

Solution Options for PJM CIR Transfer Efficiency Issue Charge

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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**) support this type of on-site replacement using carbon-free resources

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

Guiding principles for solutions development

- An efficient CIR transfer process is an important part of the **solution to the reliability risks** raised in PJM's 4R report, by ensuring an option for timely, localized replacement of retiring resources
- Replacement resources are distinct from other interconnection customers because they are sited at the same POI of a resource that already has studied and approved CIRs, which they would receive via transfer. Streamlining the interconnection process for these replacement resources makes sense from an **operational efficiency and grid impact** perspective.
- In a well-designed process, there should be **no undue adverse system impacts** or network upgrades triggered by the replacement resource. This could be assessed via a screening tool or study at the outset, to vet requests and determine if they can move forward.
- The process by which CIRs are transferred should be **public, transparent, and fair**. While the decision to retire and transfer CIRs is the incumbent generation owner's alone, once initiated, the process for determining the replacement resource should be consistent with principles of open access.

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
- **Screening test** to determine viability
- 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
- Learn from experience of other RTOs

*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?
- How could this separate process be implemented in such a way as to best respect the premium on PJM staff time? What can be drawn from the way other RTOs and utilities are handling these requests?