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25.11 Appendices

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APPENDIX 1 TO ATTACHMENT S—~~APPENDIX ONE~~— Allocation of Overage Cost

An Example of the Allocation of Overage Cost Among Class Year Developers, in

Accordance with Section 25.6.2 of Attachment S:

- There are five Developer projects in Class Year ~~200X~~20XX.
- The Annual Transmission Reliability Assessment (“ATRA”) determines that 10 System Upgrade Facilities (“SUFs”) are needed to reliably interconnect the Class Year ~~200X~~20XX projects, at a total cost of \$30 million.
- The Annual Transmission Baseline Assessment (“ATBA”) determines that 7 SUFs would be needed to meet reliability standards without the Class Year ~~200X~~20XX projects, at a total cost of \$20 million. (Note: The ATBA may have included some generic “projects” identical to or similar to some of the Class Year ~~200X~~20XX projects, but not necessarily. Also, some of the SUFs identified by the ATBA may be the same as those identified in the ATRA, but not necessarily.)
 - (1) The total cost of ATRA SUFs allocated to the Transmission Owners (“TOs”) is equal to the total cost of the ATBA SUFs (\$20 million).
 - (2) The total cost of ATRA SUFs allocated to the Developers, the Overage Cost, is the net of the total cost of the ATRA vs. ATBA SUFs (\$30 million - \$20 million = \$10 million).
 - (3) The ratio of the Overage Cost to the total cost of ATRA SUFs, the Overage Cost Percentage, is used to compute the Developers’ cost allocations for each ATRA SUF. In this example, the Overage Cost Percentage, the ratio, = \$10 million/\$30 million = 1/3 (The Developers pay 1/3 the cost of each ATRA SUF). Assume the cost of one of the ATRA SUFs (SUF#1) is \$3 million. The Developers’ share of the cost of that SUF = 1/3 x \$3 million = \$1 million.
 - (4) The Developers’ share of the cost of each ATRA SUF is allocated among all the

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Developers that have at least a *de minimus* impact causing the need for that SUF.

In this example, the ATRA determines that 3 of the 5 Class Year 200X projects have at least a *de minimus* impact causing the need for SUF#1.

- (5) The Developers' cost of an ATRA SUF is allocated to each Developer that has at least a *de minimus* impact in accordance with the Contribution Percentage, or ratio of that Developer's measured impact, its electrical contribution, to the sum of the measured impact of all the Developers that have at least a *de minimus* impact.

In this example, the measured impacts of the three projects are 200, 300, and 500 amps, respectively. Thus the pro rata shares of the projects' cost of SUF#1 are \$200K, \$300K, and \$500K, respectively.

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APPENDIX 2 TO ATTACHMENT S – Expedited Deliverability Study Agreement

THIS AGREEMENT is made and entered into this _____ day of _____, 20____ by and among _____, a _____ organized and existing under the laws of the State of _____ (“Developer”), the New York Independent System Operator, Inc., a not-for-profit corporation organized and existing under the laws of the State of New York (“NYISO”), and _____ a _____ organized and existing under the laws of the State of New York (“Connecting Transmission Owner”). Developer, NYISO and Connecting Transmission Owner each may be referred to as a “Party,” or collectively as the “Parties.”

RECITALS

WHEREAS, Developer is proposing to develop or owns an existing or facility requesting Capacity Resource Interconnection Service (“CRIS”); and

WHEREAS, the NYISO has confirmed that the Developer has satisfied the eligibility requirements for entering a Class Year Interconnection Facilities Study (“Class Year Study”) and an Expedited Deliverability Study; and

WHEREAS, Developer has elected to enter an Interconnection Facilities Expedited Deliverability Study in order to obtain or increase [Energy Resource Interconnection Service (“ERIS”)/ERIS and CRIS/CRIS only/an increase in CRIS] pursuant to Attachments S, X and Z to the NYISO’s Open Access Transmission Tariff (“OATT”), as applicable.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Section 30.1 of Attachment X to the NYISO’s OATT or Section 25.1.2 of Attachment S to the NYISO’s OATT.
- 2.0 Developer elects to be evaluated for [ERIS/ERIS and CRIS/CRIS only/an increase in CRIS] and NYISO shall cause to be performed an Interconnection Facilities Expedited Deliverability Study consistent with Attachments S and X to the ISO OATT. The terms of the above-referenced OATT Attachments, as applicable, are hereby incorporated by reference herein.
- 3.0 The scope of the Expedited Deliverability Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 For Developers seeking ERIS, the Interconnection Facilities Study report (i) shall

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provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the facility to the New York State Transmission System (or Distribution System, as applicable) and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Reliability Impact Study. For Developers seeking CRIS, ~~The Expedited Deliverability~~ Interconnection Facilities Study report (i) shall identify whether ~~System Deliverability Upgrades are required for~~ the facility to be fully deliverable at its requested level of CRIS; and (ii) ~~if not fully deliverable,~~ shall determine the facility's deliverable MW ~~provide a description and estimated cost of any required System Deliverability Upgrades, to the extent required, based on the Developer's election under Section 25.7.7.1 of Attachment S to the ISO OATT. For Developers seeking both ERIS and CRIS, the Interconnection Facilities Study report shall provide all of the information described in this Section 4.0.~~

- 5.0 The Developer shall provide a deposit of [~~\$100,000 if requesting evaluation for ERIS or ERIS and CRIS/\$50,000 if requesting only CRIS~~\$30,000] for the performance of the ~~Expedited Deliverability Interconnection Facilities~~ Study. The time for completion of the ~~Expedited Deliverability Interconnection Facilities~~ Study is specified in Attachment A.

NYISO shall invoice Developer on a monthly basis for the expenses incurred by NYISO and the Connecting Transmission Owner on the ~~Expedited Deliverability Interconnection Facilities~~ Study each month, as computed on a time and materials basis in accordance with the rates attached hereto. Developer shall pay invoiced amounts to NYISO within thirty (30) Calendar Days of receipt of invoice. NYISO shall continue to hold the amounts on deposit until settlement of the final invoice.

6.0 Miscellaneous.

- 6.1 Accuracy of Information. Except as Developer or Connecting Transmission Owner may otherwise specify in writing when they provide information to NYISO under this Agreement, Developer and Connecting Transmission Owner each represent and warrant that the information it provides to NYISO shall be accurate and complete as of the date the information is provided. Developer and Connecting Transmission Owner shall each promptly provide NYISO with any additional information needed to update information previously provided.

- 6.2 Disclaimer of Warranty. In preparing the ~~Expedited Deliverability Interconnection Facilities~~ Study, the Party preparing such study and any

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subcontractor consultants employed by it shall have to rely on information provided by the other Parties, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither the Party preparing the Expedited Deliverability Interconnection Facilities Study nor any subcontractor consultant employed by that Party makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy, content, or conclusions of the Expedited Deliverability Interconnection Facilities Study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

6.3 Limitation of Liability. In no event shall any Party or its subcontractor consultants be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the Expedited Deliverability Interconnection Facilities Study or any reliance on the Expedited Deliverability Interconnection Facilities Study by any Party or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall any Party or its subcontractor consultants be liable for any delay in delivery or for the non-performance or delay in performance of its obligations under this Agreement.

6.4 Third-Party Beneficiaries. Without limitation of Sections 6.2 and 6.3 of this Agreement, Developer and Connecting Transmission Owner further agree that subcontractor consultants employed by NYISO to conduct or review, or to assist in the conducting or reviewing, an Expedited Deliverability Interconnection Facilities Study shall be deemed third party beneficiaries of these Sections 6.2 and 6.3.

6.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 30.6.5, shall continue in effect until the Interconnection Facilities Expedited Deliverability Study for Developer's facility is completed and approved by the NYISO Operating Committee. Developer or NYISO may terminate this Agreement upon the withdrawal of the Developer's project from the Interconnection Facilities Study pursuant to Section 25.7.7.1 of Attachment S from the NYISO interconnection queue.

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- 6.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to any choice of laws provisions.
- 6.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 6.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 6.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 6.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 6.11 Independent Contractor. NYISO shall at all times be deemed to be an independent contractor and none of its employees or the employees of its subcontractors shall be considered to be employees of Developer or Connecting Transmission Owner as a result of this Agreement.
- 6.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such party's right to insist or rely on any such provision, rights and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 6.13 Successors and Assigns. This Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

New York Independent System Operator, Inc.

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By: _____

Title: _____

Date: _____

[Insert name of Connecting Transmission Owner]

By: _____

Title: _____

Date: _____

[Insert name of Developer]

By: _____

Title: _____

Date: _____

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Attachment A To Appendix 2 - Expedited Deliverability Interconnection Facilities Study Agreement

SCHEDULE FOR CONDUCTING THE INTERCONNECTION FACILITIES EXPEDITED DELIVERABILITY STUDY

The NYISO and Connecting Transmission Owner shall use Reasonable Efforts to complete the study and issue an Expedited Deliverability Interconnection Facilities Study report to the Developer within the following number of days four months after of receipt of an executed copy of this Expedited Deliverability Interconnection Facilities Study Agreement:

_____ estimated completion date (i.e., Operating Committee approval of the Class Interconnection Facilities Study) for Class Year 20 ____ Interconnection Facility Study for the Annual Transmission Reliability Assessment required by Attachment S to the ISO OATT: ____/____/_____, if no additional System Deliverability Upgrade studies are required.

- Study work (other than data provision and study review) that may be requested of the Transmission Owner by the NYISO is currently not specified, but will be specified in a Study Work Agreement to be developed between the NYISO and Transmission Owner.
- Pursuant to Article 5.0 of this Agreement, the rates for the study work are attached as Exhibit 1.

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**Attachment B To Appendix 2 - Expedited Deliverability Interconnection Facilities
Study Agreement**

DATA FORM TO BE PROVIDED BY DEVELOPER

**WITH THE INTERCONNECTION FACILITIES EXPEDITED DELIVERABILITY
STUDY AGREEMENT**

1. Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
2. Finalize and specify your Interconnection Service evaluation election for the Class-Year Study. Developer should specify either Energy Resource Interconnection Service (“ERIS”) alone, both ERIS and some Specify the MW level of Capacity Resource Interconnection Service (“CRIS”) requested or CRIS only (e.g., if your facility is already interconnected taking only ERIS, you may elect to be evaluated for CRIS only); provided however, that CRIS requests are subject to the limits specified in Section 25.8.1 of Attachment S to the ISO OATT Evaluation election:

ERIS: _____

CRIS: _____ (For a Resource with Energy Duration Limitations that is requesting CRIS, indicate the maximum injection capability over the selected duration (e.g., 10 MWh over 4 hours))

3. Proposed Schedule:

Begin Construction	Date: _____
In-Service	Date: _____
Initial Synchronization	Date: _____
Generation Testing	Date: _____
Commercial Operation	Date: _____

4. Additional Information Required as Part of this Data Form:

All facilities, including BTM:NG Resources, Energy Storage Resources Resources with

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Energy Duration Limitations, and Small Generating Facilities comprised of multiple units of the same or different technology type, and Class Year Transmission Projects, must also complete Section A, below.

A. Additional Information:

Nameplate MW: _____

Nameplate MVA: _____

Auxiliary Load: _____

For temperature sensitive units, provide MW vs. temp curves and indicate maximum summer and winter net capability below:

- Maximum summer net (net MW = gross MW minus auxiliary loads total MW) which can be achieved at 90 degrees F: _____
- Maximum winter net (net MW = gross MW minus auxiliary loads total MW) which can be achieved at 10 degrees F : _____

1. One set of metering is required for each generation connection to the new ring bus or existing Connecting Transmission Owner station. Number of generation connections: _____
2. On the one-line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
3. On the one-line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps
4. Will an alternate source of auxiliary power be available during CT/PT maintenance?
_____ Yes _____ No
5. Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? _____ Yes _____ No
(If yes, indicate on one-line diagram).
6. What type of control system or PLC will be located at the Developer's facility?

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7. What protocol does the control system or PLC use?

8. Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

9. Physical dimensions of the proposed interconnection station:

10. Bus length from generation to interconnection station:

11. Line length from interconnection station to Connecting Transmission Owner's transmission line.

12. Tower number observed in the field. (Painted on tower leg):

13. Number of third-party easements required for transmission lines, if known:

14. Describe any injection-limiting equipment if the facility is requesting ERIIS below its full output:

BTM:NG Resources

15. In addition to the above information, as applicable, for BTM:NG Resources, please also provide the following information:

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Interconnection Customer or Customer-Site Load: _____ kW (if none, so state)

Existing load? Yes _____ No _____

If existing load with metered load data, provide coincident Summer peak load: _____

If new load or existing load without metered load data, provide estimated coincident Summer peak load: _____

Is the new or existing load in the Transmission Owner's service area?

_____ Yes _____ No _____ Local provider: _____

Resources with Energy Duration Limitations

15. In addition to the above information, as applicable, for Resources with Energy Duration Limitations, please also provide the following information:

Energy storage capability (MWh): _____

Minimum Duration for full discharge (i.e., injection) (Hours): _____

Minimum Duration for full charge (i.e., withdrawal) (Hours): _____

Maximum withdrawal from the system (i.e., when charging) (MW): _____

Inverter manufacturer, model name, number, and version: _____

Maximum sustained injection (in MW) over the Developer-selected duration:

Primary frequency response operating range for electric storage resource:

Minimum State of Charge: _____ (%) Maximum State of Charge: _____ (%)

If requesting CRIS, indicate the maximum injection capability over the selected duration (e.g., 2.5 MW over 4 hours for a total of 10 MWh):

a. Describe the composition of assets (including MW level) within the Small

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Generating Facility, including load reduction assets (e.g., 5 MW wind facility, 2 MW Energy Storage Resource and a load reduction resource with a maximum of 1 MW of load reduction):

b. Maximum Injection Capability of entire Small Generating Facility over 1 hour:

c. If the Small Generating Facility includes a Resource with Energy Duration Limitations and is requesting CRIS, indicate the maximum injection capability for the entire Small Generating Facility over the selected duration (e.g., 10 MWh over 4 hours):

d. Provide the following information for each unit within the Small Generating Facility (if unchanged from the information provided with the Small Generator Interconnection Request form, as applicable, indicate “No Change”:

Energy Source: Solar Wind Hydro Hydro Type (e.g. Run-of-River):
Diesel Natural Gas Fuel Oil Other (state type)

Prime Mover: Fuel Cell Recip Engine Gas Turb Steam Turb
Microturbine PV Other

Type of Generator: Synchronous Induction Inverter

Generator Nameplate Rating: kW (Typical) Generator Nameplate kVAR:

If solar array, fixed, 1-axis, 2-axis, 2-axis flat panel, 2-axis CPV, CSP, etc.):

Interconnection Customer or Customer-Site Load: kW (if none, so state)

Existing load? Yes No

If existing load with metered load data, provide coincident Summer peak load:

If new load or existing load without metered load data, provide estimated coincident Summer peak load, together with supporting documentation for such estimated value:

Typical Reactive Load (if known):

Maximum Physical Export Capability Requested: kW

List components of the Small Generating Facility equipment package that are currently certified:

<u>Equipment Type</u>	<u>Certifying Entity</u>
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1. _____
2. _____
3. _____
4. _____
5. _____

Is the prime mover compatible with the certified protective relay package? Yes No

Generator (or solar collector)

Manufacturer, Model Name & Number: _____

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) (Winter)

Nameplate Output Power Rating in kVA: (Summer) (Winter)

Individual Generator Reactive Capability in kVAR

Leading: _____ Lagging: _____

If wind, total number of generators in wind farm to be interconnected pursuant to this

Interconnection Request: _____

Generator Height: _____ Single phase Three Phase

If a Resource with Energy Duration Limitations:

Inverter manufacturer, model name, number, and version: _____

Energy storage capability (MWh): _____

Minimum Duration for full discharge (i.e., injection) (Hours): _____

Minimum Duration for full charge (i.e., withdrawal) (Hours): _____

Maximum withdrawal from the system (i.e., when charging) (MW): _____

Maximum sustained one-hour injection in MW hours: _____

Primary frequency response operating range: _____

Minimum State of Charge: (%) Maximum State of Charge: (%)