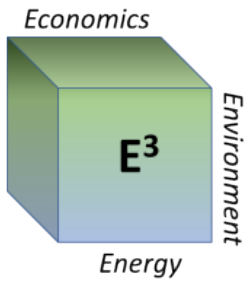


Comprehensive CIR-ELCC Proposal:

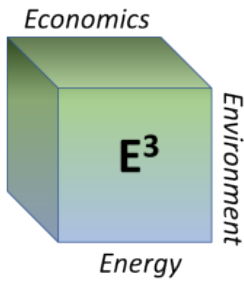
Paul M. Sotkiewicz, Ph.D.

June 25, 2022



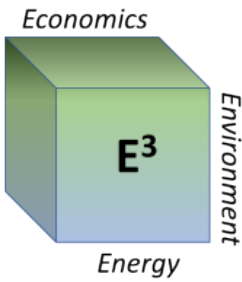
CIR Request Policy

- **Objective:** Allow IC to request the CIRs they believe they can support through testing and operations
- **Tariff Rules Today and Going Forward:** CIRs have never been the equivalent of UCAP for Capacity Purposes, but only the show the energy that can be delivered from Capacity that qualifies a Capacity Resource.
- **Features:**
 - Net output 10am to 10pm EPT June, July, Aug, Sept, and May of each Delivery Year based on IC's expectations
 - IC takes risk of being able to test or operate to CIRs requested in the future. No different than those risks faced by unlimited resources historically
- **Implementation:** Begin with Transition Cycle 1 that allows resources to request additional CIRs prior to the start of that Cluster in this proposal.



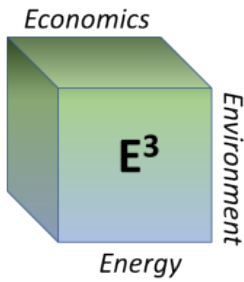
CIR Testing, Verification

- **Objective:** Ensure CIRs are being utilized and supported by the IC
- **Features (Variable and Limited Resources):**
 - Maximum of last 3 Delivery Years' output of the resource between hour ending 10AM and 10PM Eastern Prevailing Time June, July, August, September, May that closest meets or exceeds the CIR value currently in place.
- **Features (Hybrid):** Sum of Limited and Variable
- **Features (Unlimited):** Status quo
- **Properties:**
 - Shoulder months around the peak summer months are included given problems are often seen in these months with above normal temperatures that occur with transmission and generator maintenance outages.
- **Implementation:** Begin with the 2023/2024 DY



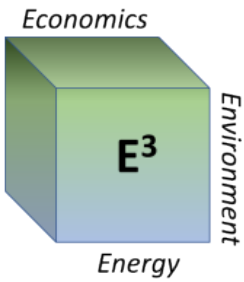
CIRs and Accredited UCAP

- **Objective:** Translate CIRs usage into Accredited UCAP in RPM
- **Variable Resources:**
 - Hourly output used in ELCC model and in unit-specific Performance Adjustment (i.e. based on 10 years of 200CPx2 hourly output values) cannot exceed:
 - a) during the months of May through October (inclusive), the CIR value; and
 - b) during the months of November through April (inclusive), the lesser of the winter deliverability MW or CIR value. Also: UCAP cannot exceed CIRs.
 - UCAP and CIRs are not equivalent, CIRs measure deliverability across transmission and UCAP measures the expected output of the resource adjusting for performance criteria.
- **Other Resources:** Same as PJM Package D
- **Implementation:** Begin with the 2024/2025 DY for which the BRA is scheduled December 2022.



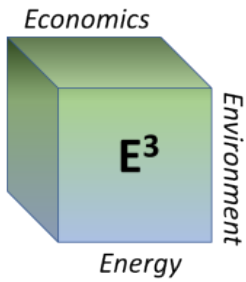
Transition Mechanism – Existing Resources

- **Objective:** Ensure non-discriminatory treatment of new and existing resources
- **Existing Resources:**
 - "PJM will adjust the AUCAP for Existing Units participating in the Base Residual Auctions commencing with the 2024/2025 BRA and subsequent BRAs to reflect the CIRs/Deliverability modeled by PJM and current level of CIRs where CIRs = Deliverability.
 - Hourly historic performance data will be used and will not exceed awarded CIRs.
 - Existing wind and solar, defined as having signed ISAs as of the date FERC approval, can request additional CIRs in accordance with Design Component 1 above by entering the Interconnection Queue in accordance with the interconnection rules and any hydro or unlimited resource would need to do.
 - Any modification to CIR/Deliverability and associated accreditation will only be represented in the auction when i) an amended/new ISA is in place reflecting the increase in CIRs if requested, ii) any and all necessary transmission system upgrades are implemented and paid for by the resource owner, and iii) associated Tariff changes are approved by FERC order. "



Transition Mechanism – Existing Queue Resources

- **Objective:** Ensure non-discriminatory treatment of new and existing resources
- **Existing Queue Resources:**
 - “Existing Queue Units” are defined as Variable Resources in the PJM Queue without an executed ISAs as the date of March 31, 2023 and are not in the Fast Track process.
 - Resources in the Fast Track Process must submit queue positions for any subsequent CIR requests.
 - Allow Resources in the Fast Track process to request more CIRs but then be bumped into the Transition Cycle 1 process.
 - Existing Queue Units in Transition Cycle 1 and Transition Cycle 2 may request higher CIRs. Any additional CIRs that may be desired after this point, ICs and will need to get back into the queue to request higher CIRs if desired.



CIR Transfers

- **Objective:**

- Reduce the time for new projects with existing CIRs at their original POI coming into service
- Show value in existing CIRs and sites

- **Properties:**

- Status quo plus;
- Resources using existing CIRs at the original POI can be entered directly into the commencement of the next cluster cycle
- Those CIRs are already modeled for deliverability and will not affect subsequent or existing queue studies.