

April 29, 2011

By Electronic Delivery

**CONTAINS CRITICAL ENERGY
INFRASTRUCTURE INFORMATION**

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Filing of an Executed Merchant Transmission Facility Interconnection
Agreement Among the New York Independent System Operator, Inc.,
Consolidated Edison Company of New York, Inc., and Hudson Transmission
Partners, LLC and Request for Critical Energy Infrastructure Information
Designation, Docket No. ER11-____-000

Dear Ms. Bose:

Pursuant to Section 205 of the Federal Power Act,¹ Section 35.12 of the Commission's Regulations,² and Section 11.3 of its Large Facility Interconnection Procedures ("LFIP"), the New York Independent System Operator, Inc. ("NYISO") and Consolidated Edison Company of New York, Inc. ("Con Edison") (collectively "Joint Filing Parties") hereby tender for filing an executed Merchant Transmission Facility Interconnection Agreement ("Interconnection Agreement") as Service Agreement No. 1719 among the NYISO, Con Edison as the Transmission Owner, and Hudson Transmission Partners, LLC ("HTP") as the merchant transmission project Developer (collectively, "the Parties").³ With the exceptions noted in Section II of this letter, the Interconnection Agreement conforms to the NYISO's *pro forma* Large Generator Interconnection Agreement ("LGIA") that is contained in Attachment X of the NYISO's OATT.

The Joint Filing Parties request an April 20, 2011, effective date for the Interconnection Agreement and further request waiver of the normal 60-day notice period, as discussed fully below.

¹ 16 U.S.C. § 824d (2006).

² 18 C.F.R. § 35.12 (2008).

³ Capitalized terms not otherwise defined in this letter have the meaning set forth in Attachments S and X of the NYISO's Open Access Transmission Tariff ("OATT").

I. Background

The Interconnection Agreement governs the interconnection of HTP's merchant transmission facility (the "Merchant Transmission Facility"). The Merchant Transmission Facility is a 660MW back-to-back HVDC (AC input-DC conversion-AC output) transmission project that will connect the PSE&G Bergen Substation ("PSE&G Substation") located in Ridgefield, New Jersey, with the Connecting Transmission Owner's West 49th Street Substation in New York City.

The Merchant Transmission Facility includes 2100 feet of 230kV alternating current ("AC"), solid dielectric cable connection from the PSEG Substation to a back-to-back converter station facility, to be constructed in Ridgefield, New Jersey (the "Converter Station"). The Converter Station, which includes 230kV and 345kV Switchyards, will convert AC power to DC and back to AC. A 345kV AC underground and underwater cable system will be constructed and installed from the Converter Station to the Connecting Transmission Owner's West 49th Street Substation in New York City. The high-voltage AC power cables will interconnect PJM and New York City along a route that is entirely underground, installed either in existing roadways, an existing railway tunnel, or buried beneath the Hudson River. The Merchant Transmission Facility will have only unidirectional flow from PJM to the New York Control Area. The Merchant Transmission Facility and Developer's Attachment Facilities will have an operating range between 60MW and 660MW, subject to system conditions as described in Sections 9.5.1 and 9.5.2 of the Interconnection Agreement.

A simplified schematic illustrating the major components of the Merchant Transmission Facility and Developer's Attachment Facilities are included in Appendix A, Figure A-1, which is designated as CEII for the reasons discussed in Section III, *infra*. The Point of Interconnection is defined as the point at the Connecting Transmission Owner's West 49th Street Substation between existing circuit breakers 7 and 8 as shown in Figure A-1 of Appendix A of the Interconnection Agreement.

The Interconnection Agreement substantially conforms to the NYISO's *pro forma* Large Generator Interconnection Agreement ("LGIA") contained in Attachment X of its Open Access Transmission Tariff ("OATT"). However, as discussed in the next section, the Interconnection Agreement has been changed from the *pro forma* LGIA to reflect the fact that HTP is a merchant transmission project Developer and not a generator Developer. The NYISO's LFIP provides that Attachment X applies to merchant transmission project Developers as well as generator project Developers. For ease of reference, the Joint Filing Parties have included a blackline of the Interconnection Agreement against the NYISO's *pro forma* LGIA to highlight these changes.

II. Variations From the NYISO's Pro Forma LGIA

As noted above, the Interconnection Agreement is based on the NYISO's *pro forma* LGIA; however, the Parties have agreed to make a limited set of modifications to the *pro forma* LGIA. These modifications are described below and are necessary to reflect (A) the unique

characteristics of a Merchant Transmission Facility; (B) the unique characteristics of a Merchant Transmission Facility spanning two separate Control Areas; (C) the absence of Connecting Transmission Owner's Attachment Facilities and Stand Alone System Upgrade Facilities;⁴ (D) the timing of execution of the Interconnection Agreement vis-à-vis the award of Unforced Capacity Deliverability Rights; (E) performance specifications for the characteristics of the Merchant Transmission Facility; (F) principles associated with construction activity at Con Edison's West 49th Street Substation; (G) modifications expressly contemplated by the *pro forma* LGIA; and (G) necessary ministerial revisions. All of the Parties to the Interconnection Agreement agree to these changes.

The Commission has accepted changes to the *pro forma* LGIA terms where, as here, there are unique circumstances associated with the interconnections, including "reliability concerns, novel legal issues or other unique factors."⁵ In fact, many of the modifications to the *pro forma* LGIA in this Interconnection Agreement are substantially similar or identical to those previously accepted by the Commission.⁶ The NYISO respectfully requests that the Commission accept these modifications in light of the unique factors and novel legal issues explained below.

A. Deviations to Reflect the Unique Characteristics of the Merchant Transmission Facility

As noted above, it was necessary for the Parties to revise the *pro forma* LGIA because the *pro forma* governs the interconnection of a generation facility, not a transmission facility. First, the Parties have inserted the term "Merchant Transmission Facility," which is defined in the Interconnection Agreement as "generally a merchant facility for the transmission of electricity, and specifically the Developer's facility for the transmission of electricity as described in this Agreement and the Appendices hereto." In parallel to this addition to the Interconnection Agreement, the Parties have replaced the *pro forma* term "Large Generating Facility" with "Merchant Transmission Facility" throughout the Interconnection Agreement. Similarly, the Parties have revised the definition of "Standard Large Generator Agreement" to clarify that such term does not refer to this Interconnection Agreement. Consistent with those revisions, the Parties have replaced the term "Standard Large Interconnection Agreement" with "this Agreement," "Interconnection Agreement" or "Merchant Transmission Facility Interconnection Agreement."

⁴ This project involves no Connecting Transmission Owner Attachment Facilities, no Stand Alone System Upgrade Facilities and no System Deliverability Upgrades.

⁵ See *PJM Interconnection, LLC*, 111 FERC ¶ 61,163 at PP 10-11, *reh'g denied*, 112 FERC ¶ 61,282 (2005).

⁶ See *New York Independent System Operator, Inc. and Consolidated Edison Company of New York, Inc.*, 123 FERC ¶ 61,093 (Apr. 29, 2008) (accepting an interconnection agreement of a Merchant Transmission Facility); *see also New York Independent System Operator, Inc. and Consolidated Edison Company of New York, Inc.*, Docket No. ER-11-2199-000 (December 28, 2010).

In addition, revisions were necessary to account for the specific characteristics of a transmission facility. Unlike a Large Generating Facility, a Merchant Transmission Facility “transmits” power. Large Generating Facilities, by contrast, generate, produce, or export power. The Parties have therefore replaced the word “export,” “generate,” or “produce,” as applicable, with the word “transmit.”⁷ Similarly, the Parties have replaced the following terms:

- ⌚ “generation” with “generation or transmission facilities;”⁸
- ⌚ “generating facilities” to “merchant transmission facilities;”⁹
- ⌚ “generating electricity for sale” with “transmitting electricity,”¹⁰ ⌚
“generated at” to “transmitted on;”¹¹
- ⌚ “generate test energy at” to “transmit test energy over;”¹²
- ⌚ “produce or absorb reactive power” to “transmit reactive power;”¹³
- ⌚ “production of electricity” to “transmission” or “transmission of electricity over the Merchant Transmission Facility;”¹⁴

The Parties have also revised the *pro forma* LGIA to account for the metering requirements associated with the Merchant Transmission Facility.¹⁵ First, in the definition of “Metering Equipment” in Article 1, the Parties have added a reference to the Point of Interconnection (as opposed to the “metering points”) as the location at which Metering Equipment shall be installed. Second, the Parties have revised Article 7 (“Metering”) to delete generator-specific language that is not comprehensible in the context of a Merchant Transmission Facility.¹⁶ Article 7 has also been modified to require *both* Connecting Transmission Owner and Developer to provide metering quantities, as required, to Developer or NYISO upon request.¹⁷

Certain reactive power and voltage provisions in the *pro forma* LGIA have also been revised to conform to the unique operating requirements of the Merchant Transmission Facility.

⁷ See, e.g., Interconnection Agreement at § 1 (“Definitions”); § 6.1 (“Pre-Commercial Operation Date Testing and Modifications”); § 9.5.2 (“Voltage Schedules”).

⁸ *Id.* at § 5.14.

⁹ *Id.* at § 9.6.2.2.

¹⁰ *Id.* at § 1, “Commercial Operation.”

¹¹ *Id.* at § 5.17.2.

¹² *Id.* at § 6.1.

¹³ *Id.* at § 9.5.2.

¹⁴ *Id.* at § 9.6.2.

¹⁵ See, e.g., *Id.* at §§ 9.5.1 and 9.5.2.

¹⁶ *Id.* at § 7.1.

¹⁷ *Id.*

Article 9.5.1 (“Power Factor Design Criteria”) has been modified to delete inapplicable language and to provide that the power factor will be maintained within the variable range of -50 MVar and +200 MVar for an AC voltage range of 0.95 pu to 1.05 pu at the Point of Interconnection, and by including a cross-reference to Appendix G, which includes additional details regarding the manner in which Developer will maintain the power factor within these parameters. In addition, Article 9.5.2 (“Voltage Schedules”) has been revised to (i) delete inapplicable language; (ii) revise language such that it is tailored to the unique characteristics of the Merchant Transmission Facility; (iii) provide that voltage at the Point of Interconnection is within the range of 346kV to 362kV, in accordance with specific Connecting Transmission Owner engineering requirements; and (iv) in light of the Merchant Transmission Facility’s impact on the portion of the transmission system under Connecting Transmission Owner’s operational control, to require notification to *both* the Connecting Transmission Owner and NYISO operators in the event the Merchant Transmission Facility is unable to provide the requested assistance or maintain the specified power factor.

Several other provisions included in the generator-focused *pro forma* LGIA are simply not applicable in the context of a Merchant Transmission Facility or are otherwise required to be revised. Accordingly:

- The Parties have deleted Article 5.4 (“Power System Stabilizers”), and Article 9.5.4 (“Governors and Regulators”) in light of their inapplicability in the context of a Merchant Transmission Facility;
- The Parties have qualified Article 5.17.2 (“Representations and Covenants”) by the language, “as applicable to this Merchant Transmission Facility;”
- The Parties have revised Article 6.4 (“Right to Inspect”) to delete the reference to Power System Stabilizers;
- The Parties have added language regarding the right to observe testing of the Merchant Transmission Facility to the discussion in Article 6.3 (“Right to Observe Testing”) which is limited, in the *pro forma* LGIA, to Attachment Facilities testing;
- The Parties have revised Article 9.6.4 (“System Protection and Other Control Requirements”) to account for the potential tripping of not only the Merchant Transmission Facility, but also the Connecting Transmission Owner’s facilities;¹⁸
- The Parties have further revised Article 9.6.4 to account for the manner and intervals at which tests will be conducted related to System Protection Facilities;¹⁹

¹⁸ *Id.* at § 9.6.4.4.

¹⁹ *Id.* at § 9.6.4.6.

- The Parties have revised Article 9.6.5 (“Requirements for Protection”) to delete language regarding load interrupting capability and equipment that is not applicable to a Merchant Transmission Facility;
- The Parties have revised Article 24.4 (“Information Supplementation”) to delete references to voltage tests that are inapplicable to a Merchant Transmission Facility and to delete language regarding equipment to be tested, where such equipment is unique to generation facilities; and
- The Parties have further revised Article 24.4 to clarify that instead of voltage tests, Developer shall provide the Connecting Transmission Owner and NYISO validated test recordings showing the responses of the Merchant Transmission Facility.

B. Deviations to Reflect the Unique Characteristics of a Merchant Transmission Facility Spanning Two Separate Control Areas

The Parties further revised the *pro forma* LGIA to reflect the fact that the Interconnection Agreement governs the interconnection of a Merchant Transmission Facility, portions of which, including the Developer’s Attachment Facilities, are located beyond the New York Control Area in the PJM Interconnection (“PJM”). As a result, the Parties have inserted references to PJM, PJM’s Regional Entity, Reliability First Corporation (“RFC”), and Connecting Transmission Owner on the PJM side - Public Service Electric and Gas Company (“PSE&G”) - as applicable.²⁰ For the same reason, the Parties have revised the definition of “Initial Synchronization Date” in Article 1 to clarify that, as used in the Interconnection Agreement, such term relates to the synchronization “with the New York State Transmission System.” The Parties have also revised Section 6.1 (“Pre-Commercial Operation Date Testing and Modifications”) to clarify that with respect to injection of test energy, injection is only permitted in one direction: “injection into the New York Control Area” or “withdrawal from PJM.”

C. Deviations to Reflect the Absence of Connecting Transmission Owner’s Attachment Facilities, Stand Alone System Upgrade Facilities, and System Deliverability Upgrade Facilities

Due to the specific design characteristics of the Merchant Transmission Facility, only one party has Attachment Facilities - Developer. There are no Connecting Transmission Owner’s Attachment Facilities covered by the Interconnection Agreement. The Parties have therefore revised Article 5.8 to refer to “*the* Attachment Facilities” rather than “*their respective* Attachment Facilities.” Also, the Parties have revised the definition of “In-Service Date” in Article 1 such that it means the date upon which the Developer reasonably expects it will be ready to begin use of *either* Connecting Transmission Owner’s Attachment Facilities *or* System

²⁰ *Id.* at § 1 (Definition of “Applicable Reliability Council”); § 6.1 (“Pre-Commercial Operation Date Testing and Modifications”); § 8.2 (“Remote Terminal Unit”); § 9.4 (“Start-Up and Synchronization”); § 9.6.5 (“Requirements for Protection”).

Upgrade Facilities to obtain back feed power. The Parties have also made limited revisions to Article 5.11 to delete the requirement that Connecting Transmission Owner provide to Developer “as-built” drawing, information and documents for the Connecting Transmission Owner’s Attachment Facilities, of which there are none.

In addition since there are no System Deliverability Upgrade Facilities and no Stand Alone System Upgrade Facilities covered by this Agreement the Parties have deleted the reference in Appendix A to System Deliverability Upgrade Facilities and have revised references in the Appendices to refer simply to “System Upgrade Facilities” rather than “Stand Alone System Upgrade Facilities.”

D. Deviations to Reflect the Timing of the Execution of the Interconnection Agreement Vis-à-Vis the Award of Unforced Capacity Deliverability Rights

HTP has elected to seek both Energy Resource Interconnection Service and Capacity Resource Interconnection Service (“CRIS”).²¹ While the Class Year Study that included the Merchant Transmission Facility concluded that it was deliverable and, therefore, eligible for CRIS, the extent to which a transmission facility can be utilized to supply Unforced Capacity is dependent upon it receiving Unforced Capacity Deliverability Rights (“UDRs”), among other requirements. The Interconnection Agreement was executed prior to the project requesting or obtaining any UDRs. Accordingly, the Parties modified Article 4.3, which requires a Developer wishing to supply Energy, Installed Capacity or Ancillary Services to make application to do so in accordance with the NYISO Services Tariff. In light of unique interrelation between CRIS and UDRs involved in the context of a Merchant Transmission Facility, the Parties added language to Article 4.3 clarifying that if the Developer wishes to supply Energy, Installed Capacity or Ancillary Services, then Developer will make application to do so in accordance with the NYISO Services Tariff *and the NYISO Installed Capacity Manual*. The Parties further added, “[t]his Agreement does not in any way alter the Merchant Transmission Facility’s eligibility for Unforced Capacity Deliverability Rights to the extent such Unforced Capacity Deliverability Rights are requested by the Merchant Transmission Facility after execution of this Agreement.”²²

E. Deviations to Reflect Merchant Transmission Facility and Developer Attachment Facilities Performance Specifications

The Parties have revised Appendix G to tailor the language to the unique performance specifications of the Merchant Transmission Facility and Developer’s Attachment Facilities. Appendix G in the *pro forma* LGIA provides the detailed technical standards addressing, for example, low voltage ride-through and power factor requirements applicable to a Wind

²¹ *Id.* at § 4.1.1.

²² *Id.* at § 4.3.

Generating Plant. The Parties have replaced those inapplicable wind plant requirements with similar technical details as applicable to a Merchant Transmission Facility.

F. Deviations to Reflect Principles Associated with Construction Activity at Con Edison's West 49th Street Substation

The Parties have added a new appendix to the Interconnection Agreement - Appendix H. Appendix H provides the detailed principles associated with construction activity at Con Edison's West 49th Street substation. A similar such Appendix was added to interconnection agreements accepted by the Commission on April 29, 2008 in Docket No. ER08-618-000 and on December 28, 2010 in Docket No. ER-11-2199-000.²³

G. Modifications Expressly Contemplated by the LGIA²⁴

Article 2.2 of the Interconnection Agreement ("Term of Agreement") provides for a term of ten (10) years. The language of Article 2.2 specifically provides that the Parties may elect a term longer than ten (10) years. Exercising the rights afforded to them by this language, the Parties have elected to insert a term of twenty-five (25) years.

Similarly, the Parties have revised Article 29.2 ("Conflicts") as specifically contemplated by the *pro forma* LGIA. Article 29.2 provides for discrepancies or conflicts between or among terms and conditions of the cover agreement and its Appendices. The language of this Article specifically provides that the terms and conditions of the cover agreement shall be given precedence over the Appendices, "except as otherwise expressly agreed in writing by the Parties." Exercising the rights afforded to them by this last clause, the Parties added a provision to this article expressly agreeing that the terms and conditions of the Appendices shall take precedence over the provisions of the cover agreement in case of a discrepancy or conflict between or among the terms and conditions of same.

H. Ministerial Revisions

Finally, the Parties have corrected certain numbering errors,²⁵ formatting errors,²⁶ and other ministerial revisions, including (i) updating the Table of Contents to reflect the above-referenced revisions; (ii) adding a clarifying word, "associated" to Article 5.12 regarding Access Rights with respect to "associated safety rules and procedures;" and (iii) replacing the reference in Section 9.6.3 to NPCC criteria A-3 with a reference to the NPCC Regional Reliability

²³ See *New York Independent System Operator, Inc. and Consolidated Edison Company of New York, Inc.*, 123 FERC ¶ 61,093 (Apr. 29, 2008) and see also, *New York Independent System Operator, Inc. and Consolidated Edison Company of New York, Inc.*, Docket No. ER-11-2199-000 (December 28, 2010).

²⁴ The Joint Filing Parties note these modifications here, but do not consider them non-conforming.

²⁵ See, e.g., *id.* at 8.1 (revising Appendix "D" to Appendix "C").

²⁶ See, e.g., *id.* at Table of Contents.

Reference Directory that has replaced NPCC criteria A-3. These changes have no impact on the substantive provisions of the *pro forma* LGIA.

III. Request for CEII Treatment

Pursuant to the Commission's regulations at 18 C.F.R. §388.112 and 18 C.F.R. § 388.113, Con Edison requests that the one-line diagram included as part of Appendix A to the Interconnection Agreement (Figure A-1) be protected from disclosure as Critical Energy Infrastructure Information ("CEII"). This one-line diagram contains detailed, one-line schematics of transmission lines, the Gowanus substation and generation facilities that, if disclosed, could pose a threat to the security and the reliability of the New York State bulk power system. This diagram provides more than simply the general location of critical infrastructure. Unlike publicly available maps of power transmission lines and generation and substation facilities, this schematic shows the exact nature and specific location of facilities and transmission lines used to maintain the reliability of the New York State bulk power system. This diagram, in Con Edison's assessment, reveals such critical information related to the facilities and transmission depicted therein that, if disclosed, could be useful to a person seeking to disable the power grid. Therefore, the disclosure of this CEII diagram would pose a threat to the reliability of the New York State bulk power system and to the health and safety of New York residents. Moreover, the information revealed in this schematic reveals CEII which FERC has determined to be exempt from mandatory disclosure under 5 U.S.C. § 552(b)(7)(F). The diagram has been omitted from the Public version of the Interconnection Agreement included in this filing. The diagram is included only in the CEII version of the Interconnection Agreement in the filing.

All communications relating to this request for CEII treatment should be addressed to the following:

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IV. Effective Date

The Parties request an effective date of April 20, 2011, the date of execution of the Interconnection Agreement. The Commission has allowed interconnection agreements to become effective on the date of execution, even when that date precedes the date that an interconnection agreement is filed. Accordingly, the Parties request that the Commission grant a

waiver of its prior notice requirements to the extent necessary to accommodate this requested effective date.

V. Communications and Correspondence

Communications regarding this filing should be directed to:

For the NYISO

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*Designated to receive service.

VI. Documents Submitted

The NYISO submits the following documents:

- A. this filing letter;**
- B. a clean Public version of the Interconnection Agreement;**
- C. a blacklined Public version showing the Interconnection Agreement's changes from the body of the NYISO's *pro forma* LGIA and the addition of Appendix H; and**
- D. a clean CEH version of the Interconnection Agreement.**

VII. Service

The NYISO will send an electronic link to this filing to the official representative of each of its customers, to each participant on its stakeholder committees, to the New York Public Service Commission, and to the electric utility regulatory agency of New Jersey. In addition, a Public version of this filing will be posted on the NYISO's website at www.nyiso.com.

VIII. Conclusion

Wherefore, the NYISO respectfully requests that the Commission accept the attached Agreement effective as of April 20, 2011.

Respectfully submitted,

/s/ Sara B. Keegan

Sara B. Keegan

Counsel for the

New York Independent System Operator, Inc.

/s/ Paul A. Savage

Paul A. Savage

Counsel for Consolidated Edison Company of New
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