

## **5.18 Generator Outages and Generator Obligations While in These Outages**

This Section 5.18 shall apply to a Generator in any outage state that started on or after May 1, 2015.

A Market Participant with a Generator in the NYCA that is in any outage state shall report this status to the ISO pursuant to ISO Procedures.

Except when a Generator is not subject to the requirements of this Section 5.18 because it is only participating in the ISO Markets as part of an Aggregation of Distributed Energy Resources, if the Market Participant that administers a Generator's participation in the ISO Administered Markets is a different entity than the entity that possesses the ultimate decision-making authority concerning the deactivation-, outage or repair of the Generator, then the entity with ultimate decision-making authority regarding the deactivation, outage or repair of the Generator must agree, as part of the registration of the Generator with the ISO for participation in the ISO Administered Markets, that it will be subject to and comply with the outage state rules set forth in this Section 5.18 of the ISO Services Tariff. Except when a Generator is not subject to the requirements of this Section 5.18 because it is only participating in the ISO Markets as part of an Aggregation of Distributed Energy Resources, the entity with ultimate decision-making authority regarding the deactivation, retirement and/or repair of the Generator shall, along with the Market Participant, be subject to all of the requirements of Section 5.18 of the ISO Services Tariff that apply to a Market Participant.

A Hybrid Storage Resource ("HSR") utilizes two or more component Generators to participate in the ISO-Administered Markets. Whenever a HSR loses one or more of its component Generators, the HSR is required to derate its capability as soon as practicable in real-time and update its UOL, LOL and ORL to accurately reflect its current operating capabilities.

The HSR itself will not enter an outage state. Instead, each of the HSR's component Generators is subject to the outage state rules (including the reporting requirements) as an individual Resource. As explained below, the derate or outage of one HSR Generator may affect how the HSR participates in the ISO's Energy and Ancillary Services Markets going-forward, using its remaining Generators. The rules below address both (a) the requirements that apply to the specific HSR component Generator that is in a Forced Outage or ICAP Ineligible Forced Outage, and (b) changes to the market participation rules that specify how the HSR must operate its Generators that remain in-service.

#### **5.18.1 Forced Outages and Commenced Repair Determinations**

5.18.1.1 A Market Participant with a Generator in a Forced Outage shall keep the ISO informed as to progress of its Generator's repairs pursuant to ISO Procedures. A Market Participant may keep its Generator in a Forced Outage beyond the last day of the month which contains the 180th day of its Forced Outage only if it has Commenced Repair of its Generator. In addition, if the ESR component of a Hybrid Storage Resource is in a Forced Outage, then the HSR may only continue to participate in the Energy market beyond the last day of the month which contains the 180th day of the component ESR's Forced Outage if the Market Participant has either Commenced Repair of the ESR, or has Commenced Repair to reconfigure its remaining Generators to permit them to participate in the markets as independent Generators, as explained below. A Market Participant that anticipates its Generator will not be able to return to the Energy market before the last day of the month which contains the 180th day of its Forced Outage and which desires to remain eligible to be in the Installed

Capacity market beyond the 180th day shall provide a Repair Plan to the ISO by the 120th day of the Forced Outage.

If a HSR's ESR experiences a Forced Outage and is seeking a Commenced Repair determination, the Repair Plan must specify either (a) that the ESR is being repaired and returned to the Energy market consistent with the rules in this Section 5.18.1.1, or (b) that the ESR will not return, and instead the remaining Generators will be reconfigured to each participate in the ISO-Administered Markets as distinct Intermittent Power Resources, and/or as a Limited Control Run-of-River Hydro Resource, going-forward. A proposed reconfiguration must be completed in the same timeframes and subject to the same rules as a repair. So long as a proposed reconfiguration is diligently pursued, consistent with the ongoing requirement to demonstrate that the Market Participant has Commenced Repair, the remaining intermittent and hydroelectric Generators may continue to participate as a HSR, subject to the rules specified below, until the reconfiguration is complete.

5.18.1.1.1 If a HSR's ESR experiences a Forced Outage, the ISO will, as soon as practicable, temporarily remove the HSR from service to ensure that it does not receive infeasible Energy or Ancillary Services schedules. The HSR may return to participating in the Energy and Ancillary Services Markets using its remaining Generators after the HSR's commitment parameters (including but not limited to UOL, LOL, ORL and ramp rates) and Bids have been updated to reflect its reduced capability, and the HSR's ability to provide Regulation Service or Operating Reserve (if any) has been removed.

If the Market Participant elects not to return its HSR to participating in the Energy and Ancillary Services Markets while the ESR component is in a Forced Outage, then a HSR's Intermittent Power Resource and/or Limited Control Run-of-River Hydro Resource components that did not suffer a Forced Outage and are fully capable of operating and providing power to the grid will be permitted to enter Inactive Reserves while the Market Participant diligently pursues either i) the repair or replacement of the HSR's ESR component, or ii) the reconfiguration of the remaining Generators so that they can operate as independent Intermittent Power Resources and/or a Limited Control Run-of-River Hydro Resource on a going-forward basis.

If a Market Participant elects to temporarily return its HSR to participating in the markets without the ESR, the HSR will be expected to follow the ISO's dispatch instructions. However, without the ESR there may be times when the HSR is not physically capable of following the ISO's dispatch instructions in real-time. To address these potential physical limitations, in addition to the ISO Tariff rules that apply financial incentives and disincentives to encourage Resources to follow the ISO's dispatch instructions, if the HSR is not following ISO dispatch instructions and the ISO system operators or a Transmission Owner determine that the HSR's failure to follow its dispatch instructions is detrimentally impacting NYCA or local reliability, then the ISO may instruct the HSR to cease operating for the remainder of the real-time dispatch day.

5.18.1.1.2 If one or more of a HSR's Intermittent Power Resources or its Limited Control Run-of-River Hydro Resource experience a Forced Outage, then the

Market Participant shall promptly submit derates that reflect the HSRs reduced capabilities. So long as its ESR remains available, the HSR is expected to continue to participate in the ISO-Administered Markets as a HSR using its reduced capability, while the component Generator(s) that suffered a Forced Outage will be subject to the outage states process.

5.18.1.2 A Repair Plan shall include a work plan, with milestones, or set of necessary actions, and shall provide the time it is expected to take to complete each task and describe the repair of the Generator's equipment related to electric production, fuel or station power supply or transmission interconnection, as appropriate, that was either affected by the Forced Outage or otherwise makes the unit available for the Energy market. The Repair Plan's milestones shall include, in appropriate circumstances: damage assessments, engineering assessments, initial cost estimates, purchase orders, inspection reports, initial safety assessments, hazardous material abatement plans, and labor mobilization plans. The Repair Plan shall include the date the Market Participant expects the Generator to be repaired and available for the Energy market (return date) which return date: i) shall be reasonable, ii) may be provided as a good faith estimate, and iii) shall be updated to the extent new information becomes available. -The return date or good faith estimate of a return date that a Market Participant provides for its Generator shall be reasonable if it is comparable to the return date that would be included in a Credible Repair Plan pursuant to Section 5.18.1.5 of this Services Tariff. As explained in Section 5.18.1.1 above, a Repair Plan can alternatively encompass the reconfiguration of a HSR's remaining Generators to

change how they will participate in the ISO's markets.

5.18.1.3 Market Participants requesting that the NYISO determine, pursuant to Services Tariff Section 23.4.5.6.2, that their Generator has experienced a Catastrophic Failure, or that Exceptional Circumstances will delay the submission of data necessary for the ISO to perform an audit and review pursuant to Section 23.4.5.6.2, shall submit their requests, with necessary supporting data, to the NYISO by the 120<sup>th</sup> day of the Forced Outage if they desire the determination to be issued by the 160<sup>th</sup> day of the Forced Outage of their Generator.

5.18.1.4 A Market Participant has Commenced Repair of its Generator if it: i) has decided to pursue the repair of its Generator or the reconfiguration of a HSR's remaining Generator(s), and based on the ISO's technical/engineering evaluation, ii) has a Repair Plan for the Generator(s) that is consistent with a Credible Repair Plan, and iii) has made appropriate progress in pursuing the repair or reconfiguration of its Generator(s) when measured against the milestones of a Credible Repair Plan.

5.18.1.5 For purposes of the determinations required by Section 5.18.1.3(ii) and (iii), and 5.18.1.6 of this Services Tariff, a Credible Repair Plan is the Repair Plan that would be expected from a supplier: i) with a generating facility that is reasonably the same as or similar to the type and vintage of the Generator; ii) -intending to return its generating facility to service. A Credible Repair Plan for a Generator that suffered a Forced Outage is a Repair Plan that would also be expected from a supplier with a generating facility that suffered a forced outage that was reasonably the same as or comparable to the Forced Outage suffered by

the Generator and which forced outage occurred under the same, or reasonably similar, circumstances as the Generator's. A Credible Repair Plan for a Generator in a Mothball Outage is a Repair Plan that would also be expected from a supplier pursuing a repair to its generating facility which repair is reasonably the same as or comparable to the repair being pursued by the Generator. A Credible Repair Plan for the reconfiguration of a HSR's Generators is the Repair Plan that would be expected from a supplier: i) to reconfigure its facilities to the extent necessary, and/or ii) to obtain required metering, telemetry and other information, to support operation of the remaining Generator(s) under the participation model(s) they will transition to when they cease participating in the ISO-Administered Markets as components of a HSR, consistent with ISO Procedures.

5.18.1.6 The determination that a Market Participant has Commenced Repair of its Generator in a Forced Outage shall be made by the ISO by the 160<sup>th</sup> day of the Forced Outage. If the Market Participant provides updated information after the 120<sup>th</sup> day of the Forced Outage and before the 180<sup>th</sup> day of its Generator's Forced Outage, the ISO will, as applicable, take such information into consideration to make its determination or it will update its previously issued determination to the extent practicable. However, if the Generator in a Forced Outage is an ESR that participates as a component of a HSR, then the ISO will not consider any information submitted by the Market Participant after the 150<sup>th</sup> day of its Generator's Forced Outage or update its determination based on information submitted after that date.

The determination that a Market Participant has Commenced Repair of its

Generator in an ICAP Ineligible Forced Outage, which Market Participant has been determined by the ISO to have one or more Exceptional Circumstances that delay the acquisition of necessary data for an audit and review for economic justification pursuant to Section 23.4.5.6.2 of this Services Tariff, shall be made by the ISO as soon as practicable following receipt of necessary data.

The determination that a Market Participant has Commenced Repair of its Generator in an ICAP Ineligible Forced Outage or Mothball Outage, which Market Participant is seeking to toll expiration of its outage and CRIS rights pursuant to Sections 5.18.2.3.2 or 5.18.3.3.2 of this Services Tariff, will be made by the ISO as soon as practicable following receipt of the necessary data.

5.18.1.7 If a Market Participant has not Commenced Repair of its Generator by the last day of the month which contains the 180<sup>th</sup> day of the Forced Outage, the Generator's Forced Outage shall expire on the last day of the month which contains the 180<sup>th</sup> day of the Forced Outage. If the Generator in a Forced Outage is an ESR that participates as a component of a HSR, then the ISO will not consider any information that becomes available to it after the 150<sup>th</sup> day of the Forced Outage in determining whether the Market Participant timely Commenced Repair.

The Forced Outage of a Generator that Commenced Repair but ceased or unreasonably delayed the Generator's repair shall terminate on the last day of the month containing the date that the Market Participant ceased or unreasonably delayed the repair. If the reconfiguration of a HSR's component Generators to participate in the markets as independent Generators ceases, or is unreasonably



delayed, then the affected Generators will enter an ICAP Ineligible Forced Outage on the last day of the month containing the date that the Market Participant ceased or unreasonably delayed the reconfiguration. The ISO will determine a Market Participant has unreasonably delayed the repair or reconfiguration of its Generator(s) if such delay would not have been included in a Credible Repair Plan from a supplier experiencing the situation which caused the Market Participant to delay the repair or reconfiguration of its Generator(s).

5.18.1.8 Upon the expiration or termination of a Generator's Forced Outage, the Generator shall be in an ICAP Ineligible Forced Outage unless the Generator has been Retired by the Market Participant.

If the Forced Outage of an ESR that participates as a component of a HSR expires or terminates and, as a result, that ESR enters an ICAP Ineligible Forced Outage, then the ISO shall not permit the HSR to participate in the ISO-Administered Markets after the last day of the month which contains the 180<sup>th</sup> day of the ESR's Forced Outage and the remaining Generators that are components of the same HSR shall enter an ICAP Ineligible Forced Outage on that date, unless the Market Participant has Commenced Repair to repair the ESR or to reconfigure its HSR's remaining Generators to permit them to participate in the markets as independent Generators. The rules in Section 5.18.1.7 apply if the Market Participant ceases or unreasonably delays repair (including reconfiguration) after the last day of the month which contains the 180<sup>th</sup> day of the ESR component's Forced Outage. If the abandoned or unreasonably delayed repair plan was to restore the ESR component to service, then all of the HSR's component

Generators will enter an ICAP Ineligible Forced Outage on the date that the ESR's Forced Outage terminates.

The other Generators that participated in the HSR may each return to the markets to independently participate as an Intermittent Power Resource or as a Limited Control Run-of-River Hydro Resource when they are able to satisfy all requirements for independent participation, including ISO registration requirements, and the ISO is able to incorporate them into its market models.

## **5.18.2 ICAP Ineligible Forced Outage**

5.18.2.1 A Market Participant may voluntarily reclassify its Generator from a Forced Outage to an ICAP Ineligible Forced Outage only if the Generator has been in a Forced Outage for at least sixty (60) days. A Generator that has been voluntarily reclassified from a Forced Outage to an ICAP Ineligible Forced Outage shall begin its ICAP Ineligible Forced Outage on the first day of the month following the month in which it was voluntarily reclassified to an ICAP Ineligible Forced Outage.

A Generator in an ICAP Ineligible Forced Outage as a result of the expiration or termination of its Forced Outage pursuant to Section 5.18.1.6 of this Services Tariff, shall begin its ICAP Ineligible Forced Outage on the day following the day the Generator's Forced Outage expired or terminated.

A Generator in an ICAP Ineligible Forced Outage as a result of substantial actions that have been taken, such as dismantling or disabling essential equipment, which actions are inconsistent with an intention to operate the Generator in the Energy market shall begin its ICAP Ineligible Forced Outage on

the day following the day such actions began.

If one of the two Generators in a CSR enters an ICAP Ineligible Forced Outage but the other CSR Generator continues operating, the remaining Generator may continue to participate as a Generator in a CSR unless or until the Generator in the ICAP Ineligible Forced Outage becomes Retired. The rules for Generators that participate as components of a HSR are set forth above.

5.18.2.2 A Generator in an ICAP Ineligible Forced Outage is not eligible to participate in the Installed Capacity market and shall automatically cease to qualify to participate in the Installed Capacity market beginning with the first day of its ICAP Ineligible Forced Outage. The Generator shall no longer be ineligible to participate in the Installed Capacity market, by virtue of its ICAP Ineligible Forced Outage, as of the first day the Generator returns to operation and offers its Energy into the Day-Ahead Market without declaring an outage. The month for which the Generator will first be eligible to participate in the Installed Capacity market will be based on the date the Generator returns to operation and offers its Energy into the Day-Ahead Market without declaring an outage and ISO Procedures.

### **5.18.2.3 ICAP Ineligible Force Outage Expiration**

5.18.2.3.1 Except as provided in Section 5.18.2.3.2, a Generator's ICAP Ineligible Forced Outage shall expire if: i) its CRIS rights have expired; or ii) it did not have CRIS rights and has been in the ICAP Ineligible Forced Outage for 36 consecutive months. A Generator shall be Retired if its ICAP Ineligible Forced Outage expires.

5.18.2.3.2 If a Market Participant with a Generator in an ICAP Ineligible Forced

Outage has Commenced Repair prior to when the ICAP Ineligible Forced Outage would expire pursuant to Section 5.18.2.3.1 and has provided a reasonable return date as that term is described in Section 5.18.1.2 of this Services Tariff that occurs after such expiration date, then the outage and the Generator's CRIS rights will be tolled until, and the ICAP Ineligible Forced Outage will expire on, the earlier of:

- i) 120 days from when the outage would have expired under Section 5.18.2.3.1; or
- ii) an ISO determination that the Market Participant has ceased or unreasonably delayed the repair of its Generator. The ISO will determine if a Market Participant has unreasonably delayed the repair of its Generator if such delay would not have been included in a Credible Repair Plan from a supplier experiencing the situation which caused the Market Participant to delay the repair of its Generator. The tolling of CRIS rights occurs under this Section 5.18.2.3.2 notwithstanding the three year period in which CRIS-inactive facilities may maintain CRIS rights pursuant to Section 25.9.3.1 of Attachment S to the OATT; provided, however, the expiration period for transfers of CRIS rights provided in Section 25.9.3.1 of Attachment S to the OATT shall not be tolled. A Market Participant seeking to toll its outage and CRIS rights pursuant to this Section 5.18.2.3.2 must submit a Repair Plan no later than 60 days prior to when the ICAP Ineligible Forced Outage would expire under Section 5.18.2.3.1.

5.18.2.4 A Market Participant with a Generator in an ICAP Ineligible Forced

Outage that is notified by a Transmission Owner or the ISO that the return to service of its Generator could address a reliability issue shall provide an updated

good faith estimate of the Generator's return date. A Market Participant with a Generator in an ICAP Ineligible Forced Outage shall make a timely return to service to resolve a reliability issue, in accordance with Section 5.18.4, as the term "timely return" is described in Section 5.18.4.2 of this Services Tariff. A Market Participant with a Generator in an ICAP Ineligible Forced Outage shall provide temporary use of its Generator's interconnection point in accordance with Section 5.18.5 of this Services Tariff when a transmission solution using the Generator's interconnection point has been selected as the Short-Term Reliability Process Solution, the Gap Solution, or to resolve a reliability issue arising on a non-New York State Bulk Power Transmission Facility during its outage. The Transmission Owner shall provide that power to the station remains available notwithstanding its temporary use of the Generator's interconnection point.

### **5.18.3 Mothball Outage**

5.18.3.1 Prior to entering a Mothball Outage, the Generator must satisfy the prior notice requirement contained in Section 38.3.1 of Attachment FF to the ISO OATT, among other applicable requirements. A Generator in a Mothball Outage is not eligible to participate in the Installed Capacity market and shall automatically cease to qualify to participate in the Installed Capacity market beginning with the date the Generator begins its Mothball Outage. The Generator shall no longer be ineligible to participate in the Installed Capacity market, by virtue of its Mothball Outage, as of the first day the Generator returns to operation and offers its Energy into the Day-Ahead Market without declaring an outage. The month for which the Generator will first be eligible to participate in the

Installed Capacity market will be based on the date the Generator returns to operation and offers its Energy into the Day-Ahead Market without declaring an outage and ISO Procedures.

If one of the two Generators in a CSR enters a Mothball Outage but the other CSR Generator continues operating, the remaining Generator may continue to participate as a Generator in a CSR unless or until the Generator in the Mothball Outage becomes Retired.

An ESR that participates in the ISO-Administered Markets as a component of a HSR can only enter a Mothball Outage if all of that HSR's component Generators will be in a Mothball Outage or are Retired. An Intermittent Power Resource or Limited Control Run-of-River Hydro Generator that participate in the ISO-Administered Markets as a component of a HSR may enter a Mothball Outage by complying with the requirements of Section 5.18.3 of the Services Tariff and Section 38 of the OATT.

5.18.3.2 As part of the Generator Deactivation Notice required prior to entering a Mothball Outage pursuant to Section 38.3.1 of Attachment FF to the ISO OATT, a Market Participant shall notify the ISO whether its Generator will be physically able to return within 180 days to resolve a reliability issue or it has good cause for an alternate period of time, stated in days, to return its Generator to service to resolve a reliability issue. The Market Participant shall establish good cause, to the satisfaction of the ISO, by providing empirical evidence demonstrating the need for the alternate period of time to return its Generator to service to resolve a reliability issue. The number of days within which a Generator in a Mothball

Outage can be returned to service to resolve a reliability issue will be shared with the applicable Transmission Owner(s).