2028/2029 Quadrennial Review - 2 Proposals

July/Aug MIC/MRC, 2025

Industry-leading Developer, Operator, and Investor

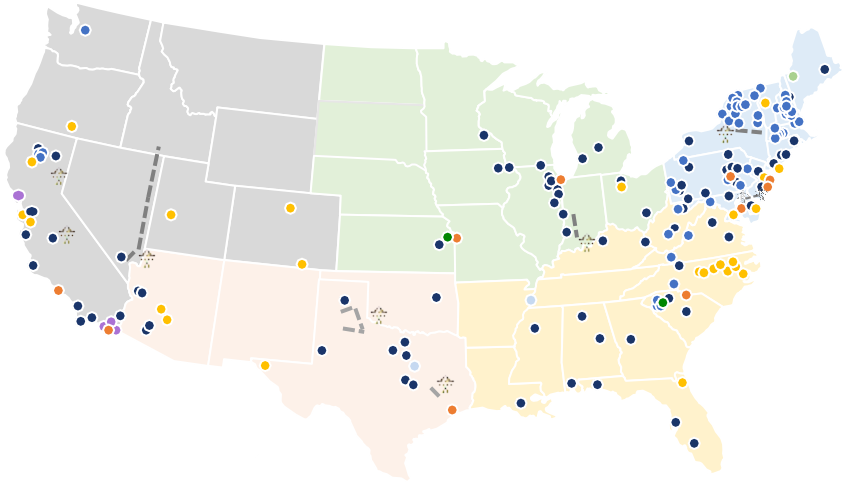
LS POWER
Innovation and Investment in Energy

1990	Inception
>$60B	Debt and Equity Capital Raised
>47	GW Developed and Acquired
>160	Power Generation Projects
>780	Miles of High-Voltage Transmission Completed
6	Transmission Utilities
8	Energy Transition Platforms
>370	Professionals Across Five Offices

LS Power Group

Investments	Power Generation	Energy Storage & Renewables	Transmission

- 160+ power generation projects developed or acquired
- Own and operate 19,000+ MW of power generation (34,000+ MW acquired since inception)
- Nation leading energy transition businesses representing electric vehicle charging, demand response (virtual power plants), microgrids, renewable fuels and waste-to-energy platforms
- 16 transmission projects, including 6 operating utilities, across 8 states and 5 ISO/RTOs that serve 185mm people
- $13 billion in equity commitments raised



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Keep it simple with no major changes

- The guiding principles behind both LS Power proposals is to focus on maintaining consistent market rules, to allow the competitive market to dictate outcomes, return stability and certainty to the Capacity Market, and instill confidence in the structure of the market going forward
- The markets must continue to support investment during this critical time where new supply is needed and reassure market participants that material out of scope changes to the capacity market will not be adopted unilaterally
- LS Power doesn't believe this is the the time to make any major changes to the market without properly vetting those changes in a very deliberate, structured process which includes thorough modeling and analysis of impacts of the changes to the market that would include backcasting, etc
- This is not the time to propose the major changes as described below

Keep it simple with no major changes

- We are pleased that PJM has not adopted the major changes as suggested in the Brattle Report including:
  - Shifting the Reference Resource back to the Combined Cycle (CC)
  - Replacing VRR Curve with Marginal Reliability Impact (MRI) Curve
  - Replacing Net CONE with "Reference Price"
  - Shifting to a sub-annual market, and
  - Modification of the Reliability Backstop provision in the Tariff that would bifurcate the market into two products with a new product that would be nothing more than a long-term, cost of service product
- But, PJM still proposes to make major changes (apparently for political reasons) including:
  - Shifting back to the CC Reference Resource
    - PJM moved to the CC in the 26/27 Quad Review against the objections of LS Power and others
    - Then in an accelerated FERC filing, moved away from the CC and back to the CT for 26/27 and 27/28 BRA while also having to add yet another six month delay for the 26/27 thru 29/30 BRAs
  - Revising the shape of the VRR Curve
    - Moving to the CC forces PJM to make changes that:
      - reduce the price cap
      - prevent the issue of Net CONE going to $0.00/MW-Day which is why we went back to the CT for 26/27 and 27/28 BRAs

Keep it simple with no major changes

- LS Power agrees with the IMM to use the CT as the Reference Resource but without the major changes suggested by the IMM such as:
  - Revising the shape of the VRR Curve to reduce the price cap
- Instead, as will be shown, the LS Power proposals limit and minimize the changes to solely address the quadrennial review Tariff requirements:

  (i) a review of the shape of the Variable Resource Requirement Curve ("VRR Curve" or "Curve") and based on the simulation of market conditions to quantify the ability of the market to invest in new Capacity Resources and to meet the applicable reliability requirements on a probabilistic basis, provide a recommendation of whether to either modify or retain the existing VRR Curve shape;

  (ii) update the Cost of New Entry (CONE); and

  (iii) a review the methodology for determining the Net Energy and Ancillary Services Revenue Offset (EAS Offset)

LS Power Proposals

- For both LS Power proposals:
  - Codify the CT as the Reference Resource for 28/29 thru 31/32 DYs (Quad Review period) for CONE Areas 1, 2, 3, and 4, and for CONE Area 5 (COMED) the BESS as recommended by Brattle/PJM – see Appendix for indicative Tariff definition change
  - Update the CT technology to the CT proposed in the Brattle Report
  - Update CONE for the CT using the Brattle/S&L estimates but refresh the estimates prior to filing with FERC
  - Use the BESS CONE as developed by Brattle/S&L
  - Retain the use of forward-looking E&AS revenues as defined in the current tariff
- Proposal LSP1 - Retain the current shape of the VRR Curve but update the parameters (e.g. Net CONE, etc) to reflect updated CT costs and E&AS updates
- Proposal LSP2 – Same as LSP1 but return to the shape of the VRR Curve in use prior to the 2022 Quad Review change
- That's it. Both proposals are simple and in accordance with the tariff requirements and maintain the competitiveness of the competitive capacity market

So Why the CT and not the CC? – Several Reasons

- We agree with the IMM's decision to retain the CT as the Reference Resource and the IMM's thorough and well articulated argument that the CT is the correct choice because it and not the CC requires the "missing money" from the Capacity Market
- From a reliability perspective, as we saw with the most recent Hot Weather Alert in June where there was >11,000 MW of solar at the peak, PJM deployed the 120 and 60 minute DR at a time when the solar began to roll-off faster than the load. As the penetration of solar is expected to increase going forward and with the expected large load growth which could include less-flexible load in the form of data centers, the need for CTs increases to continue to meet the load and reserves when the intermittents fall-off during the day
  - CCs, which mostly operate as base-load resources, do not provide the flexibility and dispatchability required to follow fast load changes
  - As PJM highlighted in their review of the June 2025 Hot Weather Alert, one of the challenges coming out of the event is "Future resource adequacy concerns considering increasing loads and renewable generation penetration"

So Why the CT and not the CC? – Several Reasons

- We also disagree with one of the arguments for moving to the combined cycle which is “that is what developers are building” - However, this needs to be put into the proper context
- The reason CCs have been developed and not CTs is CCs are primarily developed based on energy revenues and not capacity revenues
  - In any case, CCs have been developed and built under curves established using a CT reference resource
  - If the CC is the reference resource, by definition that is what will be built, because other sources of capacity become uneconomic under that curve
- CTs on the other hand cannot be developed predominantly on energy revenues since they don’t operate as often as CCs and therefore require capacity revenues to support their development
  - The same is true for BESS systems, which require significant capacity revenues for their development
- The capacity market needs to reflect these realities and provide the capacity revenues to support continued investment in existing CTs, the development of new CTs, and commercialization of BESS projects

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So Why the CT and not the CC? – Several Reasons

- While the use of the CC may result in lower Net CONE values than the CT and therefore potentially lower BRA clearing prices, these clearing prices will not support the development of CTs
  - Up until the most recent BRA, capacity clearing prices have not supported the development of CTs and only one CT has been developed over the last many years
- A data update is important!
  - Brattle's analysis shows that underestimating CONE can have significant consequences for price outcomes and reliability
  - Significant effect of external drivers on the CONE:
    - Commodity inflation
    - Supply Chain Constraints
    - Tariffs on Foreign Components

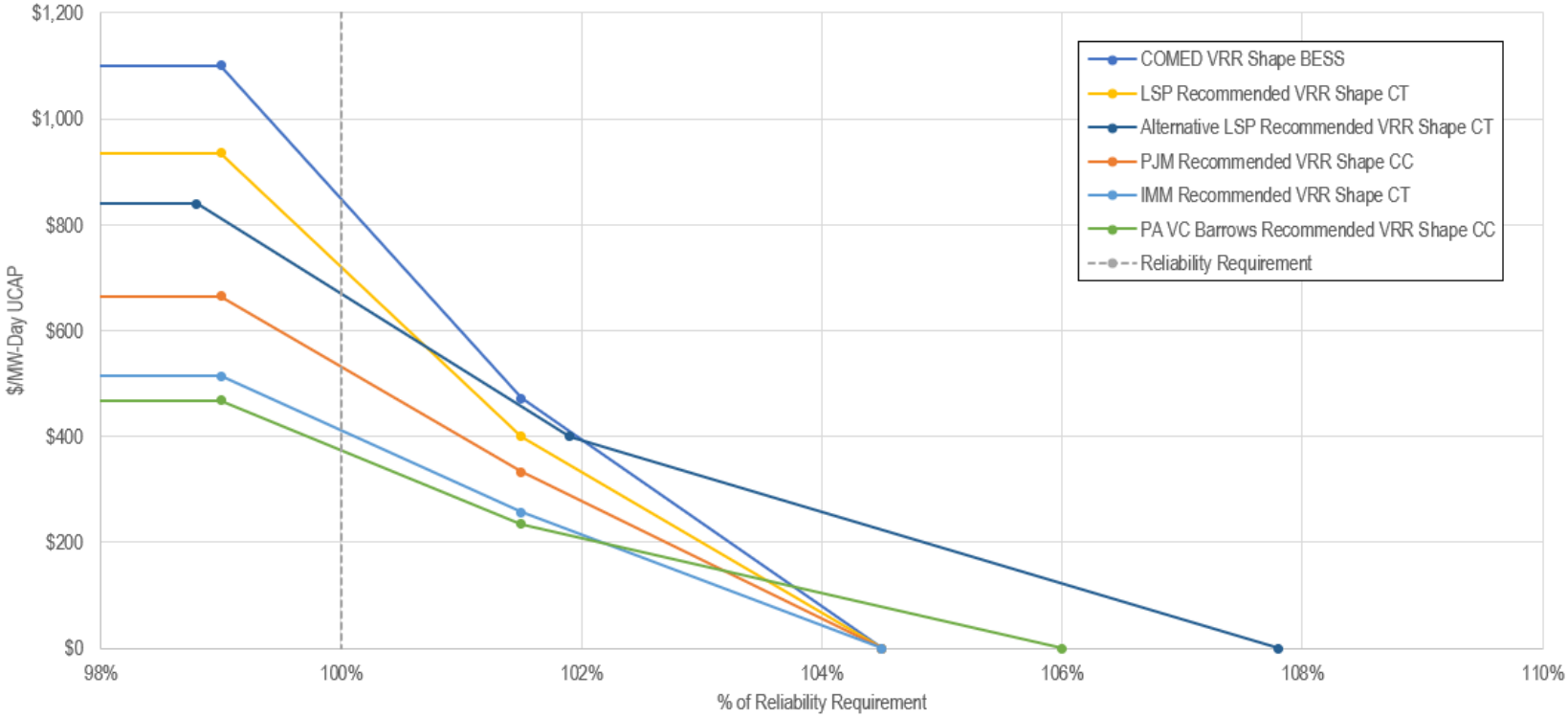
What about CONE Area 5?

- LS Power adopts PJM's approach to the reference resource in CONE Area 5
- Requiring accelerated depreciation to address CEJA retirement requirements, a CT reference resource likely proves less economic than using the BESS as the reference resource for that LDA
- On a Gross CONE and Net CONE ICAP basis, the CT and BESS technologies are similarly situated
  - Lower BESS ELCC value compared to CT increases the UCAP-based price points on the VRR Curve

Shape of the VRR Curve

- Proposal LSP1 – LS Power is proposing to use the current VRR Curve Shape to minimize changes
  - Of all VRR curves studied, the current VRR curve (LSP1) exhibits the highest level of reliability in Brattle's analysis
- However, the shape of the current curve was changed in the previous Quad Review to among other things address a perceived "over procurement" problem
- The result of this change was a rapid tightening of supply and higher than previous clearing prices
- Proposal LSP2 – LS Power offers as an alternative a return to the shape in use prior to the 2022 change
  - That legacy curve maintained sufficient resources during a large number of retirements and provided relatively competitive price outcomes while maintaining reliability

Comparison of VRR Curve Shapes



Notes:
Data reflects Brattle CONE and Net EAS estimates as of April 2025
Curve points based on:
PJM-provided data from Brattle Report Table ES-2 at
https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250411-special/item-1-02-revised-cone-report-final., and
IMM presentation:
https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250709/20250709-item-06-2---quadrennial-review-proposal---imm.pdf

Conclusion

- There have been many changes proposed during this stakeholder process as previously discussed
- A new poll was released by PJM to gauge the Members' interests in pursuing a Sub-Annual Market and a prompt market and the results only presented today.
- In addition, discussions continue on modifying the ELCC accreditation methodology and efforts to develop a method to include data center load forecasts into the load forecast.
- All these efforts have an impact on the Capacity Market.
- Given the wide scope of these efforts PJM must prioritize stabilizing the Capacity Market as proposed by LS Power and commence a new stakeholder process(es) to address these items in parallel
- For all these reasons herein, LS Power urges the PJM Board to minimize changes to the Capacity Market and adopt one of the LS Power proposals

APPENDIX

Appendix

- Revised OATT Definition of Reference Resource
  - **Reference Resource:**
    - "Reference Resource" shall mean, through the 2025/2026 Delivery Year, a combustion turbine generating station, configured with a single General Electric Frame 7HA turbine with evaporative cooling, Selective Catalytic Reduction technology all CONE Areas, dual fuel capability, and a heat rate of 9.134 Mmbtu/MWh. For the 2026/2027 Delivery Year and subsequent Delivery Years, "Reference Resource" shall mean, for all CONE Areas, a combustion turbine generating station, configured with a single General Electric Frame 7HA turbine with evaporative cooling, Selective Catalytic Reduction technology, dual fuel capability, and a heat rate of 9.189 Mmbtu/MWh. For the 2028/2029 and subsequent Delivery Years, "Reference Resource" shall mean, for CONE Areas 1, 2, 3, and 4, a combustion turbine generating station, configured with a single General Electric Frame 7HA.03 turbine with evaporative cooling, Selective Catalytic Reduction technology, dual fuel capability, and a heat rate of 9.150 Mmbtu/MWh. For the 2028/2029 and subsequent Delivery Years, "Reference Resource" shall mean for CONE Area 5 only or CONE Area 5 (COMED) a Battery Energy Storage System (BESS), Lithium-ion, containerized, rated output power (at POI): 200 MW-ac, gross inverter output requirement of 210 MW-ac, installed Energy Capacity 1,009 MWh-dc, capacity degradation loss (at first Augmentation) of 10.28%, minimum state of charge of 5%, duration of 4 hours, and augmentations Years 5, 8, 11, 14, and 17