



# Market Efficiency Process Enhancement Task Force: Phase 3 update

Brian Chmielewski  
Manager, Market Simulation  
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MEPETF

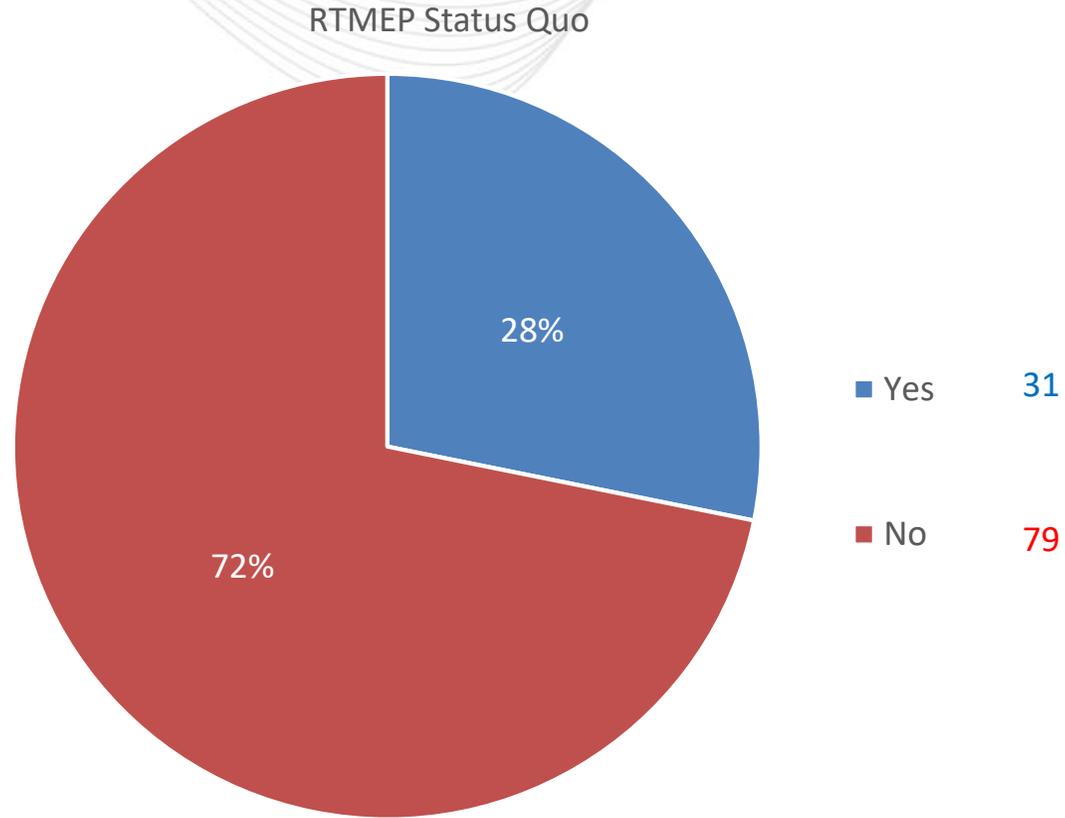
## MEPETF Phase 3 authorized by Planning Committee in June 2019

- 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

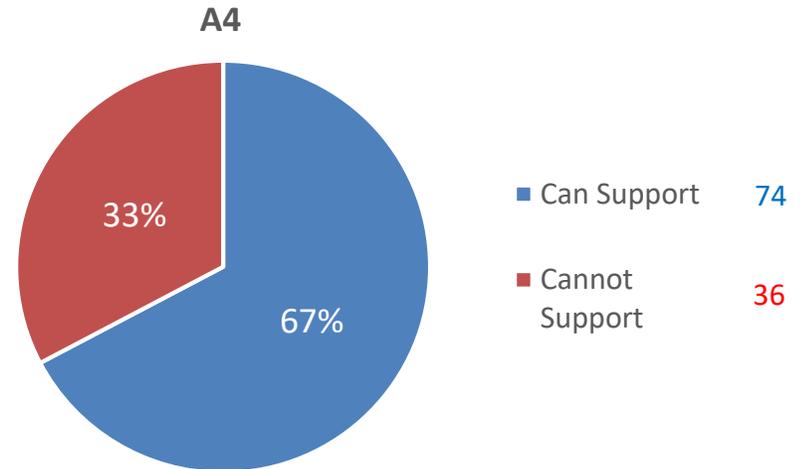
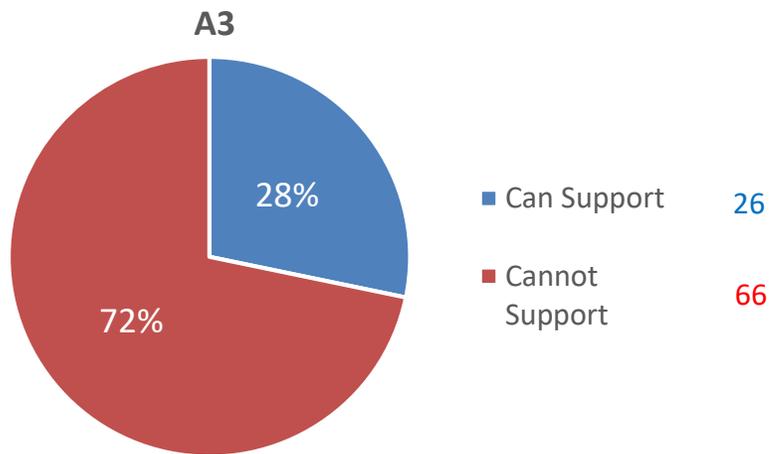
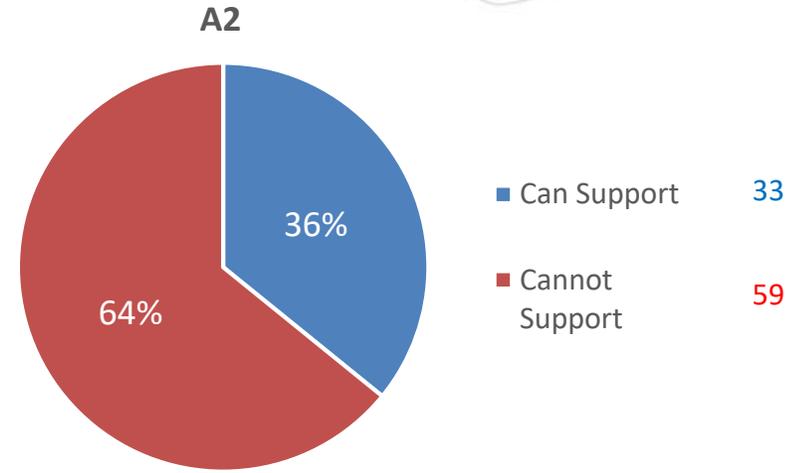
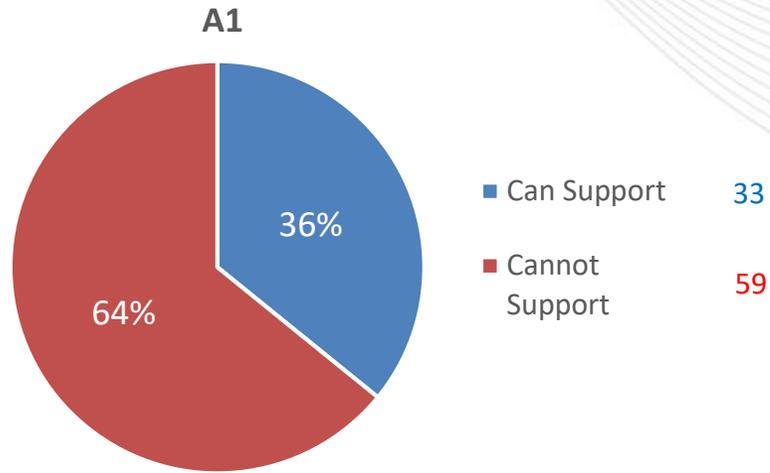
- Poll responses are non-binding and intended to solicit feedback on potential support for key design components
- Total Unique Responders – 14
- Total Companies – 110



1. With regards to a new RTMEP process, do you prefer to retain the status quo which currently has no internal/regional targeted market efficiency process?

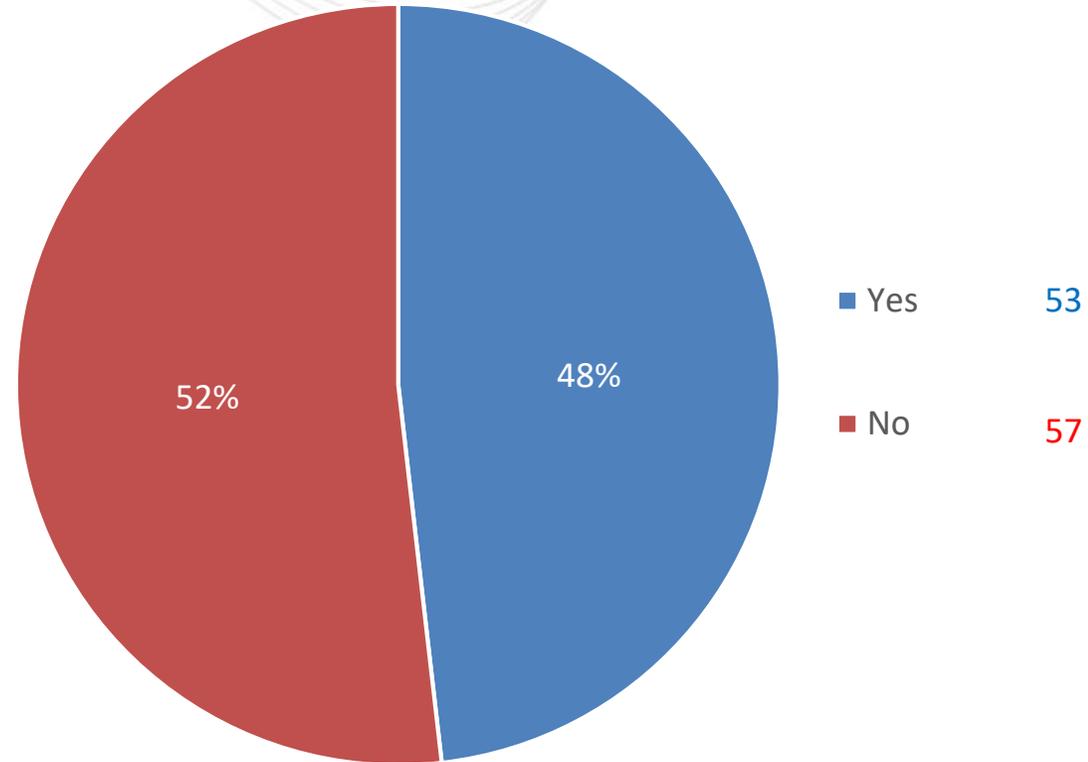


## 2. Please indicate whether or not you can support each option with regard to using a new RTMEP process for market efficiency projects.



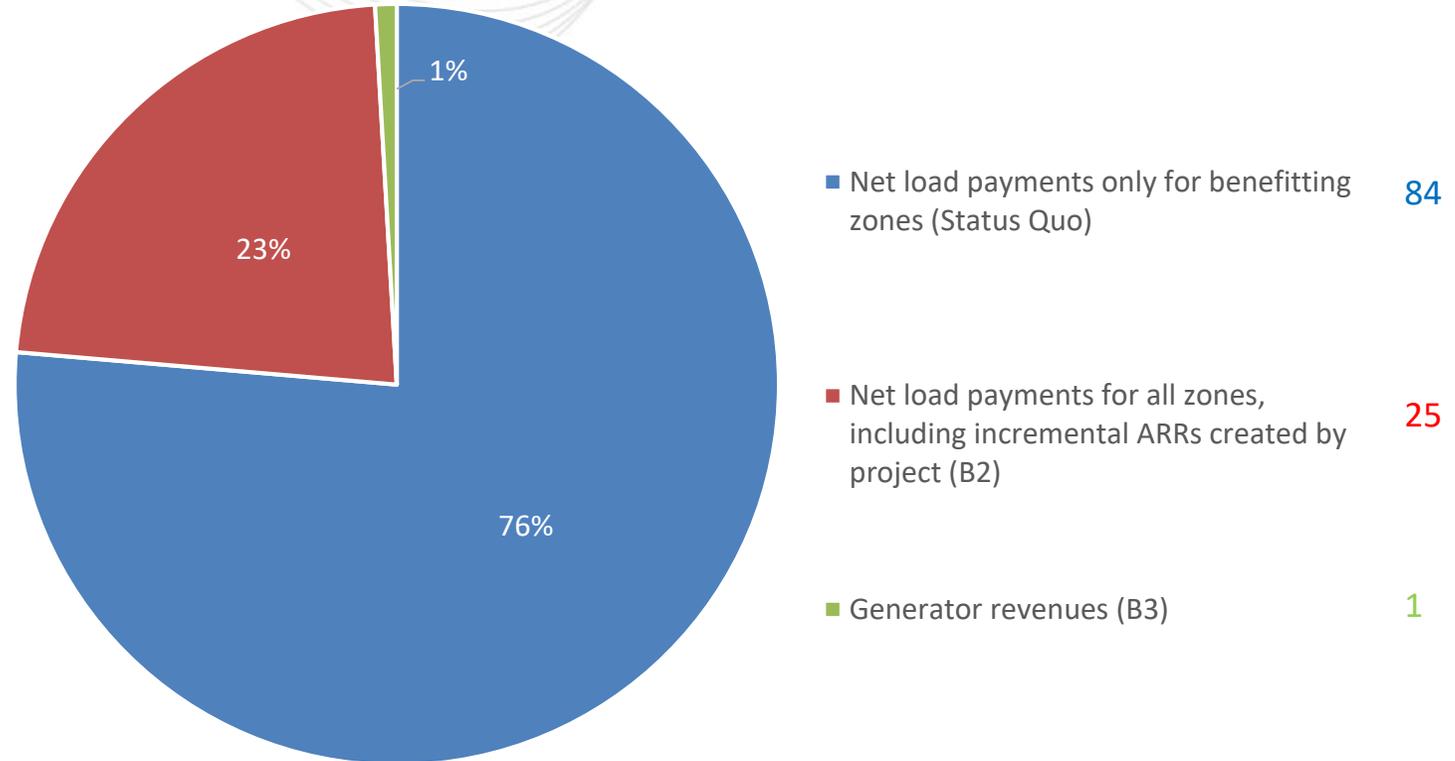
### 3. With regards to the benefit calculation, do you prefer to retain the status quo?

Benefits Calculation Status Quo



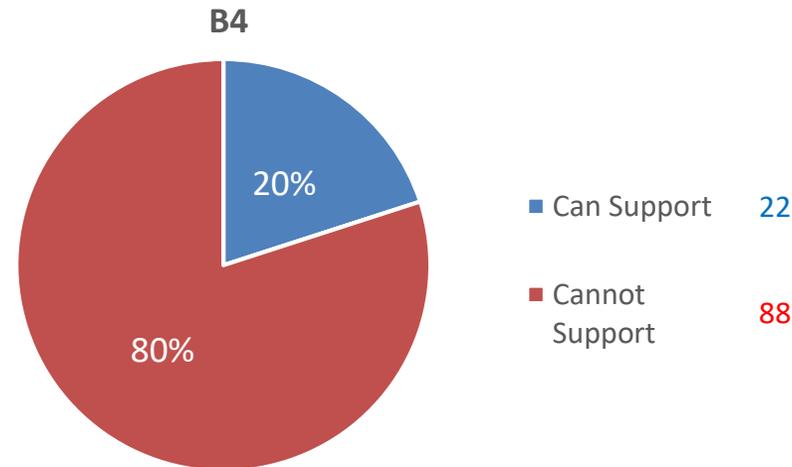
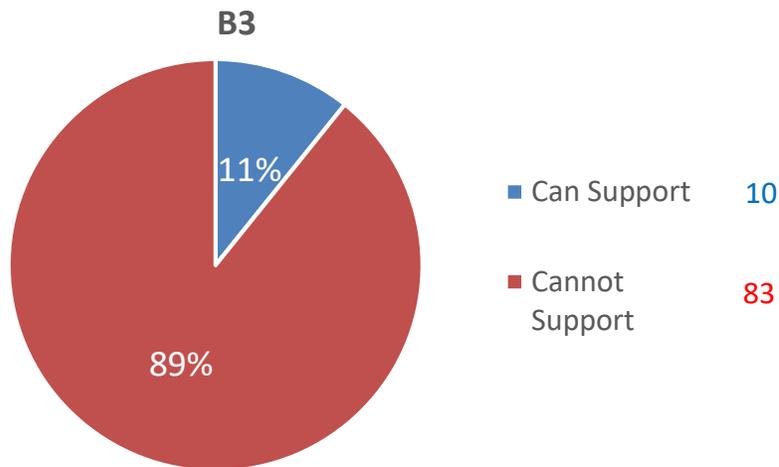
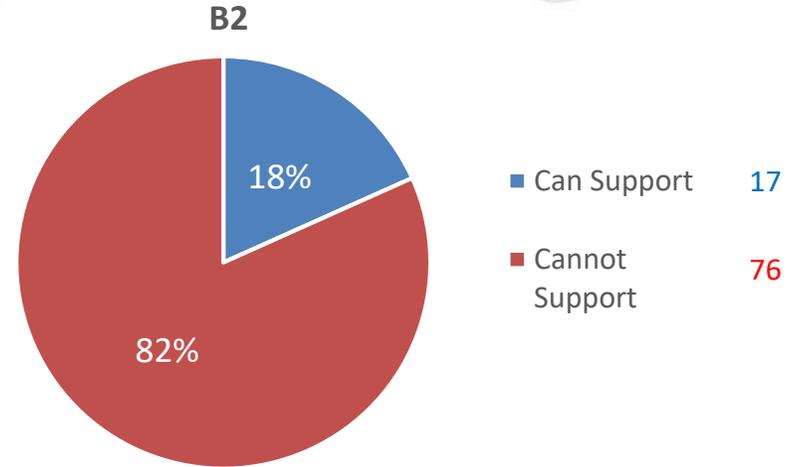
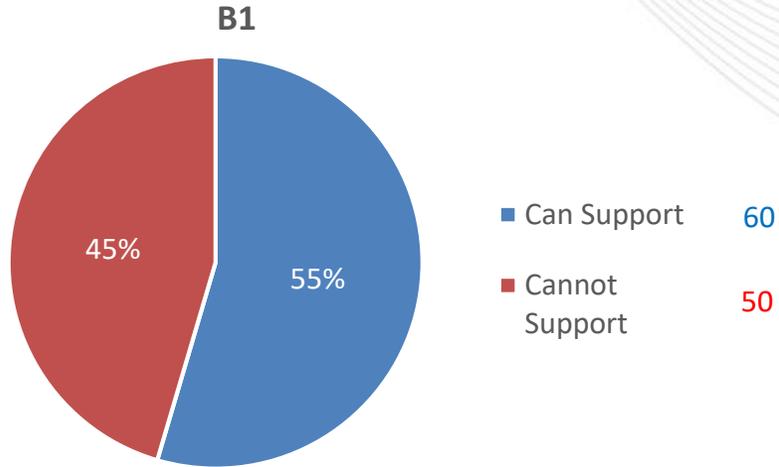
# 4. Which of the benefit calculation metric options do you most strongly support?

Benefit Calculation Metric Options





# 5. Please indicate whether or not you can support each option with regard to the benefit calculation metric used for market efficiency projects.





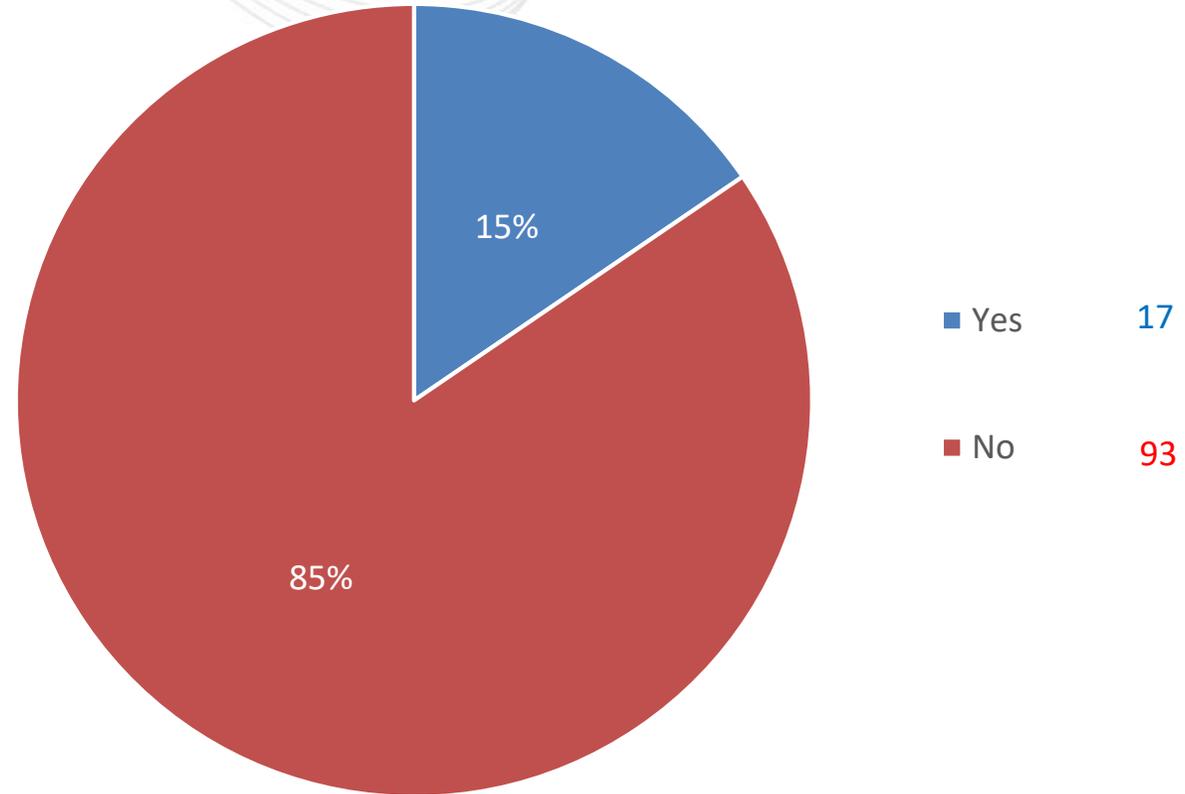
5. Please indicate whether or not you can support each option with regard to the benefit calculation metric used for market efficiency projects.

## Comments

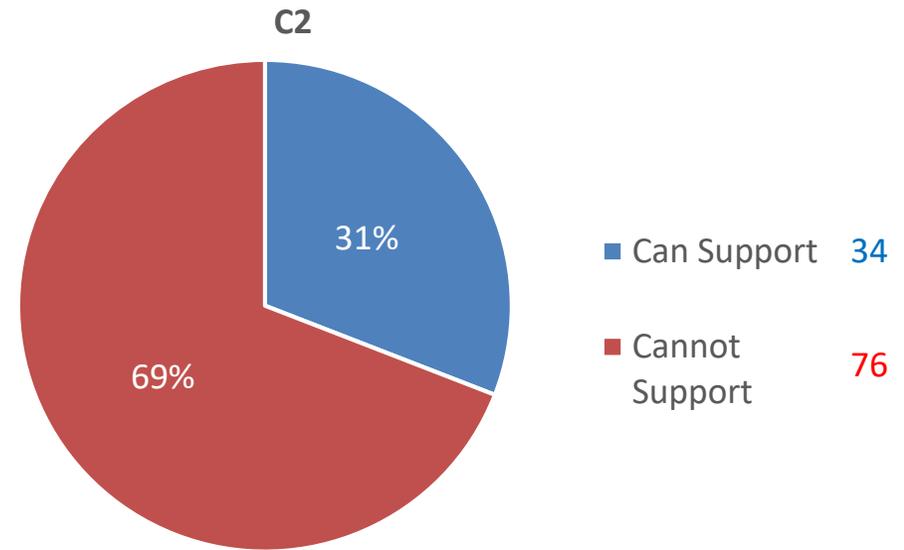
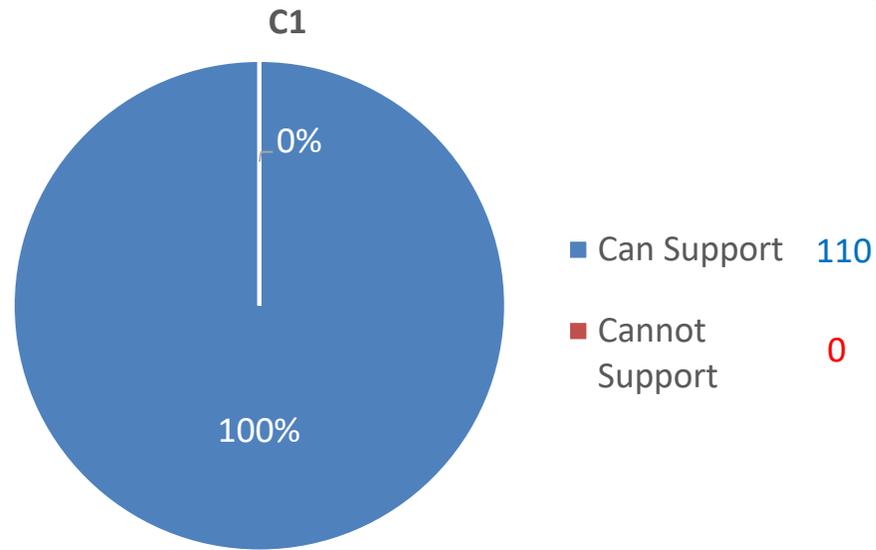
- Being in-service for RPM Year is too restrictive
- Primary support is for B4; could possibly support B2 and B3.

# 6. With regards to the window for capacity drivers, do you prefer to retain the status quo?

Window for Capacity Drivers Status Quo



# 7. Please indicate whether or not you can support each option with regard to the window for capacity drivers used for market efficiency projects



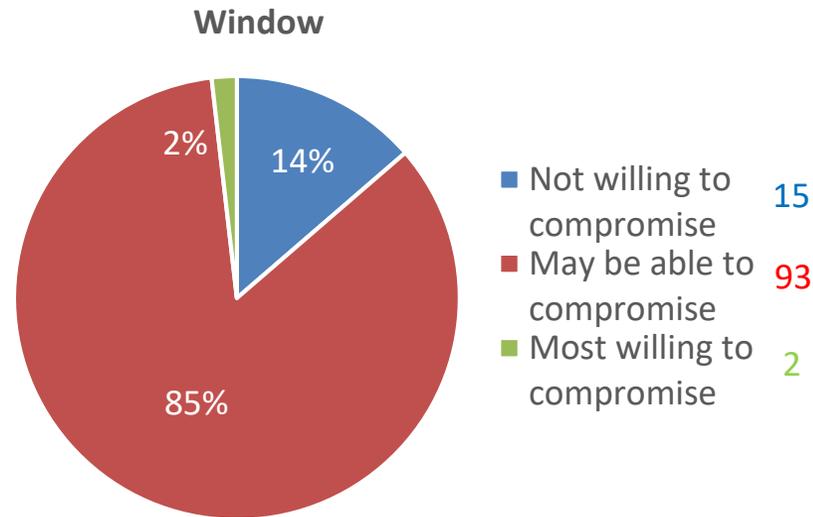
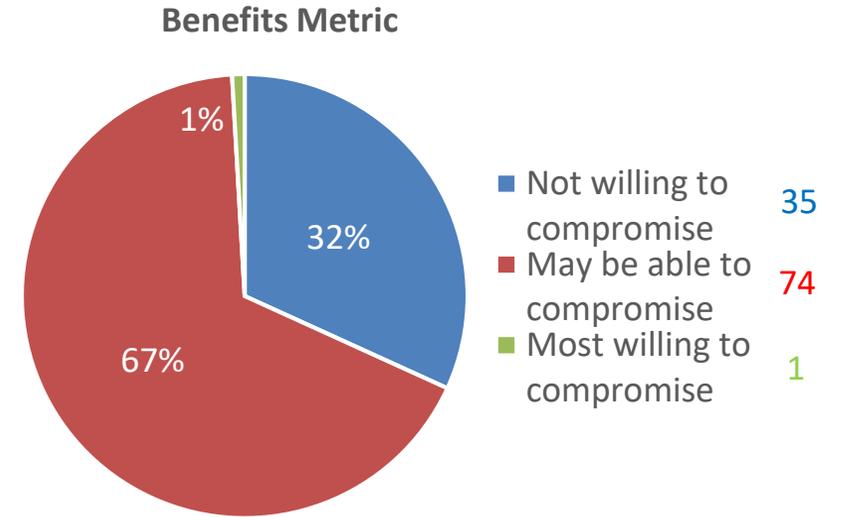
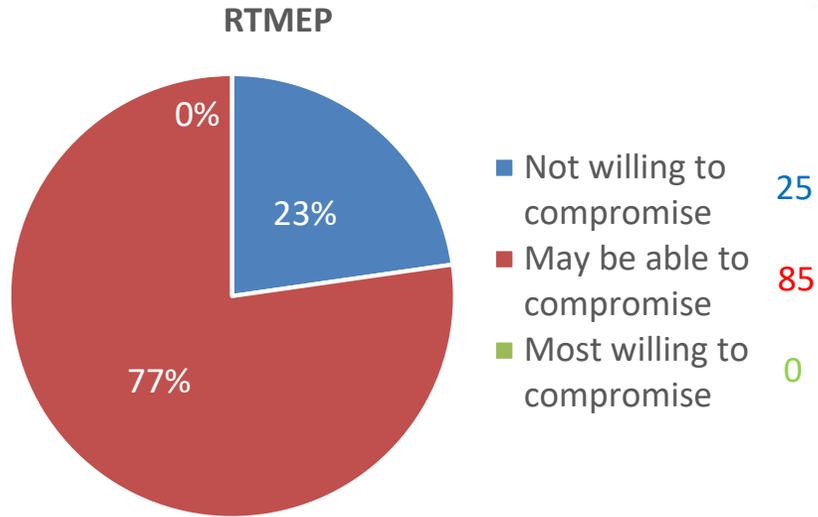


7. Please indicate whether or not you can support each option with regard to the window for capacity drivers used for market efficiency projects

## **Comments**

- Primary support for C1; could also support C2
- Important to separate the evaluation of projects by Energy Market drivers from those based on Capacity Market drivers.

# 8. Please indicate your willingness to compromise on the following design components:



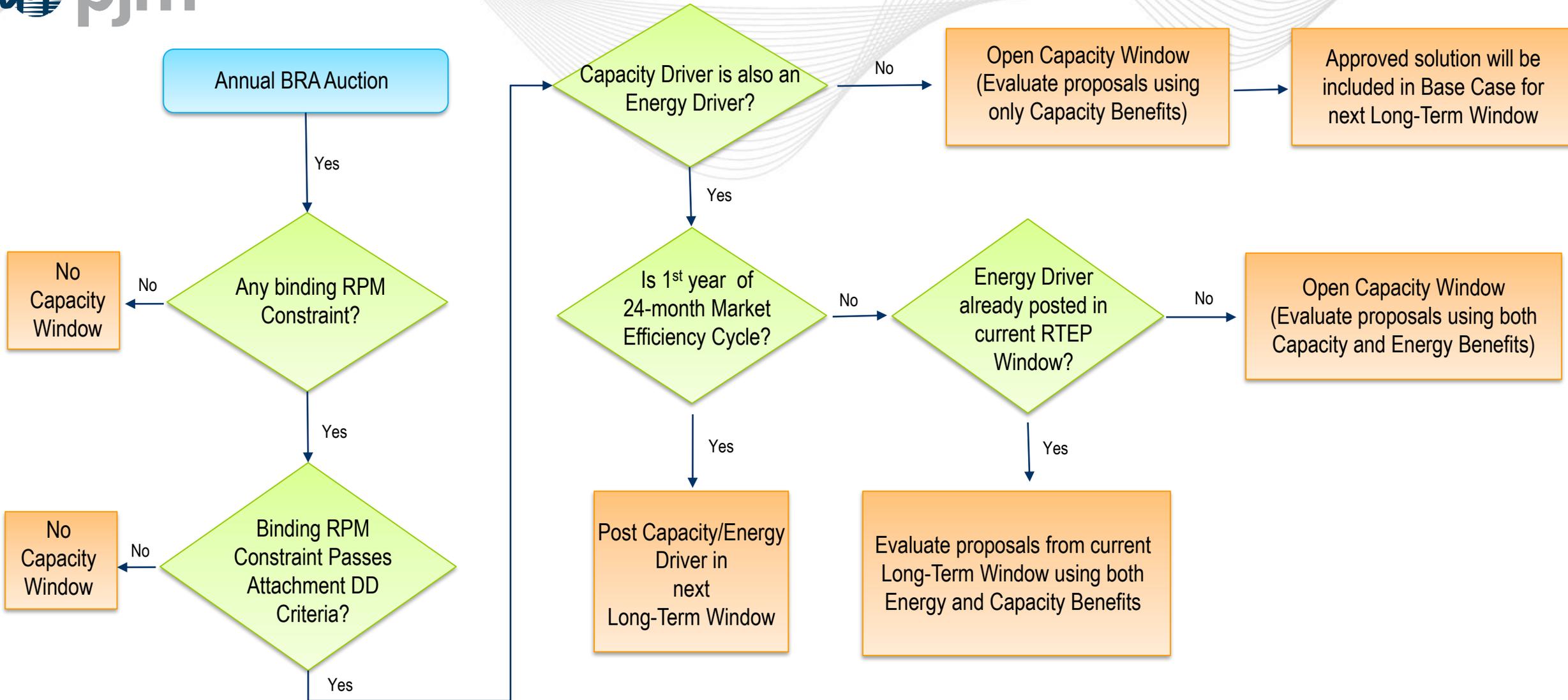
## Comments

- There may be some flexibility around the solicitation process for RTMEPs.
- Alternative benefit proposals currently before the MEPETF have not been shown to be superior to the current MEP process.
- Capacity window must be separated from the energy window; there is no alternative or compromise in this situation.

- **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](#)

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.	



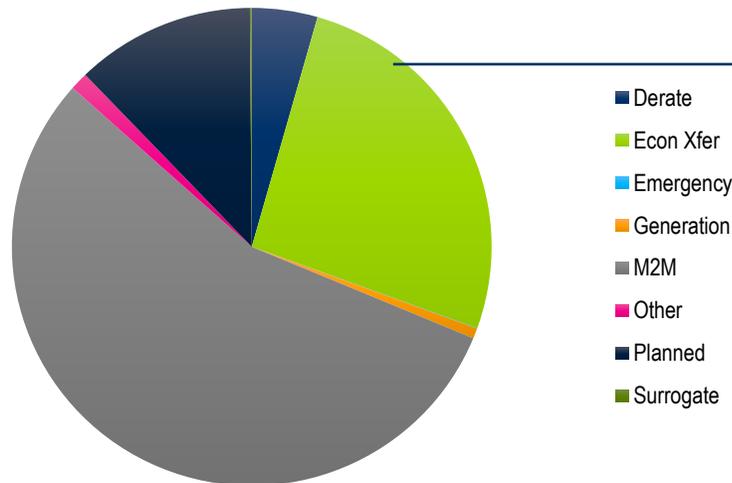


Design Component	Status Quo	Proposed Change	Justification
Qualified Projects	N/A	Consistent with interregional TMEP process	<ul style="list-style-type: none"> <li>Establish process to fill gap that exists when historical congestion is persistent and not captured in planning models</li> </ul>
Qualified 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	

- As a result of Phase 2, PJM Markets has been tracking and classifying causes of day-ahead and balancing congestion revenues since June 1, 2019
  - Two potential candidates if trends continue

**Causes of Congestion  
June 2019 – October 2019**



Monitored Element	Contingency	Identified Solution in RTEP?
TANNERSC345 KV TAN-MIA1	L345.EastBend-Terminal	Yes
CONASTON500 KV CNS-PEA	L500.Hunterstown-Conastone.5013	Yes
CONASTON500 KV CNS-PEA	BASE	Yes
BELLEFON T3 XFORMER H 138 KV	138/69/34.Bellefonte.T2	Yes
LORETTO 138 KV LOR-VIE	L230.IndianRvr-PineyGrve.23002+230/138.PinyGr.AT20	No
HAVILAND J CB 138 KV	L345.EastLima-MaddoxCreek	No
FACEROCK FAROZBR SER DEV A 69 KV	L500.Conastone-PeachBottom.5012	Yes
SBENDAEP138 KV SBE-TWI1	345/138.Olive.T2(Sctnlz)	Yes

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

- OA / Manual redline review December 3<sup>rd</sup> at MEPETF (**pending poll results**)
  - Q/A session
- 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