

# Solution Options for CIR Transfer Efficiency Issue Charge

Katie Siegner, RMI

September 2023

# Why is this issue charge important?

PJM is projecting **up to 40 GW of generation retirements** by 2030, mainly coal and gas plants, which could pose reliability risks absent faster new entry

Replacing these retiring resources with new ones at the same point of interconnection (POI) can **reduce the grid impacts and costs** created by retirements and enable new projects to **connect faster** due to reduced study requirements

State and federal policies (incl. incentives from the **Inflation Reduction Act**) make this type of same-POI replacement using carbon-free resources more attractive

Establishing a **generator replacement process** in PJM would effectively and efficiently address the above reliability risks and economic/policy opportunities

# Solution options for enhancing CIR transfer efficiency via a generator replacement process

## Eligible replacement resources:

- All *energy-injecting* capacity resources
- New or existing queue requests
- Behind same POI as retiring generator\*
- Requesting CIRs equal to or less than those of retiring generator (on *ELCC-adjusted* basis)
- Can have different ownership

## Interconnection process:

- Replacement resource with transferred CIRs would proceed through **separate generator replacement** process, as exists in other RTOs
- Two-phase study process:
  - Replacement Impact + Reliability Studies (RIS + RAS)
  - Facilities study (if needed)
- Target timeline of **<270 days**

## Initiation of CIR transfer process:

- Submission of deactivation notice + intent to transfer CIRs – **publicly posted** on generation owner and PJM websites

## Implementation:

- Development of PJM-specific generator replacement process rules, starting in this forum
- New process could be implemented after 60-day notice period and FERC approval

\*To be eligible for generator replacement process; this does not necessarily preclude other CIR transfers to resources at different POIs, which could still happen as they do today

# Rationale for streamlined interconnection of generator replacement resources



Replacement generation projects with transferred CIRs are efficiently re-using existing transmission infrastructure, **limiting the impacts to the grid** associated with both the retiring and new generators.



While interconnection study is still required given different potential technologies and capabilities of the replacement resource, the **study needs are less** compared to greenfield interconnection requests.



PJM's 4R report identifies a need to correct the imbalance between the pace of retirements and the pace of new entry, which if left unaddressed could impact **local and regional reliability**. Generator replacement projects help fill this need.



Enabling an efficient process for interconnecting these resources can be part of the solution to clearing the existing (and potential future) interconnection backlog, and on net **save time and resources** PJM is spending on interconnection studies.



These projects can also help **support local economic development, state policy objectives, and affordability goals** by keeping revenue in the existing energy community, connecting to the grid quickly, and avoiding costly network upgrades.

# Questions for further solution refinement

- What are the key design components or rules to ensure alignment with principles of open access and competition?
- How could this separate process be implemented in such a way as to respect the premium on PJM staff time?
  - What is the experience of other RTOs and utilities with a separate, shorter generator replacement interconnection process?