Reliability Backstop Procurement Design

Reliability Backstop CIFP

PJM Staff

June 10-11, 2026

Updates since May 27th

Area	Update
Schedule	Provided a more detailed schedule for the bilateral matching and central procurement (Slides 4-5)
Evidence to Reduce target	Provided additional details on the evidence needed to reduce the target for the central procurement (Slide 10)
Max Willingness To Pay	PJM received numerous feedback on the proposed price cap, and is continuing to evaluate options (Slide 14)
Gating Criteria	Added details on the evidence needed for the gating criteria (Slide 19-20)
Collateral	Updated to include a credit requirement step down (Slide 34-35)
TO Exit Fees	Added details on RBP Charges/Resources for areas that may exit PJM (Slide 37)

PJM will commence the reliability backstop process with a parallel effort to both facilitate bilateral matching and conduct a central procurement. This achieves the bilateral preferences expressed by PJM stakeholder and RFI respondents and allows PJM to work swiftly to address the immediate shortfall.

1 **Bilateral Matching:** PJM and Charles River Associates (CRA) will act as confidential intermediaries to provide match-making services for buyers (Load) and sellers (New Generation). Parties would then set terms and conditions and contract out of PJM's purview (no proforma agreements, no specific PJM requirements). *Parties would NOT be required to utilize PJM/CRA as intermediaries and could consummate bilateral transactions on their own.*

RFP responses collected June 9 - July 21, 2026, with matching through Dec 2026-Mar 2027

This 6-9-month period in intended to allow enough time for matching and contracting to occur. PJM is open to reviewing the effectiveness of the facilitated matching process in March and extend the timeline if needed

2 **Central Procurement:** PJM will open a central procurement in September 2026 to procure capacity for the expected shortfall from the 2028/2029 BRA.

Procurement will open September 10, 2026 and close November 20, 2026

This includes a window for bid submission and procurement target adjustment, and a window for selection

Bilateral Matching Schedule

June 9, 2026
- Issue RFP

July 21, 2026
- Responses Due

Late August
- Initial Matches Expected

- The iterative matching process will continue through early 2027.
- Projects in the bilateral matching process that do not form agreements may bid into the central procurement. However, bidding into the central procurement reflects a willingness to take on a binding commitment. Bidders will not be permitted to exit the central procurement process to enter bilateral arrangements. Projects that are not selected in the central procurement may re-engage in bilateral matching.

Central Procurement Schedule

Sept 10 – Oct 9, 2026

- Solicitation of bids, with gating review beginning as bid packages are received
- Solicitation of evidence to reduce procurement target

Oct 10 – Nov 20, 2026

- Selection process
- Posting of results

- This timeline is based upon anticipated FERC filing date of July 10, 2026. Should there be a delay, the bid solicitation and target adjustment window will be condensed while keeping the selection process timing and deadline for results intact.
- PJM will allow for 5 business days to cure any deficiencies in the information provided before not passing a project through to selection. The cure period will begin once PJM notifies the project applicant of a deficiency.

Request for Information (RFI)

PJM, through CRA, issued an RFI to industry from April 17 to May 6 to allow parties to provide information to PJM on supply and demand participation and indicate interest in bilateral-contracting to provide matching criteria details.

PJM received close to 450 responses in the RFI with a large volume of supply (130+GW) and demand (30+GW) engaging in the process

Majority of parties expressed interest and preference to a bilateral contract over a central procurement

Additional detail summaries posted with today's meeting materials

	Targeted Audiences
Supply	Generation developers, owners, investors and other supply side participants, including demand response and entities representing new resources, upgrades/uprates, repowering projects, storage resources and additionally resources capable of serving large loads
Demand	Large load customers (e.g., hyperscalers/data center developers, large industrials/advanced manufacturing) and/or their authorized representatives, including EDCs/LSEs submitting on behalf of one or more specific large loads.
Regulatory (EDC/LSEs)	Identify regulatory and tariff prerequisites that may affect the feasibility, timeline, and structure of any market-based approach to serving large, discrete load additions.

KEY FEATURES

Procurement Target	Eligible Supply Criteria	Interconnection Review	Central Procurement Design
Selection Process	Supply Obligations	Cost and Risk Allocation	Settlement

- The use of the term "EDC" in PJM's Reliability Backstop proposal refers to Electric Distributor as defined in the PJM Reliability Assurance Agreement (RAA)
  - **Electric Distributor:** "Electric Distributor" shall mean a Member that 1) owns or leases with rights equivalent to ownership of electric distribution facilities that are used to provide electric distribution service to electric load within the PJM Region; or 2) is a generation and transmission cooperative or a joint municipal agency that has a member that owns electric distribution facilities used to provide electric distribution service to electric load within the PJM Region.

Procurement Target

PJM will set an initial UCAP target for procurement. This procurement will be at the RTO level and set as the observed MW shortfall of the reliability requirement in the 2028/2029 BRA*. PJM will break out the target by zone areas based on forecasted load adjustments**

- **FRR Exclusion:** FRR area will be excluded from the target procurement.

EDCs will be requested to provide evidence (in coordination with LSE/LL) to reduce the large load additions that are bringing capacity to the system

- Signed contracts for new supply (BYONC)
- Approved IRP supply
- Large load site committed to demand side participation

Cost Allocation to LSE: Costs will be allocated to LSEs based on EDC defined allocation in a zone area where load receives a share of RBP committed UCAP.

*calculated as the Reliability Requirement – total cleared MW UCAP.

** Table B-9b of the 2026 Load Forecast

Evidence to Reduce Central Procurement Target

1. Signed contracts for new supply (BYONC)
   - An ESA/TSA for load coming online in the 2028/2029 DY and a demonstrated finalized PPA compliant with PJM BYONC rules
2. Approved IRP supply
   - An ESA/TSA for load coming online in the 2028/2029 DY and identified Self-Supply Generation that is in a State approved IRP and has associated generation in the PJM interconnection queue or a demonstrated finalized PPA compliant with PJM BYONC rules
3. Large load site committed to demand side participation
   - Identified load that is committed to offer in the 2028/2029 2nd IA as a Demand Response resource, and will continue to be a DR resource through the 2032/2033 DY (or until the load demonstrates a finalized PPA compliant with PJM BYONC rules

Initial Pro-Rata Zone Area Allocation

	AREANAME	2026	2028	Difference (2028-2026)	Share of 2028-2026
BGE	BGE	18.0	43.0	25	0.3%
PECO	PECO	17.0	281.0	264	2.9%
PL	PPL	189.0	1,274.0	1,085	12.0%
PS	PSEG	308.0	628.0	320	3.5%
AEP	AEPOHIO	1,743.8	3,763.0	2,019.2	22.4%
APS	PE	165.0	319.0	154.0	1.7%
ATSI	PP	0.0	17.8	17.8	0.2%
	OHIO	132.0	281.2	149.2	1.7%
COMED	COMED	885.0	2,058.0	1,173.0	13.0%
DAYTON	DAY	0.0	277.0	277.0	3.1%
DOM	DOM	4,386.2	5,368.8	982.6	10.9%
	NVEC	1,995.4	3,717.8	1,722.4	19.1%
	ODEC	384.9	555.1	170.2	1.9%
	REC	299.5	973.3	167.8	7.5%
Total	RTO	10,523.8	19,557.0	9,033.2	100%

Initial Target MW Values are calculated using Table B-9b of the 2026 Load Forecast

- The difference between the Total Adjustments to Summer Peak Load (MW) for summer 2028 minus summer 2026 are used to calculate the allocation share.
- PJM's posted Total Load Adjustments Breakdown provides additional detail down to the zone area for applicable zones.

These initial pro-rata share values will change based on input from EDCs

Procurement Target Workflow

State Commission	LSE, Data Centers	

PJM sets initial procurement target by EDC Zone area based on shortfall after the 2028/29 BRA → EDCs/LSEs/Large Loads review and provide adjustments to PJM (i.e. proof of bilateral) → RFP for target MW in RTO

Target:	**5,000 MW**
EDC 1:	1,500 MW (30%)
EDC 2:	1,500 MW (30%)
EDC 3:	2,000 MW (40%)

Target:	**4,500 MW**
EDC 1:	1,500 MW
EDC 2:	1,000 MW
Shows proof of bilateral -500MW 29/30	
EDC 3:	2,000 MW

Target:	**4,500 MW**

Eligible Resources

“New” Resources are Eligible:

Resources that are considered “new” have not received an RPM commitment for a future delivery year

Reliability Backstop Procurement eligible supply:

- For generation, this means new ICAP, and MFO.
  - Can include new build, uprates or repowering of deactivated generators that have retired as of April 10, 2026, generation in the queue with CIR transfers would be eligible.
  - CIRS must be new or may be transferred from a deactivated resource or a resource that has announced deactivation as of April 10, 2026
- Have a commercial operation date (COD) no later than June 1, 2032, inclusive of network upgrades.
- Resources with NOIs for 2028/2029 BRA are ineligible for participation, unless the resource offers and does not clear the BRA. Resources with NOIs for 2029/2030 DY are eligible for participation.
- PJM is proposing to **exclude** delayed retirements, re-licensing, fuel switching, CIR only uprates, surplus resources.
- New Demand Response and DER are eligible, with locations that have not previously participated in PJM’s RPM or new demonstrated capability from generation or storage at a pervious site. DR/DER Sell offer for the RBP would be required to provide identified locations & contracts of participating assets.

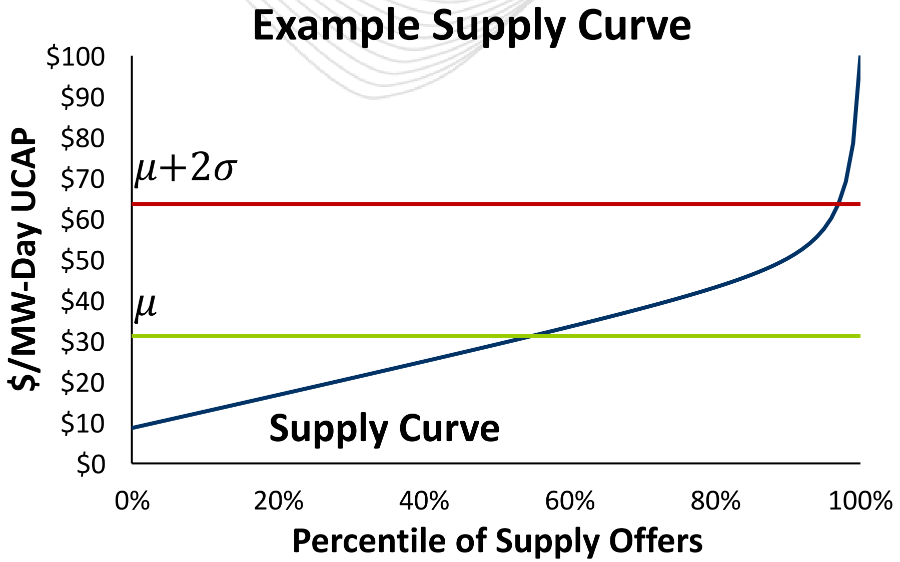
Central Procurement Structure

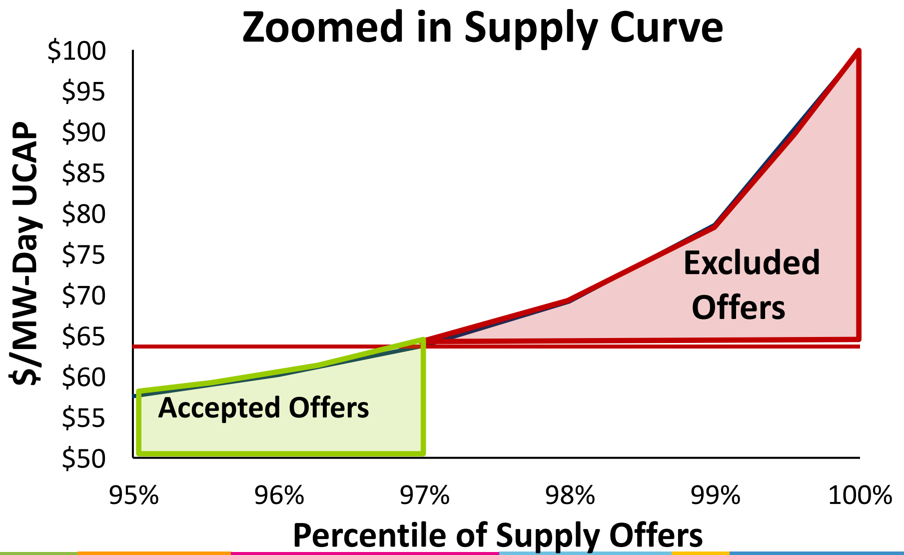
Procurement	Capacity Only (UCAP)
Term	15-year term (2028/2029 – 2042/2043 delivery years)
Network Upgrade	Included in supply offer
Location	RTO
ELCC	Suppliers need to offer expected UCAP by delivery year
Clearing Price	Pay as Bid
Max Willingness To Pay	$(\mu + 2\sigma)$ of the RBP Sell Offers *(a numerical cap still under consideration)*
Settlement	Contract for Differences Approach against RPM

- PJM is proposing to offer a fixed 15-year term in the central procurement that will run out 15 years from the targeted shortfall for the 2028-2029 Delivery Year
  - Eligible commitments for 2028/2029 DY – 2042/2043 DY
- Resources that are unable to come online to address the 2028/2029 shortfall but are eligible for participation in the RBP (COD before 6/1/2032) will be able to participate with a delayed start. Commitments will not extend past the 15-year term.
  - 2030 COD resource would receive a commitment for 2030/2031 DY – 2042/2043 DY

Max Willingness to Pay

- PJM is proposing to define the maximum willingness to pay, i.e. price cap, equal to $(\mu + 2\sigma)$ of the RBP offer distribution
  - This approach excludes price outliers that do not reflect the competitive consensus of the market
  - Given the convexity of electricity supply curves, often referred to as a "hockey-stick" shape with very high offers for the last percentile of offers, the final few percentile of offers often reflect exponential price increases for marginal capacity





- PJM is proposing a 2-stage selection process
  - Stage 1: Gating criteria pass/fail evaluation
  - Stage 2: Selection based on COD and then levelized cost of capacity (UCAP) over the offered term

$$\boldsymbol{Levelized\ Cost} = \frac{NPV(Cost\ Offer \times MW, \$)}{NPV(Capacity, MW)}$$

Discount Rate = 9.5% ATWACC

- PJM will select resources up to the RTO target MW value in least-cost order

Gating Criteria

Backstop applicants will be required to provide evidence supporting a COD by June 1, 2032, or earlier, inclusive of expected network upgrades.

Threshold criteria aimed at validating the required COD. Resources that cannot produce this evidence of project feasibility will not pass through the gating stage:

- Critical path construction schedule showing how COD will be achieved, with attestation
- Site control for generation resources
- Identified locations and contracts for DR or DER bids
- Financing plan
- Permitting plan
- Signed memorandum for the acquisition of major equipment, invoices of or agreements to acquire major equipment, or other documentary evidence that major equipment has been procured
- Experience having constructed a previous project of similar size and technology
- Fuel delivery arrangements (if applicable)
- Project must be electrically located in or have firm transmission into PJM

Applicants will be screened based on COD feasibility and risks ahead of selection process.
Selection of applicants will be based on lowest levelized cost over the term

Gating Criteria Details: Generation & Storage

- Critical path construction schedule showing how COD will be achieved, with attestation.
  - A project in TC2 and earlier must provide study information and timeline from its most current PJM study.
  - A project in Cycle 1, the Expedited Interconnection Track, or not under study must provide study information and timeline from an independent consultant report.
- Evidence of site control consistent with PJM Tariff Part VIII, Subpart A, Section 402.
- Financing plan – provide identification of financing sources (e.g., project finance, balance sheet, tax equity, sponsor equity), the current status of any financing commitments or term sheets, and a general description of the capital structure and expected timeline to financial close.
- Permitting plan – provide a list of all applicable permits, current status, and timeline to obtain each.
- Signed memorandum for the acquisition of major equipment, invoices or agreements to acquire major equipment, or other documentary evidence that major equipment has been procured.
- Evidence of experience having constructed a previous project of similar size and technology or have contracted with an EPC partner with such experience, or contract with an EPC partner with such experience.
- For natural gas resources, evidence of delivery arrangements in the form of a notice of intent or attestation of pipeline capacity expansion to support the new project.
- Project must be electrically located in or have firm transmission into PJM.
  - Projects located outside of PJM must provide evidence of (a) a completed facilities study or equivalent under the host RTO's or utility's interconnection process, and (b) long-term firm point-to-point transmission service, or a confirmed transmission service request with a completed system impact study, sufficient to deliver capacity to the PJM border.

Gating Criteria Details: DR & DER

- Identified locations by Zone / Sub-Zone and aggregate capacity for DR or DER bids that are electrically located within PJM.
- For DER, identification of applicable EDC interconnection/distribution impact study requirements and a plan to initiate on a timeline consistent with the proposed delivery date. For DR, identification of EDC coordination requirements for metering, telemetry, and baseline measurement infrastructure.
- Evidence of prior DR/DER registration and performance in PJM or an equivalent organized market, including historical performance during PJM Performance Assessment Intervals (PAIs) or equivalent dispatch events.
- Enrollment & deployment schedule showing milestones for customer acquisition, equipment installation, metering/telemetry activation, EDC coordination, and PJM registration.
- Executed customer agreements or binding commitments (not LOIs) covering the proposed MW commitment, with identified locations, customer names, and expected curtailment/injection capability per site.
- Equipment procurement plan or evidence of deployed enabling infrastructure (metering, telemetry, load control, SCADA/dispatch systems, or DER major equipment as applicable).

Selection Example

Sell offers consist of **UCAP MW** and **price** for each **delivery year.**

Target = 8,000 MW				
Example	29/30	30/31	31/32	**Levelized Offer Cost for Selection**
Supply 1:	550 MW @ $200	500 MW @ $200	500 MW @ $200	$200
Supply 2:		2,150 MW @ $280	2,150 MW @ $280	$280
Supply 3:	1,800 MW @ $290	1,800 MW @ $290	1,800 MW @ $290	$290
Supply 4:	3,000 MW @ $300	3,000 MW @ $300	3,000 MW @ $300	$300
Supply 5:			550 MW @ $310	$310
Supply 6:	550 MW @ $320	550 MW @ $320	550 MW @ $320	$320
Total	5,900 MW @ $289.49	8,000 MW @ $287.50	8,000 MW @ $287.50	

- PJM would procure supply based on the levelized offer cost until the target MW is met for any delivery year, prioritizing the earliest delivery year.
- Supply 5 would not clear in this example, as the 8,000 MW is met in 2030/2031 with Supply 1-4, 6.

* All data is for example purposes

Supply Obligations

- Any UCAP not able to be delivered in a delivery year within the backstop commitment period will not be compensated for the shortfall MW for the reliability backstop commitment
- A reliability backstop resource will be subject to a shortfall charge of 20% of the RBP commitment price for all UCAP not able to be delivered under the Connect and Manage showing.
  - Resources that fall short of the RBP committed UCAP and subject to a shortfall charge are eligible to use replacement capacity to cover the RBP commitment and would be able to replace with any MW that are considered BYONC and not allocated to another load for Connect and Manage.
  - Given the 1-time showing for Connect and Manage, after the RBP resource delivers the first DY UCAP to the system, no shortfall charge will be assessed.
  - When PJM concludes the Connect and Manage posture, the RBP resource will not be subject to a shortfall charge
  - There will be an exception to the shortfall charge for resources that are unable to meet the COD solely due to delayed network upgrades. In this case, the supply resource will need to demonstrate readiness through test energy and seeking interim deliverability to be absolved of the shortfall charge.
- Failure to come online for 3 years after the first applicable committed delivery year, will rescind the RBP commitment for the remainder of the term.

Zonal UCAP Allocation Example

Target	**8,000 MW**
ED 1:	1,000 MW (12.5%)
ED 2:	2,000 MW (25%)
ED 3:	5,000 MW (62.5%)

Procured = 8,000 MW for a given delivery year

Supply 1:	2,500 MW
Supply 2:	2,500 MW
Supply 3:	3,000 MW

Zone Area

ED 1:	1,000 MW (12.5%)
ED 2:	2,000 MW (25%)
ED 3:	5,000 MW (62.5%)

Target	**8,000 MW**
ED 1:	1,000 MW (12.5%)
ED 2:	2,000 MW (25%)
ED 3:	5,000 MW (62.5%)

Procured = 2,200 MW for a given delivery year

Supply 1:	50 MW
Supply 2:	2,150 MW

Zone Area

ED 1:	275 MW (12.5%)
ED 2:	550 MW (25%)
ED 3:	1,375 MW (62.5%)

Pro-rata zonal UCAP share (%) remains constant for the 15-year term, total UCAP is dependent on available supply

Deficiency Charges

When Connect and Manage is in effect, the Reliability Backstop resource is subject to deficiency charges for not delivering the RBP committed UCAP during the transition year under the C&M framework

RBP Shortfall MW = RBP Committed UCAP – UCAP delivered under the Connect and Manage showing)

RBP Shortfall Charge = RBP Shortfall MW * 20% RBP Price

RBP Shortfall Charges will be allocated pro-rata as credits to LSEs assessed RBP Charges.

RBP Resources may also be subject to overlapping RPM Commitment Deficiency Charges. *RPM Commitment Deficiency Charges are allocated as credits to RPM Load.*

Calculation of the Total RBP Credits is based on the summation of credits for all resources.

New Unit Auction Results and Settlements

		RBP				BRA			
Unit	Zone	Cleared	Price	Cost	Owned	Offered	Cleared	Price	Credits
1	RTO	1,000	$300	$300,000	1,000	1,000	1,000	$350	$350,000
2	B	1,000	$600	$600,000	1,000	1,000	1,000	$500	$500,000
3	C	0	$0	$0	0	0	0	$500	$0
		2,000		$900,000			2,000		

CfD are determined individually for all supply resources then totaled across the RTO to determine total RBP credits to be collected as RBP Charges.

Contract for Differences

Deliv MW	Price Diff	Credit	Shortfall	Shortfall $
1,000	($50)	($50,000)	0	$0
1,000	$100	$100,000	0	$0
0		$0	0	$0
2000		$50,000	0	$0

Settlements

RPM Credits	RBP Credits	Total	Penalty	Net Credit
$350,000	($50,000)	$300,000	$0	$300,000
$500,000	$100,000	$600,000	$0	$600,000
$0	$0	$0	$0	$0
$850,000	$50,000	$900,000		

Cost Allocation: Step 1

Zone Area Pro-Rata Cost Allocation: Costs will first be allocated to zone areas based on their pro-rata share of the target MW as described on slides 7 and 17

LSE Pro-Rata Cost Allocation: Zone area costs will then be allocated pro-rata to LSEs based on Large Load Contribution Obligation MW

- EDCs will be responsible for allocating assigned Zonal RBP Target MW to customers via introduction of new Large Load Contribution (LLC) Obligation MW assignment in Capacity Exchange (similar to existing PLC and NSPL processes)
- If states have not established frameworks to appropriately allocate costs to new data center loads, it is unclear to which customers those costs would be assigned
  - As a backstop, If EDC does not allocate via LLC Obligation, PJM will allocate to all load in the zone (including non-large loads) using existing PLC assignments.

RBP Charges

- RBP Charges are converted to a $/MW-day cost
- LSEs are then charged for their pro-rata share of the total zonal LLC obligation
- Charges will be calculated daily and billed weekly

Daily Zonal LLC Obligation* MW		RBP Price
• Each zone with an assigned share of the RBP target receives a share of the RTO-procured UCAP • LSEs receive share of Zonal LLC obligation MW based on EDC allocation	✖	Total RBP Credits divided by total RTO Target MW

**In absence of zonal LLC Obligation Assignments, PJM will allocate using existing Obligation Peak Load ratio share methodology*

Cost Allocation Example

Total RBP Credits are allocated pro-rata to LSEs based on EDC-submitted LLC Obligation MW

Settlements						
Zone	Alloc Zonal LLC Obl MW	LSE	EDC-submitted LLC MW	Alloc LLC Obl MW	RBP Price ($/MW-day)	RBP Charges ($/day)
		AA	400	400	$25.00	$10,000
A	450	BB	50	50	$25.00	$1,250
		CC	600	666.7	$25.00	$14,375
B	1000	DD	300	333.3	$25.00	$10,625
C	550	EE	550	550	$25.00	$13,375
Total	**2,000**		**1900**	**2,000**		**$50,000**

Alloc LLC Obl MW =
Alloc Zonal LLC Obl MW * (EDC-submitted MW / Sum(EDC-submitted LLC MW))
RBP Charges = Alloc LLC Obl MW * RBP Price

Assume:
Total RBP Credits = $50,000
RBP Price = $50,000/2,000 MW = $25.00/MW-Day

LLC Obligation Reassignments

In the event a load doesn't materialize or shuts down before the end of the RBP term, the corresponding large load obligation must be reassigned. There are three options:

The EDC can directly assign the large load obligation to another LSE, if the original LSE doesn't retain responsibility for those costs per the rules for that state jurisdiction.

If the EDC does not leave the large load obligation with the original LSE or assign it to another LSE, and there are other LSEs that were already assigned LLCs in the zone, then the obligation will be allocated pro-rata amongst the remaining LSEs based on their zonal LLC share.

If the EDC does not assign LLCs in the zone, the costs will be reallocated across all load in the zone on a pro rata basis using the Obligation Peak Load Contribution MW (the same methodology used to allocate RPM costs).

Credit and Collateral Requirements (Pre-Bid RBP Phase II)

Illustrative Example

Credit requirement is $21.4MM for a 100 MW unit with 15-year tenor, clearing price $400/MWD and 9.5% discount rate.

Assumptions: (1) To participate in RBP Phase II (central procurement), entity must be a PJM market participant, and (2) RBP Phase II (central procurement) credit requirement is stand alone*.

Bid/Clearing Price ($/MWD)	$400	
Cleared Volume (MW)	100	
Bid (central procurement) Credit Rate%	20%	
Tenor (year)	15	
Discount Rate	9.5%	
Nominal RBP Credit Requirement ($/Yr)	$2,920,000	=400/MWD * 100MW * 365 * 20%
NPV (Jun-28) of RBP Credit Requirement	$25,029,807	=NPV(Discount Rate, Tenor, -Nominal RBP Credit Requirement)
NPV (Sep-26) of RBP Credit Requirement	$21,355,943	=NPV(Discount Rate, Years Between Sep-26 and Jun-28, 0,-NPV in Jun-28)
Year Multiplier	7.31	=NPV(Sep-26) / Nominal RBP Credit Requirement

Year	Jun-28	Jun-29	…	Jun-42
RBP Credit Requirement	$2,920,000	$2,920,000	…	$2,920,000
Discounted RBP Credit Requirement	$2,920,000	$2,666,667	…	$819,568
NPV (Jun-28)	$25,029,807			
NPV (Sep-26)	$21,355,943			
Year Multiplier	7.31			

*RBP credit requirement is separate from the RPM credit requirement

Credit Requirements Schedule (RBP Phase II)

Illustrative Example

Year	RBP Credit Req. Desired (NPV)	RBP Credit Requirement	RPM Credit Requirement	Total Credit Requirement	Note
Sep-26	$21,355,943	$21,355,943		$21,355,943	Total credit requirement is in addition to collateral posted for 28/29
Dec-26	$21,355,943	$21,355,943	$2,920,000	$24,275,943	RPM for 29/30
May-27	$21,355,943	$21,355,943	$5,840,000	$27,195,943	RPM for 29/30 & 30/31
Jun-27	$22,858,271	$21,355,943	$5,840,000	$27,195,943	
Jun-28	$25,029,807	$21,355,943	$5,840,000	$27,195,943	
Jun-29	$22,109,807	$21,355,943		$21,355,943	COD
Jun-30	$19,443,140	$19,443,140		$19,443,140	Start to step down on collateral contingent on credit valuation per Att. Q.
Jun-31	$17,007,828	$17,007,828		$17,007,828	
Jun-32	$14,783,799	$14,783,799		$14,783,799	
Jun-33	$12,752,722	$12,752,722		$12,752,722	
Jun-34	$10,897,857	$10,897,857		$10,897,857	
Jun-35	$9,203,917	$9,203,917		$9,203,917	
Jun-36	$7,656,939	$7,656,939		$7,656,939	
Jun-37	$6,244,174	$6,244,174		$6,244,174	
Jun-38	$4,953,978	$4,953,978		$4,953,978	
Jun-39	$3,775,716	$3,775,716		$3,775,716	
Jun-40	$2,699,679	$2,699,679		$2,699,679	
Jun-41	$1,716,996	$1,716,996		$1,716,996	
Jun-42	$819,568	$819,568		$819,568	
Average		**$11,610,593**		**$12,297,652**	

The credit requirement schedule shows how the required RBP credit req. may reduce as the contract progresses.

RPM credit requirement assumes the RPM auction clears at $400/MWD and the RBP resources is planned through June 2029.

RPM milestones are not captured in RPM credit requirement

KEY

Year: actual year
RBP Credit Req. Desired: collateral required if the NPV is recalculated through out the contract term
RBP Credit Requirement: PJM credit requirement proposal NPV as of September 2026
RPM Credit Requirement: Incremental RPM credit requirement to participate in RPM BRA
Total Credit Requirement: Total posted credit requirement

Assumptions

1. **RPM credit requirement is separate from RBP** bid collateral as they cover different charges
2. **RPM annual auction clearing price is same price as RBP** central procurement bid price (400/MWD)

Credit Requirements Schedule (RBP Phase II)

Step Down – Illustrative Example

Year	RBP Credit Req. Desired (NPV)	RBP Credit Requirement	RPM Credit Requirement	Total Credit Requirement	Note
Sep-26	$21,355,943	$21,355,943		$21,355,943	Total credit requirement is in addition to collateral posted for 28/29
Dec-26	$21,355,943	$21,355,943	$2,920,000	$24,275,943	RPM for 29/30
May-27	$21,355,943	$21,355,943	$5,840,000	$27,195,943	RPM for 29/30 & 30/31
Jun-27	$22,858,271	$21,355,943	$5,840,000	$27,195,943	
Jun-28	$25,029,807	$21,355,943	$5,840,000	$27,195,943	
Jun-29	$22,109,807	$21,355,943		$21,355,943	COD
Jun-30	$19,443,140	$19,443,140		$0	Start to step down on collateral contingent on credit valuation per Att. Q.

KEY

Year: actual year
RBP Credit Req. Desired: collateral required if the NPV is recalculated through out the contract term
RBP Credit Requirement: PJM credit requirement proposal NPV as of September 2026
RPM Credit Requirement: Incremental RPM credit requirement to participate in RPM BRA
Total Credit Requirement: Total posted credit requirement

The credit requirement schedule shows how the required RBP credit req. may reduce when achieve COD and developer meets RBP one time showing for Connect and Manage - Return of Credit Requirement after the one year look back.

RPM credit requirement assumes the RPM auction clears at $400/MWD and the RBP resources is planned through June 2029.

RPM milestones are not captured in RPM credit requirement

Assumptions

1. **RPM credit requirement is separate from RBP** bid collateral as they cover different charges
2. **RPM annual auction clearing price is same price as RBP** central procurement bid price (400/MWD)

Credit Requirement Step Down Scenarios

1. Pre-bid central procurement Credit Requirement prior to COD (refer to previous slide)

2. Achieve COD, fail to meet UCAP commitment and PJM is in Connect and Manage – Reduction (return) in Credit Requirement following PJM assessment of the appropriate level to be maintained.

3. Achieve COD and developer meets RBP one time showing for Connect and Manage - Return of Credit Requirement after the one year look back.

Credit and Collateral Requirements

- Upon notification by the Load Serving Entity (LSE) of the known changes to its load, credit, and collateral requirements for LSEs are expected to be managed by the current credit processes. These processes include, but are not limited to, credit evaluation, PMA recalculation and use of other mitigation tools, such as posting of credit support and/or UCRs.

- Notification will be required no later than 60 days in advance of the delivery year. Notification shall include:
  - Name of EDC
  - Contact Name /Mobile Number
  - Name of LSE
  - LSE Contact Name/Mobile number
  - Contract start (delivery) date and end date
  - Number of MWs (RBP peak load MW and total load MWh by month)
  - Price - Avg price

- Form of collateral: letter of credit and cash

Default Allocation

- If default occurs as a result of a supplier's nonpayment of a RBP penalty or deficiency charge, the EDCs/LSEs will be short those corresponding credits. This is consistent with the RPM market today.

- If a default occurs as a result of a non-payment of a RBP charge by an LSE, the defaulted amount would be allocated to all remaining LSEs receiving a share of the RBP charges based on their pro-rata share of the total RBP charges.

TO Exit Fees Related to RBP

TO leaves with generation that was part of RBP

- TO pays all costs for generation to pseudo-tie if generation is able to be pseudo-tied and PJM elects to retain such resource (waiving electrical distance requirement for impacted existing generation).
- If Generation is not able to be pseudo-tied to PJM and deliver
  - Option 1 – Prior to exiting, TO must pay PJM the notional value of remainder of contract value (mws x rate x remaining years) on an accelerated basis – justification is that the system is less reliable and load should be given credit for potential curtailment
  - Option 2 – Same as Option 1 but prior to exiting, TO must also pay PJM an extra 20% deficiency penalty – justification is that if a unit does not deliver the capacity they commit today, they are subject to a deficiency charge

TO leaves with load that was allocated an RBP charge

- Prior to exiting, TO must pay all forward obligations on an accelerated basis (similar to a withdrawal today – they either post collateral or cannot leave) – obligation would be calculated as the remaining notional value of the RBP allocation. – justification is that remaining load cannot be harmed by the member leaving and RBP generation will need to continue to be paid through the term of the commitment.

Appendix

"Match-Making" Supply and Demand

This Bilateral Matching process will allow CRA to facilitate finding potential parties for executing bilateral contracts.

- This will give parties opportunity to provide confidential data.
- CRA will be able to do a many-to-one matching to allow a full load or full supply to be contracted.
- These are services that are above PJM's current bulletin board capabilities.
- These contracts would be direct between the load and the supply – PJM would not be a party to the contract or play any role in the negotiation of terms and conditions.
    - This will allow for more efficient contracting and allow for other contracting terms (such as inclusive of E&AS)
    - Finalizing a contract is not a requirement in this process.
- Parties participating in the Bilateral Matching would still be able to participate in the Central Procurement

There will be a capacity must-offer requirement for the UCAP of the RBP commitment from the underlying supply resource for auctions conducted after procurement, for all delivery years in the backstop period (term length).

- The must-offer requirement will be to offer into each RPM auction at $0 (price taker) and the resource will receive the capacity clearing price in each auction.
- The resource RPM committed MW will be subject to all RPM rules, including replacement and non-performance charges (deficiency charges, PAI, stop loss).

- There will be no restriction to participation in the RBP imposed by the interconnection process.
  - For supply offers accepted in the RBP, the underlying generation project will need to proceed through the interconnection process and obtain an interconnection agreement.
    - This can include already executed agreements, TC2, the Cycle process or any other applicable parallel processes.
    - PJM is not proposing a special interconnection process to support the RBP.
- The project will be required to either reach commercial operation or seek interim deliverability for its first bid-in delivery year and all applicable subsequent delivery years of the commitment term.

Interconnection Review – Network Upgrades

- Estimated Network Upgrade costs will be determined by the developer and expected to be part of the Seller's Offer for the reliability backstop.
  - Network Upgrade costs can be determined by information provided by PJM through the normal queue process or determined independently from the planning models provided by PJM.
- The generation developer will be responsible for all actual Network Upgrade costs as determined through the interconnection process, and the commitment price will not be adjusted.

Offer Example

Sell offers consist of **UCAP MW** and **price** for each **delivery year.**

	Target = 8,000 MW				
Example	29/30	30/31	31/32	32/33…	**Levelized Cost for Selection**
Supply 1: 100 MW ESR	55 MW @ $190	50 MW @ $200	50 MW @ $200	49 MW @ $210	$199.71
Supply 2: 2,500 MW CC		2,150 MW @ $280	2,150 MW @ $280	2,200 MW @ $250	$269.85
Total	55 MW @ $190	2,200 MW @ $278.18	2,200 MW @ $278.18	2,249 MW @ $249.13	

If the target is set to 8,000 MW in this example, PJM will look to procure 8,000 MW, but may procure less, dependent on available supply – this example is less than the target for illustration purposes.

Settlements Approach

- RBP Cleared Resources that offer and clear in RPM Auctions are paid RPM Auction Credits
  - Auction Credits are allocated as Locational Reliability Charges to load based on existing allocation methodology (See RPM Cost Allocation from Feb 25 Workshop)
- Any difference between the RBP committed price and the seller’s unit-specific weighted average resource clearing price (WARCP) of applicable auctions will be settled via Contract for Differences as RBP Credits
  - RBP Credits can be positive or negative depending on RPM Auction Prices
  - RBP Credits will be allocated as RBP Charges to EDCs pro-rata based on RBP target MW and can be positive or negative.

- Contract for Differences (CfD) will be settled based on the difference between the RBP commitment price and the seller’s unit-specific weighted average resource clearing price (WARCP) of applicable RPM auctions for all cleared MW.
  - The MW eligible for CfD will be calculated as the lesser of a seller’s RBP Cleared MW for the Delivery Year, Daily Owned MW and Daily RPM Cleared MW (all in UCAP Terms).
- UCAP MW available *above the committed RBP UCAP* are eligible to participate in RPM auctions and not subject to the RBP commitment obligations or settlement.

- The following examples are meant to illustrate how settlements for RBP commitments will flow through RPM and RBP Billing
  - They use a simple scenario of one cleared supply resource and one RBP Load and the effect RPM activity has on the RBP settlement
- Credits are expressed as positive numbers
- Charges are expressed as negative numbers

Example #1 – Resource Settlement

RBP Commitment = RPM Commitment
RBP Price > RPM Price

RBP Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Credits	$10,000	
RPM Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$75	
Settlements		
RPM Auction Credits	$3,750	RPM Cleared MW * RPM Price
RBP Credits	$6,250	RBP Cleared MW * (RBP Price - RPM Price)
Total Credits	$10,000	

The RPM Revenues are less than the expected RBP Settlement resulting in a positive RBP Credit. The total amount paid to the RBP resource is equal to the Expected RBP Credits.

Example #1 – Load Settlement

RBP Commitment = RPM Commitment
RBP Price > RPM Price

RBP Clearing		
Target MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Charges	($10,000)	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$75	
Settlements		
RPM Charges	($3,750)	UCAP Obligation MW * FZP
RBP Charges	($6,250)	Equal to RBP Credits
Total Charges	($10,000)	

The RPM Charges are less than the expected RBP Charges resulting in a positive RBP Charge. The total amount paid by the RBP load is equal to the Expected RBP Charges.

Example #2 – Resource Settlement

RBP Commitment = RPM Commitment
RBP Price < RPM Price

RBP Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Settlement	$10,000	
RPM Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$350	
Settlements		
RPM Auction Credits	$17,500	RPM Cleared MW * RPM Price
RBP Credits	($7,500)	RBP Cleared MW * (RBP Price - RPM Price)
Total Credits	$10,000	

The RPM Revenues are more than the expected RBP Settlement resulting in a negative RBP Credit. The total amount paid to the RBP resource is equal to the Expected RBP Settlement.

Example #2 – Load Settlement

RBP Commitment = RPM Commitment

RBP Price < RPM Price

RBP Clearing		
Target MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Charges	($10,000)	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$350	
Settlements		
RPM Charges	($17,500)	UCAP Obligation MW* FZP
RBP Charges	$7,500	RBP Cleared MW * (RBP Price - RPM Price)
Total Charges	($10,000)	

The RPM Charges are greater than the expected RBP Charges resulting in a negative RBP Charge. The total amount paid by the RBP load is equal to the Expected RBP Charges.

Example #2a

CfD Comparison to Bilateral Contract

RBP Price < RPM Price

Bilateral Contract	
Contracted MW (UCAP)	50
Contract Price ($/MW-Day)	$200
Expected Contract Settlement	$10,000

Load Charge	($10,000)
Resource Credit	$10,000

RPM Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$350	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$350	
Settlements		
RPM Auction Credits	$17,500	RPM Cleared MW * RPM Price
RPM Charges	($17,500)	
Net RPM Settlement	$0	
Net RPM and Contract Settlement	($10,000)	

Contract for Differences yields the same settlement outcome as if the RBP Load bilaterally purchased the RBP Resource via Unit Specific Bilateral Transaction and offered it directly into the auction.

Example #3 – Resource Settlement

RBP Commitment < RPM Commitment
RBP Resource Clears in Multiple Auctions
RBP Price > WARCP

RBP Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Credits	$10,000	
RPM Clearing	**BRA**	**3rd IA**
Cleared MW	50	1
Auction Price	$75	$20
Weighted Average RCP (WARCP)	$73.92	
Daily Committed MW (UCAP)	51	
Daily Owned MW (UCAP)	51	
Settlements		
RPM Auction Credits	$3,770	RPM Cleared MW * RPM Price
RBP Credits	$6,303.92	RBP Cleared MW * (RBP Price - RPM WARCP)
Total Credits	$10,073.92	

In the event a resource clears in multiple Auctions, the Contract for Differences will be calculated as the difference between the RBP Price and the resource's Weighted Average Resource Clearing Price.

The total amount paid to the RBP resource is above the Expected RBP Credits due to the extra 1 MW Committed in the IA at WARCP.

Example #3 – Load Settlement

RBP Commitment < RPM Commitment
RBP Resource Clears in Multiple Auctions
RBP Price > WARCP

RBP Clearing		
Target MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Charges	($10,000)	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$73.92	
Settlements		
RPM Charges	($3,696.08)	UCAP Obligation MW* FZP
RBP Charges	($6,303.92)	RBP Credits
Total Charges	($10,000)	

RPM Charges are less than the expected RBP Charges resulting in an RBP Charge. The total amount paid by the RBP load is equal to the Expected RBP Charges. The RBP load does not pay for the additional RPM credits paid to the resource due to the IA clearing.

Example assumes additional 1 MW of Cleared UCAP in 3rd IA is allocated to a non-RBP LSE

Example #4 – RBP Resource Deficiency

RBP Partial Shortfall; No RPM Shortfall

RBP Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Credits	$10,000
RPM Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$75
Daily Committed MW (UCAP)	45
Daily Owned MW (UCAP)	45

DY Owned UCAP is lower than RBP Commitment and specify replacement capacity to decrease RPM commitment. No payments for the undelivered RBP MW, resulting in a $625 reduction of RBP Credits [5 MW * (RBP Price – RPM Price)].

In addition, Resource is subject to RBP Shortfall Charge of 20% RBP Price

Example assumes connect and manage is being allocated

Settlements		
RPM Auction Credits	$3,750	RPM Cleared MW * RPM Price
RPM Commitment Deficiency MW	-	Daily Committed MW – Daily Owned MW
RBP Credits	$5,625	Daily UCAP Owned MW * (RBP Price - RPM Price)
RBP Shortfall Penalty MW	5	RBP Cleared MW - min (RPM Cleared MW, Daily Owned MW)
RBP Shortfall Charges	($200)	RBP Shortfall Penalty MW * 20% RBP Price
Total Credits	$9,175	Total Settlement is less than Expected due to reduced Daily Owned MW

Example #4 – RBP Load Allocation of Deficiency

RBP Partial Shortfall; No RPM Shortfall

RBP Clearing	
Target MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Charges	($10,000)
RPM Clearing	
UCAP Obligation MW (UCAP)	50
Final Zonal Capacity Price ($/MW-Day)	$75

Load does not pay for the 5 MW of undelivered RBP supply, resulting in a $625 reduction of RBP Charges.

In addition, Load is allocated RBP Shortfall Charges collected.

Example assumes connect and manage is being allocated

Settlements		
RPM Charges	($3,750)	UCAP Obligation MW* FZP
RBP Charges	($5,625)	Equal to RBP Credits
RBP Shortfall Credits	$200	Allocated RBP Shortfall Charges
Total Charges	($9,175)	Total Settlement is less than Expected due to non-delivery of full RBP Commitment

Example #5 – RBP Resource Deficiency Full Shortfall

RBP Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Credits	$10,000
RPM Clearing	
Cleared MW (UCAP)	49
Price ($/MW-Day)	$75
Daily Committed MW (UCAP)	49
Daily Owned MW (UCAP)	-

Resource has lower UCAP available for RPM due to ELCC decrease. Unit does not come online for Delivery Year and does not specify replacement capacity to decrease RPM commitment.

Resource is still paid for RPM Auction Credits, but assessed RPM Commitment Charges in excess of Credits (status quo)

Resource is not paid for the undelivered RBP MW, resulting in a $0 RBP Credit payment. In addition, Resource is subject to RBP Shortfall Charge of 20% RBP Price.

Example assumes connect and manage is being allocated

Settlements		
RPM Auction Credits	$3,675	RPM Cleared MW * RPM Price
RPM Commitment Deficiency MW	49	Daily Committed MW – Daily Owned MW
RPM Commitment Charge	($4,410)	RPM Commitment Deficiency MW * 1.2 * RPM WARCP
RBP Credits	$0	Daily Owned MW * (RBP Price - RPM Price)
RBP Shortfall Penalty MW	50	RBP Cleared MW - min (RPM Cleared MW, Daily Owned MW)
RBP Shortfall Charges	($2,000)	RBP Shortfall Penalty MW * .2*RBP Price
Total Credits	($2,735)	Total Settlement is less than Expected due to non-delivery of full RBP and Deficiencies

Example #5 – RBP Load Allocation of Deficiency

RBP Full Shortfall; RPM Full Shortfall

RBP Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Charges	($10,000)
RPM Clearing	
UCAP Obligation MW (UCAP)	50
Final Zonal Capacity Price ($/MW-Day)	$75

Load is still assessed RPM Charges but is allocated the RPM Commitment Deficiency Credits.

Load does not pay for the undelivered RBP MW, resulting in no RBP Charges. In addition, Load is allocated RBP Shortfall Charges collected.

Example assumes connect and manage is being allocated

Settlements		
RPM Charges	($3,750)	UCAP Obligation MW* FZP
RPM Commitment Deficiency Credits	$4,410	
RBP Charges	$0	Equal to RBP Credits
RBP Shortfall Credits	$2,000	Allocated RBP Shortfall Charges
Total Charges	$2,660	Load is credited due to non-delivery of RBP Commitment and RPM Commitment

Example #2b – Resource Settlement

RBP Load Assignment > RPM Load Assignment
RBP Price < RPM Price

RBP Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Settlement	$10,000	
RPM Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$350	
Settlements		
RPM Auction Credits	$17,500	RPM Cleared MW * RPM Price
RBP Credits	($7,500)	RBP Cleared MW * (RBP Price - RPM Price)
Total Credits	$10,000	

The RPM Revenues are more than the expected RBP Settlement resulting in a negative RBP Credit. The total amount paid to the RBP resource is equal to the Expected RBP Settlement.

Example # 2b – Load Settlement

RBP Load Assignment > RPM Load Assignment
RBP Price < RPM Price

RBP Clearing	
Target MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Charges	($10,000)
RPM Capacity Charges	
UCAP Obligation MW (UCAP)	30
Final Zonal Capacity Price ($/MW-Day)	$350

The RPM Charges are a function of the UCAP Obligation MW and can be lower than what is assigned via the RBP allocation. In our simplistic example of having only one load in the RBP, it would continue to be assessed all 50 MW of RBP Charges even if the actual load was lower.

Settlements		
RPM Charges	($10,500)	UCAP Obligation MW* FZP
RBP Charges	$7,500	RBP Cleared MW * (RBP Price - RPM Price)
Total Charges	($3,000)	

Example #3a – Resource Settlement

RBP Commitment < RPM Commitment
RBP Resource Clears in Multiple Auctions
RBP Price > WARCP

RBP Clearing		
Cleared MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Credits	$10,000	
RPM Clearing	**BRA**	**3rd IA**
Cleared MW	50	1
Auction Price	$75	$90
Weighted Average RCP (WARCP)	$75.29	
Daily Committed MW (UCAP)	51	
Daily Owned MW (UCAP)	51	
Settlements		
RPM Auction Credits	$3,840	RPM Cleared MW * RPM Price
RBP Credits	$6,235.29	RBP Cleared MW * (RBP Price - RPM WARCP)
Total Credits	$10,075.29	Expected RBP Credits + (Incremental MW * RPM WARCP)

In the event a resource clears in multiple Auctions, the Contract for Differences will be calculated as the difference between the RBP Price and the resource's Weighted Average Resource Clearing Price.

The total amount paid to the RBP resource is above the Expected RBP Credits due to the extra 1 MW Committed in the IA at WARCP.

Example #3a – Load Settlement

RBP Commitment < RPM Commitment
RBP Resource Clears in Multiple Auctions
RBP Price > WARCP

RBP Clearing		
Target MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Charges	($10,000)	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$75.29	
Settlements		
RPM Charges	($3,764.71)	UCAP Obligation MW* FZP
RBP Charges	($6,235.29)	RBP Credits
Total Charges	($10,000)	

RPM Charges are less than the expected RBP Charges resulting in an RBP Charge. The total amount paid by the RBP load is equal to the Expected RBP Charges. The RBP load does not pay for the additional RPM credits paid to the resource due to the IA clearing.

Example assumes additional 1 MW of Cleared UCAP in 3rd IA is allocated to a non-RBP LSE

Example #3b – Resource Settlement

RBP Commitment = RPM Commitment
RBP Resource in IA Only
RBP Price > WARCP

RBP Clearing			
Cleared MW (UCAP)	50		
Price ($/MW-Day)	$200		
Expected RBP Credits	$10,000		
RPM Clearing	**BRA**	**3rd IA**	
Cleared MW	0	50	
Auction Price	$200	$90	
Weighted Average RCP (WARCP)	$90		
Daily Committed MW (UCAP)	50		
Daily Owned MW (UCAP)	50		
Settlements			
RPM Auction Credits	$4,500	RPM Cleared MW * RPM Price	
RBP Credits	$5,500	RBP Cleared MW * (RBP Price - RPM WARCP)	
Total Credits	$10,000	Expected RBP Credits + (Incremental MW * RPM WARCP)	

In the event a resource clears in only in Incremental Auctions, the Contract for Differences will still be calculated as the difference between the RBP Price and the resource's Weighted Average Resource Clearing Price.

Example #3b – Load Settlement

RBP Commitment = RPM Commitment
RBP Resource in IA Only
RBP Price > WARCP

RBP Clearing		
Target MW (UCAP)	50	
Price ($/MW-Day)	$200	
Expected RBP Charges	($10,000)	
RPM Capacity Charges		
UCAP Obligation MW (UCAP)	50	
Final Zonal Capacity Price ($/MW-Day)	$195*	
Settlements		
RPM Charges	($9,750)	UCAP Obligation MW* FZP
RBP Charges	($5,500)	RBP Credits
Total Charges	($15,250)	

RBP Load can pay more than the Expected Charges in the event the Final Zonal Capacity Price is higher than the WARCP.

*Example assumes BRA procured majority of the RPM Obligation at $200, causing the Final Zonal Capacity Price to be much higher than the IA Clearing Price.

Example #5a – RBP Resource Deficiency Full Shortfall with Must-Offer Exemption

RBP Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Credits	$10,000
RPM Clearing	
Cleared MW (UCAP)	0
Price ($/MW-Day)	$75
Daily Committed MW (UCAP)	-
Daily Owned MW (UCAP)	-

Resource was granted an exemption to the must offer requirement ahead of the auction for a one-year COD delay.

Resource is not paid for the undelivered RBP MW, resulting in a $0 RBP Credit payment. In addition, Resource is subject to RBP Shortfall Charge of 20% RBP Price.

Example assumes connect and manage is being allocated

Settlements		
RPM Auction Credits	$0	RPM Cleared MW * RPM Price
RPM Commitment Deficiency MW	0	Daily Committed MW – Daily Owned MW
RPM Commitment Charge	$0	RPM Commitment Deficiency MW * 1.2 * RPM WARCP
RBP Credits	$0	Daily Owned MW * (RBP Price - RPM Price)
RBP Shortfall Penalty MW	50	RBP Cleared MW - min (RPM Cleared MW, Daily Owned MW)
RBP Shortfall Charges	($2,000)	RBP Shortfall Penalty MW * .2*RBP Price
Total Credits	($2,000)	Total Settlement is less than Expected due to non-delivery of full RBP and Deficiencies

Example #5a – RBP Load Allocation of Deficiency

RBP Full Shortfall; RPM Full Shortfall

RBP Clearing	
Cleared MW (UCAP)	50
Price ($/MW-Day)	$200
Expected RBP Charges	($10,000)
RPM Clearing	
UCAP Obligation MW (UCAP)	50*
Final Zonal Capacity Price ($/MW-Day)	$75

Load does not pay for the undelivered RBP MW, resulting in no RBP Charges. In addition, Load is allocated RBP Shortfall Charges collected.

Example assumes connect and manage is being allocated

Settlements		
RPM Charges	($3,750)	UCAP Obligation MW* FZP
RPM Commitment Deficiency Credits	$0	
RBP Charges	$0	Equal to RBP Credits
RBP Shortfall Credits	$2,000	Allocated RBP Shortfall Charges
Total Charges	($1,750)	Load is credited due to non-delivery of RBP Commitment and RPM Commitment

Example assumes the auction procured the RPM Obligation from other resources.

Calculation of the CfD are determined based on the summation of credits for all resources.

$$Avg\ Cost = \frac{\sum_i^n Cleared\ MW_i \times Price_i)}{\sum_i^n Cleared\ MW_i)}$$

$$Avg\ Cost = \frac{1{,}000\ MW \times \$300 + 1{,}000\ MW \times \$600}{1{,}000\ MW + 1{,}000\ MW}$$

$$Avg\ Cost = \$450/MW$$

New Unit Auction Results and Settlements

		RBP				BRA			
Unit	Zone	Cleared	Price	Cost	Owned	Offered	Cleared	Price	Credits
1	RTO	1,000	$300	$300,000	1,000	1,000	1,000	$350	$350,000
2	B	1,000	$600	$600,000	1,000	1,000	1,000	$500	$500,000
3	C	0	$0	$0	0	0	0	$500	$0
		2,000		$900,000			2,000		

CfD are determined through the supply resources, and then costs are allocated to affected zones.

Contract for Differences

Deliv MW	Price Diff	Credit	Shortfall	Shortfall $
1,000	($50)	($50,000)	0	$0
1,000	$100	$100,000	0	$0
0		$0	0	$0
2000		$50,000	0	$0

Settlements

RPM Credits	RBP Credits	Total	Penalty	Net Credit
$350,000	($50,000)	$300,000	$0.0	$300,000
$500,000	$100,000	$600,000	$0.0	$600,000
$0	$0	$0	$0.0	$0.0
$850,000	$50,000	$900,000		

Total contract for difference amount are allocated back to the affected zones based on the RBP target MW.

Zone/TO Load Settlements

		RBP					BRA		
TO	LDA	Demand	Share	Alloc MW	Avg. Price	Cost	Cleared	Price	Credits
A	RTO	450	22.5%	450	$450	$180,000	12,000	$350	$4,200,000
B	B	1,000	50.0%	1,000	$450	$360,000	3,000	$500	$1,500,000
C	C	550	27.5%	550	$450	$360,000	9,000	$500	$4,500,000
		2,000		2,000		$900,000	24,000		$10,200,000

CfD for RBP resources are then further allocated pro-rata to load based on cost allocation methodology specified on prior slides.

UCAP Obligations and Prices

TO	LDA	RPM Obl	FZCP
A	RTO	9,600	$350
B	B	4,800	$500
C	C	9,600	$500
		24,000	

Settlements

TO	LDA	RPM Credits	CfD Credits	RPM Charges	Alloc RBP Charges	CTR $	Net Charge
A	RTO			$3,360,000	$11,250	$0	$3,370,000
B	B			$2,400,000	$25,000	$270,000	$2,150,000
C	C			$4,800,000	$13,750	$90,000	$4,730,000
		$10,200,000	$50,000	$10,560,000	$50,000	$360,000	$10,250,000

Credit and collateral requirements for planned resources for taking on a RBP commitment will follow existing RPM framework (Attachment Q, VI.,B) with rate adjustments as follows:

Prior to bid submission RBP Phase II (central procurement) Max($20, 0.2 x bid/clearing price) x **year multiplier**

Year multiplier is the ratio of the Net Present Value* of the number of years penalty (credit requirement) cash flow to the nominal value of one-year penalty (credit requirement)

RBP Phase II (central procurement) credit requirement may be reduced to reflect the remaining years while taking into account the credit quality of the Market Participant.

***NPV rate = 9.5%, Source – Brattle 2025 CONE Report for PJM**

Year Multiplier/Credit Support Rationale

- 15-year tenor and 9.5% discount rate was assumed to calculate the year multiplier, which equates to ~seven years.
- Risk is proposing to require credit support equivalent to Net Present Value (NVP) of future penalties (credit requirement) over the term.
- The credit support amount:
  - Covers the full penalty for the years at most risk and on-going obligations
  - Equates to approximately one-year of notional value of the commitment value
  - Provides operational financial assurance once the plant is online.