



**Interconnection  
Agreement**

**Between**

**Independent Electricity Market Operator**

**And**

**The New York Independent System Operator, Inc.**

**Effective Date: May 1<sup>st</sup>, 2002**

THIS *AGREEMENT* made this 1<sup>st</sup>, day of May, 2002.  
BETWEEN:

INDEPENDENT ELECTRICITY MARKET OPERATOR  
a not-for-profit, non-share capital corporation established pursuant to the *Electricity Act*,  
(Hereinafter called the "IMO")  
OF THE FIRST PART

- And -

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.  
a not-for-profit corporation organized under the laws of New York State,  
(Hereinafter called "NYISO")  
OF THE SECOND PART

WHEREAS, NYISO and the IMO are sometimes hereinafter referred to as the "*Parties*" or individually as a "*Party*"; and

WHEREAS, by an agreement dated March 1<sup>st</sup>, 1977 and entitled "Interconnection Agreement between New York Power Pool and Ontario Hydro", the former Ontario Hydro and "New York Power Pool" interconnected their respective electric power systems for their mutual advantage in order to achieve as a result of coordinated interconnection operation, benefits to their respective power systems and thereby to the public serviced by each; and

WHEREAS the IMO was established pursuant to the *Electricity Act*, as a Successor Company of Ontario Hydro and certain assets, rights and obligations of Ontario Hydro have been transferred to the IMO by or pursuant to a transfer order under the *Electricity Act* to carry out its objects as a separate entity following the demerger of Ontario Hydro on April 1, 1999; and

WHEREAS NYISO is a not-for-profit corporation established pursuant to the ISO Agreement, responsible for maintaining the reliability of the electric power system and facilitating an efficient market for energy and ancillary services in NY State in accordance with its filed Tariffs; and

WHEREAS, the IMO and NYISO desire to continue coordinated interconnected operation formerly carried out by Ontario Hydro and the New York Power Pool to maintain reliability for both of the power systems of the province of Ontario, Canada, and the state of New York, USA, recognizing the *Parties* desire to maximize interconnected capability under the terms and conditions contained in this *Agreement*; and

WHEREAS, related to the *Interconnection Facilities*:

A. NYISO operates and is responsible for the secure operation of the *New York Transmission System* in accordance with its *ISO/TO Agreement* and the *ISO Agreement* and in compliance with New York State Reliability Council requirements and requirements and guidelines as set forth by *NERC or NPCC* and as such has the power and authority to enter into this *Agreement* and perform its obligations under it;

B. The IMO is the *Control Area Operator*, the *Security Coordinator*, the *Transmission Service Provider*, the market operator and directs the operation of the *Ontario Transmission System* for the Province of Ontario pursuant to and subject to the restrictions of the *Electricity Act*, and as such has the power and authority to enter into this *Agreement* and perform its obligations under it;

C. The *New York Transmission System* and the *Ontario Transmission System* or the *IMO controlled grid*, interconnect at certain points of *Interconnection* as more specifically described in this *Agreement* and the *Parties* wish to record their agreement as to the operational and other matters addressed herein and pertaining to the *Interconnection Systems*; and

WHEREAS the *Parties* desire to manage the operational aspects of their interconnected operations by developing, administering and implementing practices, procedures and information relating to security coordination and power system operation that will be managed and approved by a committee formed under this *Agreement*;

NOW THEREFORE THIS *AGREEMENT* WITNESSES THAT in consideration of the mutual agreements and obligations between the *Parties* and for other good and valuable consideration NYISO and the IMO agree as follows:

## 1.0: DEFINITIONS

In this *Agreement*, the following words and terms shall have the meanings (such meanings to be equally applicable to both the singular and the plural forms) ascribed to them in this Article 1:

"*Adequacy*" means the ability of the electric system to supply electrical demand and energy requirements at all times, taking into account scheduled and unscheduled outages of system elements.

"*Agreement*" means this Agreement and the *Schedule(s)* attached hereto and incorporated herein.

"*Control Area*" means an electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other control areas and contributing to frequency regulation of the *Interconnection Facilities* as set forth by *NERC*.

"*Control Area Operator*" means the person responsible for the secure operation of a *Control Area* as set forth by *NERC*.

"*Delivery Point*" means the international border point at each of the several points of direct *Interconnection* between the New York *Control Area* and the Ontario *Control Area*.

"*Dispute*" has the meaning attributed thereto in Article 12.0.

"*Effective Date*" means the reference date of this *Agreement* as shown on the first page.

"*Electricity Act*" means the *Electricity Act, 1998 (Ontario)*, as amended from time to time.

"*Emergency*" means any abnormal system condition that requires remedial action to prevent or limit loss of transmission or generation facilities that could adversely affect the *Reliability* of the electricity system.

"*Emergency Energy*" means energy supplied from *Operating Reserve* or electrical generation available for sale in Ontario or New York or available from another *Control Area*. *Emergency Energy* may be provided in cases of sudden and unforeseen outages of generating units, transmission lines or other equipment, or to meet other sudden and unforeseen circumstances such as forecast errors, or to provide sufficient *Operating Reserve*.

"*Force Majeure*" means an event of force majeure as described in Section 13.1.

"*Good Utility Practice*" means any of the practices, methods and acts engaged in or approved by a significant portion of the North American electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgement

in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result 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 by *NERC*.

“*IMO controlled grid*” means the *Ontario Transmission System* with respect to which, pursuant to operating agreements, the IMO has authority to direct operations.

“*Intentional Wrongdoing*” means an act or omission taken or omitted by a *Party* with knowledge or intent that injury or damage could reasonably be expected to result.

“*Interconnection*” means a connection between two or more individual *Transmission Systems* that normally operate in synchronism and have interconnecting *Interties*.

“*Interconnection Committee*” means the jointly constituted NYISO and IMO committee established to administer the terms and provisions of this *Agreement* pursuant to Article 7.

“*Interconnection Facilities*” means the interconnection facilities described in *Schedule A*.

“*Intertie*” means a transmission line that forms part of an *Interconnection*.

“*ISO Agreement*” means the agreement that establishes the NYISO.

“*ISO/TO Agreement*” means the agreement that establishes the terms and conditions under which the *Transmission Owners* transferred to the NYISO *Operational Control* over designated transmission facilities.

“*ISO Services Tariff*” means the NYISO Market Administration and Control Area Services Tariff.

“*Market Participant*” means an entity that, for its own account, produces, transmits, sells, and/or purchases for its own consumption or resale capacity, energy, energy derivatives and ancillary services in the wholesale power markets. Market Participants include transmission service customers, power exchanges, transmission owners, load serving entities, loads, holders of energy derivatives, generators and other power suppliers and their designated agents.

“*Metered Quantity*” means apparent power, reactive power, active power, with associated time tagging and any other quantity that may be measured by a *Party*’s *Metering Equipment* and that is reasonably required by either *Party* for *Security* reasons or revenue requirements.

“*Metering Equipment*” means the potential transformers, current transformers, meters, interconnecting wiring and recorders used to meter any *Metered Quantity*.

"*Mutual Benefits*" as described in Article 3, means the transient and steady-state support that the integrated generation and *Transmission Systems* in New York and Ontario provide to each other inherently by virtue of being interconnected.

"*NERC*" – means the North American Electric Reliability Council or its successor organization.

"*New York Transmission System*" for the purpose of this *Agreement* means the "ISO Secured System", as ISO Secured System is defined in the NYISO Open Access Transmission Tariff (OATT).

"*NPCC*" means the Northeast Power Coordinating Council or its successor organization.

"*Ontario Market Rules*" means the rules made from time to time, and any and all amendments thereto or replacements thereof, pursuant to Section 32 of the *Electricity Act*, and all policies, procedures, and guidelines contemplated thereby.

"*Ontario Transmission System*" means the integrated transmission facilities located in the Province of Ontario including *Interconnection Facilities*, except for distribution systems operating at a nominal voltage level of less than 50 kV as defined in the *Electricity Act*.

"*Operating Instructions*" means the operating procedures, steps, and instructions for the operation of the *Interconnection Facilities* established from time to time by the *Interconnection Committee* in accordance with *Schedule B* of this *Agreement* and includes changes from time to time by the *Interconnection Committee* to such established procedures, steps and instructions.

"*Operational Control*" means security monitoring, adjustment of generation and transmission resources, coordinating and approval of changes in transmission status for maintenance, determination of changes in transmission status for *Reliability*, coordination with other *Control Areas*, voltage reductions and load shedding, except that each legal owner of generation and transmission resources continues to physically operate and maintain its own facilities.

"*Operating Reserve*" means generation capacity or load reduction capacity which can be called upon on short notice by either *Party* to replace scheduled energy supply which is unavailable as a result of an unexpected outage or to augment scheduled energy as a result of unexpected demand or other contingencies.

"*Parties*" means NYISO and IMO and *Party* means either one of them.

"*Reliability*" means the degree of performance of the bulk electric system that results in electricity being delivered within *Reliability Standards* and in the amount desired. Electric system *Reliability* can be addressed by considering two basic and functional aspects of the electric systems *Adequacy* and *Security*.

"*Reliability Standards*" means the criteria, standards and requirements relating to *Reliability* established by a *Standards Authority*.

"*Schedule*" means a schedule attached to this *Agreement* and all amendments, supplements, replacements and additions hereto.

"*Security*" means the ability of the electric system to withstand sudden disturbances including, without limitation, electric short circuits or unanticipated loss of system elements.

"*Security Coordinator*" means the person or persons delegated to perform *Interconnection Security* functions as set forth by *NERC*.

"*Security Limits*" – means operating electricity system voltage limits, stability limits and thermal ratings.

"*Standards Authority*" means the North American Electric Reliability Council, any successor thereof, or any other agency or body that recommends standards or criteria to either *Party* relating to the *Reliability of Transmission Systems*.

"*Transmission Operator*" means the entity that operates and maintains the transmission facilities and equipment, and executes switching orders.

"*Transmission Owner*" means an entity that owns a *Transmission System*.

"*Transmission Service Provider*" means an entity that manages (under an agreement with *Transmission Owners*) a *Transmission System* that performs the functions of providing transmission services to qualified *Market Participants* under applicable transmission service agreements, and that determines transmission *Adequacy* by monitoring the interconnected system and performing actions to preserve local network integrity.

"*Transmission System*" means a system for transmitting electricity, and includes any structures, equipment or other facilities used for that purpose.

## **2.0: SCOPE OF AGREEMENT**

### **2.1 Purpose of this Agreement**

This *Agreement* provides for the reliable operation of the interconnected *Transmission Systems* of NYISO and Ontario in accordance with the requirements of the *Standards Authority*.

This *Agreement* establishes a structure and framework for the following functions related to the *Reliability* of interconnected operations between the *Parties*:

- (a) developing and issuing *Operating Instructions* and *Security Limits*;
- (b) coordinated operation of the *Transmission Systems*;
- (c) development and adoption of operating criteria and standards;
- (d) operating performance review of the *Interconnection Facilities* ;
- (e) considering matters of transmission service and access;
- (f) implementation of the respective requirements of each of *NERC* and *NPCC* in respect of the *New York Transmission System and Ontario Transmission System*;

(g) providing assistance in an *Emergency* and system restoration.

The *Parties* shall, to the maximum extent they deem consistent with the safe and proper operation of their respective *Control Area* and necessary coordination with other interconnected systems, and with the furnishing of dependable and satisfactory service to their own customers, operate their systems in accordance with the following procedures and principles.

### 3.0: MUTUAL BENEFITS

#### 3.1. No Charge for Mutual Benefits of Interconnection

The *New York Transmission System* and *Ontario Transmission System*, by virtue of being connected with a much larger *Interconnection*, share *Mutual Benefits* such as transient and steady-state support. IMO and NYISO shall not charge one another for *Mutual Benefits*.

#### 3.2. Maintenance of Mutual Benefits

The *Parties* shall endeavor to operate or direct the operation of the *Interconnection* to realize the *Mutual Benefits*. The *Parties* recognize circumstances beyond their control, such as a result of operating configurations, contingencies, maintenance, or actions by third parties, may result in a reduction of *Mutual Benefits*.

### 4.0: INTERCONNECTED OPERATION

#### 4.1. Obligation to Remain Interconnected

The *Parties* shall at all times during the term of this *Agreement* operate or direct the operation of their respective *Transmission Systems* so that they remain interconnected except:

- (a) during the occurrence of an event of *Force Majeure* which renders a *Party* unable to remain interconnected;
- (b) when an *Interconnection* is opened in accordance with the terms of an *Operating Instruction* or, if the *Operating Instruction* does not anticipate a particular circumstance where there is an imminent risk of equipment failure, or of danger to personnel or the public, or a risk to the environment, or risk to system *Security* or *Reliability* of a *Transmission System*, which cannot be avoided by *Good Utility Practice*; or
- (c) during planned maintenance where notice has been given in accordance with outage procedures as implemented by the *Interconnection Committee*.

#### 4.2 Radial Facility Operation

Any radial *Interconnection Facilities* shall be operated with the normally-open points as described in *Schedule A*, except by mutual agreement of the *Parties*.

#### 4.3 Notification of Circumstances

In the event that an *Interconnection Facility* is opened or if the *Interconnection Facility* transfer capability is changed, the *Party* which plans to initiate the opening of, or the transfer capability change to the *Interconnection Facility* shall immediately provide the other *Party* with notification indicating the circumstances of the opening or transfer capability change and



expected restoration time, in accordance with procedures implemented by the *Interconnection Committee*.

#### **4.4 Compliance with Decisions of the Interconnection Committee Direction.**

NYISO shall direct the operation of the *New York Transmission System* and the IMO shall direct the operation of the *IMO controlled grid* in accordance with the obligations of their respective tariffs, rules and standards and applicable directions of the *Interconnection Committee* that conform with their respective tariffs, rules and standards, except where prevented by *Force Majeure*. The *Interconnection Committee* direction includes decisions and jointly developed and approved *Operating Instructions*. If decisions of the *Interconnection Committee* do not anticipate a particular circumstance, the *Parties* shall act in accordance with *Good Utility Practice*.

#### **4.5 Control and Monitoring**

Each *Party* shall provide or arrange for 24-hour control and monitoring of their portion of the *Interconnection Facilities*.

#### **4.6 Reactive Transfer**

In the absence of a commercial agreement, each *Party* unless mutually agreed otherwise shall endeavour to provide its own reactive supply to maintain unity power factor on the *Interconnection*.

#### **4.7 Inadvertent**

Inadvertent power transfers on all *Interconnection Facilities* shall be controlled and accounted for in accordance with the standards and procedures developed by *NERC* and *NPCC* and implemented by the *Interconnection Committee*.

#### **4.8 Adoption of Standards**

The *Parties* hereby agree to adopt, enforce and comply with requirements and standards that will safeguard *Reliability* of the interconnected *Transmission Systems*. Such *Reliability* requirements and *Reliability Standards* shall be:

- (a) adopted and enforced for the purpose of providing reliable service;
- (b) not unduly discriminatory in substance or application;
- (c) applied consistently to both *Parties* and,
- (d) consistent with the *Parties* respective obligations to applicable *Standards Authorities* including, without limitation, any relevant requirements or guidelines from each of *NERC*, *NPCC* or any other regional *Standards Authority* or regional transmission group .

#### **4.9 Transfer Point for Real and Reactive Power**

Real and reactive power will be transferred over the *Interconnection Facilities* as described in *Schedule A* where these circuits cross the international boundary.

## 5.0: EMERGENCY ASSISTANCE

### 5.1 Emergency Assistance

Both *Parties* shall exercise due diligence to mitigate an *Emergency* to the extent practical as per applicable requirements of each of *NERC*, *NPCC*, *NYISO*, New York State Reliability Council and the pertinent *Ontario Market Rules*, or if the *Ontario Market Rules* are not yet in effect, the existing policies and procedures of the *IMO*, governing the mitigation of an *Emergency*. In mitigating an *Emergency*, both *Parties* shall strive to allow for commercial remedies.

### 5.2 Emergency Energy Transactions

Each *Party* shall to the maximum extent it deems consistent with the safe and proper operation of its respective *Transmission System*, provide *Emergency Energy* to the other *Party* in accordance with the provisions of *Schedule C*.

## 6.0: EXCHANGE OF INFORMATION AND CONFIDENTIALITY

### 6.1 Information

*NYISO* and *IMO* agree to exchange such information as may be required from time to time for the *Interconnection Committee* to perform its duties and for the *Parties* to fulfill their obligations under this *Agreement*. Such information will be comprised of the following:

- (a) Information required to develop *Operating Instructions*;
- (b) *Transmission System* facility specifications and modeling data required to perform *Security* analysis;
- (c) Functional descriptions and schematic diagrams of *Transmission System* protective devices and communication facilities;
- (d) Ratings data, and associated ratings methodologies, for *Interconnection Facilities*;
- (e) Telemetry points, equipment alarms and status points required for real time monitoring of *Security* dispatch;
- (f) Data required to reconcile accounts for inadvertent energy, and for *Emergency Energy* transactions;
- (g) Commercially valuable *Transmission System* information concerning such things as transfer capabilities, physical curtailments and interruptions, ancillary services, pricing for transmission service, and discounts offered on pricing for transmission service; provided, however, that this commercially valuable *Transmission System* information shall not be shared by the receiving *Party* with any other party that is a *Market Participant*; and

- (h) Such other information as may be required for the *Parties* to maintain the reliable operation of their interconnected *Transmission Systems* and fulfill their obligations under this *Agreement* and to any *Standards Authority* of which either *Party* is a member, provided, however, that this other information will be exchanged only if that can be done in accordance with applicable restrictions on the disclosure of information to any *Market Participant*.

## **6.2 Confidentiality**

The *Party* receiving information pursuant to this Article 6 shall treat such information as confidential, and shall not, except as provided for in subsection 6.3, disclose any of the information received without the prior written consent of the *Party* supplying the information. The obligation of each *Party* under this subsection 6.2 continues and survives the termination of this *Agreement* by 7 years.

## **6.3 Demands for Disclosure**

If information received by a *Party* is required to be disclosed in compliance with an order or subpoena of a court or regulatory body, or the award of an arbitrator, the *Party* that received the information, consistent with its legal and regulatory obligations, shall seek to protect the information demanded. The *Party* receiving the demand for disclosure shall also, consistent with its legal and regulatory obligations, notify the other *Party*, so as to give the other *Party* an opportunity to seek appropriate protection for the information demanded.

# **7.0: INTERCONNECTION COMMITTEE**

## **7.1 Interconnection Committee Inauguration & Authorization**

The *Parties* shall form an *Interconnection Committee* under this *Agreement*. Within 30 days of the *Effective Date*, each of the *Parties* shall appoint two representatives, a principal and an alternate, to serve as members of the *Interconnection Committee* with the authority to act on their behalf with respect to actions or decisions taken by the *Interconnection Committee*. A *Party* may, at any time upon providing prior notice to the other *Party*, designate a replacement principal member or alternate member to the *Interconnection Committee*.

## **7.2 Interconnection Committee Duties and Responsibilities**

The *Interconnection Committee* exists to administer the implementation of the provisions of this *Agreement*. The *Interconnection Committee* shall develop and adopt policies, instructions, and recommendations relating to the *Parties'* performance of their obligations under this *Agreement*, attempt to resolve *Disputes* between the *Parties* pursuant to Article 12 of this *Agreement*, and shall undertake any other actions specifically delegated to it pursuant to this *Agreement*.

The *Interconnection Committee* shall undertake to jointly develop and authorize *Operating Instructions* to implement the intent of this *Agreement* in accordance with *Schedule B*, 'Procedures for Development and Authorization of *Operating Instructions*'.

Should the terms and conditions contained in this *Agreement* be found to conflict with or fail to recognize obligations of a *Standards Authority* of which either *Party* is a member or other regulatory requirements the *Parties* agree to amend this *Agreement* accordingly.

Any effective recommendations on revisions to this *Agreement* shall be provided to each *Party*'s appropriate corporate officers for approval.

### **7.3 Limitations of Interconnection Committee Authority**

With the exception of the *Schedules*, the *Interconnection Committee* is not authorized to modify or amend any of the terms of this *Agreement*. The *Interconnection Committee* has no authority to commit either *Party* to any expenditure that is beyond those expenses described herein.

### **7.4 Exercise of Interconnection Committee Duties**

The *Interconnection Committee* shall hold meetings no less frequently than twice each calendar year. The matters to be addressed at all meetings shall be specified in an agenda, which shall contain items specified by either *Party* in advance of the meeting and sent to the representatives of the other *Party*. All decisions of the *Interconnection Committee* must be unanimous. Special meetings may be called at any time if the *Interconnection Committee* deems such meetings to be necessary or appropriate.

Subject to the limitations on its authority as described in Section 7.3 of this *Agreement*, the *Interconnection Committee* has the responsibility and authority to take action on all aspects of this *Agreement*, including, but not limited to the following:

- (a) amending, adding or canceling *Schedules*, or *Operating Instructions* and providing written notice in accordance with Article 16.0
- (b) assessment of non-compliance with this *Agreement* and, subject to Article 12, the taking of appropriate action in respect thereof;
- (c) documentation of decisions related to the initial resolution of *Disputes* as set out in Article 12, or in cases of unresolved *Disputes*, the circumstances relevant to the *Dispute* in question as contemplated by the requirements of Article 12;
- (d) preparation, documentation, retention and distribution of *Interconnection Committee* meeting minutes and agendas; and
- (e) joint development and implementation of decisions involving but not limited to the following work activities:

- (i) development and maintenance of procedures for active power and reactive power accounting, including but not limited to methods of energy balancing;
- (ii) approval of information and data exchange costs and scope;
- (iii) documented points of operational data, as required by mutual agreement;
- (iv) development and maintenance of outage scheduling and coordination procedures with respect to the reliable operation of the *Interconnection Facilities*;
- (v) coordination of system tests; and
- (vi) development of system restoration and mutual assistance procedures.

## **8.0 SECURITY COORDINATION AND RELIABILITY ASSESSMENT OF OUTAGES**

Both *Parties* agree to provide each other with appropriate updates on planned outage schedules and other activities that may impact on the *Reliability* or availability of the interconnected *Ontario Transmission System* and *New York Transmission System*. As *Control Area Operator* and *Security Coordinator* the IMO for the province of Ontario and NYISO for the state of New York, shall interact with each other as required, and with other *Control Area Operators* and *Security Coordinators*, to establish *Security Limits* and to perform *Security* coordination and *Reliability* assessments of outages.

## **9.0: OPERATIONAL INFORMATION**

### **9.1 Obligation to Provide Operational Data and Status Points**

The *Parties* shall ensure that appropriate monitoring facilities are installed as required to provide for electric power quantities or equipment loading to enable monitoring of *Security Limits*, meet requirements of each of *NERC* and *NPCC* , and for determining *Interconnection Facilities* inadvertent energy accounting .

### **9.2 Points of Operational Data**

The points of data for operating information are those points as may be agreed in writing by the *Interconnection Committee* from time to time.

## 10.0: INTERCONNECTION REVENUE METERING

### 10.1 Obligation to Provide Inadvertent Energy Accounting Metering

The *Parties* shall ensure appropriate electric metering devices are installed as required to measure electric power quantities for determining *Interconnection Facilities* inadvertent energy accounting.

### 10.2 Standards for Metering Equipment

Any *Metering Equipment* used to meter *Metered Quantities* for inadvertent energy accounting shall be designed, verified, sealed and maintained in accordance with the *Party's* respective metering standards or as otherwise agreed to by the *Interconnection Committee*.

### 10.3 Meter Compensation to the Point of Interconnection

The metering compensation for transmission line losses to the *Interconnection Facilities Delivery Point* shall be determined by the *Party's* respective standards or otherwise agreed to by the *Interconnection Committee*.

### 10.4 Metering Readings

The *Parties* shall ensure that integrated meter readings are provided at least once each hour for *Interconnection Facilities* accounting purposes and meter registers are read at least monthly, as close as practical to the last hour of the month. An appropriate adjustment shall be made to register readings not taken on the last hour of the month.

## 11.0: LIABILITY AND INDEMNITY

### 11.1 Liability Between Parties

The *Parties'* duties and standard of care with respect to each other, and the benefits and rights conferred on each other shall be no greater than as expressly stated herein. Neither *Party*, nor its directors, officers, trustees, employees or agents, shall be liable to the other *Party* for any loss, damage, claim, cost, charge or expense, whether direct, indirect, incidental, punitive, special, exemplary or consequential, arising from the *Party's* performance or nonperformance under this *Agreement*, except to the extent that a *Party* is found liable for gross negligence or willful misconduct, in which case the *Party* will not be liable for any incidental, consequential, punitive, special, exemplary or indirect damage.

### 11.2 Liability for Interruptions

Neither *Party* shall be liable to the other *Party* for any claim, demand, liability, loss or damage, whether direct, indirect, incidental, punitive, special, exemplary or consequential, resulting from an occurrence on the circuits and system that are under the Operational Control of the other *Party* and which results in damage to or renders inoperative such circuits and system, or the separation of the systems in an emergency, or interrupts or diminishes service, or increases, decreases or in any way affects for whatever length of time the voltage or frequency of the power and energy delivered hereunder to the other *Party*.

### **11.3 Liability to Third Parties**

Except as otherwise expressly provided herein, nothing in this *Agreement* shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or liability or obligation, contractual or otherwise, on the part of the *Parties* to this *Agreement* to any third party.

## **12.0 DISPUTE RESOLUTION**

In the event of a *Dispute* arising out of or relating to this *Agreement* that is not resolved by the representatives of the *Parties* who have been designated under Section 7.1 of this *Agreement* within 7 days of the reference to such representatives of such *Dispute*, each *Party* shall, within 14 days' written notice by either *Party* to the other, designate a senior officer with authority and responsibility to resolve the *Dispute* and refer the *Dispute* to them. The senior officer designated by each *Party* shall have authority to make decisions on its behalf with respect to that *Party's* rights and obligations under this *Agreement*. The senior officers, once designated, shall promptly begin discussions in a good faith effort to agree upon a resolution of the *Dispute*. If the senior officers do not agree upon a resolution of the *Dispute* within 14 days of its referral to them, or do not within the same 14 day period agree to refer the matter to some individual or organization for alternate dispute resolution, then either *Party* shall have the right to pursue any and all remedies available to it at law or in equity. Neither the giving of notice of a *Dispute*, nor the pendency of any *Dispute* resolution process as described in this Section shall relieve a *Party* of its obligations under this *Agreement*, extend any notice period described in this *Agreement* or extend any period in which a *Party* must act as described in this *Agreement*. Notwithstanding the requirements of this section, either *Party* may terminate this *Agreement* in accordance with its provisions, or pursuant to an action at equity. The issue of whether such a termination is proper shall not be considered a *Dispute* hereunder.

## **13.0: FORCE MAJEURE**

### **13.1 Force Majeure Defined**

A *Party* shall not be considered to be in default or breach of this *Agreement*, and shall be excused from performance or liability for damages to any other *Party*, if and to the extent it shall be delayed in or prevented from performing or carrying out any of the provisions of this *Agreement*, arising out of or from any act, omission, or circumstance by or in consequence of any act of God, labor disturbance, sabotage, failure of contractors or suppliers of materials, act of a public enemy, war, invasion, insurrection, riot, fire, storm, flood, ice, earthquake, explosion, epidemic, breakage or accident to machinery or equipment or any other cause or causes beyond such *Party's* reasonable control, including any curtailment, order, regulation, or restriction imposed by governmental, military, or lawfully established civilian authorities, or by making of repairs necessitated by an emergency circumstance not limited to those listed above upon the property or equipment of the *Party* or property or equipment of others which is deemed under the *Operational Control* of the *Party*. Any *Party* claiming a *Force Majeure* event shall promptly

give written and reasonably descriptive notification to the other *Party*, shall use reasonable diligence to remove the condition that prevents performance and shall not be entitled to suspend performance of its obligations in any greater scope or for any longer duration than is required by the *Force Majeure* event. Each *Party* shall use its best efforts to mitigate the effects of such *Force Majeure* event, remedy its inability to perform, and resume full performance of its obligations hereunder; provided, however, a *Party* shall not be obliged to settle a labor disturbance to accomplish the foregoing.

#### **14.0: GOVERNING LAW**

This *Agreement* shall be governed and construed in accordance with the laws of the State of New York, with the exception of any choice of laws provisions therein.

#### **15.0: EFFECTIVE DATE , TERMINATION AND ASSIGNMENT**

##### **15.1 Effective Date**

This *Agreement* shall take effect as of date first above written.

##### **15.2 Termination**

This *Agreement* may be terminated at any time by mutual agreement in writing. It may also be terminated by either of the *Parties* with at least one year's prior written notice to the other *Party* of its intention to terminate, provided that such unilateral termination shall not prejudice any outstanding obligations entered into under this *Agreement* that have accrued as at the date of termination.

##### **15.3 Force of Agreement**

This *Agreement* shall be binding upon and shall enure to the benefit of the IMO and NYISO, and their respective successors and permitted assigns.

##### **15.4 Assignment Requirements and Limitation**

This *Agreement* shall not be assigned by either *Party* without the prior written consent of the other *Party*, such consent not to be unreasonably withheld or delayed. No assignment shall constitute a novation or release the assigning *Party* from its obligations under this *Agreement* without the express, written agreement of the other *Party*.



## 16.0: NOTICES

### 16.1 Correspondence

All notices shall be addressed to the respective corporate officers of NYISO and the IMO set out in Section 16.2.

### 16.2 Notices

All notices shall be sufficiently given and conclusively deemed to be delivered:

- (a) on the date of transfer, receipt confirmed, if by means of facsimile transfer;
- (b) on the third business day after the day of mailing, if by mail and
- (c) at the time of delivery, if delivered by hand.

In the case of NYISO to:

New York Independent System Operator, Inc.  
3890 Carman Road  
Schenectady, New York 12303  
Attention: Vice-President Operations and Reliability  
Fax: (518) 356-6118

In the case of the IMO to:

Independent Electricity Market Operator  
Station A, Box 4474  
Toronto, Ontario M5W 4E5  
Attention: General Counsel & Secretary                      Fax: (416) 506-2849

Either *Party* shall notify the other *Party* from time to time of a change to the foregoing information by sending a notice to that effect in accordance with the provisions of this Section 16.2.

IN WITNESS WHEREOF the Parties hereto have caused this *Agreement* to be executed in duplicate as of the day and year first written above.

For: **NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.**



Approved:

Michael C. Calimano  
Vice-President of Operations & Reliability  
New York Independent System Operator, Inc.

Signature Date: Nov 26, 2001

For: **INDEPENDENT ELECTRICITY MARKET OPERATOR.**



Approved:

Paul Murphy  
Chief Operating Officer  
Independent Electricity Market Operator

Signature Date: Nov 19/2001

## **Schedule A: Description of Interconnection Facilities**

The IMO – NYISO Interconnection Agreement covers the New York – Ontario *Interconnection Facilities* under the operating control of the IMO and NYISO.

The NYISO-Ontario *Interconnection* is comprised of the 4 main interconnections, namely;

1. 230kV Interconnections L33P and L34P
2. 230kV Interconnection PA27
3. 345kV Interconnections PA301 and PA302
4. 230kV Interconnection BP76

### 230kV Interconnections L33P and L34P

- At St. Lawrence, a 230 kV transmission circuit designated L33P and a 300 MVA voltage regulating transformer and a 318 MVA Phase Shifting transformer connecting the St. Lawrence and F.D. Roosevelt transmission stations.
- At St. Lawrence, a 230 kV transmission circuit designated L34P and a 300 MVA phase shifting voltage regulating transformer connecting the St. Lawrence and F.D. Roosevelt transmission stations.

### 230kV Interconnection PA27

- At Niagara, a 230 kV transmission circuit designated PA27 and a 400 MVA voltage regulating transformer connecting the Moses transmission station with Sir Adam Beck GS No. 2.

### 345kV Interconnections PA301 and PA302

- At Niagara, a 345 kV transmission circuit designated PA301 and a 1000 MVA voltage regulating transformer connecting the Moses transmission station with Sir Adam Beck GS No. 2.
- At Niagara, a 345 kV transmission circuit designated PA302 and a 1000 MVA voltage regulating transformer connecting the Moses transmission station with Sir Adam Beck GS No. 2.

### 230kV Interconnection BP76

- At Niagara, a 230 kV transmission circuit designated BP76 and a 400 MVA voltage regulating transformer connecting the Packard transmission station with Sir Adam Beck GS No. 2.

**The remaining NY – Ontario ties are covered under the IMO – Niagara Mohawk Agreement and are listed below for informational purposes only.**

**115kV Interconnection BL104**

At Niagara, a 115 kV transmission circuit designated BL104 connecting the Lockport transmission station with Sir Adam Beck GS No. 1.

Normal operation of the 115kV Interconnection BL104 is as a radial circuit connecting Sir Adam Beck GS No. 1 generators, separated from the *Ontario Transmission System*, into the *NMPC Transmission System* at Lockport.

**115kV Emergency Tie L46**

At Niagara, a 115 kV transmission circuit designated L46 between the Niagara Mohawk Huntley transmission station and the CNP Station 18 at Fort Erie. The 115kV circuit L46 is to be used as an alternate connection only and must be operated radially from the Niagara Mohawk 60 Hz system. To place circuit L46 into service, a “break before make” operation with Ontario’s 60Hz system is required to ensure a prudent disconnection of the CNP system from the Ontario 60Hz system. The synchronous operation of the Ontario 60Hz system and the Niagara Mohawk system via Emergency Tie L46 is not permitted.

**115kV Emergency Tie L5C to CD1 and CD2**

At Cornwall 115 kV mid span openers between the St Lawrence L5C and Denisson CD1 and CD2 can be used as an alternate connection to transfer the Cornwall load to the Ontario system. The synchronous operation of the Ontario and Niagara Mohawk systems via this emergency tie is not permitted. To transfer the Cornwall load a “break before make” operation is required.

**Niagara 25 Hz System**

The combined Niagara Mohawk and Ontario 25 Hz systems consisting of the following:

69kV Interconnection BSC105

69kV Interconnection BSH106

NMPC frequency changer at Gardenville

frequency changer in Ontario at Beck 1

127 Mw of 25 Hz generation from 3 units at Beck 1 GS.

75 Mw of 25 Hz generation from 11 units at Rankine GS.

**69kV Interconnection BSC105**

At Niagara, a 69kV transmission circuit designated BSC105 connecting Sir Adam Beck GS No. 1 to Harper TS and then extends from Harper TS to Terminal Station C. The nominal operating voltage at the Sir Adam Beck GS No. 1 terminal is 115 kV and is transformed to a nominal 69 kV by three in-line 25 MVA transformers, located in Niagara Parks TS at Sir Adam Beck GS No. 1.

The BSC105 circuit is normally operated closed at all terminals to form a synchronous tie between the two systems.

### **69Kv Interconnection BSH106**

At Niagara, a 69kV transmission circuit designated BSH106 provides a means of connecting Sir Adam Beck GS No. 1 Unit 7 radial to the NMPC 25Hz system to, under certain conditions, assist in the transfer of power and as an aid to control the loading on other system facilities.

### **41.6Kv Interconnection Line 6**

At Niagara a 41.6Kv transmission circuit designated Line 6 provides a means of connecting CNP Station 11 to NMPC Terminal House B

## Schedule B: Procedures for Development and Authorization of Operating Instructions

### Overview

The *Interconnection Committee* shall jointly develop and approve *Operating Instructions* and review them at least semiannually. The *Interconnection Committee* shall submit draft material to one another for review and comment. The *Interconnection Committee* shall provide comment on the draft material promptly and in any event within 30 days. The *Interconnection Committee* shall promptly provide such information as may reasonably be required in connection with establishing, or reviewing, the material.

In the event that any conflicts arise or are made apparent to a *Party*, they shall notify the other *Party* and engage the *Interconnection Committee* if necessary to resolve such conflicts.

Outlined below are the key principles and items of methodology to be observed while the *Interconnection Committee* is engaged in developing and approving *Operating Instructions*, and issuing them to their respective operations staff.

### Principles

Given that the *Parties'* respective operations staff benefit from following a single instruction for all aspects of their execution of interconnected operations, it is an acceptable practice to combine this content to achieve the single *Operating Instructions* for use by a respective *Party's* operations staff.

Each *Party* shall coordinate the issuance internally of any *Operating Instructions* developed and agreed to by the *Interconnection Committee* to ensure that their respective operations staff have the same *Operating Instructions* at the same time.

*Operating Instructions*, when approved by the *Interconnection Committee*, shall be binding on the *Parties* insofar as they relate to the *Interconnection Facilities* until they expire, are changed, deleted, or superseded by authority of the *Interconnection Committee*.

## Items of Methodology

Each page of the approved *Operating Instructions* shall be identified in the header or footer as the IMO – NYISO *Interconnection Committee's* with the effective date and any revision number. This identification shall continue to be displayed internally when a given *Party* issues *Operating Instructions* in their respective company's documentation system.

By mutual agreement of the *Interconnection Committee*, one *Party* shall control the revision process from the initial drafting of material through to the conversion of the *Operating Instruction* into its final form.

## Schedule C: Emergency Energy Transactions

The Ontario *Control Area* or the New York *Control Area* may, from time to time, have insufficient *Operating Reserve* available to its respective system, or need to supplement available resources to cover sudden and unforeseen circumstances such as loss of equipment or forecast errors. Such conditions could result in the need by the *Party* experiencing the deficiency to purchase *Emergency Energy* for *Reliability* reasons.

The purpose of this *Schedule* is to allow for the exchange of *Emergency Energy* between the Ontario *Control Area* and the New York *Control Area* during such times when resources are insufficient and commercial remedies are not available.

### 1.0: CHARACTERISTICS OF THE POWER AND ENERGY

Unless otherwise mutually agreed, all power and energy made available by the Seller shall be three phase, 60 Hz alternating current at operating voltages established at the *Delivery Point* in accordance with system requirements and appropriate to the *Interconnection*.

### 2.0: NATURE OF SERVICE

2.1 NYISO or the IMO, as the case may be, to the maximum extent each deems consistent with:

- (a) the safe and proper operation of its own system,
- (b) the furnishing of dependable and satisfactory services to its own customers, and
- (c) its obligations to other parties,

shall make available to the Buyer *Emergency Energy* from available generating capability in excess of its load requirements up to the transfer limits in use between the two *Control Areas*.

The Seller shall refer to all *Emergency Energy* transactions as being sold:

- (d) "out of *Operating Reserve*" where such a delivery could reasonably be expected to be recalled if the Seller needed the generation for a reserve pick-up or other system emergency; or
- (e) "above and beyond *Operating Reserve* requirements" where the Seller would normally be able to continue delivering the *Emergency Energy* following a reserve pick-up.

The *Parties* shall use reasonable efforts to ensure that an *Emergency Energy* transaction continues only until it can be replaced by a commercial transaction.



- 2.2 In the event either NYISO or the IMO is unable to provide *Emergency Energy* to the other when needed, but there is energy available from a third party *Control Area*, delivery of such *Emergency Energy* will be effected where feasible.

### 3.0: RATES AND CHARGES

- 3.1 All *Emergency Energy* transactions shall be billed based on scheduled deliveries.
- 3.2 All rates and charges associated with *Emergency Energy* shall be expressed in funds of the United States of America.
- 3.3 NYISO and the IMO agree that the charge for *Emergency Energy* delivered by NYISO or the IMO to the other *Party* shall be as defined below.

The Seller shall be allowed to include, in the total price charged for *Emergency Energy*, all costs incurred in the delivery of *Emergency Energy* to the *Delivery Point*, and the Buyer shall be responsible for all costs at and beyond the *Delivery Point*.

#### Direct NYISO/IMO Transaction

The charge for *Emergency Energy* supplied in any hour to the Buyer shall be calculated using the following two-part formula. The first part of the formula calculates the energy portion of the charge and the second part incorporates any transmission charges incurred by the Seller to deliver the *Emergency Energy* to the *Delivery Point*. In the case of NYISO as the Seller, the cost of the energy portion shall be the LBMP (Locational Based Marginal Price) at the point(s) of exit. In the case of the IMO as the Seller, the cost of the energy portion shall be the Ontario market clearing price at the point(s) of exit to provide the *Emergency Energy*. Regardless of the Seller, the Seller's energy cost shall be multiplied by 110%.

Energy Portion for an hour =

(*Emergency Energy* supplied in the hour in MWhr)  
times (Seller's cost of such energy in \$/MWhr)  
times 110%

Transmission Charge to *Delivery Point* (if applicable) =

The actual ancillary services (as applicable) and transmission costs incurred by the Seller in delivering such *Emergency Energy* to the *Delivery Point* pursuant to the Seller's Transmission Tariffs or the equivalent thereof.

Total Charge for *Emergency Energy* supplied in any hour =

The sum of the Energy Portion for an hour and the Transmission Charge for that same hour.

#### NYISO/IMO Transaction from Third Party Supplier

The charge for *Emergency Energy* supplied to the Buyer from a third party through the Seller's *Control Area* shall be calculated using the following two-part formula. The first part of the formula calculates the energy portion of the charge and the second part incorporates any transmission charges incurred by the Seller to deliver the *Emergency Energy* to the *Delivery Point*. The Seller's cost for *Emergency Energy* (whether NYISO or the IMO) shall be the cost that the third party supplier charges the Seller.

Energy Portion for an hour =  
(*Emergency Energy* supplied in the hour in MWhr) times  
(Third party Supplier's charge for such energy in \$/MWhr)

Transmission Charge to *Delivery Point* (if applicable) =  
The actual ancillary service costs (as applicable), transmission costs and all other applicable costs attributable to such import transactions incurred by the Seller in delivering such energy to the *Delivery Point* pursuant to the Seller's Transmission Tariffs or the equivalent thereof.

Total Charge for *Emergency Energy* supplied in and hour =  
The sum of the energy Portion for an hour and the transmission Charge for that same hour.

#### **4.0: MEASUREMENT OF ENERGY INTERCHANGED**

All *Emergency Energy* supplied at the *Delivery Point* shall be metered. The Seller shall be responsible for the actual losses as a result of delivery to the *Delivery Point* and the Buyer shall be responsible for all losses from the *Delivery Point*.

#### **5.0: BILLING AND PAYMENT**

- 5.1 The procedure for rendering and payment of invoices for transactions pursuant to this *Schedule* shall be as set out hereunder unless otherwise agreed by the Interconnection Committee.
- 5.2 Unless otherwise specifically agreed upon by the *Parties*, the calendar month shall be the standard period for all payments under this *Schedule*. Promptly after the end of each calendar month, NYISO and the IMO shall prepare or cause to be prepared and render to the other *Party* an invoice for the payment obligations, if any, incurred by the other *Party* hereunder during the preceding month.

- 5.3 Unless otherwise agreed by NYISO and the IMO, all invoices under this *Schedule* shall be due and payable in immediately available same-day funds in accordance with each *Party's* invoice instructions on or before the twentieth (20th) day of each month. If such a day is not a banking day, then payment is due and payable on the first banking day common to the *Parties* following the due date. Each *Party* will make payments by electronic funds transfer in the currency of the United States of America, or by other mutually agreeable method(s), to the account designated by the other *Party*.
- 5.4 If the rendering of an invoice is unavoidably delayed, the Seller may issue an interim invoice based on estimated charges. Each invoice shall be subject to adjustment for any errors in calculation, meter readings, estimating or otherwise. Any such adjustments shall be made as promptly as practical, but in no event later than six months after issuing the invoice.
- 5.5 NYISO and the IMO hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other under this Schedule through netting. As such, all amounts owed by NYISO and the IMO to the other *Party* for the purchase and sale of *Emergency Energy* during the monthly billing period under this *Schedule*, including any interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the *Party* who owes it.

If no mutual debts or payment obligations exist and only one of NYISO or the IMO owes a debt or obligation to the other *Party* during the monthly billing period, including, but not limited to, any interest, and payment or credits, that *Party* shall pay such sum in full when due.

- 5.6 Any amount not paid by the due date shall be deemed delinquent and subject to interest. Interest shall be computed from the date of collection until the date refunds are made as follows:

At an average prime rate for each calendar quarter on all excessive rates or charges held (including all interest applicable to such rates or charges). The applicable average prime rate for each calendar quarter shall be the arithmetic mean, to the nearest one-hundredth of one percent, of the prime rate values published in the Federal Reserve Bulletin, or in the Federal Reserve's "Selected Interest Rates" (Statistical Release G. 13), for the fourth, third, and second months preceding the first month of the calendar quarter. The interest required to be paid, shall be compounded quarterly.

- 5.7 If any invoice remains unpaid after the due date the Seller may, in addition to all other remedies available to it, and after giving the Buyer at least five (5) days written notice of the Seller's intention to do so, refuse to provide *Emergency Energy* under this *Schedule* so long as any amounts remain unpaid. Such action shall not be construed as a breach of contract by the Seller and shall not relieve the Buyer of its obligations to pay for *Emergency Energy* in accordance with the provisions of this *Schedule*.

- 5.8 If a *Party* objects to all or a portion of any invoice, that *Party* shall, on or before the date payment of the invoice is due, pay the full amount of the invoice and shall give notice to the other *Party* within thirty (30) days from the date the invoice is rendered, setting forth in specific details the basis for its objection and the amount thereof in dispute. The authorized officers of the *Parties* or their designees shall use their best efforts to develop a solution to the billing dispute. The authorized officers may choose to submit the billing dispute to a form of alternative dispute resolution to which the authorized officers may agree. If the objection is upheld resulting in a refund, the disputing *Party* shall receive interest upon such amount as specified in Section 5.6 herein, from the date payment was received until the date upon which refund is made. Any refunds agreed to will be paid, with interest, within seven (7) banking days.
- 5.9 The applicable provisions of this *Schedule* shall continue in effect after termination of this *Schedule* to the extent necessary to provide for final billing, billing adjustments, payments and disposition of any claims outstanding.

## **6.0: RECORDS**

Each *Party* hereto shall keep or cause to be kept complete and accurate records and memoranda of its operations hereunder and shall maintain such data as may be necessary to determine with reasonable accuracy any item required hereunder. With respect to invoicing records, each *Party* shall maintain or cause to be maintained such records, memoranda and data for the current calendar year plus the previous calendar year. The *Interconnection Committee* shall have the right to examine all such records and memoranda that are not confidential in so far as may be reasonably necessary for the purpose of ascertaining the reasonableness and accuracy of any statements of costs relating to transactions hereunder.

