PJM MEPETF
Package H Overview

07/31/18
# Package H Overview

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| FSA Modeling   | Consider all FSA and Suspended ISA resources at time of case build         | Suspended ISAs are included in the model at full capability. All FSAs are included in the model with their capabilities scaled to 40% of their proposed MW Energy. Scaled units should maintain similar economic performance as if they were modeled at full capability (their proposed MW Energy). | • Significant amount of “late stage” queue generation will go into commercial operation within 15 year planning horizon, and thus, some amount of FSA generation should be modeled in market efficiency study.  
  • Assuming no FSA generation from the queue will go into service is not realistic.  
  • Queue generation is responding to market signals and should be modeled.  
  • Generation which is economic will be dispatched; generation which is not economic will not be dispatched in study.  |
| FSA Exception  | If FSA or Suspended ISA resources are excluded from the base case at time of case build, TEAC should be notified. | Status Quo                                                                 | • Reserve requirement is a floor for Capacity MW, not a cap or a target amount for either Capacity or Energy MW.  
  • RPM regularly procures capacity in excess of reserve requirement  
  • Scaling FSA generation will capture trends in aggregate queue generation development while reducing impacts and uncertainties at specific locations (modeling is diffused). |
| Criteria to Include FSAs | Not defined. PJM practice includes all. | In case of a reserve deficiency, FSA units can be scaled higher than 40%. |                                                                                                                                         |

1 Suspended ISAs have CIRs which must be maintained in reliability analyses.  
2 Per 12/14/17 PC, Item 7, Slide 8, roughly 40% of MW which complete Facilities Study enter Commercial Operation
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| Benefit Adjustment for In-Service Date | N/A | As a means of comparing between alternatives with different in-service dates, benefits can be adjusted for that difference as proposed by PJM (slides 9-10, item 3g). Ideally, this adjustment would be done following the Independent Cost and Schedule Review. This adjustment would be done for projects with in-service dates both before and after the RTEP year. B/C Ratio for approval would remain unadjusted. | • There is no rationale nor justification to either incentivize projects to be done by RTEP year\(^2\) or to penalize projects if they cannot meet this arbitrary in-service date.  
  - B/C should be evaluated for first fifteen years of project life irrespective of in-service date of project.  
  - Separate from B/C calculation, methodology needed to compare between competing alternatives with different in-service dates.  
  - PJM proposed methodology (with adjustments)\(^1\) is workable for performing comparison provided foregone benefits by project with later in-service date are quantified based on benefits provided by project with earlier in-service date. |

#### Sensitivities

- For informational purposes only

### Status Quo

- No need for mandatory sensitivity

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\(^1\)6/15/2018 MEPETF, Item 3g. An adjustment to the proposed methodology is needed for logical consistency. The Benefits of the proposal with the later In-service date should be adjusted by the benefits which would be foregone by not doing the proposal with an earlier in-service date.

\(^2\)Year for 2016/2017 Window was 2021. 2 years cycle target end date was December 2017. The Final Board Approval for a solution from that window occurred in April 2018. This is only 3 years from RTEP year. Two full RTEP cycles had completed by April 2018 and a third cycle was underway. All relevant factors consistent with the latest RTEP cycle had been accounted for in the Market Efficiency models.
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<tr>
<td>Sensitivity Parameters</td>
<td>N/A</td>
<td>Status Quo</td>
<td>N/A</td>
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<tr>
<td>Generator Retirement Plan</td>
<td>Aligned with simulation years</td>
<td>In all simulated years, generation and transmission topology are set at RTEP year level</td>
<td>• Mitigate benefit uncertainty driven by topology and generation</td>
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