

**PJM DRAFT PLS Revisions 7/1/2013**

**ATTACHMENT K-APPENDIX OF OATT/ SCHEDULE 1 OF OPERATING AGT**

**6.6 Minimum Generator Operating Parameters – Parameter Limited Schedules.**

(a) Market Sellers submitting Offer Data for Generation Capacity Resources shall submit and be subject to pre-determined limits on non-price offer parameters (“parameter limited schedules”) under the following circumstances:

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- (i) The Operating Reserve markets fail the three pivotal supplier test. When this subsection applies, the parameter limited schedule shall be the less limiting of the defined parameter limited schedules or the submitted offer parameters.
- (ii) The Office of the Interconnection: (i) declares a Maximum Generation Emergency; (ii) issues an alert that a Maximum Generation Emergency may be declared (“Maximum Generation Emergency Alert”); or (iii) schedules units based on the anticipation of a Maximum Generation Emergency or a Maximum Generation Emergency Alert for all, or any part, of an Operating Day.

(b) Parameter limited schedules shall be defined for the following parameters:

- (i) Turn Down Ratio;
- (ii) Minimum Down Time;
- (iii) Minimum Run Time;
- (iv) Maximum Daily Starts;
- (v) Maximum Weekly Starts.

(c) The following table specifies default parameter limited schedule values, by technology type, for generation resources:

**Parameter Limited Schedule Matrix**

<b>Parameter</b>	<b>Minimum Down Time (Hrs)</b>	<b>Minimum Run Time (Hrs)</b>	<b>Maximum Daily Starts</b>	<b>Maximum Weekly Starts</b>	<b>Turn Down Ratio = Economic Maximum MW / Economic Minimum MW</b>
Small Frame CT and Aero CT Units - Up to 29 MW	2.0 or Less	2.0 or Less	2 or More	14 or More	1.0 or More

ICAP

Medium Frame CT and Aero CT Units - 30 MW to 65 MW ICAP	2.0 or Less	3.0 or Less	2 or More	14 or More	1.0 or More
Medium-Large Frame CT Units - 65 MW to 135 MW ICAP	3.0 or Less	5.0 or Less	2 or More	14 or More	1.0 or More
Large Frame CT Units - 135 MW to 180 MW ICAP	4.0 or Less	5.0 or Less	2 or More	14 or More	1.0 or More
Combined Cycle Units	4.0 or Less	6.0 or Less	2 or More	11 or More	1.5 or More
Petroleum and Natural Gas Steam Units - Pre-1985	7.0 or Less	8.0 or Less	1 or More	7 or More	3.0 or More
Petroleum and Natural Gas Steam Units - Post-1985	3.5 or Less	5.5 or Less	2 or More	11 or More	2.0 or More
Sub-Critical Coal Units	9.0 or Less	15.0 or Less	1 or More	5 or More	2.0 or More
Super-Critical Coal Units	84.0	24.0 or Less	1 or More	2 or More	1.5 or More

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(d) Upon receipt of proposed revised parameter limited schedule values from the Market Monitoring Unit, prepared in accordance with the procedures for periodic review included in section II.B.1 of Attachment M - Appendix, the Office of the Interconnection shall file to revise the Parameter Limited Schedule Matrix in section 6.6(c) above accordingly. In the event that the Office of the Interconnection disagrees with the values proposed for revising the matrix, the Office of the Interconnection shall file the values that it determines are appropriate.

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(e) The Market Monitoring Unit shall calculate and provide to Market Sellers for their generation resources unit-specific default values in accordance with section II.B of Attachment M - Appendix. The default values set forth in the table in subsection (c) above shall apply unless a generation resource is operating pursuant to an exception from the default values under this subsection (f) due to physical operational limitations that prevent the resource from meeting the minimum parameters. For generation resources having the ability to operate on multiple fuels, Market Sellers may submit a parameter limited schedule associated with each fuel type.

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(f) Exceptions to the Parameter Limited Schedule Matrix default values shall be categorized as either a one-time temporary exception, lasting 30 days or less; a period exception, lasting at least 31 days and no more than one year; or a persistent exception, lasting for at least one year.

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(i) Temporary Exceptions. A temporary exception shall be deemed accepted without prior review by the Market Monitoring Unit or the Office of the

Interconnection upon submission by the Market Seller of the generation resource of written notification to the Market Monitoring Unit and the Office of the Interconnection, at least one business day prior to the commencement of the exception, and shall automatically commence and terminate on the dates specified in such notification, which must be for a period of time lasting 30 days or less, unless the termination date is extended pending a request for a period exception or shortened due to a change in the physical conditions of the unit such that the temporary exception is no longer required. Such Market Seller shall provide to the Market Monitoring Unit and the Office of the Interconnection within three days following the commencement of the temporary exception its documentation explaining in detail the reasons for the temporary exception, and shall also respond to additional requests for information from the Market Monitoring Unit and the Office of the Interconnection within three days after such request. Failure to provide a timely response to such request for additional information shall cause the temporary exception to terminate the following day. The Market Seller shall notify the Office of the Interconnection and the Market Monitoring Unit in writing of an early termination of a temporary exception due to changed physical conditions by no later than one business day prior to the early termination date.

*Modification of Temporary Exceptions.* If, prior to the scheduled termination date, the Market Seller determines that the temporary exception must persist for more than 30 days, the Market Seller must submit to the Market Monitoring Unit and the Office of the Interconnection a written request to modify the temporary exception to become a period exception or a persistent exception, and provide detailed documentation explaining the reasons for the requested modification of the temporary exception. Market Sellers shall supply for each generation resource the required historical unit operating data in support of the period or persistent exception request, and if the exception requested is based on new physical operating limits for the resource for which some or all historical operating data is unavailable, the Market Seller may also submit technical information about the physical operational limits of the resource to support the requested parameters. Such Market Seller shall respond to additional requests for information from the Market Monitoring Unit and the Office of the Interconnection within three days after such request. Such request shall be reviewed by the Market Monitoring Unit and must be evaluated by the Office of the Interconnection using the same standard utilized to evaluate period exception and persistent exception requests. Per Section II.B of Attachment M-Appendix, the Market Monitoring Unit shall evaluate the modification request and provide its determination of whether the request raises market power concerns, and, if so, any modifications that would alleviate those concerns, to the Market Seller, with a copy to Office of the Interconnection, by no later than 15 days from the date of the modification request. The Office of the Interconnection shall provide its determination whether the request complies with the Tariff and Manuals by no later than 20 days from the date of the modification request. A temporary exception shall be extended and shall

not terminate until the date on which the Office of the Interconnection issues its determination of the modification request.

(ii) Period Exceptions and Persistent Exceptions. Market Sellers must submit period exception and persistent exception requests to the Market Monitoring Unit and the Office of the Interconnection by no later than the February 28 immediately preceding the twelve month period from June 1 to May 31 during which the exception is requested to commence. Market Sellers shall supply for each generation resource the required historical unit operating data in support of the period exception or persistent exception request, and if the exception requested is based on new physical operational limits for the resource for which some or all historical operating data is unavailable, the generation resource may also submit technical information about the physical operational limits for exceptions of the resource to support the requested parameters. The Market Monitoring Unit shall evaluate such request in accordance with the process set forth in Section II.B of Attachment M - Appendix. A Market Seller (i) must submit a parameter limited schedule value consistent with an agreement with the Market Monitoring Unit under such process, or (ii) if it has not agreed with the Market Monitoring Unit on the parameter limited schedule value, may submit its own value to the Office of the Interconnection and to the Market Monitoring Unit, by no later than April 8. Each exception request must indicate the expected duration of the requested exception including the termination date thereof. The proposed parameter limited schedule value submitted by the Market Seller is subject to approval of the Office of the Interconnection pursuant to the requirements of the Tariff and the PJM Manuals. The Office of the Interconnection may engage the services of a consultant with technical expertise to evaluate the exception request. After it has completed its evaluation of the exception request, the Office of the Interconnection shall notify the Market Seller in writing, with a copy to the Market Monitoring Unit, whether the exception request is approved or denied, by no later than April 15. The effective date of the exception, if approved by the Office of the Interconnection, shall be no earlier than June 1. The Office of the Interconnection's determination for an exception shall continue for the period requested and, if requested, for such longer period as the Office of the Interconnection may determine is supported by the data.

The Market Seller shall provide written notification to the Market Monitoring Unit and the Office of the Interconnection of a material change to the facts relied upon by the Market Monitoring Unit and/or the Office of the Interconnection in their evaluations of the Market Seller's request for a period or persistent exception. The Market Monitoring Unit shall provide written notification to the Office of the Interconnection and the Market Seller of any change to its determination regarding the exception request, based on the material change in facts, by no later than 15 days after receipt of such notice. The Office of the Interconnection shall notify the Market Seller in writing, with a copy to the Market

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Monitoring Unit, of any change to its determination regarding the exception request, based on the material change in facts, by no later than 20 days after receipt of the Market Seller's notice. If the Office of the Interconnection determines that the exception no longer complies with the Tariff or Manuals, the default values specified in the Parameter Limited Schedule Matrix shall apply. ▾

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(f) On a daily basis each generation resource may submit notification to the Office of the Interconnection of changed physical operational limitations at such generation resources that require a temporary exception to the otherwise applicable parameter limited schedule value. Each generation resource must supply the required operating data necessary to support the exception consistent with the requirements set forth in the PJM Manuals. Such exceptions may not continue past the next period (as described in section II.B of Attachment M - Appendix). Temporary exception requests shall be subject to acceptance by the Office of the Interconnection upon submission by a generation resource, and shall be subject to further subsequent review of the continuation of the exception by the Office of the Interconnection and the Market Monitoring Unit. Based on the further review and determination by the Office of the Interconnection and the Market Monitoring Unit, the generation resource may (i) continue to submit a parameter limited schedule value consistent with the Market Monitoring Unit's determination or, (ii) if dissatisfied with the Market Monitoring Unit's determination, continue to submit a parameter limited schedule value to the Office of Interconnection inconsistent with the Market Monitoring Unit's determination subject to acceptance by the Office of the Interconnection, with or without prior approval of the Commission. If the Office of the Interconnection denies an exception request, in whole or in part, the generation resource may contest the denial through the PJM Dispute Resolution Process set forth in this Agreement, in which case the generation resource shall continue to submit a parameter limited schedule value as determined during the exception process until the issue has been resolved. If physical conditions at the generation resource change, such that the exceptio...

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Effective Date: 12/17/2012 - Docket #: ER12-149-000

**ATTACHMENT M-APPENDIX**

**II. DEVELOPMENT OF INPUTS FOR PROSPECTIVE MITIGATION**

**B. Minimum Generator Operating Parameters:**

1. The Market Monitoring Unit shall provide to the Office of the Interconnection a table of default unit class specific parameter limits to be known as the “Parameter Limited Schedule Matrix” to be included in Section 6.6(c) of Schedule 1 of the Operating Agreement. The Parameter Limited Schedule Matrix shall include default values on a unit-type basis as specified in Section 6.6(c). The Market Monitoring Unit shall review the Parameter Limited Schedule Matrix annually, and, in the event it determines that revision is appropriate, shall provide a revised matrix to the Office of the Interconnection by no later than December 31 prior to the annual enrollment period.

2. The Market Monitoring Unit shall notify Market Sellers of generation resources and the Office of the Interconnection no later than April 1 of its determination of market power concerns raised regarding each request for a period exception or persistent exception to a value specified in the Parameter Limited Schedule Matrix or the parameters defined in Section 6.6 of Schedule 1 of the Operating Agreement and the PJM Manuals, provided that the Market Monitoring Unit receives such request by no later than February 28.

If, prior to the scheduled termination date, a Market Seller submits a request to modify a temporary exception, the Market Monitoring Unit shall review such request using the same standard utilized to evaluate period exception and persistent exception requests, and shall provide its determination of whether the request raises market power concerns, and, if so, any modifications that would alleviate those concerns, to the Market Seller, with a copy to Office of the Interconnection, by no later than 15 days from the date of the modification request.

3. When a Market Seller notifies the Market Monitoring Unit of a material change to the facts relied upon by the Market Monitoring Unit and/or the Office of the Interconnection to support a parameter limited schedule period or persistent exception, the Market Monitoring Unit shall make a determination, and provide written notification to the Office of the Interconnection and the Market Seller, of any change to its determination regarding the exception request, based on the material change in facts, by no later than 15 days after receipt of such notice,

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4. The Market Monitoring Unit shall notify the Office of the Interconnection of any risk premium to which it and a Market Seller owning or operating nuclear generation resource agree or its determination if agreement is not obtained. If a Market Seller submits a risk premium for its nuclear generation resource that is inconsistent with its agreement or inconsistent with the Market Monitoring Unit’s determination regarding such risk premium, the Market Monitoring Unit may exercise its powers to inform Commission staff of its concerns pursuant to Attachment M.

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