



# Market Efficiency Process Enhancement Task Force: PJM Proposal Review

December 3, 2019

## MEPETF Phase 3 authorized by Planning Committee in June 2019

- Address concerns with benefit/cost calculations using summation of energy and capacity benefits
- Discuss Regional TMEP concept and explore any necessary alternatives
- Evaluate the benefit-to-cost calculation for the two items:
  - Evaluate whether the current b/c analysis for a project should include zones with both positive and negative benefits
  - Explore whether the current b/c analysis includes a method to evaluate risk in both cost and benefit estimates

- **PJM is proposing three changes to the market efficiency process**
  - create standalone process to address RPM drivers independent of energy driver analysis
  - modify calculation inputs for RPM benefits
  - create a backwards looking “quick hit” market efficiency process to address persistent congestion not identified in the forward looking planning model
- **PJM is not proposing changes to the existing energy benefit calculation or rules governing project cost commitments**
  - summary available [here](#)
  - 76% prefer status quo

## Capacity Benefits

- 86% prefer a change to status quo; 100% can support window portion of PJM proposal
- Clarification to the options matrix file for capacity portion of proposal
- Concerns with how benefits would be calculated when the energy and capacity driver are the same

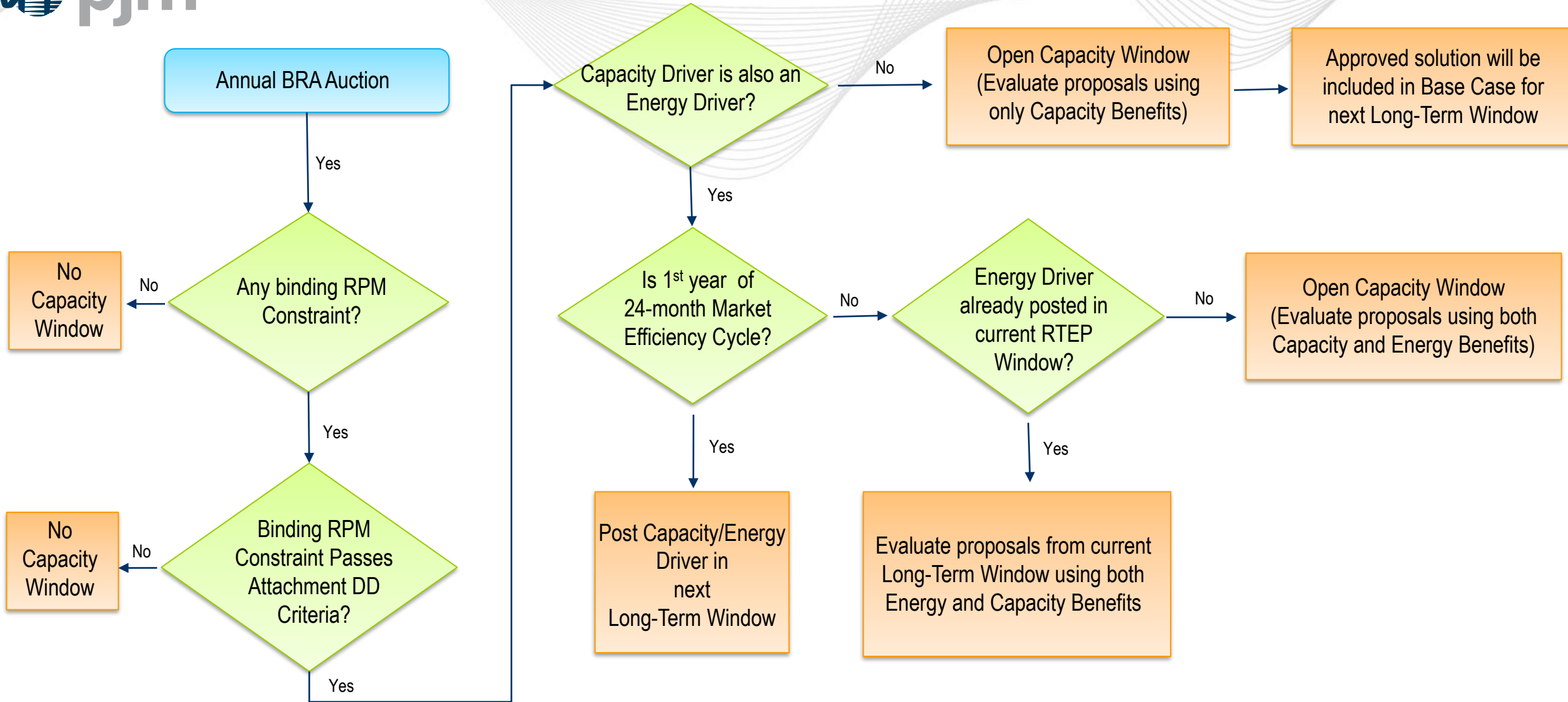
## Regional Targeted Market Efficiency Process

- 72% prefer a change to the status quo
- Concerns with a 30-day competitive window or exception
  - 67% can support exception (package A4)
- Relation / timing with Market Efficiency projects

- Matrix file consolidated to one tab
- OATT paragraph 3 specifically referenced for capacity benefit criteria
- Packages color-coded to highlight differences

Design Component	Status Quo	Proposed Change	Justification
Capacity Benefit Calculation Simulation Years	RTEP, RTEP+3 and RTEP+6	RPM and RTEP years	Addresses topology and CETL uncertainties beyond RTEP year
In-Service for RPM Market	No restrictions	To be in service prior to June 1 of the Delivery Year for which the Base Residual Auction is being conducted. In the event a transmission expansion cannot be placed in service by this date, PJM will consider capacity market solutions that can be in service before RTEP year.	Ensure projects address a capacity driver by the RPM year

Design Component	Status Quo	Proposed Change	Justification
Cycle Type	24-Month	24-Month for Energy drivers 12-Month for Capacity drivers	<ul style="list-style-type: none"> <li>Address capacity driver in time for BRA delivery year</li> <li>Existing procedures outline when transmission solutions are appropriate in RPM</li> </ul>
Proposal Windows Type and Duration	120-day long-term window for Energy, Capacity and multi-criteria drivers; biennial	120-day biennial window for long-term Energy drivers 60-day annual short-term window for Capacity exclusive and multi-criteria drivers, when needed	
Window Timing	January-April of odd years (addressed in Phase 2)	Energy drivers: January-April of odd years Capacity drivers: Following the annual Base Residual Auction (BRA)	
Capacity Driver Criteria	Tied to Eligible Energy Congestion Drivers	Follow existing OATT Att. DD, Section 15 language	
Timing and Coordination with Energy Drivers and Capacity Drivers Windows	N/A	If the same congestion drivers are identified for both Energy and RPM, then the evaluation of the combined benefits will be performed during the 24-month process used for the evaluation of Energy congestion drivers. The latest available ME base case will be used to evaluate the proposals for such multi-criteria drivers.	





# Timeline 2<sup>nd</sup> Year of RTEP Cycle

P  
J  
M

Jan 2<sup>nd</sup>  
RTEP Window Open  
Post Energy Drivers

Apr 15<sup>th</sup>  
Post Revised BRA  
Parameters  
(CETL/CETO, limiting  
elements)

Feb 1<sup>st</sup>  
Post Initial BRA  
Parameters  
(CETL/CETO, limiting  
elements)

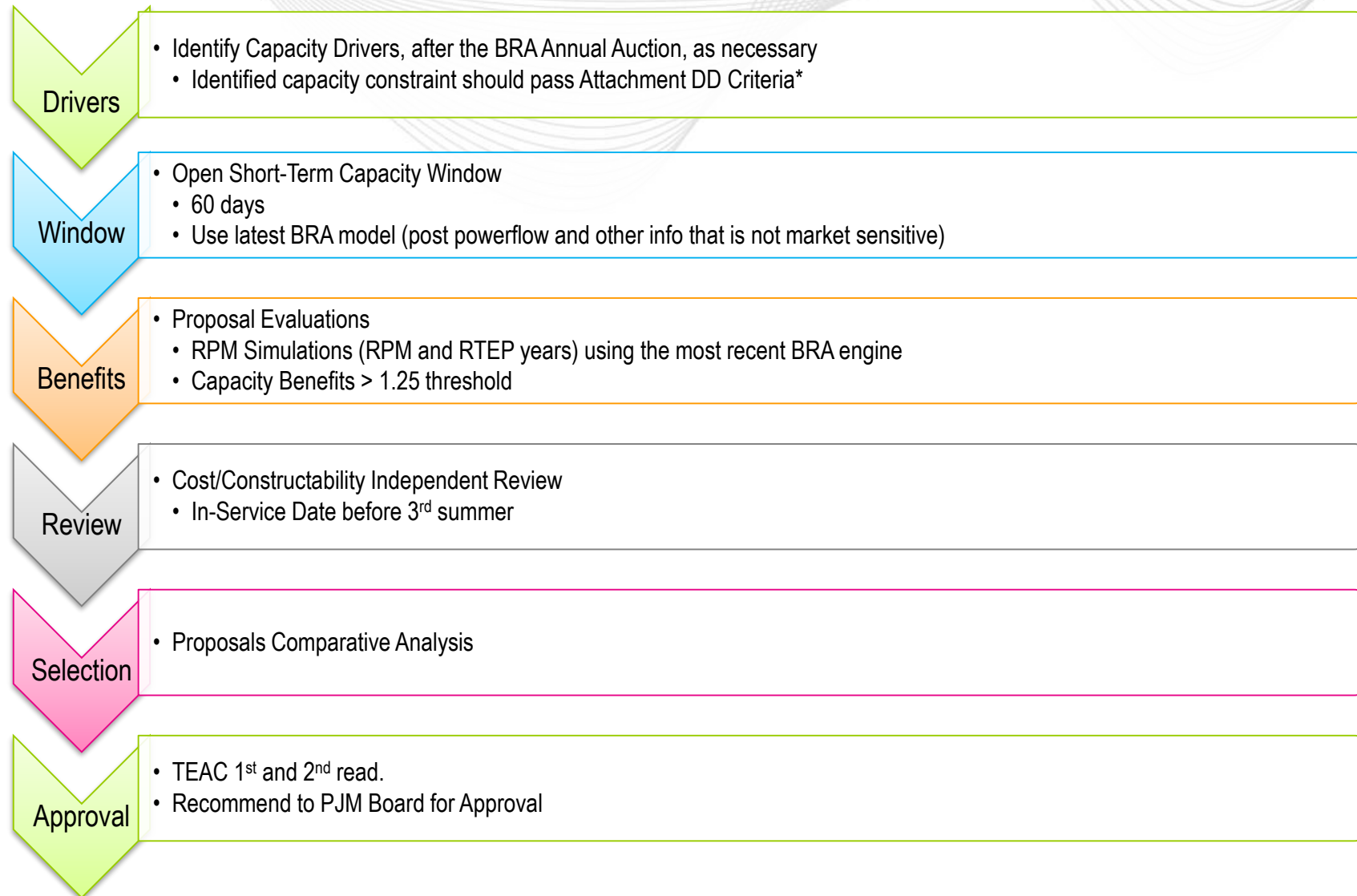
April 30<sup>th</sup>  
Final Day Proposals  
Acceptance  
RTEP Window Closes

## Proposer Actions

Initial Energy Design  
Phase  
(based on Energy  
Drivers)

Capacity Design  
Adjustment Phase  
(Energy + Capacity  
Drivers)

Final Fine-Tuning  
Design Phase  
(Energy + Capacity  
Drivers)



Design Component	Status Quo	Proposed Change	Justification
Qualified Projects	N/A	Consistent with interregional TMEP process	<ul style="list-style-type: none"> <li>Establish process to fill gap that exists when historical congestion is persistent and not captured in planning models</li> </ul>
Qualified Congestion Drivers	N/A	PJM Identified facilities with significant and persistent historical congestion (based on previous 2 years) that are not due to planned outages, that are not addressed by any planned system changes	
Benefits	N/A	Average of past 2 years of historical congestion (Day Ahead + Balancing), adjusted for outage impacts	
Cost	N/A	Project capital cost (no discount or inflation rate)	
Passing Threshold	N/A	Four years worth of Benefits (no discount/inflation rate) must completely cover project's capital cost	

Design Component	Status Quo	Proposed Change	Justification
Timing and Coordination between TMEMP and ME Processes	N/A	TMEMPs will be studied periodically throughout the market efficiency 24-month cycle. Any identified TMEMP driver will be reviewed by TEAC and identified solutions will be approved by Board on an as needed basis.	<ul style="list-style-type: none"> <li>Establish process to fill gap that exists when historical congestion is persistent and not captured in planning models</li> </ul>
Unit Retirements in Area of Congestion	N/A	Consistent with interregional TMEMP process	
Competitive Process Type	N/A	Sponsorship Model	
TMEMP Window	N/A	30-day window, as needed	



# TMEP/MEP Comparison

*MEP criteria will apply if driver thresholds are met; RTEMPs will not be studied on PJM-MISO seam*

Design Component	MEP	Regional TMEP
Benefit Metric	Net Load Payment Savings	Congestion Cost Savings
Project cost for B:C Ratio	15-years of Annual Revenue Requirement	Total Capital Cost
Project Cost Cap	N/A	\$20M
In-service Date	RTEP year or later	3 <sup>rd</sup> Summer Peak
Passing Threshold	1.25:1 NPV over 15 years	1:1 over 4 years
Qualified Congestion Driver	Simulated congestion of \$1M or more in each RTEP and RTEP+3 simulation years	Historical avg. congestion of \$1M or more in 2 previous years; Simulated congestion less than MEP threshold
Proposal Window	60 days	30 days

- Planning Committee first read December 2019, vote January 2020
  - Full task force report
  - Recommend group sunset at January PC vote
- MRC first read (if necessary) February 2020, vote (if necessary) March 2020
- File OA changes with FERC April 2020 effective for 20/21 window