

V. GENERATION DEACTIVATION

References to section numbers in this Part V refer to sections of this Part V, unless otherwise specified.

Preamble:

Deactivation of generating units in the PJM Region shall be governed by this Part V of this Tariff.

113 Notices

113.1 Generation Owner Notice:

When a Generation Owner desires to deactivate a generating unit located in the PJM Region, such Generation Owner, or its Designated Agent, must provide notice of such proposed Deactivation in writing to the Transmission Provider at least twelve (12) months prior to the desired Deactivation Date. This notice shall include an indication of whether the generating unit is being retired or mothballed, the desired Deactivation Date, and, if mothballing, a good faith estimate of the time period the generating unit would be out of service. The desired Deactivation Date may be no earlier than the following: (a) April 1 of the following calendar year, if the Transmission Provider receives the notice between January 1 and March 31; (b) July 1 of the following calendar year, if the Transmission Provider receives the notice between April 1 and June 30; (c) October 1 of the following calendar year, if the Transmission Provider receives the notice between July 1 and September 30; or (d) January 1 of the second calendar year, if the Transmission Provider receives the notice between October 1 and December 31. The Transmission Provider shall promptly provide a copy of such notice to the Market Monitoring Unit. The desired Deactivation Date may be earlier than the above-referenced dates if the Generation Owner, or its Designated Agent, (i) receives notice from a state or federal regulatory entity that requires or compels the Generation Owner, as a matter of law, to deactivate its generating unit by a date earlier than the dates permitted by this Tariff, Part V, section 113.1 (ii) receives such notice on a date that renders compliance with this provision infeasible; and (iii) the generating unit experiences a catastrophic failure as reasonably determined by the Transmission Provider which renders compliance with this provision infeasible.

113.2 Notice of Reliability Impact:

The Transmission Provider shall inform the Generation Owner, or its Designated Agent, whether the Deactivation of the generating unit would adversely affect the reliability of the Transmission System ("Notice of Reliability Impact") by the following date: (a) May 31 of the current calendar year, if the Transmission Provider received the notice required pursuant to Tariff, Part V, section 113.1 between January 1 and March 31; (b) August 31 of the current calendar year, if the Transmission Provider received the notice required pursuant to Tariff, Part V, section 113.1 between April 1 and June 30; (c) November 30 of the current calendar year, if the Transmission Provider received the notice required pursuant to Tariff, Part V, section 113.1 between July 1 and September 30; or (d) February 28 of the following calendar year, if the Transmission Provider received the notice required pursuant to Tariff, Part V, section 113.1 between October 1 and December 31. In the event there are no reliability issues associated with the proposed Deactivation of the generating unit, the Notice of Reliability Impact shall so notify the Generation Owner, or its Designated Agent, and the Generation Owner or its Designated Agent may deactivate its generating unit at any time thereafter. The Generation Owner shall coordinate with the appropriate Transmission Owner and the Transmission Provider regarding the removal of any transmission equipment located at the generating unit proposed for Deactivation. In the event the Transmission Provider determines that, in accordance with established reliability criteria, the Deactivation of the Generation Owner's generating unit would adversely affect the reliability of the Transmission System absent upgrades to the Transmission System, the Notice of

Reliability Impact shall notify the Generation Owner, or its Designated Agent, of the reliability concerns. Such Notice of Reliability Impact shall (1) identify the specific reliability impact resulting from the proposed Deactivation of the generating unit; and (2) provide an initial estimate of the period of time it will take to complete the Transmission System reliability upgrades necessary to alleviate the reliability impact. Regardless of whether the Deactivation of the generating unit would adversely affect the reliability of the Transmission System, the Generation Owner or its Designated Agent may deactivate its generating unit, subject to the notice requirements in Tariff, Part V, section 113.1. Within 30 days of the Generation Owner's or its Designated Agent's receipt of the Notice of Reliability Impact identifying reliability concerns pursuant to this Tariff, Part V, section 113.2, the Generation Owner or its Designated Agent shall inform Transmission Provider whether the generating unit proposed for Deactivation will continue operating beyond its desired Deactivation Date during the period of construction of the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit, and if the generating unit will continue operating, provide the Transmission Provider with an estimate of the amount of any project investment and the time period the generating unit would be out of service for repairs, if any, that would be required to keep the unit in, or return the unit to, operation. For generating units that will continue operating beyond their desired Deactivation Dates, the Transmission Provider shall (a) within 45 days of the Transmission Provider issuing the Notice of Reliability Impact pursuant to this Tariff, Part V, section 113.2, provide an updated estimate of the period of time it will take to complete the Transmission System upgrades necessary to alleviate the reliability impact; and (b) within 60 days of the Transmission Provider issuing the Notice of Reliability Impact pursuant to this Tariff, Part V, section 113.2, post on its internet site full details of the transmission upgrades necessary to alleviate the reliability impact that would result from the Deactivation of the generating unit. Upon receipt of notification from the Transmission Provider that Deactivation of the generating unit would cause reliability concerns, the Generation Owner that agrees to continue operating its generating unit beyond its desired Deactivation Date shall, after consultation with the Transmission Provider, execute the Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A, and immediately be entitled to file with the Commission a cost of service rate to recover the entire cost of operating the generating unit until such time as the generating unit is deactivated pursuant to this Part V ("Cost of Service Recovery Rate"). In the alternative, the Generation Owner may elect to receive the Deactivation Avoidable Cost Credit provided under this Part V, after consultation with the Transmission Provider and execution of the Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A.

~~113.3 Subsequent Deactivation Notice for Generating Units Continuing to Operate:~~

~~In the event that a Generation Owner or its Designated Agent, which has informed Transmission Provider pursuant to section 113.2 that a generating unit will continue operating, desires to deactivate such generating unit prior to the completion date of the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System, the Generation Owner or its Designated Agent shall provide notice of such proposed Deactivation in writing to the~~

~~Transmission Provider no later than 90 days prior to the desired Deactivation Date for the generating unit.~~

113.34 Notice for Generation Units Providing Reactive Supply and Voltage Control:

In addition to the notice requirements in this Tariff, Part V, when a Generation Owner desires to deactivate a generating unit that provides reactive supply and voltage control service under Tariff, Schedule 2, such Generation Owner, or its Designated Agent, must satisfy the notice and filing requirements in Tariff, Schedule 2.

114 Deactivation Avoidable Cost Credit:

In the event that the Generation Owner or its Designated Agent informs Transmission Provider pursuant to section 113.2 that it will continue operating a generating unit beyond its desired Deactivation Date, the Generation Owner or its Designated Agent ~~shall~~may elect to receive a monthly Deactivation Avoidable Cost Credit for such continued operation pursuant to the terms and conditions of this section 114.

Subject to section 119 of this Tariff, a Generation Owner or its Designated Agent shall be eligible for Deactivation Avoidable Cost Credits for the term specified in the executed Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A. commencing on the later of the proposed Deactivation Date of its generating unit or the day after the Generation Owner or its Designated Agent submits the informational filing pursuant to section 116 of this Tariff and continuing until the earlier of such time as the generating unit is deactivated or the completion date of the necessary

~~Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System. The Transmission Provider shall give at least thirty days notice to a Generation Owner or its Designated Agent of the date when continued operation of a generating unit is no longer required under Part V of the Tariff.~~

Deactivation Avoidable Cost Credits shall be determined according to the following formula:

Deactivation Avoidable Cost Credit = ((Deactivation Avoidable Cost Rate * Applicable Multiplier) * MW capability of the unit * Number of days in the month) + (APIR * First Year Multiplier) – Actual Net Revenues

Where:

Deactivation Avoidable Cost Rate is the Generation Owner's Deactivation Avoidable Cost Rate determined pursuant to section 115 of this Tariff.

Applicable Adder is the appropriate multiplier specified below:

First Year Multiplier: 110 percent. This multiplier shall apply commencing on the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Second Year Multiplier: 120 percent. This multiplier shall apply commencing on the first day of the 13th month after the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Third Year Multiplier: 135 percent. This multiplier shall apply commencing on the first day of the 25th month after the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Fourth Year Multiplier: 150 percent. This multiplier shall apply commencing on the first day of the 37th month after the desired Deactivation Date of the generating unit proposed for Deactivation and until the earlier of such time as the generating unit is deactivated or the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System.

(Deactivation Avoidable Cost Rate * Applicable Multiplier) is expressed in \$/MW day.

Actual Net Revenues are all revenues from PJM markets and unit-specific bilateral contracts net of marginal cost of service recoverable under cost-based offers to sell energy from operating capacity on the PJM Interchange Energy Market under the Operating Agreement, ~~not less than zero.~~

~~Deactivation Avoidable Cost Credit shall not be less than zero. To the extent that the Actual Net Revenues exceed the other components of the Deactivation Avoidable Cost Credit, yielding a monthly Deactivation Avoidable Cost Credit less than \$0, the Deactivation Avoidable Cost Credit shall be \$0. The difference between the Actual Net Revenues and all other components of the credit shall carry forward and be added to the following month's Actual Net Revenues. If, at the conclusion of the term specified in the executed Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A, the Actual Net Revenues for the entire term exceed the summation of the other components of the credit for the entire term, the generating unit owner shall retain the excess Actual Net Revenues.~~

The Market Monitoring Unit and the generating unit owner shall attempt to come to agreement on the appropriate level of each component included in the Deactivation Avoidable Cost Credit. If a generating unit owner includes a cost component inconsistent with its agreement or inconsistent with the Market Monitoring Unit's determination regarding such cost components, the Market Monitoring Unit may petition the Commission for an order that would require the generating unit owner to include an appropriate cost component. This provision is duplicated in section IV.2 of Attachment M – Appendix.

115 Deactivation Avoidable Cost Rate:

The Deactivation Avoidable Cost Rate for a generating unit proposed for Deactivation shall be determined using the following formula:

$$\text{Deactivation Avoidable Cost Rate} = ((\text{AOML} + \text{AAE} + \text{AME} + \text{AVE} + \text{ATFI} + \text{ACC} + \text{ACLE}) / 12)$$

Where:

- **AOML (Avoidable Operations and Maintenance Labor)** consists of the avoidable labor expenses related directly to operations and maintenance of the generating unit proposed for Deactivation for the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AOML are those incurred for: (a) on-site based labor engaged in operations and maintenance activities; (b) off-site based labor engaged in on-site operations and maintenance activities directly related to the generating unit; and (c) off-site based labor engaged in off-site operations and maintenance activities directly related to generating unit equipment removed from the generating unit site.
- **AAE (Avoidable Administrative Expenses)** consists of the avoidable administrative expenses related directly to employees at the generating unit proposed for Deactivation for twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AAE are those incurred for: (a) employee expenses (except employee expenses included in AOML); (b) environmental fees; (c) safety and operator training; (d) office supplies; (e) communications; and (f) annual plant test, inspection and analysis.
- **AME (Avoidable Maintenance Expenses)** consists of avoidable maintenance expenses (other than expenses included in AOML) related directly to the generating unit proposed for Deactivation for the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AME are those incurred for: (a) chemical and materials consumed during maintenance of the generating unit; and (b) rented maintenance equipment used to maintain the generating unit.
- **AVE (Avoidable Variable Expenses)** consists of avoidable variable expenses related directly to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AVE are those incurred for: (a) water treatment chemicals and lubricants; (b) water, gas, and electric service (not for power generation); and (c) waste water treatment.
- **ATFI (Avoidable Taxes, Fees and Insurance)** consists of avoidable

expenses related directly to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AFTI are those incurred for: (a) insurance; (b) permits and licensing fees; (c) site security and utilities for maintaining security at the site; and (d) property taxes.

- **ACC (Avoidable Carrying Charges)** consists of avoidable short term carrying charges related directly to the generating unit proposed for Deactivation in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. Avoidable short term carrying charges shall include short term carrying charges for maintaining reasonable levels of inventories of fuel and spare parts that result from short-term operational unit decisions as measured by industry best practice standards. For the purpose of determining ACC, short term is the time period in which a reasonable replacement of inventory for normal, expected operations can occur.

- **ACLE (Avoidable Corporate Level Expenses)** consists of avoidable corporate level expenses directly related to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. Avoidable corporate level expenses shall include only such expenses that are directly linked to providing tangible services required for the operation of the generating unit proposed for Deactivation. The categories of avoidable expenses included in ACLE are those incurred for: (a) legal services; (b) environmental reporting; and (c) procurement expenses.

The Avoidable Project Investment Recovery Rate (APIR) for a generating unit proposed for Deactivation shall be determined using the following formula:

- **APIR (Avoidable Project Investment Recovery Rate) = PI/NMR**

Where:

PI is the amount of project investment required to enable a generating unit proposed for Deactivation to continue operating beyond its proposed Deactivation Date.

NMR is the number of months beyond the proposed Deactivation Date of a generating unit proposed for Deactivation that the Transmission Provider has specified in its updated estimate pursuant to section 113.2 of this Tariff that such generating unit shall be required to operate.

PI recovered through the APIR, shall not commence before the in-service date of the PI. The amount recovered through the APIR shall not exceed the actual amount of the PI.

For the purpose of determining Deactivation Avoidable Cost Rate, avoidable expenses are

incremental expenses directly required for the operation of a generating unit proposed for Deactivation that a Generation Owner would not incur if such generating unit deactivated on its proposed Deactivation Date rather than continuing to operate beyond its proposed Deactivation Date. A generating unit owner shall direct all inquiries regarding avoidable expenses to the Market Monitoring Unit.

For the purpose of determining a Deactivation Avoidable Cost Rate, avoidable expenses shall exclude variable costs recoverable under cost-based offers to sell energy from operating capacity on the PJM Interchange Energy Market under the Operating Agreement.

116 Filing and Updating of Deactivation Avoidable Cost Rate:

As of the proposed Deactivation Date of a generating unit or as of the day prior to the effective date of an updated Deactivation Avoidable Cost Rate, the Generation Owner or its Designated Agent shall file with the Commission, for informational purposes, the Deactivation Avoidable Cost Rate, along with applicable cost support and a certification by an officer of the Generation Owner or its Designated Agent attesting to the accuracy of the Deactivation Avoidable Cost Rate. Generation Owner or its Designated Agent may update the Deactivation Avoidable Cost Rate annually, as well as, following materially adverse unforeseen circumstances affecting the unit that increase the costs incurred by the Generation Owner. Generation Owner, or its Designated Agent, shall provide Transmission Provider with a copy of informational filings submitted pursuant to this section 116. Crediting of the Deactivation Avoidable Cost Credit to the Generation Owner or its Designated Agent by the Transmission Provider shall commence on the later of the day following the date of this informational filing or the proposed Deactivation Date of the Generation Owner's generating unit.

118 Refund of Project Investment Reimbursement:

In the event that the Generation Owner's PI in the generating unit proposed for Deactivation and credited through the APIR set forth in Tariff, Part V, section 115 enables the generating unit to remain operational beyond the term specified in the executed Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A ~~the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System~~, and the generating unit remains in service beyond such date, the Generation Owner or its Designated Agent shall refund Transmission Provider a pro-rata share of the amount of any PI for which it received reimbursement pursuant to the APIR set forth in Tariff, Part V, section 115. The Refund of Project Investment Reimbursement shall be determined using the following formula:

Refund of Project Investment Reimbursement = ((Number of months the PI permits the generating unit proposed for Deactivation to operate – The number of months Transmission Provider determines is required to construct the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit) / (Number of months the PI permits the generating unit proposed for Deactivation to operate)) * (The amount of the PI/ (Number of months the PI allows the generating unit proposed for Deactivation to continue to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System)).

Where:

The number of months the PI permits the generating unit proposed for Deactivation to operate is determined by the Generation Owner or its Designated Agent and verified by an independent entity.

Generation Owner or its Designated Agent shall make the Refund of Project Investment Reimbursement each month for the number of months the PI allows the generating unit proposed for Deactivation to continue to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System and shall be credited to transmission customers in such month on the same basis as costs are allocated under section 120. The months the generating unit proposed for Deactivation continues to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability

criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System need not be continuous, and the Refund of Project Investment Reimbursement will continue regardless of ownership of the generating unit.

118A Recovery of Project Investment:

A Generation Owner or its Designated Agent shall be entitled to continue to recover its PI costs under Tariff, Part V, section 115 in situations where the Transmission Provider subsequently determines the generation unit is no longer needed for reliability of the Transmission System and the generating unit is deactivated prior to recovering its PI costs; provided however, that any PI cost recovery pursuant to this section shall be net of any PI reimbursements already credited to the Generation Owner to its Designated Agent pursuant to the APIR set forth in Tariff, Part V, section 115.

119 Cost of Service Recovery Rate:

Notwithstanding anything to the contrary in Part V of this Tariff, a Generation Owner with a generating unit proposed for Deactivation that continues operating beyond its proposed Deactivation Date and executes the Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A may file with the Commission a cost of service rate to recover the entire cost of operating the generating unit until such time as the generating unit is deactivated pursuant to this Part V (“Cost of Service Recovery Rate”). In the event that the Generation Owner or its Designated Agent files a rate pursuant to this section 119, the Generation Owner shall not be eligible to receive Deactivation Avoidable Cost Credits, except as provided pursuant to this section 119, and PJMSettlement shall pay the Generation Owner the Cost of Service Recovery Rate accepted by the Commission commencing on the effective date established by the Commission for the rate. In the event the Generation Owner or its Designated Agent already is receiving Deactivation Avoidable Cost Credits, prior to filing an Cost of Service Recovery Rate, such Deactivation Avoidable Cost Credits will cease as of the date that the Generation Owner or its Designated Agent files its Cost of Service Recovery Rate, and PJMSettlement shall begin paying the Generation Owner or its Designated Agent the Cost of Service Recovery Rate accepted by the Commission commencing on the effective date established by the Commission for the rate.

A generating resource owner shall direct all inquiries regarding avoidable expenses to the Market Monitoring Unit. If a generating resource owner includes a cost component inconsistent with its agreement or inconsistent with the Market Monitoring Unit’s determination regarding such cost components, the Market Monitoring Unit may petition the Commission for an order that would require the generating resource owner to include an appropriate cost component. This provision is duplicated in section IV.2 of Attachment M – Appendix.

120 Cost Allocation:

The costs incurred to compensate Generation Owners pursuant to this Part V of this Tariff shall be an additional transmission charge allocated to the load in the Zone(s) of the Transmission Owner(s) that will be assigned financial responsibility for the reliability upgrades necessary to alleviate the reliability impact that would result from the Deactivation of the generating unit and this new charge shall be collected monthly from such loads in addition to all other charges for transmission service to such loads.

121 Performance Standards:

A generating unit proposed for Deactivation that continues to operate for reliability beyond its desired Deactivation Date pursuant to Part V of the Tariff shall continue to be operated according to existing standards applicable to generating units located in the PJM Region and in accordance with the executed Form Reliability Must Run Service Agreement under Tariff, Part V, Subpart A.

122 Black Start Units:

Nothing in this Part V of the Tariff relieves owners of Black Start Units of any obligations or requirements set forth in Schedule 6A of the Tariff, including (a) the two year rolling commitment to provide Black Start Service; (b) the notice requirements for terminating such commitment; or (c) the forfeiture of Black Start Service revenues for failure to fulfill such commitment.

123-199 [Reserved]