Consultation With Members Regarding Future 205 Filing on Capacity Market

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Special Markets and Reliability Committee
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Purpose and Timing

The purpose of this meeting is to get feedback on the path forward including the scope and substance of a 205 filing.	*This is session 1 of 2 on this topic.* 1. The second will be at the Nov. 21 Members Committee (MC). 2. The full PJM Board has been invited to attend the Nov. 21 MC meeting to hear the discussion and positions of stakeholders.

- Following that meeting, PJM will consult with the Board. Any filing resulting from that would be expected to be made in early December 2024.
- As part of that filing, PJM will set out a schedule for the auction. We will look for opportunities to slim the pre-auction schedule to minimize the delay time for auctions.
- A deficiency notice on the filing could extend auction delays.

Topics Raised Since 2025/26 BRA

Various capacity market design elements have been discussed since the clearing of the 2025/2026 BRA.

PJM is pursuing an auction delay for 2026/2027 to propose changes to some of these.

- PJM will propose changes to several design elements today, as alternatives have already been identified and the implementation of those is straightforward.
- Other areas where PJM and stakeholders may desire change have less obvious alternative approaches or those approaches require more discussion and analysis to vet them.

  These items are candidates for future filings following a more deliberative stakeholder process to determine the best path forward.

PJM will support those processes in as expedited a fashion as is reasonable. Some may have solutions that are implementable for the 2027/28 BRA.

Design Elements
Reference technology of CC
$0/MWd Net CONE in some areas
Contribution of RMR resources
Must offer for all resources
Winter deliverability for thermal resources
Other ELCC enhancements
DR availability window
Seasonal capacity market

Currently Planned Scope for a Section 205 Filing

PJM is currently planning to address the following topics with this filing:

Various issues associated with the change in **reference technology** from a dual fuel Combustion Turbine (CT) to a single fuel Combined Cycle (CC).

Concerns raised regarding very low or **$0/MWd Non-Performance Charge Rates** in some areas and not others.

Resource adequacy contributions of **Reliability Must-Run (RMR) units** where the contributions are reasonably comparable to a capacity commitment.

Filing Timeline and 2026/27 Auction Schedule

Dec.	Jan.	Feb.	March	April-May	June
•205 filing submitted to FERC (early) •NOI deadline for 2026/27 BRA	•Order from FERC on 205 filing •Must-offer exception requests	•Member vote and Board approval of FPR •MSOC process starts	Post Planning Parameters	Market Sellers appeal to FERC	Auction

A filing in early December 2024 results in a tight schedule to hold an auction in June 2025 given the typical pre-auction schedule.

- It results in the NOI date for the 2026/27 BRA occurring before we receive an order from FERC. This is not ideal but will be the case for this auction.
- As PJM evaluates the final auction schedule it will propose, we will look to find time to trim to maintain the auction in June.
- The 26/27 BRA will use the updated load forecast.

Items Beyond Scope of December Filing: Must Offer for All Resources and Market Seller Offer Cap

PJM does not view applying a must offer to intermittent resources to be as simple as it has been portrayed.

- Current structure was implemented during Capacity Performance (CP) as a measure to mitigate performance risk. No explicit changes have been made to replace this risk mitigation measure.
- The existing MSOC has known deficiencies regarding the inclusion of opportunity cost and CPQR when going-forward costs are otherwise zero or negative (see ER24-98 order). Applying this MSOC to intermittent resources could result in confiscatory offer levels.

- Exempting intermittent resources from CP risk will likely face discrimination arguments that will be challenging to overcome.
- PJM believes a sub-annual design would more naturally allow for extension of the must offer to intermittent resources whose performance aligns with market sub-divisions. Although proposed by PJM, it was broadly not supported in the CIFP process and would take more time to refine and implement.
- Including this contentious topic will add additional risk of litigation and auction delay.

Possible measure for inclusion in December filing…

Introduce language stating that the must-offer exemption is not a defense for withholding to increase prices for the benefit of the Market Seller's portfolio.

Next Steps

PJM will bring a Problem Statement and Issue Charge to the December 2024 MRC.

Items Beyond Scope of December Filing: Winter Deliverability for Thermal Resources

PJM supports further exploration of this and is analyzing the amount of additional capacity this change could result in. Implementation is not trivial and requires resolution of various design decisions.

- Should thermal resources be required to be studied at levels higher than their CIRs or should it be by election like it is done for wind resources today?
- The energy market must offer (currently in the OA) is based on cleared ICAP which is limited by CIRs, an annual number. Granting winter deliverability to thermals could increase the cleared ICAP in that season above the CIR level. Changing the energy market must-offer to reflect this appears to require OA amendments.
- If the full capability available/requested is not deliverable, how should it be allocated?

- Further, this change will impact accreditation and the determination of the Planning Parameters.

  Like other changes to ELCC, an order would be needed in December 2024 to implement the changes for a mid-year 2025 auction.

Venue for Further Discussion

This topic is included in the scope of the ELCC Enhancements Issue Charges brought forth by LS Power. PJM supports prioritizing this issue so that any enhancements may be implemented by the 27/28 BRA.

Items Beyond Scope of December Filing: Other ELCC Enhancements

- Various changes/enhancements to the risk modeling and ELCC calculation have been identified for further discussion.
- PJM supports tackling these requests in an expedited manner.
- Implementation of those identified is not feasible for the 2026/27 BRA, as a FERC Order accepting the proposed enhancements would be needed by December 2024 to implement them for a mid-year 2025 auction.
- Based on the proposed auction schedule, implementation of changes for the 2027/28 BRA would require a filing with FERC around March 2025 assuming the changes require minimal software development, testing and implementation.

Venue for Further Discussion

This topic is included in the scope of the ELCC Enhancements Issue Charges brought forth by LS Power. PJM supports targeting a set of changes that can be implemented by the 27/28 BRA.

Items Beyond Scope of December Filing: DR Availability Window

- Enhancements to the modeling of DR during the reliability analysis were initially raised in May 2024 and have been discussed at the MIC since then.
- Meaningful progress has been made in this area since that time. Currently solution options are being discussed with the hope of arriving at a vote in the next few months.
- Like other enhancements impacting the Planning Parameters and accreditation, implementation of these enhancements is not feasible for the 2026/27 BRA, as a FERC Order accepting the proposed enhancements would be needed by December 2024 to implement them for a mid-year 2025 auction.

Venue for Further Discussion

Continued Discussion at the Market Implementation Committee

Items Beyond Scope of December Filing: Sub-Annual Capacity Market

PJM continues to support the design and implementation of a sub-annual capacity market. While this sounds complex on the surface, it simplifies many things.

- Alignment of accreditation, CETO, CETL, FPR, clearing prices, revenues and cost allocation with seasonal resource adequacy risk patterns
- Better incentives for load reductions that directly benefit system resource adequacy needs
- Ensuring annual revenue requirements are met through a sub-annual market is a problem that electricity markets can already solve (Day-ahead Market unit commitment).

- A sub-annual market is either already implemented or planned to be implemented in every other ISO/RTO with a capacity market.
- The design and implementation of this may take longer than other topics listed, but PJM views the long-term benefits to be significant.

Venue for Further Discussion

To Be Determined

General Condensed Auction Schedule

Auction+

7 months	Notice of Intent to Offer
5 months	Must offer exception requests
4 months	• Member vote and Board approval of FPR • MSOC process starts • Post Planning Parameters
3 months	Market Sellers appeal to FERC
+0 months	Auction post

Auction schedule rounded up to the nearest month.

- Calculation of Planning Parameters and accreditation occurs here.
- Any changes that impact those or the decision to offer a new resource would benefit from FERC approval well before the auction.

Implementation of Enhancements in Future Auctions That Impact Accreditation and Planning Parameters

In general, all of the future enhancements except for the “Must Offer and MSOC” will impact accreditation or the Planning Parameters.

To implement these, an order is needed by ~8 months (or so) prior to the auction.

- This is the tightest timeline possible that results in a FERC Order before the NOI deadline.
- Changes requiring significant software development, testing, etc., will likely require an order even earlier so that there is certainty on the design prior to full development.

Auction Year	Tentative Auction Date*	Estimated Filing Deadline*
2027/28	Dec. 2025	~March 2025
2028/29	June 2026	~Sept. 2025
2029/30	Dec. 2026	~March 2026

** Dates subject to change pending final auction schedule determination.*

Reference Technology and $0/MWd Net CONE

History of the Reference Technology

- For every RPM auction, up to and including the BRA for the 2025/26 Delivery Year, the Variable Resource Requirement (VRR or demand) curve has been based upon a Combustion Turbine (CT) as the reference resource.
- In the 2018 Quadrennial Review (QR), PJM's consultant recommended changing the reference resource from a CT to a Combined Cycle (CC). PJM did not adopt this recommendation and filed to continue using the CT in the 2018 QR. FERC accepted that proposal.
- In the 2022 QR, PJM's consultant once again recommended changing to a CC unit. PJM and many stakeholders supported this recommendation given the circumstances at that time. It was subsequently filed and accepted by FERC.
- Other stakeholders opposed the change to the CC stating that the high and potentially volatile Energy and Ancillary Service (EAS) revenues for this resource would result in very low Net CONEs and instability in the market.

Statement of Problem: Reference Technology

The switch to a single fuel CC as the reference technology in 2026/27 results in several outcomes that have raised concern.

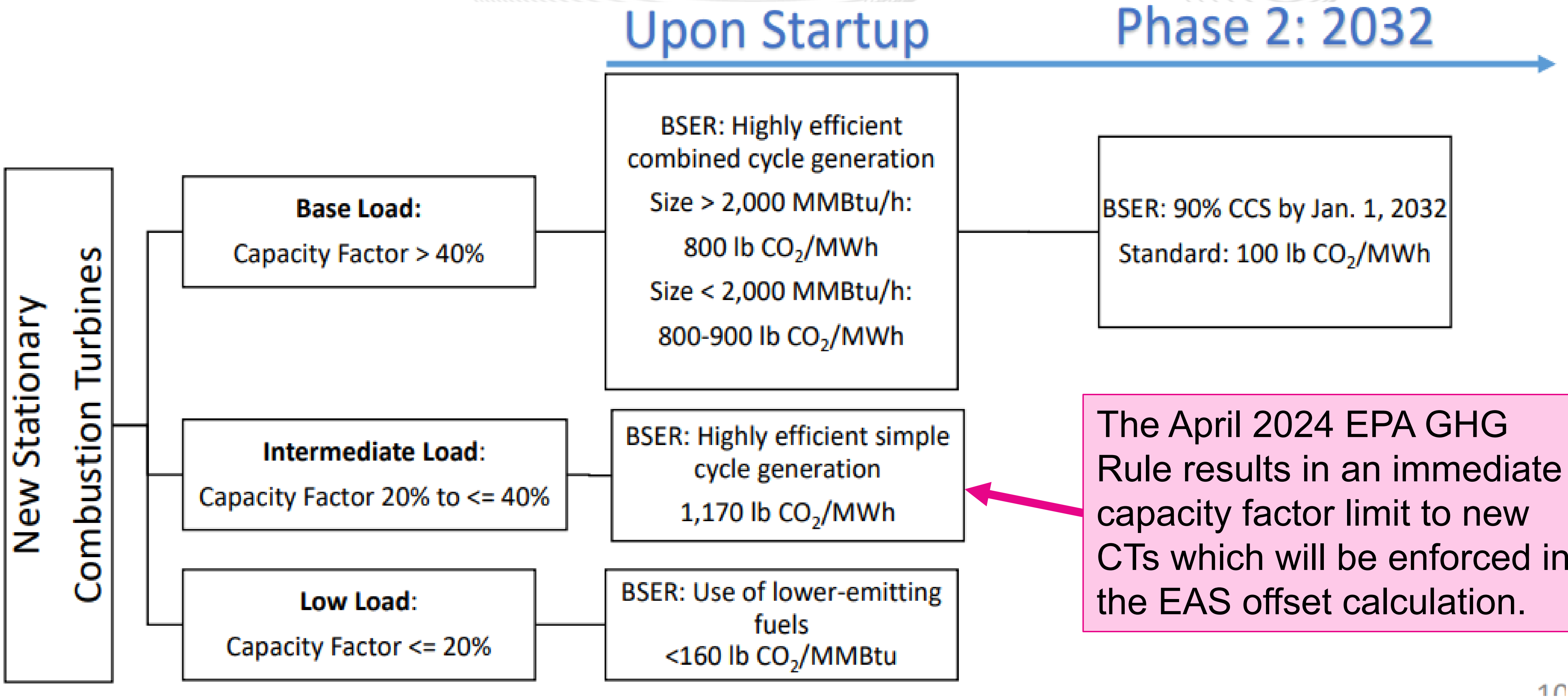
It results in a Net CONE of $0/MWd in **some** areas of the footprint.

- This makes the demand curves for impacted LDAs very steep, which can create volatility and stunt investment.
- Resources in affected zones face no non-performance charges but can still be paid bonus.

The April 2024 EPA GHG Rule has created uncertainty as to whether the CC technology will continue to be built in the manner it has been historically. This rule applies to new CTs as well (see next slide).

- Requirement to have 90% carbon capture by Jan. 1, 2032, or run at less than a 40% capacity factor. Carbon capture costs are not considered in the Gross CONE.
- CCs in PJM generally run at capacity factors in the range of 60–80%. Fewer run hours for energy result in less EAS revenues and a higher Net CONE. For a new CC, this would significantly affect future revenue projections.

April 2024 EPA GHG Rule Application to CT Technologies



The April 2024 EPA GHG Rule results in an immediate capacity factor limit to new CTs which will be enforced in the EAS offset calculation.

https://www.epa.gov/system/files/documents/2024-04/cps-presentation-final-rule-4-24-2024.pdf

Proposed Solution: Reference Technology

Propose to continue using the CT as the reference technology until the next Quadrennial Review (QR) is implemented. On the current schedule, this would likely be the 2028/29 BRA in June 2026.

In most cases, PJM anticipates this will address issues associated with a $0/MWd Net CONE, but it does not completely eliminate that exposure.

- Forward revenues for CTs are also high, and therefore there may still be some local areas where the Net CONE is still $0/MWd. Further enhancements to this process will be reviewed in the current Quadrennial Review.
- We will not know for certain until final EAS values are calculated in Q1 2025.
- Fully addressing the steepness of the demand curve would likely require proposing different price points associated with Points A and/or B on the demand curve. This is included in the scope of the QR, which is underway.

Propose to implement a uniform non-performance charge rate at the RTO Net CONE. This will address:

- Lack of non-performance charges in zones where the Net CONE is $0/MWd
- Arguments regarding discrimination given the non-uniformity of the penalty rate. ISONE implements a uniform non-performance charge rate across their footprint.
- More consistent with broader, regional PAIs rather than previous locational ones

Setting a Floor on the CP Penalty Rate

- Using the CT as the reference technology makes it less likely that the Net CONE is $0/MWd than if we used the CC.
- This is caused by the generally lower proportion of total revenues that come from the EAS markets and the immediate run hour limitations applied by April 2024 EPA GHG Rule.
- Despite this, there is still a risk Net CONE being $0/MWd resulting in a steep demand curve and a $0/MWd penalty rate.
- An additional measure that could be taken in this 205 filing to protect against this could be to set a floor on the CP Penalty Rate (for example, X% of Gross CONE).
- A longer-term, more comprehensive solution can be investigated in the ongoing QR process.

PJM is looking for feedback on this concept.

Reference Technology: Firm Transportation or Dual Fuel

A more specific decision needs to be made regarding whether the CT is dual fuel or single fuel with firm transportation.

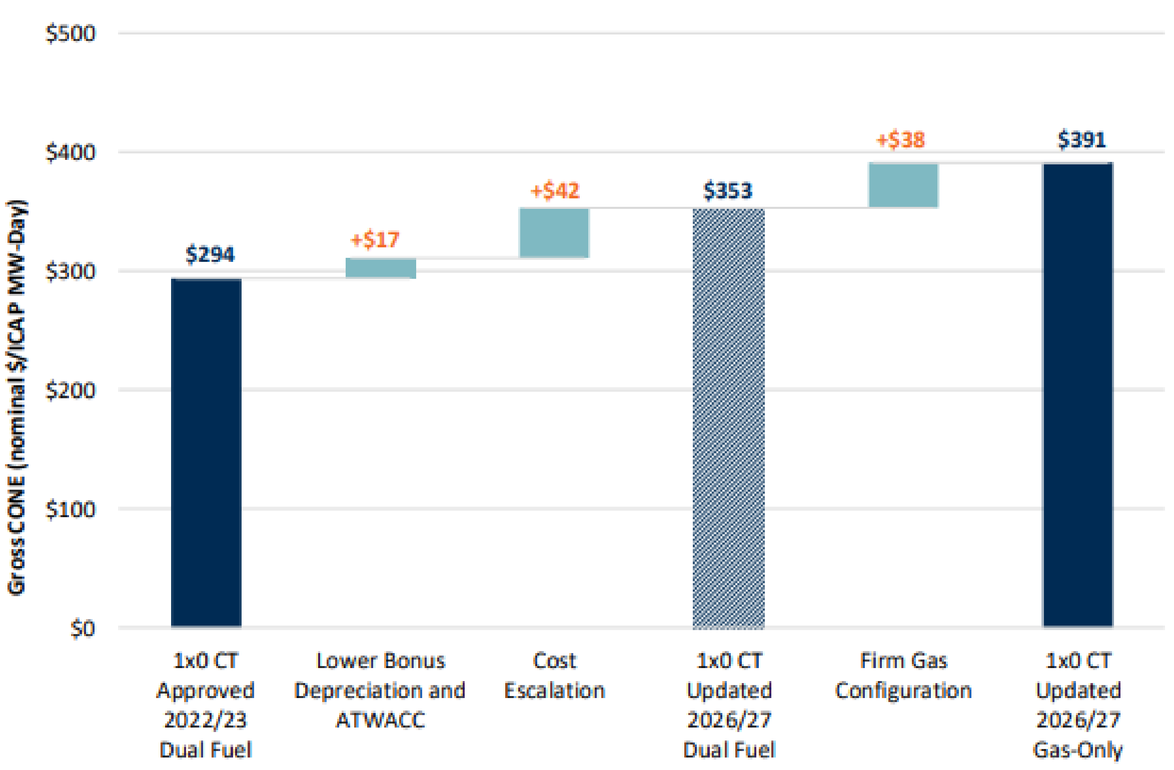
Generally:

- The cost of dual fuel is lower than single fuel with firm transportation.
- The ELCC of dual fuel is higher (79% vs. 68%).
- Dual fuel may be harder to site and permit given emissions, while firm transportation may require pipeline expansion, which is also difficult to site.

PJM is working with Brattle to get more specific cost information regarding dual fuel CTs.

PJM is leaning toward a dual fuel CT given the expected lower cost and increased ELCC.

FIGURE 11: DRIVERS OF HIGHER CT 2026/27 CONE ESTIMATES (AVERAGE ACROSS ALL CONE AREAS)



Above values expressed in ICAP terms using an 8.0% ATWACC. The filed and approved ATWACC from the 2022 Quadrennial Review is 8.85%.

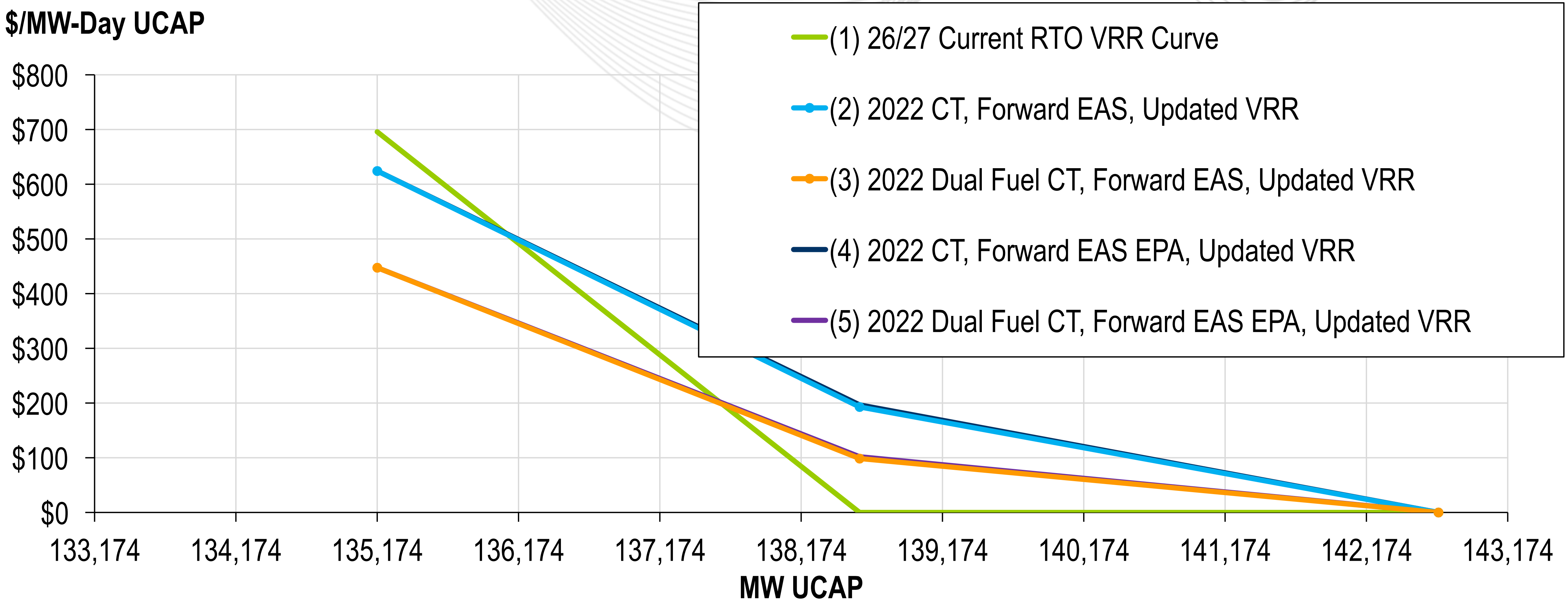
Page 65; https://www.brattle.com/wp-content/uploads/2022/05/PJM-CONE-2026-27-Report.pdf

Demand Curve Comparison

- The following demand curve comparison selects different reference technologies from 2022 Quadrennial Review.
- All CT Forward E&AS values are calculated using the 2022 CT technical specifications.
- *All curve shapes will need to be updated for the 8.85% ATWACC filed and accepted in the 2022 QR and final EAS Offsets in Q1 2025. Data used for these curves is directly from the 2026/27 CONE Report.*
- All curves are the RTO curve.

Option	Reference Resource	E&AS Methodology	Demand Curve Shape
(1)	2022 CC 78% ELCC Class Rating	2022 – Forward	2022 Shape
(2)	2022 CT – Single Fuel 68% ELCC Class Rating	2022 – Forward	2022 Shape
(3)	2022 CT – Dual Fuel 79% ELCC Class Rating	2022 – Forward	2022 Shape
(4)	2022 CT – Single Fuel 68% ELCC Class Rating	2022 – Forward and abiding by EPA rule	2022 Shape
(5)	2022 CT – Dual Fuel 79% ELCC Class Rating	2022 – Forward and abiding by EPA rule	2022 Shape

Demand Curve Comparison, *continued*



*** These are **NOT** the demand curves that will be used in the auction or projections of them. They are estimates using the best data we have at this time and will need to be updated prior to use in any auction as noted on the prior slide. ***

Resource Adequacy Contribution of RMR Units

When Part V (Generation Deactivation) was added to the PJM Tariff, **the current capacity market structure did not exist.**

- "RMR" units were expected to be few and far between, which is largely how things have played out over time.
- PJM has *no ability to mandate resources to continue to operate for reliability*, nor is there a standard operating protocol for such units when they do continue to operate beyond their desired deactivation date.
- **Each such instance to date has been unique and fact-specific.**

Statement of Problem: Resource Adequacy Contribution of RMR Units

Several complainants and respondents have alleged that the PJM Tariff is unjust and unreasonable because it does not account for the resource adequacy contribution of RMR units in the capacity market.

The complaint highlights cases in NYISO, ISONE and CAISO where RMR units are included in resource adequacy determinations.

The complaint omits RMR rules in MISO, which are virtually the same as PJM's.

PJM looked more specifically into the ISONE and NYISO examples.

CAISO does not have a capacity market.

Selected Points from PJM's Response *(EL24-148)*

RMR unit obligations are not assured to be comparable to a capacity obligation.

Eddystone 2, Cromby 2 and Cromby Diesel RMR agreements only permitted the units to be run for transmission emergencies.	Assuming all RMRs have some capacity contribution is not appropriate.

- Generation owners set the terms of these agreements, and, as such, they are not uniform.
- NYISO and ISONE have pro forma agreements that require participation as a price-taker in the capacity market.
- *This is significantly different than PJM's process and the resulting agreements.*

RMRs in the PJM Capacity Market

- More recent RMR Agreements, including those proposed for Brandon Shores and Wagner, contain language that allows the resource to be run during local and system-wide emergencies.
- PJM acknowledges arguments that there could be specific cases where RMR units have operational requirements comparable to a capacity resource and can make a contribution to resource adequacy.

- The RPM auctions are a single-year snapshot intended to capture the supply and demand profiles of that year as accurately as possible.
  - The auctions do not anticipate what the system may look like in subsequent delivery years.
  - RPM auctions do not anticipate what other units may deactivate (or enter) in future delivery years, even if those changes have already been announced.

Given the current process for establishing an RMR Agreement and the fact that they are not uniform, setting criteria to determine whether all or part of an RMR unit should be counted toward resource adequacy can be a reasonable approach.

As PJM has discussed this issue, we have found it to be significantly complicated to broadly address the existing RMR regime within the PJM capacity market given the unique circumstances of each agreement.

In an effort to allow more time for broader reforms to the RMR process to be developed and proposed, **PJM proposes a targeted filing that addresses the existing filed RMR Agreements in the BGE Zone and set a sunset date for the provisions to emphasize an expedited resolution to more holistic reforms that can be informed by a more deliberative stakeholder process.**

PJM's Targeted Proposal to Include Resource Adequacy Contribution of RMR Units in the Capacity Market and Reliability Analysis

PJM proposes that the existing filed RMR agreements in the BGE Zone need to meet the following criteria to be determined to have a resource adequacy contribution and be accounted for in the capacity market.

- Be reasonably expected to be able to operate for the entire delivery year in accordance with applicable permits and legal restrictions.
- Have available run hours greater than those expected to be needed for transmission support.
- Be required to be available for PJM dispatch in expectation of all PJM emergencies, so long as the unit is not on an outage.
- Have CIRs and be deliverable.

PJM proposes an initial sunset date for these provisions of August 2025 so that they are in effect for the 2026/27 and 2027/28 BRAs while PJM works with stakeholders toward a broader set of reforms that can be filed to be in effect for the 2028/29 BRA. (Filing by September 2025)

Applying the Criteria

It is unclear if Brandon Shores is able to operate for the 2026/27 Delivery Year based on the agreement with Sierra Club and therefore does not have a resource adequacy contribution we can depend on.

- Current agreement with Sierra Club requires the unit to stop operating on coal by Dec. 31, 2025.

- PJM is not aware of any plan to convert the unit to an alternative fuel.

- DOE 202(c) emergency order is not yet granted and typically only lasts for 90 days.

Wagner 3 appears as if it would pass all criteria based on current information available.

PJM is investigating whether Wagner 4 has enough permitted run hours in 2026/27 to support scheduled work. **Decision on this resource is TBD.**

- Currently there are only 438 run hours for this resource (5% of the year).
- It is expected to be needed to support transmission work necessitating the RMR and work to support the rebuild of the Key Bridge.

Process to Include RMRs in the Auction

- **RMR units counted toward resource adequacy should have comparable commitments and financial incentives for performance as other Generation Capacity Resources.** The specifics could be identified in a pro forma RMR Agreement similar to what is done in ISO-NE and NYISO. This is likely too large of a change in the time available and therefore PJM's proposal should be viewed as an interim step.

- Mechanisms for how to do this in the PJM market were proposed by the Sierra Club and the IMM.

- **Sierra Club:** Remove them from the demand.
- **IMM:** Include their UCAP as generic supply as a price taker (offer = $0/MWd) but do not give them a commitment.

- Both of these can produce the same auction result but have potential cost allocation issues that need to be addressed. In particular, the entities paying for the cost of the RMR do not receive the full benefit of the resource.
- There are also scenarios where the UCAP megawatts determined for the RMR resource at the time it is accounted for in an auction is not the same as what is available during the delivery year. These need to be considered as well.

In order to most easily address issues related to capacity and RMR cost allocation, ***PJM proposes using what it understands to be the IMM method for inclusion in the auction if units meet the aforementioned criteria.***

Cost and Revenue Allocation Issues with Proposed Methods

Allocation of the resource adequacy value of the RMR resource is challenging to do via adjustments to capacity obligations.

A collection of entities are paying the full cost to retain the RMR unit.	Not all of the entities paying for the RMR have a capacity obligation.	Market revenues from the RMR resources are netted from the cost of the RMR agreement which includes all parties paying for the RMR.

Capacity obligations are calculated, and ultimately costs are allocated, based on load ratio share (generally).

– Adjusting capacity obligations to allocate the market revenues of the RMR units is not straightforward since not all have obligations to start with.	– Obligations are not affected by changes to the locational cleared quantities of capacity which makes demand-side adjustments a challenging approach.

Cost Allocation Issue with Proposed Methods

- More generally, implementing the Sierra Club and IMM proposals and allowing them to flow through the existing capacity market cost allocation rules would result in only the load entities with capacity obligations paying for the RMR getting their load ratio share's worth of the benefit of the RMR unit. (This is not exactly correct but is an easy way to conceptualize it).
- For all of the entities paying for the RMR to get the full benefit of the resources they are exclusively paying for, an allocation of the market revenues that would have been paid to the RMR resource had it taken on a commitment would need to be made to the bills of the entities paying for the RMR. This requires Tariff changes.
- No revenues would be paid to the RMR unit.

To implement this method, we would propose using the IMM's method for including the resources in the auction

Quick Example on Cost Allocation Issue

Parameter	Value
RTO Load	100,000 MW
RMR Load Zone	5,000 MW
RMR Load Ratio Share of RTO	5%
RMR UCAP	2,000 MW

Assume for a moment that the entities paying for the RMR are only loads within one zone.

- Capacity cost allocation rules would result in an obligation for the RMR Load Zone equivalent to 5% of the capacity cleared in PJM.
- Assume PJM clears 115,000 MW in the auction which includes the 2,000 MW of RMR capacity.
- Allocating 5% of the RTO capacity obligation to the RMR Load Zone would require them to pay for 5,750 MW of capacity and the cost of the 2,000 MW of RMR resources instead of something more like 3,750 MW plus the cost of the RMR units (their load ratio share).

If in another world there were additional entities paying for the RMR that were not loads paying for capacity…

We would have to do something like make their obligations negative to generate a credit back to them which is messy.

Proposal for RMR Cost Allocation

PJM proposes to offset the capacity charges for the entities paying for the RMR by the amount of capacity credits that would have been paid to the resource.

The proposed steps to do this would be:

1. Include the UCAP MW from the RMR resource in the auction in the manner we understand to be proposed by the IMM.
2. Collect capacity revenues for those MWs as if they had taken on a supply obligation even though they are not.
3. Allocate those credits back to the entities paying for the RMR pro-rata based on the proportion each entity pays for the RMR.

The net result is that the entities paying for the RMR will:

- Pay for their full capacity obligation using the normal capacity market clearing prices and settlement.
- Receive a credit for the capacity value of the RMR resource allocated on a pro-rata basis.
- Pay the cost of the RMR in excess of the capacity value of the resource.

Changes in Accredited UCAP to RMR Units

- Like with units taking on capacity commitments, it is possible that between the initial auction where an RMR unit is accounted for and the Delivery Year, the accredited UCAP of the RMR resource can change.
- It is also possible that an RMR agreement is terminated early because the associated transmission upgrades are completed early or end partway through a Delivery Year.
- In both cases, adjustments must be made to cost and revenue allocation to accommodate this. Additionally, Incremental Auction (IA) buy bids and sell offers submitted by PJM would need to account for this.

Currently PJM is thinking of making one "true up" in the 3rd IA for the level of UCAP the RMR resource has during the Delivery Year.

If the RMR agreement is terminated prior to the 3rd IA for a Delivery Year:

- PJM will no longer charge entities for the cost of the RMR.
- PJM will no longer collect revenues for the supply adjustment made to account for the RMR unit in the auction and allocate those revenues to the entities paying for the RMR.
- PJM would adjust its 3rd IA buy bid to purchase the same amount of UCAP MWs that were being provided by the RMR unit.
- Charges associated with this cleared buy bid would be allocated using the existing capacity cost allocation mechanism.

RMR Agreement Termination After the 3rd IA

If the RMR agreement is terminated after to the 3rd IA for a Delivery Year:

- PJM will no longer charge load for the UCAP MW from the RMR unit.
- PJM will no longer pay credits to the RMR Loads as they are no longer paying the cost of the RMR.
- No further adjustments would be made unless PJM seeks out replacement capacity. Currently there are no provisions for this. **We are looking for input on whether this capability should exist.**

- Under the current RMR process, PJM does not have the authority to force the RMR unit to remain in place for the full Delivery Year.

- This feature may be beneficial under a future standard agreement.

RMR Agreement Remains in Place and Accredited UCAP of the RMR Changes

If the UCAP value of the RMR unit only changes but the RMR remains in place:

- PJM would submit a buy bid or sell offer based on the magnitude of the change in accreditation of the RMR unit in the 3^{rd} IA.
- Charges associated with buy bids would flow back to RTO load.
- Entities paying for the RMR would receive:
  - Lesser of the (BRA Cleared MW, Final UCAP Value) * BRA Clearing Price, plus,
  - 3rd IA Cleared MW * 3rd IA Clearing Price

High-Level Proposal Wrap-Up

1	Propose to continue using the CT as the reference technology until the next QR is implemented and incorporate the applicable capacity factor cap from the 2024 EPA GHG Rule. On the current schedule, the current QR would likely be implemented for the 28/29 BRA in June 2026.
2	Propose to implement a uniform non-performance charge rate at the RTO Net CONE. Consider a floor on the penalty rate.
3	Propose to use the IMM method of including RMR resources in the auction as generic supply in the applicable location when relevant criteria are met.
4	Propose to offset the capacity charges for the entities paying for the RMR by the amount of capacity credits that would have been paid to the resource. This will require adjustments to cost allocation and rules regarding PJM IA participation.

Next Steps

November 7	Take feedback from this session and adjust the proposal.
November 20	Consult with TOs at the Special TOAAC.
November 21	Consult with Members at the MC.
Late November	Make final adjustments and consult with Board.
December TBD	Submit any resulting filing.

Appendix

Reference Technology: Other Options We Considered

- **Delay the implementation of the 2022 QR and stay with the 2018 QR.**
  - Reference technology was a dual fuel CT, ATWACC was 8% and historic E&AS Offset.
  - PJM has concerns with the age of the data being used and its ability to be defended under protest when new information is available, filed and accepted via the 2022 QR.
- **Make targeted changes to the problem areas created by the $0/MWd Net CONE.**
  - Many targeted solutions lead back to the selection of the reference technology as the source of the problem.
  - Others touch more complex topics such as the E&AS Offset and MSOC that would be difficult to arrive at an acceptable solution in the time available.

RMR Units in ISONE

- On October 9, 2024, ISONE posted a memo regarding the treatment of “resources retained for local transmission security” in their capacity market. In the memo they state:
  - These resources are treated as price takers (offer price of $0/MWd).
  - They believe this treatment is “appropriate and logical”.
  - They are not proposing to change it as part of the broader reforms to the capacity market they are working on.

RMR Units in the NYISO

- The same general discussion occurred in NYISO in response to a complaint (EL13-62) between 2013-2015.
  - Independent capacity sellers filed a complaint against including such resources in the NYISO capacity market.
  - NYISO and their IMM fought the complaint saying they should be included and do not suppress prices.
  - FERC rejected the complaint and supported the NYISO and IMM arguments regarding consumers paying twice and economic efficiency.
  - NYISO pursued to MOPR the resources in limited cases but that was ultimately rejected.
- While the NYISO model is not the same as ours, the principles of the argument have merit in our discussion.

Applicability

- These examples both point towards including RMR units as price takers.
- Both FERC and the ISOs point to concerns with consumers paying twice and the economic inefficiency of arbitrarily excluding these resources from the market.
- All three ISOs highlighted in the complaint (ISONE, NYISO and CAISO) all have pro forma RMR agreements contained in their Tariffs that mandate this type of capacity market participation as a condition of the agreement.
- No such pro forma agreement exists in PJM and the current process does not give PJM authority to set the terms of the agreement. As such, the rules are different.

RMR Unit Inclusion: Other Options We Considered

- **Include the RMR units in the auction and give them commitments.**
  - Exposure to CP risk is not contemplated in the RMR agreements and could negatively influence settlement discussions and the ability to retain needed units.
- **Demand-side adjustment proposed by Sierra Club.**
  - Requires a MW adjustment to capacity obligations to allocate the resource adequacy benefit to entities paying for the RMR.
  - Not straightforward how to allocate this benefit to all entities paying for the RMR when some do not have capacity obligations and not all capacity obligations are in the same LDA.
- **A broad set of criteria to apply to the existing and future RMRs. (not specific to the existing ones)**
  - Tough to determine exact legal thresholds an RMR agreement must be at to be “certain” it will exist in the Delivery Year.
  - Uncertainty on the types of terms that may exist in any future RMRs developed under the current regime.