

Fixed or Float 10-Delivery Year Election

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CCSTF

Auwahi Wind Farm

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A Fundamental Change

ELCC is a Fundamental Market Design Change for Renewable and Limited-Duration Resources

Two Key Changes - all done in a model that provides zero transparency and whose results are highly predicated by inputs and assumptions.

1. The Effective Load Carrying Capability of a class of resources changes on an annual basis.
2. Unit-specific performance adjustment is a model result.

Both principles impact the amount of capacity a resource can offer into an RPM auction.

No other resource types within PJM will have capacity accreditation assigned based on model assumptions and results, instead of actual performance.

Furthermore it is not entirely clear that PJM, with an actual capacity market and mature rules around how unit performance impacts accreditation, must or should be utilizing unit-specific performance assessment within an abstract model.

The Marginal vs Average Decision within the Model

Which is correct?

Academically the marginal method sends a more appropriate capacity quantity signal to the investment community. However, it is not entirely clear a marginal methodology is the correct choice when it comes to a reliability-related, planning model. Valid arguments can be made for each method. A marginal method may result in actual under-build, and the average method may result in the overbuilding of resources.

A Hybrid Result using the Average Approach in the Model

The Fixed/Float 10-DY will have PJM utilizing (per their package) the average methodology within the ELCC model. However, because we allow the optionality of a resource to elect a fixed value for 10-delivery years, the model is limited in its ability to arbitrarily keep adding resources by reducing the accreditation of existing resources. The result is the sending of accreditation signals that will likely be closer to a marginal accreditation value in the near-term, and then will rise to that of somewhere between a marginal and average class outcome in the longer-term. This result is fair to new and existing resources.

Transition

Limited-Duration Resources - Start '22/23 BRA Intermittent and Other - Start '23/24 BRA

Provides a 5-DY transition for existing and those resources coming online to participate in the '23/24 BRA to utilize up to its current, non-ELCC capacity accreditation for the next 5 delivery years, subject to status quo performance expectations. The performance adjustment will be based on the 368-hr rule as it exists today.

The Fixed 10-Delivery Year (Fixed 10)

Those coming online in delivery years '24/25 or thereafter, or having to make a subsequent election will be subject to:

Characteristics of election:

- The applicable forecasted ELCC value for the applicable BRA becomes the Fixed Class value (FixedClassELCC%) for the next 10-Delivery Years.
- Unit-specific performance adjustments are done with the equivalent (at time of election) of an updated 368-hour rule, not utilizing the ELCC performance adjustment model. This would include an updated value prior to the 3rd IA for a delivery year, just like today.
- Must-Offer. Failure to offer into the BRA results in the resource's accredited MW being allocated to new and existing units in the ClassELCC% under the Float 10-DY method for the remainder of the election. The resource would move to the Float class for the remainder of its fixed duration.

The Float 10-Delivery Year (Float 10)

Those coming online in delivery years '24/25 or thereafter, or having to make a subsequent election will be subject to:

Characteristics of election:


- A resource's accreditation (ClassELCC%) changes each year.
- The Class ELCC % is forecast for the BRA and is then updated prior to the 3rd IA.
- Unit-specific performance adjustments are done within the ELCC model and are part of the forecasted value for the BRA and then updated for the 3rd IA.
- No must-offer.

Summary

- A smooth, reasonable transition to ELCC.
- Provide resources decision points on how they should be modeled within PJM's ELCC model
 - Fixed 10-Delivery Years (still subject to actual performance rules to maintain accreditation)
 - Float 10-Delivery Years (ELCC)
- Resources not offering into RPM will have their ELCCMWs given to new or existing resources that are utilizing the Float 10-DY (in other words, freed capacity will result in a rise of the ClassELCC%)
- PJM provides rolling, 10-year forecasted ELCC values
- The Class ELCC % will be an input utilized by all in the future, whether choosing the Fixed or Float 10.
- 2026 Quadrennial Review to determine status.

The capacity market and thus accreditations will continue to evolve. We suggest utilizing a minimalistic approach that allows for propagation of new ideas in the next reiteration of RPM.

This package will result in the least amount of new costs being incurred by customers in RPM because we will not be arbitrarily taking away the capacity quantity from existing zero, marginal-cost resources to newly constructed, zero marginal-cost resources.

A large white wind turbine stands prominently in the center of the frame, its three blades extending outwards. The scene is set during sunset, with a warm, orange and pink glow on the horizon. In the foreground, several sunflowers are in bloom, their yellow petals and dark centers clearly visible. The background shows a flat landscape with a few more wind turbines in the distance under a clear, light blue sky.

**Thank you.
Any Questions?**