Scheduling Planned and Maintenance Events (Outages and Deratings)

As the result of an audit of the PJM eGADS system, it has come to our attention that some eGADS users may not be aware of the NERC GADS Data Reporting Instructions and also may not be aware of specific PJM based rules for scheduling planned and maintenance outages and deratings. Also discovered in the audit, were situations where forced events were coded as planned or maintenance events. In other cases, forced outages were coded as non-curtailing events. Improper coding of these types of events can affect generating unit performance statistics used in the PJM RPM Capacity Markets and PJM Planning Department reliability studies.

The NERC GADS Data Reporting Instructions can be found at this link: http://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx
Please pay particular attention to Section III, pages 6 through 9 (event types and rules) and Section III, pages 9 through 11 (specific examples).

In PJM Manual 10 (at this link: http://www.pjm.com/~/media/documents/manuals/m10.ashx) in Section 2, pages 12 through 22, pay particular attention to the rules for scheduling planned and maintenance events (outages and deratings) in the PJM RTO.

PJM has an operations based generator outage collection and scheduling tool ("eDART") that is the portal where all planned and maintenance outage scheduling must take place. It is possible that the PJM eDART user for your respective company's generators is different than yourself and the user may be an individual under contract with your company as agent (such as a 24 hour desk). Please take the time to acquaint yourselves with your respective company's eDART users and coordinate correct planned, maintenance and forced event reporting to PJM eGADS. It may be beneficial for you to register for the eDART tool so that you can check the event types of the outages and deratings that are scheduled for the generators for which you are responsible. Users can register for the PJM eDART tool at this link: http://www.pjm.com/markets-and-operations/etools/edart.aspx.

Improperly Scheduled Planned and Maintenance Events

Any planned or maintenance event that has not been scheduled via the PJM eDART tool, cannot be a planned or maintenance event in PJM eGADS.

Per Manual 10:

- 1) All planned outages and deratings should be scheduled no less than 30 days prior to the operating day in which the planned outage or derating is to commence.
- 2) All maintenance outages and deratings should be scheduled no less than 3 days prior to the operating day in which the maintenance outage or derating is to commence.

There are times when a maintenance event might be scheduled less than 72 hours prior to the start of the operating day in which the outage or derating is to commence. These events should never be for failures of equipment or operating issues where the units capability to carry load is lost or anticipated to

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be lost, in whole or in part, before the end of the next weekend. These short notice maintenance events should only be for situations where components or systems are tested, adjusted, cleaned and/or removed from service and repaired, in order to decrease the chance of future failure or to correct anticipated performance degradation.

Nonetheless, all planned and maintenance outages and deratings must be scheduled in advance via the PJM eDART tool.

PJM reserves the right to change any planned or maintenance event in PJM eGADS that has not been scheduled per the rules in Manual 10, to a more proper outage or derating type. Typically, planned events will be changed to maintenance events if the event was scheduled inside of 30 days and outside of 3 days. Any maintenance or planned event, scheduled inside the 3 day minimum, will be changed to a forced outage or derating if the event description does not sufficiently describe the work performed during the event. Specifically, PJM reserves the right to change planned or maintenance outages or deratings that are scheduled during the operating day in which the events commence, to forced outages or deratings. In these cases, it is imperative to include a concise event description when entering planned and maintenance outages or deratings, to ensure the proper use of the maintenance or planned event category.

Non-Curtailing Events

Non-curtailing events are events that occur whenever equipment or a major component is removed from service for maintenance, testing, or other purposes that do not result in a generating unit outage or derating. Non-curtailing events typically exist when a generating unit is operating at less than full capacity due to system dispatch requirements. During this period, equipment can be removed from service for maintenance, testing, or other reasons and be reported as a non-curtailing event if both the following conditions are met:

- 1) The available capacity of the unit is not reduced below what is required by system dispatch
- 2) Maintenance work can be stopped or completed and the unit can reach its net dependable capacity (NDC) level within its normal ramp-up time if and when needed by the system

If the conditions above cannot be met, report an appropriate outage or derating event rather than a non-curtailing event. Non-curtailing events are defined in the NERC GADS Data Reporting Instructions in Section III page 18.

Typically, non-curtailing events are temporary deratings to adjust or test equipment or systems. Non-curtailing events can also be used for fuel quality issues as long as full load can be achieved on alternate fuel and sufficient alternate fuel is available. If a non-curtailing event is reported that has no available capacity associated with the event and does not have a concise event description, the non-curtailing event will be changed to a forced outage. If the event is a fuel quality related event, please indicate in the event description what alternate fuel is available and what loading levels can be achieved by the generator with the alternate fuel. Without a concise event description, the non-curtailing event will be changed to a forced outage or derating.

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PJM eGADS System Monthly Audits

Beginning June 1, 2016, monthly audits of the PJM eGADS system will take place. Any planned or maintenance event in PJM eGADS that has not been scheduled properly in the PJM eDART tool, will be checked for consistency and if needed, the event type will be changed appropriately. Also, users may get emails requesting events be added to PJM eGADS to ensure that events placed in the PJM eDART system are accounted for in the PJM eGADS system; eGADS users associated with each generator will get these notifications. It will be the responsibility of the eGADS user to add these events to the PJM eGADS system or to provide explanations as to why these events have already been accounted for in the PJM eGADS system. Keep in mind that these audits can be performed at any time; they can be performed for any month or months in the past; typically, the audits will be performed on the current or most recently completed Delivery Year. The Delivery Year runs from June 1 through May 31.

If you have any questions please contact GADSSUPPORT@pjm.com

Thank You,

The PJM eGADS Administrators

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