CIR Transfer Efficiency IMM Package

Planning Committee October 8, 2024 **IMM**



IMM Package

- IMM package has two tracks:
 - Track one is consistent with current planning approach to new resources
 - "Replacement resource" means a new resource that uses some or all of the released CIRs.
 - Track two is expedited process (fast track) to address PJM identified reliability issues, including those requiring RMRs

- Release CIRs on the retirement date.
- The CIRs cannot be transferred bilaterally.
- Released CIRs made available to the next resource(s) in the queue.

IMM Package: Track Two/Expedited

- In the event the retiring unit causes a reliability issue (RMR or other as determined by PJM) an expedited (fast track) process will be used:
 - Assigns released CIRs to the next resource(s) in the queue with a defined in service date that can use the released CIRs to solve (in whole or in part) the identified reliability issue.
 - If no resource(s) are in the queue, PJM will open a limited scope expedited reliability process to select projects that address the reliability issues.
- There could be multiple expedited projects.

Expedited Project Selection Criteria

- Project selection metric includes multiple dimensions:
 - Reliability contribution (output characteristics)
 - Capacity contribution (ELCC derated UCAP)
 - Willingness to commit to a capacity market must offer obligation
 - Reliability/capacity contribution as a share of the defined problem
 - How much of the required transmission would the generation displace

Expedited Project Selection Criteria

- Expected in service date
 - Risk metrics based on PJM's experience with project delays
 - Risk metrics including site control, all permits, financing, equipment, ...
 - Risk metrics based on developer's track record, credit, ability to complete on time
 - Risk metrics based on transmission interconnection requirements and ability of TO to complete on time

Issues with Coalition Proposal

- Creates market power for existing/retiring generator
- Retention of CIRs creates delays of up to a year
- Option to request further delays
 - No risk criteria
- Existing generator chooses new resource based on highest offer for CIRs rather than system needs
 - No PJM planning or reliability criteria applied
- No requirement to be a capacity resource
- No requirement to match system energy output needs
- No requirement to displace required transmission

Appendix

Matrix items



- Criteria for applying this process
 - All resources provided that the resource has CIRs (i.e. Generation Capacity Resources) and the resource has submitted an official deactivation notice to PJM.
 - The result is not a bilateral transfer but a return of the CIRs to the grid to increase headroom for the next resource(s) in the queue.
- New/Modified Definitions (i.e. Material Modification)
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- Criteria for applying this process
 - All resources provided that the resource has CIRs (i.e. Generation Capacity Resources) and the resource has submitted an official deactivation notice to PJM which results in a reliability issue (RMR or other as determined by PJM).
 - CIRs are not transferred. Eligible resources are selected from the queue. If no eligible resources are in the queue, PJM will conduct an limited scope reliability process to select resources that can resolve the reliability issue in whole or in part, in a timely manner.

- New/Modified Definitions (i.e. Material Modification)
 - No material modifications that would delay commercial operation date.

- Public Posting of New Generation Requests
 - CIR availability posted publicly at the time of the deactivation notice and effective on the deactivation date.
- POI Requirements of New Resource
 - **POI** requirements per Issue Charge
 - Better option: Use of CIRs by new resources defined by standard PJM planning criteria. POI requirements for new resources should be per existing tariff.

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- Public Posting of New Generation Requests
 - Post all expedited projects on a new PJM expedited generation webpage. Include details of the new Expedited Resource similar to the details posted for new Generation Interconnection projects in the Cycle Process (Project Name/POI, State, TO, MFO, MWE, MWC, Fuel, Application Submittal Date, Requested Commercial Operation Date, Status, etc).
- POI Requirements of New Resource
 - PJM has the flexibility to choose the best project to resolve the reliability issue.

- MW Requirements of New Resource
 - The new holder of the CIRs will receive CIRs based on the MFO/ICAP value of the new resource.
 - The new gen request has no upper limit on requested CIRs. CIRs awarded based on available headroom and completion of required transmission enhancements required as per normal planning process.
- Initiation of CIR Transfer Process
 - The next resource or resources in the queue that can use CIRs from the deactivating unit will have first call on the released CIRs

- MW Requirements of New Resource
 - The new holder of the CIRs will receive CIRs based on the MFO/ICAP value of the new resource.
 - The expedited new gen request has no upper limit on the CIRs they are requesting. CIRs awarded based on available headroom and completion of required transmission enhancements required as per normal planning process. Expedited generation MW size should be selected to ensure fastest commercial operation while resolving in whole or in part reliability issue (i.e. limit need for new transmission builds). The new resource must agree to offer capacity in capacity

- Initiation of CIR Transfer Process
 - A deactivation notice submitted to PJM by the Generation Owner. If the deactivation study shows that the retiring unit will cause a reliaiblity issue (RMR or other as determined by PJM), PJM will initiate the expedited process to look for the next project in the queue that can resolve the issue in whole or in part. If no project is available, PJM will conduct a limited scope reliability process to select resources that can resolve the reliability issue, in whole or in part, in a timely manner.

- Commercial Operation date of new generation
 - Commercial Operation date as defined through the normal planning process.
- Priority among New Resource requests
 - Priority will depend on whether the new resource solves reliability issues that would otherwise require an RMR in a timely manner.

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- Commercial Operation date of new generation
 - Selected expedited generation project must have a defined commercial operation date consistent with solving the reliability needs in a timely manner. There will be no exceptions to the commercial operation date.
- Priority among New Resource requests
 - Priority to new resources that solve reliability issues, in whole or in part, and have defined timely commercial operation date and agree to a capacity must offer obligation.

- Screening criteria, Study Phases, and scope of each Study Phase (More Detailed Description added in tab 2a of Matrix for additional clarity considerations) The screening criteria includes an assessment of whether the new resource would trigger network upgrades.
 - Allocation of CIRs are evaluated through the normal planning process.

- Screening criteria, Study Phases, and scope of each Study Phase (More Detailed Description added in tab 2a of Matrix for additional clarity considerations) The screening criteria includes an assessment of whether the new resource would trigger network upgrades.
 - PJM will conduct an expedited study process outside of the normal cluster process.

- New Resource Facilities Study
 - Facilities Studies are performed during the Cycle Process.
 - In Phase 2, the Facilities Study for Interconnection Facilities is done (if required).
 - In Phase 3, the Facilities Study for Network Upgrades is done (if required).

- New Resource Facilities Study
 - Facilities Study (if any of these needed) (if new interconnection facilities, metering/relaying, new network upgrades)
 - Develop cost and time estimates for such required work.
 - Expedited Process rules will dictate allowed scope.

- Criteria for New Generator Requests that are found to have adverse impacts to transmission system
 - The new generation resource is part of a Cycle within the PJM New Services Request Process and cost responsibility may be shared with other New Service Requests in the same Cycle, if impacts are found.

- Criteria for New Generator Requests that are found to have adverse impacts to transmission system
 - Expedited generation projects selected based on their ability to come online without material adverse impacts to the system. If no projects are in the queue that meet this criteria, PJM will conduct a limited scope reliability process to select resources that can resolve the reliability issue, in whole or in part, in a timely manner.

- Application and Deposit Requirements for New Resource
 - Deposit Requirement same as a generation interconnection request entering the Cycle Process (deposit increases with increased MFO request) (see M14H section 2.5.1).
- Decision Points during Study Process
 - There are decision points 1, 2, and 3 after Phases 1,2,3 of the Cycle Process.

- Application and Deposit Requirements for New Resource
 - Deposit Requirement same as a generation interconnection request entering the Cycle Process (deposit increases with increased MFO request) (see M14H section 2.5.1).
- Decision Points during Study Process
 - 1, 30 day Decision Point after Developer receives Impact Study and Facilities Study (if required). The Decision Point will run concurrently with a 60 day Final Agreement Negotiation Phase. 100% Security due at end of 30 day Decision Point.

- GIA Requirements
 - GIA issued for new resource as part of the New Services Request Process, per the OATT sections covering the New Services Request Process.
- Site Control Requirements
 - New resource site control requirements per OATT Part VIII, Subpart A, section 402, under the Cycle Process.
- Application Submission Windows/Periods
 - Cycle Process each Cycle has an Application Phase to accept Applications. See PJM Manual 14H, Section 2 "Application Phase".

- GIA Requirements
 - GIA Requirements similar to GIAs issued for Interconnection requests claiming CIRs in the Gen Interconnection Cycle Process.
- Site Control Requirements
 - Expedited generation projects must have site control consistent with commercial in service date.

- Application Submission Windows/Periods
 - PJM will evaluate new resources in the queue. If not adequate, PJM will conduct a limited scope reliability process with appropriate deadlines to select resources that can resolve the reliability issue in whole or in part, in a timely manner.

- Priority between New Resource requests and Interconnection Requests/Cycles in the Cycle Process; Model Assumptions
 - New Resource requests are processed in the Cycle Process with other Interconnection requests.
- Scope of Reliability studies to be performed
 - New Resource requests are studied in the Cycle Process (OATT Part VIII). Main reliability studies include power flow at various load levels, short circuit, stability, Affected System studies, TO analysis per TO Local Planning criteria.

- Priority between New Resource requests and Interconnection Requests/Cycles in the Cycle Process; Model Assumptions
 - Expedited process gives priority to resources that can resolve, in whole or in part, identified reliability issues in a timely manner.
- Scope of Reliability studies to be performed
 - Same scope of reliability studies as generation interconnection requests in the Cycle Process. Performed on an expedited basis.

- Cost responsibility/allocation rules for any identified required network upgrades for New Resource
 - New Resource requests are studied in the Cycle Process (OATT Part VIII) and network upgrades are cost allocated among all projects in a given Cycle if they meet PJM cost allocation thresholds as outlined in M14H, Att. B.
- Processing of existing New Generation requests at same POI (i.e. Transition Plan)
 - New Resource requests are studied in the Cycle Process (OATT Part VIII).

- Cost responsibility/allocation rules for any identified required network upgrades for New Resource
 - Interconnection Facility related upgrade costs are 100% allocated to the expedited generation projects.
- Processing of existing New Generation requests at same POI (i.e. Transition Plan)
 - Expedited generation projects should be selected based on their ability to come online without material adverse impacts to the system. If no projects are in the queue that meet this criteria, PJM will conduct a limited scope reliability process with appropriate deadlines to select resources that can resolve the reliability issue, in whole or in part, in a timely manner.

- Type of interconnection service for the New Generating Facility (Energy only Resource and CIRs)
 - Only new resources requesting CIRs with their New Service Request application are eligible to claim the CIRs that were returned to the pool from a Deactivation resource. Energy-only resources cannot request or claim CIRs.

- Type of interconnection service for the New Generating Facility (Energy only Resource and CIRs)
 - Only new resources requesting CIRs with their New Service Request application are eligible to claim the CIRs that were returned to the pool from a Deactivation resource. Energy-only resources cannot request or claim CIRs.

- Customer Modification of New Generation Request
 - New Gen requests involving CIR Transfers are studied in the PJM Cycle Process and subjected to the requirements in OATT Part VIII. Certain project changes are and are not allowed at different decision points in the Cycle Process at DP1, DP2, DP3.
- Clear definition of "material adverse impact(s)."
 - No present PJM Tariff definition for "material adverse impacts" exists. Note: "Material Modification" is a PJM Tariff defined term and is included as Design Component #4.

- Customer Modification of New Generation Request
 - No material modifications that would delay commercial operation date.
- Clear definition of "material adverse impact(s)."
 - "Material adverse impact": If the expedited resource degrades any thermal, short circuit, stability capability available on the system, as compared to the Deactivation Resource.

CIR ownership

 The CIRs are not transferred bilaterally. The CIRs are made available to the next resource(s) in the queue.

Contingent Facilities

 Contingent Facilities (unbuilt Interconnection Facilities and/or Network Upgrades) which the New Service Request is dependent upon are identified in the Cycle Process Phase I, II, and III System Impact Studies and are documented in the GIA. Examples of these can include planned baseline upgrades or required Network Upgrades being funded by previously queued interconnection projects.

- CIR ownership
 - The CIRs are not transferred bilaterally. The CIRs are made available to the pool and, as a result, to the selected expedited resource in whole or in part.
- Contingent Facilities
 - Contingent Facilities, if any, would be identified during the New Resource Impact Study and captured in the GIA.

- Interim Studies
 - Required for Cycle Process Interconnection requests if 1)
 coming into service prior to their case study year or 2)
 coming into service prior to the completion of any
 required network upgrade or contingent facility that the
 interconnection request requires or is dependent upon to
 support their interconnection request.
- Retention of CIRs in case of New Resource Process Delays or New Resource Study Failure
 - CIRs should be returned to pool on the retirement date.
 - CIRs should never be retained beyond one year.

- Interim Studies
 - Interim study requirements similar to those for Interconnection requests claiming CIRs in the Gen Interconnection Cycle Process.
- Retention of CIRs in case of Expedited Resource Process Delays or New Resource Study Failure
 - CIRs are not retained, they are returned to pool on the retirement date.
 - CIRs should never be retained beyond one year.

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