PROVIDER IS UNABLE TO COMPLETE NEW TRANSMISSION FACILITIES FOR FIRM POINT-TO-POINT TRANSMISSION SERVICE

# 20.1 Delays in Construction of New Facilities

If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Transmission Provider and Transmitter shall promptly notify the Transmission Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Transmission Customer of such delays, convene a technical meeting with the Transmission Customer and Transmitter to evaluate the alternatives available to the Transmission Customer. The Transmission Provider and Transmitter also shall make available to the Transmission Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider or Transmitter that is reasonably needed by the Transmission Customer to evaluate any alternatives.

# 20.2 Alternatives to the Original Facility Additions

When the review process of Section 20.1 determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider and Transmitter shall present such alternatives for consideration by the Transmission Customer. If, upon review of any alternatives, the Transmission Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may request the Transmission Provider to submit a revised Service Agreement for Firm Point-To-Point Transmission Service. If the alternative approach solely involves Non-Firm Point-To-Point Transmission Service Agreement for Non-Firm Point-To-Point Transmission Service providing for the service. In the event the Transmission Provider concludes that no reasonable alternative exists and the Transmission Customer disagrees, the Transmission Customer may seek relief under the dispute resolution procedures pursuant to Section 12.

# 20.3 Refund Obligation for Unfinished Facility Additions

If the Transmission Provider and the Transmission Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of Part II of the Tariff, the obligation to provide the requested Firm Point-To-Point Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned with interest calculated on a daily basis, at an interest rate equal to the prime rate per annum as charged by the Bank of Montreal in Fredericton, or any other bank designated by the Transmission Provider or its Designated Agent, on the last banking day of the month for which payment is due. However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Provider and Transmitters through the time construction was suspended.

# 21 PROVISIONS RELATING TO TRANSMISSION CONSTRUCTION AND SERVICES ON THE SYSTEMS OF OTHER UTILITIES

# 21.1 Responsibility for Third-Party System Additions

The Transmission Provider shall not be responsible for making arrangements for any necessary engineering, permitting, and construction of transmission or distribution facilities on the system(s) of any other entity or for obtaining any regulatory approval for such facilities. The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

# 21.2 Coordination of Third-Party System Additions

In circumstances where the need for transmission facilities or upgrades is identified pursuant to the provisions of Part II of the Tariff, and if such upgrades further require the addition of transmission facilities on other systems, the

Transmission Provider shall have the right to coordinate construction on the Transmission system with the construction required by others. The Transmission Provider and Transmitter, after consultation with the Transmission Customer and representatives of such other systems, may defer construction of new transmission System facilities, if the new transmission facilities on another system cannot be completed in a timely manner. The Transmission Provider and Transmitter shall notify the Transmission Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before they will initiate or resume construction of new facilities. Within sixty (60) days of receiving written notification by the Transmission Provider and Transmitter of their intent to defer construction pursuant to this section, the Transmission Customer may challenge the decision in accordance with the dispute resolution procedures pursuant to Section 12.

# 22 CHANGES IN SERVICE SPECIFICATIONS

#### 22.1 Modifications On a Non-Firm Basis

The Transmission Customer taking Firm Point-To-Point Transmission Service may request the Transmission Provider to provide transmission service on a non-firm basis over Receipt and Delivery Points other than those specified in the Service Agreement ("Secondary Receipt and Delivery Points"), in amounts not to exceed its firm capacity reservation, without incurring an additional Non-Firm Point-To-Point Transmission Service charge or executing a new Service Agreement, subject to the following conditions.

- (a) Service provided over Secondary Receipt and Delivery Points will be non-firm only, on an as-available basis and will not displace any firm or non-firm service reserved or scheduled by third-parties under the Tariff or by the Transmission Provider on behalf of Native Load Customers.
- (b) The sum of all Firm and non-firm Point-To-Point Transmission Service provided to the Transmission Customer at any time pursuant to this

- section shall not exceed the Reserved Capacity in the relevant Service Agreement under which such services are provided.
- (c) The Transmission Customer shall retain its right to schedule Firm Point-To-Point Transmission Service at the Receipt and Delivery Points specified in the relevant Service Agreement in the amount of its original capacity reservation.
- (d) Service over Secondary Receipt and Delivery Points on a non-firm basis shall not require the filing of an Application for Non-Firm Point-To-Point Transmission Service under the Tariff. However, all other requirements of Part II of the Tariff (except as to transmission rates) shall apply to transmission service on a non-firm basis over Secondary Receipt and Delivery Points.

#### 22.2 Modification On a Firm Basis

Any request by a Transmission Customer to modify Receipt and Delivery Points on a firm basis shall be treated as a new request for service in accordance with Section 17 hereof, except that such Transmission Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Transmission Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement.

# 23 SALE OR ASSIGNMENT OF TRANSMISSION SERVICE

# 23.1 Procedures for Assignment or Transfer of Service

A Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to Resellers shall be at rates established by agreement between

the Reseller and the Assignee.

The Assignee must execute a service agreement with the Transmission Provider governing reassignments of transmission service prior to the date on which the reassigned service commences. The Transmission Provider shall charge the Reseller, as appropriate, at the rate stated in the Reseller's Service Agreement with the Transmission Provider or the associated OASIS schedule and credit the Reseller with the price reflected in the Assignee's Service Agreement with the Transmission Provider or the associated OASIS schedule; provided that, such credit shall be reversed in the event of non-payment by the Assignee. If the Assignee does not request any change in the Point(s) of Receipt or the Point(s) of Delivery, or a change in any other term or condition set forth in the original Service Agreement, the Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. The Assignee will be subject to all terms and conditions of this Tariff. If the Assignee requests a change in service, the reservation priority of service will be determined by the Transmission Provider pursuant to Section 13.2.

# 23.2 Limitations on Assignment or Transfer of Service

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's generation, transmission, or distribution systems. The Assignee shall compensate the Transmission Provider for performing any System Impact Study needed to evaluate the capability of the Transmission System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Transmission Provider and the Reseller through an

amendment to the Service Agreement.

# 23.3 Information on Assignment or Transfer of Service:

In accordance with Section 4, all sales or assignments of capacity must be conducted through or otherwise posted on the Transmission Provider's OASIS on or before the date the reassigned service commences and are subject to Section 23.1. Resellers may also use the Transmission Provider's OASIS to post transmission capacity available for resale.

# 24 <u>METERING AND POWER FACTOR CORRECTION AT RECEIPT AND DELIVERY POINTS(S)</u>

# 24.1 Transmission Customer Obligations

Unless otherwise agreed, the respective Transmitter shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under Part II of the Tariff and to communicate the information as required. Such equipment shall remain the property of the respective Transmitter. At the Point of Receipt, the Transmission Customer will pay the associated costs. At the Point of Delivery, the respective Transmitter will pay the associated costs.

# 24.2 Transmission Provider Access to Metering Data

The Transmission Provider shall have access to metering data, which may reasonably be required to facilitate measurements and billing under the Service Agreement.

# 24.3 Power Factor

Unless otherwise agreed, the Transmission Customer is required to maintain a power factor at the Point of Delivery within the same range as the Transmission Provider pursuant to Good Utility Practices. The power factor requirements are specified in the Service Agreement where applicable.

In lieu of any specific power factor requirements in the relevant service agreement, the penalty for poor power factor in any month shall be charged at a rate of four (4) times the monthly firm rate for transmission service applied to the following:

90% of the maximum MVA measured in the month

less the maximum transmission billing demand in MW

The monthly rate for transmission service is the monthly firm point-to-point rate as noted in Schedule 7 and is not to include the rate for any ancillary services.

# 25 COMPENSATION FOR TRANSMISSION SERVICE

Rates for Firm and Non-Firm Point-To-Point Transmission Service are provided in the Schedules appended to the Tariff: Firm Point-To-Point Transmission Service (Schedule 7); and Non-Firm Point-To-Point Transmission Service (Schedule 8). The Transmission Provider and Transmitters shall use Part II of the Tariff to make their Third-Party Sales. The Transmission Provider and Transmitters shall account for such use at the applicable Tariff rates, pursuant to Section 8.

## 26 STRANDED COST RECOVERY

The Transmission Provider or Transmitters may seek to recover stranded costs from the Transmission Customer pursuant to this Tariff. However, the Transmission Provider or Transmitter must separately file any specific proposed stranded cost charge with the Board.

# 27 COMPENSATION FOR NEW FACILITIES AND REDISPATCH COSTS

Whenever a System Impact Study performed by the Transmission Provider in connection with the provision of Firm Point-To-Point Transmission Service identifies the need for new facilities, the Transmission Customer shall be responsible for such costs to the extent consistent with the Transmission Provider's policy. Whenever a System Impact Study performed by the Transmission Provider identifies capacity constraints that may be relieved by redispatching resources to eliminate such constraints, the Transmission Customer shall be responsible for the redispatch costs to the extent consistent with the Transmission Provider's policy.

## III. <u>NETWORK INTEGRATION TRANSMISSION SERVICE</u>

#### **Preamble**

The Transmission Provider will provide Network Integration Transmission Service pursuant to the applicable terms and conditions contained in the Tariff and Service Agreement. Network Integration Transmission Service allows the Network Customer to integrate, economically dispatch and regulate its current and planned Network Resources to serve its Network Load in a manner comparable to that in which the Transmission Provider utilizes its Transmission System to serve other Network Loads and any Native Load Customers. Network Integration Transmission Service also may be used by the Network Customer to deliver economy energy purchases to its Network Load from non-designated resources on an as-available basis without additional charge. Transmission service for sales to non-designated loads will be provided pursuant to the applicable terms and conditions of Part II of the Tariff.

#### 28 NATURE OF NETWORK INTEGRATION TRANSMISSION SERVICE

#### 28.1 Scope of Service

Network Integration Transmission Service is a transmission service that allows Network Customers to efficiently and economically utilize their Network Resources (as well as other non-designated generation resources) to serve their Network Load located in the Transmission Provider's Control Area and any additional load that may be designated pursuant to Section 31.3 of the Tariff. The Network Customer taking Network Integration Transmission Service must obtain or provide Ancillary Services pursuant to Section 3.

#### 28.2 Transmission Provider Responsibilities

The Transmission Provider will plan, operate and cause to be constructed and maintained the Transmission System in accordance with Good Utility Practice and its planning obligations in Attachment K in order to provide the Network

Customer with Network Integration Transmission Service over the Transmission Provider's Transmission System. A Transmitter, on behalf of its Native Load Customers, shall be required to designate resources and loads in the same manner as any other Network Customer under Part III of this Tariff. This information must be consistent with the information used by the Transmission Provider to calculate available transfer capability. The Transmission Provider shall include the Network Customer's Network Load in its Transmission System planning and shall, consistent with Good Utility Practice and Attachment K, endeavor to have constructed and placed into service sufficient transfer capability to deliver the Network Customer's Network Resources to serve its Network Load on a basis comparable to the delivery of any Transmitter's generating and purchased resources to that Transmitter's Native Load Customers.

## 28.3 Network Integration Transmission Service

The Transmission Provider will provide firm transmission service over its Transmission System to the Network Customer for the delivery of capacity and energy from its designated Network Resources to service its Network Loads on a basis that is comparable to any Transmitter's use of the Transmission System to reliably serve its Native Load Customers.

#### 28.4 Secondary Service

The Network Customer may use the Transmission Provider's Transmission System to deliver energy to its Network Loads from resources that have not been designated as Network Resources. Such energy shall be transmitted, on an as-available basis, at no additional charge. Secondary service shall not require the filing of an Application for Network Integration Transmission Service under the Tariff. However, all other requirements of Part III of the Tariff (except for transmission rates) shall apply to secondary service. Deliveries from resources other than Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under Part II of the Tariff.

#### 28.5 Real Power Losses

Real Power Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Network Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider. The applicable Real Power Loss factors are based on system average losses. The system average loss factor is 3.30%.

#### 28.6 Restrictions on Use of Service

The Network Customer shall not use Network Integration Transmission Service for (i) sales of capacity and energy to non-designated loads, or (ii) direct or indirect provision of transmission service by the Network Customer to third parties. All Network Customers taking Network Integration Transmission Service shall use Point-To-Point Transmission Service under Part II of the Tariff for any Third-Party Sale which requires use of the Transmission Provider's Transmission System. The Transmission Provider shall specify any appropriate charges and penalties and all related terms and conditions applicable in the event that a Network Customer uses Network Integration Transmission Service or secondary service pursuant to Section 28.4 to facilitate a wholesale sale that does not serve a Network Load.

## 29 INITIATING SERVICE

#### 29.1 Condition Precedent for Receiving Service

Subject to the terms and conditions of Part III of the Tariff, the Transmission Provider will provide Network Integration Transmission Service to any Eligible Customer, provided that (i) the Eligible Customer completes an Application for service as provided under Part III of the Tariff, (ii) the Eligible Customer and the Transmission Provider complete the technical arrangements set forth in Sections 29.3 and 29.4, (iii) the Eligible Customer executes a Service Agreement pursuant to Attachment F for service under Part III of the Tariff or requests in writing that the Transmission Provider file a proposed unexecuted Service

Agreement with the Board, and (iv) each facility owner executes a Network Operating Agreement with the respective Transmitter pursuant to Attachment G.

## 29.2 Application Procedures

An Eligible Customer requesting service under Part III of the Tariff must submit an Application, with a deposit approximating the charge for one month of service, to the Transmission Provider as far as possible in advance of the month in which service is to commence. Unless subject to the procedures in Section 2, Completed Applications for Network Integration Transmission Service will be assigned a priority according to the date and time the Application is received, with the earliest Application receiving the highest priority. Applications should be submitted by entering the information listed below to: New Brunswick Power Corporation, 77 Canada Street, Fredericton, NB, Canada, E3A 3Z3. The Transmission Provider will time-stamp the submittal as a record for establishing the service priority of the Application. A Completed Application shall provide all of the information required, including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;
- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion

of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;

- (v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:
  - Unit size and amount of capacity from that unit to be designated as Network Resource
  - VAR capability (both leading and lagging) of all generators
  - Operating restrictions
    - Any periods of restricted operations throughout the year
    - Maintenance schedules
    - Minimum loading level of unit
    - Normal operating level of unit
    - Any must-run unit designations required for system reliability or contract reasons
  - Approximate variable generating cost (\$/MWH) for redispatch computations
  - Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Area, where only a portion of unit output is designated as a Network Resource:

For each off-system Network Resource, such description shall include:

- Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
- Identification of the control area from which the power will originate
- Delivery point(s) to the Transmission Provider's Transmission System
- Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any

- Any periods of restricted operations throughout the year
- Maintenance schedules
- Minimum loading level of unit
- Normal operating level of unit
- Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations;
- (vi) Description of Eligible Customer's transmission system:
  - Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
  - Operating restrictions needed for reliability
  - Operating guides employed by system operators
  - Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources Location of Network Resources described in subsection (v) above 10 year projection of system expansions or upgrades Transmission System maps that include any proposed expansions or upgrades Thermal ratings of Eligible Customer's Control Area ties with other Control Areas; and
- (vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year
- (vii) A statement signed by an authorized officer from or agent of the Network Customer attesting that all of the network resources listed pursuant to Section 29.2(v) satisfy the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission

service under Part III of the Tariff; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program; and

(viii) Any additional information required of the Transmission Customer as specified in the Transmission Provider's planning process established in Attachment K.

Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgement must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new priority consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the approved standards of conduct.

# 29.3 Technical Arrangements to be Completed Prior to Commencement of Service

Network Integration Transmission Service shall not commence until the Transmitter and the Network Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement

consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider shall exercise reasonable efforts, in coordination with the Network Customer, to ensure completion of such arrangements as soon as practicable taking into consideration the Service Commencement Date.

#### 29.4 Network Customer Facilities

The provision of Network Integration Transmission Service shall be conditioned upon the Network Customer's constructing, maintaining and operating the facilities on its side of each delivery point or interconnection necessary to reliably deliver capacity and energy from the Transmission Provider's Transmission System to the Network Customer. The Network Customer shall be solely responsible for constructing or installing all facilities on the Network Customer's side of each such delivery point or interconnection.

# 29.5 Filing of Service Agreement

The Transmission Provider will file Service Agreements with the Board.

# 30 NETWORK RESOURCES

## **30.1 Designation of Network Resources**

Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. Network Resources may not include resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. Any owned or purchased resources that were serving the Network Customer's loads under firm agreements entered into on or before the Service Commencement Date shall initially be designated as Network Resources until the Network Customer terminates the designation of such

resources.

## **30.2 Designation of New Network Resources**

The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable. A designation of a new Network Resource must be made to the Transmission Provider by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

#### 30.3 Termination of Network Resources

The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider as soon as reasonably practicable, but not later than the firm scheduling deadline for the period of termination. Any request for termination of Network Resource status must be submitted to the Transmission Provider, and should indicate whether the request is for indefinite or temporary termination. A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely

terminated. A request for temporary termination of Network Resource status must include the following:

- (i) Effective date and time of temporary termination;
- (ii) Effective date and time of redesignation, following period of temporary termination:
- (iii) Identification and capacity of resource(s) or portions thereof to be temporarily terminated;
- (iv) Resource description and attestation for redesignating the network resource following the temporary termination, in accordance with Section 30.2; and
- (v) Identification of any related transmission service requests to be evaluated concomitantly with the request for temporary termination, such that the requests for undesignation and the request for these related transmission service requests must be approved or denied as a single request. The evaluation of these related transmission service requests must take into account the termination of the network resources identified in (iii) above, as well as all competing transmission service requests of higher priority.

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

# 30.4 Operation of Network Resources

The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area such that the output of those facilities exceeds its designated Network Load, plus Non-Firm Sales delivered pursuant to Part II of the Tariff, plus losses. This limitation shall not apply to changes in the operation of a Transmission Customer's Network Resources at the request of the Transmission Provider to respond to an emergency or other unforeseen condition which may impair or

degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-to-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the Network Resource's designated capacity, excluding energy delivered using secondary service or Point-to-Point Transmission Service.

## 30.5 Network Customer Redispatch Obligation

As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis.

# 30.6 Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Provider

The Network Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Network Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.

## 30.7 Limitation on Designation of Network Resources

The Network Customer must demonstrate that it owns or has committed to purchase generation pursuant to an executed contract in order to designate a generating resource as a Network Resource. Alternatively, the Network Customer may establish that execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff.

## 30.8 Use of Interface Capacity by the Network Customer

There is no limitation upon a Network Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Customer's Network Resources (or substitute economy purchases) with its Network Loads. However, a Network Customer's use of the Transmission Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.

#### 30.9 Network Customer Owned Transmission Facilities

The Network Customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider, to serve its power and transmission customers. For facilities added by the Network Customer subsequent to the Service Commencement Date under Part III of the Tariff, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities; provided however, the Network Customer's transmission facilities shall be presumed to be integrated if such transmission facilities, if owned by the Transmission Provider, would be eligible for inclusion in the Transmission Provider's annual transmission revenue requirement for Network Service. Calculation of any credit under this subsection shall be addressed in either the Network Customer's

Service Agreement or any other agreement between the Parties.

# 31 <u>DESIGNATION OF NETWORK LOAD</u>

#### 31.1 Network Load

The Network Customer must designate the individual Network Loads on whose behalf the Transmission Provider will provide Network Integration Transmission Service. The Network Loads shall be specified in the Service Agreement.

### 31.2 New Network Loads Connected With the Transmission Provider

The Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable of the designation of new Network Load that will be added to its Transmission System. A designation of new Network Load must be made through a modification of service pursuant to a new Application. The Transmission Provider will use due diligence to have a Transmitter install any transmission facilities required to interconnect a new Network Load designated by the Network Customer. The costs of new facilities required to interconnect a new Network Load shall be determined in accordance with the procedures provided in Section 32.4 and shall be charged to the Network Customer in accordance with the Transmission Expansion Policy (Attachment K).

# 31.3 Network Load Not Physically Interconnected with the Transmission Provider

This section applies to both initial designation pursuant to Section 31.1 and the subsequent addition of new Network Load not physically interconnected with the Transmission Provider. To the extent that the Network Customer desires to obtain transmission service for a load outside the Transmission Provider's Transmission System, the Network Customer shall have the option of (1) electing to include the entire load as Network Load for all purposes under Part III of the Tariff and designating Network Resources in connection with such

additional Network Load, or (2) excluding that entire load from its Network Load and purchasing Point-To-Point Transmission Service under Part II of the Tariff. To the extent that the Network Customer gives notice of its intent to add a new Network Load as part of its Network Load pursuant to this section the request must be made through a modification of service pursuant to a new Application.

#### 31.4 New Interconnection Points

To the extent the Network Customer desires to add a new Delivery Point or interconnection point between the Transmission Provider's Transmission System and a Network Load, the Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable.

# 31.5 Changes in Service Requests

Under no circumstances shall the Network Customer's decision to cancel or delay a requested change in Network Integration Transmission Service (e.g. the addition of a new Network Resource or designation of a new Network Load) in any way relieve the Network Customer of its obligation to pay the costs of transmission facilities constructed by a Transmitter and charged to the Network Customer as reflected in the Service Agreement. However, the Transmission Provider must treat any requested change in Network Integration Transmission Service in a non-discriminatory manner.

## 31.6 Annual Load and Resource Information Updates

The Network Customer shall provide the Transmission Provider with annual updates of Network Load and Network Resource forecasts consistent with those included in its Application for Network Integration Transmission Service under Part III of the Tariff including, but not limited to, any information provided under section 29.2(ix) pursuant to the Transmission Provider's planning process in Attachment K. The Network Customer also shall provide the Transmission Provider with timely written notice of material changes in any other information provided in its Application relating to the Network Customer's Network Load,

Network Resources, its transmission system or other aspects of its facilities or operations affecting the Transmission Provider's ability to provide reliable service.

# 32 <u>ADDITIONAL STUDY PROCEDURES FOR NETWORK INTEGRATION</u> <u>TRANSMISSION SERVICE REQUESTS</u>

# 32.1 Notice of Need for System Impact Study

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

# 32.2 System Impact Study Agreement and Cost Reimbursement

(i) The System Impact Study Agreement will clearly specify the Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for

- such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the service requests, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf or on behalf of a Transmitter, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 8.

## **32.3 System Impact Study Procedures**

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including, to the extent possible, an estimate of the cost of redispatch, (3) available options for installation of automatic devices to curtail service (when requested by an Eligible Customer), and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for all Eligible Customers. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement, or the Application shall be deemed terminated and withdrawn.

# 32.4 Facilities Study Procedures

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period, or as otherwise agreed to with the Network Customer. If the Transmission Provider is unable to complete

the Facilities Study in the allotted time period, the Transmission Provider shall notify the Eligible Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Eligible Customer, (ii) the Eligible Customer's appropriate share of the cost of any required Network Upgrades, and (iii) the time required to complete such construction and initiate the requested service. As soon as the Facilities Study is complete, the Transmission Provider shall make a copy of the completed Facilities Study available and tender a Service Agreement to the Eligible Customer. The Eligible Customer shall provide the Transmission Provider or Transmitter with a letter of credit or other reasonable form of security acceptable to the Transmission Provider and Transmitter equivalent to the Eligible Customer's share of the costs of new facilities or upgrades. After being tendered with a Service Agreement, the Eligible Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement and provide the required letter of credit or other form of security or the request no longer will be a Completed Application and shall be deemed terminated and withdrawn.

#### 32.5 Failure to Meet Study Deadlines

Section 19.9 outlines the Transmission Provider's actions that apply for failure to meet the 60-day study completion due diligence deadlines for System Impact Studies and Facilities Studies under Part II of the Tariff. These same requirements and penalties apply to service under Part III of the Tariff.

## 33 LOAD SHEDDING AND CURTAILMENTS

### 33.1 Procedures

Prior to the Service Commencement Date, the Transmission Provider and the Network Customer shall establish Load Shedding and Curtailment procedures pursuant to the Network Operating Agreement with the objective of responding to contingencies on the Transmission System. The Parties will implement such programs during any period when the Transmission Provider determines that a system contingency exists and such procedures are necessary to alleviate such contingency. The Transmission Provider will notify all affected Network Customers in a timely manner of any scheduled Curtailment.

#### **33.2 Transmission Constraints**

During any period when the Transmission Provider determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Provider's system, the Transmission Provider will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission Provider's system. To the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider will initiate procedures pursuant to the Network Operating Agreement to redispatch all resources available to the Transmission Provider for redispatch including Network resources on a least-cost basis without regard to the ownership of such resources. Any redispatch under this section may not unduly discriminate between a Transmitter's use of the Transmission System on behalf of its Native Load Customers and any Network Customer's use of the Transmission System to serve its designated Network Load.

# 33.3 Cost Responsibility for Relieving Transmission Constraints

Whenever the Transmission Provider implements least-cost redispatch procedures in response to a transmission constraint, the Network Customers will each bear a proportionate share of the total redispatch cost based on their respective Load Ratio Shares.

#### 33.4 Curtailments of Scheduled Deliveries

If a transmission constraint on the Transmission Provider's Transmission System cannot be relieved through the implementation of least-cost redispatch procedures and the Transmission Provider determines that it is necessary to Curtail scheduled deliveries, the Parties shall Curtail such schedules in accordance with the Network Operating Agreement.

#### 33.5 Allocation of Curtailments

The Transmission Provider shall, on a non-discriminatory basis, curtail the transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, any Curtailment will be shared by Network Customers in proportion to their respective Load Ratio Shares. The Transmission Provider shall not direct the Network Customer to Curtail schedules to an extent greater than the Transmission Provider would Curtail the Transmission Provider's schedules under similar circumstances.

# 33.6 Load Shedding

To the extent that a system contingency exists on the Transmission Provider's Transmission System and the Transmission Provider determines that it is necessary for Network Customers to shed load, the Network Customers shall shed load in accordance with previously established procedures under the Network Operating Agreement.

## 33.7 System Reliability

Notwithstanding any other provisions of this Tariff, the Transmission Provider reserves the right, consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Network Integration Transmission Service without liability on the Transmission Provider's part for the purpose of making necessary adjustments to, changes in, or repairs on its lines, substations and facilities, and in cases where the continuance of Network Integration Transmission Service would endanger persons or property. In the event of any adverse condition(s) or

disturbance(s) on the Transmission Provider's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Provider's Transmission System, the Transmission Provider, consistent with Good Utility Practice, also may Curtail Network Integration Transmission Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent damage to generating or transmission facilities, or (iii) expedite restoration of service. The Transmission Provider will give the Network Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Network Integration Transmission Service will be not unduly discriminatory relative to any Transmitter's use of the Transmission System on behalf of its Native Load Customers. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer fails to respond to established Load Shedding and Curtailment procedures.

# 34 RATES AND CHARGES

The Network Customer shall pay the Transmission Provider or Transmitter for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with the Transmission Provider's policy as approved by the Board, along with the following:

## **34.1 Monthly Demand Charge**

The Network Customer shall pay a monthly Demand Charge as specified in Attachment H.

## 34.2 Determination of Network Customer's Monthly Network Load

The Network Customer's monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with the Transmission Provider under Section 31.3) coincident with the Transmission Provider's Monthly Transmission System Peak.

## 34.3 NOT USED AT THIS TIME

## 34.4 Redispatch Charge

The Network Customer shall pay a Load Ratio Share of any redispatch costs allocated between Network Customers and the Transmission Provider pursuant to Section 33. To the extent that the Transmission Provider incurs an obligation to the Network Customer for redispatch costs in accordance with Section 33, such amounts shall be credited against the Network Customer's bill for the applicable month.

# 34.5 Stranded Cost Recovery

The Transmission Provider or a Transmitter may seek to recover stranded costs from the Network Customer pursuant to this Tariff. However, the Transmission Provider or Transmitter must separately file any proposal to recover stranded costs with the Board.

#### 34.6 Power Factor

Unless otherwise agreed, the Transmission Customer is required to maintain a power factor within the range established by the Transmitter pursuant to Good Utility Practices. The power factor requirements are specified in the Service Agreement where applicable.

In lieu of any specific power factor requirements in the relevant service agreement, the penalty for poor power factor in any month shall be charged at a rate of four (4) times the monthly firm rate for transmission service applied to the following:

90% of the maximum kVA measured in the month

less the maximum transmission billing demand in kW

The monthly rate for Network Integration is the monthly rate as noted in Attachment H and is not to include the rate for any ancillary services.

# 35 OPERATING ARRANGEMENTS

## 35.1 Operation under the Network Operating Agreement

The Network Customer and facility owner shall plan, construct, operate and maintain the facilities in accordance with Good Utility Practice and in conformance with the Network Operating Agreement.

# **35.2 Network Operating Agreement**

The terms and conditions under which the Network Customer and facility owner shall operate the facilities and the technical and operational matters associated with the implementation of Part III of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the facility owner and the respective Transmitter to (i) operate and maintain equipment necessary for integrating the facilities within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Provider and the Network Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for redispatch required under Section 33, voltage schedules, loss factors and other real time data), (iii) use software programs required for data links and constraint dispatching, (iv) exchange data on forecasted loads and resources necessary for long-term planning, and (v) address any other technical and operational considerations required for implementation of Part III of the Tariff, including scheduling protocols. The Network Operating Agreement will recognize that the Network Customer shall either (i) operate as a Control Area under applicable

guidelines of the Electric Reliability Organization (ERO), (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider, or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with another entity, consistent with Good Utility Practice, which satisfies the applicable reliability guidelines of the ERO that are subsequently adopted, with or without modification, by the Board. The Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement shall be substantially in the form as specified in Attachment G.

# **35.3 Network Operating Committee**

The Network Operating Committee (Committee) shall advise the Transmission Provider on coordinated operating criteria for the Parties' respective responsibilities under the Network Operating Agreement.

#### **SCHEDULE 1**

# Scheduling, System Control and Dispatch Service

This service is required to schedule the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. Scheduling, System Control and Dispatch Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for Scheduling, System Control and Dispatch Service are to be based on the rates set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

The charges for this ancillary service, payable monthly, are set forth below:

Point-to-Point

1) Yearly Delivery: One-twelfth of C\$ 2,924.28/MW

of Reserved Capacity per year.

2) Monthly Delivery: C\$ 243.69/MW of Reserved Capacity

per month.

3) Weekly Delivery: C\$ 56.24/MW of Reserved Capacity

per week.

4) On-Peak Daily Delivery: C\$ 11.25 /MW of Reserved Capacity

per day.

5) Off-Peak Daily Delivery: C 8.01 /MW of Reserved Capacity per day.

6) On-Peak Hourly Delivery: C\$ 0.70/MW of Reserved Capacity per hour.

7) Off-Peak Hourly Delivery: C\$ 0.33/MW of Reserved Capacity per hour.

Network Integration: C\$ 0.202/kW of Network Integration Service per

month.

On-Peak days for the service are defined as Monday to Friday.

On-Peak hours for this service are defined as time between hour ending 09:00 and hour ending 24:00 Atlantic Time, Monday to Friday.

#### **SCHEDULE 2**

# Reactive Supply and Voltage Control from Generation or Other Sources Service

In order to maintain transmission voltages on the Transmission Provider's transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the Control Area operator are operated to produce (or absorb) reactive power. Thus, Reactive Supply and Voltage Control from Generation or Other Sources Service must be provided for each transaction on the Transmission Provider's transmission facilities. The amount of Reactive Supply and Voltage Control from Generation or Other Sources Service that must be supplied with respect to the Transmission Customer's transaction will be determined based on the reactive power support necessary to maintain transmission voltages within limits that are generally accepted in the region and consistently adhered to by the Transmission Provider.

Reactive Supply and Voltage Control from Generation or Other Sources Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for such service will be based on the rates set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by the Control Area operator.

The charges for this ancillary service, payable monthly, are set forth below.

#### Point-to-Point:

1) Yearly Delivery: One-twelfth of C\$1,872.00/MW of

Reserved Capacity per year.

2) Monthly Delivery: C\$156.00/MW of Reserved Capacity per month.

3) Weekly Delivery: C\$36.00/MW of Reserved Capacity per week.

4) On-Peak Daily Delivery: C\$7.20/MW of Reserved Capacity per day.

5) Off-Peak Daily Delivery: C\$5.13/MW of Reserved Capacity per day.

6) On-Peak Hourly Delivery: C\$0.45/MW of Reserved Capacity per hour.

7) Off-Peak Hourly Delivery: C\$0.21/MW of Reserved Capacity per hour.

Network Integration: C\$0.129/kW of Network Integration Service per

month.

On-Peak days for this service are defined as Monday to Friday.

On-Peak hours for this service are defined as time between hour ending 09:00 and hour ending 24:00 Atlantic Time, Monday to Friday.

#### **SCHEDULE 3**

## **Regulation and Frequency Response Service**

Regulation and Frequency Response Service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Regulation and Frequency Response Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic generating control equipment) and by other non-generation resources capable of providing this service as necessary to follow the moment-by-moment changes in load. The obligation to maintain this balance between resources and load lies with the Transmission Provider (or the Control Area operator that performs this function for the Transmission Provider). The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The aforementioned Transmission Provider obligation to offer this service is conditional upon the Transmission Provider having sufficient visibility and control of the resources in the area in which the load is located to allow the Transmission Provider to perform its balancing function in a non-discriminatory fashion. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Regulation and Frequency Response Service obligation. The Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements. amount of and charges for Regulation and Frequency Response Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a

pass-through of the costs charged to the Transmission Provider by that Control Area operator.

The Regulation and Frequency Response Service is comprised of two components. These components are called Automatic Generation Control (AGC) and Load Following and are priced separately below.

Intra-hour performance will be monitored for specific behaviour that introduces a disproportionate burden on the Transmission Provider with respect to AGC and load following. Sanctions may be invoked. The determination of whether or not such activity is disproportionate will take into account the extent to which the offending party is already paying the Transmission Provider for, or self-supplying to the Transmission Provider, the AGC and/or load following services. This determination will give consideration to the net effect of aggregated intra-hour behaviours of Non-Dispatchable Generators before any such sanction is invoked.

**3(a) AGC:** This ancillary service is the provision of generation and load response capability, including capacity, energy and maneuverability, that responds often and rapidly to automatic control signals issued by the Control Area operator.

1) Yearly Delivery: One-twelfth of C\$99,855.95 /MW of Monthly

Obligation per year.

2) Monthly Delivery: C\$8,321.33 /MW of Monthly Obligation per month.

3) Weekly Delivery: C\$1,920.31 /MW of Monthly Obligation per week.

4) Daily Delivery: C\$384.06 /MW of Monthly Obligation per day.

There will be an adder applied to these prices when the Transmission Provider incurs extra costs. These extra costs will be limited to out-of-order dispatch costs associated with revised generation or load dispatch for the purpose of providing this ancillary service.

**3(b)** Load Following (LF): This ancillary service is the provision of generation and load response capability, including capacity, energy and maneuverability, that is dispatched within the scheduling period by the Control Area operator at frequencies and rates that are lower and slower than AGC.

1) Yearly Delivery: One-twelfth of C\$99,448.43 /MW of Monthly

Obligation per year.

2) Monthly Delivery: C\$8,287.37 /MW of Monthly Obligation per month.

3) Weekly Delivery: C\$1,912.47 /MW of Monthly Obligation per week.

4) Daily Delivery: C\$382.49 /MW of Monthly Obligation per day.

There will be an adder applied to these prices when the Transmission Provider incurs extra costs. These extra costs will be limited to out-of-order dispatch costs associated with revised generation or load dispatch for the purpose of providing this ancillary service.

# 3(c) AGC and Load Following for Non-Dispatchable Wind Power Generators

This ancillary service is the combination of AGC and Load Following service required to address the aggregate impact of non-dispatchable wind generation in the balancing area. The rate is inclusive of capacity and out-of-order dispatch costs. The Transmission Provider shall seek to minimize these costs.

# The Schedule 3(c) rate is \$0.29/MWh.

This service does not apply to generators that are exporting from the balancing area and for which dynamic scheduling occurs whereby the delivery to an adjacent balancing area is equivalent to the generator's production.

#### **SCHEDULE 4**

# **Energy Imbalance Service**

Energy Imbalance Service is provided when a difference occurs between the expected and the actual hourly injection or withdrawal from the Transmission System.

In the case of loads, including exports, Energy Imbalance is the difference between the scheduled withdrawal and the actual withdrawal of energy from the Transmission System. In the case of supply sources, including imports, Energy Imbalance is the difference between the dispatch instructions issued by the Transmission Provider and the actual injection to the Transmission System.

Energy Imbalance Service does not apply to inadvertent energy imbalances that occur as a result of actions directed by the Control Area operator to:

- Balance total load and generation for the Control Area, or a portion thereof, through the use of Automatic Generation Control;
- Maintain interconnected system reliability, through actions such as re-dispatch or curtailment:
- Support interconnected system frequency; or to
- Respond to transmission, generation or load contingencies.

Energy Imbalance Service will be settled between the Transmission Provider and the party responsible for the relevant transaction using the hourly marginal cost to the Transmission Provider of redispatch. The Transmission Provider's hourly marginal cost of redispatch is the marginal system cost.

Energy Imbalances will be monitored by the Transmission Provider Customer for both specific occurrences of inappropriate behaviour and patterns of inappropriate behaviour. Any such behaviour will be addressed by the Transmission Provider in its market monitoring role.

An optional service will be available for Non-Dispatchable Generators whereby the hourly variances in deliveries to the Transmission System of all generators that are registered to receive this service will be aggregated and the resulting net imbalance will be allocated to those contributing to the imbalance in proportion to their respective contributions. This service is available for a minimum term of one calendar month at the prior request of the generator registrant and subject to the approval of the Transmission Provider.

#### **SCHEDULE 5**

## **Operating Reserve - Spinning Reserve Service**

Spinning Reserve Service (also referred to as Contingency Reserve – Spinning) is needed to serve load immediately in the event of a system contingency. Spinning Reserve Service may be provided by generating units that are on-line and loaded at less than maximum output and by non-generation resources capable of providing this service. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Spinning Reserve Service obligation. aforementioned Transmission Provider obligation to offer this service is conditional upon the Transmission Provider having sufficient visibility and control of the resourced in the area in which the load is located to allow the Transmission Provider to perform its balancing function in a non-discriminatory fashion. Spinning Reserve Service requirements arising from contingencies in excess of an incremental threshold will be the responsibility of parties causing such large contingencies. The Incremental Reserve threshold as defined in Section 3.7 shall be established and published by the Transmission Provider. The amount of and charges for Spinning Reserve Service are set forth below. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

The charges for this ancillary service, payable monthly, are set forth below:

1) Yearly Delivery: One-twelfth of C\$99,312.59 /MW of Monthly Obligation

per year.

2) Monthly Delivery: C\$8,276.05 /MW of Monthly Obligation per month.

3) Weekly Delivery: C\$1,909.86 /MW of Monthly Obligation per week.

4) Daily Delivery: C\$381.97 /MW of Monthly Obligation per day.

There will be an adder applied to these prices when the Transmission Provider incurs extra costs. These extra costs will be limited to out-of-order dispatch costs associated with revised generation or load dispatch for the purpose of providing this ancillary service. Out-of-order dispatch costs will be calculated as the difference between the cost of serving load and the cost of serving load plus ancillaries. These costs will be charged to Transmission Customers that take this service on a pro rata share basis as a function of the quantity of the service purchased from the Transmission Provider at the time that the out-of-order dispatch occurs.

## **Supplier Obligations**

Transmission Customers that self-supply this service, and third-party suppliers, shall provide between 100 and 110% of the stated MW amount within ten minutes of notification by the Transmission Provider to activate these reserves. The reserves shall be sustainable for sixty minutes from activation.

#### **Activation of Reserves**

When a contingency occurs, the Transmission Provider will activate, at its sole discretion, sufficient reserves from (1) those under contract with the Transmission Provider, (2) those provided by Transmission Customers, (3) those contracted from third parties by Transmission Customers. Typically the activation will be done to minimize the overall cost of supplying reserves and to return the system to pre-contingency conditions within the time required by NPCC Criteria/Directories and Board approved reliability standards.

## **Operating Reserve - Supplemental Reserve Service**

Supplemental Reserve Service (also referred to as Contingency Reserve-Supplemental) is needed to serve load in the event of a system contingency; however, it is not available immediately to serve load but rather within a short period of time. Supplemental Reserve Service may be provided by generating units that are on-line but unloaded, by quick-start generation or by interruptible load or other non-generation resources capable of providing this service. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Supplemental Reserve Service obligation. The aforementioned Transmission Provider obligation to offer this service is conditional upon the Transmission Provider having sufficient visibility and control of the resourced in the area in which the load is located to allow the Transmission Provider to perform its balancing function in a non-discriminatory fashion. Supplemental Reserve Service requirements arising from contingencies in excess of an incremental reserve threshold as defined in Section 3.7 will be the responsibility of parties causing such large contingencies. The Incremental Reserve threshold shall be established and published by the Transmission Provider. The amount of and charges for Supplemental Reserve Service are set forth below. To the extent that the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

## 6(a) Operating Reserve – Supplemental (10 minute)

This ancillary service is the portion of Operating Reserve – Supplemental that is available within 10 minutes.

The charges for this ancillary service, payable monthly, are set forth below:

1) Yearly Delivery: One-twelfth of C\$64,600.60 /MW of Monthly Obligation

per year.

2) Monthly Delivery: C\$5,383.38 /MW of Monthly Obligation per month.

3) Weekly Delivery: C\$1,242.32 /MW of Monthly Obligation per week.

4) Daily Delivery: C\$248.46 /MW of Monthly Obligation per day.

There will be an adder applied to these prices when the Transmission Provider incurs extra costs. These extra costs will be limited to out-of-order dispatch costs associated with revised generation or load dispatch for the purpose of providing this ancillary service. Out-of-order dispatch costs will be calculated as the difference between the cost of serving load and the cost of serving load plus ancillaries. These costs will be charged to Transmission Customers that take this service on a pro rata share basis as a function of the quantity of the service purchased from the Transmission Provider at the time that the out-of-order dispatch occurs.

### **Supplier Obligations**

Transmission Customers that self-supply this service, and third-party suppliers, shall provide between 100 and 110% of the stated MW amount within ten minutes of notification by the Transmission Provider to activate these reserves. The reserves shall be sustainable for sixty minutes from activation.

#### **Activation of Reserves**

When a contingency occurs, the Transmission Provider will activate, at its sole discretion, sufficient reserves from (1) those under contract with the Transmission NEW BRUNSWICK POWER CORPORATION OPEN ACCESS TRANSMISSION TARIFF 101 SCHEDULE 6

Provider, (2) those provided by Transmission Customers, (3) those contracted from third parties by Transmission Customers. Typically the activation will be done to minimize the overall cost of supplying reserves and to return the system to pre-contingency conditions within the time required by NPCC Criteria/Directories and Board approved reliability standards.

## 6(b) Operating Reserve – Supplemental (30 minute)

This ancillary service is the portion of the Operating Reserve – Supplemental that is available within 30 minutes.

The charges for this Ancillary Service, payable monthly, are set forth below:

1) Yearly Delivery: One-twelfth of C\$64,600.60/MW of Monthly Obligation

per year.

2) Monthly Delivery: C\$5,383.38/MW of Monthly Obligation per month.

3) Weekly Delivery: C\$1,242.32/MW of Monthly Obligation per week.

4) Daily Delivery: C\$248.46/MW of Monthly Obligation per day.

There will be an adder applied to these prices when the Transmission Provider incurs extra costs. These extra costs will be limited to out-of-order dispatch costs associated with revised generation or load dispatch for the purpose of providing this ancillary service.

Out-of-order dispatch costs will be calculated as the difference between the cost of serving load and the cost of serving load plus ancillaries. These costs will be charged to Transmission Customers that take this service on a pro rata share basis as a function of the quantity of the service purchased from the Transmission Provider at the time that the out-of-order dispatch occurs.

## **Supplier Obligations**

Suppliers who offer 30-Minute Reserve services shall provide between 100 and 110% of the stated MW amount within thirty minutes of being notified by the Transmission Provider to activate these reserves. These reserves shall be sustainable for sixty minutes from activation.

#### **Activation of Reserves**

When a contingency occurs, the Transmission Provider will activate, at its sole discretion, sufficient reserves from (1) those under contract with the Transmission Provider, (2) those provided by Transmission Customers, (3) those contracted from third parties by Transmission Customers. Typically the activation will be done to minimize the overall cost of supplying reserves and to return the system to pre-contingency conditions within the time required by NPCC Criteria/Directories and Board approved reliability standards.

## Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at the sum of the applicable charges set forth below:

1) Yearly delivery: one-twelfth of the demand charge of

C\$ 25,671.24/MW of Reserved Capacity per year.

2) **Monthly delivery**: C\$ 2,139.27/MW of Reserved Capacity

per month.

3) Weekly delivery: C\$ 493.68/MW of Reserved Capacity

per week.

4) On-Peak Daily delivery: C\$ 98.74/MW of Reserved Capacity per day.

5) Off-Peak Daily delivery: C\$ 70.33/MW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

- Discounts: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.
- 7) On-Peak days for this service are defined as Monday to Friday.
- 8) **Resales**: The rates and rules governing charges and discounts stated above NEW BRUNSWICK POWER CORPORATION OPEN ACCESS TRANSMISSION TARIFF 104 SCHEDULE 7

	shall not apply to resales of transmission service, combe governed by section 23.1 of the Tariff.	ompensation for	which shall
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#### Non-Firm Point-To-Point Transmission Service

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery**: C\$ 2,139.27/MW of Reserved Capacity per month.
- 2) Weekly delivery: C\$ 493.68/MW of Reserved Capacity per week.
- 3) On-Peak Daily delivery: C\$ 98.74/MW of Reserved Capacity per week.
- 4) Off-Peak Daily delivery: C\$ 70.33/MW of Reserved Capacity per day.
  - The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.
- 5) On-Peak Hourly delivery: The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed C\$ 6.17/MWh.
- Off-Peak Hourly delivery: The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed C\$ 2.93/MWh. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.
- 7) **Discounts**: Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately

posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

- 8) On-Peak days for this service are defined as Monday to Friday.
- 9) On-Peak hours for this service are defined as time between hour ending 09:00 and hour ending 24:00 Atlantic Time, Monday to Friday.
- 10) Resales: The rates and rules governing charges and discounts stated above shll not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

**Non-Capital Support Charge Rate** 

The Non-Capital Support Charge Rate is an OM&A related carrying charge and shall

include, without limitation, both direct and indirect OM&A expense. This rate is

calculated as the OM&A (direct and indirect) component of the Transmitter's revenue

requirement divided by the total plant (fixed assets) upon which the revenue

requirement is based. This rate is applied to assets for which the transmission

customer has been assigned an obligation to make support payments to the

transmission provider. A direct assignment facility for the interconnection of a generator

that is paid for by the Transmission Customer but maintained by the Transmitter is one

such example. The rate is as follows:

**Non-Capital Support Charge Rate = 5.32%** 

The capital charges that are subject to support for a particular Transmission Customer

are to be identified in the respective connection agreement.

Calculation of the support rate:

OM&A

C\$ 54.0 million/year

Fixed Assets (Gross Book Value)

C\$ 1,015.4 million/year

OM&A ÷ Fixed Assets

5.32%

This rate will be updated from time to time upon approval of the Board and will be used

to calculate the support payments for capital charges that are subject to support

payments.

## **Residual Uplift**

The Residual Uplift provides a periodic settlement of various Transmission Provider expenses and revenues that are not reflected in other schedules in this OATT. The net value of these expenses and revenues can be either positive or negative in any given settlement period.

The Residual Uplift shall be calculated for each settlement period in accordance with the Transmission Provider's electricity business rules.

The Transmission Customer shall pay (or be paid) the Residual Uplift to the (by the) Transmission Provider in accordance with the Transmission Provider's Electricity Business Rules.

## ATTACHMENT A

## Form of Service Agreement for Firm Point-To-Point Transmission Service

1.0	This Service Agreement, dated as of, is entered into, by and
	between (the Transmission Provider), and ("Transmission Customer").
2.0	The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
3.0	The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
4.0	Service under this agreement shall commence on the later of (I) the requested service commencement date, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Board. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
6.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Provide	er:			
Transmission Custor	ner:			
Company Name:		 	 	
Billing Contact:				
Address:		 		
_			 	
Telephone:			 	
Fax:			 	
Email				
Company Code			 	
DUNS			 	
Administrative				
Contact:		 	 	
Address:				
_			 	
Telephone:				
Fax:		 	 	
Email		 	 	

7.0 The Tariff is incorporated herein and made a part hereof.

executed by their respective authorized officials.

# Specifications For Long-Term Firm Point-To-Point **Transmission Service**

Start Date	:
Terminati	on Date:
Description	n of capacity and energy to be transmitted by Transmission Pro
including	he electric Control Area in which the transaction originates.
Point(s) o	Receipt:
Delivering	
	Reservation at Point(s) of Receipt:
Point(s) o	Delivery:
Receiving	Party:
	Reservation at Point(s) of Receipt:

_	Designation of party(ies) subject to reciprocal service obligation:
_	Name(s) of any Intervening Systems providing transmission service
	Service under this Agreement may be subject to some combination charges detailed below. (The appropriate charges for individual transaction be determined in accordance with the terms and conditions of the Tariff.)
	Transmission Charge:
	System Impact and/or Facilities Study Charge(s):
	Direct Assignment Facilities Charge:
	Ancillary Services Charges:

## **ATTACHMENT A-1**

## Form Of Service Agreement For The Resale, Reassignment Or Transfer Of **Point-To-Point Transmission Service**

1.0	This Service Agreement, dated as of, is entered into, by and between (the Transmission Provider), and (the
2.0	Assignee).  The Assignee has been determined by the Transmission Provider to be an
2.0	The Assignee has been determined by the Transmission Provider to be an Eligible Customer under the Tariff pursuant to which the transmission service rights to be transferred were originally obtained.
3.0	The terms and conditions for the transaction entered into under this Service Agreement shall be subject to the terms and conditions of Part II of the Transmission Provider's Tariff, except for those terms and conditions negotiated by the Reseller of the reassigned transmission capacity (pursuant to Section 23.1 of this Tariff) and the Assignee, to include: contract effective and termination dates, the amount of reassigned capacity or energy, point(s) of receipt and delivery. Changes by the Assignee to the Reseller's Points of Receipt and Points of Delivery will be subject to the provisions of Section 23.2 of this Tariff.
4.0	The Transmission Provider shall credit the Reseller for the price reflected in the Assignee's Service Agreement or the associated OASIS schedule.
5.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

	smission Provider:	_	
		_	
Assiç	gnee:	_	
		_	
6.0	The Tariff is incorporated here	— ein and made a part	hereof.
	ITNESS WHEREOF, the Partie uted by their respective authorize		Service Agreement to be
Trans	smission Provider:		
Ву:			
	Name	Title	Date
Ву:	Name	 Title	 Date

# Specifications For The Resale, Reassignment Or Transfer of Long-Term Firm Point-To-Point Transmission Service

1.0	Term of Transaction:
	Start Date:
	Termination Date:
2.0	Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.
3.0	Point(s) of Receipt:
	Delivering Party:
4.0	Point(s) of Delivery:
	Receiving Party:
5.0	Maximum amount of reassigned capacity:
6.0	Designation of party(ies) subject to reciprocal service obligation:

char	ice under this Agreement may be subject to some combination of ges detailed below. (The appropriate charges for individual transaction etermined in accordance with the terms and conditions of the Tariff.)
8.1	Transmission Charge:
8.2	System Impact and/or Facilities Study Charge(s):
8.3	Direct Assignment Facilities Charge:
8.4	Ancillary Services Charges:

## ATTACHMENT B

## Form Of Service Agreement For Non-Firm Point-To-Point Transmission Service

1.0	This Service Agreement, dated as of, is entered into, by and between (the Transmission Provider), and
	(Transmission Customer).
2.0	The Transmission Customer has been determined by the Transmission Provider to be a Transmission Customer under Part II of the Tariff and has filed a Completed Application for Non-Firm Point-To-Point Transmission Service in accordance with Section 18.2 of the Tariff.
3.0	Service under this Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer.
4.0	The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
5.0	The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Non-Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
6.0	Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated below.

Transmission Prov	ider:		
Transmission Cust	omer:		
Company Name:			
Billing Contact:			
Address:		 	
Telephone:		 	
Fax:		 	
Email		 	
Company Code		 	
DUNS			
Administrative			
Contact:		 	
Address:			
Telephone:			
Fax:		 	
Email			

7.0	7.0 The Tariff is incorporated herein and made a part hereof.				
	ITNESS WHEREOF, the Parties ted by their respective authorized		Service Agreement to be		
Transı	mission Provider:				
Ву:	Name	Title	 Date		
Transı	mission Customer:				
Ву:	Name	Title	 		

#### ATTACHMENT C

## Methodology to Assess Available Transmission Capability

The Transmission Provider is responsible for calculating the Total Transfer Capabilities (TTCs) and Available Transfer Capabilities (ATCs) for identified interfaces internal and external to New Brunswick. The Transmission Provider calculates TTC and ATC values for seven different interfaces with New Brunswick as follows:

- New England
- Nova Scotia
- Northern Maine
  - o Maine Public Service
  - Eastern Maine Electric Cooperative
- Prince Edward Island
- Quebec
  - Hydro-Quebec HVDC
  - o Hydro-Quebec Radial

It is mandatory that the methodologies used by the Transmission Provider for determining TTCs and ATCs are in compliance with the following NERC reliability standards approved by the New Brunswick Energy and Utilities Board:

- MOD-001-1a Available Transmission System Capability
- MOD-004-1 Capacity Benefit Margin
- MOD-008-1 TRM Calculation Methodology
- MOD-029-1a Rated System Path Methodology.

As required by MOD-001-1a and MOD-029-1a, the Transmission Provider is responsible for:

 Establishing and maintaining an Available Transfer Capability Implementation Document (ATCID) to describe the methodology used for determining required TTC and ATC values.

- Making the ATCID document available to neighbouring entities and utilities that the Transmission Provider coordinates TTC and ATC activities with.
- Providing notification to neighbouring entities and utilities prior to implementation of a new or revised ATCID.

The Transmission Provider posts its TTC and ATC values in accordance with its OASIS Terms and Conditions (Attachment P).

#### ATTACHMENT D

## Methodology for Completing a System Impact Study

#### Scope

A System Impact Study may be performed by the Transmission Provider to determine whether the Transmission Service requested by an Eligible Customer can be accommodated using the existing Transmission System. The study will identify any system constraints or impairments that would likely occur on the Transmission System and any redispatch options, within New Brunswick, which may be available to accommodate the requested service. The study may examine potential constraints in other Control Areas. The System Impact Study would be performed at the Eligible Customer's expense. A System Impact Study does not evaluate options associated with facilities expansion or network upgrades.

#### Assessment of the Need

The Transmission Provider will make an assessment whether a System Impact Study is required to determine if the requested service can be accommodated. In making this assessment, the Transmission Provider will rely on operating experience and available technical information. The Eligible Customer will be advised of the result of this assessment as follows:

- A System Impact Study is not required because the available information is sufficient to make a decision whether to approve or reject the requested service; or
- A System Impact Study is required before making a decision on the requested service.

### **Guidelines and Principles**

In order to perform a System Impact Study the Transmission Provider will develop system models for the known transmission system, including appropriate representation of load and generation for the time frame during which the Transmission Service is requested. These models will include existing agreements and other pending Transmission Service Requests. These models may include the representation of neighboring systems using the NPCC library of base cases as required.

The study may include load flow, short circuit, stability, loss evaluation, economic and other analyses as appropriate and will be conducted according to the following:

- The Transmission Provider and Transmitter criteria and guidelines for operation and planning.
- NPCC criteria and guidelines for design and operation of interconnected power systems.
- Board approved planning and operating standards.
- Good Utility Practice.

#### **Action Following the Completion**

Based on the outcome of the System Impact Study, the Transmission Provider will notify the Eligible Customer of one of the following findings:

- The requested service can be accommodated without additional operating measures or new facilities.
- 2. There are system constraints or impairments that may be avoided by system redispatch within New Brunswick. The Eligible Customer is responsible for any additional cost incurred as a result of implementing such redispatch options.

- 3. The requested service can be accommodated by changing the operating procedures and/or securing Transmission Service in another Control Area. The Eligible Customer shall be responsible for contacting the other Control Area to determine the general availability of such operating procedures or services.
- 4. The requested service cannot be accommodated unless new facilities are added and/or upgrades are made to the Transmission System. The Transmission Provider shall tender a Facilities Study agreement to the Eligible Customer within thirty (30) days of the completion of the System Impact Study. The scope of the Facilities Study will include an estimate of the cost of the new facilities and/or upgrades to the Transmission System, and an estimate of the time required to complete such construction and initiate the requested service. The Eligible Customer has to execute the Facilities Study agreement within fifteen (15) days, otherwise the request for service shall be deemed withdrawn.
- 5. The requested service cannot be accommodated because of equipment limitations or it can cause unacceptable system performance or reliability risks. The Eligible Customer can decide whether to modify or cancel the request.

## ATTACHMENT E

## **Point-to-Point Customers**

The index of Point-To-Point Transmission Service Customers, including the date of service, is posted on the Transmission Provider's website.

## ATTACHMENT F

## **Service Agreement for Network Integration Transmission Service**

1.0	This Service Agreement, dated as of	, is entered into,
	by and between	(the Transmission
	Provider), and Customer).	(Transmission
2.0	The Transmission Customer has been determined by the T to have a Completed Application for Network Integration under the Tariff.	
3.0	The Transmission Customer has provided to the Trans Application deposit in accordance with the provisions of Sec	
4.0	Service under this agreement shall commence on the later service commencement date or (2) the date on which Interconnection Equipment, any Direct Assignment Facil Upgrades are completed, or (3) the date on which a Agreement is executed and all requirements of said Agreement or (4) the date the Board approves providing the or (5) such other date as it is under this agreement shall te as mutually agreed upon by the parties.	n construction of all ities and/or Network Network Operating greement have been service, if applicable,
5.0	The Transmission Provider agrees to provide and the Transmission Provider agrees to take and pay for Network Integration Service in provisions of Part III of the Tariff and this Service Agreement	accordance with the
6.0	Any notice or request made to or by either Party re Agreement shall be made to the representative of the oth below.	

	Transmission Provider:			
	Transmission Customer:			
7.0	Term of Transaction:			
	Start Date:			
	Termination Date:			
8.0	General description of power and energy to be transmitted by Transmissic Provider including the electric Control Area in which the transaction originates.	on		

iled de ctions:	escription	of each	Network	Resource	, including	any	ope
	-	of the T		n Custome	er's anticipa	ated us	se (
ription	of any tra	nsmission	system o	vned or cor	ntrolled by t	he Tra	nsm

Nar	me (s) of any intervening transmission provid	ders:				
-						
	Network Integration Service Customer's o	bligation for the following servi				
will	be provided as follows:					
Sou	Source					
1.	Scheduling, System Control and Dispatch	NBPC				
2.	Reactive Supply and Voltage Control	NBPC				
3.	Regulation and Frequency Response					
3a.	AGC					
3b.	Load Following					
4.	Energy Imbalance					
5.	Spinning Reserve					
6.	Supplemental Reserve					
6a.	Contingency Reserve - Supplemental					
6b.	30 Minute Reserve	- <u></u> -				
7.	Real Power Losses					

<sup>\*</sup> The Transmission Customer will propose the source of services 3a, 3b, 4, 5, 6a, 6b, and 7. The Transmission Provider will confirm the acceptability of each source of supply proposed by the Transmission Customer.

15.0	Description of required Direct Assignment Facilities:				
16.0	In addition to the charge for Transmission Service and charges for Ancillary Services as set forth in the Tariff, the customer will be subject to the following charges:				
16.1	System Impact and/or Facilities Study Charge (s):				
16.2	Direct Assignment Facilities Charges:				
16.3	Redispatch Charges:				

16.4	Network Upgrade Charges:				
17.0	The Tariff is incorporated her	ein and made a part	hereof.		
	ITNESS WHEREOF, the Pauted by their respective authori		this Service Agreement to be		
	Transmission Provider:				
Ву:	Name	Title	 Date		
	Transmission Customer:				
Ву:	Name	 Title	 Date		

#### **ATTACHMENT G**

## **Network Operating Agreement**

## **Applicability**

This Operating Agreement applies to Network (and Point-to-Point) Loads that are physically connected to the Transmission Provider's Transmission System.

Network Customers that are not physically connected to the Transmission Provider's Transmission System will be governed by the interconnection agreement between the Transmission Provider and the owner of the transmission system facilities to which the Network Customer is physically connected.

## **NETWORK OPERATING AGREEMENT**

Between

(Insert Transmitter's Name)

And

(Insert Facility Owner Name)

(Date)

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## **NETWORK OPERATING AGREEMENT**

THIS AGRE	EMENT MADE THIS	day of _		
BETWEEN:	(CAPS)  Head Office in the City of _	-	-	_
	Transmitter",			
	- and -			
	(CAPS)		a duly	incorporated
	Company having its Head Offi	ce in the City of		
	hereinafter called "the Custome	er",		
the County	Both of which may hereinafter the Customer is the owner and of premises"), and requires a co	operator of facilities in the Province	s located in of New B	, runswick (the
AND WHER	REAS the Transmitter has agr	eed to provide coi	nnection se	rvice and the
Customer ha	as agreed to take connection	service from the	Transmitter	for aforesaid
Customer pro	emises pursuant to the terms an	d conditions of this i	Agreement.	
NOW THER	EFORE this Agreement witness	seth that in consider	ration of the	premises and
the mutual o	covenants and agreements here	einafter set forth, th	ne Parties h	ereto mutually
covenant and	d agree as follows:			

DEFINITIONS
In this Agreement, unless the context otherwise requires, the following definitions
shall apply:
Transmitter Facilities
The Transmitter Facilities are the transmission system of the Transmitter and the
necessary kV extension thereof constructed to the Delivery Point, together
with the Metering Equipment, all of which are provided, owned and maintained by
the Transmitter.
Customer Facilities
The Customer Facilities are the facilities beyond the Delivery Point which are
provided, owned and maintained by the Customer and, in addition, shall be
deemed to also include any Rental Facilities.
Without limiting the generality of the foregoing, these facilities include
Delivery Point
The Delivery Point is the place at which the Customer Facilities and the Transmitter
Facilities are connected together, specifically

\_\_\_\_\_ as shown on the

\_\_\_\_\_ attached hereto and marked Appendix A.

Transmitter's Substation Diagram No. \_\_\_\_\_ dated

## **Good Utility Practice**

Good Utility Practice is a practice consistent with the reasonable and practicable operation of electric utilities in Canada.

## **Metering Equipment**

The Metering Equipment is the meters and associated equipment approved by Industry Canada or such other authority as may from time to time be charged with such responsibility, required for measuring power and energy supplied to the Customer under this Agreement.

## **Metering Point**

The Metering Point is the point at which all power and energy supplied to the Customer is measured. The Metering Point is at or near the Delivery Point.

#### **Rental Facilities**

The Rental Facilities are those facilities provided, owned and maintained by the Transmitter for which the Customer pays a Rental Charge.

Without	limiting	the	generality	of	the	foregoing,	these	facilities	include

Transmitter

### II. CONNECTION SERVICE

## 2.1 Characteristics of Connection Service

Subject to Article 3.1 hereof the transmission connection service supplied to the Customer at the Delivery Point shall be three phase alternating current at the nominal frequency of 60 hertz and at a nominal voltage of volts between phases.

### 2.2 Metering

In this section where reference is made to Industry Canada it shall also be deemed to include any other authority as may from time to time be charged with the responsibility for metering.

The Transmitter shall, at its cost, provide, install and maintain the Metering Equipment. If requested by the Transmitter, the Customer shall provide at the Customer's expense adequate space and facilities on the Customer's premises satisfactory to the Transmitter for the installation and maintenance of the Metering Equipment.

If, at any time, the Metering Equipment is found to be inaccurate by more than the limits specified by Industry Canada or other authorized standard setting body, the Metering Equipment or any faulty components thereof shall be promptly replaced, repaired or readjusted by the Transmitter at the Transmitter's expense.

The Transmitter may modify or replace the Metering Equipment from time to time.

#### III. GENERAL OBLIGATIONS OF THE CUSTOMER

## 3.1 Customer's Equipment

The Customer shall be responsible for installing and maintaining protective equipment to protect the Customer Facilities from variations in frequency and voltage or from temporary delivery of other than three phase power.

The Customer agrees that all motors, transformers and other equipment utilized in its installation shall conform with Canadian Standards Association requirements, and shall be wired, connected and operated so as not to produce detrimental effects on the Transmitter Facilities which will adversely affect the adequacy of service to the Customer and other customers.

### 3.2 Electrical Harmonics

Electrical harmonics shall be considered as components of current or voltage whose frequency is some multiple of the 60 hertz fundamental frequency. The Customer shall assume the responsibility of direct loss by reason of damages to the Transmitter Facilities caused by electrical harmonics produced in the Customer Facilities provided that such liability shall be restricted to the repair or, if necessary, the replacement or modification of such Transmitter Facilities which have been damaged or made necessary by reason of electrical harmonics produced in the Customer Facilities. The Customer agrees to take all reasonable steps to limit the effects of any electrical harmonics which may be produced in the Customer Facilities to a level tolerable to the Transmitter. The Transmitter shall cooperate with the Customer in the investigation of any harmonic problems and the analysis of corrective measures. The Transmitter reserves the right to discontinue the supply of power and energy where in its opinion the reliability of the Transmitter Facilities is threatened by the presence of electrical harmonics.

#### 3.3 Load Balance

The Customer agrees to take and use the three phase current supplied through the the Transmitter's transmission system in such manner that in no case shall the difference between any two phases be greater than 5%. The Customer, upon written instructions from the Transmitter, shall so adjust its load as to comply with this requirement.

## 3.4 Right-of-Way

The Customer agrees to provide and arrange for the necessary right-of-way on the Customer's premises for the appropriate Transmitter Facilities and Rental Facilities free of cost to the Transmitter during the continuance of this Agreement, renewal or renewals thereof, and for six (6) months thereafter, so that the Transmitter, its subcontractors, their respective employees and agents may enter upon the same and build, install and erect, construct, operate, repair and remove any or all of the appropriate Transmitter Facilities or Rental Facilities, all of which shall not unduly interfere with the Customer's operations and which in the opinion of the Transmitter are necessary for the delivery of transmission service under this Agreement. Any changes which the Customer may request the Transmitter to make in the location of the Transmitter Facilities or Rental Facilities shall be made at the expense of the Customer.

#### 3.5 Right of Access

One or more representatives of the Transmitter appointed for this purpose may, at any reasonable time during the continuance of this Agreement, have access to the Customer's premises for the purposes of but not limited to meter reading, inspection, operation, testing, adjustment, repair, alteration, reconstruction, and removal of the Transmitter Facilities, or for the purpose of inspecting the Customer Facilities and taking records there from as required for compliance with this Agreement.

## 3.6 Preparation for the Receipt of Transmission Connection Service

The Customer agrees to prepare for the receipt and use of transmission connection services hereunder and to supply, erect and maintain at its own risk, cost and charge, all transformers, switchgear, protective equipment, as well as poles, wires, hardware, cables, fittings, insulators and materials used in distribution on the Customer's premises beyond the Delivery Point.

In addition to the aforegoing the Customer agrees to provide, own and maintain beyond the Delivery Point any equipment which the Transmitter deems necessary from time to time during the continuance of this Agreement for the safety and security of operation of the Transmitter Facilities in accordance with Good Utility Practice. All the said equipment of the Customer shall be subject to the approval of the Transmitter and shall be installed, maintained and operated in a manner satisfactory to the Transmitter.

## 3.7 Customer's Responsibility for the Transmitter Facilities on its Premises

All Transmitter Facilities and Rental Facilities furnished and installed on the Customer's premises shall remain the property of the Transmitter and should such Transmitter Facilities or Rental Facilities be destroyed or damaged from any cause due to the Customer, or from any peril originating on the Customer's premises, the Customer shall reimburse the Transmitter for the full cost of repair or replacement.

#### 3.8 Insulation Contamination

Contaminants shall be considered as foreign matter or substance deposited on insulation components which reduce the value and effectiveness of the insulation and may consist of dust, particles or chemicals either dry or in solution.

The Customer shall be responsible for the correction of contamination problems occurring on the Customer Facilities. If contaminants caused by activities on the

Customer's premises accumulate on the Transmitter Facilities which, in the opinion of the Transmitter affect the insulating characteristics, the Customer shall bear the cost of removal of contamination or replacement of insulation components as deemed necessary by the Transmitter. Interruptions of service occasioned to correct contamination problems shall be, where possible, arranged at a time mutually agreeable to the Customer and the Transmitter. Notwithstanding the above the Transmitter reserves the right to discontinue the supply of power and energy at its discretion where the reliability of its system is threatened by the presence of contaminants on insulation components.

### IV. GENERAL RIGHTS AND OBLIGATIONS OF TRANSMITTER

## 4.1 Interruption of Supply

The Transmitter shall provide a regular and uninterrupted delivery of transmission connection services under the terms of this Agreement but shall have no liability to the Customer for loss or damage from any failure of delivery in respect of any abnormality, delay, interruption or other partial or complete failure in the said delivery when such loss or damages are caused by something that is beyond the ability of the Transmitter to control by reasonable and practicable effort, said effort to be measured by Good Utility Practice as defined herein.

The Transmitter shall have the right to suspend the delivery of transmission connection services for the purpose of safeguarding life or property, for making repairs, changes, renewals, improvements or replacements to the Transmitter Facilities or Rental Facilities but all such interruptions shall be of a minimum duration consistent with the exigencies of the case, and when possible, arranged for a time least objectionable to the Customer, and such interruptions shall not release the Customer from its obligation to pay all charges pursuant to this Agreement during the period of any such suspensions and to resume the use of

transmission connection services when the service is restored. When such repairs, changes, renewals, improvements or replacements are of a non-emergency routine nature that can be scheduled in advance by the Transmitter, the Transmitter or its designate shall advise the Customer in writing at least two (2) weeks in advance of such work. The Customer shall be responsible for any additional costs incurred by the Transmitter resulting from performing, at the Customer's request, such repairs, changes, renewals, improvements or replacements outside of normal working hours.

## 4.2 Special or Consequential Damages

Notwithstanding any other provision in this contract, the Transmitter shall not be liable to the Customer for special or consequential damages, or damages for loss of use, arising directly or indirectly from any breach of this contract, fundamental or otherwise, and in particular but not limited to interruption of supply or from any acts or omissions of its employees.

## 4.3 Removal of Equipment at Termination

The Transmitter shall, at the termination of this Agreement, or within six (6) months thereafter, remove from the Customer's premises the appropriate Transmitter Facilities and Rental Facilities which may have been installed by the Transmitter for the supply of transmission connection service under this Agreement, but after the expiration of said six (6) months period all such Transmitter Facilities and Rental Facilities shall be at the risk of the Transmitter.

## V. ENVIRONMENTAL CONTAMINATION

#### 5.1 Environmental Contamination

The Customer shall comply with all environmental laws and regulations with respect to Customer Facilities.

The Customer shall indemnify and save harmless the Transmitter from all loss, expense, damage or injury to persons or property inclusive of the Transmitter's property arising as a result of environmental damage, contamination and/or injury due to or caused by the Customer.

The Transmitter shall comply with all environmental laws and regulations with respect to the Transmitter Facilities.

The Transmitter shall indemnify and save harmless the Customer from all loss, expense, damage or injury to persons or property inclusive of Customer property arising as a result of environmental damage, contamination and/or injury due to or caused by the Transmitter.

Both parties agree to immediately notify the other of any environmental incident that occurs relative to the terms of this Agreement.

### VI. FORCE MAJEURE

## 6.1 Force Majeure

Force Majeure is any cause beyond the reasonable control of the Transmitter including, without limiting the generality of the foregoing, failure of facilities, flood, earthquake, storm, nuclear disaster, lightning, fire, epidemic, war, riot, civil disturbance, labour trouble, strike, sabotage and restraint by court or public authority which by exercise of Good Utility Practice the Transmitter could not be expected to avoid. If the Transmitter is rendered unable to fulfill any obligations by reason of Force Majeure, it shall be excused from performing to the extent it is prevented from so doing but it shall exercise Good Utility Practice to correct such inability with all reasonable dispatch, and it shall not be liable for injury, damage

or loss resulting from such inability. However, settlement of strikes and labour disturbances shall be wholly within the discretion of the Transmitter.

#### VII. INDEMNITY

## 7.1 Indemnity by the Customer

The Customer shall indemnify and save harmless the Transmitter from all loss, damage or injury to persons or property sustained by any third person or persons, including employees of the Transmitter and the Customer, arising from the operation and maintenance of the Customer Facilities, unless such loss, damage or injury results from negligence or willful misconduct of the Transmitter, its agents, servants or employees, provided that the Customer shall be given prompt notice of any such claim and shall have the exclusive right to defend and settle any such claim with the full cooperation of the Transmitter in such defense.

## 7.2 Indemnity by the Transmitter

The Transmitter shall indemnify and save harmless the Customer from all loss, damage or injury to persons or property sustained by any third person, or persons, including employees of the Customer and the Transmitter, arising from the operation and maintenance of Transmitter Facilities, unless such loss, damage or injury results from negligence or willful misconduct of the Customer, its agents, servants or employees, provided that the Transmitter shall be given prompt notice of any such claim and shall have the exclusive right to defend and settle any such claim with the full cooperation of the Customer in such defense.

### VIII. TERM OF AGREEMENT

### 8.1 Term of Agreement

The Initial Term of this Agreement shall commence on the day and year first above written and continue in force for a period of five (5) years. This Agreement shall terminate on the expiration of the Initial Term provided one of the Parties hereto has given at least twelve (12) months written notice to the other Party. Should neither of the Parties hereto give notice to terminate this Agreement at the expiration of the Initial Term, this Agreement shall continue in full force and effect provided however that it may be terminated at any time after the expiration of the Initial Term by either Party having first given at least twelve (12) months written notice of termination to the other Party.

### IX. FORMER AGREEMENTS

## 9.1 Former Agreements

This Agreement and all attached schedules constitute the entire agreement between the parties to this Agreement pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, negotiations and discussions whether oral or written, of the parties and there are not warranties, representations or other agreements between the parties in connection with the subject matter of this Agreement except as specifically set forth herein.

## X. SUCCESSORS OF PARTIES

## 10.1 Successors and Assigns

This Agreement shall extend to and be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns. The obligations under and the benefit of this Agreement shall not be assignable by either party without the consent in writing of the other party. Such consent shall not be unreasonably withheld.

#### XI. MODE OF DELIVERY

## 11.1 Mode of Delivery

Except as provided by this Agreement or otherwise agreed from time to time, any notice or other communication which is required by this Agreement to be given in writing, shall be sufficiently given if delivered personally to a senior official of the Party for whom it is intended or faxed or e-mailed or sent by registered mail, addressed as follows:

- a) In the case of the Company, to:Attention:
- b) In the case of the Transmitter, to: or delivered to such other person or faxed or e-mailed or sent by registered mail to such other address as either Party may designate for itself by notice given in accordance with this Section.

Any notice or other communication so mailed shall be deemed to have been received on the fifth business day following the day of mailing or if faxed or emailed shall be deemed to have been received on the same business day as the date of the fax or e-mail or if delivered personally shall be deemed to have been received on the date of delivery.

#### XII. ADMENDMENT

#### 12.1 Amendment

If at any time during the continuance of this Agreement the parties shall deem it necessary or expedient to make any alteration or addition to this Agreement it shall be done by way of a written agreement which shall be supplemental and form part of this Agreement.

### XIII. SEVERANCE

### 13.1 Severance

It is intended that all provisions of this Agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or a part of one is found void, void able or unenforceable for any reason whatsoever, then the particular provision or provisions or part of the provision shall be deemed severed from the remainder of this Agreement and all other provisions shall remain in full force.

## XIV. GOVERNING LAW

## 14.1 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of New Brunswick and/or any applicable Federal laws.

IN WITNESS WHEREOF the Parties hereto have caused their corporate seals to be hereto affixed and these presents to be executed by their duly authorized officers respectively.

TRANSMITTER	CUSTOMER

#### ATTACHMENT H

## **Network Integration Service Rates and Network Load Determination**

 The rate charged for regular Network Integration Service will be C\$ 1.77/kW-m.

This rate shall be applied to the Network Integration Service provided for Network Load.

- 2. Network Load is the sum of the loads at all Points of Delivery and the load at each Point of Delivery is the greater of:
  - (i) the monthly net non-coincident peak demand during on-peak hours, and
  - (ii) 71% of the monthly net non-coincident peak demand during off-peak hours, where the non-coincidence peak demand is subject to adjustment to account for load transfers confirmed and agreed to by the Transmission Provider.

On-Peak hours for this service are defined as the time between hour ending 8:00 and hour ending 23:00 Atlantic Time, Monday to Friday.

## **ATTACHMENT I**

## **Network Integration**

The index of Network Integration Transmission Service Customers is posted on the Transmission Provider's website.

## **ATTACHMENT J**

**Generation Connection Agreement** 

## **GENERATION CONNECTION AGREEMENT**

## **BY AND BETWEEN**

[Insert Company Name]

### AND

[Insert Company Name]
[Insert Generator name/location, if applicable]

[Insert Date]

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#### **GENERATION CONNECTION AGREEMENT**

This Agreement made in duplicate of the [Xth] day of [Inset month & Year].

**BETWEEN** 

[insert Transmitter name here], a body corporate under the laws of New Brunswick, having its head office in the City of , , hereinafter called "the Transmitter".

- and -

[Insert Company Name], a body corporate under the laws of New Brunswick, having its head office in [Insert place name], hereinafter called "the Customer".

WHEREAS the Customer is developing generation facilities ("the Facility") to be located [Insert location]

**WHEREAS** the Customer desires to connect the Facility with the Transmission System owned by Transmitter; and

**WHEREAS** the Customer requires certain Connection Service from Transmitter for its Generation, as provided in this Agreement; and

**WHEREAS** additions, modifications, and upgrades must be made to certain existing transmission facilities owned by Transmitter in order to accommodate the connection; and

WHEREAS, the Parties have agreed to execute this mutually acceptable Generation Connection Agreement in order to provide certain Connection Service to Customer; to provide for the additions, modifications, and upgrades to Transmitter's Transmission System; and to define the continuing responsibilities and obligations of the Parties; all in accordance with the terms and conditions set forth herein.

**NOW THEREFORE**, in order to carry out the transactions contemplated in this Agreement, and in consideration of the mutual representations, covenants and agreements hereinafter set forth, the Parties hereto, intending to be legally bound hereby, agree as follows:

#### **SECTION 1.0 - DEFINITIONS**

Wherever used in this Agreement with initial capitalization, the following terms will have the meanings specified or referred to in this Section 1. Terms used in this Agreement that are not defined herein will have the meanings customarily attributed to such terms by the electric utility industry in Canada. The words "shall" and "will" are used interchangeably throughout the Agreement, the use of either connotes a mandatory requirement and the use of one or the other shall not mean a different degree of right or obligation for either Party. All references to Sections and Schedules herein refer to those attached to this Agreement unless otherwise stated.

- 1.1 "Affiliate" means, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.
- 1.2 "Agreement" means this Generation Connection Agreement between Transmitter and Customer, including all Schedules attached hereto, as the same may be amended, supplemented, or modified in accordance with its terms.
- 1.3 "Board" means the New Brunswick Energy and Utilities Board (NBEUB) under the authority of the *Public Utilities Act* (New Brunswick), as amended.
- 1.4 "Business Day" is Monday to Friday, inclusive, excluding statutory holidays for the Transmission Provider.
- 1.5 "Customer" means [Insert Customer's Name], and includes its permitted successors and assigns.

- 1.6 "Customer-Owned Connection Facilities" means those facilities or portions of facilities owned by Customer and identified as Customer-Owned Connection Facilities in Schedule A.
- 1.7 "Direct Assignment Facilities," also referred to as Transmitter-Owned Connection Facilities, means the facilities or portion of facilities that are constructed for the sole use/benefit of Customer, and installed and owned by Transmitter under this Agreement. Such facilities are identified as Direct Assignment Facilities in Schedule A, as it may be amended, which is attached hereto and incorporated herein by reference. The costs of such Direct Assignment Facilities are identified in Schedule D (with respect to Revenue Meters) and Schedule I (with respect to all other Direct Assignment Facilities).
- 1.8 "Effective Date" means the date first above written.
- 1.9 "Emergency" means any abnormal system condition that requires automatic or immediate manual action to prevent or limit loss of transmission facilities or generation supply that could adversely affect the reliability of the electric system.
- 1.10 "EMS" means Energy Management System.
- 1.11 "Environmental Laws" means all federal, provincial, and local laws (including common laws), regulations, rules, ordinances, codes, decrees, judgments, binding directives, or judicial or administrative orders relating to protection, preservation or restoration of human health, the environment, or natural resources, including, without limitation, laws relating to releases or threatened Releases of Hazardous Substances into any media (including, without limitation, ambient air, surface water, groundwater, land, surface and subsurface strata) or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, release, transport or handling of Hazardous Substances.

- 1.12 "Event of Default" has the meaning set forth in Section 8.1.
- 1.13 "Facilities Study" means the studies conducted pursuant to the Facilities Study Agreement [Insert date], between Transmitter, and Customer, as it may be amended from time to time in accordance with its terms.
- 1.14 "Facility" means all of Customer's generation plant and equipment with the net capacity as designated in Schedule A, including Customer-Owned Connection Facilities, identified in Schedule A, located at the Facility site.
- 1.15 "Facility Station Service" means all electric service requirements used in connection with the operation and maintenance of the entire Facility, including, without limitation, stand-by, supplemental, maintenance, and interruptible power, and delivery of such service.
- 1.16 "Generation" means the electrical capacity, energy, and/or ancillary services produced at the Facility.
- 1.17 "Good Utility Practice" means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.18 "Hazardous Substances" means (a) any petro-chemical or petroleum products, oil or coal ash, radioactive materials, radon gas, asbestos in any form that is or could become friable, urea formaldehyde foam insulation and transformers or

other equipment that contain dielectric fluid which may contain levels of polychlorinated biphenyls; (b) any chemicals, materials, or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "contaminants," or "pollutants" or words of similar meaning and regulatory effect; or (c) any other chemical, material, or substance, exposure to which is prohibited, limited or regulated by applicable Environmental Laws.

- 1.19 "Index Rate" means the Bank of Montreal Prime Rate, in effect on the date such interest begins to accrue. The "Bank of Montreal Prime Rate" is defined as the prime rate per annum as charged by the Bank of Montreal in Fredericton, on the last banking day of the month for which payment is due.
- 1.20 "Connection Facilities" means the Customer-Owned Connection Facilities and the Transmitter-Owned Connection Facilities collectively.
- 1.21 "Connection Facilities Support Charge Capital Related" (IFSC-CR) means a charge determined or modified by Transmitter, to the extent applicable, to recover all capital costs related to the facilities installed or modified after the Effective Date, required for providing Connection Service. The IFSC-CR shall be defined in Schedule I of this Agreement, as such Schedule I may be amended or superseded from time to time. The current IFSC-CR is stated in Schedule I of this Agreement.
- 1.22 "Connection Facilities Support Charge Non-Capital Related" (IFSC-NCR) means a charge, as accepted or approved by the relevant jurisdictional authority, to the extent applicable, and which may be modified by Transmitter, as accepted or approved by the relevant jurisdictional authority, to the extent applicable, designed to enable Transmitter to recover all on-going non-capital support costs related to the facilities required for providing Connection Service.

The current IFSC-NCR is stated in Schedule D (metering facilities) and Schedule I (non-metering facilities) of this Agreement.

- 1.23 "Connection Service" means all of the services and facilities provided for in this Agreement, including, without limitation, integrating the output of the Facility into Transmitter's Transmission System in accordance with the terms, conditions and limitations, if any, resulting from the System Impact Study and Facility Study conducted by Transmitter on behalf of Customer, as well as to enable the Facility to receive any Facility Station Service, but does not include Transmission Service. Connection Service will not include connection of any other generating unit owned by Customer, wherever located, to the Transmission System.
- 1.24 "Maintain" means construct, reconstruct, install, inspect, test, repair, replace, operate, patrol, maintain, use, modernize, upgrade, or other similar activities.
- 1.25 "Measurement Canada" means the Government of Canada agency established to administer and enforce the *Electricity and Gas Inspection Act* (Canada).
- 1.26 "Metering Point(s)" is the location of any and all meter(s), as approved by Transmitter, used to determine the amount of Generation delivered to the Transmission System.
- 1.27 "NERC" means North American Electric Reliability Corporation or its successor.
- 1.28 "NPCC" means Northeast Power Coordinating Council, a Regional reliability council of NERC.
- 1.29 "Other Direct Assignment Facilities" means the Transmission Upgrades used by Transmitter or others (network facilities) which would not be necessary except to interconnect and/or accommodate the output of the Customer's Facility and that

are identified as Other Direct Assignment Facilities in Schedule A. The Customer's cost responsibility for Other Direct Assignment Facilities will be determined in accordance with Attachment K of the Transmitter's OATT and set forth in Schedule I of this Agreement.

- 1.30 "Parties" means Transmitter and Customer collectively; individually a "Party".
- 1.31 "Point of Connection" means the point where Customer's Facility connects to Transmitter's Transmission System, as specified in Schedule A to this Agreement.
- 1.32 "Point of Receipt" means the point on Transmitter's Transmission System where capacity and energy generated by Customer will be received, as specified in Schedule A.
- 1.33 "Primary" means power equipment such as transformers, circuit breakers, rigid or strain bus and other equipment operating above 600 volts.
- 1.34 "Project Finance Holder" means (a) any holder, trustee or agent for holders, of any Project Financing, or (b) any purchaser from the Facility to which Customer has granted a mortgage or other lien or interest as security for some or all of Customer's obligations under the corresponding power purchase agreement.
- 1.35 "Project Financing" means (a) one or more loans and/or debt issues, together with all modifications, renewals, supplements, substitutions or replacements thereof, the proceeds of which are used to finance or refinance the costs of the Facility, any alteration, modification, expansion or improvement to the Facility, the purchase and sale of the Facility, or the operations of or at the Facility; (b) a power purchase agreement pursuant to which Customer's obligations are secured by a mortgage, lien or other interest in the Facility; or (c) loans and/or debt issues secured by mortgage, lien or other interest in the Facility.

- 1.36 "Province" means the Province of New Brunswick.
- 1.37 "Release" means release, spill, leak, discharge, dispose of, pump, pour, emit, empty, inject, leach, dump, or allow to escape into or through the environment.
- 1.38 "Revenue Meters" means all kWh, kVARh, kVAh and demand meters, pulse isolation relays, pulse conversion relays, and associated metering equipment to measure the transfer of energy between the Parties.
- 1.39 "RTG" means a Regional Transmission Group, a voluntary organization of transmission owners, transmission users and other entities formed to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis, as established from time to time.
- 1.40 "RTU" means remote terminal unit.
- 1.41 "Secondary Systems" means control or power circuits that operate at or below 600 volts, ac or dc, including but not limited to any hardware, control or protective devices, cables, conductor, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers where signals or energy may be used by Customer, Transmitter, or their Affiliates.
- 1.42 "Switching, Tagging, and Grounding Rules" has the meaning set forth in Transmitter's Transmission & Distribution Operating Regulations 1998 and Standard Work Methods Manual as amended from time to time, which are hereby incorporated by reference as if fully set forth herein.
- 1.43 "System Operator" means the New Brunswick System Operator, the Crown Corporation by virtue of the *Electricity Act* (New Brunswick) that is responsible for the planning, security and reliable operation of the Transmission System

- including switching and tagging, system monitoring, voltage and VSR control, notifications, transmission services and system restoration.
- 1.44 "Tag List" means the list of Customer personnel approved by Customer who meet the requirements to switch, tag, and ground electrical equipment set forth in Transmitter's Transmission & Distribution Operating Regulations 1998, Standard Work Method's Manual, and Corporate Safety Manual 1999, or their successor.
- 1.45 "Terminal" means a transmission voltage level substation, switching station or generating station.
- 1.46 "Transmission Service" means the services provided to Customer by Transmitter on the Transmission System.
- 1.47 "Transmission Upgrades" or "Transmission System Upgrades" means the transmission facilities designed, constructed, procured, and installed by Transmitter under this Agreement. The cost responsibility for such Transmission System Upgrades is set forth in Schedule I.
- 1.48 Transmission System" means all of Transmitter's transmission equipment and facilities owned, controlled or operated by Transmitter. This Transmission System may be a subset of the transmission system for which the Tariff provides open access.
- 1.49 "Transmitter" means New Brunswick Power Transmission Corporation, and includes its permitted successors and assigns.
- 1.50 "Transmitter's Open Access Transmission Tariff" or "Transmitter's OATT" or "Transmitter's Tariff" or "Tariff" means the Open Access Transmission Tariff approved by the Board for use of the Transmission System, as such Tariff may

be amended from time to time. The Tariff may provide for open access with respect to assets owned by more than one Transmitter and may be the responsibility of the System Operator rather than the Transmitter.

- 1.51 "Transmitter-Owned Connection Facilities," also referred to as Direct Assignment Facilities, means facilities or portions of facilities used by Customer, or jointly used by Customer and Transmitter, that are owned by Transmitter. The Direct Assignment Facilities are identified in Schedule A.
- 1.52 "Uplift Charges" means the congestion cost responsibilities (including, without limitation, replacement generation costs and redispatch costs), as determined and billed by the System Operator resulting from (a) temporary operating restrictions being imposed or facilities being temporarily removed from service to accommodate upgrades required to interconnect Customer, or (b) an Transmitter facility taken out of service for any reason to accommodate Customer during its construction or installation, or during construction or installation Transmitter is performing on Customer's behalf.

#### **SECTION 2.0 - TERM**

#### 2.1 Term

Subject to required regulatory authorizations, including, without limitation, approval or acceptance by the Board, this Agreement will become effective as of the Effective Date when executed by the Parties. This Agreement will remain in effect for [Insert number] years from the Effective Date or until (a) terminated on an earlier date by mutual agreement of the Parties, (b) terminated by Customer upon ninety (90) days' prior written notice to Transmitter, or (c) otherwise terminated in accordance with the terms of this Agreement. Transmitter will file

this Agreement with the Board as a Rate Schedule within the meaning of *Public Utilities Act* (New Brunswick).

## 2.2 Good Faith Negotiations Upon Occurrence of Certain Events

For Connection Service, if the Province, the Board, the System Operator, or Transmitter implements a change in any law, regulation, rule or practice; which change affects or is reasonably expected to affect the provision of Connection Service to Customer pursuant to this Agreement, the Parties agree to negotiate in good faith to determine the amendments, if any, to this Agreement reasonably necessary to conform the terms of Connection Service to such change, and where practicable will provide Customer with thirty (30) days advance notice. Provided that if the Parties are unable to reach agreement as to what, if any, amendments are necessary, Customer will have the right to oppose such filing and participate fully in any proceeding established by the Board to address such amendment.

#### 2.3 Survival of Certain Provisions

The applicable provisions of this Agreement will continue in effect after expiration or termination hereof to the extent necessary to provide for final billings, billing adjustments and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect. These provisions include, without limitation, Section 3.2 ("Licence and Access Rights"), Section 10 ("Indemnification"), Section 11 ("Insurance"), and Section 19 ("Limitation of Liability"). Upon termination of this Agreement prior to the expiration of the Term, Customer shall pay any removal and abandonment costs Transmitter may incur, and any associated costs, or shall continue to pay the charges set forth in Schedule I and Schedule D until the expiration of the Term.

#### 2.4 Effect of Termination

Expiration or termination of this Agreement shall not relieve Transmitter or Customer of any of its liabilities and obligations arising hereunder prior to the date expiration or termination becomes effective.

# 2.5 Construction And Installation Of Transmitter-Owned Connection Facilities and Other Direct Assignment Facilities

- 2.5.1 At Customer's expense in accordance with Section 5, Transmitter shall design, procure, and construct the Transmitter-Owned Connection Facilities and the Other Direct Assignment Facilities, in conformance with Good Utility Practice.
- 2.5.2 Expedited Design, Procurement, and Construction. Customer may request Transmitter to design, procure, and construct the Transmitter-Owned Connection Facilities and the Other Direct Assignment Facilities as expeditiously as reasonably possible and to the extent Transmitter can accommodate Customer's request without jeopardizing the reliability of the Transmission System or service to other Transmitter customers, or causing other inconveniences or disruptions to the conduct of Transmitter's business, Transmitter agrees to cooperate and work with Customer to accomplish that objective. If conditions permit, and subject to Customer's obligations herein, Transmitter will undertake expedited design, procurement, and construction activity prior to completion of the Facilities Study provided Customer pays the estimated cost of such work to Transmitter prior to Transmitter undertaking any such activities.
- 2.5.3 The Parties understand and recognize that performing any activities relating to the design, procurement, and construction of Transmitter-Owned Connection Facilities and the Other Direct Assignment Facilities in an expeditious manner prior to the completion of the Facilities Study may result in additional costs and

the procurement of equipment and/or the construction (in whole or part) of additions, modifications, or upgrades that the Facilities Study, when completed, indicates are not necessary to accommodate the connection of the Facility. Customer agrees to defend, indemnify, and hold Transmitter harmless from such risks, and to bear all costs resulting from or associated with the expedition, including those costs associated with and resulting from expediting the design, procurement, and the designing, procuring, or constructing replacement or substitute facilities, so long as such costs are not the result of Transmitter's, or its Affiliates', gross negligence or reckless or willful misconduct, provided, however, that nothing herein shall limit Customer's rights with respect to third parties.

2.5.4 <u>Disclaimer of Warranties</u>. Customer understands and agrees that the expedited design, procurement or construction activities relating to the Transmitter-Owned Connection Facilities and the Other Direct Assignment Facilities performed prior to the completion of the Facilities Study are being performed for the convenience of Customer. Customer further understands and agrees that regulatory rules and procedures as well as unanticipated and unforeseen changes may adversely impact the usefulness of any such design, procurement or construction activity. Accordingly, Transmitter makes no representations or warranties, either express or implied, regarding the need for or usefulness, as indicated by the completed Facilities Study, of any design, procurement or construction activity performed prior to the completion of the Facilities Study. Transmitter specifically disclaims any and all implied warranties, including without limitation any implied warranties of merchantability or fitness for a particular purpose, regarding any such design, procurement or construction activity performed prior to the completion of the Facilities Study, provided, however, that such disclaimer of express warranties, if any, or implied warranties is inapplicable to any design, procurement or construction activity that was undertaken by Transmitter and was subsequently identified in the Facilities Study as being necessary to accommodate the Facility's connection.

- 2.5.5 Right to Suspend or Terminate Work. Customer reserves the right, upon prior written notice to Transmitter, to suspend or terminate at any time all work by Transmitter associated with the design, procurement, or construction of the Transmitter-Owned Connection Facilities or the Other Direct Assignment Facilities, provided, however, that, if necessary, an equitable adjustment will be made to the construction schedule and the compensation to be paid to Transmitter as a result of such suspension. Customer shall be responsible for costs (a) which Transmitter incurred prior to the suspension or termination, and (b) which are attributable to the suspension or termination of the work, including without limitation, costs of closing out contracts and bringing the work to an orderly conclusion and costs of work necessary to ensure the safety of persons and property and the integrity of the Transmission System.
- 2.5.5 <u>Progress Reports.</u> Transmitter shall inform Customer, at such times as Customer reasonably requests, of the status of the construction and installation of the Transmitter-Owned Connection Facilities and Other Direct Assignment Facilities.

## 2.6 Testing

Prior to connection of the Facility to the Transmission System, Transmitter, at Customer's expense, shall test the Transmitter-Owned Connection Facilities, the Other Direct Assignment Facilities, and specify testing to be conducted by Customer and witness such testing of Customer's facilities, to ensure their safe and reliable operation in accordance with Good Utility Practice and shall, at Customer's expense, correct any situations contrary to Good Utility Practice.

# 2.7 Timely Completion

The estimated construction schedule is set forth in Schedule C hereto, a copy of which is attached hereto and incorporated by reference as if fully set forth herein, which Schedule C may be revised or amended in accordance with Section 27.0 of this Agreement. Transmitter will use commercially reasonable efforts to procure, construct, install, and test the Transmitter-Owned Connection Facilities and the Other Direct Assignment Facilities in accordance with the estimated schedule set forth in Schedule C.

2.7.2 If any of the Transmission Upgrades are not completed prior to Customer's commercial operation date, Customer may have operating studies performed, at its expense, by Transmitter, or its agent or delegate, to determine the maximum allowable output of the Facility, and Customer shall, at Transmitter determination, be permitted to operate the Facility in accordance with such study results, provided such study results and/or operation of the Facility are not inconsistent with Good Utility Practice and do not affect the reliability or safety of the Transmission System.

#### SECTION 3.0 - CONTINUING OBLIGATIONS AND RESPONSIBILITIES

#### 3.1 Connection Service and Transmission Service

3.1.1 Transmitter will provide Customer with Connection Service under the terms and conditions specified in this Agreement. Transmission Service, if any, will be provided pursuant to the provisions of the Tariff, any other applicable tariff and applicable market settlement rules and procedures. If a Transmitter facility must be taken out of service for any reason in connection with construction, installation or maintenance that Transmitter is performing at

Customer's request, Customer will be responsible for the resulting Uplift Charges.

- 3.1.1.1 Customer agrees that, when consistent with Good Utility Practice, certain operational limits, including without limitation, scheduled maintenance and other outages of Transmission System facilities and the facilities of other Transmitters, may apply to the Generation, as determined by Transmitter from time to time. When practicable the System Operator will provide reasonable notice to Customer of any operational limits that may impact Customer's Generation, but no failure to provide such notice will prevent the System Operator from so limiting Customer's Generation.
- 3.1.2 Transmitter agrees to permit Customer to interconnect the Facility, for the Term of, and under the terms and conditions specified in, this Agreement, as long as Customer continues to operate and maintain such Facility pursuant to Good Utility Practice and is not in default under this Agreement as addressed in Section 8.0. Customer will at all times Maintain the Facility consistent with Schedule B. Transmitter's Generator Technical Requirements, a copy of which is attached hereto, and incorporated by reference herein as if fully set forth herein, unless any such requirement is otherwise waived in writing by Transmitter.
- 3.1.3 Customer, or its own customers, shall be responsible for making arrangements and payments under the applicable tariffs for transmission, and ancillary services associated with the delivery of capacity and energy from the Point of Receipt.
- 3.1.3.1 Notwithstanding any other provision of this Agreement, nothing herein shall be construed as granting, conveying, relinquishing or foreclosing any rights to firm transmission, capacity, or transmission credits, that the Customer, or one or more of its customers, may be entitled to, now or in the future, as a

result of, or otherwise associated with, the transmission capacity, if any, created by any of the facilities to be paid for by Customer under this Agreement. Any such rights to firm transmission, capacity, or transmission credits for facilities constructed under this Agreement shall be consistent with the policies of the Province and the Tariff. In the event that Customer requests and purchases transmission service from Transmitter to transmit electricity from the Facility, the rate for such service(s) shall reflect whatever credits or other adjustments may be appropriate in light of the charges paid by Customer under this Agreement so as to render such rate consistent with the policies of the Province and the Tariff.

- 3.1.4 Customer is also responsible for making arrangements and payments for Customer's Facility Station Service requirements pursuant to applicable tariffs. To the extent provided by law, Customer may make arrangements with another entity for the provision of energy and generation capacity associated with Facility Station Service.
- 3.1.5 In the event Transmitter determines that any modification to Customer's existing connection for the Facility or any modification to such Facility requires an addition to or modification of the Transmitter-Owned Connection Facilities or Transmitter's Transmission System due to Good Utility Practice, Transmitter will notify Customer of the necessity of the addition or modification and the estimated costs to Customer as a result thereof.
- 3.1.6 In the event that the Transmitter-Owned Connection Facilities or the Customer-Owned Connection Facilities or the Facility is modified to allow other customers to be served from said Transmitter-Owned Connection Facilities, said Transmitter-Owned Connection Facilities, or portion thereof serving additional customers in addition to Customer, shall no longer be considered to solely benefit Customer. If said facilities are no longer considered to solely benefit Customer, Customer's cost responsibility shall

not change from that previously assessed to the Customer under this Agreement, for Connection Service and service over Transmitter-Owned Connection Facilities to deliver generation from the Facility to the Transmission System.

3.1.7 Consistent with Good Utility Practice, Customer will comply with all applicable standards and requirements, including, without limitation, maintenance outage coordination, voltage schedules, generator power factor, control and reporting of output and line flow data and major equipment status, and metering accuracy. Customer will also be obligated to comply with the System Operator's directives regarding operation during Emergency conditions.

## 3.2 Licence and Access Rights

- 3.2.1 The Point of Connection and ownership points for the Connection Facilities and the Transmission System are set forth in Schedule A.
- 3.2.2 Customer hereby grants, without cost to Transmitter, a licence (the Licence) to permit Transmitter to have such access to Customer's property as is reasonably necessary for Transmitter to Maintain its facilities and equipment and the Transmission System and to exercise its rights and carry out its obligations under this Agreement; provided, however, that when exercising such access rights, Transmitter (i) provides Customer with as much advance notice as is practical under the circumstances, (ii) will not unreasonably disrupt or interfere with the normal operations of Customer's business, (iii) adheres to the more stringent of (a) Customer's safety rules or (b) Transmitter's safety rules, and (iv) acts in a manner not inconsistent with Good Utility Practice. Customer will, at its sole cost and expense, execute such documents as Transmitter may require to enable it to establish record evidence of such Licence. For the purposes of this Section 3.2, Transmitter's

facilities and equipment will include, without limitation, all of Transmitter's metering, substation, terminals, communication, transmission and Secondary Systems facilities, suitable and sufficient meters, protective equipment, poles, towers, pipes, ducts, conduits, raceways, manholes, hand holes, riser poles, foundations, anchors, guys, braces, fittings, cross arms, wires, cables, and appurtenances for the transmission of energy, control signals, and communications located from time to time on Customer's property.

- 3.2.3 Transmitter hereby grants, without cost to Customer, a licence to permit Customer to have such access to Customer's facilities on Transmitter's property as is reasonably necessary and appropriate for Customer to Maintain the Facility and the Customer-Owned Connection Facilities in accordance with the terms and conditions of this Agreement and to exercise its rights and carry out its obligations under this Agreement.
- 3.2.3.1 When exercising such access rights, Customer shall (a) provide Transmitter with as much advance notice as is appropriate under the circumstances, (b) not unreasonably disrupt or interfere with normal operations of Transmitter's business, (c) adhere to the environmental and safety rules and procedure established by Transmitter and all applicable environmental rules and procedures, and (d) act consistent with Good Utility Practice.
- 3.2.3.2 Such access rights for access inside Transmitter's substation or terminal shall be exercised by Customer only with supervision by Transmitter. Customer shall provide Transmitter three (3) days prior notice of a request for such supervised access to Transmitter's substation and Transmitter and Customer shall mutually agree upon the date and time of such supervised access. In addition to the aforementioned requirement, in exercising such access rights, Customer shall (a) not unreasonably disrupt or interfere with normal operations of Transmitter's business, (b) adhere to the environmental and safety rules and procedure established by Transmitter and all applicable

environmental rules and procedures, (c) act consistent with Good Utility Practice, and (d) compensate Transmitter for the use of Transmitter's personnel time in supervising such substation or terminal access.

- 3.2.4 The Licence and access rights granted to Transmitter under Section 3.2.2 will remain in effect for so long as Transmitter's facilities and equipment remain in place. The licence and access rights granted to Customer under Section 3.2.3 will remain in effect for so long as Customer is utilizing the Facility for its intended commercial purpose. Neither Party's licence, and access rights may be revoked or terminated by the other Party and neither Party will take any action that would impede, restrict, diminish or otherwise interfere with any of the rights granted under Sections 3.2.2, 3.2.3 and this Section 3.2.4, provided each Party adheres to the provisions pertaining to access rights specified in this Agreement.
- 3.2.5 Notwithstanding the foregoing, should a Party decide to permanently abandon the use of any such licence and access rights or any portion of any of them, it will send to the other Party written notice of such decision and, if applicable, shall cause a release of said such licence and access right or portion thereof to be recorded in the appropriate land registry office.

The provisions of this Section 3.2 will survive expiration or termination of this Agreement.

## 3.3 Facility and Equipment Maintenance

- 3.3.1 Equipment Maintenance and Testing Obligations.
- 3.3.1.1 Customer will Maintain all of its Facility equipment and Customer-Owned Connection Facilities connected to Transmitter's Transmission System and

Transmitter will Maintain all of its Transmitter-Owned Connection Facilities connected to Customer's Facility in accordance with Good Utility Practice.

- 3.3.1.2 Customer will submit for approval by June 30<sup>th</sup> of each year, its planned annual generator maintenance schedule for the subsequent calendar year to the System Operator. The System Operator's approval shall be based on Transmitter's obligation to its customers for reliability of the Transmitter System consistent with Good Utility Practice. Once approved by the System Operator, said schedule shall be binding on both Parties. Any subsequent changes to this schedule must be approved by the System Operator. Customer will also furnish the System Operator with a non-binding five (5) year projected generator maintenance schedule by June 30<sup>th</sup> of each year for the subsequent five calendar years.
- 3.3.1.3 Upon a reasonable request by Transmitter, Customer will, at its sole cost and expense, test, calibrate, verify or validate Customer's telemetering, data acquisition, protective relay, control equipment or systems or other equipment or software pursuant to Good Utility Practice, consistent with the requirements of Schedule B, and consistent with Customer's obligation to maintain its equipment and facilities, or for the purpose of trouble shooting problems on interconnected facilities.
- 3.3.1.4 Subject to Section 3.6.1, Customer will supply Transmitter, upon Transmitter's reasonable request and at Customer's sole cost and expense, with copies of inspection reports, installation and maintenance documents, test and calibration records, verifications and validations of the telemetering, data acquisition, protective relay, or any software or other equipment that comprises or pertains to the Facility.

- 3.4 New Construction or Modifications to Transmitter's Transmission System
- 3.4.1 Unless otherwise required by law, regulation, or Good Utility Practice, Transmitter will not be required at any time to upgrade or otherwise modify the Transmission System or Connection Facilities.
- 3.4.2 Transmitter may undertake additions, modifications, or replacements of its Transmission System including, without limitation, Transmitter-Owned Connection Facilities. If such additions, modifications, or replacements might reasonably be expected to affect the Customer's operation of the Facility, as reasonably determined by Transmitter, Transmitter will, if the circumstances permit, provide thirty (30) days written notice to Customer prior to undertaking such additions, modifications, or replacements.
- 3.4.3 At the request of Transmitter, acting in accordance with Good Utility Practice, the Customer, at its expense, will modify the Customer-Owned Connection Facilities and the Facility to conform with additions, modifications, or replacements of the Transmission System or Transmitter-Owned Connection Facilities.
- 3.4.4 Customer may install, construct or modify the Facility or Customer-Owned Connection Facilities pursuant to the terms and conditions of this Agreement and applicable rules and regulations of Transmitter, NERC, NBEUB, NPCC, or other entity having jurisdictional authority over any such modifications and in accordance with Good Utility Practice.
- 3.4.5 Before Customer may install, construct or modify the Facility in any manner that changes the electrical characteristics of the Facility or modifies the Facility's Primary electrical or associated protective equipment or its Connection Facilities in any manner that could reasonably be expected to

affect Transmitter's ability to: (a) meet its service obligations under this Agreement, or (b) meet its service obligations to any Transmitter customer as both (a) and (b) are determined by Transmitter in its sole discretion exercised in a non-discriminatory manner, Customer will be required to (1) provide Transmitter with all drawings, plans, schematics, specifications and all other documentation associated with the proposed addition or modification at least sixty (60) days prior to the date upon which Customer would like to implement such installations, construction or modification; and, (2) receive Transmitter's prior written approval, which approval shall not be unreasonably withheld or delayed.

Transmitter reserves the right to require a review period that is longer than sixty (60) days, if required by Transmitter, in its sole discretion, to assess Customer's proposed modifications. Customer will not conduct any such installation, construction or modification described in Section 3.4.4 or this Section 3.4.5 without Transmitter prior written approval. Transmitter will not unreasonably withhold or delay such approval. Transmitter's review and/or approval of Customer's drawings, plans, schematics, specifications and other documentation associated with a proposed installation, construction or modification will be construed neither as confirming nor as endorsing the design, nor as any warranty as to fitness, safety, durability or reliability of the installation, construction or modification. Transmitter will not, by reason of such review or failure to review, be responsible for the specifications, strength, design detail, adequacy, capacity, or any other technical aspect of Customer's equipment, nor will Transmitter's acceptance be deemed to be an endorsement, verification, or approval of Customer's equipment. Customer will reimburse Transmitter for any and all reasonable costs and expenses that Transmitter incurs in accordance with Good Utility Practice to review such drawings, plans, schematics, specifications or other documentation.

- 3.4.6 For new generation installations or modifications that would reasonably be expected to impact Transmitter's Transmission System, Customer agrees to comply with Good Utility Practice and, as to the portion of Customer's Facility or Customer-Owned Connection Facilities being modified, with the Transmitter's Generator Technical Requirements set forth in Schedule B.
- 3.4.7 Financial Obligations Associated with Incremental Transmission Investment. If at any time subsequent to the completion of the construction of the facilities initially constructed to accommodate Customer's connection, as set forth in Schedule A upon execution of this Agreement, Customer modifies the Facility in a manner that affects the electrical characteristics of the electricity produced by the Facility, including a change in MVA capability, MW capability, MVAR capability, frequency or voltage; and (1) Transmitter is required to invest in any new transmission facilities or upgrades to existing transmission facilities as a result of such modification to maintain the Facility's connection, or (2) Transmitter incurs any other costs associated with new transmission facility additions or upgrades that are attributable to modifications to the Facility, Customer is responsible for all costs and expenses associated with such investment in accordance with Section 5 of this Agreement, including, without limitation, Uplift Charges as described in Section 3.1.1 hereof, provided, however, that Transmitter shall refund to Customer such costs to the extent that such responsibility is inconsistent with any law or regulation.
- 3.4.7.1 Transmitter will modify the Transmitter-Owned Connection Facilities as may be required by Good Utility Practice or to conform with additions, modifications, or replacements of Transmitter's Transmission System, which additions, modifications or replacements are consistent with Good Utility Practice. Without prejudice to Customer's right to challenge that it is not responsible for such costs, Customer will reimburse Transmitter for all costs and expenses associated with such modifications and all related costs, in

accordance with Section 5 of this Agreement, unless collected under a tariff or directly assigned to one or more third parties.

- 3.4.8 Financial Obligations Associated with Other Investments. If any entity other than Transmitter is required at any time to invest in any new facilities or upgrades to any existing facilities to interconnect, or accommodate the output of, the Facility, or such other entity determines that any new facilities or upgrades to existing facilities are attributable to the Facility, Customer will be responsible for making payment arrangements with such entity for any costs associated with or otherwise related to any such new or upgraded facilities.
- 3.4.9 Notwithstanding anything to the contrary set forth herein, all work performed in connection with the construction, installation, or modifications to the Facility that requires the performance of any activities on, or which may physically affect, Transmitter's Transmission System or Transmitter-Owned Connection Facilities, or any part thereof, will be performed only by the Customer (or by contractors selected by the Customer), subject to the approval of Transmitter, which will not be unreasonably withheld.

#### 3.5 Inspections

3.5.1 <u>General</u>. Each Party, at its own cost and expense (with the exception of periodic testing and inspection, as specifically provided for in Schedule B) has the right, but not the obligation, to inspect or observe the operations and maintenance activities, equipment tests, installation, construction, or other modifications to the other Party's equipment, systems, or facilities located at the Facility or any other substation or terminal being modified pursuant to this Agreement, which might reasonably be expected to affect the observing Party's operations. The Party desiring to inspect or observe will notify the

other Party in accordance with the notification procedures set forth in Section 3.13.

3.5.2 If the Party inspecting such equipment, systems, or facilities observes any deficiencies or defects, which might reasonably be expected to adversely impact the operations of the inspecting Party, the inspecting Party will so notify the other Party, and said Party will make any corrections necessitated by Good Utility Practice. Notwithstanding the foregoing, the inspecting Party shall have no liability whatsoever for any failure to give such notice, it being agreed that the owning Party will be fully responsible and liable for all such activities, tests, installation, construction or modification.

## 3.6 Information Reporting Obligations

- 3.6.1 Customer's obligations to provide information, reports, or data to Transmitter is subject to the following limitations:
  - (a) such information, reports, or data shall be subject to Section 7.1;
  - (b) Customer shall be required to provide such information, reports or data only to the extent Transmitter reasonably requires such information, reports, or data to operate, Maintain, or plan the Transmission System or the regional network pursuant to Good Utility Practice;
  - (c) Transmitter will request information, reports, and data from Customer on a basis that is not unduly discriminatory with respect to generators interconnected to the Transmission System, as necessary in Transmitter's judgment, for the purposes set forth in clause (d) below;
  - (d) Transmitter will use any information, reports, or data provided by Customer pursuant to this Agreement only for the purposes of operating, Maintaining, reporting on compliance and planning the Transmission System or the regional network pursuant to Good Utility Practice: and

(e) if and to the extent that any of the functions for which Transmitter requires certain information, reports, or data is no longer performed by Transmitter, which function has been adequately assumed by another entity such as a System Operator, Customer's provision of such information, reports, or data to the System Operator shall satisfy its corresponding obligation under this Agreement.

If Customer believes that any information, report, or data requested by Transmitter is excluded under any of the foregoing limitations, it will nevertheless provide the information, report or data pending resolution of the dispute under Section 13 if such information, report or data, in Transmitter's judgment: (i) constitutes information gathered through the means described in Section 3.6.4 or otherwise comprises real time generating information; (ii) is required as a result of, or to enable Transmitter, in a timely fashion, to respond to or prevent, any Emergency; (iii) is required to enable Transmitter in a timely fashion to Maintain the safety, reliability, stability, and integrity of the Transmission System, or to avoid endangering life or property; or (iv) is otherwise required by Transmitter (before a dispute between the Parties regarding the appropriateness of Transmitter's request can be resolved) in order for Transmitter to operate, Maintain or plan the Transmission System, pursuant to Good Utility Practice. The Parties agree to cooperate in good faith to expedite the resolution of any disputes arising under this Section 3.6.1.

3.6.2 Subject to Section 3.6.1, in order to maintain Connection Service, Customer will promptly provide Transmitter, at Customer's sole expense, with all information in Customer's possession which could reasonably be expected to impact Transmitter's Transmission System and which is necessary for Transmitter to satisfy any reporting obligations it may have to NPCC, NERC, NBEUB, or the System Operator.

- 3.6.3 Subject to Section 3.6.1, Customer will supply to Transmitter, at Customer's sole cost and expense, accurate, complete, and reliable information in response to any Transmitter requests for data or information necessary for operations, maintenance, planning, or regulatory requirements and analysis of the Transmission System. Such information may include metered values for MW, kVAR, voltage, current, amp, frequency, breaker status indication, or any other information reasonably required by Transmitter for reliable operation of the Transmission System pursuant to Good Utility Practice.
- 3.6.4 Subject to Section 3.6.1, information pertaining to generation and transmission operating parameters will be gathered by Customer, at Customer's sole cost and expense, for electronic transmittal to Transmitter using: RTU equipment, interval metering or other equivalent devices. File formats, communication protocols, frequency and timing of data transfers must be acceptable to Transmitter. Any cost to modify Transmitter's systems to accept the electronic transmittals will be at the sole cost and expense of Customer.
- 3.6.5 Notwithstanding the foregoing provisions of this Section 3.6, Transmitter may request and Customer will promptly provide, at Customer's sole cost and expense, such other information and data that Transmitter may reasonably require to carry out Transmitter's responsibilities and enforce Transmitter's rights under this Agreement.
- 3.6.6 Notwithstanding the foregoing provisions of this Section 3.6, Customer may reasonably request and Transmitter will provide, as promptly as reasonably practicable and at Customer's sole cost and expense, such other information and data that Customer may reasonably require to carry out Customer's responsibilities and enforce Customer's rights under this Agreement. This provision applies to information already in Transmitter's possession and not reasonably available from an alternate source. Nothing in this section shall

obligate Transmitter to undertake any data collection, or to perform any studies, to satisfy Customer's request.

#### 3.7 Local Services

- 3.7.1 <u>General</u>. The Parties agree that, due to the integration of certain protection and control schemes, revenue metering applications, and communication networks, it may be necessary to provide each other with the services set forth in Sections 3.8 and 3.9 below.
- 3.7.1.1 The Parties will use commercially reasonable efforts to ensure that services provided by one Party to the other Party pursuant to Sections 3.8 and 3.9 will be available at all times during the term of this Agreement. Notwithstanding the foregoing, either Party may change the services set forth in Sections 3.8 and 3.9, provided that the quality, reliability and integrity of the replacement services is equivalent to the existing services.
- 3.7.1.2 Neither Party will terminate, during the term of this Agreement, any services set forth in Sections 3.8 and 3.9 that it agrees to provide to the other Party.
- 3.7.2 Temporary Suspension of Services
- 3.7.2.1 The Party providing the services set forth in Sections 3.8 and 3.9 below will notify and obtain approval from the affected Party of any scheduled temporary suspension of services at least (5) five working days (if practical under the circumstances) in advance of such suspension. Such notification shall include an estimate of how long such suspension is likely to last and when the Party anticipates a return to normal conditions.
- 3.7.2.2 In the event of any unscheduled or forced suspension of the services set forth in Sections 3.8 and 3.9 below, the providing Party will promptly notify

the other Party first orally and then in writing. The providing Party will use all reasonable efforts to minimize the duration of said suspension.

3.7.2.3 The Parties agree to use commercially reasonable efforts to complete any repairs, modifications or corrections that are necessary to restore suspended services pursuant to Sections 3.8 and 3.9 below to the other Party as soon as reasonably practicable.

#### 3.8 Transmitter Provided Local Services

- 3.8.0 <u>Transmitter Provided Local Service</u>. Transmitter will provide the following local services.
- 3.8.1 Revenue Metering. Metering will be by meters and metering devices as set forth in Schedule D. Customer will compensate Transmitter for metering expenses in accordance with Schedule D. Transmitter will maintain, repair, or replace all Revenue Meters, conduct meter accuracy and tolerance tests, and prepare all calibration certificates required for all meters that measures energy transfers between Customer and Transmitter. Said testing and calibration of meters shall be in accordance with Transmitter's Revenue Metering Quality Assurance Program accredited by Measurement Canada. Customer may request that Transmitter provide to the Customer a copy of the calibration certificate or other pertinent documentation. Any non-routine replacement of meters will be billed to Customer and will be at Customer's sole cost and expense. Any meter upgrades will be at Customer's sole cost and expense. All Revenue Meters will be sealed, and the seal will be broken only by Transmitter.
- 3.8.2 The Parties agree that if the metering equipment and the Point of Receipt are not at the same location, electrically, the measured quantities will be compensated if requested by either Party, as set forth in Schedule D, to record delivery of electricity in a manner that accounts for energy losses

occurring between the Metering Point and the Point of Receipt both when the generating unit is delivering energy to Transmitter and when Transmitter is delivering station service power to Customer. In the event of a change of the Metering Point or Point of Receipt, the loss compensation in Schedule D, will be adjusted by Transmitter.

- 3.8.3 Subject to the provisions of the Electricity and Gas Inspection Act (Canada), if at any time, any meter is found to be inaccurate by more than 1%, or other metering equipment is found to be outside its approved nameplate accuracy ratings, Transmitter will cause such metering equipment to be made accurate or replaced at the Customer's expense. Notwithstanding that a meter inaccuracy may be less than 3% metering disputes will be resolved in accordance with the provisions of the Electricity and Gas Inspection Act (Canada). Compensation for commercial implications of said metering inaccuracies will be dealt with outside of this agreement and pursuant to the pertinent governing documents such as electricity business rules, tariffs, and contracts. Each Party will comply with any reasonable request of the other concerning the testing, calibration or sealing of meters, the presence of a representative of the other Party when the seals are broken, and other matters affecting the accuracy of measurement. Transmitter shall, when practicable, provide Customer with five (5) days' notice of such testing, calibration or adjustment and shall allow Customer to witness the same. If either Party believes that there has been a meter inaccuracy, failure or stoppage, it will promptly notify the other.
- 3.8.4 <u>Facility Station Service</u>. If Transmitter furnishes AC electric service and/or Transmission Service to Customer, this service will be metered, and Customer will pay for this service at the rates in effect at the time, pursuant to applicable tariffs, as approved by the Board or other regulatory agency having jurisdictional authority.

#### 3.9 Customer Provided Local Services

- 3.9.1 All data collected by Customer-owned RTUs at Customer's facilities, will be made available to Transmitter at no cost to Transmitter. All equipment used for RTUs and other data collection or transmission will be approved by Transmitter, whose approval will not be unreasonably withheld. Customer is responsible for all costs and expenses to install and maintain Supervisory Control and Data Acquisition (SCADA) communications between the utility EMS computer in Fredericton, New Brunswick and Customer's RTU at Customer's Facility.
- 3.9.2 Customer will, at Customer's sole cost and expense, maintain communication facilities and the RTU for continuous operations by the System Operator to monitor and control the status of the power system.
- 3.9.3 Customer will provide supervisory control and monitoring equipment, at Customer's sole cost and expense, as reasonably required to enable the System Operator to activate the dispatch of Generation, dispatch of reactive power, and generation rejection schemes, as specified in Schedule B, and to enable the System Operator to observe and monitor the power system. In addition, to the extent the Customer provides optional ancillary services the Customer will provide supervisory control and monitoring equipment, at Customer's sole cost and expense, as required for Transmitter to facilitate the provision of such services. Other orders may be given from time to time by the System Operator in an Emergency. Customer will follow all such orders issued by the System Operator; provided, however, that nothing herein shall be construed as limiting the right of Customer to be compensated for providing any interconnected operation services, or for responding to any dispatch command pursuant to mutually agreed terms or pursuant to applicable market settlement rules and procedures as may be implemented in New Brunswick and as may be amended from time to time.

- 3.9.4 <u>Line Operation Information.</u> Transmitter will require remote access to site specific line operations information at Customer's facilities. Customer will make such information available to Transmitter at no cost, as permitted in accordance with the Standards of Conduct.
- 3.9.5 <u>Voice Communications.</u> Customer will, at Customer's sole expense, provide and maintain a dedicated telephone circuit linking the Facility to the System Operator for dispatching and operational communications.

## 3.10 Emergency Procedures

- 3.10.1 Transmitter will provide Customer with prompt oral notification by telephone of Transmission System Emergencies which may reasonably be expected to affect Customer's operation of its facilities, and Customer will provide Transmitter with prompt oral notification by telephone of generation and connection equipment Emergencies which may reasonably be expected to affect Transmitter's operations. Said telephone notifications will be followed with a written report within two Business Days where practicable, describing the Emergency event and the actions taken by Transmitter.
- 3.10.2 If a Party determines in its good faith judgment that an Emergency exists which endangers or could endanger life or property, the Party recognizing the problem will take such action as may be reasonable and necessary to prevent, avoid, or mitigate injury, danger, or loss. If, however, the Emergency involves transmission, Customer will, to the extent practicable, notify the System Operator prior to performing any switching operations.
- 3.10.3 Customer and Transmitter may each, consistent with Good Utility Practice, have the System Operator take whatever actions or inactions it deems necessary during an Emergency, without liability to the other Party for such

actions or inactions, to: (i) preserve the safety of the public and personnel of Customer, Transmitter and their contractors; (ii) preserve the integrity of the Transmission System or Customer's Facility or other equipment or property; (iii) limit or prevent damage; or (iv) expedite restoration of service.

## 3.11 Service Interruptions

If the System Operator in accordance with Good Utility Practice determines, that operation of Customer's equipment is having, or reasonably could be expected to have, an adverse impact on the quality of service or interfere with the safe and reliable operation of the Transmission System or that such operation otherwise has, or reasonably could be expected to, lead to an Emergency, Transmitter may discontinue Connection Service. Unless the System Operator perceives that an emergency exists or the risk of one is imminent, Transmitter will give Customer reasonable notice of its intention to discontinue Connection Service and, to the extent practical, allow Customer suitable time to remove or mitigate the situation. Transmitter's judgment with regard to the interruption of service under this Section 3.11 shall be made pursuant to Good Utility Practice and on a non-discriminatory basis with respect to generators connected to the Transmission System. In the case of such interruption, Transmitter will immediately confer with Customer regarding the conditions causing such interruption and its recommendation concerning timely correction thereof. Transmitter may discontinue Connection Service only for so long as is necessary under Good Utility Practice and, if such discontinuation of Connection Service does not stabilize or mitigate the situation, then Transmitter shall use Good Utility Practice to restore the provision of Connection Service to Customer. In the event Connection Service is interrupted under this Section due to Customer's failure to operate and maintain the Facility pursuant to Good Utility Practice, Customer will compensate Transmitter for all costs incurred by Transmitter attributable to the interruption and restoration of Connection Service.

# 3.12 Unit Availability Notification

- 3.12.1 For unplanned events other than forced outages that affect Facility availability, the Customer will, to the extent feasible, provide immediate notice to the System Operator so that the System Operator can coordinate the outage to maintain system reliability.
- 3.12.2 For forced outages, the Customer will immediately notify the System Operator of the Facility's temporary interruption of Generation; and it will provide the System Operator, as soon as practicable, with a schedule of when Generation will be resumed.

#### 3.13 Maintenance Notification and Coordination

- 3.13.1 Scheduled Transmission System Maintenance. Transmitter will consult with Customer regarding timing of relevant scheduled maintenance of Transmitter's transmission facilities as posted on the System Operator's Open Access Same-time Information System (OASIS), in compliance with the System Operator's SOP-T07 Outage Coordination Procedure and Standards of Conduct. Transmitter will, to the extent practicable, schedule any testing, shutdown, or withdrawal of said transmission facilities to coincide with Customer's scheduled outages.
- 3.13.1.1 If Customer desires Transmitter to perform maintenance during a time period other than a scheduled outage, Transmitter will use commercially reasonable efforts to meet Customer's request as long as it will not reasonably be expected to have an adverse economic impact upon Transmitter or Transmitter's other Customers. If Customer's request has, or is reasonably expected, as determined by Transmitter in its sole judgment, to have, an adverse economic impact upon Transmitter, and Customer is willing to

reimburse Transmitter for the costs incurred by Transmitter as a result of the rescheduling, Transmitter shall use commercially reasonable efforts to comply with Customer's request.

- 3.13.1.2 In the event Transmitter is unable to schedule an outage of its facilities to coincide with Customer's schedule, Transmitter shall use commercially reasonable efforts to notify Customer, in advance, of reasons for the outage, the time scheduled for it to take place, and its expected duration. Transmitter will use commercially reasonable efforts to restore its facilities to service as soon as reasonably practicable.
- 3.13.1.3 If in the judgment of the System Operator, it is determined prior to the commencement of any planned outage that Customer's Generation is required to operate during planned maintenance, Customer will to the maximum extent financially and technically practicable, comply with such requests. Any compensation for must run generation, if any, will be pursuant to approved market rules or Transmitter and System Operator policy, as may be amended from time to time and in no event will the Transmitter be liable for any such compensation, unless specifically required by approved electricity business rules or Transmitter and System Operator policy.
- 3.13.2 <u>Local Routine Inspection and Maintenance</u>. Transmitter will provide at least eight (8) hours advance notice to Customer's Facility operator (or equivalent) by telephone before Transmitter's personnel enter Customer's facilities for routine measurements, routine inspections, and routine meter reads.

# 3.14 Safety

3.14.1 <u>General</u>. Subject to Section 9.0, the Parties agree to be solely responsible for and assume all liability for the safety and supervision of their own employees, agents, representatives, and subcontractors.

- 3.14.1.1 The Parties agree that all work performed by either Party which could reasonably be expected to affect the operations of the other Party will be performed in accordance with all applicable laws, rules, and regulations pertaining to the safety of persons or property, including without limitation, compliance with the safety regulations and standards adopted under the Occupational Health and Safety Act (New Brunswick) as amended from time to time, the Canadian Electrical Code as amended from time to time and Good Utility Practice.
- 3.14.2 <u>Switching and Tagging Procedures</u>. Each Party will comply with Transmitter's Switching, Tagging, and Grounding Rules in existence on the date of this Connection Agreement and as they may be modified by Transmitter from time to time, at all utility Primary and Secondary Systems equipment connection or demarcation points. Transmitter will notify Customer of any changes in Transmitter's Switching, Tagging, and Grounding Rules.
- 3.14.2.1 Customer, in accordance with Transmitter's Switching, Tagging and Grounding Rules, will be responsible for arranging and paying for Transmitter approved operator training, testing and certification. Certified personnel will be eligible for inclusion on a Tag List and eligible to perform Switching and Tagging functions. Customer will provide the System Operator with an up-to-date copy of Customer's Tag List as may be revised from time to time.

## 3.15 Environmental Compliance and Procedures

3.15.1 The Parties will comply with all applicable Environmental Laws which impact the ability of the Parties to meet their obligations under this Agreement.

3.15.2 The Parties will comply with all local notification and response procedures required for all applicable environmental and safety matters which impact the ability of the Parties to meet their obligations under this Agreement.

#### **SECTION 4.0 - OPERATIONS**

#### 4.1 General

The Parties agree to operate all equipment that could reasonably be expected to have a material impact on the operations of the other Party in a safe and efficient manner and in accordance with all applicable federal, provincial, and local laws, and all applicable rules, regulations, and codes of governmental agencies, Good Utility Practice, and the terms of this Agreement.

# 4.2 Customer's Operating Obligations

- 4.2.1 Except in an Emergency, Customer will request permission from the System Operator (or such Party designated by the System Operator) prior to opening or closing switching devices at the designated Point of Connection, identified in Schedule A, in accordance with applicable switching and operations procedures, which permission will not be unreasonably withheld or delayed. If Customer opens or closes a switching device in an Emergency, without requesting permission from the System Operator, Customer shall notify the System Operator immediately after taking such action.
- 4.2.1.1 Customer will carry out all switching orders from the System Operator in a timely manner.

- 4.2.1.2 Customer will keep Transmitter advised of its generator's capabilities of participation in system restoration or if it has black start capability in accordance with Schedule E (Black Start Criteria).
- 4.2.2 <u>Voltage or Reactive Control Requirements</u>. Unless otherwise agreed to by the Parties, Customer will operate its Facility with automatic voltage regulators consistent with Schedule B. The voltage regulators will control voltage at the Points of Connection when the Facility is operating consistent with the range of voltage and reactive capability set forth in Schedule H, a current copy of which is attached hereto and incorporated by reference as if fully set forth herein. Compensation to Customer, if any, for providing such reactive power and voltage support will be in accordance with applicable provisions of the Tariff, or any applicable electricity business rules and procedures.
- 4.2.2.1 When the Facility is available, Customer shall, to the extent technically practicable, comply with requests by the System Operator to deactivate the automatic voltage regulator and to adjust reactive power up to the limits defined in Schedule H, attached hereto and which is incorporated by reference as if fully set forth herein, only if such requests are required by Good Utility Practice and are necessary to maintain the safety or reliability of the Transmission System and provided further that nothing herein shall be construed as limiting the right of Customer to be compensated for providing any interconnected operation services, including but not limited to reactive power or VAR support, pursuant to mutually agreed terms or pursuant to applicable provisions of any Board-approved tariff of which Transmitter has received prior written notice, Transmitter's OATT, or any market settlement rules and procedures the Board may approve for implementation in New Brunswick, as applicable, and as may be amended from time to time.

- 4.2.2.2 If Customer's Facility is operating, and Customer fails to operate the Facility in accordance with Section 4.2.2, Transmitter may, in its reasonable discretion, provide written notice to Customer of such condition. If Customer does not commence appropriate action to correct such condition within seven (7) days of receipt of such notice or such earlier date reasonably specified by Transmitter, Transmitter may, in the event of or in order to prevent an Emergency, take necessary action at Customer's expense, to correct such condition, including the installation of capacitor banks or other reactive compensation equipment necessary to ensure the proper voltage or reactive supply at the Facility. Nothing in this Section will obligate Customer to operate the Facility beyond its design or actual capability. If Customer fails to operate the Facility as required by Section 4.2.2, Transmitter may open the connection between Customer and Transmitter, only if required by Good Utility Practice and necessary to maintain the safety and reliability of the Transmission System. Unless prohibited from doing so by the exercise of Good Utility Practice, Transmitter will endeavor to provide the Customer with as much notice as practicable of Transmitter's intent to take such action, and with an opportunity to correct the condition, before opening the connection as described in the preceding sentence.
- 4.2.2.3 Customer will promptly notify the System Operator, to the extent required by the System Operator, if the Facility reaches a VAR limit, if there is any deviation from the assigned voltage schedule, or if any automatic voltage regulator is removed from or restored to service.
- 4.2.2.4 In addition to voltage regulation, Customer will adhere to the System Operator's system restoration plans and black start criteria, if applicable, as amended from time to time. System Restoration Plans are set forth in Transmitter's System Emergency Restoration Instructions (SERI) and incorporated by reference as if fully set forth herein.

Blackstart Criteria are attached hereto as Schedule E.

- 4.2.2.5 In addition to the above, Customer will maintain its automatic frequency response controls (governor), as specified in Schedule B, in service unless otherwise agreed to by the System Operator.
- 4.2.3 If Transmitter determines that any of Customer-Owned Connection Facilities or associated equipment fail to perform as designed, or that Customer has failed to perform testing or maintenance of such equipment in accordance with the terms of this Agreement and such failure has, or could reasonably be expected to adversely impact operation of the Transmission System, Transmitter shall notify Customer in writing of such failure, its recommended corrective action, and its recommended deadline for the completion of such corrective actions. Within ten (10) days or the deadline reasonably specified by Transmitter, Customer must demonstrate to Transmitter's satisfaction that Customer has initiated such corrective action as is necessitated by Good Utility Practice. If Customer fails to demonstrate within such time period to Transmitter's satisfaction that it has initiated or completed such corrective action as is necessitated by Good Utility Practice or that no corrective action is necessitated by Good Utility Practice, Transmitter may open the connection between Customer and Transmitter; provided, however, that Transmitter may open the connection only for so long as is necessary under Good Utility Practice.
- 4.2.3.1 If Transmitter determines that a modification to any of Customer-Owned Connection Facilities or associated equipment has been made so that performance is not as originally approved by Transmitter and such performance has, or could reasonably be expected to adversely impact operation of the Transmission System, Transmitter may, if such condition is not corrected after giving Customer as much advance notice to correct the condition as is practicable under the circumstances, open the connection

between Customer and Transmitter; provided, however, that Transmitter may open the connection only for so long as is necessary under Good Utility Practice.

- 4.2.3.2 Notwithstanding anything to the contrary in this Agreement, Transmitter may immediately disconnect the Facility from Transmitter's Transmission System, if Transmitter perceives, consistent with Good Utility Practice, that the operation of Customer's equipment or Facility presents an imminent threat to the reliable and safe operation of Transmitter's Transmission System; provided, however that Transmitter may disconnect the Facility for so long as is necessary under Good Utility Practice.
- 4.2.4 Customer acknowledges that the System Operator has the right to require reduced or increased generation and/or select for generation rejection as specified in Schedule B in accordance with this Agreement. Customer will promptly comply with all such requests of the System Operator, provided such requests of the System Operator are consistent with Good Utility Practice and are made on non-discriminatory basis and provided further that nothing herein shall be construed as limiting the right of Customer to be compensated for responding to any dispatch command pursuant to mutually agreed terms or pursuant to applicable provisions of Transmitter's OATT, or any approved market settlement rules and procedures in New Brunswick, as applicable, and as may be amended from time to time.

## 4.3 Transmitter's Operating Obligations

4.3.1 <u>General</u>. All operations pertaining to Customer's generation, including start-up, shutdown and determination of hourly generation, will be coordinated by the System Operator, with Customer.

- 4.3.2 With respect to any curtailment, interruption, reduction or disconnection permitted under this Agreement, Transmitter agrees that:
  - (a) when the curtailment, interruption, reduction or disconnection can be scheduled, the System Operator will consult in advance with Customer regarding the timing of such scheduling and further notify Customer of the expected duration. The System Operator will use commercially reasonable efforts to schedule the curtailment or interruption to coincide with the scheduled outages of the Facility and, if not possible, the System Operator will use commercially reasonable efforts to schedule the curtailment or interruption during non-peak load periods. If scheduling the curtailment or interruption during non-peak load periods, or to coincide with scheduled outages of the Facility, results in increased costs to Transmitter, Customer agrees to reimburse Transmitter for such increased costs.
  - (b) when curtailment, interruption, reduction or disconnection must be made under Emergency circumstances or other circumstances which do not allow for advance notice, the System Operator will notify the Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction and, if known, its expected duration. Upon Customer's reasonable request, telephone notification will be followed by written notification;
  - (c) the curtailment, interruption, reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice and the System Operator will use commercially reasonable efforts to resolve any problems to allow Customer to return to a safe and reliable operating level as determined and authorized by the System Operator;

- (d) any such curtailment, interruption, reduction or disconnection shall be made on an equitable, non-discriminatory basis with respect to all users of the Transmission System;
- 4.3.3 Transmitter reserves the right, in accordance with Good Utility Practice, to have the System Operator specify generator requirements that impact the Transmission System, such as excitation, droop and automatic generation control, as modified from time to time on a non-discriminatory basis. Customer agrees to comply with such specifications at Customer's sole cost and expense; provided, however, nothing herein shall be construed as limiting the right of Customer to be compensated for fulfilling any such requirements pursuant to mutually agreed terms or pursuant to applicable provisions of Transmitter's OATT, or any approved market settlement rules and procedures in New Brunswick, as applicable, and as may be amended from time to time.

# **SECTION 5.0 - COST RESPONSIBILITIES AND BILLING PROCEDURES**

# 5.1 Customer's Cost Responsibility Associated with Connection Services

5.1.1 <u>Customer's Continuing Annual Costs Responsibility</u>. Customer will be responsible for all continuing costs relative to Direct Assignment Facilities, Other Direct Assignment Facilities, and Revenue Meters constructed or installed on Customer's behalf, as set forth in Schedule D (with respect to Revenue Meters) and Schedule I (with respect to all other Direct Assignment Facilities). A copy of Schedule D and Schedule I are attached hereto and incorporated by reference as if fully set forth herein.

- 5.1.1.1 <u>Customer's Annual Costs for Transmitter-Owned Connection Facilities and Other Direct Assignment Facilities</u>. Customer's annual cost associated with said Transmitter-Owned Connection Facilities and Other Direct Assignment Facilities will be as set forth in Schedule I. Transmitter will annually update the Connection Facilities Charges (IFSC-CR and IFSC-NCR), for any new or upgraded Transmitter-Owned Connection Facilities, as applicable, by applying the formula set forth in Schedule 9 of Transmitter's OATT.
- 5.1.1.2 <u>Customer's Annual Costs for Revenue Meters</u>. Customer will pay Transmitter a monthly charge for the operation, maintenance, and routine testing of Transmitter's metering devices and for the processing of electronically metered data, as set forth in Schedule D. Customer's annual cost associated with Revenue Meters will be set forth in Schedule D. Transmitter will annually update the annual charge for Revenue Meters, for any new or upgraded Revenue Meters, as applicable, by applying the formula set forth in Schedule 9 of Transmitter's OATT.
- Customer's Cost Responsibility for Design, Engineering, and Construction of Facilities. The Customer shall be responsible for the entire costs of Direct Assignment Facilities and Revenue Metering. The Customer's cost responsibility for Other Direct Assignment Facilities will be determined in accordance with Attachment K of the Transmitter OATT and set forth in Schedule I of this Agreement. Customer will pay Transmitter the Customer's proportionate share of the following charges associated with any design, engineering, procurement, construction, installation and/or testing of Direct Assignment Facilities, Other Direct Assignment Facilities, and Revenue Meters which are being or may be constructed or required pursuant to this Agreement. Reimbursable costs under this Section 5.1.2 will include, without limitation, Transmitter's labor costs; costs of materials and equipment; contractor costs; any taxes or governmental fees; Transmitter's overheads;

cost of capital, and operations, maintenance, and administrative (OM&A) expenses, and other related costs.

- (a) Customer will pay Transmitter a contribution of capital in an amount equal to the estimated cost of any such new or upgraded Direct Assignment Facilities, Revenue Metering, and Customer's proportionate share of Other Direct Assignment Facilities. Customer will reimburse Transmitter for any taxes that may be actually incurred by Transmitter as a result of a determination by Revenue Canada, that the facilities installed by a Transmitter or a portion thereof was a "contribution-in-aidof-construction." Customer will be liable to Transmitter for payment immediately upon notice from Transmitter to Customer that Revenue Canada has made such a determination.
- (b) Transmitter shall refund to Customer any sums previously paid by Customer that Transmitter is collecting under the Transmitter OATT.
- (c) Customer will pay to Transmitter, on an estimated basis, the amounts that may be due pursuant to Section 5.1.2(a) in accordance with the payment schedule set forth in Schedule C. If necessary, Transmitter shall re-estimate the amounts and will invoice Customer. Customer shall pay Transmitter for the invoiced amount within thirty (30) days of Customer's receipt of Transmitter's invoice.
- (d) All payments required under this Section 5.1.2 will be determined initially by Transmitter on an estimated basis, and then adjusted for actual costs incurred and adjusted to account for any portion of the costs of any Transmission System Upgrades previously paid by Customer that are to be recovered under the Transmitter Tariff rates, if any.

- (e) When Customer's properly allocated share of the actual construction costs resulting from Sections 5.1.2 are known, Transmitter will issue a final cost report to Customer. Transmitter will determine the difference between the estimated costs already paid by Customer and the Customer's properly allocated share of the actual costs of the additions and upgrades described in Section 5.1.2. To the extent that the Customer's properly allocated share of the actual costs of the upgrades and additions exceed the estimated cost paid by Customer, Customer will pay Transmitter an amount equal to the difference between the amount paid by Customer and the Customer's properly allocated share of the actual cost. To the extent the estimated cost exceeds the Customer's properly allocated share of the actual cost, and Customer has paid the estimated cost in full, Transmitter will refund the difference between the Customer's properly allocated share of the actual cost and the amount paid by Customer within thirty (30) days. Payments by the Parties pursuant to this Section 5.1.2 will be made pursuant to Section 5.6 of the Agreement within thirty (30) days of the date upon which Transmitter notifies Customer of the Customer's properly allocated share of the actual costs of the upgrades and additions provided, however, that Transmitter (i) may retain a reserve to cover any costs associated with the additions and upgrades that remain to be completed and/or that have not been invoiced and paid, and (ii) may retain a deposit equal to one month's estimated charges under this Agreement or Customer may provide other such security as is reasonably acceptable to Transmitter, such acceptance not to be unreasonably withheld.
- (f) If the Customer for whatever reason goes out of business or otherwise abandons the Facility and any incremental Transmission System Upgrades have already been partially or completely constructed the Customer will be responsible for reimbursing Transmitter for all of the

unrecovered costs in accordance with Section 2.5.5 of the said Transmission System Upgrades that would not have been incurred by Transmitter but for the Facility.

- 5.1.2.1 Audits. Within twelve (12) months following the issuance of a final cost report pursuant to Section 5.1.2(e), Customer may audit Transmitter's accounts and records at the offices where such accounts and records are maintained, during normal business hours and at a time mutually agreeable to the Parties. Customer shall provide Transmitter fifteen (15) days prior written notice of a request to audit pursuant to this Section 5.1.2.1 and any such audit shall be limited to those portions of such accounts and records that relate to such final cost report. Any data collection for such audit conducted pursuant to this Section 5.1.2.1 shall be performed continuously until complete and Customer shall utilize commercially reasonable efforts to complete the data collection for such audit within thirty (30) days, however, in no event shall any data collection for such audit continue for more than sixty (60) days. Transmitter reserves the right to assess a reasonable fee to compensate for the use of its personnel time in assisting any inspection or audit of its books, records or accounts by Customer or its designated agent.
- 5.1.2.2 Under this Agreement, the Customer shall not be responsible for any costs or expenses associated with the procurement, construction, testing, operation and maintenance of any modifications or upgrades to the Transmission System undertaken that are unrelated to the Facility being interconnected to the Transmission System, including, without limitation, those undertaken in order to prevent, mitigate, or otherwise remedy conditions that existed prior to, and that otherwise would have been prevented, mitigated, or remedied regardless of the Customer's connection. The Customer shall be responsible for any costs or expenses associated with the procurement, construction, testing, operation and maintenance of any modification or upgrades to the Transmission System necessary in order to prevent, mitigate, or otherwise

remedy conditions that result from the Facility being interconnected to the Transmission System whenever it is determined that such conditions need be prevented, mitigated, or otherwise remedied. Any refunds owed to the Customer by Transmitter and any payments owed to Transmitter by the Customer under this Section 5.1.2.2 shall be made in accordance with Section 5.1.2(e).

- 5.1.3 Except as specifically provided elsewhere in this Agreement, if Transmitter incurs any additional costs during the term hereof in connection with the modification, relocation, removal, retirement or abandonment in whole or in part of Customer's Facility or Transmitter-Owned Connection Facilities or Other Direct Assignment Facilities, Customer will reimburse Transmitter for all such costs on a lump sum basis or as otherwise requested by Transmitter pursuant to charges as established by Transmitter. Reimbursable costs under this Section 5.1.3 will include, without limitation, Transmitter's labor costs; costs of materials and equipment; contractor costs; any taxes or governmental fees; Transmitter's overheads; cost of capital, and OM&A expenses, and other related costs.
- 5.1.4 If Transmitter incurs any additional costs during the term hereof in connection with the construction, maintenance and operation of Transmitter-Owned Connection Facilities and Other Direct Assignment Facilities, or if Transmitter is assessed any costs that are determined to be directly attributable to Customer, Customer will reimburse Transmitter for all such costs in accordance with Attachment K of the Transmitter OATT. Said construction, maintenance and operation costs include those related to facility upgrades not identified during the initial studies but determined anytime thereafter to be necessary and directly attributable to the connection of Customer's Facility Reimbursable costs under this Section 5.1.4 shall include, without limitation, any tax liability, the cost of acquiring land for Transmitter's facilities, and fees for all permits, licences, franchises, or regulatory or other approvals.

# 5.2 Cost Responsibilities for Local Services

- 5.2.1 Customer will be responsible for the costs for services provided by Transmitter in Section 3.8.
- 5.2.2 For services provided by Transmitter which have identified prices/rates schedules set forth herein or in applicable tariffs or rate schedules, said payment will be in accord with said schedules as in effect from time to time. For services provided by Transmitter which do not have identified price/rate schedules, Transmitter will determine such charges for any such services.

## 5.3 Pre-Contract Costs

Transmitter will invoice Customer for pre-contract costs incurred by Transmitter prior to the date of execution of this Agreement. Such pre-contract costs are set forth in Schedule G.

# 5.4 Billing Procedures

With respect to any costs and expenses for which a Party is entitled to be compensated under this Agreement, the Party (the invoicing Party) shall, within a reasonable time after the first day of each month but no later than the 5<sup>th</sup> Business Day, prepare an invoice for those reimbursable services provided to the other Party under this Agreement. Any payment due to Transmitter by Customer, which may be computed according to the annual formula in Schedule, will be billed at one-twelfth (1/12) of the annual cost, each on a monthly basis or as otherwise mutually agreed to in writing by the Parties.

5.4.2 Each invoice will delineate the month in which the services were provided, fully describe the work, equipment, or services for which the costs were or are expected to be incurred, and be itemized to reflect such work, equipment or services. Payment of the invoiced amount will be due and payable by the latter of the 20<sup>th</sup> day of the month or the previous common Business Day. All payments will be made in immediately available funds payable to the invoicing Party, or by wire transfer to a bank named by the invoicing Party.

## 5.5 Payment Not a Waiver

Payment of invoices by either Party will not relieve such Party from any responsibilities or obligations it has under this Agreement, nor will it constitute a waiver of any claims arising hereunder.

### 5.6 Interest

The rate of interest on any unpaid amounts, including amounts placed in escrow, will be calculated using the Index Rate in effect from time to time, plus five percent (5%) per annum. Interest on payments by Customer made pursuant to Section 5.1.2 (e) will be calculated from the date the final cost report is issued to the date payment is mailed (registered or certified, postage prepaid). Interest on delinquent amounts will be calculated from the due date of the invoice to the date of payment. When payments are made by mail, invoices will be considered as having been paid on the date of receipt by the other Party.

# 5.7 Billing Disputes

If a Party disputes any portion of an invoice, that Party shall notify the invoicing Party in writing of any such dispute and the reason therefore. In the event of a billing dispute, each Party shall continue to perform its duties and obligations under this Agreement as long as the other Party (i) continues to

make all payments not in dispute, and (ii) if requested by the invoicing Party, pays into an escrow account the portion of the invoice in dispute, pending resolution of such dispute.

### **SECTION 6.0 - DOCUMENTATION**

### 6.1 General

- 6.1.1 Customer will provide Transmitter, and Transmitter will provide Customer, upon reasonable request, with appropriate documentation, consistent with Good Utility Practice, in the form of written test records, operation and maintenance procedures, drawings, material lists, or descriptions, when Customer installs or makes an alteration, change, or modification to its property, equipment, or facilities that could reasonably be expected to affect Transmitter, or whenever such documentation is necessary for maximizing operational efficiencies or promoting safety, reliability or environmental compliance.
- 6.1.2 Except to the extent set forth in Section 7 below, all documentation furnished to or obtained by Transmitter pursuant to this Agreement will be confidential and will be treated as proprietary information.
- In accordance with Section 3.4.5, prior to Customer constructing, installing, or performing any modifications to equipment or portions of the Facilities that are connected to Transmitter's Transmission System, or that are jointly used, operated, or maintained, and such modifications could reasonably be expected to change the electrical output or electrical characteristics of such Facilities or may require modifications to be made to Transmitter's Transmission System, Customer will submit the proposed plans to Transmitter.

- 6.1.4 Upon completion of any modifications to equipment or facilities that are connected to Transmitter's Transmission System, or that will be jointly used, operated, or maintained, but no later than ninety (90) days thereafter, Customer will, at its sole cost and expense, issue "as built" drawings to Transmitter.
- 6.1.5 Customer will be responsible for its own equipment, inspections, maintenance, construction, and modifications. Transmitter's review of, or comments on, any document provided by Customer, will not relieve Customer of its responsibility for the correctness and adequacy of the work to be performed.

# 6.2 Drawings

Each Party will be responsible for drawing updates and corrections to their respective drawings of Customer-Owned Connection Facilities and Transmitter-Owned Connection Facilities and will provide copies to the other Party as soon as practicable thereafter.

## **SECTION 7.0 - CONFIDENTIALITY**

# 7.1 Confidentiality of Transmitter

7.1.1 Subject to Section 7.1.2, Transmitter will hold in confidence, unless compelled to disclose by judicial or administrative process or other provisions of law, any and all documents and information furnished by Customer in connection with this Agreement. Except to the extent that such information or documents are (i) generally available to the public other than as a result of a disclosure by Transmitter, (ii) available to Transmitter on a non-confidential

basis prior to disclosure to Transmitter by Customer, or (iii) available to Transmitter on a non-confidential basis from a source other than Customer. provided that such source is not known, and by reasonable effort could not be known, by Transmitter to be bound by a confidentiality agreement with Customer or otherwise prohibited from transmitting the information to Transmitter by a contractual, legal or fiduciary obligation, Transmitter will not release or disclose such information to any other person, except to its employees, contractors and agents on a need-to-know basis, in connection with this Agreement who has not first been advised of the confidentiality provisions of this Section 7.1 and has agreed in writing to comply with such provisions. Transmitter will promptly notify Customer if it receives notice or otherwise concludes that the production of any information subject to this Section 7.1 is being sought under any provision of law, but Transmitter will have no obligation to oppose or object to any attempt to obtain such production. If Customer desires to oppose or object to such production, it will do so at its own expense. Transmitter may utilize information subject to this Section 7.1 in any proceeding under Section 13, or otherwise to enforce Transmitter's rights under this Agreement, subject to a confidentiality agreement with the participants or a protective order approved by an arbitrator or an administrative agency or court of competent jurisdiction.

7.1.2 The provisions of Section 7.1.1 do not apply to documents or information furnished by Customer to Transmitter, which Transmitter must provide to the System Operator. Transmitter will endeavor to ensure that all such documents or information are treated as confidential by the System Operator.

# 7.2 Confidentiality of Customer

Customer will hold in confidence, unless compelled to disclose by judicial or administrative process or other provisions of law, any and all documents and information furnished by Transmitter in connection with this Agreement. Except to the extent that such information or documents are (i) generally available to the public other than as a result of a disclosure by Customer, (ii) available to Customer on a non-confidential basis prior to disclosure to Customer by Transmitter, or (iii) available to Customer on a non-confidential basis from a source other than Transmitter, provided that such source is not known, and by reasonable effort could not be known, by Customer to be bound by a confidentiality agreement with Transmitter or otherwise prohibited from transmitting the information to Customer by a contractual, legal or fiduciary obligation, Customer will not release or disclose such information to any other person, except its employees, contractors, or agents, on a need-to-know basis, in connection with this Agreement, who has not first been advised of the confidentiality provision of this Section 7.2 and has agreed in writing to comply with such provisions. Customer will promptly notify Transmitter if it receives notice or otherwise concludes that the production of any information subject to this Section 7.2 is being sought under any provision of law, but Customer will have no obligation to oppose or object to any attempt to obtain such production. If Transmitter desires to oppose or object to such production, it will do so at its own expense. Customer may utilize information subject to this Section 7.2 in any proceeding under Section 13, subject to a confidentiality agreement with the participants or a protective order approved by an arbitrator or an administrative agency or court of competent jurisdiction.

# 7.3 Remedies Regarding Confidentiality

The Parties agree that monetary damages by themselves would be inadequate to compensate a Party for the other Party's breach of its obligations under Section 7.1 or 7.2, as applicable. Each Party accordingly agrees that the other Party will be entitled to equitable relief, to the extent permitted by law, or otherwise, if the first Party breaches or threatens to breach its obligations under Section 7.1 or 7.2, as applicable.

#### **SECTION 8.0 - DEFAULT**

## 8.1 Default

"Event of Default" shall mean any of the following events which either (a) continues for twenty (20) days after a Party's receipt of written notice of such from the other Party or, if the event cannot be completely cured within such twenty (20) day period, (b) diligent efforts to cure the event within such twenty (20) day period have not been commenced by the Party, and the event is likely curable within sixty (60) days but is not cured within sixty (60) days after a Party's receipt of written notice of such event from the other Party:

- (a) The failure to pay any amount when due;
- (b) The failure to maintain the Facility or comply with any material term or condition of this Agreement, including but not limited to any material breach of a representation, warranty or covenant made in this Agreement;
- (c) If Customer: (1) becomes insolvent; (2) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (3) makes a general assignment for the benefit of its creditors; or (4) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) The failure to provide licence or access rights described in Section 3.2, failure to execute any document provided for by Section 3.2, or an

attempt to revoke or terminate such licence or access rights as provided under this Agreement; or

- (f) The failure to provide information or data as required under this Agreement.
- 8.1.1 In an Event of Default by Customer, Transmitter shall provide written notice to any Project Finance Holders that have been identified in accordance with Section 20.2. A Project Finance Holder will have the right, in accordance with Section 15.1.2, but not the obligation, to cure any default by Customer.

## 8.2 Upon an Event of Default:

- 8.2.1 The non-defaulting Party will be entitled to payment of all sums due by the defaulting Party, together with an interest rate on all said amounts, until paid, at a rate of interest that is five percent (5%) greater than the Index Rate.
- 8.2.2 The non-defaulting Party may (1) terminate service, to the extent that termination of service does not jeopardize system reliability as determined by the System Operator; and (2) commence an action to require specific performance and exercise such other rights and remedies as it may have in equity or at law.

# 8.3 Performance of Obligations of a Non-performing Party

If either Party fails to carry out its obligations under this Agreement (the "Non-performing Party") and such failure could reasonably be expected to have an adverse impact on Transmitter's Transmission System, the Transmitter-Owned Connection Facilities, Customer-Owned Connection Facilities, the Facility, or the regional network, the other Party, following twenty (20) days' prior written notice to the Non-performing Party (except in

cases of Emergencies in which case only such notice as will be reasonably practicable in the circumstances) may, but will not be obligated to, perform the obligations of the Non-performing Party hereunder (excluding Transmitter's maintenance obligations), in which case the Non-performing Party will, not later than twenty (20) days after receipt of an invoice therefore, reimburse the other Party for all costs and expenses incurred by it in performing said obligations of the Non-performing Party hereunder (including, without limitation, costs associated with its employees and the costs of appraisers, engineers, environmental consultants and other experts retained by said Party in connection with performance of obligations of the Non-performing Party), together with interest on all said amounts, until paid, at a rate of interest that is five percent (5%) greater than the Index Rate.

## 8.4 Collection Expenses

In the event a Party is owed any overdue amounts under the terms of this Agreement, Customer or Transmitter, as applicable, will pay such Party's actual costs of collection and attempted collection, including, without limitation: (a) those expenses incurred or paid to collect or attempt to collect obligations due under or pursuant to this Agreement, (b) expenses of dealing with any person or entity in any bankruptcy proceeding, and (c) all out-of-pocket expenses incurred for its attorney and paralegal fees, disbursements, and costs, including the costs of attorneys, appraisers, engineers, environmental consultants and other experts that may be retained in connection with such collection efforts.

# 8.5 Rights Cumulative

The rights and remedies in this Section 8 and elsewhere set forth in this Agreement are cumulative and non-exclusive.

## SECTION 9.0 - DAMAGE TO EQUIPMENT, FACILITIES AND PROPERTY

# 9.1 Customer's Responsibility

Except to the extent caused by Transmitter's negligence and willful misconduct, Customer will be responsible for all physical damage to or destruction of property, equipment or facilities owned by Customer or its Affiliates, regardless of who brings the claim and regardless of who caused the damage, and Customer will not seek recovery or reimbursement from Transmitter for such damage.

# 9.2 Transmitter's Responsibility

Except to the extent caused by Customer's negligence and willful misconduct, Transmitter will be responsible for all physical damage to or destruction of property, equipment or facilities owned by Transmitter or its Affiliates, regardless of who brings the claim and regardless of who caused the damage, and Transmitter will not seek recovery or reimbursement from Customer for such damage.

## 9.3 Disputes

Any claims by either Party against the other under Section 9 are subject to the dispute resolution process described in Section 13.

### 9.4 Insurance

The obligations under this Section 9 will not be limited in any way by any limitation on either Party's insurance, and each Party waives any subrogation which any of its insurers may have against the other Party.

### **SECTION 10.0 - INDEMNIFICATION**

## 10.1 Indemnification Obligation

Subject to the limitations on and exclusions of liability set forth herein, each Party agrees to indemnify, hold harmless, and defend the other Party, its Affiliates, and their respective officers, directors, employees, agents, contractors, subcontractors, invitees and successors (collectively the Indemnitees), from and against any and all claims, liabilities, costs, damages, and expenses which may be imposed on or asserted at any time against an Indemnitee by any third party (including, without limitation, reasonable attorney and expert fees, and disbursements incurred by any Indemnitee in any action or proceeding) for or arising from damage to property, injury to or death of any person, including the other Party's employees or any third parties (collectively, the Loss), to the extent caused wholly or in part by any act or omission, negligent or otherwise, by the indemnifying Party and/or its officers, directors, employees, agents, and subcontractors arising out of or connected with the indemnifying Party's performance or breach of this Agreement, or the exercise by the indemnifying Party of its rights hereunder; provided, however, that no indemnification by a Party is required under this Section to the extent such Loss is caused by or results from the negligence or willful misconduct of the other Party or its Indemnitee(s). In the event that such Loss is the result of the negligence of both Parties, each Party shall be liable to the other to the extent or degree of its respective negligence, as determined by mutual agreement of both Parties, or in the absence thereof, as determined by the adjudication of comparative negligence.

## 10.2 Control of Indemnification

If any third party shall notify any Indemnitee of a claim with respect to any matter which may give rise to a claim for indemnification against the other Party (the Indemnifying Party) under this Section, then the Indemnitee shall notify the Indemnifying Party thereof promptly (and in any event within ten (10) Business Days after receiving any written notice from a third party). The Indemnifying Party's liability hereunder to the Indemnitee shall be reduced to the extent the Indemnifying Party is materially adversely prejudiced by the Indemnitee's failure to provide timely notice hereunder. In the event any Indemnifying Party notifies the Indemnitee within ten (10) Business Days after the Indemnitee has given notice of the matter that the Indemnifying Party is assuming the defense thereof, (i) the Indemnifying Party will defend the Indemnitee against the matter with counsel of its choice reasonably satisfactory to the Indemnitee, (ii) the Indemnitee may retain separate cocounsel at its sole cost and expense (except that the Indemnifying Party will be responsible for the fees and expenses of the separate counsel to the extent the Indemnitee reasonably concludes that the counsel the Indemnifying Party has selected has a conflict of interest), (iii) the Indemnitee will not consent to the entry of any judgment or enter into any settlement with respect to the matter without the written consent of the Indemnifying Party (which shall not be unreasonably withheld, and (iv) the Indemnifying Party will not consent to the entry of any judgment with respect to the matter, or enter into any settlement which does not include a provision whereby the plaintiff or claimant in the matter releases the Indemnitee from all liability with respect thereto, without the written consent of the Indemnitee (which shall not be unreasonably withheld). In the event the Indemnifying Party does not notify the Indemnitee within ten (10) Business Days after the Indemnitee has given notice of the matter that the Indemnifying Party is assuming the defense thereof, however, the Indemnitee may defend against the matter in any manner it may deem appropriate.

# 10.3 Recovery of Enforcement Costs

Notwithstanding any other provision of this Agreement, the indemnifying Party will pay all damages, settlements, expenses and costs, including Costs of investigation, court costs and reasonable attorneys' fees and costs the other Party incurs in enforcing this Section 10.0. Each Party agrees its indemnification obligation, as detailed under this Section 10.0, will survive expiration or termination of the Agreement.

#### **SECTION 11 - INSURANCE**

### 11.1 General

Each Party agrees to maintain at its own cost and expense, fire, liability, workers' compensation, and other forms of insurance relating to their property and facilities in the manner, and amounts, and for the durations set forth in <u>Schedule F</u>, a current copy of which is attached hereto and incorporated by reference as if fully set forth herein. Transmitter may elect to self-insure any and/or all of the obligations set forth in <u>Schedule F</u>.

## 11.2 Certificates of Insurance; Claims Made Coverage

Each Party agrees to furnish the other with certificates of insurance evidencing the insurance coverage set forth in <u>Schedule F</u>, and additional insured status. Each Party will provide documentation of all policies, in a form reasonably acceptable to the other Party.

# 11.3 Notice of Cancellation

Neither Party shall enter into a contract of insurance providing the coverage required in <u>Schedule F</u> unless the contract contains the following or equivalent clause: "No reduction, cancellation or expiration of the policy will be effective until thirty (30) days from the date written notice thereof is actually received except ten (10) days notice for non-payment." Upon receipt of any notice of material change, reduction, cancellation or expiration, the Party will immediately notify the other Party in accordance with Article 20.

### 11.4 Additional Insured

Each Party and its Affiliates will be named as additional insureds on the general liability insurance policies required in Schedule F under this Agreement; provided, however, that to the extent that a Loss is caused by or results from the negligence, recklessness or willful misconduct of a Party and/or its Affiliates (collectively the Negligent Party), the coverages provided through being an additional insured on the other Party's policy(s) shall be secondary to any other coverage available to the Negligent Party. Each Party will waive any right of recovery against the other Party for any Loss covered by a policy of the other Party on which it has been named as an additional insured to the extent such Loss is reimbursed under such policy. Where a Party is indemnifying an Indemnitee in accordance with the provisions of this Agreement, the insurance coverages of the other Party on which the indemnifying Party has been named an additional insured shall be secondary to any other coverage available to the indemnifying Party.

# 11.5 Failure to Comply

Failure of either Party to comply with the foregoing insurance requirements, or the complete or partial failure of an insurance carrier to fully protect and

indemnify the other Party or its Affiliates, or the inadequacy of the insurance, will not in any way lessen or affect the obligations or liabilities of each Party to the other.

## 11.6 Waiver of Subrogation

Each Party, on its behalf and on behalf of its Affiliates, waives any right of subrogation under its respective insurance policies for any liability it has agreed to assume under this Agreement. Evidence of this requirement will be noted on all certificates of insurance.

#### **SECTION 12 - FORCE MAJEURE**

### 12.1 Definition

An event of Force Majeure means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a Party's control. Neither the Transmitter nor the Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement.

### 12.2 Procedures

If a Party relies on the occurrence of an event or condition described above, as a basis for being excused from performance of its obligations under this

Agreement, then the Party relying on the event or condition will: (i) provide prompt written notice of such force majeure event to the other Party giving an estimation of its expected duration and the probable impact on the performance of its obligations hereunder; (ii) exercise all reasonable efforts to continue to perform its obligations under this Agreement; (iii) expeditiously take commercially reasonable action to correct or cure the event or condition excusing performance; provided that settlement of strikes or other labor disputes will be completely within the sole discretion of the Party affected by such strike or labor dispute; (iv) exercise all reasonable efforts to mitigate or limit damages to the other Party; and (v) provide prompt notice to the other Party of the cessation of the event or condition giving rise to its excuse from performance. All performance obligations hereunder, other than any payment obligation, or any and all obligations which were incurred prior to the force majeure event, will be extended by a period equal to the term of the resultant delay.

#### **SECTION 13.0 - DISPUTES**

## 13.1 Dispute Resolution

Neither Transmitter nor the Customer shall commence any proceedings against the other Party with respect to the interpretation or enforcement of this Agreement unless and until it has first referred the matter in issue for determination to two senior executives, one from each Party. If these senior executives, despite their best efforts, are unable to determine the matter within thirty (30) days of its referral to them, or such other period as the Parties may agree upon, then the Parties may refer the matter in issue to binding arbitration.

## 13.2 Arbitration

Any matter in issue between the Parties as to their rights under this Agreement may, by mutual agreement of the Parties hereto, be submitted to arbitration. Any dispute to be decided by arbitration shall be decided by a single arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within 10 days of the referral of the dispute to arbitration, the dispute shall be decided by a panel of three arbitrators, each Party to choose one arbitrator within 10 days and the two so chosen shall, within a further 10 days, select a third arbitrator to be chairman in accordance with the Arbitration Act (New Brunswick). or any re-enactment of the same. The arbitrator(s) shall be knowledgeable in the electric utility industry including electric transmission and bulk power issues and shall not have any current or past business or financial relationships with any Party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the parties an opportunity to be heard and shall generally conduct the arbitration in accordance with the provisions of the Arbitration Act (New Brunswick) and any applicable Board regulations or RTG rules. Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within 90 days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this Agreement and shall have no power to modify or change the Agreement in any manner. Subject to Section 13.3(b), the decision of the arbitrator(s) shall be conclusive, final and binding upon the Parties and the decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the provisions of the Arbitration Act (New Brunswick). The Arbitration Act (New Brunswick) shall govern the procedures to apply in the enforcement of any award made. If it is necessary to enforce such award, all costs of enforcement shall be payable and paid by the Party against whom such

award is enforced. Each Party shall be otherwise responsible for its own costs incurred during the arbitration process.

## 13.3 Referral of Dispute to the Board

Notwithstanding anything contained in this Section 13, the Customer may:

- (a) instead of proceeding through the arbitration procedures outlined in Section 13.2 above, elect to refer a dispute directly to the Board by filing a complaint with the Board in the manner set out below. The decision of the Board with respect to the matter shall be final and binding and the matter in dispute cannot thereafter proceed to the dispute resolution process;
- (b) if the Customer is dissatisfied with the results of an arbitration decision rendered pursuant to Section 13.2, refer a dispute to the Board for determination and the decision of the Board with respect to the matter shall be final and binding.

No complaint may be referred to the Board pursuant to Section 13.3 until the Dispute Resolution procedures set out in Section 13.1 have been concluded.

The Complaints filed with the Board must be in writing and must include reasons and evidence in support of the Customer's position. A copy of the complaint, together with the supporting reasons and evidence, must be filed with the Transmitter.

Board may require a complainant to provide such security for the costs incurred or to be incurred by the Board, as it considers reasonable, and such security may be forfeited to the Board if the complaint is not substantiated.

## **SECTION 14.0 – REPRESENTATIONS**

# 14.1 Representations of Transmitter

Transmitter represents and warrants to Customer as follows:

- 14.1.1 Organization. Transmitter is a statutory body created by an act of the Legislature of the Province of New Brunswick being the *Electricity Act*, having its head office in the City of Fredericton, Province of New Brunswick, validly existing and in good standing under the laws of the Province of New Brunswick and Transmitter has the requisite power and authority to carry on its business as now being conducted;
- Authority Relative to this Agreement. Transmitter has the requisite power and authority to execute and deliver this Agreement and to carry out the actions required of it by this Agreement. The execution and delivery of this Agreement and the actions it contemplates have been duly and validly authorized by the Board of Directors of Transmitter, and no other corporate proceedings on the part of Transmitter are necessary to authorize this Agreement or to consummate the transactions contemplated hereby. The Agreement has been duly and validly executed and delivered by Transmitter and constitutes a legal, valid and binding Agreement of Transmitter enforceable against it in accordance with its terms;
- 1.4.1.3 <u>Regulatory Approval</u>. Transmitter has obtained or will obtain all approvals of, and has given or will give all notices to, any public authority that are required for Transmitter to execute, deliver and perform its obligations under this Agreement;
- 14.1.4 <u>Compliance With Law and Agreements</u>. Transmitter represents and warrants that: (i) it is not in violation of any applicable law, statute, order, rule, or regulation promulgated or judgment entered by any federal, provincial

or local governmental authority, which individually or in the aggregate would adversely affect Transmitter's entering into or performance of its obligations under this Agreement; and (ii) its entering into and performance of its obligations under this Agreement will not give rise to any default under any agreement to which it is a party; and

14.1.5 Transmitter represents and warrants that it will comply with all applicable laws, rules, regulations, codes, and standards of all applicable federal, provincial, and local governmental agencies having jurisdiction over Transmitter or the transactions under this Agreement and with which failure to comply could reasonably be expected to have a material adverse effect on Customer.

# 14.2 Representations of Customer

Customer represents and warrants to Transmitter as follows:

- 14.2.1 <u>Organization</u>. Customer is a [Insert type of company], validly existing and in good standing under the laws of the Province of New Brunswick and Customer has the requisite power and authority to carry on its business as now being conducted;
- Authority Relative to this Agreement. Customer has the requisite power and authority to execute and deliver this Agreement and to carry out the actions required of it by this Agreement. The execution and delivery of this Agreement and the actions it contemplates have been duly authorized by proceedings on the part of Customer are necessary to authorize this Agreement or to consummate the transactions contemplated hereby. This Agreement has been duly and validly executed and delivered by Customer and constitutes a legal, valid and binding Agreement of Customer enforceable against it in accordance with its terms;

- 14.2.3 <u>Regulatory Approval</u>. Customer has obtained all approvals of, and given all notices to, any public authority that are required for Customer to execute, deliver and perform its obligations under this Agreement;
- 14.2.4 Compliance With Law and Agreements. Customer represents and warrants that: (i) it is not in violation of any applicable law, statute, order, rule, or regulation promulgated or judgment entered by any federal, provincial, state, or local governmental authority, which, individually or in the aggregate, would adversely affect Customer's entering into or performance of its obligations under this Agreement; and (ii) its entering into and performance of its obligations under this Agreement will not give rise to any default under any agreement to which it is a party; and
- 14.2.5 Customer represents and warrants that it will comply with all applicable laws, rules, regulations, codes, and standards of all federal, state, provincial, and local governmental agencies having jurisdiction over Customer or the transactions under this Agreement and with which failure to comply could reasonably be expected to have a material adverse effect on Transmitter.

# 14.3 Representations of Both Parties

The representations in Sections 14.1.5 and 14.2.5 will continue in full force and effect for the term of this Agreement.

#### SECTION 15.0 - ASSIGNMENT/CHANGE IN CORPORATE IDENTITY

### 15.1 General

This Agreement and all of the provisions hereof will be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns, but neither this Agreement nor any of the rights, interests,

or obligations hereunder may be assigned, except as provided for in Section 15.1.1 or Section 15.1.2 below, by either Party hereto, without the prior written consent of the other Party, which consent will not be unreasonably withheld or delayed. Any assignment of this Agreement in violation of the foregoing will be, at the option of the non-assigning Party, void.

- 15.1.1 Notwithstanding anything to the contrary herein, this Agreement may, with prior written notice to Transmitter, be assigned by Customer, if Customer is not then in default of this Agreement as addressed in Section 8.0:
  - to any Affiliate of Customer in connection with a merger, consolidation, reorganization or other change in the organizational structure of Customer, provided that such Affiliate is the owner of all or substantially all of the Facility;
  - (b) to any Project Finance Holder as security for amounts payable under any Project Financing; in addition, Customer or its permitted assignee may assign, transfer, pledge or otherwise dispose of its rights and interests hereunder to a lender or financial institution in connection with a collateral assignment of this Agreement for financing or refinancing purposes, including upon or pursuant to the exercise of remedies under such financing or refinancing, or by way of assignments, transfers, conveyances or dispositions in lieu thereof; provided, however, that no such assignment, transfer, pledge, or disposition will relieve or in any way discharge Customer or such assignee from the performance of its duties and obligations under this Agreement. Transmitter agrees to execute and deliver such documents as may be reasonably necessary to accomplish any such assignment, transfer, conveyance, pledge, or disposition of rights hereunder for purposes of the financing or refinancing of the Facility, so long as Transmitter's rights under this Agreement are not thereby altered, amended, diminished or otherwise

impaired. Customer will reimburse Transmitter for its costs and expenses associated with the preparation and review of any documents reasonably necessary to effect such assignment, transfer, conveyance, pledge or disposition of rights for the financing or refinancing of the Facility.

- 15.1.2 Upon breach of this Agreement or any loan documents by Customer, or the insolvency of Customer, the Project Finance Holder (i) shall have the rights of Customer set forth in Section 8.0 to cure any breach of this Agreement complained of, provided the Project Finance Holder agrees to perform Customer's obligations under the Agreement during the cure period; and (ii) shall have the right to assume all rights and obligations of Customer under this Agreement, provided, that in accordance with Section 15.2, Transmitter consents in writing to such assumption and/or to a release of the Customer from such liability.
- 15.1.3 Notwithstanding anything to the contrary herein, this Agreement may, with prior written notice to Customer, be assigned by Transmitter to any entity(ies) in connection with a merger, consolidation, reorganization or other change in the organizational structure of Transmitter.

# 15.2 Party to Remain Responsible

Except for assignments pursuant to Section 15.1.1(b) and Section 15.1.3, no assignment, transfer, pledge, conveyance, or disposition of rights or obligations under this Agreement by a Party will relieve that Party from liability and financial responsibility for the performance thereof after any such assignment, transfer, conveyance, pledge, or disposition unless and until the transferee or assignee agrees in writing to assume the obligations and duties of that Party under this Agreement and the non-assigning Party has consented in writing to such assumption and to a release of the assigning Party from such liability.

# 15.3 Termination of Corporate Existence, Etc.

If Customer terminates its existence by acquisition, sale, consolidation, or otherwise, or if all or substantially all of such Customer's assets are transferred to another person or business entity, without complying with Section 15.1 above, Transmitter will have the right, enforceable in a court of competent jurisdiction, to enjoin the Customer's successor from using the property in any manner that interferes with, impedes, or restricts Transmitter's ability to carry out its ongoing business operations, rights and obligations.

## **SECTION 16.0 - SUBCONTRACTORS**

### 16.1 Use of Subcontractors Permitted

Nothing in this Agreement will prevent the Parties from utilizing the services of subcontractors as they deem appropriate; provided, however, the Parties agree that all said subcontractors will comply with the applicable terms and conditions of this Agreement.

## 16.2 Party to Remain Responsible

The creation of any subcontract relationship will not relieve the hiring Party of any of its obligations under this Agreement. Each Party will be fully responsible to the other Party for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any obligation imposed by this Agreement upon either Party, where applicable, will be equally binding upon and will be construed as having application to any subcontractor.

# 16.3 No Limitation by Insurance

The obligations under this Section 16.0 will not be limited in any way by any limitation on subcontractor's insurance.

#### **SECTION 17.0 - LABOUR RELATIONS**

The Parties agree promptly to notify the other Party, verbally and then in writing, of any labour dispute or anticipated labour dispute which may reasonably be expected to affect the operations of the other Party.

### SECTION 18.0 - INDEPENDENT CONTRACTOR STATUS

Nothing in this Agreement will be construed as creating any relationship between Transmitter and Customer other than that of independent contractors.

### **SECTION 19.0 - LIMITATION OF LIABILITY**

# 19.1 Operating Liability Limitations

Except in cases of gross negligence or reckless or willful misconduct, under no circumstances will a Party be liable for any cost, expense, loss or damage, including, without limitation, foregone compensation, lost opportunity cost or any operating cost associated with the required reduced output of the Facility, including those resulting from or associated with any interruption, discontinuance, curtailment, or suspension of Connection Service; disconnection of the Facility from Transmitter's Transmission

System; forced or planned outages of Transmitter's facilities or the facilities of others; electrical transients, irregular or defective service, including, without limitation, short circuits (faults); or requests by the System Operator to increase or decrease Customer's Generation or make other operational changes at the Facility; provided, however, that nothing herein shall be construed as limiting the right of Customer to be compensated for any such operating costs pursuant to mutually agreed terms or pursuant to applicable provisions of Transmitter's OATT, or any market settlement rules and procedures approved for implementation in New Brunswick.

# 19.2 Consequential Damages

Notwithstanding any other provision of this Agreement, except to the extent provided for in Section 10, neither Transmitter nor Customer, nor their Affiliates, successors or assigns, nor any of their respective officers, directors, agents or employees, will be liable to the other Party or its Affiliates, successor or assigns, or any of their respective officers, directors, agents or employees, for claims, suits, actions or causes of action, or otherwise, for incidental, punitive, special, indirect, multiple or consequential damages (including attorneys' fees and other litigation costs, or claims for lost profits or revenues) connected with or resulting from performance or non-performance of this Agreement, or any actions undertaken in connection with or related to this Agreement, including without limitation any such damages which are based upon causes of action for breach of contract, tort (including negligence and misrepresentation), breach of warranty, strict liability, statute, operation of law, or any other theory of recovery. The provisions of this Section 19.2 will apply regardless of fault.

# 19.3 Delays in Interconnecting Customer's Facility

Notwithstanding anything to the contrary in this Agreement, Transmitter, or any of its successors, assigns, directors, officers, employees,

representatives, agents and/or contractors or otherwise, will not be liable (whether based on contract, indemnification, warranty, tort, strict liability, or otherwise) to Customer for any claims, suits, judgments, demands, actions (including attorneys' fees), penalties, liabilities or damages whatsoever, including, without limitation, direct, incidental, indirect, consequential, punitive, and special damages, or loss of profits or revenues, as a result of a delay or failure to meet any schedule, except to the extent such delay or failure results from the gross negligence or reckless or willful misconduct of Transmitter or any of its successors, assigns, directors, officers, employees, representatives, agents and/or contractors or otherwise.

# 19.4 Obligations of the System Operator

Notwithstanding any provision of this Agreement relating to the obligations or other actions of the System Operator or the obligations of the Transmitter relating to corresponding actions of the System Operator, the System Operator is not a party to this Agreement and acts independently of the Transmitter, and the Parties agree that the Transmitter has no responsibility for, or any liability to the Customer for, the actions of the System Operator as described in this Agreement, or for any inaction on the part of the System Operator.

### 19.5 Exclusive Remedies

The remedies set forth in this Agreement are the exclusive remedies for the liabilities of each Party arising out of or in connection with this Agreement.

#### **SECTION 20.0 - NOTICES**

# 20.1 Emergency Numbers

Each Party will provide, by written notice, an emergency telephone number, staffed 24 hours-a-day, to call in case of an emergency. As of the Effective Date of this Agreement, and until modified in writing, Transmitter's emergency telephone numbers are:

Customer's emergency telephone numbers are:

Control Room -

Operations Shift Manager

Single Point of Contact (Electrical Superintendent)

System Operator

Control Room - 1-506-458-4636

#### 20.2 Form of Notice

All notices, requests, claims, demands and other communications hereunder, unless otherwise specified in this Agreement, will be in writing and will be given (and will be deemed to have been duly given if so given) by hand delivery, cable, telecopy (confirmed in writing) or telex, e-mail, by mail (registered or certified, postage prepaid), or by overnight courier that provides evidence of delivery or refusal, to the respective Parties as follows:

or such other address as is furnished in writing by such Party in accordance with this Section 20.2; and any such notice or communication will be deemed to have been given as of the date received. Upon written request by Customer, Transmitter shall provide to Customer's designated Project Finance Holders any and all oral or written notices, demands or requests

required or authorized by this Agreement to be given by Transmitter to Customer in the same manner provided by Transmitter to Customer.

#### **SECTION 21.0 - HEADINGS**

The descriptive headings of the Sections of this Agreement are inserted for convenience only and do not affect the meaning or interpretation of this Agreement.

## **SECTION 22.0 - WAIVER**

Except as otherwise provided in this Agreement, any failure of either Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement, or condition will not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

## **SECTION 23.0 - COUNTERPARTS**

This Agreement may be executed in two or more counterparts, all of which will be considered one and the same Agreement and each of which will be deemed an original.

#### **SECTION 24.0 - GOVERNING LAW**

# 24.1 Applicable Law

This Agreement and all rights, obligations, and performances of the Parties hereunder, are subject to all applicable federal and provincial laws, and to all duly promulgated orders and other duly authorized action of governmental authority having jurisdiction.

### 24.2 Choice of Law

This Agreement will be governed by and construed in accordance with the laws of the Province of New Brunswick, Canada, without giving effect to the conflict of law principles thereof. Except for those matters covered in this Agreement and jurisdictional to the Board or which must first go to arbitration pursuant to Section 13.0 herein, any action arising out of or concerning this Agreement must be brought in the courts of New Brunswick, Canada. Both Parties hereby consent to the jurisdiction of New Brunswick, Canada for the purpose of hearing before and determining any action by the Board.

## **SECTION 25.0 - EQUAL EMPLOYMENT OPPORTUNITY**

The Parties agree to comply with all applicable federal, provincial, and other applicable anti-discrimination laws, the standards and regulations issued there under, and the amendments thereto.

## **SECTION 26.0 - SEVERABILITY**

In the event that any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the Parties will, to the extent possible, negotiate an equitable adjustment to the provisions of this Agreement, with a view toward effecting the purpose of this

If to Transmitter, to:

With a copy to:

If to Customer to:

Agreement, and the validity and enforceability of the

#### **SECTION 27.0 - AMENDMENTS**

# 27.1 Transmitter Amendment Rights

Notwithstanding any provision of this Agreement to the contrary, Transmitter may unilaterally make application to the Board for a change in any rates, terms and conditions, charges, classification of service. However, as set forth in Schedule I, Transmitter may unilaterally change the charges (as described in Schedule I), without application to or approval of the Board, and the changed IFSC-NCR and/or IFSC-CR, as determined by Transmitter, will become effective on the date specified by Transmitter in its written notice to Customer, pursuant to Section 20.

# 27.2 Customer Amendment Rights

Notwithstanding any provision of this Agreement to the contrary, Customer may exercise its rights under the *Public Utilities Act*, R.S.N.B. with respect to any rate, term, condition, charge, classification of service, rule or regulation for any services provided under this Agreement over which the Board has jurisdiction.

#### 27.3 Revision of Schedules

Notwithstanding any provision of this Agreement to the contrary, and without limiting or waiving any of Transmitter's other rights, Transmitter reserves the right to modify, in a manner not inconsistent with Good Utility Practice or Board policy, those provisions of the Schedules attached to this Agreement which are set forth below within parenthesis:

Schedule A (entire schedule)

Schedule B (additions or revisions to technical requirements by Board approved reliability standards and NPCC Criteria/Directories)

Schedule C (entire schedule)

Schedule D (only for (i) finalization of estimates, as set forth in the schedule; (ii) equipment identification; and (iii) annual updates to the inputs to the formula in accordance with the Transmitter's Tariff Schedule G (costs of studies)

Schedule H (generator capability curve to be provided by Customer)

Schedule I (only for (i) finalization of estimates, as set forth in the schedule; and (ii) annual updates to the inputs to the formula in accordance with Transmitter's OATT Schedule I, as described in Section 27.1 above)

The modified schedules will be incorporated by reference as if fully set forth herein, and will become effective on the date specified by Transmitter in its written notice to Customer, pursuant Section 20.

## 27.4 Amendment by Mutual Agreement

Except as provided for in Sections 27.1, 27.2 and 27.3, this Agreement may only be amended, modified, or supplemented by written agreement signed by both Transmitter and Customer.

#### **SECTION 28.0 - ENTIRE AGREEMENT**

# 28.1 Entire Agreement

This Agreement constitutes the entire understanding between the Parties, and supersedes any and all previous understandings, oral or written, which pertain to the subject matter contained herein or therein.

# 28.2 No Third Party Rights

Nothing in this Agreement, express or implied, is intended for the benefit of third parties and no third party may claim for damages or otherwise to enforce any such benefit.

#### **SECTION 29.0 - OTHER CONDITIONS**

#### 29.1 Conflict With Other Documents

The Transmitter's Tariff is supplemented by this Agreement to the extent permitted by law. This Agreement incorporates by reference the terms of the Transmitter's Tariff. The Transmitter's Tariff may be modified from time to time in accordance with law and thereby affect the services furnished to Customer; provided, however, Transmitter shall not change the specific rates, terms or conditions set forth in this Agreement without making any necessary filings with the Board to so amend the Agreement.

**IN WITNESS WHEREOF** the Parties have executed and delivered this Agreement as of the date and year first above written.

[Insert Transmitter Name]	
By:	
Name:	
Title:	
By:	
Name:	
Title:	
[Insert Customer Name]	
By:	_
Name:	
Title:	
By:	_
Name:	
Title:	

# **Schedules**

# **Description**

- A Connection Facilities and Associated Equipment
- B Generator Technical Requirements
- B1 Technical Data Generator
- C Construction and Payment Schedule
- D Revenue Metering Equipment and Costs
- E Black Start Criteria
- F Insurance Requirements
- G Pre-contract Costs
- H Generator Capability Curve
- I Connection Facilities Charges

# Schedule A - CONNECTION FACILITIES AND ASSOCIATED EQUIPMENT

remaining provisions hereof will not be affected thereby.

l.	Customer:
	Project:
	Unit Location:
	Net Capacity:
	Point(s) of Connection:
	Point(s) of Receipt:
II.	Customer-Owned Connection Facilities and Associated Equipment:
III.	Direct Assignment Facilities:
IV.	Other Direct Assignment Facilities:

# **Schedule B - GENERATOR TECHNICAL REQUIREMENTS**

**Note:** The technical data for the [Insert Customer/Facility Name] Facility are included in Schedule B1.

- Requirements for generation facilities to connect to the New Brunswick Power Transmission Corporation's (Transmitter) Transmission System. This document reflects, in part, the Transmitter view of Good Utility Practices with respect to the installation of generation connection equipment. These requirements are written to establish a basis for maintaining power quality and a safe environment for the general public, power consumers, maintenance personnel, and equipment. This document describes the general protection requirements for parallel operation and includes typical one-line diagrams. This document also includes equipment maintenance requirements and details the information that must be provided to Transmitter during all stages of a project. This document is a guide and as such, is not intended to be used as the sole basis for the specific design of the generator's protection systems and connection with the Transmission System. Final design will be subject to review and approval on a case-by-case basis.
- **ii. Customer** This term refers to the owner/operator of the generation facilities.
- **iii. Facility** This term refers to generation facility.
- **iv. Use** This document is intended for general use by present Customers, prospective Customers and Transmitter personnel.
- v. Transmission System This term refers to The Transmitter electrical system that includes 345, 230, 138 and 69 kV transmission elements.

vi. Qualified Transmitter Personnel - This term is used to refer to those persons employed by Transmitter having the required knowledge, training, experience, and accountability in specialized areas of Transmission Services, Transmission Engineering, Operations and Planning.

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PRIMARY WIRING

SECONDARY WIRING

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- E. PRIMARY INTERRUPTING DEVICE
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UNIT REGULATING HIGH LIMIT (MEGAWATTS)
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#### I. GENERAL INFORMATION

The information in this generator technical requirements document is supplied to Customers for the purpose of establishing and maintaining an acceptable connection with the Transmission System. Safety and power quality are of utmost importance and, as such, careful study of each proposed installation and the identification of appropriate protective devices is required before a Facility is allowed to begin interconnected operation. This standard is based on Transmitter requirements as well as the regulations of authorities having jurisdiction over Transmitter.

# A. Transmitter Review & Approval

Transmitter will review Transmission System parameters in relation to the proposed point of connection to determine any necessary changes to the Transmission System in order to accept the generation. Transmitter will verify that the Facility's design meets these connection requirements and will conduct a functional test of the Facility's system before the Facility will be allowed to commence interconnected operation. Transmitter will provide the Customer written approval, from Qualified Transmitter Personnel, for interconnected operation with the Transmission System. Subsections 1 through 5, below, summarize this process.

# 1. Engineering Study

Upon request for interconnected operation of a proposed generation facility, Transmitter will initiate an engineering study to determine the actual requirements for facility connection. The information provided by the Customer to Transmitter, as identified in Section II, "General Requirements," is required for this study. Transmitter will provide the Customer an estimate of the cost to complete the study. The Customer must prepay this cost.

# 2. Connection Costs

Unless otherwise specified in a site-specific connection agreement, or any applicable transmission tariff, the Customer will pay the connection costs for any equipment required by Transmitter to allow connection to the Transmission System. This will include the costs of new transmission or Transmission facilities and/or upgrades to existing facilities, metering equipment, and changes to the Transmitter Protection System. Transmitter will require prepayment for any necessary work.

With regard to any connection costs or ongoing charges, if there are any conflicts between these connection requirements and a site-specific connection agreement, or any applicable transmission tariff, as may be amended from time to time, the connection agreement or applicable transmission tariff will control.

# 3. Design Approval

Transmitter will review and provide written approval for the portion of the facility's design that is required to meet these connection requirements. This review and approval will only cover the required connection equipment and is not intended to provide overall facility design review.

### 4, Initial Inspection and Testing

Prior to the initial synchronization to the Transmission System, the connection equipment must be inspected, calibrated, and functionally tested. Transmitter will inspect the connection equipment and will either perform or observe the functional testing. Refer to Sections III.L, "Generator Facility Acceptance," and III.M, "Synchronizing to the Transmission System," for more specific information on this process.

# 5. Ongoing Testing and Maintenance

After the initial synchronization, the Customer is required to perform periodic testing and maintenance of the connection equipment to ensure this equipment will operate properly. Section VIII.E, "Testing & Maintenance," provides additional details for these ongoing requirements.

## B. Operation and Maintenance Charges

In addition to paying for necessary changes to the Transmission System, the Customer may be required to pay a special facilities charge. This charge is based upon the installation costs of any new or upgraded utility equipment necessary to support the facility connection.

# C. Grandfathering

Generators already connected to the Transmission System are not exempt from the requirements of this document. The Transmitter Connection Requirements are periodically revised to reflect changes in standard electrical practice and the Transmission System. Each Facility will be subject to review as a result of analyzing local Transmission System problems as well as during the initial inspection and ongoing biennial test and inspections. Transmitter may require reasonable modifications to the Connection Protection System as a result of these reviews and inspections.

# D. Generators 5,000 kVA and Larger and Facilities 10,000 kVA and Larger

All individual generators with a minimum generating capacity of 5,000 kVA and all Facilities that interconnect with the Transmission System with a minimum capacity of 10,000 kVA must meet the review and approval criteria identified in Sections A through C, above. They must also be equipped with SCADA equipment as described in Section V, "Supervisory Control and Data Acquisition." For staffed Facilities, a telephone line dedicated to voice

communications with the System Operator must be provided. For unstaffed Facilities, the Customer must provide an alternative means of communications to meet the requirements of the Systems Operator.

## E. Board Approved, NPCC Requirements

Generation facilities that are connected to the Transmission System must also comply with Board approved reliability standards, and Northeast Power Coordinating Council (NPCC) criteria, guides, requirements, and standards.

## F. DC & Variable Speed Generators

Direct current generators and variable speed alternating current generators may be connected to the Transmission System through a synchronous inverter. The inverter installation will be designed such that a Transmission System interruption will result in the removal of the generator/inverter from the Transmission System. Synchronous inverters must comply with Transmitter's power quality requirements as outlined in Section VI, "Power Quality."

#### G. Generators Less than 5000 kVA

Generation equipment less than 5000 kVA, and greater than 1,000 kVA, may be installed, where appropriate Transmission lines exist, without an extensive engineering review. The level of detail of information required depends on the site at which the connection occurs. In all cases, the Customer must install the appropriate protection and obtain written approval from the Transmitter, as specified in this document, before commencing interconnected operation. For facilities 1,000 kVA or smaller, Transmitter approval must still be obtained, though the level of detail is less than that required for facilities greater than 1,000 kVA.

# H. Emergency Generators

Emergency generators cannot be connected to, or operated in parallel with, the Transmission System, except for momentary paralleling (paralleling for 0.5 seconds or less). Facilities may utilize momentary paralleling of emergency generators providing they use automatic controls to monitor and control the switching process. The automatic control and switching system will require Transmitter review and approval. These facilities do not require a protection system to monitor for faults on the Transmission System.

#### II. GENERAL REQUIREMENTS

The Customer's installation shall meet all requirements of Good Utility Practices, methods, and standards that are commonly used in engineering and plant operations and maintenance to provide for a safe and dependable installation. In addition to meeting those practices, methods, and standards and the requirements set forth in this document, as may be changed from time to time. the Customer's equipment and installation shall conform to the latest revision of all applicable Federal, Provincial, and Local Government codes. These include Canadian Standards Association (CSA), Electrical Equipment Manufacturers Association of Canada (EEMAC), American National Standards Institute (ANSI), Institute of Electrical and Electronics Engineers (IEEE), National Electrical Manufacturers Association (NEMA), Underwriter's laboratory (UL), Underwriter's Laboratory of Canada (ULC), Workplace Health, Safety and Compensation Commission of New Brunswick (WHSCC), Canadian Environmental Assessment Act (CEAA), New Brunswick Department of Environment and Local Government (NBDELG), New Brunswick Department of Natural Resources and Energy (NBDNRE), North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council (NPCC), and New Brunswick Power Transmission Corporation standards.

# A. Connection Process and Required Information

To facilitate the connection process, the Customer should contact Transmitter early on in the design stages of the proposed installation. The Customer must provide Transmitter the following information on each proposed facility:

- Complete, accurate, and applicable data to enable the proper modeling of the Customer's unit in load flow, transient stability, and fault studies. This will include line, transformer, and machine data as well as parameters for exciter systems, governor systems, and power system stabilizers.
- Design data and specifications that reflect the facility's reactive capability.
- All information regarding design and implementation of any Special Protection System(s) associated with its facilities.
- Unit availability data including both unit design data and known performance data from other facilities utilizing similar equipment.

Figure I at the end of this section provides Electrical Equipment Data Sheets that the Customer must complete and forward to Transmitter to allow an engineering study to be performed. Upon receipt of the required information, as part of the engineering study, Transmitter will review the Connection Protection System requirements. Any additional requirements not explicitly specified in this document will be provided by Transmitter to the Customer. The Customer must submit design documents reflecting these additional requirements to Transmitter for review and approval.

## B. Protection System Requirements.

Each Customer must design, install, maintain, and operate appropriate protection systems. The Customer must obtain Transmitter approval of specific relays and connection equipment before parallel operation can begin. Section III, "System Protection," covers Transmitter requirements for the protection systems in greater detail.

## C. Transformer Interface

In general, the Customer's facility shall interface with the Transmission System through a step-up transformer or bank of transformers of adequate kVA rating and proper voltage rating for conversion from the facility's generator voltage to transmission voltage. Transmitter requires that the transformer be solidly grounded at the high voltage side. The ratio of this step-up transformer must not restrict the reactive capability requirement specified in Section F, "Reactive Capability," below.

# D. Switching Equipment and Station Ground

Each installation must be provided with the following switching equipment and station ground:

## 1. Tie Disconnect Switch

The Customer will provide a manual, three-phase, gang-operated, visible, lockable, interrupter (tie disconnect) switch at the point of connection to the Transmission System. See Section VII, "Safety," for switch operation requirements. Facilities with generation capacity of 100 kVA or less may have this requirement waived as long as the requirement D.2, below, is met.

## 2. High-Side Interrupting Device

The high side of the facility's step-up transformer must be connected to the Transmission System through a high-side circuit breaker, recloser, or fuse. This device must be capable of interrupting both the facility's full generation capacity and the maximum fault current at this location.

## Station Ground

The facility's station ground must be designed and installed in accordance with Transmitter substation standards and the CSA.

#### E. Generator Circuit Breakers

A circuit breaker is normally required between each generator and the generator step-up transformer. This breaker provides a means to disconnect the generator from the Transmission System under fault conditions as well as providing a means to synchronize to the Transmission System. Under certain conditions, it may be more economical to design this device into the high-voltage side of the step-up transformer. If this is the case, a low-side disconnect device will still be required.

# F. Reactive Capability

All synchronous generators shall be rated to operate continuously at maximum rated power and at any power factor between 90 percent lagging and 95 percent leading within ±5 percent of rated voltage. The generator step-up transformer ratio will be set such that the generator will support this reactive capability. Generators may be required to operate in either reactive or voltage control as directed by the System Operator to assist in maintaining proper system voltage. Generators must maintain operating limits or connection service will be discontinued.

The nominal rating of the step-up transformer's high voltage winding will be specified by Transmitter to ensure the Transmission System reactive power requirements are met. As a minimum, the step-up transformer will be provided with tap settings that span ±5 percent of the nominal voltage at 2½ percent intervals.

Taps on any station service transformers within the Facility will also be set such that the Facility will support this reactive capability requirement. If tap settings restrict the generator's reactive capability, the transformers must be replaced. The cost for such replacement will be the responsibility of the Customer.

#### G. Routine Maintenance

As a minimum requirement, each Customer is expected to adopt an Operations and Maintenance program consistent with the Operations and Maintenance section of this document. Maintenance records will be kept on file at the Customer's facility and will be provided to Transmitter upon request.

## H. Capacitors

Excitation or power factor correction capacitors may be installed on generators only with the written consent of Transmitter.

#### I. Phase Unbalance

There may be single-phase fuses or automatic line switching devices, installed between the utility power source and the generator, which may operate and cause phase unbalance. It is the sole responsibility of the Customer to protect its own equipment from any such unbalance. Transmitter will not assume any responsibility or liability for this protection.

## J. Changes

Changes to the connection, including protective relaying and metering, as well as changes to special operating conditions caused by the Customer's equipment could affect the safety, reliability, and performance of the Transmission System. Therefore, all such changes must be submitted in writing to Transmitter a minimum of thirty (30) days prior to making any such change. These changes

will require written approval by Transmitter. These changes include, but are not limited to, the following:

# 1. Changes to the Transmission System

Transmitter may find it necessary to perform changes to the Transmission System serving the Customer's interconnected facility. In turn, such changes could affect the Customer's facility, resulting in required changes there also.

# 2. Changes to the Connection Protection System

No modifications will be performed on the connection relays, their specified set points, or other associated equipment by the Customer or the Customer's representative without written approval from Transmitter.

# 3. Changes to Transformers

No changes to the generator's step-up transformer ratio are allowed without written approval from Transmitter.

# 4. Changes to the Transmitter Protection System

If any changes are required to the Transmitter Protection System due to the Facility's connection, those changes will be performed by Transmitter at the Customer's expense.

# 5. Unauthorized Changes

Changes to the connection equipment without Transmitter written permission will result in the facility connection service being discontinued until the facility returns to compliance with these requirements.

#### K. Transmitter Disclaimer

A Transmitter review of the Customer's facility, equipment, connection equipment, protective devices, and metering does not confirm or endorse the design. A Transmitter review is not a warranty of safety, durability or reliability of the facility or any of the equipment. Transmitter shall not, by reason of such review or failure to review, be responsible for strength, safety, details of design, adequacy or capacity of the Customer's facility, equipment, connection equipment, or protection systems. Transmitter will not assume any responsibility or liability for protection of the Customer's electrical system resulting from interconnected operation of a Customer's facility with the Transmission System.

# Figure I: Electrical Equipment Data Sheets, Page 1 of 2.

### **GENERATOR STEP-UP TRANSFORMER**

Required for all sites

Transformer MVA Rating		
Transformer Voltage Rating		
Available Taps		
Connection of Windings		
(ie., Wye-Wye, Wye-Delta, etc.)		
Transformer Leakage Impedance's for Positive	p.u. on	tap
and Zero Sequence on the transformer base		
between each pair of windings and for each available tap.	p.u. on	tap
(etc., as needed)	p.u. on	tap
	p.u. on	tap
	p.u. on	tap
	p.u. on	tap
Type of Grounding *		
Neutral Impedance (Reactance/Resistance) *		

#### **INTERTIE PROTECTION SYSTEM DATA**

Required for all sites

Provide one line, three line, and DC elementary diagrams of the electrical design showing the following information:

- 1. Generator Step-Up Transformer (GSU) Ratio, Rating & Winding Configuration.
- 2. Voltage Transformers (PTs) Ratios, Ratings & Winding Configurations.
- 3. Current transformers (CTs) Ratios & Ratings.
- 4. Protective Relays Model and Style Numbers.
- 5. Switching Devices Manufacturer's Electrical Specifications.
- 6. Trip and Close Circuits.
- 7. Synchronizing Devices Generator Specifications

#### **EXCITATION SYSTEM DATA**

Required for generators >= 5000 kVA

Manufacturer						
Type of Excitation System **	IEEE Type 1	_ 2	_ 3	4	_ DC	
•					AC	
					ST	
Voltage Response						
Manufacturer Exciter Type						
Manufacturer Regulator Type						
Saturation Curve No. on Open Circuit						
Saturation Curve No. for Rated Armature Current						

Develop in conjunction with Transmitter.

**	Please supply gains, time constants and limits applicable to the model. IEEE Paper F 80 258-4, "IEEE Committee Report on Excitation System Models for Power System Stability Studies" provides model descriptions and block diagrams.

Figure I: Electrical Equipment Data Sheets, Page 2 of 2.

# **GENERATOR DATA**

Required for generators >= 5000 kVA

	Preliminary	′ Fina	l
Manufacturer			
Generator Nameplate Number			
Rated MVA at Rated H $_2$ psig			
Rated kV			
Rated P.F. (±)			
Max. Turbine kW Capability			
(Utilizing over pressure, etc.)			
Field Amperes for Rated Conditions			
Field Amperes at Rated Generator			
Volts & Amps. @ 0 p.f. Overexcited			
Field Resistance	Ohms	@	°C
Generator Grounding Type/Specification			
<del></del>	In I	Per Unit on	Rated
	Ma	chine MVA	and kV
Direct Axis Unsaturated Synchronous Reactance X <sub>d</sub>			
Overdigatives Avia Hanativestad Complements Departures V			
Discret Assis Transpired Department of Detail Comment			
Direct Axis Transient Reactance at Rated Voltage X' <sub>dv</sub>			
Quadrature Axis Transient Reactance at Rated Current (where applicab		i	
Direct Axis Subtransient Reactance at Rated Current	,	i	
Quadrature Axis Subtransient Reactance at Rated Current		ıi —————	
Direct Axis Subtransient Reactance at Rated Voltage		lv	
Quadrature Axis Subtransient Reactance at Rated Voltage		ıv	
Negative Sequence Reactance			
Zero Sequence Reactance			
Stator Leakage Reactance at Rated Voltage			
Stator Leakage Reactance at Rated Current			
Potier Reactance			
Positive Sequence Resistance	R.	@	°C
Zero Sequence Resistance	R <sub>1</sub>	@	°C
Negative Sequence Resistance	P.		℃
Direct Axis Transient Open-Circuit Time Constant			
Direct Axis Transient Open-Circuit Time Constant  Direct Axis Subtransient Open-Circuit Time Constant		osec. \ osec.	
Quadrature Axis Transient Open-Circuit Time Constant (where applicab	ا <sub>d"،</sub> حال	sec.	@ c
Short-Circuit Time Constant of Armature Winding		sec. sec. @	
Generator, Turbine and Exciter Inertia	'а. \//E	sec. @	J h = 1 2
Rated Speed	VVI	`	
nertia Constant on Machine Base		Mw \$	
	Пс	IVIVV	Jec./IVIVA
Saturation Curve No. on Open-Circuit			
Saturation Curve No. for Rated Stator Current at 0 pf lagging			
V" Curve No. (Capacity Curve)	ad in ACA Cta	ndordo Do	finitions of
The above resistances, reactances and time constants are define	SIC ACA III DE	แนนเนร-บย	iii iiiiions ot

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Electrical Terms (Group 10-Rotating Machinery, Section 31).

### III. PROTECTION SYSTEMS

Requirements for protection due to interconnected operation of generation facilities will vary depending on the size and type of installation and the characteristics of the Transmission System at the point of connection. The following requirements are necessary for planning and designing generation facilities for interconnected operation with the Transmission System.

## A. Transmitter Engineering Review of Proposed Generation Facilities

Only those portions of the drawings and other design documents which apply to the Connection Equipment and the Connection Protection System will be reviewed to determine if any changes are required due to the interconnected operation of the Customer's facility.

## **B.** Transformer Connections

Generally, the step-up transformer high voltage winding must be connected in a wye configuration. The Customer will coordinate with Transmitter to select a transformer connection and grounding arrangement.

# C. General Protection System Descriptions

The Transmitter Protection System and the Connection Protection System must provide the necessary level of protection for the Transmission System. Transmitter will determine the Connection Protection System relay settings and changes to the existing Transmitter Protection System or other power system equipment due to the interconnected operation of the Customer's facility.

# 1. Connection Protection System

The Connection Protection System must detect power system faults or abnormal conditions and will not take into consideration protection for the Customer's electrical system or equipment; rather it will provide protection for the Transmission System and other customers. The Connection Protection System will:

comply with the minimum operating and safety standards set forth in these requirements;

operate to limit the severity and extent of system disturbances and damage to Transmission System equipment;

detect abnormal operating conditions and disconnect the Customer's facility when such conditions do not return to normal within certain time limits;

communicate with utility equipment as required;

monitor for loss of the utility supply (feed) and prevent energizing a de-energized utility circuit, except when doing so as provided under Section VI.D, "Islanded Generation Limits;" and

be located in a secure, environmentally controlled, easily maintained, and readily accessible location, such as a switchgear room.

## 2. NPCC Requirements

Any Customer whose facility is interconnected to the Transmission System will be required to meet Northeast Power Coordinating Council (NPCC) guidelines for protection requirements. These guidelines require redundant protection equipment including station batteries, breaker trip coils, station service AC supply, and breaker failure systems. Transmitter will verify these requirements are incorporated into Bulk Power System (BPS) interconnected facilities.

## 3. Generator Protection System

Customers must provide the necessary Generator Protection System to protect their own equipment. Transmitter will provide system data to the Customer to allow the

Customer to coordinate their protective system settings with the Transmitter Protection System and the Connection Protection System and may include provision for tripping the generator off-line by special telecommunications signals.

In addition to these standard protection systems, Transmitter may require other Special Protection Systems at certain sites. Special Protection System requirements will be determined by Transmitter on a case-by-case basis. The generator will not be compensated by the System Operator for costs incurred by the generator due to a Special Protection System trip unless the Transmission Provider is negligent.

# D. Quality of Protection System Equipment

Protection system components must perform under extreme environmental and electrical transient conditions. Therefore, equipment ratings must meet or exceed American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers (IEEE) Standards (i.e. All protective relays must meet or exceed ANSI/IEEE Standard C37.90). In addition, protection systems must include design, maintenance, and testing features as follows:

### 1. Equipment Quality

The Connection Protection System equipment, including auxiliary equipment and instrument transformers, must be utility grade (of suitable quality, proven design and commonly used in similar applications).

# 2. Primary Wiring

All primary or high-voltage wiring of CTs, PTs, circuit breakers, etc., shall be in accordance with CSA standards, provincial regulations, Transmitter standards and based on Good Utility Practices.

# 3. Secondary Wiring

All secondary wiring and connections on the Connection Protection System and its associated equipment shall meet all national and provincial requirements and based on Good Utility Practices.

All connection relay trip outputs must be hard-wired directly to the tie breaker or interposing lock-out device. No connection relay trip may be wired through, or derived from, any interposing device, such as a programmable logic controller (PLC) or a plant process computer.

Screws, studs, nuts, and terminals used for Connection Protection System electrical connections shall be nickel plated brass/copper alloy. The wire used will be no smaller than #14 AWG stranded copper, except wire used for grounding of CT and PT circuits will be no smaller than #12 AWG. All wire insulation will be cross-linked polyethylene or equivalent high quality insulation (type "SIS" or equivalent). Polyvinyl chloride insulation is not permitted. The minimum rating for insulation is 600 volts. Wire terminations must utilize solderless, "Crimp-Style" ring lug terminals. "Spade" or "Fork" type lug terminals are not permitted.

## 4. CT Ratio / Accuracy

All CT ratios and accuracy classes shall be chosen such that, under maximum fault conditions, secondary current is less than 100 Amperes and transformation errors are less than 10%.

## E. Primary Interrupting Device

The Customer's facility must be connected to the Transmission System through a primary interrupting device. This device must be capable of interrupting the maximum fault current available at the facility. If this device is a breaker, it must be capable of opening after loss of either the facility's generation, the Transmission System, or both.

In addition, this breaker must have the ability to be electrically tripped (opened) by the Connection Protection System. If this device is a fuse it must be sized in consideration of the facility's kVA rating and the maximum available fault current at the facility.

In certain installations, high-side fault protection may be provided by Transmitter remote-end line protection. In these specific installations, a high side fault interrupting device may not be initially required providing no other Transmitter customers are affected by remote-end tripping. However, future changes to the Transmission System may require the Customer to install a high-side fault protection device at a later date. Under these circumstances, if Transmitter determines that high-side fault protection is necessary, the Customer will be responsible for the cost of installing the necessary equipment.

# F. Trip Source (Battery)

The source of tripping and/or control power must be a storage battery, equipped with a battery charger, and designed and suitable for the intended use. This trip source will be ungrounded and equipped with a ground detection system.

The battery must have sufficient capacity, in accordance with appropriate IEEE Standards, to permit operation of the station in the event of a loss of the battery charger or AC supply. The battery charger must be capable of supplying the station load plus charging the battery and shall be equipped with over/under voltage alarms for monitoring the battery voltage and battery charger supply.

All DC peripheral devices must be fused separately from the protection systems, including the breaker trip coil(s). This will prevent the failure of any other device from jeopardizing the security of the protection systems. Use of AC voltage, or use of the generator exciter as a source of DC power, is not an acceptable alternative to the battery and charger system. The battery and breaker trip coil must be a nominal 48

volts DC, minimum. The breaker trip coils and relay circuits must be monitored for loss of DC.

## G. Islanding

Islanding is the operation of the Customer's facility supplying an isolated portion of the Transmission System. This operation can create hazards to personnel, other customers, and the general public, and may cause equipment damage. Because of the hazards involved, islanding must be avoided, except as provided for in Section VI.D, "Islanded Generation Limits." Where it is allowed, the Customer's facility shall be designed with appropriate control and protection systems to safely supply connected loads while islanding.

In situations where islanding is not allowed and the Customer's facility is not immediately disconnected from the Transmission System after the utility breaker opens, additional relaying and/or communications equipment will be required, at the Customer's expense. See Section I, "Transfer Trip," below.

## H. Automatic Reclosing

Transmitter utilizes automatic reclosing to reduce outage durations of the Transmission System. Should a utility circuit breaker open due to a detected fault condition, that circuit breaker will automatically reclose. The Customer's equipment, the Transmission System, and other Transmitter customers' equipment is susceptible to damage if the circuit breaker closes back in while the generator is still connected to the Transmission System. Additional fault interrupting devices may exist between the utility substation breaker and the Customer's facility. Customers are responsible for protecting their equipment from automatic or manual reclosing of all such utility devices.

# I. Transfer Trip

Transmitter may require, or the Customer may request that Transmitter install, transfer trip equipment as additional protection against the Customer's facility backfeeding a portion of the Transmission System. This equipment shall provide separation of the Customer's facility from the Transmission System in the event of system disturbances detected by utility equipment remote from the Customer's facility. The Customer will be responsible for all costs associated with the installation, operation, and maintenance of such equipment, including the installation and ongoing costs associated with any required communications channels.

The Customer may be required to provide local breaker failure protection, which may include direct transfer tripping to the utility line terminal(s), in order to detect and clear faults within the Customer's facility that cannot be detected by Transmitter back-up protection.

## J. Transmitter Underfrequency Load Shedding Program

The Underfrequency Load Shedding (UFLS) program is designed to match load to generation for the loss of a major tie line or the significant loss of generation, and to return the system frequency to acceptable limits following such a loss. Transmitter must review and report annually to the Northeast Power Coordinating Council (NPCC) on this program. Frequency relaying installed as part of the Connection Protection System and the Generator Protection System will be set according to criteria which will allow Transmitter to meet UFLS program goals.

Each Customer is responsible to review the setting criteria to ensure that the Transmitter specified settings will not unduly stress their generating equipment. In instances where these settings cannot be implemented in accordance with these criteria, or where generator controls or auxiliary equipment prevent generator operation at these frequencies, Transmitter will install alternate load relief to compensate for the

lost generation. The Customer will be responsible for the cost of providing and maintaining this alternate load relief.

Customers who have other frequency and/or speed control devices not required by Transmitter must coordinate the setpoints of these devices with the connection frequency relay settings specified by Transmitter. If there is no connection frequency relay, these other devices must be set to meet the UFLS program. The Customer will be responsible to test any of these additional devices and maintain this test information on file. Such information will be provided to Transmitter upon request.

# K. Black Start Capability

In order to meet the requirements of NPCC, certain generators interconnected to the Transmission System may have black start capability. These generators must be able to start without an external power source, to allow for restoration of the Transmission System in the event of a system-wide outage. This capability must be tested every year, unless conducting such a test would interrupt firm customer load. In this instance, the testing interval will be as agreed to by the Customer and Transmitter, on a case-by-case basis.

## L. Generator Facility Acceptance

Before interconnected operation with the Transmission System can begin, the Customer's facility must be inspected by Transmitter to verify that protection system requirements are met, that operability of Connection Protection System is verified, and that all appropriate testing has been completed. To facilitate this process, the Customer will assign an engineer or technician who is currently registered or licensed in the province of New Brunswick. This person will coordinate the start-up testing and operation of all equipment and act as the liaison between the Customer and Transmitter until the connection requirements have been met.

Two weeks prior to the initial functional test, the Customer shall supply as-built protection drawings to Transmitter. These drawings must provide sufficient information for Transmitter to analyze all functional test requirements specified below.

- CTs: rating, circuit polarity, ratio, insulation, excitation, continuity and burden tests.
- PTs: rating, circuit polarity, ratio, insulation and continuity tests.
- Relay pick-up and time delay tests.
- Functional breaker trip tests from protective relays.
- Relay in-service tests to check for proper phase rotation and magnitudes of applied currents and voltages.
- Breaker closing interlock tests.
- Paralleling and de-paralleling operation.
- Other relay commissioning tests typically performed for the relays involved.

## Such tests are required to demonstrate:

- The correct functioning of governors, exciters, and synchronizer circuits for each unit.
- The reactive capability of each unit.
- That the actual exciter gain matches the gain documented in the exciter model.
- That the governor droop is set to 4%.
- That the unit matches the open circuit saturation curve data calculated by the manufacturer.
- That the unit matches the short circuit saturation curve data provided by the manufacturer.

The Customer will provide Transmitter a copy of all test data for evaluation. Transmitter will perform or observe a functional test and commissioning of the entire Connection Protection System. This will include a calibration check of the connection protective relays and as many trips of the connection breaker and/or the generator breaker(s) as

Transmitter considers necessary to verify the correct operation of the Connection Protection System and the breaker trip circuits. Phase rotation and synchronizing will also be verified.

To facilitate this testing, test points must be accessible to permit injection of test voltages or currents to verify the calibration and operation of the components making up the Connection Protection System. One means of providing these test points is incorporating ABB FT or GE PK test blocks into the facility design. These test points shall also interrupt the protection system trip outputs. Transmitter will review and approve the testability of the Connection Protection System as part of the initial design review.

After the final commissioning, the Customer must provide Transmitter with one set of accurate drawings and maintain one set on-site. Any subsequent changes to the facility impacting the Connection Protection System must be approved by Transmitter before being incorporated. After incorporation, such changes must be verified by Transmitter and documented and incorporated into the facility prints within ninety (90) days. A set of updated prints will be provided to Transmitter within this time-frame.

## M. Synchronizing to the Transmission System

All components of the Connection Protection System, the Generator Protection System, and the synchronizing circuits must be energized and functioning correctly before the Customer will be allowed to begin parallel operation with the Transmission System.

The Customer is solely responsible for properly synchronizing to the Transmission System. No more than a 3% instantaneous variation in voltage (flicker) is allowed when connecting or disconnecting any generator or station load to the Transmission System. The circuit breakers associated with the generating units must be equipped with facilities to automatically or manually synchronize the generating unit with the

Transmission System. All synchronizing must be performed with the aid of either a synchronizing relay or a synchroscope. A sync check relay is recommended to prevent catastrophic errors during the synchronizing process.

NOTE: For facilities 5 MVA or greater, the Customer must notify the System Operator prior to connecting or disconnecting any generation or station load on the Transmission System when such action is a planned operation.

Transmitter requires a detailed procedure from the Customer for the initial synchronization. The Customer's actual synchronizing procedure will require approval from Transmitter. See Figure II for a sample procedure. Upon complete implementation of the Customer's procedure, assuming that all technical requirements have been met, the Facility will be allowed to connect to the Transmission System and begin parallel operation.

NOTE: The System Operator must be notified at least 24 hours prior to the initial synchronizing.

THE INITIAL SYNCHRONIZATION SHALL BE WITNESSED BY Transmitter.

### N. Typical Installations

The installations listed in this section provide the important characteristics of connecting to a transmission line. Transmission line and substation busses generally have two (or more) connections with the rest of the Transmission System, and are typically of higher voltage. The nominal phase-to-phase transmission voltages within the Transmission System are 69, 138, 230 and 345 kV.

The following subsections give a general overview of acceptable connection designs. Figures III and IV are one-line diagrams for the installations listed below. Figure V provides a legend of symbols used in the one-line diagrams. ALL INSTALLATIONS MUST BE REVIEWED AND APPROVED BY TRANSMITTER PRIOR TO FINAL ACCEPTANCE AND COMMISSIONING.

Transmission-Bus

		Transformer	
<u>Type</u>	<u>Rating</u>	Configuration (HV-LV)	<b>Utility Connection</b>
I	Any size 3-phase	Wye-Delta	Transmission-Line

Any size 3-phase Wye-Delta

Ш

Figure II: Sample Synchronizing Procedure for Commissioning.

Purpose: To verify proper rotation and phase relationships of primary and secondary circuits of Customer's generator and

the Transmission System prior to connection.

**Discussion:** Both the incoming and running PTs will be energized from a common source.

Rotation and phase angle checks will be taken on both PTs and the synchronizing circuits will be verified for correct operation.

<u>Precautions</u>: To prevent personnel injury and motoring the generator, the links between the generator and the main bus shall

be removed prior to performing any switching.

The safety of the plant will be the Customer's responsibility.

#### **Prerequisites:**

- Verify that all relay and control testing has been completed and the unit step-up transformer and all other pertinent equipment is ready for energization.
- Verify that 86 devices have been reset.
- Verify generator and transformer relays are operable.
- Verify transformer auxiliaries are ready to be energized and operable.
- Signature \_\_\_\_\_\_\_

### **Procedure:**

- a. Energize main step-up transformer from the Transmission System.b. Read and record rotation on running PTs.
- c. Read and record bus voltage on running PTs for all 3-phases.

Phase A \_\_\_\_\_ Phase B \_\_\_\_\_

Phase C \_\_\_\_\_\_ By: \_\_\_\_ Close generator breaker to energize incoming PTs.

- d. Close generator breaker to energize incoming PTs.
  e. Observe synchroscope is at 12 o'clock position. If not at 12 o'clock position, STOP and inform Transmitter.
- f. Read and record rotation on incoming PTs. Should be the same as running PTs. If not, STOP and inform Transmitter.

By:

g. Read and record bus voltage on incoming PTs for all 3-phases.

Phase A \_\_\_\_\_ Phase B

Phase C \_\_\_\_\_ By: \_\_\_

h. Should be the same as running PTs. If not, STOP and inform Transmitter.

By: \_\_\_\_\_

- i. Return system to normal.
- j. Reinstall generator links.
- k. Rack generator breaker into test position.
- I. Bring unit up to rated speed and voltage.
- m. Using a strip chart recorder, record voltage and speed matching capability.
- n. Allow auto synchronizing equipment to close generator breaker in test position. Record phase angle difference between generator bus and the Transmission System at time of closing. Mismatch must be less than 1% between the incoming and running voltmeter. The phase difference must be zero. (This information required to be on file with Transmitter.)
- o. Open the generator breaker.

NOTE: If provisions have been made for manual synchronizing, the operator must demonstrate his ability as follows:

- p. Select sync selector to "Manual".
- q. Adjust unit speed allowing at least 6 seconds per revolution on the synchroscope (generator faster than the Transmission System).
- r. Adjust voltage to less than 1% voltage mismatch.
- s. At 6 seconds per revolution, the operator would initiate the close pulse approximately 5 degrees prior to the 12 o'clock position.

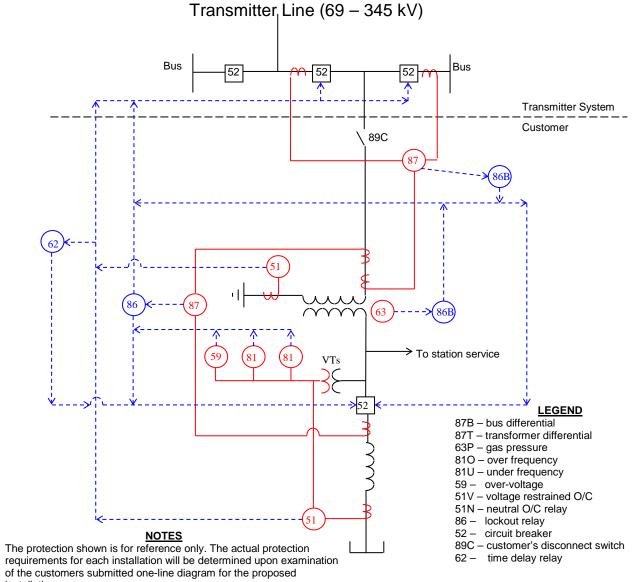
t.	Record phase angle difference between generator bus and the Transmission System at time of closing
u.	Rack generator breaker into normal operating position and repeat synchronizing procedures n. through
	By: (This information required to be on file with Transmitter.)
Final	
Conditi	ons:
•	Synchronizing procedure has been completed.
	Date/Time:
	Operator:

## 1. Type I Installations - (Figure III)

These are three-phase generators (synchronous or induction) interconnected to the Transmission System. This installation provides for power flow from the Customer's facility to the Transmission System as a normal operating mode. The primary reason for the generation may be to serve the Customer's own load.

- This installation requires a primary circuit breaker or circuit switcher designated as component "52L" in Figure III, which is capable of interrupting the maximum available fault current at this location.
- System Operations directly controls the operation of all switching devices on the utility Transmission System. On this type installation, the Facility's switches affected are the tie disconnect switch, the station grounding switch, and "52L."
- The Facility's control scheme must be designed to allow for the closing of breaker "52G" only if the feed from Transmitter is energized, or breaker "52L" is open. If breaker "52L" is open and breaker "52G" is closed, the generator may synchronize across breaker "52L." If the feed from Transmitter is not energized, then the Facility's control scheme must prevent closing of both breakers "52G" and "52L." Blackstart facilities will require an override to this control which will be utilized only under the direct authorization of System Operations.
- This installation requires telecommunications channel relaying and/or transfer trip for high speed fault clearing capability.
- PTs providing sensing input to Connection Protective Relays must be continuously rated for line-to-line voltage.
- Transmitter will require the Customer to provide two independent, redundant relaying systems where required by NPCC criteria. This will also be required for Facilities interconnected to the Transmission System if Transmitter determines that delayed clearing of faults within the Customer's Facility could adversely affect the Transmission System.

Figure III: Type I Installations



- requirements for each installation will be determined upon examination of the customers submitted one-line diagram for the proposed
- If all or part of the installation is determined to be part of the NPCC Bulk Power System (BPS), the protective relaying systems for the BPS portions must be designed, installed and maintained in accordance with the applicable NPCC Criteria. The key element of this requirement is that the BPS element be protected by two independent protective relaying systems with redundancy.
- The winding configuration of the generator step up transformer must be approved by Transmitter early in the project.
- The generator underfrequency relaying must not trip the generator off line for frequencies above the curve in figure 1 of NPCC criteria document A3.
- Synchronizing capabilities must be provided on the generator breaker 52G.
- The protection for the generator and its bus work must be utility grade equipment that adheres to accepted industry standards for generators



1.21	NB POWER	<b>CORPORATION</b>		
I Typical Protective Relaying for Three Phase Generators Connected to Transmission Lines/Substations				
	KAH	May 27, 2002		

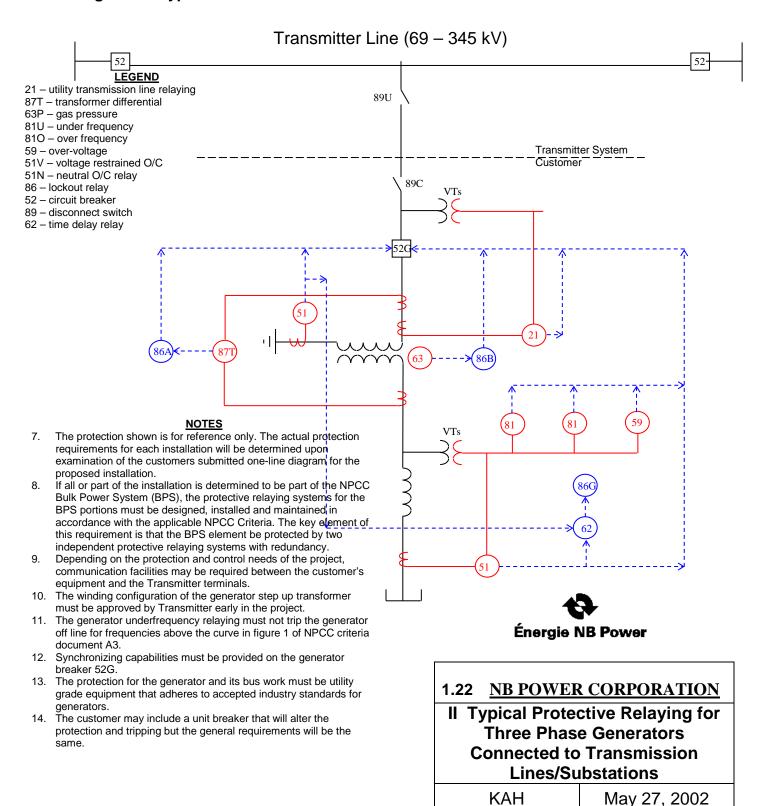
# 2. Type II Installations - (Figure IV)

This installation is interconnected to the utility Transmission System through a substation bus at Transmission voltages. The substation bus will be connected to at least two (2) utility transmission sections. This design provides for power flow from the Customer's facility to the utility as a normal operating mode.

Because the facility is connected to a transmission bus, some of the standard connection relays for the other installation types are not required. Specifically, over/under frequency relaying is not required except to protect the generator itself where a generator will not island to serve local distribution load connected to the bus. As shown in Figure III-6, other relaying, such as bus differential relaying, may be required to meet site-specific conditions.

- As with the Type I installations, a primary circuit breaker is required, rated
  to interrupt maximum available fault current, designated as "52B" in
  Figure III-6. This breaker, along with the associated breaker disconnects,
  bypass switch, and grounding switch, will be under the direct control of
  System Operations.
- The Facility's control scheme must be designed to allow for the closing of breaker "52G" only if the feed from Transmitter is energized, or breaker "52B" is open. If breaker "52B" is open and breaker "52G" is closed, the generator may synchronize across breaker "52B." If the feed from Transmitter is not energized, then the Facility's control scheme must prevent closing of both breakers "52G" and "52L." Blackstart facilities will require an override to this control which will be utilized only under the direct authorization of System Operations.
- Transmitter will require the Customer to provide two independent, redundant relaying systems where required by NPCC criteria. This will also be required for Facilities interconnected to the Transmission System if Transmitter determines that delayed clearing of faults within the Customer's Facility could adversely affect the Transmission System.

Figure IV: Type II Installations



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Figure V: Legend of Schematic Symbols

	Three phase transformer, delta – grounded wye connection.	
	Three phase generator.	
	Breaker.	
<u>}</u>	Potential transformer.	
3	Current transformer.	
	Three phase disconnect switch.	
	Protective relay.	
>	DC control circuit.	



1.23	NB POWER	R CORPORATION		
LEGEND SCHEMATIC SYMBOLS USED IN Types I and II Installations				
	KAH	May 27, 2002		

## O. Exceptions

While the majority of installations have been discussed, this document cannot cover every possible contingency or variation in equipment to be encountered at the various generator installations. Questions on the protective relaying to be used at any installation not covered by this document shall be addressed to Transmitter.

### IV. METERING

Any location where a Facility is connected in parallel with the Transmission System will be metered to measure energy flow in two directions. The metering requirements contained herein assume bi-directional metering at the point of connection. Any other metering arrangement will require approval of, and design by, Transmitter.

# A. Revenue Metering Location

The physical location of the revenue metering point is to be as close as practical to the actual contractual delivery point and must be approved by Transmitter.

Normally station service metering is accounted for within the generator metering using bi-directional metering; however, where the Station service is not accounted for within the generator metering, it shall be separately metered.

## B. Loss Compensation

Where the metering point is not located at the contractual delivery point, the metering shall be adjusted to allow for the losses between the contractual metering point and the physical metering point.

# C. Metering Ownership and Maintenance

Transmitter will own the Revenue Metering Equipment associated with the station service and the generator output to the Transmitter system.

Transmitter's Revenue Metering equipment and installations will be approved, inspected, tested and maintained in keeping with Transmitter polices and Measurement Canada regulations.

A metering monthly operation and maintenance charge will be charged as per Schedule D of the Generation Connection Agreement (Revenue Metering Equipment and Costs).

## D. Construction of New and Upgraded Metering Installations

The Customer will provide at its expense adequate space and facilities on its premises, satisfactory to Transmitter, for the installation and maintenance of the Revenue Metering Equipment. Facilities may include but not limited to concrete foundations, conduit, and enclosures etc.

Transmitter will be responsible for the design, procurement, installation and commissioning of all Revenue Metering Equipment. The Customer will be required to pay Transmitter's full cost of the design, procurement, installation and commissioning of all Revenue Metering equipment.

The procurement and installation of instrument transformers may become the responsibility of the Customer where it is mutually agreed, by the Customer and Transmitter, and it is more economical to purchase the revenue metering instrument transformers installed within the Customer's equipment, such as switchgear. The location, type, accuracy class, and ratios of revenue metering

instrument transformers purchased within the Facility's equipment must be approved by Transmitter. All instrument transformers must be approved by Measurement Canada for revenue metering. The Customer is responsible to supply factory certification tests and the Measurement Canada approval numbers for instrument transformers supplied within the Facility's equipment.

Where the Customer and Transmitter agree to install the revenue metering instrument transformers within the Facility's equipment, the Customer is responsible for all future costs associated with replacing the instrument transformers. Instrument transformers must be replaced when they fail or when they are not performing within their designed burden and accuracy ratings.

# E. Use of Revenue Metering Instrument Transformers

Revenue Metering instrument transformers will be used solely for the purpose of supplying the Revenue Metering equipment and for supplying transducers required for telemetering to Transmitter's Energy Control Centre. No other equipment is permitted to be connected to the revenue metering instrument transformers. In the case of potential transformers, a dedicated secondary winding on a potential transformer will be considered to have met this requirement provided the VA burden rating of the potential transformer is not exceed when the connected burdens on all secondary potential windings are added together.

### F. Sealing of Metering Equipment

Where space is provided in customer owned equipment, all compartments containing revenue metering equipment, including terminal blocks, instrument transformers, meters etc, must be sealable by Transmitter.

Transmitter Seals on revenue metering equipment are to be broken by Transmitter personnel only.

### G. Communication Link

The Customer must provide areliable telephone line and telephone line isolation, as required, to all revenue metering interval meters.

## H. Outages Required to Repair Metering Equipment

Where the revenue metering equipment becomes inoperable and an outage to the Facility's equipment is required to repair the metering equipment, the outage must be arranged by the Customer, with Transmitter consultation, within a reasonable time frame. While the revenue metering is out of service, metering will be estimated based on the information that is available to Transmitter.

# I. Metering Equipment and Quantities Metered

- Figure VI shows a typical metering installation for a generation connection on the Transmission System. Note that the metering is installed on the primary Transmission System in this figure.
- 2. Revenue Metering installations will have instrument transformers approved for revenue metering by Measurement Canada.
- Revenue Metering installations will have a Main Revenue Meter and a separate Back-up Revenue Meter. Both meters will be approved by Measurement Canada.

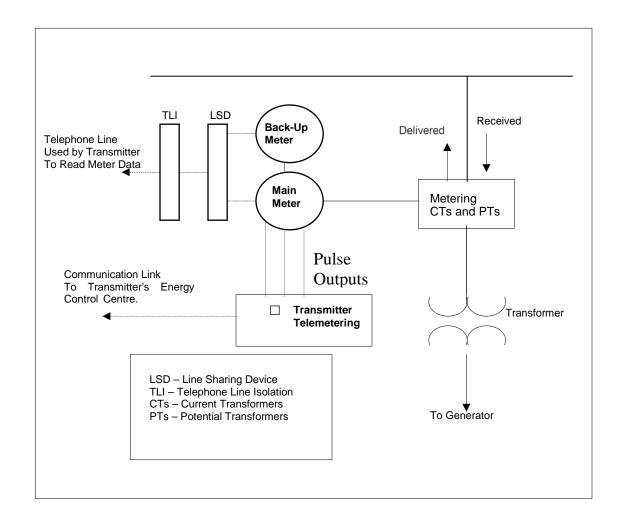
- 4. Accuracy of the Revenue Meters must meet or exceed the 0.2% accuracy class of ANSI standard C12.20.
- 5. Revenue meters must be equipped with a minimum of 4 pulse outputs.

  These pulse outputs may be used by Transmitter for telemetering.
- 6. Each revenue meter will have a Transmitter approved test switch installed to permit on site testing of the metering installation.
- 7. Both the Main and Back-up bi-directional Revenue Meters will have a minimum of 6 interval data channels. Typically the following interval and register data will be recorded:

Energy (kWh) Flow From generator To Transmitter - Delivered kWhs Delivered – cumulative register and interval data kVARhs Lag – cumulative register and interval data kVARhs Lead – cumulative register and interval data

Energy (kWh) Flow From Transmitter To generator – Received kWhs Received – cumulative register and interval data kVARhs Lag - cumulative register and interval data kVARhs Lead - cumulative register and interval data Max kW Demand – Register Max kVA Demand - Register

**Figure VI: Typical Metering Requirements** 



## V. SUPERVISORY CONTROL AND DATA ACQUISITION

Transmitter employs a Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS) to monitor and control the Transmission System. This SCADA/EMS provides real time status and analog information of the Transmission System components by gathering information at each terminal/plant/switching station/substation via Remote Terminal Units (RTUs). These RTUs are interconnected by data communications facilities to the SCADA/EMS host computers in Marysville, New Brunswick. The host computers are used by Operations personnel who are responsible for power system operations. All generation facilities with 5 MVA or more of net generation must have an RTU to meet these requirements.

## A. RTU Requirements

The Facility's RTU must be compatible with Transmitter protocol for data communication. Communication equipment design and procurement must be reviewed and approved by Transmitter to ensure this compatibility.

The RTU must operate continuously to provide the information listed below. Any required maintenance or repair must be scheduled through the System Operator, and must be completed expeditiously to return the RTU to continuous operation.

## B. Normal SCADA Requirements

Generators are required to install an RTU and shall provide for the following telemetry (the scan rates for all analog and digital data are 2 seconds).

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- 1. Analog Data (for each generating unit)
  - Unit Gross Real Power Output (Megawatts)

- Unit Gross Reactive Power Output (Megavars)
- Unit Net Real Power Output (Megawatts)
- Unit Net Reactive Power Output (Megavars)
- Common Station Service Real Power Load(Megawatts)
- Common Station Service Reactive Power Load (Megavars)
- Unit Output Voltage (Kilovolts)
- Manual High and Low Operation Limit for each unit
- 2. Digital Data (for each generating unit)
  - Unit Gross Hourly Energy Output (Megawatthours)
  - Unit Net Hourly Energy Output (Megawatthours)
  - Net Hourly Energy Input (Megawatthours) (where required)
  - AVR Status
  - Unit disconnect Status
  - Unit breaker status
- 3. Meteorological Data (for each wind powered Facility)
  - Wind Speed (m/s), one minute average
  - Wind Direction (Degrees), one minute average
  - Air Temperature (°C)

### C. Automatic Generation Control - Telemetry

For each unit participating in Automatic Generation Control (AGC), the following telemetry is required in addition to the SCADA requirements listed above.

- 1. Unit Control Status (local/remote)
- 2. Unit regulating low limit (Megawatts
- 3. Unit regulating high limit (Megawatts)
- 4. Unit ramp rate (Megawatts/min)

## D. Automatic Generation Control – Control Output

Unit Control Output (Raise/Lower Adjustment)
 For remote control, a 1-second pulse out of the RTU is set to 1 MW of movement in the raise or lower direction. There is a separate raise and lower control output for each unit.

# E. Automatic Generation Control – Tuning Parameters

The following tuning data is required from the Customer prior to commissioning the unit on AGC (does not have to be telemetered):

- 1. Net capacity
- 2. Minimum load
- 3. Disallowed regions (if any)

## F. Additional SCADA Requirements

Transmitter, at its discretion, may require miscellaneous trouble alarms (if any) associated with the generator, such as:

- 1. Block Increase (status)
- 2. Block Decrease (status)
- 3. Runback in Progress (status)

# **G.** SCADA Communication Requirements

The Customer is responsible for the cost to install and maintain continuous SCADA communications between The Transmitter SCADA/EMS computer in Marysville and their RTU at the generation facility. Information can be transmitted via a telephone company provided circuit or via a private communications carrier. The utility Data Communications Network may be

utilized for a fee to provide the connection to the Transmitter Energy Control Centre.

The Customer is responsible for providing SCADA communications to both the Master Control Centre and the Backup Control Centre which are in separate locations in Fredericton, New Brunswick.

All Generation facilities are required to have 7 days-per-week, 24 hours-per-day repair capability for all SCADA circuits.

### VI. POWER QUALITY

The following criteria are established to ensure that generation facilities within the utility service area provide the power quality expected by power consumers and other generators.

# A. Voltage

The voltage from synchronous generators must be controlled so that Transmitter can maintain the distribution voltage within + 5% of nominal. Voltage limits for generation facilities connected to the Transmission System will be determined by Transmitter. Any facility with synchronous generators may be required to provide voltage support to the Transmission System by operating their generator at any point within the generator's capability curve as directed by System Operations.

### B. Flicker

Any sudden change in real or reactive power from the Customer's equipment is reflected as sudden voltage changes that can cause problems to equipment and also cause lights to flicker. Flicker limitations will be determined at the power consumer connected nearest to the Customer's facility and will be based on the flicker chart of % voltage fluctuation versus fluctuations per time period, as given in IEEE Standard 519, "IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems." No more than a 3% instantaneous variation in voltage (flicker) is allowed when connecting or disconnecting any generator or station load to the Transmission System.

### C. Harmonic Content

The harmonic content of the voltage and current waveforms on the Transmission System must be restricted to levels which will not cause any interference or equipment operating problems for customers. Minimum requirements for limitations of harmonic content on the Transmission System shall comply with IEEE Standard 519.

Harmonic problems will also be addressed on a complaint basis. If Transmitter determines that the Facility is the cause of a harmonic problem, then that generation must be removed from the Transmission System until the condition is resolved. In addition, all costs associated with research and corrective action, including settlements paid to other customers, will be at the Customer's expense.

#### D. Islanded Generation Limits

Under certain circumstances, Transmitter may request that the generator serve local distribution load while isolated from Transmitter. To accommodate these situations, the voltage and frequency limits will be specified by Transmitter. These will be reviewed and approved by Transmitter on a case-by-case basis.

## VII. SAFETY (SWITCHING AND TAGGING PROCEDURES)

#### A. General

The connection of multiple generation facilities (possibly controlled by many independent companies) on the Transmission System introduces safety concerns. To mitigate these concerns:

- There shall be established communication between the generator operators and the System Operator.
- There shall be a clear division of operating control between the System
  Operator and the generator operator. This is normally the tie disconnect
  switch (high voltage generator disconnect switch).
- Each Customer shall have a code of practice that provides switching, tagging and grounding procedures that comply with the *Occupational Health and Safety Act, R.S.N.B.* (OSHA). The Transmitter code of practice is the "Transmission and Distribution (T&D) Operating Rules and Regulations".
- The generator operators shall be trained and be made aware of the operating authority of the System Operator.

### B. Switching and Tagging

Strict adherence to established Switching, Tagging and Grounding procedures must be maintained for the safety and protection of all personnel. All operations of the tie disconnect shall be done under T&D Operating Rules and Regulations.

This switch shall be able to be verified open by visual inspection and shall be lockable.

The Customer shall provide the System Operator with a list of all Customer personnel trained and qualified to operate this switch. This list shall be certified and maintained by the Customer in accordance with the T&D Operating Rules and Regulations.

Customer personnel not on the qualified list shall not be permitted to operate the disconnect switch.

# C. Transmitter Responsibility

Transmitter representatives shall carry out an inspection of the work area when Transmitter is required to work on a Customer's premises. If Transmitter believes that hazardous working conditions exist, the Customer shall be required to correct the unsafe condition before Transmitter shall commence work.

## D. Generator Responsibility

The Customer is responsible for establishing a code of practice to comply with all required safety regulations and protection of personnel. Permission must be received from the System Operator before operating the tie disconnect.

When Transmitter is working on the Facility, it is the Customer's responsibility to ensure the equipment being worked on is isolated and de-energized in compliance with T&D Operating Rules and Regulations.

### E. Switch Access

The Customer must provide Transmitter unrestricted, continuous access to the tie disconnect switch.

## F. Energizing Apparatus

The Customer shall not energize any Transmission apparatus unless acting under the rules as set out in the Transmitter System Emergency Restoration Instructions.

### VIII. OPERATIONS AND MAINTENANCE

Power consumers are affected by the Customer's operation and maintenance practices. Practices that promote high reliability will enhance the quality of service to all customers on the Transmission System.

### A. Generator Interfacing

There are many events that will necessitate communications between Transmitter and the Customer. Transmitter and the Customer will provide each other a contact name, phone number, and address for the purpose of conducting ongoing business.

### 1. Operations

Customers may call the System Operator to discuss the status, availability or operation of the Facility. Requests for Transmitter to open/close the Facility's tie disconnect switch should be made to Transmitter as indicated in Section VII, "Safety (Switching and Tagging Procedures)", of this document.

# 2. Metering

The metering package at the Customer's facility will be on a regular calibration schedule that is coordinated by Transmitter Metering Operations. This department will attempt to contact the Customer prior to actually calibrating these meters. The Customer can observe this procedure if desired.

## B. Site Inspections

The following site inspections will be coordinated between the Customer and Transmitter.

## 1. Initial Inspection

The initial inspection includes the Customer's facility acceptance testing which must be conducted before the Facility will be allowed to generate in parallel with the Transmission System, as described in Section III.L, "Generator Facility Acceptance," of this document. This inspection will also involve a discussion and observation of standard operation and safety procedures.

### 2. Annual Inspection

Transmitter will determine the necessity for an annual inspection. If conducted, it will include a visual inspection of the generator and switchgear rooms (where connection equipment is located) and a review of operation and maintenance procedures, pertinent documentation, and adherence to all applicable codes and standards.

## 3. Biennial Test and Inspection

This test and inspection will occur every two years after the initial inspection. Items of concern for the annual inspection will be reviewed and a test of the connection system will be performed per Section VIII.E.1, "Connection Protection System." This test will include input verification testing, overall

protection system operability, and calibration of protective relays. Input verification testing will include verification of PT and CT circuits, transformer ratios, and DC trip source availability. The overall protection system operability will entail verification of trip circuits including a trip test of each breaker tripped by the connection relaying. Calibration of relays will verify the setpoints and confirm the ability of the protective devices to respond within specified parameters.

Protective Connection Relay calibration testing must be performed by a qualified contractor and observed by Transmitter. At the Customer's option, this testing may be performed by Transmitter. Verification of setpoints will be in accordance with Transmitter specifications.

### C. Site Access

Transmitter will require site access for the following reasons:

### 1. Routine Access

Transmitter will require access to the Customer's facilities to perform the inspections and tests detailed in this document as well as for other business needs. Normally, this access will be coordinated and scheduled by phone so as to enable each party to conduct the necessary business with minimum impact to the other party.

## D. Operational Requirements

Utility Transmission Systems are designed to provide safe, reliable service to all customers. Facilities operating in parallel with the Transmission System must not operate in a manner that result in unacceptable service to customers. Facilities whose operation of equipment results in unacceptable service to

customers or adversely affects the Transmission System must immediately correct any problems by performing modifications to equipment as necessary to prevent the recurrence of those problems. If necessary, Transmitter will discontinue the facility connection service until the problems have been corrected.

During maintenance, testing, or repair of Transmission facilities, Transmitter may request the Customer to discontinue parallel operations. Such maintenance may require opening of the tie disconnect switch.

The following operating requirements are necessary to ensure reliable service and that the operation of generation equipment does not cause any adverse affects on the Transmission System.

# 1. Voltage Control

The Customer must automatically adjust generation to maintain adequate voltage regulation under a variety of operating conditions. The distribution voltage to all customers must be maintained within ±5% of nominal voltage as specified by Transmitter. The Customer must employ an automatic method of disconnecting generation equipment from the Transmission System if the system voltage cannot be maintained within tolerance. All generators must be equipped with an Automatic Voltage Regulator and it must remain in-service unless authorized by the System Operator.

### Reactive Power

To prevent the degradation of system voltage to Transmitter customers as a result of connection with a Customer's Facility, Facilities with synchronous generators shall generate such reactive power as may be reasonably necessary to maintain voltage levels and reactive area support.

## 3. Speed Control

All generators must be equipped with an automatic frequency sensitive speed-governing system capable of achieving a 4% droop characteristic.

## 4. System Performance Reporting

For Transmitter to adequately assess the performance of its system, ensure compliance with regulatory requirements, and provide conformance reporting to NPCC and the ISO New England, Customers will be required to submit the following operational information:

- Continuously (Units Larger than 5 MVA): Accurate and reliable metering and information regarding status and the output (MW, MVAR, kV, MWh, and alarms) of the Facility as specified in Section V, "Supervisory Control and Data Acquisition."
- When Available: Information about whether the facility has capability for participation in system restoration or has black start capability.
- Each Year or as Required: Maintenance schedules for the generator, step-up transformer, tie breaker, and protection system.
- Biennially: Setpoint verification on all underfrequency/overfrequency relays or underspeed/overspeed devices which are not part of the Connection Protection Equipment.
- After Outages or Relay Operations: Information about any outage or connection relay operation involving their facility as per Transmitter instructions for Relay Operation Target Report within two (2) working days.

# E. Testing & Maintenance

The Customer will have full responsibility for the routine testing and maintenance of the connection equipment, including the Connection Protection System, the Generator Protection System, the Generator Step-up Transformer, the Connection Circuit Breaker, and the Station Battery and Charging System. Transmitter will monitor maintenance on the Connection Equipment, including protection system(s), transformer(s), Connection Circuit Breaker(s), and Station Battery(ies) and Charging System(s), etc.

Transmitter is primarily interested in the performance of the total facility to ensure that the facility operates with no adverse impact to the Transmission System. Therefore the Customer is expected to maintain the generator and all of its support systems. The Customer is also responsible for tree trimming and vegetation control in accordance with Transmitter vegetation control standards for any portion of the connection where a fault could affect the operation of the Transmitter System.

As a minimum, Customers must perform all periodic maintenance and testing according to: the recommended manufacturer's maintenance and test guidelines; the requirements specified in this document; and specifications found in reference documentation of controlling authorities.

Maintenance records are required to be maintained and must be made available to Transmitter during the annual inspections and biennial test and inspections. Specific equipment test data must be made available to Transmitter upon request to provide evidence that the equipment will operate as intended. Failure of the Customer to provide proper testing and maintenance will result in the Customer being notified and requested to take prompt corrective action within ten (10) days. Should the Customer then fail to provide the proper testing and

maintenance, Transmitter will discontinue the facility connection service until appropriate corrective action is taken and Transmitter approval is obtained.

If the connection equipment is not properly maintained, fails to perform its intended function, or has been modified from that approved by Transmitter, then Transmitter will give notice to correct the area of noncompliance or will open the connection. The time allowed for the Customer to comply, while remaining on line, will depend upon an Transmitter assessment of the safety, reliability, and performance issues relating to the noncompliance.

Transmitter may inspect any of the connection equipment, including the protection systems, whenever such an inspection is deemed necessary by Transmitter. This inspection may include tripping of the connection and/or generator circuit breaker(s). The Customer shall bear the cost of any necessary testing that may be requested by Transmitter.

All outage schedules and maintenance work will be coordinated through Transmitter.

The Customer must implement a maintenance program consistent with acceptable industry practice so as to achieve a highly reliable connection. During site visits, Transmitter representatives will be interested in checking maintenance records and performing testing as follows:

## 1. Connection Protection System

The Customer must perform a relay calibration test every two (2) years using equipment of known accuracy. This biennial test shall include calibration and operational tests of individual relays and functional tests of the subsystems and the total system. Calibration checks will include verification of setpoints and voltage and current measurements. Operational and functional tests will include

as many trips of the tie and/or generator breaker(s) as necessary, a synchronizing test, and any other test as may be required by Transmitter. Transfer trip equipment, where installed, will also be tested. During the biennial operational test, up-to-date design drawings must be made available to Transmitter personnel to allow for safe, reliable testing of the facility.

### Connection Circuit Breakers/Reclosers and Transformers

The Customer will perform maintenance on these devices at a maximum interval not to exceed twenty-four (24) months. The Customer must provide to Transmitter the identity and qualifications of the personnel who perform this maintenance and any associated testing. This maintenance must be coordinated with System Operations to obtain the proper zones of clearance.

# 3. Station Battery and Charging System

Batteries associated with the Connection Protection System must have a high degree of reliability. To ensure that the Connection Protection System performs its intended function, the Customer must implement a battery preventative maintenance program to include periodic battery inspections and testing as approved by Transmitter. The reports from these battery inspections and tests shall be maintained by the Customer and made available for review by Transmitter personnel during the periodic tests and inspections of the facility and at other times as requested by Transmitter.

• Battery Inspections: The preventative maintenance program will include monthly battery inspections to measure and record, as a minimum, overall battery voltage and the following parameters on a pilot cell: voltage, specific gravity (where applicable), fluid level (where applicable), and temperature. Quarterly, these readings will be taken and recorded on each battery cell. Also on a quarterly basis, an indication of battery condition (cleanliness, presence of corrosion, condition of battery leads and connections) will be recorded with notes of any corrective maintenance performed. A sample form for recording this information is included as Figure VIII-3 at the end of this section.

- A high-rate charge will be performed as required, or battery cells replaced, if the cells aren't within the manufacturer's recommendations or applicable IEEE Standards, or if a trend of reduced cell voltage is detected. Where inspection data is incomplete or indicates battery deterioration or improper maintenance, Transmitter will require the completion of a battery capacity test or replacement of the battery.
- During the biennial test and inspection, the Customer may be required to perform a battery inspection in the presence of an Transmitter representative. The results of this inspection will be reviewed by Transmitter for compliance with this station battery preventative maintenance requirement.
- Battery Testing: The Customer must perform a battery capacity (load-discharge) test on the station battery that provides tripping power for the Connection Protection System. This load discharge test must prove that the station battery retains at least 80% of its rated capacity. If the capacity falls below 80%, the battery must be replaced. An initial battery capacity test shall be done prior to battery installation and commissioning. Additional tests will be done at least every five years during the battery's operational life, in accordance with the latest applicable IEEE Standards and manufacturer's specifications.
- Load testing, as approved by Transmitter on a case-by-case basis, may be used as an alternative to capacity testing. To obtain approval for load testing, the Customer will supply Transmitter with a proposed battery test

program certified by a professional engineer. The professional engineer must certify that the battery test program will yield test results that reliably indicate the battery has ample capacity to meet the needs of the generation facility.

Results of all station battery tests must be provided to Transmitter.

• Battery Charging: A normal float charge will be maintained on the battery and a high-rate (equalizing) charge will be performed periodically as recommended by the manufacturer or applicable IEEE standards. The battery must be cleaned and each cell must be appropriately and conspicuously marked with a cell number for reference. Where applicable, cell fluid levels must be maintained with appropriate replacement fluid, in accordance with manufacturers recommendations.

# F. Board Approved Planning Standards

For facilities interconnected to the utility Transmission System, the Customer is required to meet Board approved Planning Standards. This standard requires physical testing to be performed to verify that actual equipment performance matches design data. Parameters to be verified include generator gross and net capability, gross and net reactive power capability, voltage regulator controls, speed/load governor controls, and excitation systems. These standards include requirements for the following testing and information (detailed requirements for these tests must be approved by Transmitter):

- The Customer shall annually verify the gross and net summer and winter capability of each unit.
- Every five (5) years, the Customer shall perform a test to verify the gross and net reactive capability, leading and lagging, of their units.

 Every five (5) years, the Customer shall test voltage regulator controls and limit functions, speed/ load governor controls, and excitation systems to verify equipment performance against design specifications.

### Schedule B1

### **Technical Data – Generator**

The following pages up to Schedule C contain technical data and other information respecting the [Insert Customer/Facility Name] Facility.

- Generator Data
- Generator Step-up Transformer
- Excitation System Data
- Power System Stabilizer Data
- Governor and Prime Mover Data
- Intertie Protection System Data
- Feeder Management Relays
- Synchronizing Procedure
- Diagrams
  - Key One Line Diagram
  - Breaker Synchronization
  - Three Line Diagram Generator Metering
  - Interconnect Wiring Diagram Customer

# **SCHEDULE C - CONSTRUCTION AND PAYMENT SCHEDULE**

[Developer's Name - Project Name]

**Date** 

Estimated Remaining Project Costs Amounts
Invoiced and
Payments
Received

Total Payments Received

# Schedule D - REVENUE METERING EQUIPMENT AND COSTS

Management Construction Cost Report

Costs Reported Through: [Insert date]

Location/Description	Description	Capital	Non Capital Cost	Total Cost
Revenue Metering Meters				
Meter Item A				
Meter Item B				
Meter Item C				
Subtotal Meters				
Revenue Metering Communications				
Telemetry Item A				
Telemetry Item B				
Telemetry Item C				
Subtotal Communications				
Revenue Metering Transformation				
Transformation Item A				
Transformation Item B				
Transformation C				
Sub Total Transformation				
Grand Total				

**Loss Compensation Details** 

If the Metering Point is different than the Point of Receipt, compensation for losses is required and will be specified below:

Schedule E - BLACKSTART CRITERIA

1.0 Definition

Following a complete loss of system generation (blackout), it is necessary to establish initial generation that can supply a source of electric power to other

system generation and began system restoration. These initiating generators

are referred to as system blackstart generators.

A blackstart generator must be able:

• to self start without any source of offsite electric power to help create a

source of generation that can maintain adequate voltage and

frequency while energizing isolated transmission facilities and auxiliary

loads of other generators.

2.0 Tests

All facilities designated as blackstart capable shall have this capability tested

annually without dependencies on power sources not available during a

partial or complete system blackout.

Once the facility has been started, it shall continue to demonstrate the

capability by operating in a stable condition while isolated from the power

system for a minimum of ten minutes.

The number of generators within a facility that shall be blackstarted for this

test is determined by the Control Area as needed by the Control Area's

system restoration plan.

All operating aids and auxiliary systems used in blackstarts, such as

operations voice communications and system control and data acquisition

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(SCADA), shall be verified to operate adequately without dependency on the interconnected system or other unrelated generator support for any source of station service. Station service transfer schemes will also be tested as part of

the blackstart test.

Transmission egress capability to deliver blackstart generation to the next

substation shall be verified.

3.0 Black Start Reporting

The facility owner/operator is responsible to carry out blackstart testing.

Request to carry out full facility test should be submitted to the Energy Control

Center Outage Coordinator at least 5 working days prior.

Once the test is completed the blackstart facility will report test results

verbally to the energy Control Center within 24 hours.

A written report will be submitted to the Manager of Transmission Operations

at the Energy Control Center and a copy to the Manager of Transactions and

Scheduling within one month of test completion. This report will:

Outline site location

Date of test

Test results

Reasons for failure if needed

Remedial actions required and expected completion date of remedial

actions

Documentation must be kept for a period of three years.

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ECC must provide NPCC with a consolidated report of the testing by February 1<sup>st</sup> of each year.

## 4.0 Reference documents

This document is written to comply with NPCC Document A-03 (Emergency Operation Criteria) and is a copy of New Brunswick Power Standard Operating Practice SOP-T18.

## Schedule F - INSURANCE REQUIREMENTS

- 1.0 Customer agrees to provide and/or cause its subcontractors to provide and maintain in full force and effect with financially responsible insurance carriers acceptable to Transmitter, the following insurance which shall take effect as of the date of this agreement and shall remain in effect during the term hereof or any extension thereof or as otherwise specified herein:
- 1.01 Workers Compensation as required by the *Workplace Health, Safety and Compensation Commission Act* (New Brunswick) or similar applicable legislation covering all persons employed by Contractor or its subcontractors for work performed under this contract. For U.S. employees, appropriate State Workers Compensation must be carried including Employer's Liability for a minimum limit of \$1,000,000 U.S., with a Foreign Coverage Endorsement and, to the extent applicable, *Jones Act* and U.S. Longshoreman's and Harbor Workers coverage and FELA.
- 1.02 Automobile Liability Insurance, covering all licensed motor vehicles owned, rented or leased and used in connection with the work to be performed under this agreement covering Bodily Injury and Property Damage Liability to a combined inclusive minimum limit of \$2,000,000 and mandatory Accident Benefits.

Commercial General Liability and Excess Liability Insurance on an occurrence basis in an amount not less than \$35,000,000 inclusive for both bodily injury, including death, personal injury and damage to property, including loss of use thereof, for each occurrence.

Coverage shall specifically include but not be limited to the following:

- i) Blanket Contractual Liability;
- ii) Damage to property of the Owner including loss of use thereof;
- iii) Products & Completed Operations including a provision that such coverage to be maintained for a period not less than 24 months post Final Performance:
- iv) Employer's Liability;
- v) Tenant's Legal Liability;
- vi) Non-Owned Automobile Liability; and,
- vii) Broad Form Property Damage

Excess Liability Insurance also to be excess of the coverage's under sections 1.01 (Workers Compensation – to the extent coverage includes Employer's Liability), 1.02 (Automobile Liability), and 1.04 (Aircraft Liability).

- 1.04 Aircraft Liability Insurance with respect to owned or non-owned aircraft to the extent used directly or indirectly in the performance of the work for limits no less than \$25,000,000 each occurrence without aggregate for bodily injury, death (including the passenger hazard) and damage to property including loss of use thereof.
- 1.05 i) "All Risk" property insurance as applicable to a limit of the value of the full replacement cost of the facility any one occurrence covering physical loss or damage to the facility. Deductible shall not exceed [Insert amount]\_\_\_\_\_.
- 1.06 Pollution Liability Insurance: The Customer will purchase a policy with limits of not less than \$5,000,000 per occurrence covering bodily injury and property damage claims, including cleanup costs as a result of pollution conditions arising from Customer operations.

1.07 Errors & Omissions Insurance: Customer shall, at all times, maintain in full force and effect professional liability insurance in an amount not less than [Insert amount] aggregate limit covering the period from start of the contract through to completion, for a further discovery period of 5 years from the Contract Completion. This policy is to contain a loss of use cover.

#### **General Insurance Conditions**

### 1. Certificates of Insurance:

- i) Before starting work, the Customer will supply and cause its subcontractors to supply Transmitter a certificate of insurance completed by a duly authorized representative of their insurer certifying that at least the minimum coverages required here are in effect and that the coverages will not be cancelled, nonrenewed, or materially changed by endorsement or through issuance of other policy(ies) of insurance which restricts or reduces coverage, without 60 days advance written notice by registered mail, or courier, receipt required, to:
- ii) Failure of Transmitter to demand such certificate or other evidence of full compliance with these insurance requirements or failure of Transmitter to identify a deficiency from evidence provided will not be construed as a waiver of the Customer's obligation to maintain such insurance.
- iii) The acceptance of delivery by Transmitter of any certificate of insurance evidencing the required coverages and limits does not constitute approval or agreement by Transmitter that the insurance

requirements have been met or that the insurance policies shown in the certificates of insurance are in compliance with the requirements.

- iv) If the Customer fails to maintain the insurance as set forth here, Transmitter will have the right, but not the obligation, to purchase said insurance at the Customer's expense. Alternatively, the Customer's failure to maintain the required insurance may result in termination of this Agreement at Transmitter's option.
- 2. All deductibles shall be to the account of the Customer.
- 3. With the exception of clause 1.02 (Automobile Liability), all insurance noted above shall specify that it is primary coverage and not contributory with or in excess of any other insurance that may be maintained by Transmitter.
- 4. All limits and deductibles are expressed in Canadian dollars.
- A waiver of subrogation shall be provided by the insurers to Customer, subcontractors and Project Manager for coverages 1.01 (Workers Compensation – U.S. only), 1.03 (Customer's Equipment).
- 6. Transmitter shall be included as additional Named Insured under coverages noted in (Commercial General Liability and Excess Liability), and as an Additional Insured under coverages (Aircraft Liability), and (Pollution Liability).
- Coverages noted in 1.03 (Commercial General Liability and Excess Liability),
   1.04 (Aircraft Liability), and 1.06 (Pollution Liability) shall contain a Cross Liability clause and a Severability of Interests clause.

8.	Customer shall provide Transmitter with certified copies of insurance policies		
upon request.			

# **Schedule G - PRE-CONTRACT COSTS**

This schedule defines all costs incurred by Transmitter that the generator is responsible for paying for. This includes but not limited to:

- Facilities studies
- System Impact studies

# **Schedule H - GENERATOR CAPABILITY CURVE**

A graphical representation of the generator's Megawatt and Megavar capability is to be provided by the generator owner or his representative for inclusion in the Generation Connection Agreement.

# **Schedule I - CONNECTION FACILITIES CHARGES**

Transmitter shall determine the annual charges for Connection Facilities Support Charges – Non-Capital Related (IFSC-NCR) as shown and described in this Schedule I.

## **Description Calculation:**

- a) "Total Plant Construction Costs" shall be Transmitter's original construction costs, inclusive of all project overhead OM&A costs, plus any improvements, as defined on Transmitter's plant accounting records. These costs are classified as Direct Assignment Facilities and Other Direct Assignment Facilities as defined in Section 1 of this Agreement. (See Sheet 3, Row C).
- b) "Shared Construction Costs" shall be the amount of Total Plant Construction Costs, pursuant to the Tariff covered either through other connection agreements or added to the Tariff rate base. (See Sheet I, Row F).
- c) "Total Plant Construction Costs Recoverable From Customer" shall equal the Total Plant Construction Costs less the Shared Construction Costs. (See Sheet 1, Row G).
- d) The "Metering Per Schedule D of Generation Connection Agreement" shall equal Transmitter's cost, as set forth in Schedule D, related to the construction or installation on Customer's behalf of all Revenue Meters. (See Sheet 1, Row H).
- e) "Customer's Expected Final Responsibility" shall equal the Total Plant Construction Costs Recoverable From Customer plus the Metering Per Schedule D of Generation Connection Agreement. (See Sheet 1, Row I).

- f) The "Capital Charges Subject to Support" shall equal the Customer's Final Expected Responsibility less any non-capitalized construction costs not subject to support, as determined by Transmitter, less the overhead operation, maintenance and administration, less the Metering Per Schedule D of Generation Connection Agreement. (See Sheet 1, Row J).
- g) "Non-Capital Support Charge Rate" shall equal the OM&A related carrying charge as defined by and calculated pursuant to Schedule 9 of Transmitter's currently effective OATT. The OM&A related carrying charges calculated pursuant to Schedule 9 shall include, without limitation, the direct and indirect OM&A expense. (See Sheet 1, Row K).
- h) The "IFSC-NCR Annual Cost" shall be the Capital Charges Subjected to Support multiplied by the Non-Capital Support Charge Rate. (See Sheet 1, Row L)

# Payment Options:

Customer has elected to pay in advance all construction costs, including the Metering Per Schedule D of the Generation Connection Agreement, as determined by application of the Formula in this Schedule I. The construction costs are based on good faith estimates as of the effective date of this Agreement and shall be adjusted to actual pursuant to this Agreement. The Customer will retain the obligation pursuant to this Schedule I until Transmitter has recovered its initial investment in the constructed or updated facilities or until any unrecovered investment is included for recovery in the Transmitter's OATT, an RTO OATT, or any other rate recovery.

Customer has elected to pay each month one-twelfth of the IFSC-NCR Annual Cost as determined by application of the Formula in this Schedule I. The capital costs subject to support are based on good faith estimates as of the effective date of this

Agreement and shall be adjusted to actual pursuant to this Agreement. The Customer will retain the obligation for the IFSC-NCR after the term of the Generation Connection Agreement contract to the extent the operations and maintenance expenses related to the Customer's share of the constructed facilities are not included for recovery under the Transmitter's OATT, an RTO OATT, or any other rate recovery or until the Customer has paid Transmitter for the removal of said facilities. Upon Customer's payment to Transmitter for the removal of said facilities, Customer's obligation for IFSC-NCR annual cost shall terminate and Transmitter shall remove said facilities in due course.

## Updates:

The Customer is on notice that the IFSC-NCR annual costs, as determined by Transmitter pursuant to the Formula in this Schedule I, will be updated and become effective from time to time upon approval of the Board. The update will reflect changes in the OM&A carrying charge that may result from using the most recent calendar year data or such supporting data to calculate the non-capital related carrying charges pursuant to Transmitter's OATT.

The charges in this Schedule I, including the "Capital Charges Subject to Support", will be updated if Transmitter determines that any additions, modifications or upgrades to Transmitter's transmission system are required as a result of the Customer proposing to materially change the electrical characteristics or increase the capacity of the Facility connected to Transmitter's transmission system. Transmitter will charge the Customer the incremental cost if such additions, modifications or upgrades are required. Transmitter, at its sole discretion, can require that these costs be paid in advance or over time. If Transmitter requires a lump sum payment in advance, the Customer will pay the actual construction costs, and the Net Present Value over the term of the agreement of the OM&A related charges for the direct and indirect OM&A expense.

# SUPPORT CHARGES (in \$Cdn) - Sheet 1

	Developer / Project Name			
	Location			
	Date			
	Term (years)			
			Total Cost (\$Cdn)	Source
	nstruction Costs			Sheet 2, Row A'
A B	Direct Assignment Facilities Other Direct Assignment Facilities			Sheet 2, Row A'
С	Total Plant Construction Costs (Net	of Metering)		Row A + Row B
D E F	Shared Construction Costs (if any) Direct Assignment Facilities (typicall Other Direct Assignment Facilities (may Total Shared Construction Costs	-		
G	Total Plant Construction Costs Recover	able From Customer		Row C – Row F
Н	Metering Costs			Sheet 2, Row D'
I	Customer's Expected Final Respons	ibility		Row G + Row H
Cor	nnection Facilities Support Charge	Non-Capital Related (I	FSC-NCR)	
J K	Capital Charges Subject to Suppo Non-Capital Support Charge Rate (e			Row I Sch.9 of Tariff
L	IFSC-NCR Annual Cost			Row J x Row K
Pay	ment Schedule			
M	Capital Costs: (Up-front Lump Sum Payment)			Row I
N	Monthly Non-Capital Related Sup	port Charge:		Row L ÷12

# Notes:

- 1. Sharing of costs to reflect Attachment K: Transmission Expansion Policy of the Tariff.
- 2. The Non-Capital Support Charge Rate (Row K) reflects the OM&A component of the Tariff revenue requirement relative to the total plant and is defined on Schedule 9 of the Tariff. The calculation of Row L will be updated as required to reflect the latest Board approved Non-Capital Support Rate as identified on Schedule 9 of the Tariff.

# SUMMARY OF PLANT (in \$Cdn) - Sheet 2

		Total Cost (\$Cdn)
Dire	ct Assignment Facilities (Dedicated Facilities)	
<u></u>	Terminal Related Item A	
	Terminal Related Item B	
	Terminal Related Item C	
	Terminal Related Item D	
	Transmission Lines	
	Direct Assignment Facility Capitalized Costs	
	Direct Assignment Facility Non Capital Costs	
	Direct Assignment Facility Indirect Costs	
A'	Total Direct Assignment Facilities (Dedicated)	
<u>Othe</u>	er Direct Assignment Facilities ("But-For" Facilities)	
	Terminal Related Item A	
	Terminal Related Item B	
	Terminal Related Item C	
	Terminal Related Item D	
	Transmission Lines	
	Other Direct Assignment Facility Capitalized Costs	
	Other Direct Assignment Facility Non Capital Costs	
	Other Direct Assignment Facility Indirect Costs	
B'	Total Other Direct Assignment Facilities ("But-For")	
<u>Tota</u>	Il Direct Assignment Facility & Other Direct Assignment F	acility Costs
	(excluding metering costs)	
	Total Capitalized Costs Total Non Capital Costs	
	Total Indirect Costs	
C'	Total Non-Metering Project Costs	
	·	
Mete	•	
	Revenue Metering Capitalized Cost	
	Revenue Metering Non-Capital Costs	
'ח	Revenue Metering Indirect Costs  Total Metering Project Costs	
D'	Total Meterning Froject Costs	
E'	Total Project Cost	

# **CONSTRUCTION COST DETAILS (in \$Cdn) - Sheet 3**

	Description & Location	Capital Cost	Non- Capital Cost	Total Construction	Project Overhead	Total Project
	Direct Access Facilities (Dedicated Facilities)					
	Terminal Related Item A					
	Terminal Related Item B					
	Terminal Related Item C					
	Terminal Related Item D					
	Transmission Lines					
Α"	Subtotal					
В"	Other Direct Access Facilities ("But-For" Facilities) Terminal Related Item A Terminal Related Item B Terminal Related Item C Terminal Related Item D Transmission Lines Subtotal					
C"	Total Connection Facilities					
O	rotal doffilection i doffities					
D"	Revenue Metering					
Ε"	Total Project					

Total Construction = Capital Cost + Non-capital Cost Total Project = Total Construction + Project Overhead

#### ATTACHMENT K

# **Transmission System Planning**

#### 1.0 TRANSMISSION PLANNING PROCESS

The Transmission Provider's planning process will reflect the following nine principles:

- Coordination develop transmission plans with all customers and interconnected entities.
- Openness planning meetings will be open to all transmission and interconnection customers, government authorities, and other stakeholders.
- Transparency the basic methodology, criteria, and processes used to develop transmission plans and the status of upgrades identified in the transmission plan will be made available to stakeholders.
- Information Exchange Network Customers will be required to submit information on their projected loads and resources on a comparable basis.
- Comparability the transmission system plan will be developed for specific service requests comparable to native load.
- Dispute Resolution a process will be developed to manage disputes that arise from the planning process.
- Regional Participation coordinate with interconnected systems, share system plans, and identify system enhancements that could relieve congestion or integrate new resources.
- Economic Planning Studies account for economic, as well as reliability, considerations.
- Cost Allocation requires that Transmission Providers address the allocation of costs of new facilities.

## 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, open and transparent forum open to all Interested Parties. The transmission planning process will begin with and provide for Interested Parties input throughout. The Transmission Provider's process and its conduct shall be consistent with its Standards of Conduct.
- 2.0.3 Despite the absence of a regional planning forum, the Transmission Provider will engage in planning with responsible authorities including those outside of New Brunswick to coordinate the Transmission Provider's planning activities with those of interconnected utilities.

#### 3.0 DEFINITIONS

### 3.1 10-Year Outlook

A collection of projects that meets the needs identified in the baseline plan.

#### 3.2 Baseline Plan

A plan reflecting committed and scheduled investments in transmission facilities and transmission system expansion plans, new or modified facilities approved by the Transmission Provider, and investments in transmission facilities required to maintain the reliability of the IES.

# 3.3 Economic Planning Study

A study undertaken by the Transmission Provider with respect to economic upgrades such as congestion reduction or the integration of new resources.

## 3.4 Feasibility Review

An initial review undertaken by the Transmission Provider to determine if a request for a new or modified connection to the transmission system will require a System Impact Study.

## 3.5 Interested Party

i) Any existing transmission customer, interconnection customer, or neighboring transmission provider, and ii) any other person who may be affected by the planning process described in this Attachment K.

## 3.6 NPCC

Northeast Power Coordinating Council

#### 3.7 Point of Contact

The contact designated by the Transmission Provider to whom all information and inquiries related to the planning activities described in this Attachment K should be directed.

# 3.8 Public Policy Requirements

Requirements established by enacted Canadian federal or provincial statutes, acts or regulations.

#### 3.9 Tariff

The Transmission Provider's Open Access Transmission Tariff (OATT).

## 4.0 TRANSMISSION SYSTEM PLANNING

## 4.1 Long-term Integrated Electricity System Development Plan

- 4.1.1 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.
- 4.1.2 Upon completion of the 10-Year Outlook, the Transmission Provider shall, at a minimum:
  - a) Publish the 10-Year Outlook on the Transmission Provider's public website;
  - b) Notify Interested Parties known to the Transmission Provider at the time of such publication, via electronic mail
  - c) In any publication or notice under paragraphs a) and b), solicit comments on the contents of the 10-Year Outlook via the Transmission Provider's public website;
  - d) Host an open session for discussion of the 10 Year Outlook within 30 days of its publication;
  - e) Provide Interested Parties 14 days' notice of the time and location of the open session, except where a person registers as an Interested Party after the notice is provided.
  - Reflect comments received within 45 days of the publication of the 10-Year Outlook in a published summary of comments on the Transmission Provider's public website;
  - g) Publish a revised 10-Year Outlook on the Transmission Provider's public website, if required to correct material errors or omissions and incorporate compelling requests for enhancements; and
  - h) Ensure that relevant comments are reflected in subsequent 10-Year Outlooks.

- 4.1.3 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 4.2;
  - c) The summarized results of studies performed under section 4.3;
  - 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.
- 4.1.4 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.
- 4.1.5 Should an Interested Party feel that their comments on the 10-Year Outlook have not been adequately addressed by the Transmission Provider, they have the right to follow the dispute resolution process outlined in section 12 of the Tariff.

#### 4.2 Baseline Plan

- 4.2.1 The Transmission Provider shall prepare each Baseline Plan using:
  - a) Data and information submitted by Interested Parties;
  - 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.

- 4.2.2 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.
- 4.2.3 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.

# 4.3 Annual Assessment of the Integrated Electricity System

- 4.3.1 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 congestion 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 congestion on the IES, the impact of the connection of new or modified Facilities and the Adequacy of Interconnections.
- 4.3.2 Where the Transmission Provider has identified in an annual assessment the need to alleviate existing or emerging transmission congestion on the IES, it shall develop and study technically feasible options for alleviating the constraint in consultation with existing and potential Interested Parties. Such consultation will be conducted through the process established under Section 4.1.2 of this Attachment.

- 4.3.3 Each calendar year, Interested Parties 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 congestion on the IES.
- 4.3.4 Where an annual assessment referred to in section 4.3.1 identifies potential transmission congestion on the IES, the Transmission Provider may, depending upon the nature and the probability of the congestion,
  - a) utilize the process as described in section 4.3.2; or
  - b) request further supporting information.
- 4.3.5 For the purposes of this section transmission congestion shall be considered to be emerging if it is identified by the Transmission Provider as likely to arise within one to five years and transmission congestion 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 interested parties of section 4.3.3, within five to ten years.
- 4.3.6 The Transmission Provider will accept projections that identify a need for transmission service driven by Public Policy Requirements; or, for regional planning activities, a list of studies that meet regional needs and opportunities, including needs driven by Public Policy Requirements.

## 4.4 Economic Planning Studies

4.4.1 The Transmission Provider shall undertake economic planning studies on behalf of native load or OATT customers. Economic planning studies shall evaluate potential upgrades or other investments that could reduce congestion or integrate new resources and loads. Generally, the studies will be conducted in connection with other planning studies.

- 4.4.2 Interested Parties may submit written requests for economic planning studies to the Transmission Provider. Such requests shall specify in detail the specific proposed project to be the subject of the requested economic planning study.
- 4.4.3 The Transmission Provider, with due consideration of priorities identified by Interested Parties, shall identify a maximum of two high priority economic planning studies, with no minimum, that will be performed on behalf of stakeholders within a calendar year. Any Interested Party's formal protest of the studies identified shall be in accordance with the Dispute Resolution Procedure of the Transmission Provider's OATT.

## 4.5 Coordinated Transmission Planning

- 4.5.1 As a member of NPCC, the Transmission Provider will participate in coordinated planning with interconnected systems through Annual Area Reviews as outlined in NPCC Regional Reliability Reference Directory 1, Design and Operation of the Bulk Power System.
- 4.5.2 The Transmission Provider will post current links on its public website to NPCC's procedures and guidelines, as well as information detailing the Transmission Provider's participation in NPCC's planning process.
- 4.5.3 Through the Transmission Provider's participation in NPCC, data sharing and information exchange will take place with interconnected transmission systems and in coordinated planning studies that may have interregional impacts.
- 4.5.4 The Transmission Provider will post on its website how Interested Parties can obtain information with respect to opportunities for participation in interregional planning forums.

## 5.0 CONNECTION OF NEW AND MODIFIED FACILITIES

# 5.1 Connection Requirements of New and Modified Facilities

- 5.1.1 All new or modified Facilities must be approved by the Transmission Provider before connecting to the IES.
- 5.1.2 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.
- 5.1.3 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. Power supply agreements between the Corporation and Load Facilities connected at the time the Tariff came into effect are deemed to qualify to fulfill this obligation.
- 5.1.4 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.

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

5.2.1 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 the Electricity Business Rules under Appendix B, Connection Assessment Procedure, together with the supporting materials and deposit.

- 5.2.2 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 Electricity Business Rules. Requests for Transmission Service shall be processed in accordance with the Tariff with further detail provided in Appendix B of the Electricity Business Rules.
- 5.2.3 For modifications to Generation requests, the Connection Applicant shall submit to the Transmission Provider modifications to any information provided in the Request for Connection. The applicant shall retain its queue position if the modifications are in accordance with Sections 5.2.3.1, 5.2.3.2 or 5.2.3.4, or are determined not to be material modifications pursuant to Section 5.2.3.3.
- 5.2.3.1 Prior to the return of the executed System Impact Study Agreement to the Transmission Provider, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. For plant increases, the incremental increase in plant output will go to the end of the queue for the purposes of cost allocation and study analysis.

- 5.2.3.2 Prior to the return of the executed Facility Study Agreement to the Transmission Provider, the modifications permitted under this Section shall include specifically: (a) additional 15 percent decrease of electrical output (MW), and (b) Generating Facility technical parameters associated with modifications to Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Generation Customer.
- 5.2.3.3 Prior to making any modification other than those specifically permitted by Sections 5.2.3.1, 5.2.3.2, and 5.2.3.4, the Generation Customer may first request that the Transmission Provider evaluate whether such modification is a material modification. In response to the Generation Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and inform the Generation Customer in writing of whether the modifications would constitute a material modification. Any change to the Point of Interconnection, except those deemed acceptable under Section 5.2.3.1 or so allowed elsewhere, shall constitute a material modification. The Generation Customer may then withdraw the proposed modification or proceed with a new Request for Connection for such modification.
- 5.2.3.4 Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Generating Facility to which the Request for Connection relates are not material and should be handled through construction sequencing.

- 5.2.4 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.
- 5.2.5 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 5.2.4(a) and 5.2.4(b), the Transmission Provider shall approve the request.
- 5.2.6 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 section 5.6.
- 5.2.7 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 5.2.4(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 section 5.6; 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 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 section 5.6.
- 5.2.8 Where the Transmission Provider determines that it will not approve the connection of a new or modified Facility to the IES under section 5.2.7(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, unless the Transmission Provider determines that the change is non-material.

# 5.3 General Connection Assessment Process for New or Modified Load Facilities

- 5.3.1 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 the Electricity Business Rules, Appendix B, Connection Assessment Procedure, together with the supporting material.
- 5.3.2 Relating to section 5.3.1, for modified facilities, the Transmission Provider will advise the Connection Applicant if the modification may be materially impactive requiring such submission for preliminary review and, as necessary, an in-depth review.
- 5.3.3 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.
- 5.3.4 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 section 5.6.
- 5.3.5 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.

### 5.4 Costs of Connection Assessments

- 5.4.1 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 as per the Electricity Business Rules, Appendix B.
- 5.4.2 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 the Electricity Business Rules, 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 the Electricity Business Rules, 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 the Electricity Business Rules, Appendix B.

- 5.4.3 An invoice referred to in section 5.3.1 or 5.3.2, shall include any costs incurred by a Transmitter in complying with a request for assistance under Section 5.2.6.
- 5.4.4 An invoice referred to in section 5.3.1 or 5.3.2, 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 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.
- 5.4.5 The principles of cost sharing as described in the section 5.6, Costs of Connection, shall also apply to the Connection Assessment Costs.

## 5.5 Implementation of Connection

- 5.5.1 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.

5.5.2 The Transmission Provider shall approve a material change referred to in section 5.5.1, 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.

#### 5.6 Costs of Connection

- 5.6.1 This policy pertains to situations where a request (or requests) for point-topoint or network service requires a transmission network upgrade. This policy in no way diminishes the requirement for the costs of direct assignment facilities to be borne by the Transmission Customer.
- 5.6.2 The Transmission Provider is not obligated to expand the transmission system based on the results of Economic Planning Studies.
- 5.6.3 For any project for which costs would not be recovered entirely through the Transmission Provider's rates, i.e. regional projects, cost allocation would be subject to review by the New Brunswick Energy and Utilities Board.
- 5.6.4 The principles for cost sharing in this situation are as follows:
  - a. The Transmission Provider will recover the costs of projects required for meeting service requests and system improvements in accordance with the provisions of the Tariff.
  - b. If the additional transmission tariff revenues associated with the increased use of the Transmission System is more than or equal to the increase in the Transmission System revenue requirement there will be no costs incurred by the Transmission Customer.

- c. If the additional transmission tariff revenues associated with the increased use of the Transmission System are less than the increase in the Transmission System revenue requirement, the Transmission Customer will make a contribution to capital of an amount that will allow the Transmission Provider to continue to collect the full revenue requirement.
- d. To the extent that the Transmission Provider identifies system benefits, the requirement of the Transmission Customer to make a contribution to capital is diminished by the net present value of the system benefits.
- e. If multiple service requests will benefit from a system upgrade, the cost sharing among the Interested Parties will be based on a load flow study. The study will identify the relative usage of the upgraded facilities by the transactions on a 12CP basis and the Transmission Provider will allocate the costs in proportion to the relative usage.
- f. To the extent that an upgrade to meet a request for service leads to an advancement in the schedule of network upgrades for general system benefits to which the Transmission Provider has made a commitment in its transmission expansion plan, the Transmission Customer will pay only the costs of the advancement.
- 5.6.5 For new loads, the Transmission Customer pays only the Tariff rate unless the carrying charges of the new facilities are higher than the payments that will be made by the new load as part of the tariff. The Transmission Customer will pay the tariff rates and a contribution to capital equal to the incremental carrying charges if the new connection costs exceed the average rolled-in costs of facilities.
- 5.6.6 A Transmission Customer which has paid a contribution to capital will be eligible for a proportional refund in the event of a subsequent Transmission Customer connection within the first 10 years of transmission asset

commissioning. Refunds are non-interest bearing. The contribution from the new customer and the refund to the incumbent will be calculated on a pro rata basis in proportion to the segment of the transmission assets that are used by each customer and in proportion to the capacity of the transmission assets used by each customer relative to the economic life of the transmission assets. The contribution from the new customer will be reduced by credits that arise from consequential new revenues in accordance with section 5.6.5, and the Transmission Provider will refund the incumbent by the amount of that reduction.

# 5.7 Industrial Expansion System Bypass Policy

- 5.7.1 This policy pertains to situations where a customer proposes to serve new load using new on-site generation by wheeling through the local portion of the Transmission System. This policy sets the principles for the case where the construction of on-site transmission or distribution facilities by the customer would be less expensive to the customer than paying the transmission tariff rates for wheeling through the local portion of the Transmission System.
- 5.7.2 In some situations the incremental cost to the Transmitter of allowing the customer to use the Transmission System is less than the cost of the proposed on-site transmission or distribution facilities. In this case, having the customer use the Transmission System reduces the overall cost. The resulting savings will be split evenly between the Transmission Customer and the revenue collected by the Transmission Provider.
- 5.7.3 When the incremental cost to the Transmitter of allowing the transmission customer to use the Transmission System is greater than the cost of the proposed on-site transmission or distribution facilities, it is appropriate for the customer to build the proposed on-site transmission or distribution facilities.
- 5.7.4 If it would be more expensive for the Transmission Customer to build on-site

transmission or distribution facilities than to pay the transmission tariff rates for wheeling through the local portion of the Transmission System, it is presumed that the customer will choose the least expensive option.

5.7.5 If the Transmission Customer's use of the local portion of the Transmission System results in a requirement to upgrade that portion of the system, the Transmission Customer will be required to pay for the upgrade.

# ATTACHMENT L (NOT USED AT THIS TIME)

# ATTACHMENT M (NOT USED AT THIS TIME)

In accordance with the *Electricity Act* (SNB 2013, c. 7), the previous contents of this attachment have been removed from the NB Power OATT.

# **ATTACHMENT N**

t of Transmitters is posted on the Transmission Provider's website.				

#### **ATTACHMENT O**

#### **Creditworthiness Procedures**

#### 1.0 Introduction

These Creditworthiness Procedures outline the Transmission Provider's process for determining a Transmission Customer's ability to meet its obligations under the NB Power OATT.

#### 2.0 Credit Review

A credit review and credit limit approval process is required for all Transmission Customers prior to the execution of a Service Agreement.

For the purpose of determining the ability of the Transmission Customer to meet its obligations related to service under the NB Power OATT, the Transmission Provider will require reasonable credit review procedures. This review shall initially be conducted for each Transmission Customer and shall be reviewed periodically, including upon reasonable request by the Transmission Customer.

### 3.0 Creditworthiness

A Transmission Customer is creditworthy if they meet the Creditworthiness Criteria outlined in this Attachment O. Specifically, the Transmission Customer must be deemed to be a low risk.

#### 4.0 Creditworthiness Criteria

Transmission Customers shall be evaluated on a scale of 1 to 10. A creditworthiness rating of 1 to 5 is considered low risk whereas a rating of 6 to 8 is considered medium risk and a rating of 9 or 10 is considered high risk. When available, the Transmission Provider shall use a formal credit rating from a recognized credit rating agency such as Standard & Poor's (S&P), Moody's, Fitch or Dominion Bond Rating Service (DBRS). When more than one rating is available, the lower rating shall be used in the assessment.

When a credit rating is not available from a recognized credit rating agency, a substitute ratings process will be used to develop a rating that is equivalent to the external ratings scale. Such ratings will be compiled by analyzing key financial metrics and benchmarking the results against the metrics used by external credit rating agencies in their rating process.

If financial information cannot be obtained, the internal rating for that counterparty will default to the lowest rating.

**Table 1: NB Power Creditworthiness Rating** 

NB Power Rating	Equivalent S&P / Fitch Rating	Equivalent Moody's Rating	Equivalent DBRS Rating	Overall Risk	Maximum Credit Limit (000 Dollars)
1	AA+ and above	Aa1 and above	AAH and above	Low	\$50,000
2	AA	Aa2	AA	Low	\$45,000
3	AA-	Aa3	AAL	Low	\$40,000
4	A+	A1	AH	Low	\$35,000
5	Α	A2	Α	Low	\$25,000
6	A-	A3	AL	Medium	\$20,000
7	BBB+	Baa1	BBBH	Medium	\$15,000
8	BBB	Baa2	BBB	Medium	\$10,000
9	BBB-	Baa3	BBBL	High	\$ 5,000
10	Below BBB- and unrated	Below Baa3 and unrated	Below BBBL and unrated	High	

Credit limits may be extended above the initial maximum credit limits by posting collateral. Acceptable forms of collateral are: Cash deposits, Irrevocable Letters of Credit, and Financial Guarantees.

# 5.0 Changes in Creditworthiness Status

The Creditworthiness of Transmission Customers will be reviewed periodically.

If the review results in a change to a Transmission Customer's Creditworthiness Status, the customer will be notified immediately. This notification will include the reason(s) for the change and will identify the new collateral requirement(s). The new requirements must be met within five (5) business days.

If the Transmission customer disagrees with the Transmission Provider's determination of the Transmission customer's Creditworthiness or collateral requirements, the Transmission Customer may write to the Transmission Provider explaining the nature of the disagreement. The Transmission Provider will respond to such a letter within five (5) Business Days.

#### ATTACHMENT P

#### **OASIS Terms and Conditions**

# 1 Open Access Same-Time Information Systems

# 1.1 Obligations of Transmission Providers and Responsible Parties.

- a) NB Power will provide for the operation of an OASIS, either individually or jointly with other Transmission Providers, in accordance with the requirements of this Attachment. The Transmission Provider may delegate this responsibility to an entity such as another Transmission Provider, an Independent System Operator, a Regional Transmission Group, or a Regional Reliability Council (a "Responsible Party").
- b) A Responsible Party must provide access to an OASIS providing standardized information relevant to the availability of transmission capacity, prices, and other information (as described in this part) pertaining to the transmission system for which it is responsible.
- c) A Responsible Party may not deny or restrict access to an OASIS user merely because that user makes automated computer-to-computer file transfers or queries, or extensive requests for data.
- d) In the event that an OASIS user's grossly inefficient method of accessing an OASIS node or obtaining information from the node seriously degrades the performance of the node, a Responsible Party may limit a user's access to the OASIS node without prior Board approval. The Responsible Party must immediately contact the OASIS user to resolve the problem. Notification of the restriction must be made to the Board within two business days of the incident and include a description of the problem. A closure report describing

how the problem was resolved must be filed with the Board within one week of the incident.

- e) In the event that an OASIS user makes an error in a query, the Responsible Party can block the affected query and notify the user of the nature of the error. The OASIS user must correct the error before making any additional queries. If there is a dispute over whether an error has occurred, the procedures in paragraph (d) of this section apply.
- f) Transmission Providers must provide "read only" access to the OASIS to Board staff, at no cost, after such staff members have complied with the requisite registration procedures.

# 1.2 Information to be posted on the OASIS.

- (a) The information posted on the OASIS must be in such detail and the OASIS must have such capabilities as to allow Transmission Customers to:
  - (1) Make requests for transmission services offered by Transmission Providers, Resellers and other providers of ancillary services, request the designation of a network resource, and request the termination of the designation of a network resource;
  - (2) View and download in standard formats, using standard protocols, information regarding the transmission system necessary to enable prudent business decision making;
  - (3) Post, view, upload and download information regarding available products and desired services;

- (4) Clearly identify the degree to which transmission service requests or schedules were denied or interrupted;
- (5) Obtain access, in electronic format, to information to support available transmission capability calculations and historical transmission service requests and schedules for various audit purposes; and
- (6) Make file transfers and automated computer-to-computer file transfers and queries as defined by the Open Access Same-Time Information Systems (OASIS) Standards and Communications Protocols referenced in section 2.1 herein.
- (b) Posting transfer capability. The available transfer capability on the Transmission Provider's system (ATC) and the total transfer capability (TTC) of that system shall be calculated and posted for each Posted Path as set out in this section.
  - (1) Definitions. For purposes of this section the terms listed below have the following meanings:
    - (i) Posted path means any control area to control area interconnection; any path for which service is denied, curtailed or interrupted for more than 24 hours in the past 12 months; and any path for which a customer requests to have ATC or TTC posted. For this last category, the posting must continue for 180 days and thereafter until 180 days have elapsed from the most recent request for service over the requested path. For purposes of this definition, an hour includes any part of an hour during which service was denied, curtailed or interrupted.
    - (ii) Constrained posted path means any posted path having an ATC less than or equal to 25 percent of TTC at any time during the

- preceding 168 hours or for which ATC has been calculated to be less than or equal to 25 percent of TTC for any period during the current hour or the next 168 hours.
- (iii) Unconstrained posted path means any posted path not determined to be a constrained posted path.
- (iv) The word interconnection, as used in the definition of "posted path", means all facilities connecting two adjacent systems or control areas.
- (v) Available transfer capability or ATC means the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses, or such definition as contained in Board-approved reliability standards.
- (vi) Total transfer capability or TTC means the amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions, or such definition as contained in Board-approved reliability standards.
- (vii) Capacity Benefit Margin or CBM means the amount of TTC preserved by the Transmission Provider for load-serving entities, whose loads are located on that Transmission Provider's system, to enable access by the load-serving entities to generation from interconnected systems to meet generation reliability requirements, or such definition as contained in Board-approved reliability standards.
- (viii) Transmission Reliability Margin or TRM means the amount of TTC necessary to provide reasonable assurance that the interconnected transmission network will be secure, or such definition as contained in Board-approved reliability standards.

- (2) Calculation methods, availability of information, and requests.
  - (i) Information used to calculate any posting of ATC and TTC must be dated and time-stamped and all calculations shall be performed according to consistently applied methodologies referenced in the Transmission Provider's transmission tariff and shall be based on Board-approved reliability standards as well as current industry practices, standards and criteria.
  - (ii) On request, the Responsible Party must make all data used to calculate ATC, TTC, CBM, and TRM for any constrained posted paths publicly available (including the limiting element(s) and the cause of the limit (e.g., thermal, voltage, stability), as well as load forecast assumptions) in electronic form within one week of the posting. The information is required to be provided only in the electronic format in which it was created, along with any necessary decoding instructions, at a cost limited to the cost of reproducing the material. This information is to be retained for six months after the applicable posting period.
  - (iii) System planning studies, facilities studies, and specific network impact studies performed for customers or the Transmission Provider's own network resources are to be made publicly available in electronic form on request and a list of such studies shall be posted on the OASIS. A study is required to be provided only in the electronic format in which it was created, along with any necessary decoding instructions, at a cost limited to the cost of reproducing the material. These studies are to be retained for five years.
- (3) Posting. The ATC, TTC, CBM, and TRM for all Posted Paths must be posted in megawatts by specific direction and in the manner prescribed in this subsection.

- (i) Constrained posted paths—
  - (A) For firm ATC and TTC.
  - (1) The posting shall show ATC, TTC, CBM, and TRM for a 30-day period. For this period postings shall be: by the hour, for the current hour and the 168 hours next following; and thereafter, by the day. If the Transmission Provider charges separately for onpeak and off-peak periods in its tariff, ATC, TTC, CBM, and TRM will be posted daily for each period.
  - (2) Postings shall also be made by the month, showing for the current month and the 12 months next following.
  - (3) If planning and specific requested transmission studies have been done, seasonal capability shall be posted for the year following the current year and for each year following to the end of the planning horizon but not to exceed 10 years.
  - (B) For non-firm ATC and TTC. The posting shall show ATC, TTC, CBM and TRM for a 30-day period by the hour and days prescribed under paragraph (b)(3)(i)(A)(1) of this section and, if so requested, by the month and year as prescribed under paragraph (b)(3)(i)(A) (2) and (3) of this section. The posting of non-firm ATC and TTC shall show CBM as zero.
  - (C) Updating posted information for constrained paths.
  - (1) The capability posted under paragraphs (b)(3)(i)(A) and (B) of this section must be updated when transactions are reserved or service ends or whenever the estimate for the path changes by more than 10 percent.

- (2) All updating of hourly information shall be made on the hour.
- (3) When the monthly and yearly capability posted under paragraphs (b)(3)(i)(A) and (B) of this section are updated because of a change in TTC by more than 10 percent, the Transmission Provider shall post a brief, but specific, narrative explanation of the reason for the update. This narrative should include, the specific events which gave rise to the update (e.g., scheduling of planned outages and occurrence of forced transmission outages, de-ratings of transmission facilities, scheduling of planned generation outages and occurrence of forced generation outages, changes in load forecast, changes in new facilities' in-service dates, or other events or assumption changes) and new values for ATC on the path (as opposed to all points on the network).
- (4) When the monthly and yearly capability posted under paragraphs (b)(3)(i)(A) and (B) of this section remain unchanged at a value of zero for a period of six months, the Transmission Provider shall post a brief, but specific, narrative explanation of the reason for the unavailability of ATC.
- (ii) Unconstrained posted paths.
  - (A) Postings of firm and nonfirm ATC, TTC, CBM, and TRM shall be posted separately by the day, showing for the current day and the next six days following and thereafter, by the month for the 12 months next following. If the Transmission Provider charges separately for on-peak and off-peak periods in its tariff, ATC, TTC, CBM, and TRM will be posted separately for the current day and the next six days following for each period.

These postings are to be updated whenever the ATC changes by more than 20 percent of the Path's TTC.

- (B) If planning and specific requested transmission studies have been done, seasonal capability shall be posted for the year following the current year and for each year following until the end of the planning horizon but not to exceed 10 years.
- (iii) Calculation of CBM.
  - (A) The Transmission Provider must reevaluate its CBM needs at least every year.
  - (B) The Transmission Provider must post its practices for reevaluating its CBM needs.
- (iv) Daily load. The Transmission Provider must post on a daily basis, its load forecast, including underlying assumptions, and actual daily peak load for the prior day.
  - (c) Posting Transmission Service Products and Prices.
  - (1) Transmission Providers must post prices and a summary of the terms and conditions associated with all transmission products offered to Transmission Customers.
  - (2) Transmission Providers must provide a downloadable file of their complete tariffs in the same electronic format as the tariff that is filed with the Board. Transmission Providers also must provide a link to all of the rules, standards and practices that relate to transmission services posted on the Transmission Providers' public Web sites.

- (3) Any offer of a discount for any transmission service made by the Transmission Provider must be announced to all potential customers solely by posting on the OASIS.
- (4) For any transaction for transmission service agreed to by the Transmission Provider and a customer, the Transmission Provider (at the time when ATC must be adjusted in response to the transaction), must post on the OASIS (and make available for download) information describing the transaction (including: price; quantity; points of receipt and delivery; length and type of service; identification of whether the transaction involves the Transmission Provider's wholesale merchant function or any affiliate; identification of what, if any, ancillary service transactions are associated with this transmission service transaction; and any other relevant terms and conditions) and shall keep such information posted on the OASIS for at least 30 days. A record of the transaction must be retained and kept available as part of an audit log.
- (5) Customers choosing to use the OASIS to offer for resale transmission capacity they have purchased must post relevant information to the same OASIS as used by the Transmission Provider from whom the Reseller purchased the transmission capacity. This information must be posted on the same display page, using the same tables, as similar capability being sold by the Transmission Provider, and the information must be contained in the same downloadable files as the Transmission Provider's own available capability.

- (d) Posting Ancillary Service Offerings and Prices.
- (1) Any ancillary service offered under the NB Power OATT must be posted with the price of that service.
- (2) Any offer of a discount for any ancillary service made by the Transmission Provider must be announced to all potential customers solely by posting on the OASIS.
- (3) For any transaction for ancillary service agreed to by the Transmission Provider and a customer, the Transmission Provider (at the time when ATC must be adjusted in response to an associated transmission service transaction, if any), must post on the OASIS (and make available for download) information describing the transaction (including: date and time when the agreement was entered into; price; quantity; length and type of service; identification of whether the transaction involves the Transmission Provider's wholesale merchant function or any affiliate; identification of what, if any, transmission service transactions are associated with this ancillary service transaction; and any other relevant terms and conditions) and shall keep such information posted on the OASIS for at least 30 days. A record of the transaction must be retained and kept available as part of an audit log.
- (4) Any other interconnected operations service offered by the Transmission Provider may be posted, with the price for that service.
- (5) Any entity offering an ancillary service shall have the right to post the offering of that service on the OASIS if the service is

one offered by the Transmission Provider under the NB Power OATT. Any entity may also post any other interconnected operations service voluntarily offered by the Transmission Provider. Postings by customers and third parties must be on the same page, and in the same format, as postings of the Transmission Provider.

- (e) Posting specific transmission and ancillary service requests and responses—
- (1) General rules.
- (i) All requests for transmission and ancillary service offered by Transmission Providers under the NB Power OATT, including requests for discounts, and all requests to designate or terminate a network resource, must be made on the OASIS and posted prior to the Transmission Provider responding to the request, except as discussed in paragraphs (e)(1)(ii) and (iii) of this section. The Transmission Provider must post all requests for transmission service, for ancillary service, and for the designation or termination of a network resource comparably. Requests for transmission service, ancillary service, and to designate and terminate a network resource, as well as the responses to such requests, must be conducted in accordance with the Transmission Provider's tariff.
- (ii) The requirement in paragraph (e)(1)(i) of this section, to post requests for transmission and ancillary service offered by Transmission Providers under the NB Power OATT, including requests for discounts, prior to the Transmission Provider responding to the request, does not apply to requests for next-hour service made during Phase I.
- (iii) In the event that a discount is being requested for ancillary

services that are not in support of basic transmission service provided by the Transmission Provider, such request need not be posted on the OASIS.

- (iv) In processing a request for transmission or ancillary service, the Responsible Party shall post the same information as required in paragraphs (c)(4) and (d)(3) of this section, and the following information: the date and time when the request is made, its place in any queue, the status of that request, and the result (accepted, denied, withdrawn). In processing a request to designate or terminate the designation of a network resource, the Responsible Party shall post the date and time when the request is made.
- (v) For any request to designate or terminate a network resource, the Transmission Provider (at the time when the request is received), must post on the OASIS (and make available for download) information describing the request (including: name of requestor, identification of the resource, effective time for the designation or termination, identification of whether the transaction involves the Transmission Provider's wholesale merchant function or any affiliate; and any other relevant terms and conditions) and shall keep such information posted on the OASIS for at least 30 days. A record of the transaction must be retained and kept available as part of an audit log.
- (vi) The Transmission Provider shall post a list of its current designated network resources and all network customers' current designated network resources on OASIS. The list of network resources should include the name of the resource, its geographic and electrical location, its total installed capacity, and the amount of capacity to be designated as a network

#### resource.

- (2) Posting when a request for transmission service is denied.
- (i) When a request for service is denied, the Responsible Party must provide the reason for that denial as part of any response to the request.
- (ii) Information to support the reason for the denial, including the operating status of relevant facilities, must be maintained for five years and provided, upon request, to the potential Transmission Customer and the Commission's Staff.
- (iii) Any offer to adjust operation of the Transmission Provider's System to accommodate the denied request must be posted and made available to all Transmission Customers at the same time.
- (3) Posting when a transaction is curtailed or interrupted.
- (i) When any transaction is curtailed or interrupted, the Transmission Provider must post notice of the curtailment or interruption on the OASIS, and the Transmission Provider must state on the OASIS the reason why the transaction could not be continued or completed.
- (ii) Information to support any such curtailment or interruption, including the operating status of the facilities involved in the constraint or interruption, must be maintained and made available upon request, to the curtailed or interrupted customer, the Commission's Staff, and any other person who requests it, for five years.
- (iii) Any offer to adjust the operation of the Transmission Provider's system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed

and interrupted Transmission Customers at the same time.

- (f) Posting Transmission Service Schedules Information. Information on transmission service schedules must be recorded by the entity scheduling the transmission service and must be available on the OASIS for download. Transmission service schedules must be posted no later than seven calendar days from the start of the transmission service.
- (g) Posting Other Transmission-Related Communications. (1) The posting of other communications related to transmission services must be provided for by the Responsible Party. These communications may include "want ads" and "other communications" (such as using the OASIS as a Transmission-related conference space or to provide transmission-related messaging services between OASIS users). Such postings carry no obligation to respond on the part of any market participant.
- (2) The Responsible Party is responsible for posting other transmission-related communications in conformance with the instructions provided by the third party on whose behalf the communication is posted. It is the responsibility of the third party requesting such a posting to ensure the accuracy of the information to be posted.
- (3) Notices of transfers of personnel shall be posted as described in the Transmission Provider's standards of conduct. The posting requirements are the same as those provided in section 1.3 herein for audit data postings.
- (4) Logs detailing the circumstances and manner in which a

Transmission Provider or Responsible Party exercised its discretion under any terms of the tariff shall be posted. The posting requirements are the same as those provided in section 1.3 herein for audit data postings.

- (h) Posting information summarizing the time to complete transmission service request studies.
- (1) For each calendar quarter, the Responsible Party must post the set of measures detailed in paragraph (h)(1)(i) through paragraph (h)(1)(vi) of this section related to the Responsible Party's processing of transmission service request system impact studies and facilities studies. The Responsible Party must calculate and post the measures in paragraph (h)(1)(i) through paragraph (h)(1)(vi) of this section for requests for short-term firm point-to-point transmission service, requests for long-term firm point-to-point transmission service, and requests to designate a new network resource or network load. When calculating the measures in paragraph (h)(1)(i) through paragraph (h)(1)(iv) of this section, the Responsible Party may aggregate requests for short-term firm point-to-point service and requests for long-term firm point-to-point service, but must calculate and post measures separately for transmission service requests from Affiliates and transmission service requests from Transmission Customers who are not Affiliates. The Responsible Party is required to include in the calculations of the measures in paragraph (h)(1)(i) through paragraph (h)(1)(vi) of this section all studies the Responsible Party conducts of transmission service requests on another Transmission Provider's OASIS.

- (i) Process time from initial service request to offer of system impact study agreement.
- (A) Number of new system impact study agreements delivered during the reporting quarter to entities that request transmission service.
- (B) Number of new system impact study agreements delivered during the reporting quarter to entities that request transmission service more than thirty (30) days after the Responsible Party received the request for transmission service,
- (C) Mean time (in days), for all requests acted on by the Responsible Party during the reporting quarter, from the date when the Responsible Party received the request for transmission service to when the Responsible Party changed the transmission service request status to indicate that the Responsible Party could offer transmission service or needed to perform a system impact study,
- (D) Mean time (in days), for all system impact study agreements delivered by the Responsible Party during the reporting quarter, from the date when the Responsible Party received the request for transmission service to the date when the Responsible Party delivered a system impact study agreement, and
- (E) Number of new system impact study agreements executed during the reporting quarter.
- (ii) System impact study processing time.
- (A) Number of system impact studies completed by the

Responsible Party during the reporting quarter,

- (B) Number of system impact studies completed by the Responsible Party during the reporting quarter more than 60 days after the Responsible Party received an executed system impact study agreement,
- (C) For all system impact studies completed more than 60 days after receipt of an executed system impact study agreement, average number of days study was delayed due to transmission customer's actions (e.g., delays in providing needed data),
- (D) Mean time (in days), for all system impact studies completed by the Responsible Party during the reporting quarter, from the date when the Responsible Party received the executed system impact study agreement to the date when the Responsible Party provided the system impact study to the entity who executed the system impact study agreement, and
- (E) Mean cost of system impact studies completed by the Responsible Party during the reporting quarter.
- (iii) Transmission service requests withdrawn from the system impact study queue.
- (A) Number of transmission service requests withdrawn from the Responsible Party's system impact study queue during the reporting quarter,
- (B) Number of transmission service requests withdrawn from the

Responsible Party's system impact study queue during the reporting quarter more than 60 days after the Responsible Party received the executed system impact study agreement, and

- (C) Mean time (in days), for all transmission service requests withdrawn from the Responsible Party's system impact study queue during the reporting quarter, from the date the Responsible Party received the executed system impact study agreement to date when request was withdrawn from the Responsible Party's system impact study queue.
- (iv) Process time from completed system impact study to offer of facilities study.
- (A) Number of new facilities study agreements delivered during the reporting quarter to entities that request transmission service,
- (B) Number of new facilities study agreements delivered during the reporting quarter to entities that request transmission service more than thirty (30) days after the Responsible Party completed the system impact study,
- (C) Mean time (in days), for all facilities study agreements delivered by the Responsible Party during the reporting quarter, from the date when the Responsible Party completed the system impact study to the date when the Responsible Party delivered a facilities study agreement, and
- (D) Number of new facilities study agreements executed during the reporting quarter.
- (v) Facilities study processing time.
- (A) Number of facilities studies completed by the Responsible

Party during the reporting quarter,

- (B) Number of facilities studies completed by the Responsible Party during the reporting quarter more than 60 days after the Responsible Party received an executed facilities study agreement,
- (C) For all facilities studies completed more than 60 days after receipt of an executed facilities study agreement, average number of days study was delayed due to transmission customer's actions (e.g., delays in providing needed data),
- (D) Mean time (in days), for all facilities studies completed by the Responsible Party during the reporting quarter, from the date when the Responsible Party received the executed facilities study agreement to the date when the Responsible Party provided the facilities study to the entity who executed the facilities study agreement,
- (E) Mean cost of facilities studies completed by the Responsible Party during the reporting quarter, and
- (F) Mean cost of upgrades recommended in facilities studies completed during the reporting quarter.
- (vi) Service requests withdrawn from facilities study queue.
- (A) Number of transmission service requests withdrawn from the Responsible Party's facilities study queue during the reporting quarter,
- (B) Number of transmission service requests withdrawn from the Responsible Party's facilities study queue during the reporting quarter more than 60 days after the Responsible Party received the executed facilities study agreement, and
- (C) Mean time (in days), for all transmission service requests withdrawn from the Responsible Party's facilities study queue

during the reporting quarter, from the date the Responsible Party received the executed facilities study agreement to date when request was withdrawn from the Responsible Party's facilities study queue.

- (2) The Responsible Party is required to post the measures in paragraph (h)(1)(i) through paragraph (h)(1)(vi) of this section for each calendar quarter within 15 days of the end of the calendar quarter. The Responsible Party will keep the quarterly measures posted on OASIS for three calendar years.
- (3)The Responsible Party will be required to post on OASIS the measures in paragraph (h)(3)(i) through paragraph (h)(3)(iv) of this section in the event the Responsible Party, for two consecutive calendar quarters, completes more than twenty (20) percent of the studies associated with requests for transmission service from entities that are not Affiliates of the Responsible Party more than sixty (60) days after the Responsible Party delivers the appropriate study agreement. The Responsible Party will have to post the measures in paragraph (h)(3)(i) through paragraph (h)(3)(iv) of this section until it processes at least ninety (90) percent of all studies within 60 days after it has received the appropriate executed study agreement. For the purposes of calculating the percent of studies completed more than sixty (60) days after the Responsible Party delivers the appropriate study agreement, the Responsible Party should aggregate all system impact studies and facilities studies that it completes during the reporting quarter.

- (i) Mean, across all system impact studies the Responsible Party completes during the reporting quarter, of the employee-hours expended per system impact study the Responsible Party completes during reporting period;
- (ii) Mean, across all facilities studies the Responsible Party completes during the reporting quarter, of the employee-hours expended per facilities study the Responsible Party completes during reporting period;
- (iii) The number of employees the Responsible Party has assigned to process system impact studies;
- (iv) The number of employees the Responsible Party has assigned to process facilities studies.
- (4) The Responsible Party is required to post the measures in paragraph (h)(3)(i) through paragraph (h)(3)(iv) of this section for each calendar quarter within 15 days of the end of the calendar quarter. The Responsible Party will keep the quarterly measures posted on OASIS for five calendar years.
  - (i) Posting data related to grants and denials of service. The Responsible Party is required to post data each month listing, by path or flowgate, the number of transmission service requests that have been accepted and the number of transmission service requests that have been denied during the prior month. This posting must distinguish between the length of the service request (e.g., short-term or long-term requests) and between the type of service requested (e.g., firm point-to-point, non-firm point-to-point or network service). The posted data must show:
  - (1) The number of non-Affiliate requests for transmission service

that have been rejected,

- (2) The total number of non-Affiliate requests for transmission service that have been made,
- (3) The number of Affiliate requests for transmission service, including requests by the transmission provider's merchant function to designate a network resource or to procure secondary network service, that have been rejected, and
- (4) The total number of Affiliate requests for transmission service, including requests by the transmission provider's merchant function to designate, or terminate the designation of, a network resource or to procure secondary network service, that have been made.
- (j) Posting redispatch data.
- (1) The Transmission Provider must allow the posting on OASIS of any third party offer to relieve a specified congested transmission facility.
- (2) The Transmission Provider must post on OASIS (i) its monthly average cost of planning and reliability redispatch, for which it invoices customers, at each internal transmission facility or interface over which it provides redispatch service and (ii) a high and low redispatch cost for the month for each of these same transmission facilities. The transmission provider must post this data on OASIS as soon as practical after the end of each month, but no later than when it sends invoices to transmission customers for redispatch-related services.

(k) Posting of historical area control error data. The Transmission Provider must post on OASIS historical one-minute and ten-minute area control error data for the most recent calendar year, and update this posting once per year.

# 1.3 Auditing Transmission Service Information.

- (a) All OASIS database transactions, except other transmission-related communications provided for under 1.2(g)(2), must be stored, dated, and time stamped.
- (b) Audit data must remain available for download on the OASIS for 90 days, except ATC/TTC postings that must remain available for download on the OASIS for 20 days. The audit data are to be retained and made available upon request for download for five years from the date when they are first posted in the same electronic form as used when they originally were posted on the OASIS.

### 1.4 Obligations of OASIS users.

Each OASIS user must notify the Responsible Party one month in advance of initiating a significant amount of automated queries. The OASIS user must also notify the Responsible Party one month in advance of expected significant increases in the volume of automated queries.

- 2 Business Practice Standards and Communication Protocols for Public Utilities
- 2.1 Incorporation by Reference of North American Energy Standards Board Wholesale Electric Quadrant Standards.

- (a) The Transmission Provider will comply with the following business practice and electronic communication standards promulgated by the North American Energy Standards Board Wholesale Electric Quadrant, which are incorporated herein by reference:
  - (1) Open Access Same-Time Information Systems (OASIS), Version 1.5 (WEQ-001, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009, with the exception of Standards 001-0.1, 001-0.9 through 001-0.13, 001-1.0, 001-9.7, 001-14.1.3, and 001-15.1.2);
  - (2) Open Access Same-Time Information Systems (OASIS) Standards & Communication Protocols, Version 1.5 (WEQ-002, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
  - (3) Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 1.5 (WEQ-003, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
  - (4) Coordinate Interchange (WEQ-004, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
  - (5) Area Control Error (ACE) Equation Special Cases (WEQ-005, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
  - (6) Manual Time Error Correction (WEQ-006, Version 001, Oct. 31, 2007, with minor corrections applied on Nov. 16, 2007);
  - (7) Inadvertent Interchange Payback (WEQ-007, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);

- (8) Transmission Loading Relief—Eastern Interconnection (WEQ-008, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- (9) Gas/Electric Coordination (WEQ-011, Version 002.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009);
- (10) Public Key Infrastructure (PKI) (WEQ-012, Version 002.1, March 11, 2009, with minor corrections applied on May 29, 2009 and September 8, 2009);
- (11) Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 1.5 (WEQ-013, Version 002.1, March 11, 2009, with minor corrections applied on May 29, 2009 and September 8, 2009); and
- (12) Business Practices for Measurement and Verification of Wholesale Electricity Demand Response (WEQ-015, 2010 Annual Plan Items 4(a) and 4(b), March 21, 2011).
- (13) Business Practice Standards for Measurement and Verification of Energy Efficiency Products (WEQ-021, 2010 Annual Plan Item 4(d), May 13, 2011).

# 2.2 Communication and Information Sharing Among Public Utilities and Pipelines

(a) The Transmission Provider may share non-public, operational information with a pipeline operator, or another utility for the purpose of promoting reliable service or operational planning. (b) Except as permitted in paragraph (a) of this section, NB Power, as defined in this section, and its employees, contractors, consultants, and agents are prohibited from disclosing, or using anyone as a conduit for the disclosure of, non-public, operational information received from a pipeline pursuant to a third party or to its marketing function employees as that term is defined in its standards of conduct.

### 3.0 Exceptions

The terms and conditions documented in Attachment P Sections 1 and 2 are adopted from American regulations 18 C.F.R. §37 and 18 C.F.R. §38. The Transmission Provider adopts the following exceptions to those terms and conditions.

# 3.1 Exceptions to Attachment P Section 1 Open-Access Same-Time Information Systems

- (a) With respect to section 1.2 (b)(3), FIRM/NON-FIRM ATC, TTC, CBM and TRM can be queried by hour, day, week, month or year for a span not exceeding 10 years.
- (b) For clarity, with respect to section 1.2(f) Board may incur internal costs for equipment and services to access the OASIS such as a computer, digital certificates, and internet service.
- (c) For greater clarity, the posting of information to a Transmission Provider public website dedicated to transmission system operations subjects shall be considered as meeting the requirements of posting to OASIS.
- (d) For greater clarity, with respect to section 1.2(2)(ii), the request must have been received prior to the posting for the specific time limit to apply.

# 3.2 Exceptions to Attachment P Section 2 Incorporation by Reference of North American Energy Standards Board Wholesale Electric Quadrant

#### **Standards**

- a) The Transmission Provider's implementation of Network Service in OASIS makes use of certain mechanisms that are also required for Point-to-Point Service. This method does not allow for designation of Network Resources on OASIS, so this work is done off-line. Implementation of Network Service in OASIS in accordance with the standards referenced in section 2.1 will not occur until the anticipated benefits exceed the anticipated costs.
- b) As of August 13, 2004 the Transmission Provider's OASIS is based on version 1.41 OASIS standards. The next upgrade of that OASIS is likely to be to version 2.0 or some subsequent version.