

Rate Schedule 5. Appendix I
~~Core Features of Testing Criteria for Black Start and Restoration Services Testing~~
~~Requirements Consolidated Edison Transmission District Capability Tests Pursuant to~~
Section 15.5.4.1 of Rate Schedule 5

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I. General

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1. 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~~Black Start Capability 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~~ test protocols described below.

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II. Scheduling a Test

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1. The annual test period shall be November 1st to April 30th and may be reasonably extended without financial penalty by mutual agreement among the ~~plant~~ owner Generator, Consolidated Edison and the ISO, ~~without financial penalty.~~
2. The test date must be agreed upon by the Generator, Consolidated Edison, the ~~plant owner~~ and the ISO.
3. An annual ~~black start test~~ Black Start Capability 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~~ Black Start Capability 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~~ Generator will conduct the test outside the test period without a *pro rata* reduction in annual payments.

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5. If a ~~black start test~~ Black Start Capability Test is not successful, the ~~plant owner~~Generator will have a reasonable opportunity to reschedule and conduct a subsequent test.

III. Gas Turbine Facility Unit Testing Requirements

1. A qualifying ~~test~~Black Start Capability Test of a gas turbine unit 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~~Black Start Capability 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 unit 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~~ unit 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~~ unit 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~~Black Start Capability Test will be considered successful.

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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~~ the Generator 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~~ Black Start Capability Test, the ~~generator owner~~ Generator shall submit a certification form to the ISO, – in the form provided in Appendix HIII to this Rate Schedule – indicating whether its unit successfully completed its annual Black Start Capability Test, to the ISO and Consolidated Edison.
7. ~~Consistent with past practice, plant owners will continue to~~ Generators will 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~~ Generator will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.

IV. Steam Turbine ~~Facility~~ Unit Testing Requirements

1. A qualifying ~~test~~ Black Start Capability Test of a steam turbine unit 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~~ Generator, 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

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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~~ Generator 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 turbine unit will be required to start up using energy and voltage control from a gas turbine ~~generator unit~~ 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~~ Black Start Capability Test shall be considered successful if, after isolation from the Consolidated Edison transmission system, the hot steam turbine 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 8 hours after the 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~~ Generator 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~~ Black Start Capability 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~~ Generator shall submit a certification form ~~to the ISO --~~, in the form provided in Appendix ~~HIII~~ to this Rate Schedule, ~~-- indicating whether its unit successfully completed its annual Black Start Capability Test to the ISO and Consolidated Edison.~~
7. Consistent with past practice, ~~plant owners~~ Generators 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~~ Generator will notify Consolidated Edison and the ISO within 36 hours and provide a schedule for their repair and return to service.