Market Services Tariff Rate Schedule 5

Payments and Certain Charges For Black Start and System Restoration Services

This Rate Schedule applies to payments to Generators who provide Black Start and System Restoration Services to transmission facilities that are part of the ISO's Black Start and System Restoration plan (the ISO Plan"); to payments to existing Generators of such services that are part of Transmission Owners' individual Black Start and System Restoration Services plans for their Transmission Districts; and to charges for such services that are allocated to Transmission Customers in the Consolidated Edison Company of New York, Inc.'s ("Consolidated Edison") Transmission District.

1.0 Requirements

The ISO shall develop and periodically review the ISO Plan. The ISO may amend the ISO Plan to account for changes in system configuration if the ISO determines that additional Black Start and System Restoration Services are needed. The ISO shall have the flexibility to seek bids for new resources when it amends the current ISO Plan. The ISO shall establish procedures for acquiring Black Start and System Restoration Services and testing selected Generators providing this service. The ISO shall make Black Start and System Restoration Services payments only to those selected Generators that have appropriate equipment installed and available for service at the request of the ISO.

The full restoration of the NYS Power System may require additional Black Start and System Restoration Services from Generators, which are located in local Transmission Owner areas and which are not presently listed in the ISO Plan. Although the ISO Plan will restore a major portion of the NYS Power System there are portions of the NYS Power System that will remain under Transmission Owner restoration control. Where the Transmission Owner's restoration plan requires additional Black Start and System Restoration Services, the ISO will make payments for such local services directly to the Generators that provide it, under the terms of this Rate Schedule. The LSEs in those local Transmission Owner areas will be additionally charged for those services by the ISO under the ISO OATT. Generators, which are obligated to provide Black Start and System Restoration Services as a result of divestiture contract agreements will not receive ISO payments for those services if they are already compensated for such service as part of those divestiture contracts.

2.0 Payment to Generators Under the Black Start and System Restoration Services Plans Developed by the ISO and by Individual Transmission Owners Except for Existing Generators Under the Consolidated Edison Plan

By May 1st of each year, Generators which were selected to provide Black Start and System Restoration Services under the Black Start and System Restoration Services plans developed by the ISO and by individual Transmission Owners, except for existing Generators within the Consolidated Edison Transmission District, must provide the following cost information to the ISO based upon FERC Form No. 1 or equivalent data:

- Capital and fixed operation and maintenance costs associated with only that equipment which provides Black Start and System Restoration Services capability;
- Annual costs associated with training operators in Black Start and System Restoration Services; and
- Annual costs associated with Black Start and System Restoration Services testing in accordance with the ISO Plan or the plan of an individual Transmission Owner.
 Each Generator will be paid on the basis of its costs filed with the ISO. The daily rate for Black Start and System Restoration Services will be determined by dividing the Generator's annual cost by the number of days in the year from May 1st through April 30th of the following year.

Generators that provide Black Start and System Restoration Services shall conduct tests that are deemed necessary and appropriate for providers of these services under the ISO Procedures or local Transmission Owner procedures, as applicable. Any Generator that is awarded Black Start and System Restoration Services payments and that fails a test shall forfeit all payments for such services since its last successful test. Payments to that Generator shall not resume until it successfully passes the test. **3.0 Payments to and Charges for Existing Generators Providing Black Start and System Restoration Services Under the Consolidated Edison Transmission District** Generators that are in-service as of October 1, 2005 and are listed in the Consolidated Edison Black Start and System Restoration Services plan filed with the ISO as of that date shall be paid for those services in accordance with Section 3.1 below. Charges to fund such payments shall be allocated among Transmission Customers in the Consolidated Edison Transmission District under Section 3.2 below. Generators that are in service as of October 1, 2005 and are listed in the Consolidated Edison Black Start and System Restoration Services plan are deemed to have satisfied testing requirements for the testing period that ends April 30, 2005.

3.1 Payments to Existing Generators Under the Consolidated Edison Plan

Existing Generators shall be eligible for Black Start and System Restoration Services payments, provided that they: (i) successfully test all necessary equipment in compliance with the Consolidated Edison testing criteria that are included in the ISO Procedures and provided that the testing criteria conform to Appendix I to this Rate Schedule; and (ii) commit to be available to provide these services for an initial minimum period of three years. At the end of the second year of the initial three year period a Generator, or Consolidated Edison, may give notice that the Generator will no longer be part of the end of third year. For subsequent periods, each Generator, or Consolidated Edison, may give notice at the end of every subsequent two year-period, that the Generator will no longer be part of the Consolidated Edison plan, so that a rolling three-year commitment is maintained.

Eligible existing Generators in the Consolidated Edison Transmission District shall receive annual compensation for providing Black Start and System Restoration Services based on unit type and the level of their interconnection to the New York State Transmission System pursuant to the following table.

	Steam Turbine	Gas Turbine
345 kV	\$350,000/yr/unit	\$350,000/yr/site
138 kV	\$300,000/yr/unit	\$300,000/yr/site

These annual amounts will be paid to existing Generators in twelve equal monthly payments. The monthly payments shall also include compensation for legitimate, verifiable, and adequately documented operator training costs associated with readiness to provide Black Start Service and System Restoration Services, and for legitimate, verifiable, and adequately documented variable costs associated with annual tests of Black Start and System Restoration Services capability, that existing Generators invoice to the ISO, subject to the ISO's independent review.

Eligible existing Generators shall conduct annual Black Start and System Restoration Services capability tests and shall ensure that all relevant personnel are trained in black start and restoration operations. Detailed information about the tests and training standards shall be set forth in the ISO Procedures, which shall incorporate criteria developed by Consolidated Edison. The core features of the testing criteria are included in this ISO Services Tariff as Appendix I to this Rate Schedule and the ISO Procedures may not be revised in a manner that creates an inconsistency between them and Appendix I. Upon successful completion of a test, a Generator shall submit a certification form to the ISO in the form provided in Appendix II to this Rate Schedule. If a Generator fails a Black Start and System Restoration Services capability test, it shall be subject to a *pro rata* reduction in its annual payments based on the elapsed time between the unsuccessful test and a subsequent successful test.

The ISO shall also reimburse existing Generators for equipment damage that the ISO reasonably finds: (1) to have resulted from operating such equipment in response to operational orders from the ISO, or Consolidated Edison, pursuant to the ISO Services Tariff or the ISO OATT, (2) that reasonably available and customary insurance was not available for the damages incurred and (3) would not have occurred but for the Generator's provision of Black Start and System Restoration Services. Further, the ISO

shall reimburse the owners of the Astoria Station steam units 3, 4 and 5 and Astoria Station gas turbines 4-3 and 4-4 for equipment upgrades that the ISO reasonably finds are needed to minimize the risk of equipment damage at the Astoria Station site in the Consolidated Edison Transmission District. The burden of making such showings will be upon the owners of the specified Generators. Any such reimbursement shall be made available for review by the Commission upon request by a Market Participant.

3.2 Charges to Support Payments to Existing Generators Under the Consolidated Edison Plan

The ISO shall collect, on a monthly basis, a charge from each Transmission Customer in the Consolidated Edison Transmission District in order to fund the payments described above in Section 3.1. The charge shall be equal to the product of (a) the Transmission Customer's hourly Load Ratio Share of Load in the Consolidated Edison Transmission District, and (b) the total payments for existing Black Start and System Restoration Services in that Transmission District under Section 3.1, divided by the total number of hours in the month.

3.3 Payments to New Generators that Provide Black Start and System Restoration Services in the Consolidated Edison Transmission District

New Generators that agree to provide Black Start and System Restoration Services within the Consolidated Edison Transmission District shall be treated as set forth in Section 2.0 above.

Rate Schedule 5. Appendix I

Core Features Of Testing Criteria Black Start and Restoration Services Testing Requirements Consolidated Edison Transmission District

General

- Testing shall be performed annually, consistent with Consolidated Edison Company of New York, Inc. ("Consolidated Edison") system operation requirements to qualify for Black Start and Restoration Services payments during the annual compensation period, which shall be May 1st through April 30th.
- 2. A test will be considered successful if it is completed in accordance with the written black start test procedures that have been adopted by the plant.

Scheduling a Test

- 1. The annual test period shall be November 1st to April 30th, and may be reasonably extended by mutual agreement among the plant owner, Consolidated Edison and the ISO, without financial penalty.
- 2. The test date must be agreed upon by Consolidated Edison, the plant owner and the ISO.
- 3. An annual black start test may be performed prior to a maintenance outage only if there is no other scheduling option within the test period.
- 4 If the annual test is unable to be completed during the test period due to a forced outage or force majeure event, Consolidated Edison and the plant owner will conduct the test outside the test period without a *pro rata* reduction in annual payments.
- 5. If a black start test is not successful, the plant owner will have a reasonable opportunity to reschedule and conduct a subsequent test.

Gas Turbine Facility Testing Requirements

- 61. A qualifying test of a gas turbine must be conducted when the unit is in a cold condition, i.e., the unit will be off line and will be brought on line specifically to conduct the black start tests.
- 2. The gas turbine-Generator units to be tested will be off line at the start of the test and will be isolated from all external Consolidated Edison light and power sources.
- 3. The black start test must demonstrate that (i) the designated black start unit can be started and can energize the isolated light and power bus; and (ii) that the light and power source is adequate for the purpose of bringing the other units on line. Part (ii) must be demonstrated by starting up an additional gas turbine from the light and power bus that has been energized through Part (i) of the test. Site specific appendices will be developed to reflect these general criteria.
- 4. Once isolated from Consolidated Edison's light and power, the gas turbine facility will have 90 minutes to ready the equipment and to request permission to synchronize the additional generating unit to a live bus on the Consolidated Edison transmission system. When authorized by the Consolidated Edison System Operator, the gas turbine-generator will be asked to close its breaker. Once the gas turbine-generator unit has synchronized and closed its breaker onto the transmission bus, the test will be considered successful.
- 5. A maximum of two (2) Consolidated Edison System Operations or Engineering personnel are allowed to be onsite to witness the test. At its discretion, the ISO may have its representatives onsite to witness the test. If an ISO representative is not onsite, a representative from Consolidated Edison and the plant owner will initiate calls to ISO operations personnel to signal the start time, completion time and outcome of the test.
- 6. Upon successful completion of the test, the generator owner shall submit a certification form, the template of which shall be included in the ISO tariff, to the ISO and Consolidated Edison.
- 7. Consistent with past practice, plant owners will continue to test on a monthly basis their standby diesel generators, black start gas turbines and UPS/battery back up systems. If any of these critical systems are found to be non-operational or otherwise unavailable, the plant owner will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.

Steam Turbine Facility Testing Requirements

- 1. A qualifying test of a steam turbine must be conducted while the unit is in a hot condition, *i.e.*, the unit must be on line and firm to the system prior to the test. The plant owner, the ISO and Consolidated Edison shall agree on a schedule for this test. The agreed upon test date shall be deemed firm as of 48 hours prior to the scheduled beginning of the test. A firm test may not be called off or deferred except (1) by the ISO, for system or local reliability reasons; or (2) if the unit is unable to be in hot condition because it was not selected by the ISO to run on the day prior to the test. As is the case for any ISO-approved outage, the plant owner shall not offer the unit into the Day Ahead Market for operation during the test the day, and such non-offering into the market shall be deemed not to diminish the unit's availability.
- 2. The steam unit will be required to start up using energy and voltage control from a gas turbine-generator to energize its internal light & power bus, and be ready to synchronize to an energized transmission system when directed by the Consolidated Edison System Operator.
- 3. A test shall be considered successful if, after isolation from the Consolidated Edison transmission system, the hot steam unit is synchronized to the transmission system in no more than 6 hours after the completion of the isolation and is firm to the system and operating at minimum load in no more than 2-8 hours after closing its breaker<u>the</u> completion of the isolation.
- 4. A maximum of two (2) Consolidated Edison System Operations or Engineering personnel will be allowed onsite to witness the test. ISO representatives may be onsite to witness the test. If an ISO representative is not onsite, a representative from Consolidated Edison and the plant owner will initiate calls to ISO operations personnel to signal the start time, completion time and outcome of the test.
- 5. Upon successful completion of the test, Consolidated Edison shall SRE the unit until midnight of the test day or until the unit's reference minimum run time has elapsed, whichever is earlier.
- 6. Upon successful completion of the test, the generator owner shall submit a certification form, the template of which shall be included in the ISO Services Tariff, to the ISO and Consolidated Edison.

7. Consistent with past practice, plant owners will continue monthly tests of standby diesel generators; black start gas turbines and UPS/battery back up systems. If any of these critical systems are found to be non-operational or otherwise unavailable, the plant owner will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.

Rate Schedule 5. Appendix II

[Name of Generator Owner] hereby certifies that the [name/location of generation equipment] successfully performed a Black Start and System Restoration Services test on [date] in accordance with the ISO Procedures. [Name of Generator Owner] further certifies that it identifies and maintains a list of critical components in its blackstart facilities (e.g., batteries, diesel back-up generators, inverters etc.) and has performed tests to verify the condition of these critical components in accordance with good industry practice.

Signature of Officer