

Effective Load Carrying Capability (ELCC) Senior Task Force Update

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Markets & Reliability Committee February 20, 2025



- Three Issue Charges approved by the MRC assigned to the ELCCSTF
 - Capacity Market Enhancements ELCC Accreditation Methodology
 - Capacity Market Enhancements Data Transparency
 - Capacity Market Enhancements CETL
- Began meeting on December 5, 2024 and has held seven meetings to date
- Stakeholders agreed to initially focus on ELCC Accreditation Methodology and Data Transparency



ELCC Accreditation Methodology

- Two sets of reforms developed for a targeted March filing:
 - 1. seeks to update ELCC Classes utilized in the ELCC Accreditation Methodology, and
 - 2. seeks to provide greater certainty in ELCC Accreditation between the BRA and final ELCC values determined for a delivery year
- ELCCSTF Voting Window:
 - February 4, 2025 February 10, 2025
 - Voting result report



Voting Results – ELCC Class Reforms

- Single solution package: Package A PJM
 - 97.6% in favor of Package A
 - 98.1% preferred Package A over status quo
- Separate from the BRA to IA Risk Mitigation Package and will be voted independently at MRC



Voting Results – BRA to IA Risk Mitigation Reforms

- Three solution packages: Package A Vistra, Package B ODEC & PJM, and Package C – PJM
 - 37.9% in favor of Package A; 48.2% preferred Package A over status quo
 - 66.5158% in favor of Package B; 68% preferred Package B over status quo
 - 66.5025% in favor of Package C; 74.9% preferred Package C over status quo
- MRC Main Motion: Package B; MRC Alternate: Package C



ELCCSTF Next Steps

- Solution options and packages for Data Transparency
 - Potential vote following the March 6 ELCCSTF meeting
- Solution options and packages for the remaining ELCC Accreditation Methodology design components
- CETL Issue Charge work to begin at the March 18 ELCCSTF meeting
- A current ELCCSTF work plan can be referenced under the most recent meeting materials on the ELCCSTF page.



ELCC Classes Package

Proposed ELCC Class Additions:

1. Steam - Waste to Energy: This new class would consist of certain generators that currently fall under the broader "Steam" ELCC Class today that utilize steam technology with a primary fuel source of muni waste or wood waste.

Est. ELCC Class Rating based on 2025/26 Third IA sensitivity: 83%

2. Oil CTs: This new class would consist of certain generators that currently fall in the "Other Unlimited Resource Class" today that utilize combustion turbine technology with a primary fuel source of oil / diesel

Est. ELCC Class Rating based on 2025/26 Third IA sensitivity: 85%



Review of the concern that has been raised:

Most existing generators have a must offer requirement in the BRA for their full accredited UCAP value, as determined using the ELCC analysis run prior to the BRA. That accredited UCAP value gets updated over time based on the latest ELCC analysis for the relevant Delivery Year, with the final value being determined just prior to the Third IA. When the final accredited UCAP value falls below the amount committed in the BRA, which may be driven by factors unrelated to a decrease in ICAP or performance of the resource, the resource owner is subject to deficiency charges at roughly 120% their capacity revenue for the shortfall MW when they are unable to procure replacement capacity. Market sellers are looking for reforms to address that uncertainty and risk, particularly given it may be difficult or not possible to procure the replacement capacity when the system is tight.

Example

Generator A is accredited at 100 MW UCAP and clears the full amount in the BRA at a clearing price of \$250/MW-day. Accreditation is then updated prior to the Third IA and due to changes in system risk profiles, the final accreditation of the resource is 90 MW UCAP. If unable to procure replacement capacity, the resource owner would be subject to a daily deficiency charge for the 10 MW UCAP shortfall times \$300/MW-day (1.2x BRA price)

BRA to IA Risk Mitigation: Package B (MRC Main Motion)

Package B: Lock in ELCC Class Ratings and Accredited UCAP Factors at the time of the BRA

- New units in the IAs would still have accreditation based on the BRA ELCC ratings and analysis
- The Reserve Requirement Study and IRM would still be updated prior to IAs and reflect the latest set of available inputs for weather, load forecast, projected resource mix, and performance
- The FPR would be determined for IAs based on the updated IRM and the Pool-wide average Accredited UCAP Factor from the BRA (with any small adjustments needed to reflect updates to the resource mix)

Considerations:

- Removes the BRA to 3rd IA uncertainty and risk of deficiency charges driven by lower ELCC ratings from market sellers (retains risk of ICAP deficiencies). Similarly, removes the upside of any increase in ELCC ratings for sellers that would have otherwise resulted in additional capacity value for sale.
- All updates to the inputs or shifts in risk profiles in the resource adequacy analysis and accreditation would effectively be captured in the determination of PJM Buys or Sells in the IAs with no ELCC updates, regardless of whether the driver of the changes were related to resource performance or not.

BRA to IA Risk Mitigation: Package C (MRC Alternate Motion)

Package C: Update ELCC Class Ratings and Accredited UCAP Factors with each IA. However, for commitment deficiencies driven by lower UCAP factors, apply a lower penalty rate to the deficient MW based on 100% of the resource's clearing price

- Deficiencies driven by a decrease in ICAP (e.g. a planned generator clears and then fails to come online in time) is penalized at existing penalty rate based off 120% of the resource's clearing price.
- Deficiencies driven by a lower final Accredited UCAP Factor than the factor used when clearing the auction has the penalty rate reduced to 100% of the resource's clearing price.

Considerations:

- Continues to expose market sellers to updates in ELCC accreditation values between the BRA and IAs (up or down), regardless of the driver of those changes, but removes exposure to deficiency penalties that exceed the auctions revenues being paid for the shortfall MW when the deficiency is driven by lower UCAP factors.
- Provides revenues back to load when accredited value of resources drop and replacement capacity is not procured.
- Can result in lower IA buy bid prices from owners of deficient resources than status quo and lower than the price PJM would buy at under Approach 1 in certain scenarios.



Key Takeaways

 The ELCC Class package adds two new classes for the 2027/2028 BRA. This will be voted independent from the BRA to IA Risk Mitigation packages. The ELCC BRA to IA Risk Mitigation packages propose reforms to address uncertainty and risk due to changes in the UCAP accreditation between the BRA and final accredited UCAP determined just prior to the 3rd IA. Changes would be effective with the 2027/2028 BRA and would also apply to the 2026/2027 3IA.

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Same day MRC and MC endorsement will be sought at the March 19 meetings. ELCCSTF work will continue on the remaining issues.

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