

**ATTACHMENT J**

**(To Be Filed Separately with IRAC)**

**GENERATION INTERCONNECTION AGREEMENT**

**BY AND BETWEEN**

**MARITIME ELECTRIC COMPANY, LIMITED**

**AND**

**(INSERT COMPANY NAME)**

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## **GENERATOR INTERCONNECTION AGREEMENT**

This Generation Interconnection Agreement dated as of (INSERT DATE) by and between Maritime Electric Company, Limited (MECL), a corporation having its head office in Charlottetown, Prince Edward Island and (INSERT COMPANY NAME) (Customer), a (INSERT TYPE OF CORPORATION), with offices at (INSERT OFFICE ADDRESS).

**WHEREAS**, Customer is developing a (INSERT TYPE OF UNIT) generation facility (Facility) to be located at (INSERT LOCATION OF GENERATOR);

**WHEREAS**, Customer desires to interconnect the Facility with the (INSERT VOLTAGE) Transmission System owned by MECL connecting the (NAME FACILITIES);

**WHEREAS**, Customer requires certain Interconnection Service from MECL for its Generation, as provided in this Agreement;

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

**WHEREAS**, the Parties have agreed to execute this mutually acceptable Generation Interconnection Agreement in order to provide certain Interconnection Service to Customer; to provide for the additions, modifications, and upgrades to MECL's Transmission System; and to define the continuing responsibilities and obligations of the Parties; 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 Interconnection Agreement between MECL and Customer, including all Schedules attached hereto, as the same may be amended, supplemented, or modified in accordance with its terms.
- 1.3 “Business Day” is Monday to Friday, inclusive, excluding statutory holidays for MECL. The regular business hours on a Business Day are 08:00 hours to 16:00 hours Atlantic Time.
- 1.4 “Customer” means (INSERT CUSTOMER NAME), and includes its permitted successors and assigns.
- 1.5 “Customer-Owned Interconnection Facilities” means those facilities or portions of facilities owned by Customer and identified as Customer-Owned Interconnection Facilities in Schedule A.

- 1.6 “Direct Assignment Facilities,” also referred to as MECL-Owned Interconnection Facilities, means the facilities or portion of facilities that are constructed for the sole use/benefit of Customer, and installed and owned by MECL 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).
- 1.7 “Effective Date” shall have the meaning set forth in Section 2.1.
- 1.8 “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.
- 1.9 "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 Release(s) or threatened Release(s) 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.
- 1.10 “Event of Default” has the meaning set forth in Section 8.1.
- 1.11 “Facilities Study” means the studies conducted pursuant to the Facilities Study Agreement dated (INSERT DATE), between MECL and Customer, as it may be amended from time to time in accordance with its terms.
- 1.12 “Facility” means all of Customer’s generation plant and equipment with the net capacity

as designated in Schedule A, including Customer-Owned Interconnection Facilities, identified in Schedule A, located at (INSERT LOCATION OF GENERATOR).

- 1.13 "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.
- 1.14 "Generation" means the electrical capacity, energy, and/or ancillary services produced at the Facility.
- 1.15 "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.
- 1.16 "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.

- 1.17 "Index Rate" means the RBC Royal Bank Prime Rate, in effect on the date such interest begins to accrue. The "RBC Royal Bank Prime Rate" is defined as the prime rate per annum as charged by the RBC Royal Bank, Queen Street Branch in Charlottetown, on the last banking day of the month for which payment is due.
- 1.18 "Interconnection Facilities" means the Customer-Owned Interconnection Facilities and the MECL-Owned Interconnection Facilities collectively.
- 1.19 "Interconnection Facilities Support Charge - Capital Related" (IFSC-CR) means a charge determined or modified by MECL, to the extent applicable, to recover all capital costs related to the facilities installed or modified after the Effective Date, required for providing Interconnection 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.
- 1.20 "Interconnection Facilities Support Charge - Non-Capital Related" (IFSC-NCR) means a charge, as accepted or approved by IRAC, to the extent applicable, and which may be modified by MECL, as accepted or approved by IRAC, to the extent applicable, designed to enable MECL to recover all on-going non-capital support costs related to the facilities required for providing Interconnection Service. The current IFSC-NCR is provided in Schedule 9 of MECL's Open Access Transmission Tariff.
- 1.21 "Interconnection Request" shall mean Customer's request to interconnect a new facility, or to increase the capacity of, or make a material modification to the operating characteristics of, an existing Facility that is interconnected with the MECL's Transmission System. The "Interconnection Request" procedure is provided in Schedule J.
- 1.22 "Interconnection Service" means all of the services and facilities provided for in this Agreement, including, without limitation, integrating the output of the Facility into

MECL's Transmission System in accordance with the terms, conditions and limitations, if any, resulting from the System Impact Study and Facility Study conducted by MECL on behalf of Customer, as well as to enable the Facility to receive any Facility Station Service, but does not include Transmission Service. Interconnection Service will not include interconnection of any other generating unit owned by Customer, wherever located, to the Transmission System.

- 1.23 "IRAC" means the Island Regulatory and Appeals Commission.
- 1.24 "List of Qualified Persons" means the list of Customer personnel approved by MECL who meet the requirements to switch, tag, and ground electrical equipment set forth in MECL's Standard Protection Code Manual or its successor.
- 1.25 "Maintain" means construct, reconstruct, install, inspect, test, repair, replace, operate, patrol, maintain, use, modernize, upgrade, or other similar activities.
- 1.26 "Measurement Canada" means the Government of Canada agency established to administer and enforce the Electricity and Gas Inspection Act.
- 1.27 "MECL" means Maritime Electric Company, Limited, and includes its permitted successors and assigns.
- 1.28 "MECL's Open Access Transmission Tariff" or "MECL's OATT" or "MECL's Tariff" or "Tariff" means the Open Access Transmission Tariff filed by MECL and approved by IRAC, as such Tariff may be amended from time to time.
- 1.29 "MECL-Owned Interconnection Facilities," also referred to as Direct Assignment Facilities, means facilities or portions of facilities used by Customer, or jointly used by Customer and MECL, that are owned by MECL. The Direct Assignment Facilities are identified in Schedule A.

- 1.30 "Metering Point(s)" is the location of any and all meter(s), as approved by MECL, used to determine the amount of Generation delivered to the Transmission System.
- 1.31 "NERC" means North American Electric Reliability Council or its successor.
- 1.32 "NPCC" means Northeast Power Coordinating Council or its successor. NPCC is a Regional reliability council of NERC.
- 1.33 "Other Direct Assignment Facilities" means the Transmission Upgrades used by MECL 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 MECL OATT and set forth in Schedule I of this Agreement.
- 1.34 "Parties" means MECL and Customer collectively; individually a "Party".
- 1.35 "Point of Interconnection" means the point where Customer's Facility connects to MECL's Transmission System, as specified in Schedule A to this Agreement.
- 1.36 "Point of Receipt" means the point on MECL's Transmission System where capacity and energy generated by Customer will be received, as specified in Schedule A.
- 1.37 "Primary" means power equipment such as transformers, circuit breakers, rigid or strain bus and other equipment operating above 600 volts.
- 1.38 "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.

- 1.39 “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.
- 1.40 “Province” means the Province of Prince Edward Island.
- 1.41 “Queue Position” shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by MECL.
- 1.42 “RTU” means remote terminal unit.
- 1.43 “Release” means release, spill, leak, discharge, dispose of, pump, pour, emit, empty, inject, leach, dump, or allow to escape into or through the environment.
- 1.44 "Revenue Meters" means all kWh, kVA<sub>rh</sub>, kVA<sub>h</sub> and demand meters, pulse isolation relays, pulse conversion relays, and associated metering equipment to measure the transfer of energy between the Parties.
- 1.45 "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, MECL, or their Affiliates.
- 1.46 “Site Control” shall mean documentation reasonably demonstrating:

1. ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Facility;
  2. an option to purchase or acquire a leasehold site for such purpose; or
  3. an exclusivity or other business relationship between Customer and the entity having the right to sell, lease or grant Customer the right to possess or occupy a site for such purpose.
- 1.47 "Switching, Tagging, and Grounding Rules" has the meaning set forth in MECL's Standard Protection Code Manual as amended from time to time, which are hereby incorporated by reference as if fully set forth herein.
- 1.48 "System Operator" is the entity within MECL that is responsible for the planning, security and reliable operation of the Transmission System including switching and tagging, system monitoring, voltage and VAr control, notifications, transmission services and system restoration.
- 1.49 "Terminal" means a transmission voltage level substation, switching station or generating station.
- 1.50 "Transmission Provider" means MECL in its role as the provider of Transmission Service to Customers.
- 1.51 "Transmission Service" means the services provided to Customer by MECL on the Transmission System.
- 1.52 "Transmission System" means all of MECL's transmission equipment and facilities owned, controlled or operated by MECL.
- 1.53 "Transmission Upgrades" or "Transmission System Upgrades" means the transmission facilities designed, constructed, procured, and installed by MECL under this Agreement. The cost responsibility for such Transmission System Upgrades is set forth in Schedule I.



- 1.54 “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 MECL facility taken out of service for any reason to accommodate Customer during its construction or installation, or during construction or installation MECL is performing on Customer’s behalf.

## **SECTION 2.0 - TERM**

### **2.1 Term**

Subject to required regulatory authorizations, this Agreement will become effective when signed by the Parties (Effective Date). This Agreement will remain in effect until (INSERT DATE) (the Term) unless (a) terminated on an earlier date by mutual agreement of the Parties, (b) terminated by Customer upon ninety (90) days’ prior written notice to MECL, or (c) otherwise terminated in accordance with the terms of this Agreement. MECL will submit this Agreement to IRAC.

### **2.2 Good Faith Negotiations Upon Occurrence of Certain Events**

If the Province, IRAC, or MECL implements a change in any law, regulation, rule or practice; which change affects or is reasonably expected to affect the provision of Interconnection 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 Interconnection 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 IRAC 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 MECL 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 MECL 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 MECL-Owned Interconnection Facilities and Other Direct Assignment Facilities**

2.5.1 At Customer’s expense in accordance with Section 5, MECL shall design, procure, and construct the MECL-Owned Interconnection Facilities and the Other Direct Assignment Facilities, in conformance with Good Utility Practice and in accordance with the information provided in Schedules A to J.

2.5.2 Expedited Design, Procurement, and Construction. Customer may request MECL to design, procure, and construct the MECL-Owned Interconnection Facilities and the Other Direct Assignment Facilities as expeditiously as reasonably possible and to the extent MECL can accommodate Customer’s request without jeopardizing the reliability of the MECL System or service to other MECL customers, or causing other inconveniences or

disruptions to the conduct of MECL's business, MECL agrees to cooperate and work with Customer to accomplish that objective. If conditions permit, and subject to Customer's obligations herein, MECL 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 MECL prior to MECL undertaking any such activities.

2.5.3 The Parties understand and recognize that performing any activities relating to the design, procurement, and construction of MECL-Owned Interconnection 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 interconnection of the Facility. Customer agrees to defend, indemnify, and hold MECL 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 MECL'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 Disclaimer of Warranties. Customer understands and agrees that the expedited design, procurement or construction activities relating to the MECL-Owned Interconnection 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, MECL 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. MECL

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 MECL and was subsequently identified in the Facilities Study as being necessary to accommodate the Facility's interconnection.

**2.5.5 Right to Suspend or Terminate Work.** Customer reserves the right, upon prior written notice to MECL, to suspend or terminate at any time all work by MECL associated with the design, procurement, or construction of the MECL-Owned Interconnection 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 MECL as a result of such suspension. Customer shall be responsible for costs (a) which MECL 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.

**2.5.6 Progress Reports.** MECL shall inform Customer, at such times as Customer reasonably requests, of the status of the construction and installation of the MECL-Owned Interconnection Facilities and Other Direct Assignment Facilities.

## **2.6 Testing**

Prior to interconnection of the Facility to the Transmission System, MECL, at Customer's expense, shall test the MECL-Owned Interconnection 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**

- 2.7.1 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 26.0 of this Agreement. MECL will use commercially reasonable efforts to procure, construct, install, and test the MECL-Owned Interconnection 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 MECL, or its agent or delegate, to determine the maximum allowable output of the Facility, and Customer shall, at MECL's 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 Interconnection Service and Transmission Service**

- 3.1.1 MECL will provide Customer with Interconnection Service under the terms and conditions specified in this Agreement. Transmission Service, if any, will be provided pursuant to the provisions of the OATT, and any other applicable tariff. If an MECL facility must be taken out of service for any reason in connection with construction, installation or maintenance that MECL 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 transmission providers, may apply to the Generation, as determined by MECL 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 MECL 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, MECL's Generator Technical Requirement, 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 MECL.
- 3.1.3 Customer, or its customers, is 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 Tariff.
- 3.1.4 Customer is also responsible for making arrangements and payments for Customer's

Facility Station Service requirements pursuant to applicable tariffs.

- 3.1.5 In the event MECL determines that any modification to Customer's existing interconnection for the Facility or any modification to such Facility requires an addition to or modification of the MECL-Owned Interconnection Facilities or MECL's Transmission System due to Good Utility Practice, MECL 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 MECL-Owned Interconnection Facilities or the Customer-Owned Interconnection Facilities or the Facility is modified to allow other customers to be served from said MECL-Owned Interconnection Facilities, said MECL-Owned Interconnection 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 would be entitled to a refund of a portion of the contribution-in-aid-of-construction if additional development occurs such that use by others including MECL commences within 7 years from the Commercial Operation Date of the Customer's project. Refunds are non-interest bearing and will be made either on request from the developer or by MECL automatically during the seventh year following the Commercial Operation Date. The refund amount will first be collected by MECL from the additional development. The total amount of the refund will be the proportion of the installed capacity used by others including MECL, the Transmission Provider, divided by the total installed capacity of the developer plus others including MECL on the Direct Assignment Facilities multiplied by the common usage portion of the contribution-in-aid-of construction of the project.
- 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 Interconnection and ownership points for the Interconnection Facilities and the Transmission System are set forth in Schedule A.

3.2.2 Customer hereby grants, without cost to MECL, a licence (the Licence) to permit MECL to have such access to Customer's property as is reasonably necessary for MECL 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, MECL (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) MECL'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 MECL may require to enable it to establish record evidence of such Licence. For the purposes of this Section 3.2, MECL's facilities and equipment will include, without limitation, all of MECL'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, crossarms, 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 MECL hereby grants, without cost to Customer, a licence to permit Customer to have such access to Customer's facilities on MECL's property as is reasonably necessary and appropriate for Customer to Maintain the Facility and the Customer-Owned Interconnection 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 MECL with as much advance notice as is appropriate under the circumstances, (b) not unreasonably disrupt or interfere with normal operations of MECL's business, (c) adhere to the environmental and safety rules and procedure established by MECL 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 MECL's substation or terminal shall be exercised by Customer only with supervision by MECL. Customer shall provide MECL three (3) days prior notice of a request for such supervised access to MECL's substation and MECL 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 MECL's business, (b) adhere to the environmental and safety rules and procedure established by MECL and all applicable environmental rules and procedures, (c) act consistent with Good Utility Practice, and (d) compensate MECL for the use of MECL's personnel time in supervising such substation or terminal access.
- 3.2.4 The Licence and access rights granted to MECL under Section 3.2.2 will remain in effect for so long as MECL'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 Registry of Deeds.

3.2.6 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 Interconnection Facilities connected to MECL's Transmission System and MECL will maintain all of its MECL-Owned Interconnection Facilities connected to Customer's Facility in accordance with Good Utility Practice.

3.3.1.2 Customer will submit for approval by September 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 MECL's obligation to its customers for reliability of the MECL 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 September 30<sup>th</sup> of each year for the subsequent five calendar years.

3.3.1.3 Upon a reasonable request by MECL, 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 MECL, upon MECL'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 MECL's Transmission System**

- 3.4.1 Unless otherwise required by law, regulation, or Good Utility Practice, MECL will not be required at any time to upgrade or otherwise modify the Transmission System or Interconnection Facilities.
- 3.4.2 MECL may undertake additions, modifications, or replacements of its Transmission System including, without limitation, MECL-Owned Interconnection Facilities. If such additions, modifications, or replacements might reasonably be expected to affect the Customer's operation of the Facility, as reasonably determined by MECL, MECL 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 MECL, acting in accordance with Good Utility Practice, the Customer, at its expense, will modify the Customer-Owned Interconnection Facilities and the Facility to conform with additions, modifications, or replacements of the Transmission System or MECL-Owned Interconnection Facilities.
- 3.4.4 Customer may install, construct or modify the Facility or Customer-Owned Interconnection Facilities pursuant to the terms and conditions of this Agreement and

applicable rules and regulations of MECL, NERC, 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 Interconnection Facilities in any manner that could reasonably be expected to affect MECL's ability to: (a) meet its service obligations under this Agreement, or (b) meet its service obligations to any MECL customer as both (a) and (b) are determined by MECL in its sole discretion exercised in a nondiscriminatory manner, Customer will be required to (1) provide MECL 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 MECL's prior written approval, which approval shall not be unreasonably withheld.

MECL reserves the right to require a review period that is longer than sixty (60) days, if required by MECL, 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 MECL prior written approval. MECL will not unreasonably withhold or delay such approval. MECL'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. MECL 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 MECL's acceptance be deemed to be an endorsement, verification, or approval of Customer's equipment. Customer will reimburse MECL for any and all reasonable costs and expenses that MECL 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 MECL's Transmission System, Customer agrees to comply with Good Utility Practice and, as to the portion of Customer's Facility or Customer-Owned Interconnection Facilities being modified, with the MECL'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 interconnection, 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) MECL 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 interconnection, or (2) MECL 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 MECL shall refund to Customer such costs to the extent that such responsibility is inconsistent with any law or regulation.

3.4.7.1 MECL will modify the MECL-Owned Interconnection Facilities as may be required by Good Utility Practice or to conform with additions, modifications, or replacements of MECL'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 MECL 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 MECL 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, MECL's Transmission System or MECL-Owned Interconnection Facilities, or any part thereof, will be performed only by the Customer (or by contractors selected by the Customer), subject to the approval of MECL, which will not be unreasonably withheld.

### **3.5 Inspections**

3.5.1 General. 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 MECL 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 MECL 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. MECL 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 MECL's judgement, for the purposes set forth in clause (d) below;
- d. MECL 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 MECL requires certain information, reports, or data is no longer performed by MECL, 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 MECL 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 MECL'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 MECL, in a timely fashion, to respond to or prevent, any Emergency; (iii) is required to enable MECL 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 MECL (before a dispute between the Parties regarding the appropriateness of MECL's request can be resolved) in order for MECL 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 Interconnection Service, Customer will promptly provide MECL, at Customer's sole expense, with all information in Customer's possession which could reasonably be expected to impact MECL's Transmission System and which is necessary for MECL to satisfy any reporting obligations it may have to NPCC, NERC, or a future regional System Operator.
- 3.6.3 Subject to Section 3.6.1, Customer will supply to MECL, at Customer's sole cost and expense, accurate, complete, and reliable information in response to any MECL 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, KVA<sub>r</sub>, voltage, current, amp, frequency, breaker status indication, or any other information reasonably required by MECL 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 MECL using: RTU equipment, interval metering or other equivalent devices. File formats, communication protocols, frequency and timing of data transfers must be acceptable to MECL. Any cost to modify MECL'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, MECL may request and Customer will promptly provide, at Customer's sole cost and expense, such other information and data that MECL may reasonably require to carry out MECL's responsibilities and enforce MECL's rights under this Agreement.
- 3.6.6 Notwithstanding the foregoing provisions of this Section 3.6, Customer may reasonably request and MECL 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 MECL's possession and not reasonably available from an alternate source. Nothing in this section shall obligate MECL to undertake any data collection, or to perform any studies, to satisfy Customer's request.

### **3.7 Local Services**

- 3.7.1 General. 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 MECL Provided Local Services**

3.8.0 MECL Provided Local Service. MECL 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. The Customer will compensate MECL for metering expenses in accordance with Schedule D. MECL 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 the Customer and MECL. Said testing and calibration of meters shall be in accordance Measurement Canada standards. The Customer may request that MECL provide to the Customer a copy of the calibration certificate or other pertinent documentation. Any non-routine replacement of meters and associated equipment 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 MECL.
- 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 MECL and when MECL 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 MECL.

Subject to the provisions of the Canadian Electricity and Gas Inspection Act, 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, MECL 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. 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 market 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. MECL 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 Facility Station Service. If MECL 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 IRAC 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 MECL at no cost to MECL. All equipment used for RTUs and other data collection or transmission will be approved by MECL, 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 computer in Charlottetown, Prince Edward Island 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 MECL 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 settlement rules and procedures as may be implemented in Prince Edward Island and as may be amended from time to time.

3.9.4 Line Operation Information. MECL will require remote access to site specific line operations information at Customer's facilities. Customer will make such information available to MECL at no cost, as permitted in accordance with the Standards of Conduct in Attachment L of MECL's OATT.

3.9.5 Voice Communications. 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 MECL 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 MECL with prompt oral notification by telephone of generation and interconnection equipment Emergencies which may reasonably be expected to affect MECL'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 MECL

and/or the Customer.

- 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 MECL 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, MECL 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, MECL may discontinue Interconnection Service. Unless the System Operator perceives that an emergency exists or the risk of one is imminent, MECL will give Customer reasonable notice of its intention to discontinue Interconnection Service and, to the extent practical, allow Customer suitable time to remove or mitigate the situation. MECL'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, MECL will

immediately confer with Customer regarding the conditions causing such interruption and its recommendation concerning timely correction thereof. MECL may discontinue Interconnection Service only for so long as is necessary under Good Utility Practice and, if such discontinuation of Interconnection Service does not stabilize or mitigate the situation, then MECL shall use Good Utility Practice to restore the provision of Interconnection Service to Customer. In the event Interconnection 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 MECL for all costs incurred by MECL attributable to the interruption and restoration of Interconnection 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. MECL will consult with Customer regarding timing of relevant scheduled maintenance of MECL's transmission facilities. MECL 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 MECL to perform maintenance during a time period other than a scheduled outage, MECL 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 MECL or MECL's other Customers. If Customer's request has, or is reasonably expected, as determined by MECL in its sole judgement, to have, an adverse economic impact upon MECL, and Customer is willing to reimburse MECL for the costs incurred by MECL as a result of the rescheduling, MECL shall use commercially reasonable efforts to comply with Customer's request.

3.13.1.2 In the event MECL is unable to schedule an outage of its facilities to coincide with Customer's schedule, MECL shall use reasonable efforts to notify Customer, in advance, of reasons for the outage, the time scheduled for it to take place, and its expected duration. MECL 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 MECL business practices, as may be amended from time to time and in no event will MECL be liable for any such compensation, unless specifically required by approved business practices.

3.13.2 Local Routine Inspection and Maintenance. MECL will provide at least eight (8) hours advance notice to Customer's Facility operator (or equivalent) by telephone before MECL's personnel enter Customer's facilities for routine measurements, routine inspections, and routine meter reads.

### **3.14 Safety**

3.14.1 General. 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 of Prince Edward Island as amended from time to time, the Canadian Electrical Safety Code as amended from time to time and Good Utility Practice.

3.14.2 Switching and Tagging Procedures. Each Party will comply with MECL's Standard Protection Code in existence on the date of this Interconnection Agreement and as they may be modified by MECL from time to time, at all utility Primary and Secondary Systems equipment interconnection or demarcation points. MECL will notify Customer of any changes in MECL's Standard Protection Code.

3.14.2.1 Customer, in accordance with MECL's Standard Protection Code, will be responsible for arranging and paying for MECL approved operator training, testing and certification. Qualified personnel will be eligible for inclusion on the List of Qualified Persons but will not be eligible to perform Switching and Tagging functions on MECL owned equipment unless under the direct supervision of a qualified MECL employee.

### **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 Interconnection, 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 MECL 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 Voltage or Reactive Control Requirements. 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 Interconnection 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 business practices.

- 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 IRAC-approved tariff of which MECL has received prior written notice, MECL's OATT, or any business practices and procedures IRAC may approve for implementation in Prince Edward Island, 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, MECL 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 MECL, MECL 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, MECL may open the interconnection between Customer and MECL, 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, MECL will endeavor to provide the Customer with as much notice as practicable of MECL's intent to take such action, and with an opportunity to correct the condition, before opening the interconnection 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 blackstart criteria, if applicable, as amended from time to time. 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 MECL determines that any of Customer-Owned Interconnection 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, MECL 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 MECL, Customer must demonstrate to MECL'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 MECL'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, MECL may open the interconnection between Customer and MECL; provided, however, that MECL may open the interconnection only for so long as is necessary under Good Utility Practice.

- 4.2.3.1 If MECL determines that a modification to any of Customer-Owned Interconnection Facilities or associated equipment has been made so that performance is not as originally approved by MECL and such performance has, or could reasonably be expected to adversely impact operation of the Transmission System, MECL 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 interconnection between Customer and MECL; provided, however, that MECL may open the interconnection only for so long as is necessary under Good Utility Practice.
- 4.2.3.2 Notwithstanding anything to the contrary in this Agreement, MECL may immediately disconnect the Facility from MECL's Transmission System, if MECL 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 MECL's Transmission System; provided, however that MECL 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 MECL's OATT, or business practices in Prince Edward Island, as applicable, and as may be amended from time to time.

### **4.3 MECL's Operating Obligations**

- 4.3.1 General. All operations pertaining to Customer's generation, including start-up, shutdown and determination of hourly generation, will be coordinated by the System Operator, with the Customer.
- 4.3.2 With respect to any curtailment, interruption, reduction or disconnection permitted under this Agreement, MECL 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 interruption, reduction or disconnection during non-peak load periods, or to coincide with scheduled outages of the Facility, results in increased costs to MECL, Customer agrees to reimburse MECL 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, reduction or disconnection 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 MECL 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 MECL's OATT, or any approved business practices in Prince Edward Island, 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 Interconnection Services**

5.1.1 Customer's Continuing Annual Costs Responsibility. 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 Customer's Annual Costs for MECL-Owned Interconnection Facilities and Other Direct Assignment Facilities. Customer's annual cost associated with said MECL-Owned Interconnection Facilities and Other Direct Assignment Facilities will be as set forth in Schedule I. MECL will annually update the Interconnection Facilities Charges (IFSC-CR and IFSCNCR), for any new or upgraded MECL-Owned Interconnection Facilities, as applicable, by applying the formula set forth in Schedule 9 of MECL's OATT.
- 5.1.1.2 Customer's Annual Costs for Revenue Meters. The monthly charge for the operation, maintenance, and routine testing of MECL's metering devices and for the processing of electronically metered data, is set forth in Schedule D. MECL will annually update the annual charge for Revenue Meters, for any new or upgraded Revenue Meters, as applicable, and include charges as set forth in Schedule 9 of MECL's OATT.
- 5.1.2 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 MECL OATT and set forth in Schedule I of this Agreement. Customer will pay MECL 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, MECL's labor costs; costs of materials and equipment; contractor costs; any taxes or governmental fees; MECL's overheads; cost of capital, and operations, maintenance, and administrative (OM&A) expenses, and other related costs.
- a. Customer will pay MECL a contribution of capital in an amount equal to the cost of any such new or upgraded Direct Assignment Facilities, Revenue Metering,



and Customer's proportionate share of Other Direct Assignment Facilities. The Parties intend that all payments or property transfers made by Interconnection Customer to MECL for the installation of the MECL's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with any applicable Federal and Provincial tax laws and shall not be taxable as contributions in aid of construction or otherwise under any applicable Federal and Provincial tax laws.

- b. MECL shall refund to Customer any sums previously paid by Customer that MECL is collecting under the MECL OATT as payment of a contribution of capital provided that such sums are included in Section 5.1.2(a).
- c. Customer will pay on a monthly basis, the amounts that MECL has expended pursuant to Section 5.1.2(a). Customer shall pay MECL for the invoiced amount as per the billing procedures described in Section 5.4.
- d. All payments required under this Section 5.1.2 will be determined by MECL. Any amounts not paid by the due date shall be subject to an interest charge as described in the billing procedures in Section 5.4.
- e. When Customer's properly allocated share of the actual construction costs resulting from Sections 5.1.2 are known, MECL will issue a final cost report to Customer. MECL will determine the difference between the 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 cost paid by Customer, Customer will pay MECL 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 cost exceeds the Customer's properly allocated share of the actual cost, and Customer has paid the

cost in full, MECL 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 MECL notifies Customer of the Customer's properly allocated share of the actual costs of the upgrades and additions provided, however, that MECL (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 request a deposit equal to the estimated remaining charges under this Agreement or Customer may provide other such security as is reasonably acceptable to MECL, 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 MECL 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 MECL 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 MECL'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 MECL 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. MECL 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 interconnection. 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 MECL and any payments owed to MECL 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 MECL 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 MECL-Owned Interconnection Facilities or Other Direct Assignment Facilities, Customer will reimburse MECL for all such costs on a lump sum basis or as otherwise requested by MECL pursuant to charges as established by MECL. Reimbursable costs under this Section will include, without limitation, MECL's labor costs; costs of materials and equipment; contractor costs; any taxes or governmental fees; MECL's overheads; cost of capital, and OM&A expenses, and other related costs.

5.1.4 If MECL incurs any additional costs during the term hereof in connection with the

construction, maintenance and operation of MECL-Owned Interconnection Facilities and Other Direct Assignment Facilities, or if MECL is assessed any costs that are determined to be directly attributable to Customer, Customer will reimburse MECL for all such costs in accordance with Attachment K of the MECL 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 interconnection 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 MECL'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 MECL in Section 3.8.
- 5.2.2 For services provided by MECL 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 MECL which do not have identified price/rate schedules, MECL will determine such charges for any such services.

## **5.3 Pre-Contract Costs**

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

## **5.4 Billing Procedures**

- 5.4.1 Promptly after the end of the each calendar month, MECL shall bill the Customer in Canadian dollars for the charge payable by the Customer in respect of such month.

Accounts shall be due and payable in Canadian dollars on the twentieth day of each month or if the twentieth day of the month is a Saturday, Sunday or statutory holiday in PEI then on the next closest working day to the twentieth day, and if not paid when due shall be subject thereafter and until paid to a per annum interest charge at a rate equal to the prime interest rate quoted by the Royal Bank, Queen Street Branch in Charlottetown plus two (2) percent (the “Interest Rate”). Such interest charge shall be compounded monthly.

- 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. 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 Billing Disputes and Adjustments of Invoices**

A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. Notwithstanding Section 5.4, in the event an invoice or portion thereof or any other claim or adjustment arising under this Agreement is disputed, payment of the undisputed portion of the invoice shall be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2)

business days of such resolution along with interest accrued at the interest rate from and including the due date to but excluding the date paid.

Inadvertent overpayments by Customer shall be returned upon request or deducted from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repair or deducted by the Party receiving such overpayment.

Legal or other proceedings, other than arbitration pursuant to Section 12, in respect of any dispute with respect to an invoice may not be started unless the other Party or Parties is/are notified in accordance with Section 20.2 within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which the invoice was rendered, the right of payment for such performance is waived.

## **SECTION 6.0 - DOCUMENTATION**

### **6.1 General**

- 6.1.1 Customer will provide MECL, and MECL 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 MECL, 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 MECL pursuant to this Agreement will be confidential and will be treated as proprietary information.

6.1.3 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 MECL'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 MECL's Transmission System, Customer will submit the proposed plans to MECL.

6.1.4 Upon completion of any modifications to equipment or facilities that are connected to MECL'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 MECL.

6.1.5 Customer will be responsible for its own equipment, inspections, maintenance, construction, and modifications. MECL'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 Interconnection Facilities and MECL-Owned Interconnection Facilities and will provide copies to the other Party as soon as practicable thereafter.

## **SECTION 7.0 - CONFIDENTIALITY**

### **7.1 Confidentiality of MECL**

MECL 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 MECL, (ii) available to MECL on a non-confidential basis prior to disclosure to MECL by Customer, or (iii) available to MECL 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 MECL to be bound by a confidentiality agreement with Customer or otherwise prohibited from transmitting the information to MECL by a contractual, legal or fiduciary obligation, MECL 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. MECL 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 MECL 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. MECL may utilize information subject to this Section 7.1 in any proceeding under Section 13, or otherwise to enforce MECL'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.

## **7.2 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 MECL 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 MECL, or (iii) available to Customer on a non-confidential basis from a source other than MECL, 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 MECL 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 MECL 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 MECL 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, MECL 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 two percent (2%) 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 MECL's Transmission System, the MECL-Owned Interconnection Facilities, Customer-Owned Interconnection 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 MECL'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 two percent (2%) 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 MECL, 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 MECL's negligence or 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 MECL for such damage.

#### **9.2 MECL's Responsibility**

Except to the extent caused by Customer's negligence or willful misconduct, MECL

will be responsible for all physical damage to or destruction of property, equipment or facilities owned by MECL or its Affiliates, regardless of who brings the claim and regardless of who caused the damage, and MECL 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 9.0 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 Indemnatee by any third party (including, without limitation, reasonable attorney and expert fees, and disbursements incurred by any Indemnatee 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 co-counsel 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 Schedule F, a current copy of which is attached hereto and incorporated by reference as if fully set forth herein. MECL may elect to self-insure any and/or all of the obligations set forth in Schedule F.

### **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 Schedule F, 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 Schedule F 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 Insureds**

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 MECL 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 – DISPUTE RESOLUTION PROCEDURES**

### **13.1 Internal Dispute Resolution Procedures**

Any dispute between a Customer and MECL as to their rights under this Agreement shall be referred to a designated senior representative of the MECL and a senior representative of the 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) Business 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.

### **13.2 External Arbitration Procedures**

Any arbitration initiated under this Agreement 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) Business 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) Business 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 part 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 Prince Edward Island Arbitration Act and any applicable IRAC regulations.

### **13.3 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 therefor. 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 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 Prince Edward Island of Arbitration Act.

#### **13.4 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 of 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.

#### **13.5 Referral of Dispute to IRAC**

Notwithstanding anything contained in this Section 13, either party may:

- a. Instead of proceeding through the External Arbitration Procedures outlined in Section 13.2 or 13.4 above, elect to refer a dispute directly to IRAC by filing a complaint with IRAC in the manner set out below and the decision of IRAC with respect to the matter shall be final and binding and the matter in dispute cannot thereafter proceed to the dispute resolution process; or
- b. If either party is dissatisfied with the results of an arbitration decision rendered pursuant to Section 13.3, refer a complaint to IRAC for determination and the decision of IRAC with respect to the matter shall be final and binding.

Complaints filed with IRAC must be in writing and must include reasons and evidence in support of the dissatisfied party's position. A copy of the complaint, together with the supporting reasons and evidence, must be filed with the other party.

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

### **13.6 Enforcement of Arbitration Decision**

The Arbitration Act of Prince Edward Island shall govern the procedures to apply in the enforcement of any award made pursuant to Section 13.3.

## **SECTION 14.0 - REPRESENTATIONS**

### **14.1 Representations of MECL**

MECL represents and warrants to Customer as follows:

14.1.1 Organization. MECL is a corporation having its head office in Charlottetown, Prince Edward Island validly existing and in good standing under the laws of the Province of Prince Edward Island and MECL has the requisite power and authority to carry on its business as now being conducted;

14.1.2 Authority Relative to this Agreement. MECL 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 MECL, and no other corporate proceedings on the part of MECL are necessary to authorize this Agreement or to consummate the transactions contemplated hereby. The Agreement has been duly and validly executed and delivered by MECL and constitutes a legal, valid and binding Agreement of MECL enforceable against it in accordance with its terms;

- 14.1.3 Regulatory Approval. MECL has obtained or will obtain all approvals of, and has given or will give all notices to, any public authority that are required for MECL to execute, deliver and perform its obligations under this Agreement;
- 14.1.4 Compliance With Law and Agreements. MECL 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 MECL'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 MECL 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 MECL 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 MECL as follows:

- 14.2.1 Organization. Customer is a (INSERT TYPE OF COMPANY) organized, validly existing and in good standing under the laws of the Province of Prince Edward Island, Canada, and Customer has the requisite power and authority to carry on its business as now being conducted;
- 14.2.2 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 and no

other corporate proceedings on the part of the 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 Regulatory Approval. 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 MECL.

### **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 MECL, be assigned by Customer, if Customer is not then in default of this Agreement as addressed in Section 8.0:

- a. 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. MECL 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 MECL's rights under this Agreement are not thereby altered, amended, diminished or otherwise impaired. Customer will reimburse MECL 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, MECL 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 MECL to any entity(ies) in connection with a merger, consolidation, reorganization or other change in the organizational structure of MECL.

## **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, MECL 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 MECL'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 MECL 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 and except as otherwise provided in this Agreement, 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 Interconnection Service; disconnection of the Facility from MECL's Transmission System; forced or planned outages of MECL'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 MECL's OATT, or any market settlement rules and procedures approved for implementation in Prince Edward Island.

## **19.2 Consequential Damages**

Notwithstanding any other provision of this Agreement, except to the extent provided for in Section 10, neither MECL 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, MECL, 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 MECL or any of its successors, assigns, directors, officers, employees, representatives, agents and/or contractors or otherwise.

## **19.4 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.

### **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:

If to MECL, to:

Maritime Electric Company, Limited  
PO Box 1328, 180 Kent Street  
Charlottetown, Prince Edward Island C1A 7N2 CANADA  
Attention: (Vice President, Corporate Planning and Energy Supply)  
e-mail: [VPEnergySupply@MaritimeElectric.com](mailto:VPEnergySupply@MaritimeElectric.com)

With a copy to:

Maritime Electric Company, Limited  
PO Box 1328, 180 Kent Street  
Charlottetown, Prince Edward Island C1A 7N2 CANADA  
Attention: (Manager, Production and Energy Supply)  
e-mail: ManagerEnergySupply@MaritimeElectric.com

If to Customer to:  
(INSERT CUSTOMER CONTACT INFORMATION)

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, MECL 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 MECL to Customer in the same manner provided by MECL 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 Prince Edward Island, Canada, without giving effect to the conflict of law principles thereof. Except for those matters covered in this Agreement and jurisdictional to IRAC 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 Prince Edward Island, Canada. Both Parties hereby consent to the jurisdiction of Prince Edward Island, Canada for the purpose of hearing before and determining any action by IRAC.

## **SECTION 25.0 - 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 Agreement, and the validity and enforceability of the remaining provisions hereof will not be affected thereby.

## **SECTION 26.0 - AMENDMENTS**

### **26.1 MECL Amendment Rights**

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

### **26.2 Customer Amendment Rights**

Notwithstanding any provision of this Agreement to the contrary, Customer may exercise its rights under the Electric Power Act and the Renewable Energy Act with respect to any rate, term, condition, charge, classification of service, rule or regulation for any services provided under this Agreement over which IRAC has jurisdiction.

### **26.3 Revision of Schedules**

Notwithstanding any provision of this Agreement to the contrary, and without limiting or waiving any of MECL's other rights, MECL reserves the right to modify, in a manner not inconsistent with Good Utility Practice or IRAC 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 NERC or NPCC)

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 MECL'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 MECL's OATT Schedule I, as described in Section 27.1 above).

Schedule J (technical information to be provided by Customer)

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

#### **26.4 Amendment by Mutual Agreement**

Except as provided for in Sections 26.1, 26.2 and 26.3, this Agreement may only be amended, modified, or supplemented by written agreement signed by both MECL and Customer.

### **SECTION 27.0 - ENTIRE AGREEMENT**

#### **27.1 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.



**27.2 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 28.0 - OTHER CONDITIONS**

**28.1 Conflict with Other Documents**

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

MARITIME ELECTRIC COMPANY, LIMITED

By: \_\_\_\_\_ Name:

By: \_\_\_\_\_ Name:

(Customer Name)

By: \_\_\_\_\_ Name:

By: \_\_\_\_\_ Name:

**SCHEDULES**

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**SCHEDULE A**  
**INTERCONNECTION FACILITIES AND ASSOCIATED EQUIPMENT**

- I. Customer:  
Project:  
Unit Location:  
Net Capacity:  
Point(s) of Interconnection:  
Point(s) of Receipt:
  
- II. Customer-Owned Interconnection Facilities and Associated Equipment (Description and Estimated Cost):
  
- III. Direct Assignment Facilities (Description and Estimated Cost):
  
- IV. Other Direct Assignment Facilities (Description and Estimated Cost):

**SCHEDULE B**  
**GENERATOR TECHNICAL REQUIREMENTS**

- I. **Purpose** - The purpose of this document is to establish the Technical Requirements for generation facilities to connect to the Maritime Electric Company, Limited's (MECL) Transmission System. This document reflects, in part, the MECL view of Good Utility Practice with respect to the installation of generation interconnection 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 MECL 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 interconnection 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 MECL personnel.
- V. **Transmission System** - This term refers to the MECL electrical system that includes 138 and 69 kV transmission elements.
- VI. **Qualified MECL Personnel** - This term is used to refer to those persons employed by MECL having the required knowledge, training, experience, and accountability in specialized areas of Transmission Services, Transmission Engineering, Operations and Planning.

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## **1. GENERAL INFORMATION**

The information in this generator technical requirements document is supplied to Customers for the purpose of establishing and maintaining an acceptable interconnection 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 MECL requirements as well as the regulations of authorities having jurisdiction over MECL.

### **A. MECL Review and Approval**

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

#### **1. Engineering Studies**

Upon receiving a completed Generator Interconnection Request as per Schedule J, MECL will determine the requirements for a System Impact Study. The process for these studies is described in Section 19 and 32 of MECL's OATT.

#### **2. Interconnection Costs**

Unless otherwise specified in a site-specific interconnection agreement, or any applicable transmission tariff, the Customer will pay the interconnection costs for any equipment required by MECL 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 MECL Protection System. MECL will require prepayment for any necessary work.

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

**3. Design Approval**

MECL will review and provide written approval for the portion of the facility's design that is required to meet these interconnection requirements. This review and approval will only cover the required interconnection 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 interconnection equipment must be inspected, calibrated, and functionally tested. MECL will inspect the interconnection 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 interconnection equipment to ensure this equipment will operate properly. Section VIII.E, "Testing & Maintenance," provides additional details for these ongoing requirements.

**B. Grandfathering**

Generators already connected to the Transmission System are not exempt from the requirements of this document. The MECL Interconnection 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. MECL may require reasonable

modifications to the Interconnection Protection System as a result of these reviews and inspections.

**C. Generators 1,000 kW and Larger and Facilities 1,000 kW and Larger**

All individual generators with a minimum generating capacity of 1,000 kW and all Facilities that interconnect with the Transmission System with a minimum capacity of 1,000 kW must meet the review and approval criteria identified in Sections A and B, 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.

**D. NERC, NPCC Requirements**

Generation facilities that are connected to the Transmission System must also comply with North American Electric Reliability Council (NERC), and Northeast Power Coordinating Council (NPCC) criteria, guides, requirements, and standards.

**E. DC and 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 MECL power quality requirements as outlined in Section VI, “Power Quality”.

**F. Generators Less than 1,000 kW**

Generation equipment less than 1,000 kVA and greater than 100 kW 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 interconnection occurs. In all cases, the Customer must install the appropriate protection and obtain written approval from MECL, as specified in this document, before commencing interconnected operation. For

facilities 100 kW or smaller, MECL approval must still be obtained, though the level of detail is less than that required for facilities greater than 100 kW.

#### **G. 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 MECL 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 Practice, 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 without limitation, the 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), Occupational Health and Safety Act of Prince Edward Island (OHSA), Canadian Environmental Assessment Act (CEAA), Prince Edward Island Department of Environment, Energy and Forestry, Municipal Planning Commissions and Boards, North American Electric Reliability Council (NERC), Northeast Power Coordinating Council (NPCC), and Maritime Electric Company, Limited standards.

**A. Interconnection Process and Required Information**

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

- Complete, accurate, and applicable data to enable the proper modeling of the Customer's unit(s) 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.

The Generator Interconnection Request Form, Schedule J, provides Electrical Equipment Data Sheets that the Customer must complete and forward to MECL to allow an engineering study to be performed. Upon receipt of the required information, as part of the engineering study, MECL will review the Interconnection Protection System requirements. Any additional requirements not explicitly specified in this document will be provided by MECL to the Customer. The Customer must submit design documents reflecting these additional requirements to MECL for review and approval.

**B. Protection System Requirements**

Each Customer must design, install, maintain, and operate appropriate protection systems. The Customer must obtain MECL approval of specific relays and interconnection equipment before parallel operation can begin. Section III, "System Protection," covers MECL 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. MECL requires that the transformer have a y-connected solidly grounded high voltage winding. The low voltage winding must be delta-connected or there must be a delta-connected tertiary winding. MECL also requires that the step-up transformer voltage drop during in-rush be less than 3% after 2 cycles. 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 kW or less will be subject to MECL's Net Metering procedures.

**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.

**3. Station Ground**

The facility's station ground must be designed and installed in accordance with MECL requirements and CSA Standards.

**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  $\pm 5$  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 power or voltage control modes as directed by the System Operator to assist in maintaining proper system voltage. Generators must maintain operating limits or interconnection service will be discontinued.

Asynchronous generators will normally produce reactive power flows that will hold the voltage at the delivery point constant at a pre-determined value with the capacity to operate at power factors in the range of  $\pm 0.98$  while producing full real power output and with the voltage of the delivery point constant at 1.0 per unit.

The nominal rating of the step-up transformer's high voltage winding will be specified by MECL 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  $\pm 5$  percent of the nominal voltage at  $2\frac{1}{2}$  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 MECL upon request.

#### **H. Capacitors**

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

#### **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. MECL will not assume any responsibility or liability for this protection.

#### **J. Changes**

Changes to the interconnection, 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 MECL a minimum of thirty (30) days prior to making any such change. These changes will require written approval by MECL. These changes include, but are not limited to, the following:

##### **1. Changes to the Transmission System**

MECL 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 Interconnection Protection System**

No modifications will be performed on the interconnection relays, their specified set points, or other associated equipment by the Customer or the Customer's representative without written approval from MECL.

**3. Changes to Transformers**

No changes to the generator's step-up transformer ratio are allowed without written approval from MECL.

**4. Changes to the MECL Protection System**

If any changes are required to the MECL Protection System due to the Facility's interconnection, those changes will be performed by MECL at the Customer's expense.

**5. Unauthorized Changes**

Changes to the interconnection equipment without MECL written permission will result in the facility interconnection service being discontinued until the facility returns to compliance with these requirements.

**K. MECL Disclaimer**

An MECL review of the Customer's facility, equipment, interconnection equipment, protective devices, and metering does not confirm or endorse the design. An MECL review is not a warranty of safety, durability or reliability of the facility or any of the equipment. MECL 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, interconnection equipment, or protection systems. MECL 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.

**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 interconnection. The following requirements are necessary for planning and designing generation facilities for interconnected operation with the Transmission System.

**A. MECL Engineering Review of Proposed Generation Facilities**

Only those portions of the drawings and other design documents which apply to the Interconnection Equipment and the Interconnection 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**

The step-up transformer high voltage winding must be connected in a wye configuration and solidly grounded. The low voltage winding must be delta-connected or there must be a delta-connected tertiary winding. The Customer will coordinate with MECL to select a transformer connection and grounding arrangement.

**C. General Protection System Descriptions**

The MECL Protection System and the Interconnection Protection System must provide the necessary level of protection for the Transmission System. MECL will determine the Interconnection Protection System relay settings and changes to the existing MECL Protection System or other power system equipment due to the interconnected operation of the Customer's facility.

**1. Interconnection Protection System**

The Interconnection 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 Interconnection 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 may require redundant protection equipment including station batteries, breaker trip coils, station service AC supply, and breaker failure systems. MECL will verify these requirements are incorporated into the interconnected facilities.

## **3. Generator Protection System**

Customers must provide the necessary Generator Protection System to protect their own equipment. MECL will provide system data to the Customer to allow the Customer to coordinate their protective system settings with the MECL Protection System and the Interconnection Protection System and may include provision for tripping the generator offline by special telecommunications signals.

In addition to these standard protection systems, MECL may require other Special Protection Systems at certain sites. Special Protection System requirements will be determined by MECL on a case-by-case basis. The Generator will not be compensated by MECL 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 Interconnection 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, MECL standards and based on Good Utility Practice.

**3. Secondary Wiring**

All secondary wiring and connections on the Interconnection Protection System and its associated equipment shall meet all national and provincial requirements and based on Good Utility Practice.

All interconnection relay trip outputs must be hard-wired directly to the tie breaker or interposing lock-out device. No interconnection 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 Interconnection 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 Interconnection 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 MECL remote-end line protection. In these specific installations, a high side fault interrupting device may not be initially required providing no other MECL 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 MECL 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/undervoltage 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**

MECL 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 MECL 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**

MECL may require, or the Customer may request, that MECL 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 MECL back-up protection.

## **J. MECL 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. MECL must review and report annually to the Northeast Power Coordinating Council (NPCC) on this program. Frequency relaying installed as part of the Interconnection Protection System and the Generator Protection System will be set according to criteria which will allow MECL to meet UFLS program goals.



Each Customer is responsible to review the setting criteria to ensure that the MECL 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, MECL 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 MECL must coordinate the setpoints of these devices with the interconnection frequency relay settings specified by MECL. If there is no interconnection 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 MECL upon request.

#### **K. Blackstart Capability**

In order to meet the requirements of NPCC, certain generators interconnected to the Transmission System may have blackstart 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 MECL, 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 MECL to verify that protection system requirements are met, that operability of Interconnection 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 Prince Edward Island. This person will coordinate the start-up testing and operation of all equipment and act as the liaison between the Customer and MECL until the interconnection requirements have been met.

Two weeks prior to the initial functional test, the Customer shall supply as-built protection drawings to MECL. These drawings must provide sufficient information for MECL 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, and
- That the unit matches the short circuit saturation curve data provided by the manufacturer.

The Customer will provide MECL a copy of all test data for evaluation. MECL will perform or observe a functional test and commissioning of the entire Interconnection Protection System. This will include a calibration check of the interconnection protective relays and as many trips of the interconnection breaker and/or the generator breaker(s) as MECL considers necessary to verify the correct operation of the Interconnection 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 Interconnection 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. MECL will review and approve the testability of the Interconnection Protection System as part of the initial design review.

After the final commissioning, the Customer must provide MECL with one set of accurate drawings and maintain one set on-site. Any subsequent changes to the facility impacting the Interconnection Protection System must be approved by MECL before being incorporated. After incorporation, such changes must be verified by MECL and documented and incorporated into the facility prints within ninety (90) days. A set of updated prints will be provided to MECL within this time-frame.

#### **M. Synchronizing to the Transmission System**

All components of the Interconnection 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 1 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.

MECL requires a detailed procedure from the Customer for the initial synchronization. The Customer's actual synchronizing procedure will require approval from MECL. See Figure I 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 MECL.**

## **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 and 138 kV.

The following subsections give a general overview of acceptable interconnection designs. Figures II and III are one-line diagrams for the installations listed below. Figure IV provides a legend of symbols used in the one-line diagrams. **ALL INSTALLATIONS MUST BE REVIEWED AND APPROVED BY MECL PRIOR TO FINAL ACCEPTANCE AND COMMISSIONING.**

<b>Transformer</b>			
<b>Type</b>	<b>Rating</b>	<b>Configuration (HV-LV)</b>	<b>Utility Connections</b>
I	Any size 3-phase	Wye-Grounded Wye Grounded with a Delta- Tertiary	Transmission-Line
II	Any size 3-phase	Wye-Grounded Wye Grounded with a Delta- Tertiary	Transmission-Bus

**Figure I:**  
**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.

**Precautions:**

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 the 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

- and Phase C \_\_By: \_\_\_\_\_
- 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 MECL. By: \_\_\_\_\_
  - f. Read and record rotation on incoming PTs. Should be the same as running PTs. If not, STOP and inform MECL. 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 MECL. By: \_\_\_\_\_  
\_\_\_\_\_
  - i. Return system to normal.
  - j. Reinstall generator links.
  - k. Rack generator breaker into test position.
  - l. 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 MECL.)  
**NOTE:** Check for Syn. Instructions for wind generator.
  - 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 t. By: \_\_\_\_\_. (This information required to be on file with MECL.)

**Final Conditions:**

- Synchronizing procedure has been completed.

Date/Time: \_\_\_\_\_

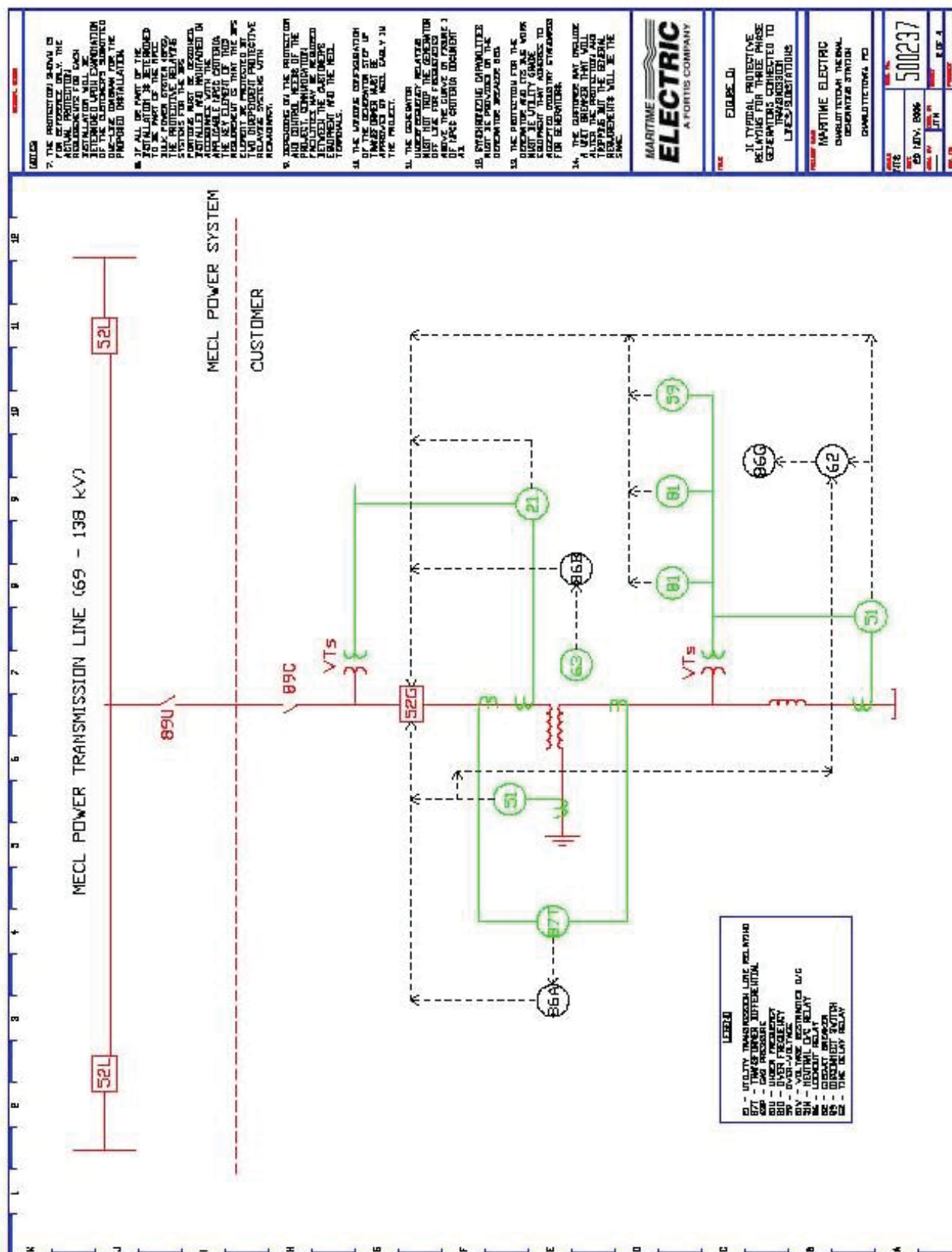
Operator: \_\_\_\_\_



**1. Type I Installations - (Figure II)**

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.

- This installation requires primary circuit breakers or circuit switches designated as components "52L" in Figure II, which are 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 MECL 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 MECL 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 Interconnection Protective Relays must be continuously rated for line-to-line voltage.
- MECL 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 MECL determines that delayed clearing of faults within the Customer's Facility could adversely affect the Transmission System.

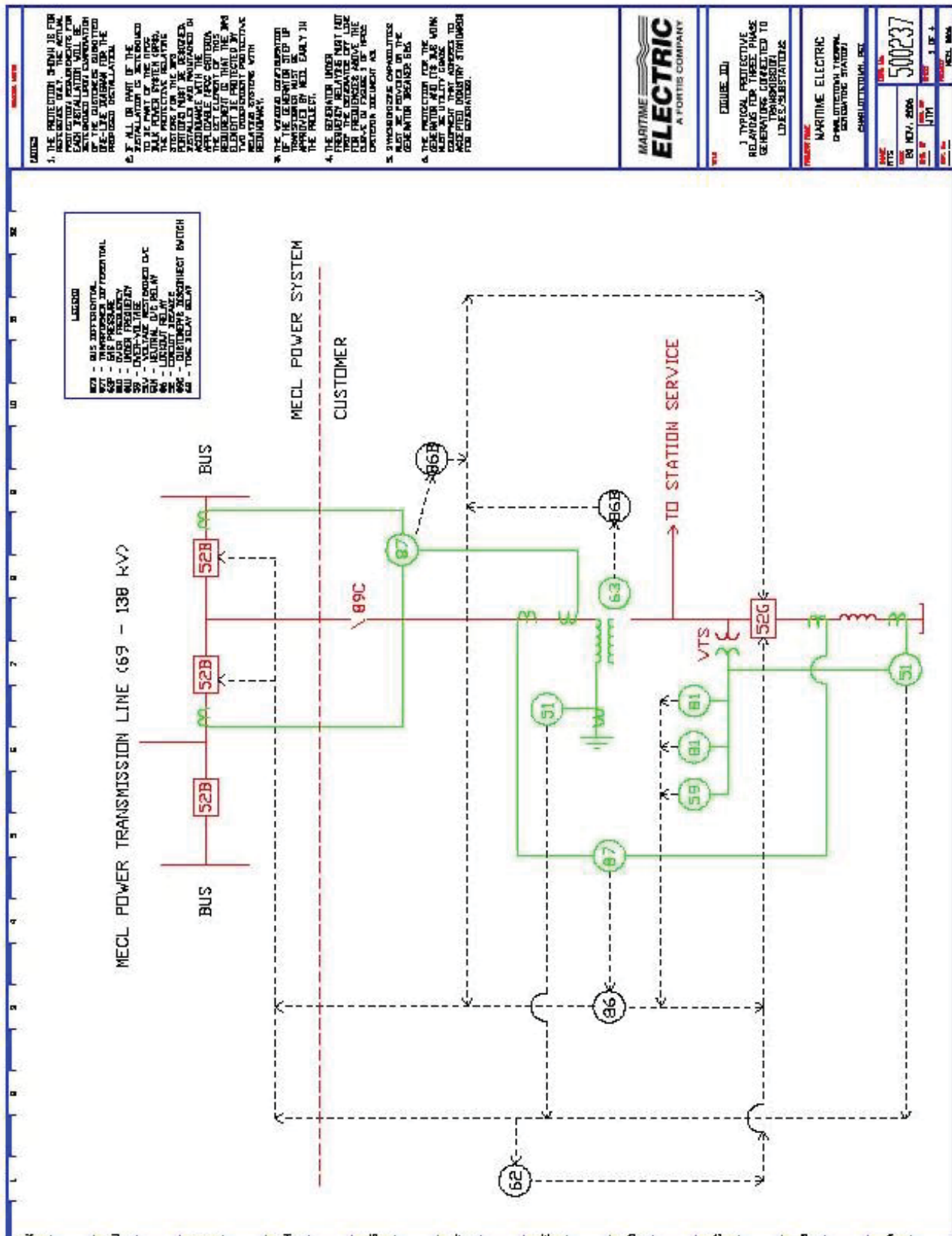



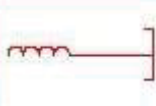







## **2. Type II Installations - (Figure III)**

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 generation itself where a generator will not island to serve local distribution load connected to the bus. As shown in Figure III, other relaying, such as bus differential relaying may be required to meet site-specific conditions.

- As with the Type I installation, a primary circuit breaker is required, rated to interrupt maximum available fault current, designated as "52B" in Figure III. 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 the Transmission Provider 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 Transmission Provider is not energized, then the Facility's control scheme must prevent closing of both breakers "52G" and "52B". Backstart facilities will require an override to this control which will be utilized only under the direct authorization of System Operations.
- Transmission Provider 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 Transmission Provider determines that delayed clearing of faults within the Customer's Facility could adversely affect the Transmission System.



1	2	3	4	5	6	7	8	9	10	11	12
1		THREE PHASE TRANSFORMER, DELTA - GROUND WYE CONNECTION.									
2		THREE PHASE GENERATOR.									
3		BREAKER.									
4		POTENTIAL TRANSFORMER.									
5		CURRENT TRANSFORMER.									
6		THREE PHASE DISCONNECT SWITCH.									
7		PROTECTIVE RELAY.									
8		DC CONTROL CIRCUIT.									
<div> <div>  <b>MARITIME ELECTRIC</b> A FORTIS COMPANY </div> <div> <b>LEGEND OF SCHEMATIC SYMBOLS USED IN TYPES INSTALLATIONS</b> </div> <div> <b>500237</b> </div> <div> <b>MARITIME ELECTRIC OPERATIONS, MAINTENANCE DEPARTMENT</b> </div> <div> <b>500237</b> </div> <div> <b>500237</b> </div> <div> <b>500237</b> </div> </div>											



**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 MECL.

**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 interconnection. Any other metering arrangement will require approval of, and design by, MECL.

**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 MECL.

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**

MECL will own the Revenue Metering Equipment associated with the station service and the generator output to the MECL system.

MECL's Revenue Metering equipment and installations will be approved, inspected,

tested and maintained in keeping with MECL policies and Measurement Canada regulations.

A metering monthly operation and maintenance charge will be charged as per Schedule D of the Generation Interconnection Agreement (Revenue Metering Equipment and Costs).

**D. Construction of New and Upgraded Metering Installations**

1. The Customer will provide at its expense adequate space and facilities on its premises, satisfactory to MECL, for the installation and maintenance of the Revenue Metering Equipment. Facilities may include but not be limited to concrete foundations, conduit, and enclosures etc.
2. MECL will be responsible for the design, procurement, installation and commissioning of all Revenue Metering Equipment. The Customer will be required to pay MECL's full cost of the design, procurement, installation and commissioning of all Revenue Metering equipment.
3. The procurement and installation of instrument transformers may become the responsibility of the Customer where it is mutually agreed, by the Customer and MECL, 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 MECL. 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. The instrument transformers will be owned by MECL.

4. Where the Customer and MECL 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 MECL. 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 exceeded when the connected burdens on all secondary potential windings are added together.

**F. Sealing of Metering Equipment**

1. 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 MECL.
2. MECL Seals on revenue metering equipment are to be broken by MECL personnel only.

**G. Communication Link**

The Customer must provide a reliable telephone line and telephone line isolation or MECL acceptable equivalent, 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 MECL 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 MECL.

## **I. Metering Equipment and Quantities Metered**

1. Figure VI shows a typical metering installation for a generation interconnection 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.
3. 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 MECL for telemetering.
6. Each revenue meter will have a MECL 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 MECL - Delivered

kWh Delivered – cumulative register and interval data

kVArh Lag – cumulative register and interval data

kVArh Lead – cumulative register and interval data

Energy (kWh) Flow From MECL To generator – Received

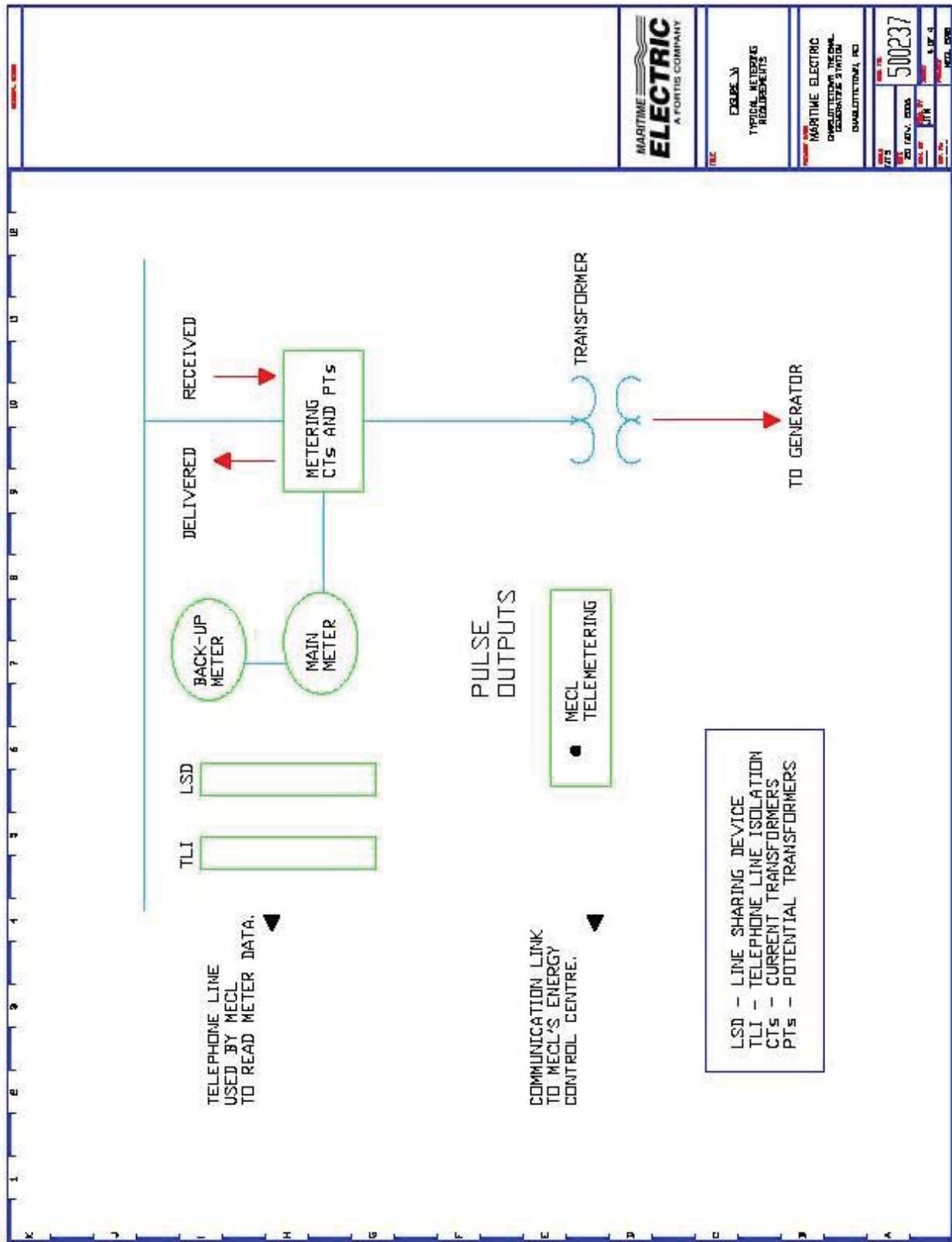
kWh Received – cumulative register and interval data

kVArh Lag - cumulative register and interval data

kVArh Lead - cumulative register and interval data

Max kW Demand – Register

Max kVA Demand – Register



**V. SUPERVISORY CONTROL AND DATA ACQUISITION**

MECL employs a Supervisory Control and Data Acquisition System (SCADA) to monitor and control the Transmission System. This SCADA 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 host computers in Charlottetown, Prince Edward Island. The host computers are used by Operations personnel who are responsible for power system operations. All generation facilities with 1 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 MECL protocol for data communication. Communication equipment design and procurement must be reviewed and approved by MECL 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).

**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

**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**

MECL, 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 MECL SCADA computer in Charlottetown and their RTU at the generation facility. Information can be transmitted via a telephone company provided circuit or via a private communications carrier. The MECL Data Communications Network may be utilized for a fee to provide the connection to the MECL Energy Control Centre.

All Generation facilities are required to have 7 days-per-week, 24 hours-per-day repair capability for all SCADA circuits.

**H. Wind Farm Information**

1. Wind speed for each unit.
2. Wind Direction for each unit.

**I. Setpoint Voltage**

System Operator will be able to set voltage for the facility.

Wind facilities shall be able to provide sufficient dynamic voltage support so as to be able to hold the voltage, at the Delivery Point, constant at 1.0 per unit while operating at power factors in the range of +/- 0.98 and producing full real power output.

## **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 generators must be controlled so that MECL can maintain the distribution voltage within  $\pm 5\%$  of nominal. Voltage limits for generation facilities connected to the Transmission System will be determined by MECL. 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 point of common connection based on IEEE Standard 1453, IEEE Recommended Practice for Measurement and Limits of Voltage Fluctuations and Associated Light Flicker on AC Power Systems and CSA-C61000-3-7:04 - Emissions Limits for Fluctuating Loads. No more than a 3% instantaneous variation in voltage 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 MECL 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, MECL may request that the generator serve local distribution load while isolated from MECL. To accommodate these situations, the voltage and frequency limits will be specified by MECL. These will be reviewed and approved by MECL on a case-by-case basis.

**VII. SAFETY (SWITCHING AND TAGGING PROCEDURES)**

**A. General**

The interconnection 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 and the MECL Standard Protection Code.



- 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 the MECL Standard Protection Code. This switch shall be able to be verified open by visual inspection and shall be lockable.

The System Operator shall provide the Customer with a list of all Customer personnel trained and qualified to operate this switch. This list shall be certified and maintained by the System Operator in accordance with the MECL Standard Protection Code.

Customer personnel not on the List of Qualified Persons shall not be permitted to operate the disconnect switch.

**C. MECL Responsibility**

MECL representatives shall carry out an inspection of the work area when MECL is required to work on a Customer's premises. If MECL believes that hazardous working conditions exist, the Customer shall be required to correct the unsafe condition before MECL 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 MECL 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 the MECL Standard Protection Code.

**E. Switch Access**

The Customer must provide MECL unrestricted, continuous access to the tie disconnect switch.

**F. Energizing Apparatus**

The Customer shall not energize any Transmission apparatus unless acting under the knowledge and direction of the System Operator.

**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 MECL and the Customer. MECL 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 MECL to open/close the Facility's tie disconnect switch should be made to MECL 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 MECL 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 MECL.

**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**

MECL will determine the necessity for an annual inspection. If conducted, it will include a visual inspection of the generator and switchgear rooms (where interconnection equipment is located) and a review of operation and maintenance procedures, pertinent documentation, and adherence to all applicable codes and standards.

**3. Test and Inspection**

This test and inspection will occur at least every five years after the initial inspection. Items of concern for the annual inspection will be reviewed and a test of the interconnection system will be performed per Section VIII.E.1, "Interconnection 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 interconnection relaying. Calibration of relays will verify the setpoints and confirm the ability of the protective devices to respond within specified parameters. At the sole discretion of MECL, more frequent testing may be required.

Protective Interconnection Relay calibration testing must be performed by a qualified contractor and observed by MECL. At the Customer's option, this testing may be performed by MECL. Verification of setpoints will be in accordance with MECL specifications.

**C. Site Access**

MECL will require site access for the following reasons:

**1. Routine Access**

MECL 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 results 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, MECL will discontinue the facility interconnection service until the problems have been corrected.

During maintenance, testing, or repair of Transmission facilities, MECL 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  $\pm 5\%$  of nominal voltage as specified by MECL. 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.

**2. Reactive Power**

To prevent the degradation of system voltage to MECL customers as a result of interconnection with a Customer's Facility, Facilities generate such reactive power as may be reasonably necessary to maintain voltage levels and reactive area support.

**3. Speed Control**

All other than non-dispatchable generators must be equipped with an automatic frequency sensitive speed-governing system capable of achieving a 4% droop characteristic.

**4. System Performance Reporting**

For MECL to adequately assess the performance of its system, ensure compliance with regulatory requirements, and provide conformance reporting to NPCC and the NBSO, Customers will be required to submit the following operational information:

- Continuously (Units Larger than 1 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. Setpoint verification on all underfrequency/overfrequency relays or underspeed/overspeed devices which are not part of the Interconnection Protection Equipment.
- After Outages or Relay Operations: Information about any outage or interconnection relay operation involving the Customer’s facility as per MECL instructions within two (2) working days.

#### **E. Testing and Maintenance**

The Customer will have full responsibility for the routine testing and maintenance of the interconnection equipment, including the Interconnection Protection System, the Generator Protection System, the Generator Step-up Transformer, the Interconnection Circuit Breaker, and the Station Battery and Charging System. MECL will monitor maintenance on the Interconnection Equipment, including protection system(s), transformer(s), Interconnection Circuit Breaker(s), and Station Battery(ies) and Charging System(s), etc.

MECL 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 MECL vegetation control standards for any portion of the interconnection where a fault could affect the operation of the MECL Transmission 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 MECL during the annual inspections and other inspections. Specific equipment test data must be made available to MECL 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, MECL will discontinue the facility interconnection service until appropriate corrective action is taken and MECL approval is obtained.

If the interconnection equipment is not properly maintained, fails to perform its intended function, or has been modified from that approved by MECL, then MECL will give notice to correct the area of noncompliance or will open the interconnection. The time allowed for the Customer to comply, while remaining on line, will depend upon an MECL assessment of the safety, reliability, and performance issues relating to the noncompliance.

MECL may inspect any of the interconnection equipment, including the protection systems, whenever such an inspection is deemed necessary by MECL. This inspection may include tripping of the interconnection and/or generator circuit breaker(s). The Customer shall bear the cost of any necessary testing that may be requested by MECL.

All outage schedules and maintenance work will be coordinated through MECL.

The Customer must implement a maintenance program consistent with acceptable industry practice so as to achieve a highly reliable interconnection. During site visits, MECL representatives will be interested in checking maintenance records and performing testing as follows:

**1. Interconnection Protection System**

The Customer must perform a relay calibration test at least every five (5) 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 MECL. Transfer trip equipment, where installed, will also be tested. During the operational test, up-to-date design drawings must be made available to MECL personnel to allow for safe, reliable testing of the Facility.

**2. Interconnection Circuit Breakers/Reclosers and Transformers**

The Customer will perform maintenance on these devices at a maximum interval not to exceed five (5) years. The Customer must provide to MECL the identity and qualifications of the personnel who perform this maintenance and any associated testing. This maintenance must be coordinated with the Energy Control Centre to obtain the proper zones of clearance.

**3. Station Battery and Charging System**

Batteries associated with the Interconnection Protection System must have a high degree of reliability. To ensure that the Interconnection 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 MECL. The reports from these battery inspections and tests shall be maintained by the Customer and made available for review by MECL personnel during the periodic tests and inspections of the facility and at other times as requested by MECL.

**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 high-rate charge will be performed as required, or battery cells replaced, if the cells are not 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, MECL 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 MECL representative. The results of this inspection will be reviewed by MECL for compliance with this station battery preventive maintenance requirement.

**Battery Testing:** The Customer must perform a battery capacity (load discharge) test on the station battery that provides tripping power for the Interconnection 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 MECL 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 MECL 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 MECL.

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 manufacturer's recommendations.

#### **F. NERC Planning Standards**

For facilities interconnected to the utility Transmission System, the Customer is required to meet North American Electric Reliability Council (NERC) 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 MECL):

- 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.

**G. 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 Set-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 SCHEDULE**

**Construction Schedule**

MECL and the Customer have negotiate in good faith concerning a schedule for the construction of EMCL's Interconnection Facilities and network Upgrades. The schedule below reflects those negotiations:

[INSERT CONSTRUCTION SCHEDULE HERE]

**SCHEDULE D**  
**REVENUE METERING EQUIPMENT AND COSTS**

Location/Description	Description	Capital	Non Capital Cost	Total Cost
<b>Revenue Metering Meters</b>				
Meter Item A				
Meter Item B				
Meter Item C				
<b>Subtotal Meters</b>				
<b>Revenue Metering Communications</b>				
Telemetry Item A				
Telemetry Item B				
Telemetry Item C				
<b>Subtotal Communications</b>				
<b>Revenue Metering Transformation</b>				
Transformation Item A				
Transformation Item B				
Transformation Item C				
<b>Subtotal Transformation</b>				
<b>Grand Total</b>				

Loss Compensation Details

The monthly operating and maintenance charge for metering shall be included in Schedule 9 of MECL's OATT.

## **SCHEDULE E**

### **BLACKSTART CRITERIA**

#### **1.0 Definition**

Following a system-wide outage (blackout), it is necessary to establish initial generation that can supply a source of electric power to other system generation and begin 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 (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 Centre 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 Centre within 24 hours.

A written report will be submitted to the Manager, Production and Energy Supply at the Energy Control Centre 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.

### **4.0 Reference Documents**

This document is written to comply with NPCC Document A-03 (Emergency Operation Criteria).

**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 MECL, 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 Prince Edward Island Workers Compensation Act 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.
- 1.03 Commercial General Liability and Excess Liability Insurance on an occurrence basis in an amount not less than \$5,000,000 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 MECL including loss of use thereof;
- iii. Products and 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) and 1.02 (Automobile Liability).

- 1.04 "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.
- 1.05 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.

### **General Insurance Conditions**

- 1. Certificates of Insurance:
  - i. Before starting work, the Contractor will supply and cause its subcontractors to supply MECL 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:

Maritime Electric Company, Limited  
PO Box 1328, 180 Kent Street  
Charlottetown PE C1A 7N2

- ii. Failure of MECL to demand such certificate or other evidence of full compliance with these insurance requirements or failure of MECL 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 MECL of any certificate of insurance evidencing the required coverages and limits does not constitute approval or agreement by MECL 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, MECL 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 contract at MECL'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 MECL.
  - 4. All limits and deductibles are expressed in Canadian dollars.

5. A waiver of subrogation shall be provided by the insurers to MECL's, Contractor, subcontractors and Project Manager for coverages 1.01 (Workers Compensation – U.S. only), 1.03 (Contractor's Equipment).
6. MECL 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).
7. Coverages noted in 1.03 (Commercial General Liability and Excess Liability), and 1.06 (Pollution Liability) shall contain a Cross Liability clause and a Severability of Interests clause.
8. Contractor shall provide MECL with certified copies of insurance policies upon request.

**SCHEDULE G**  
**PRE-CONTRACT COSTS**

This schedule defines all costs incurred by MECL that the generator is responsible for paying for. This includes but not limited to:

- Interconnection Request Deposit
- Facilities Studies
- System Impact Studies
- Engineering and Procurement Agreement Costs

**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 Interconnection Agreement.

**SCHEDULE I**  
**INTERCONNECTION FACILITIES CHARGES**

MECL shall determine the annual charges for Interconnection Facilities Support Charges – Non-Capital Related (IFSC-NCR) as shown and described in this Schedule I.

Description:

- a. “Total Plant Construction Costs” shall be MECL’s original construction costs, inclusive of all project overhead OM&A costs, plus any improvements, as defined on MECL’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.
- b. “Shared Construction Costs” shall be the amount of Total Plant Construction Costs, pursuant to the Tariff covered either through other interconnection agreements or added to the Tariff rate base.
- c. “Total Plant Construction Costs Recoverable from Customer” shall equal the Total Plant Construction Costs less the Shared Construction Costs.
- d. The “Metering per Schedule D of Interconnection Agreement” shall equal MECL’s cost, as set forth in Schedule D, related to the construction or installation on Customer’s behalf of all Revenue Meters.
- e. “Customer’s Expected Final Responsibility” shall equal the Total Plant Construction Costs Recoverable from Customer plus the Metering Per Schedule D of Interconnection Agreement.
- 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 MECL, less the overhead operation, maintenance and administration.

- g. “Non-Capital Support Charge Rate” shall equal the OM&A related carrying charge as defined by and calculated pursuant to Schedule 9 of MECL’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.
- h. The “IFSC-NCR Annual Cost” shall be the Capital Charges Subjected to Support multiplied by the Non-Capital Support Charge Rate plus all time, material and other charges incurred by MECL to operate, maintain, repair and renovate all Direct Assignment Facilities and Other Direct Assignment Facilities as defined in Section 1 of this Agreement including Metering and associated equipment described in Section D of this Agreement.

**Payment Option:**

Customer will pay monthly as costs are incurred and billed by MECL for the Total Plant Construction Costs, including the Metering Per Schedule D of Interconnection Agreement, as determined by application of the Formula in this Schedule I. The Customer will retain the obligation pursuant to this Schedule I until MECL has recovered all its costs associated with the constructed or updated facilities or until any unrecovered investment is included for recovery in the MECL OATT.

Upon Customer's payment to MECL for the removal of said facilities, Customer's obligation for IFSC-NCR annual cost shall terminate and MECL shall remove said facilities in due course.

**Updates:**

The Customer is on notice that the IFSC-NCR annual costs, as determined by MECL pursuant to the Formula in this Schedule I, will be updated annually. 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 MECL’s OATT.

The charges in this Schedule I, including the “Capital Charges Subject to Support”, will be updated if MECL determines that any additions, modifications or upgrades to MECL’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 MECL’s transmission system. MECL will charge the Customer the incremental cost if such additions, modifications or upgrades are required. MECL, at its sole discretion, can require that these costs be paid in advance. If MECL 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.



## **SCHEDULE J**

### **INTERCONNECTION REQUEST PROCEDURES**

#### **General**

An interconnection Customer shall submit to the Transmission Provider a completed Generator Interconnection Request Form and a refundable deposit of \$10,000. The Transmission Provider shall apply the deposit toward the cost of a System Impact Study. The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two interconnection requests.

At the interconnection Customer's option, the Transmission Provider and interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the System Impact Study Agreement.

#### **System Impact**

The Study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Generating Facility without requiring additional Network Upgrades.

### **Initiating an Interconnection Request**

To initiate an Interconnection Request, interconnection Customer must submit all of the following:

- i. a \$10,000 deposit,
- ii. a completed Generator Interconnection Request Form
- iii. demonstration of Site Control or a posting of an additional deposit of \$10,000.

Such deposits shall be applied toward any System Impact Studies pursuant to the Interconnection Request. If interconnection Customer demonstrates Site Control within the cure period specified below after submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, all such deposit(s), additional and initial, become non-refundable.

The expected In-Service Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the process window for the Transmission Provider's expansion planning period) not to exceed seven years from the date the interconnection Request is received by the Transmission Provider, unless the Interconnection Customer demonstrates that engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by the Transmission Provider by a period up to ten years, or longer where the interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

### **Acknowledgement of Interconnection Request**

Transmission Provider shall acknowledge receipt of the Generator Interconnection Request Form within ten (10) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement.

### **Deficiencies in Interconnection Request**

An Interconnection Request will not be considered to be a valid request until all items listed above have been received by the Transmission Provider. If an Interconnection Request fails to meet the requirements set forth above, the Transmission Provider shall notify the interconnection Customer within ten (10) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request.

Interconnection Customer shall provide the Transmission Provider the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. In the case of failure by interconnection Customer to supply the requested information, the transmission Provider shall deem the interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal.

Upon receipt of such written notice, the interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify the Transmission Provider of its intent to pursue Dispute Resolution.

Withdrawal shall result in the loss of the interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the Interconnection Customer's Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to the Transmission Provider all costs that the Transmission Provider prudently incurs with respect to that Interconnection Request prior to the Transmission Provider's receipt of notice described above. The interconnection Customer must pay all monies due to the Transmission Provider before it is allowed to obtain any System Impact Study data or results.

The Transmission Provider shall refund to the interconnection Customer any portion of the interconnection Customer's deposit or study payments that exceeds the costs that the Transmission Provider has incurred, including interest. In the event of such withdrawal, the Transmission Provider, subject to confidentiality constraints, shall provide, at interconnection Customer's request, all information that the Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **Scoping Meeting**

Within ten (10) Business Days after receipt of a valid Interconnection Request, Transmission Provider shall establish a date agreeable to interconnection Customer for the Scoping Meeting, and such date shall be no later than 30 Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection.

Transmission Provider and interconnection Customer will bring to the meeting such technical data, including, but not limited to:

- i. general facility loadings;
- ii. general instability issues;
- iii. general short circuit issues;
- iv. general voltage issues, and
- v. general reliability issues as may be reasonably required to accomplish the purpose of the meeting.

Transmission provider and interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in

the time allocated for the meeting. On the basis of the meeting, interconnection Customer shall designate its Point of Interconnection and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

**Generator Interconnection Request Form**

Page 1 of 3

The undersigned Interconnection Customer submits this request to interconnect its Generating Facility with the Transmission Provider's Transmission System pursuant to a Tariff. A valid Interconnection Request must include an applicable deposit amount as specified in the Generator Interconnection Agreement (Attachment J – Schedule J).

**Application Information**

<b>Applicant</b>	Company Name:	Street Address:
	Contact Name:	Unit/Suite:
	Phone:	City:
	Fax:	Province:
	E-mail:	Country:
		Postal/Zip Code:

**Project Information**

<b>Project</b>	Name:	Project Location:
	Owner/Developer:	Point of Interconnection Requested:
	Engineering Consultant:	Proposed In-Service Data: yy/m

**This Interconnection Request is for (check one):**

- ☐ A proposed new Generating Facility.  
☐ An increase in the generating capacity or a Material Modification of an existing Generating Facility.

**The Type of Interconnection Service Requested (check one): (GIP 3.2)**

- ☐ Energy Resource Interconnection Service      ☐ Network Resource Interconnection Service

**Maximum Megawatt Electrical Output of the Proposed New Generating Facility:**

MW summer at  degrees C       MW winter  at  degrees C

OR

MW increase in the generating capacity of an existing Generating Facility

**Evidence of Site Control as specified in Attachment J**

- ☐ Is attached to this Interconnection Request  
☐ Will be provided at a later date in accordance with Attachment J

**This Interconnection Request is submitted by:**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request and Equipment Information Form is true and correct.

\_\_\_\_\_  
Name of Interconnection Customer (Type of Print):

\_\_\_\_\_  
Title:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Date:

**Contact Information – Send Completed Form in Hard Copy to:**

Maritime Electric Company, Limited  
PO Box 1328, Charlottetown PE C1A 7N2  
Attention: Director, Corporate Planning

**Maritime Electric Company, Limited – Generator Interconnection Coordinator Use**

\_\_\_\_\_  
Received by:

\_\_\_\_\_  
Date and Time Received:

\_\_\_\_\_  
Signature:

# Generator Interconnection Request Form

Page 2 of 3

GENERATING FACILITY DATA									
Application Information									
kVA		Degrees C		Voltage					
Power Factor				Connection (e.g. wye)					
Short Circuit Ratio				Frequency (hz)					
Stator Amps at Rated kVA					Field Volts				
Max MW		Degrees C		Speed (RPM)					
Combined Turbine-Generator-Exciter Inertia Data									
Inertia Constant	H	kW-sec/kVA		Moment-of-Inertia				lb.-ft. <sup>2</sup>	
Reactance data (Per Unit-Rated kVA)									
	Direct Axis			Quadrature Axis					
Synchronous – saturated	X <sub>dv</sub>				X <sub>qv</sub>				
Synchronous – unsaturated	X <sub>di</sub>				X <sub>qi</sub>				
Transient – saturated	X' <sub>dv</sub>				X' <sub>qv</sub>				
Transient – unsaturated	X' <sub>di</sub>				X' <sub>qi</sub>				
Subtransient – saturated	X'' <sub>dv</sub>				X'' <sub>qv</sub>				
Subtransient – unsaturated	X'' <sub>di</sub>				X'' <sub>qi</sub>				
Negative Sequence – saturated	X <sub>2v</sub>								
Negative Sequence – unsaturated	X <sub>2j</sub>								
Zero Sequence – saturated	X <sub>0v</sub>								
Zero Sequence – unsaturated	X <sub>0i</sub>								
Leakage Reactance	X <sub>lm</sub>								
Field Time Constant Data (SEC)									
Open Circuit	T' <sub>do</sub>				T' <sub>qo</sub>				
Three-Phase Short Circuit Transient	T' <sub>d3</sub>				T' <sub>q</sub>				
Line to Line Short Circuit Transient	T' <sub>d2</sub>								
Line to Neutral Short Circuit Transient	T' <sub>d1</sub>								
Short Circuit Subtransient	T'' <sub>d</sub>				T'' <sub>q</sub>				
Open Circuit Subtransient	T'' <sub>do</sub>				T'' <sub>q</sub>				
Armature Time Constant (SEC)									
Three Phase Short Circuit	T <sub>a3</sub>								
Line to Line Short Circuit	T <sub>a2</sub>								
Line to Neutral Short Circuit	T <sub>a1</sub>								
<b>NOTE: If information requested above is not applicable, indicate by marking "N/A".</b>									
MW Capability and Plant Configuration – Generating Facility Data									
Armature Winding Resistance Data (Per Unit)									
Positive	R1								
Negative	R2								
Zero	R0								
Rotor Short Time Thermal Capacity		I <sub>2</sub> <sup>2</sup> t							
Field Current at Rated kVA, Armature Voltage and PF							AMPS		
Field Current at Rated kVA and Armature Voltage, 0 PF							AMPS		
Three Phase Armature Winding Capacitance							MICROFARAD		
Field Winding Resistance				OHMS				C	
Armature Winding Resistance (Per Phase)				OHMS				C	

**Generator Interconnection Request Form**

Page 3 of 3

<b>Curves</b>					
Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction Curves. Designate normal and emergency Hydrogen pressure operating range for multiple curves.					
<b>Generator Step-Up Transformer Data</b>					
Capacity kVA	Self Cooled		kVA	Max. nameplate	
Voltage ratio	Generator Side		kV	System Side	
Winding Connections	Low Voltage	<input type="checkbox"/>	Wye	OR	<input type="checkbox"/> Delta
	High Voltage	<input type="checkbox"/>	Wye	OR	<input type="checkbox"/> Delta
	Tertiary Voltage	<input type="checkbox"/>	Wye	OR	<input type="checkbox"/> Delta
Fixed Taps Available					
<b>Impedance</b>					
Positive	Z1	(one self-cooled rating)		%	
Zero	Z0	(one self-cooled rating)		%	
<b>Excitation System Data</b>					
Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation is power system stability simulations and the corresponding excitation system and PSS constants for use in the model.					
<b>Governor System Data</b>					
Identify appropriate IEEE model block diagram of governor system for computer representation is power system stability simulations and the corresponding excitation system constants for use in the model.					
<b>Wind Generators</b>					
Number of generators to be interconnected pursuant to this Interconnection Request:					
Evaluation		Single Phase		Three Phase	
Converter:	Manufacturer:		Model Number:		
	Model Name:		Version:		
List of adjustable set points for the protective equipment of software:					
Note: A completed PT1-PSS/E data sheet for the WEC must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping meeting.					
<b>Induction Generators</b>					
	Field Volts:				
	Field Amperes:				
	Motoring Power (kW):				
	Neutral Grounding Resistor (if applicable):				
	I <sub>2</sub> <sup>2</sup> t or K (Heating Time Constant):				
	Rotor Resistance:				
	Stator Resistance:				
	Stator Reactance:				
	Rotor Reactance:				
	Magnetizing Reactance:				
	Short Circuit Reactance:				
	Exciting Current:				
	Temperature Rise:				
	Frame Size:				
	Design Letter:				
	Reactive Power Required in Vars (No Load):				
	Reactive Power Required in Vars (Full Load):				
	Total Rotating Inertia, H:				



**SCHEDULE K**  
**GENERATION INTERCONNECTION AGREEMENT**  
**WIND FARMS AMENDMENT**

This Generation Interconnection Agreement Wind Farms Amendment (this “Schedule K”) dated as of the Signing Date is by and between the \_\_\_\_\_ (“\_\_\_\_\_”) and Maritime Electric Company, Limited (“MECL”). \_\_\_\_\_ and MECL are referred to individually as a “Party” or collectively as the “Parties”.

WHEREAS, simultaneously with the execution hereof, the Parties are signing a Generation Interconnection Agreement dated as of the Signing Date including all schedules and attachments thereto (the “Agreement”);

WHEREAS, the form of Generation Interconnection Agreement has been approved on an interim basis by IRAC;

WHEREAS, in connection with the interconnection of facilities involving a wind farm, the Parties desire to provide for amendments to the form of Generation Interconnection Agreement that received IRAC approval on an interim basis;

WHEREAS, the Parties are signing this Schedule K to the form of Generation Interconnection Agreement, which shall be deemed an amendment to the Agreement;

WHEREAS, this Schedule K, for the avoidance of doubt, shall be a Schedule to the Agreement and form a part of the Agreement;

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

1. **General.** Capitalized terms used but not defined in this Schedule K shall have the meanings ascribed to such terms in the Agreement. This Schedule K shall form a part of the Agreement and be incorporated therein as a Schedule provided that in the event of any conflict or inconsistency between this Schedule K and the rest of the Agreement, this Schedule K shall prevail. All references within the Agreement to “Agreement” or to “Schedules” shall include this Schedule K.
2. **Definitions.** Within the Agreement,
  - a. all references to “Generator”, “generator”, “generators”, “generating unit” or “unit” are replaced with “distributed wind generator” or “distributed wind generators”, as the case may be;
  - b. all references to “AGC” are replaced with “AFC”;
  - c. all references to “Automatic Generation Control” and “automatic generation control” are replaced with “Automatic Facility Control”;
  - d. all references to “AVR”, “Automatic Voltage Regulator” and “automatic voltage regulator” are replaced with “Voltage Set Point Control”;
  - e. all references to “biennial tests and inspections”, “biennial test and inspection” or “biennial test” are replaced with “tests and inspections in accordance with Good Utility Practice”;
  - f. “Commercial Operation Date” shall mean the first day that a transmission facility is energized for commercial use after all Facility testing and commissioning has been completed enabling the Customer to transmit up to \_\_\_\_ MW into MECL’s \_\_\_\_ kV Transmission System;
  - g. “business practices” means MECL’s business practices of general application developed from time to time by MECL in accordance with Good Utility Practice and provided to the Customer. Customer may refer the issue of whether the Customer should be bound by a business practice for resolution pursuant to Section 13 of this Agreement in which case the Customer shall be bound by such business practice from the time of implementation by MECL until final resolution

as provided under Section 13 and thereafter shall only be bound as provided for by such final resolution. MECL agrees, except in an Emergency, to provide Customer with advance notice of changes in business practices or of new business practices and to provide an opportunity for comments and input from Customer prior to implementation thereof.

3. ***Term***

- a. Section 2.1 of the Agreement is amended and restated in its entirety as follows:

**“2.1 Term** - Subject to required regulatory authorizations, this Agreement will become effective on the Commercial Operation Date (the “Effective Date”) notwithstanding the Signing Date; provided, however, the Agreement shall be legally binding when signed by the Parties as of the Signing Date. Except as provided below, this Agreement will remain in effect until 12:01 a.m., local time, on the date that is \_\_\_\_\_ ( ) years after the Signing Date. Notwithstanding the previous sentence, the Agreement may be (a) terminated on an earlier date by mutual agreement of the Parties, or (b) otherwise terminated in accordance with the terms of this Agreement. The Term shall end on the date of termination or expiration. MECL will submit this Agreement to IRAC.”

- b. Section 2.3 of the Agreement is amended and restated in its entirety as follows:

**“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 MECL 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 original Term without such termination; provided that Customer shall not have to pay such costs or charges in the event of termination due to an Event of Default by MECL or an event of Force Majeure.”

4. ***Obligations and Responsibilities***

- a. Section 3.2.6 of the Agreement is deleted.
- b. Section 3.3.1.2 of the Agreement is amended and restated in its entirety as follows:

“3.3.1.2 - Customer will submit for approval by September 30th of each year, its planned annual generator, collection circuit and substation maintenance schedules for the subsequent calendar year to the System Operator. The System Operator’s approval shall be based on MECL’s obligation to its customers for reliability of the MECL System consistent with Good Utility Practice. 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, collection circuit and substation maintenance schedules by September 30th of each year for the subsequent five calendar years.”

- c. Section 3.4.3 of the Agreement is amended and restated in its entirety as follows:

“3.4.3 As a result of any change in law, regulation or Good Utility Practice, at the request of MECL, acting in accordance with Good Utility Practice, the Customer, at its expense, will modify the Customer-Owned Interconnection Facilities and the Facility to conform with additions, modifications, or replacements of the Transmission System or MECL-Owned Interconnection Facilities. Customer may refer the issue of whether the Customer should be required to undertake such modifications at its expense for resolution pursuant to Section 13 of this Agreement in which case the Customer shall be bound by this provision until final resolution as provided under Section 13 and thereafter shall only be bound as provided for by such final resolution.

- a. Notwithstanding Section 3.9.1, Section 3.9.4 or any other provision of the Agreement, the Customer shall only be required to provide MECL the data or information set forth in Sections B through H inclusive of Section V of Schedule B of the Agreement, as amended by Schedule K.
- b. Section 3.13.1.3 of the Agreement is amended and restated in its entirety as follows:

“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 use commercially reasonable efforts to comply with such requests. Any compensation for must run generation, if any, will be pursuant to MECL business practices, as may be amended from time to time and in no event will MECL be liable for any such compensation, unless specifically required by approved business practices.”

- d. The reference in Section 5.6 of the Agreement to “two (2) business days” is replaced by “ten (10) business days”.
- e. The reference in Section 5.6 of the Agreement to “Section 12” is replaced by “Section 13”.
- f. Section 8.1a of the Agreement is amended to add “unless disputed in good faith” at the end of such Section 8.1a.
- g. Section 8.1.2 is added to the Agreement and shall read as follows:

“Notwithstanding the foregoing, if an Event of Default has occurred and not been cured as provided above, prior to MECL exercising any remedies under Section 8.2.2(1), MECL must provide the Customer with a notice of intention to terminate the service. Customer shall then have a further 30 days (beyond that set forth in the first paragraph of Section 8.1) to cure such Event of Default or dispute MECL’s right to terminate the service by referring the matter for resolution under Section 13 in which case MECL may not terminate the service until the procedures in Section 13 are exhausted and then shall only be entitled to terminate if allowed to do so by the final resolution provided for under Section 13.”

5. ***Insurance***

- a. Section 11.2 of the Agreement is amended to delete “Claims Made Coverage”.
- b. Section 11.3 of the Agreement is amended and restated in its entirety as follows:

**“11.3 Notice of Cancellation** - Neither Party shall enter into a contract of insurance providing the coverage required in Schedule F unless the

contract contains the following or equivalent clause: "No reduction or cancellation of the policy will be effective until thirty (30) days from the date written notice thereof is provided pursuant to Section 20.2 of the Agreement except ten (10) days notice for non-payment." Upon receipt of any notice of material change, reduction or cancellation, the Party will immediately notify the other Party in accordance with Section 20."

- a. Section 11.6 of the Agreement is amended and restated in its entirety as follows:

**"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 and that is covered by the policy. Evidence of this requirement will be noted on all certificates of insurance."

- b. Section 1.0 of Schedule F of the Agreement is amended and restated in its entirety as follows:

**"1.0** In Sections 1.01 to 1.03, each Party agrees and in addition in Section 1.04 Customer agrees, to provide and/or require its subcontractors to provide and maintain in full force and effect with insurance carriers duly licensed to carry on business in Prince Edward Island, the following insurance which shall be in 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:"

- c. Section 1.01 of Schedule F of the Agreement is amended and restated in its entirety as follows:

“1.01 Workers Compensation as required by the Prince Edward Island Workers Compensation Act or similar applicable legislation covering all persons employed by the Parties or its subcontractors for work performed under this contract. For international employees, appropriate workers compensation liability insurance must be carried covering such employees of the Parties or its subcontractors for work performed under this contract.”

- d. Section 1.02 of Schedule F of the Agreement is amended and restated in its entirety as follows:

“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 initially, and increased to not less than \$4,000,000 by the end of the twelfth year of the Term, which may consist of any combination of primary and excess policies, and mandatory Accident Benefits.”

- e. Section 1.03 of Schedule F of the Agreement is amended and restated in its entirety as follows:

“1.03 Commercial General Liability and Excess Liability Insurance on an occurrence basis in an amount not less than \$5,000,000, which may consist of any combination of primary and excess policies, 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. Products and Completed Operations
- iii. Employer's Liability;
- iv. Tenant's Legal Liability;
- v. Non-Owned Automobile Liability; and,
- vi. Broad Form Property Damage"

- f. Section 1.04 of Schedule F of the Agreement is amended and restated in its entirety as follows:

"1.04 The Customer agrees to maintain "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 Customer owned facilities."

- g. Section 1.05 of Schedule F of the Agreement is amended and restated in its entirety as follows:

"1.05 Pollution Liability Insurance: The Customer will maintain a policy covering bodily injury and property damage claims, including cleanup costs as a result of sudden and accidental pollution conditions arising from Customer operations with limits of not less than \$1,000,000 per occurrence, and such limit shall be reviewed as required by \_\_\_\_\_ and shall be adjusted upward, as necessary, in order to ensure that coverage appropriate to the

legislative, regulatory, and potential claims of the day is maintained by \_\_\_\_\_.”

**General Insurance Conditions**

a. Certificates of Insurance:

- i. Before starting work, Each Party shall provide the other with a certificate of insurance completed by a duly authorized representative of their insurer(s) 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 30 days advance written notice by registered mail, or courier, receipt required, to:

Maritime Electric Company, Limited  
PO Box 1328, 180 Kent Street  
Charlottetown PE C1A 7N2

OR

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- ii. Failure of either Party to demand such certificate or other evidence of full compliance with these insurance requirements or failure of either Party to

identify a deficiency from evidence provided will not be construed as a waiver the obligation to maintain such insurance.

- iii. The acceptance of delivery by either Party of any certificate of insurance evidencing the required coverages and limits does not constitute approval or agreement by that Party 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, MECL 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 contract at MECL's option.
  - a. Each Party shall be responsible for their own deductibles.
  - b. 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 the other Party.
  - c. All limits and deductibles are expressed in Canadian dollars.
  - d. Each Party shall request their respective insurers to endorse liability policies (excepting Worker's Compensation) with a waiver of subrogation in favor of the other Party.
  - e. Each Party shall request their respective insurers to add the other as Additional Insured to their respective Commercial General Liability and Excess Liability policies.
  - f. Coverages noted in 1.03 (Commercial General Liability and Excess Liability), and 1.06 (Pollution Liability) shall contain a Cross Liability clause and a Severability of Interests clause.

- g. Contractor shall provide MECL with certified copies of insurance policies upon request.”

6. ***Arbitration; Representations and Warranties; Amendments.***

- a. Section 14.2.3 of the Agreement is amended by adding “or will obtain” after “obtained” and adding “or will give” after “given”.
- b. Section 26.3 of the Agreement is deleted.
- c. Section 26.4 of the Agreement is amended and restated in its entirety as follows:

**“26.4 Amendment by Mutual Agreement** - Except as provided in Sections 26.1 and 26.2, this Agreement may only be amended, modified, or supplemented by written agreement signed by both MECL and Customer. Either Party may propose amendments to the Agreement provided that no such amendment shall become effective or binding upon the Parties until signed in writing by MECL and Customer; provided that if a Party considers that an amendment is required under any applicable law or regulation including any policy, rule or regulation enacted by IRAC under any statute and the other Party does not consider such amendment to be so required, then a Party may refer such matter for resolution under Section 13.”

- d. Section 27.1 of the Agreement is amended and restated in its entirety as follows:

“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.”

- e. Section 28.1 of the Agreement is amended to delete the words “of the MECL’s Open Transmission” and substitute “of MECL’s Open Access Transmission” and to delete “without making any necessary filings with IRAC to so amend the Agreement” and substitute therefore “except as provided herein.”

**7. *Schedule B.***

- a. The second paragraph of Section I.A.2 of Schedule B of the Agreement that begins “With regard to any interconnection costs or ongoing charges” is amended and restated in its entirety as follows: “With regard to any interconnection costs or ongoing charges, if there are any conflicts between this Agreement and the OATT, as may be amended from time to time, the OATT will govern, with the exception that this Agreement will prevail over Attachment J to the OATT.”
- b. Section II of Schedule B of the Agreement is amended to add the following prior to Section A and after the phrase “Maritime Electric Company, Limited standards”: “provided that the Customer shall have the right to review Maritime Electric Company, Limited standards and in the event of disagreement with these standards shall have the right to refer the matter for resolution under Section 13.”
- c. Section II.J of Schedule B of the Agreement is amended to add the following prior to Section 1 and prior to the phrase beginning “These changes include, but are not limited to, the following:”: “Each party shall use reasonable commercial efforts to make changes under this section that will have minimal impact on the other party’s facility or system.”
- d. Section V of Schedule B of the Agreement is amended to add the following to the end of the introductory paragraph: “Should New Brunswick Transmission system Operator (NBTSO) or its successor, in its role as Reliability Coordinator and/or Balancing Authority for the Maritimes Area, require additional information and/or

control from the Customer, other than what is stipulated in this Interconnection Agreement or in the Maritime Electric OATT, then those requirements will be deemed to be part of this Interconnection Agreement and must be supplied or provided by the Customer to MECL. Notwithstanding the previous sentence, Customer shall have the ability to contest NBTSO's right to require such additional information and/or control. MECL will provide the Customer with as much notice as practical of these requirements."

- e. Sections B through H inclusive of Section V of Schedule B of the Agreement are replaced in their entirety with the following:

**"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).

**1. Analog Data**

- Substation Net Real Power Output (Megawatts)
- Substation Net Reactive Power Output (Megavars)
- Substation Output Voltage (Kilovolts)
- Maximum Allowable MW Output Setpoint

**2. Digital Data (for Wind Facility)**

- Substation Disconnect Status
- Substation Breaker Status
- Recloser Status

Customer and MECL will discuss the timing and methodology for collecting the following data:

- Substation Gross Hourly Energy Output (Megawatthours)
- Substation Net Hourly Energy Output (Megawatthours)
- Substation Net Hourly Energy Input (Megawatthours)  
(where required)

**C. Automatic Facility Control - Telemetry**

All units shall participate in Automatic Facility Control (AFC), and the AFC system shall have the following telemetry in addition to the SCADA requirements listed above.

1. AFC Status (on/off)
2. AFC setpoint (Megawatt limits)
3. Total VAR Output of Facility (MVARs)
4. Max available Capacitive VARs of Facility (MVARs)
5. Max available Inductive VARs of Facility (MVARs)

**D. Automatic Set Point Control – Control Output**

1. Voltage Set Point (kiloVolts)
2. Set point control of the Voltage Set point
3. Power Factor Set point (power factor)
4. Set point control of the Power Factor Set point
5. Setpoint Control Status

**E. Automatic Facility Control – Parameters**

The parameters outlined in Schedule H will be implemented during commissioning of the Distributed Wind Generators on AFC. Compliance with these parameters must be maintained.

**F. Additional SCADA Requirements**

MECL, at its discretion, may require miscellaneous trouble alarms (if any) associated with the distributed wind generators, such as:

1. Normal/Contingency mode status
2. Remote activation of Normal or Contingency mode by MECL

**G. SCADA Communication Requirements**

All Generation facilities are required to have 7 days-per-week, 24 hours-per-day response capability for all SCADA circuits. The Customer shall effect repairs within a reasonable period of time.

In the event that any SCADA data point is non-functional, MECL has the sole and exclusive right to take any action necessary to protect its system from real or perceived threats due to the lack of an operation wind facility SCADA including scaling back or disallowing any or all generation to operate until such time as the SCADA communications are fully restored.

**H. Wind Farm Information**

1. Wind speed (10 minute averaged)
2. Wind Direction. (10 minute average)
3. Air Temperature (10 minute averaged)
4. Number of Wind Turbine Generators in Pause Mode
5. Number of Wind Turbine Generators in Run Mode
6. Number of Wind Turbine Generators in Non-Communication



- f. Section VI.D of Schedule B of the Agreement is amended and restated in its entirety as follows: “The Customer is not permitted to serve local distribution load while isolated from MECL because of the hazards of Islanding distributed wind facilities.”
- g. The third sentence of Section VII.D of Schedule B of the Agreement beginning “When MECL is working on the Facility” is amended and restated in its entirety as follows: “When MECL 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 the MECL Standard Protection Code provided to Customer. MECL will respect the Customer’s own safety procedures; however, at a minimum, MECL’s Standard Protection Code provided to Customer must be met.”
- h. The second and third sentences of Section VIII.A.2 of Schedule B of the Agreement are amended and restated in their entirety as follows: “This department must contact and schedule the work with the Customer prior to actually calibrating these meters. The department must not be unreasonably delayed by the Customer in scheduling the work. The Customer can observe this procedure if desired.”
- i. The seventh paragraph of Section VIII.E of Schedule B of the Agreement that reads “All outage schedules and maintenance work will be coordinated through MECL” is amended and restated in its entirety as follows: “All interconnection outage schedules and maintenance work will be coordinated through MECL.”
- j. The first sentence of Section VIII.F of Schedule B of the Agreement is amended and restated in its entirety as follows: “For facilities interconnected to the utility Transmission System, the Customer is required to meet North American Electric Reliability Corporation (NERC) Planning Standards where applicable.”

- k. The first sentence of Section VIII.G of Schedule B of the Agreement is amended and restated in its entirety as follows: “The following pages up to Schedule C contain technical data and other information as applicable respecting the \_\_\_\_\_ facility.”
  - l. Customer shall comply with low voltage ride through, underfrequency ride through, and other requirements except as listed in Section 7(m) of Schedule K below, as set forth in the System Impact Study dated \_\_\_\_\_.
8. ***Not Applicable Sections.***
- a. All provisions in the Agreement relating to “blackstart”, “droop”, “excitation”, “exciter”, and “governor”, and “power system stabilizers” are not applicable and deleted.
  - b. Section 4.2.2.5 of the Agreement is not applicable and deleted.
  - c. Sections I.B, I.E, I.F, I.G, II.A 3rd bullet, III.C.3, 2<sup>nd</sup> paragraph and III.K of Schedule B of the Agreement are not applicable and deleted.
  - d. Schedule D of the Agreement is not applicable and deleted.
  - e. Schedule E of the Agreement is not applicable and deleted.
  - f. Schedule I of the Agreement is not applicable and deleted.

[The remainder of this page is intentionally left blank.]

IN WITNESS WHEREOF the Parties have executed and delivered this Schedule K as of the  
Signing Date.

MARITIME ELECTRIC COMPANY, LIMITED

By: \_\_\_\_\_

Name:

By: \_\_\_\_\_

Name:

By: \_\_\_\_\_

Name: