

## **Proposed Transition Mechanism for Revised Generator Capability Verification Test Requirements**

### **I. Planning Committee Recommendation**

The Planning Committee has recommended several changes to the requirements for generator unit summer period capability verification tests. These recommendations are reflected in revisions made to PJM Manual 21: Rules and Procedures for Determination of Generating Capability and include:

- 1) Revised language to clarify and reinforce that all steam generating units must correct summer capability test results to reflect expected ambient conditions (air and cooling water) under PJM summer peak load conditions.<sup>1</sup>
- 2) Revised requirement for hydro and pumped storage generating units such that the capability test must be conducted during the summer period (June, July or August) as opposed to current requirement that test may be conducted at any time of the year.

The Planning Committee recommended these changes be made effective starting with the 2014 summer capability tests and that the changes be reviewed by the PJM Markets Implementation Committee to determine whether a transition period/mechanism is needed.

### **II. Markets Implementation Committee Review**

The Manual 21 revisions were first introduced at the 11/6/2013 MIC meeting and further discussed at the 12/12/2013 MIC meeting. At the 12/12/2013 meeting, several MIC members expressed concern regarding potential impact of these revisions on the ability of any affected unit to meet existing RPM commitments for the 2014/15, 2015/16 and 2016/17 Delivery Years, as well as the required offer quantity for the upcoming 2017/18 Base Residual Auction (BRA). Such members proposed that the changes either be delayed or that PJM implement a transition mechanism. Other MIC members expressed concern with a delay of the recommended changes and the inequitable impact that such a delay would create for those steam generating units that already provide corrected capability test results.

### **III. PJM Recommendation**

From a reliability perspective, it is critical that the installed capacity (ICAP) rating for all generating units reflect expected output under PJM peak load conditions and important that the ICAP rating of generating units be determined on a consistent basis. The recommended changes should be implemented without delay effective with the summer 2014 capability tests.

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<sup>1</sup> Currently, all combustion turbines and combined cycle generating units (generation types whose output is most impacted by ambient conditions) provide PJM with temperature-corrected summer capability test results; while, roughly half of steam generating units do so as indicated by summer 2012 test results provided to PJM and as presented in material to the PC and MIC.

To respond to the MIC members' concerns, PJM has developed the following transition mechanism for MIC consideration applicable to any generating unit that is affected by the Manual 21 revisions.

#### **IV. Proposed Transition Mechanism**

##### **A. Overview**

The proposed transition mechanism requires the party owning one or more affected resources ("Affected Resource Owner") to determine each affected resource's updated ICAP MW value using the revised test requirements and provide documentation showing that the resource's updated ICAP MW value is below that of the resource's current ICAP MW value. The resource's ICAP MW value will be updated in the RPM system and the impact of this update on existing RPM commitments for any upcoming Delivery Year for which an RPM auction has already been conducted is determined for each affected resource. The impact on existing RPM commitments is determined in UCAP MW terms and summed across all affected resources for each Affected Resource Owner. The total UCAP MW impact represents the total capacity resource commitment deficiency quantity for which the Affected Resource Owner is subject to a Capacity Resource Deficiency Charge unless replacement capacity is provided for each deficient resource commitment prior to the start of each delivery year.

Instead of obtaining replacement capacity to resolve the capacity commitment shortfall for each of the Affected Resource Owner's affected resources, the proposed transition mechanism would introduce a tariff provision that would afford the Affected Resource Owner the option of electing to have the RPM commitment of each of the affected resources reduced to eliminate the commitment shortfall quantity. In electing this transition option, the Affected Resource Owner relinquishes RPM revenues associated with the reduced commitment quantity and RPM reliability charges to load are reduced accordingly. PJM will offset the total reduction in capacity commitment level associated with election of this option by reflecting this quantity in the determination of PJM buy bid or PJM sell offer activity in upcoming incremental auctions for any impacted Delivery Year.

A more detailed description of the proposed transition mechanism as it relates to the Manual 21 revisions is given below:

##### **B. Eligibility Requirements**

Any generating unit that meets both of the following requirements is considered to be an affected resource impacted by the Manual 21 revisions and would be eligible for the proposed transition mechanism:

- (1) Generating unit must be either a hydro generating unit or pumped storage generating unit which will now be required to conduct its capacity testing in the summer; or steam generating unit that

had not previously provided corrected capacity test results taking into account ambient conditions as clarified under the Manual 21 revisions.<sup>2</sup>

- (2) Generating unit must provide PJM with summer capability test data meeting the revised Manual 21 requirements for the 2011, 2012 and 2013 summer periods by April 1, 2014; and this data must show that the highest revised test value from the 2011, 2012 and 2013 summer periods is less than the generating unit's current Capacity Interconnection Rights (CIR) MW value and the generating unit's current RPM ICAP MW value.

### **Transition Mechanism**

A generation owner that wishes to elect the transition mechanism must notify PJM by 4/1/2014 of this election for all its generating units meeting the requirements specified above.

- (1) The CIR MW value and the ICAP MW value of each affected generating unit will be updated and set equal to highest revised test value from the 2011, 2012 and 2013 summer periods. The updated ICAP MW value will be reflected in the RPM system with an effective date of 6/1/2014.
- (2) If the affected generating unit has an existing RPM commitment for any of the 2014/15, 2015/16 or 2016/17 Delivery Years, then PJM will reduce that unit's existing capacity commitment by the UCAP MW equivalent of the difference between the unit's initial ICAP MW value and the unit's updated ICAP MW value. The generation owner relinquishes RPM revenues for this reduced commitment quantity but also eliminates the need to obtain replacement capacity in order to avoid any Capacity Resource Deficiency Charge.
  - a. The ICAP MW to UCAP MW conversion will use the generating unit's final EFORD to reduce the generating unit's 2014/15 UCAP commitment and will use the generator unit's sell offer EFORD to reduce the generating unit's 2015/16 and 2016/17 UCAP commitment.
  - b. If the total capacity resource commitment for a given delivery year was the result of clearing in multiple RPM auctions for that delivery year, then the total required UCAP MW reduction will be allocated to each auction commitment on a pro-rata basis.
- (3) The total UCAP MW reduction of all affected units for each delivery year will be reflected in future incremental auctions for that delivery year by applying a corresponding adjustment to the quantity that PJM would otherwise seek to procure or release in those incremental auctions<sup>3</sup>. For example, if the total UCAP MW reduction of all affected units for the 2015/16 Delivery Year is 300 MW, then PJM will reduce any required PJM sell offer quantity into an IA for that delivery year by 300 MW or increase any required PJM buy bid quantity into an IA for that delivery year by 300 MW.

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<sup>2</sup> Steam generating units that provide temperature-corrected summer test data submit both uncorrected and corrected test values into the eGADS system therefore PJM has the information needed to determine those steam generating units that meet this criterion.

<sup>3</sup> Since Tariff changes are required to effectuate this mechanism, it will not be in place in time for application to the 2014/15 third incremental auction.