To: PJM Stakeholders

From: Gizelle Wray, Solar Energy Industries Association, on behalf of the PJM Clean Energy

Caucus

Date: May 24, 2021

Re: Statements on Application of ELCC to Limited Duration Resources

These comments are being made on behalf of the Clean Energy Caucus, which includes clean trade associations such as the American Clean Power Association ("ACP"), Advanced Energy Economy ("AEE"), Energy Storage Association ("ESA"), and the Solar Energy Industries Association ("SEIA"), renewable generators, energy storage developers, demand response and energy efficiency providers, and environmental NGOs. Please note that the following comments are the position of the caucus and do not reflect the views of any individual member.

Over the past year, the caucus has been intimately involved in the ELCC process. These comments explain the caucus's position so that stakeholders and PJM will understand our concerns at this critical juncture.

The October 30th Filing without a Transition Mechanism is not a Stakeholder Compromise

The Clean Energy Caucus supported the ELCC package with the transition mechanism specifically because the transition mechanism secured some forward offer volume certainty for renewable and limited duration resource owners. Conversely, thermal resources continue to retain full offer volume guarantees. Without this design component, a key "guard rail" for stability is now missing and could make transition to ELCC disruptive to renewable energy deployments over the medium-term. An ELCC package that does not contain a transition mechanism is an entirely different approach that merits new considerations, outlined in this letter.

The initial ELCC filing reflected a stakeholder compromise that balanced opposing perspectives across the industry. Since that compromise, PJM has revised its methodology and assumptions which cut solar ELCC values by nearly half, and FERC subsequently eliminated the very component of the package that made the rule palatable. Should ELCC, without the transition mechanism, go into effect for the 23/24 Delivery Year, then, as soon as the MOPR that currently creates a barrier to entry for renewable resources is eliminated, ELCC will present a countervailing challenge to renewable resources participating in the Capacity Market.

ELCC Should be Applied to Thermal Resources

The caucus believes that the only way to implement ELCC in an equitable and non-discriminatory manner is to apply it to thermal resources, and not just intermittent and limited duration resources. Under PJM's October 30th proposal, all else being equal, if a thermal and a solar resource each have consistent year-over-year unit performance, the thermal resource would have an unchanging capacity value while the solar capacity value would continually decrease for reasons exogenous to its control. Growing reliance on natural gas and infrequently used peaking units demands a close review for correlated outage effects of fossil classes.

PJM has recently indicated that stakeholders should evaluate ELCC for thermal resources in Phase 2 of the Capacity Market reform discussions. The caucus urges PJM to communicate publicly to stakeholders its clear support for and demonstration of planning to expand its capacity accreditation framework to thermal resources.

PJM Should Still Support ELCC for Storage Resources for the Next Auction

Given that storage resources are currently subject to the 10-hour rule that significantly underestimates the value those resources provide to the system, and this artificial limitation on the capacity value of storage was the genesis of the FERC proceeding at issue here, the caucus believes it is necessary to expeditiously remedy this inaccuracy in time for the 23/24 BRA. Therefore, the caucus encourages PJM to support ELCC for storage resources in its June 1 filing.

Considering that PJM boasts a near-30% reserve margin and has repeatedly asserted that it does not have any reliability concerns, there is time to design an ELCC rule that applies to resources beyond storage that is equitable and non-discriminatory.

The Data Used to Calculate ELCC Should be Transparent and the Methodology Reproducible

Transparency of the data and methodology used to develop the ELCC values is imperative. On numerous occasions, members of the caucus have asked PJM for this data to be posted publicly, yet the information that PJM has provided to date has not allowed independent analysts to replicate PJM's ELCC results. Without knowing the assumptions behind the model, industry participants cannot verify whether those assumptions are accurate. For instance, the future deployment scenarios are a key driver of ELCC results and suggest a decrease in solar class ELCC from 54% to 31% in just five years. However, the level of forecasted deployment that is driving this result is hidden behind non-disclosure agreements making it impossible to verify whether that forecast is based on rational expectations.

Compounding this concern, PJM recently commenced a stakeholder process to evaluate interconnection queue reform because the queue has become so congested that the average queue times have risen to over 700 days, some of the highest in the country. If the deployment scenario does not account for the fact that interconnecting resources are stalled in an over-congested queue, the resulting effect artificially inflates the future deployment level of solar resources and simultaneously lowers their ELCC values, even though those resources will not realistically be operational. Industry participants cannot verify if the future deployment scenarios account for this delay because PJM has not made this data public.

It would be inaccurate to claim that PJM has provided the information necessary to conduct an ELCC analysis when renewable developers and financing parties looking to gain insight into what the capacity value for their resources might be in the future have not been able to replicate and verify PJM's results. As a result, resources that will be subject to ELCC have already faced difficulty in the financing process due to heightened levels of uncertainty, and a rule has not even been implemented. Without transparency into the methodology and the inputs, resources subject to ELCC are putting their financial future in PJM's black box.

The caucus has outlined a list of data it requests be made publicly available below:

- Annual forecasted deployment in megawatts for every resource type, including non-ELCC resources
- Hourly output shapes for every year in the model for every unlimited, variable, limited duration, and combination resource type
- Forced, planned, and maintenance outages for unlimited resources
- Simulated dispatch of Demand Response resources
- Load Model
 - o Hourly load shapes for each year
 - o Hourly weather data used in forecast model
 - Hourly load scenarios
- The most up-to-date versions of these data should be aggregated in one place on the CCSTF page rather than existing in individual meeting days

Conclusion

The Clean Energy Caucus respectfully encourages PJM and the stakeholder body to consider these comments as they contemplate the next steps for ELCC.