

**Purpose:** The purpose of this Transition Component Considerations document is to provide a high-level summary of the transitional considerations for the current ELCC/CIR Packages in a single consolidated table. In addition to summarizing the key transition details of each Package, the table uses a hypothetical wind farm in the Mid-Atlantic Region to demonstrate how each Package will impact the level of Capacity Interconnection Rights for units with signed ISAs (ISA CIR) and Interconnection Queue Units without signed ISAs (Non-ISA CIR) as well as the impact of the level of CIRs on Accreditation. The document also provides stakeholders with an estimated transition cost to load (transmission build or capacity costs) and other considerations. The following explanations are provided to assist in understanding the summary table:

- The **Details Column** provides a high-level summary of the transitional considerations associated with each of the Packages, including how unit CIRs will be handled and an estimated total cost to load (transmission or capacity costs).
- The **CIR + Accreditation Wind Example Column** provides an example using a hypothetical wind farm in the Mid-Atlantic Region to illustrate the impact the Packages will have on the level of Capacity Interconnection Rights for units with signed Interconnection Service Agreements (ISA CIR) and Interconnection Queue Units without signed ISAs (Non-ISA CIR). Additionally, the subsequent impact on Accredited UCAP for units with signed ISAs (ISA AUCAP) and Interconnection Queue units without signed ISAs (Non-ISA AUCAP) is shown.
- The **Transitional Cost to Load Column** summarizes estimated transmission costs or capacity costs associated with each Package during the transitional period.
- The **Considerations Column** summarizes additional information or challenges, beyond CIR, Accreditation and Transition Costs, stakeholders may want to take into consideration as part of their decision-making process in order to select a Package to vote upon.

**Background Education:** While the purpose of this document is to focus on considerations regarding transition options, the following training materials are provided in order to gain a more holistic understanding of the interaction between ELCC, Deliverability, Capacity Interconnection Rights, and Accreditation.

- **ELCC Education:** [How Effective Load Carrying Capability \("ELCC"\) Accreditation Works \(pjm.com\)](#)
- **ELCC Background:** [20220215-item-02c-aucap-for-elcc-resources-before-and-after-elcc.ashx \(pjm.com\)](#)
- **Purpose and Role of CIRs:** [20220215-item-02b-cir-principles.ashx \(pjm.com\)](#)
- **ELCC Deliverability Background:** [20220304-cir-for-elcc-resources-discussion.ashx \(pjm.com\)](#)
- **CIRs/Deliverability and ELCC Studies:** [20220215-item-02d-interactions-of-cirs-deliverability-and-elcc-studies.ashx \(pjm.com\)](#)
- **Capping Impact:** [item-04a---cir-impact-on-wind--solar-class-ucap-values.ashx \(pjm.com\)](#)

	Details	CIR + Accreditation Wind Example*	Transitional Cost to Load	Considerations
<b>Package D</b>	<ul style="list-style-type: none"> <li>Wind and solar generators with an ISA are granted higher CIRs to maintain their UCAP without having to get back into the interconnection queue.</li> <li>Load pays for transmission baseline upgrades associated with Fast Track projects (\$0.7 B) and Transition Cycle 1 projects (\$1.3 B) totaling \$2.0 B.</li> <li>A 2023/2024 BRA sensitivity simulation showed incremental cost to load of replacing this UCAP would be on the order of \$139 M for one year (five-year total of \$695 M during transition period).</li> <li>Active wind and solar queue units (without ISA) must get back into the queue if they would like higher CIRs.</li> <li>Eligible wind and solar queue units are allowed to use excess transmission headroom for Base Residual Auction (BRA) during transition period.</li> </ul>	<p>ISA CIR = 39% MFO            Non-ISA CIR = 13% MFO</p> <p>ISA AUCAP = 13% MFO  <math>9\% \leq \text{Non-ISA AUCAP} \leq 13\% \text{ MFO}^*</math>            * Higher AUCAP values than 9% will be possible only during the transition period.</p>	\$2.0 B transmission costs	<ul style="list-style-type: none"> <li>Maintains AUCAP for ISA resources</li> <li>Potential complications with queue reform transition period if FERC delays or rejects Interconnection Queue Reform since solution is tied specifically to Fast Track (FT) and Transition Cycle 1 (TC1)</li> <li>Addresses capacity market impact (estimated five-year transition period) by conducting annual transmission headroom allocation study prior to each BRA, ensuring accreditation is not artificially lowered when transmission headroom is available</li> <li>Complex to implement (pseudo baseline upgrades)</li> </ul>
<b>Package H (NEW)</b>	<ul style="list-style-type: none"> <li><del>Same as Package D, but load pays only for transmission baseline upgrades associated with Fast Track projects totaling \$0.7 B.</del></li> </ul>	<p>ISA CIR = 39% MFO            Non-ISA CIR = 13% MFO</p> <p>ISA AUCAP = 13% MFO  <math>9\% \leq \text{Non-ISA AUCAP} \leq 13\% \text{ MFO}^*</math>            * Higher AUCAP values than 9% will be possible only during the transition period.</p>	\$0.7 B transmission costs	<ul style="list-style-type: none"> <li><del>Same considerations as in Package D</del></li> <li><del>Achieves better balance of cost allocation between generation and load compared to Package D since changes are implemented as part of Interconnection Queue Reform TC1 instead of TC2</del></li> <li><del>Risk that FERC may not accept PJM modifying TC1 assumptions impacting queue reform</del></li> <li><del>Risk that TC1 base case will be needed before RTEP can be completed under proposal</del></li> <li><del>Challenges for PJM to create case in advance of TC1 and implement Interconnection Queue Reform and ELCC/CIR simultaneously</del></li> </ul>

<p><b>Package F</b></p>	<ul style="list-style-type: none"> <li>Same as Package D except limited-duration resources in the queue that requested CIRs based on the 10-hour rule will have a one-time opportunity upon implementation of the new procedures to increase their CIR request amount at their existing queue position.</li> </ul>	<p>ISA-CIR = 39% MFO          Non-ISA-CIR = 13% MFO</p> <p>ISA-AUCAP = 13% MFO  <math>9\% \leq \text{Non-ISA-AUCAP} \leq 13\% \text{ MFO}^*</math>  <sup>*</sup>Higher AUCAP values than 9% will be possible only during the transition period.</p>	<p>\$2.0 B transmission costs</p>	<ul style="list-style-type: none"> <li>Same considerations as in Package D</li> <li>Provides batteries one-time opportunity to increase CIRs at their current queue position</li> </ul>
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Package	Details	CIR + Accreditation Wind Example*	Transitional Cost to Load	Considerations
<b>Package E4</b>	<ul style="list-style-type: none"> <li>Requires all generators, including those with an ISA, to get back into the queue if they would like higher CIRs.</li> <li>Load does not have to pay for transmission baseline upgrades associated with higher CIRs.</li> <li>No transmission headroom capability study prior to BRAs during the transition period.</li> <li>A 2023/2024 BRA sensitivity simulation showed incremental cost to load of replacing this UCAP would be on the order of \$139 M for one year (five-year total of \$695 M during transition period).</li> </ul>	ISA CIR = 13% MFO Non-ISA CIR = 13% MFO  ISA AUCAP = 9% MFO Non-ISA AUCAP = 9% MFO	\$0.695 B capacity costs	<ul style="list-style-type: none"> <li>Appears consistent with cost causation principles</li> <li>Would not introduce delays in queue transition and is straightforward to implement</li> <li>Potentially viewed as not accounting for ISA holder claims to existing headroom</li> <li>Immediate reduction in AUCAP for wind and solar resources to only capacity supported by CIR level and eligible to participate in RPM (for an approximate five-year period).</li> </ul>
<b>Package I (NEW)</b>	<ul style="list-style-type: none"> <li>Similar to Package E4 except for the following:               <ul style="list-style-type: none"> <li>Annual transmission capability study prior to each BRA for eligible wind and solar during transition period</li> </ul> </li> </ul>	ISA CIR = 13% MFO Non-ISA CIR = 13% MFO  $9\% \leq \text{ISA UCAP} \leq 13\% \text{ MFO}^+$ $9\% \leq \text{Non-ISA AUCAP} \leq 13\% \text{ MFO}^+$ <sup>+</sup> Higher AUCAP values than 9% will be possible only during the transition period.	< \$0.695 B <sup>§</sup> capacity costs  <sup>§</sup> Actual capacity cost between 0\$ and \$0.695B over the 5 year transition period	<ul style="list-style-type: none"> <li>Similar considerations as in Package E</li> <li>Addresses capacity market impact (estimated five-year transition period) by conducting annual transmission headroom allocation study prior to each BRA, ensuring accreditation is not artificially lowered when transmission headroom is available</li> </ul>
<b>Package K</b>	<ul style="list-style-type: none"> <li><u>Same as Package I except PJM Board will submit separate Section 205 filing with FERC to remove Energy Resource energy (energy above the CIRs) from the accreditation process. This separate filing will revise/clarify RAA Section 9.1 establishing CIRs as an hourly upper limit for the UCAP accreditation (AUCAP) commencing with the June 2023 BRA for 25/26 Delivery Year, i.e., hourly energy output above CIRs will not be used in calculating the accredited UCAP for Variable Resources, the ELCC portfolio, or the ELCC Class Values.</u></li> </ul>	ISA CIR = 13% MFO Non-ISA CIR = 13% MFO  $9\% \leq \text{ISA UCAP} \leq 13\% \text{ MFO}^+$ $9\% \leq \text{Non-ISA AUCAP} \leq 13\% \text{ MFO}^+$ <sup>+</sup> Higher AUCAP values than 9% will be possible only during the transition period.	< \$0.695 B <sup>§</sup> capacity costs  <sup>§</sup> Actual capacity cost between 0\$ and \$0.695B over the 5 year transition period	<ul style="list-style-type: none"> <li><b>Similar considerations as in Package I</b></li> </ul>

<p><b>Package G</b></p>	<ul style="list-style-type: none"> <li>Requires all generators, including those with an ISA, to get back into the queue if they would like higher CIRs.</li> <li>Load does not have to pay for transmission baseline upgrades associated with higher CIRs.</li> <li>No transmission headroom capability study prior to BRAs during the transition period.</li> <li>Allows Fast Track wind and solar resources to request additional CIRs, but be bumped into Transition Cycle 1.</li> <li>Allows Transition Cycle 1 and Transition Cycle 2 resources to request additional CIRs.</li> <li>Allows CIR Transfers from retired resources to new resources at the same POI and immediately go into the next available cycle without waiting as the CIRs will be modeled anyway.</li> </ul>	<p>ISA CIR = 13% MFO          Non-ISA CIR = 13% MFO</p> <p>ISA AUCAP = 9% MFO          Non-ISA AUCAP = 9% MFO</p>	<p>\$0.695 B capacity costs</p>	<ul style="list-style-type: none"> <li>Provides Fast Track wind and solar resources opportunity to increase CIRs at the start of Transition Cycle 1</li> <li>Tariff mechanisms would need to be developed in order to accommodate requests for additional CIRs within Transition Cycles 1 and 2. Currently no such process exists in Parts 7 &amp; 8 of the tariff. What deposits, timing, and application requirements (site control) would need to be developed?</li> <li>Additional CIRs introduce risks to the Transition Cycle 1 &amp; Transition Cycle 2 customers who are under the impression that the cycles are “fixed” with the current pool of applicants.</li> <li>No delays in queue as Fast Track and Transition Cycle 1 would be studied <i>de novo</i>.</li> <li>Immediate reduction in AUCAP for wind and solar resources to only capacity supported by CIRs and are eligible to participate in RPM (for an approximate five-year period).</li> <li>In the case of new requests transferring CIRs from deactivating units, there is additional risk to Transition Cycle 1 &amp; Transition Cycle 2 in the form of energy injection, seasonality concerns, unstudied dynamic responses for new units.</li> </ul> <p>See footnote 92 on page 33 of PJM’s response filing on 8/2/2022 in docket ER22-2110 copied below:</p> <p>92 Also contrary to J-Power’s contentions, New Service Requests for replacement resources using existing Capacity Interconnection Rights must be studied on the same basis as other New Service Requests within a Cycle (or an existing queue window); they require more than “minimal” study. See J-Power Comments at 1. The need for the same type and scope of</p>
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			<p>studies as any other New Service Request applies particularly because replacement resources often seek to use a different fuel source than the resources they are replacing.</p> <ul style="list-style-type: none"> <li>• See original PJM Package A for other considerations.</li> </ul>
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1. \*\*ISA CIR\*\* pertains to a resource that has an ISA as of the effective date of the proposal and "Non-ISA CIR" pertains to a resource that does not have an ISA as of the effective date of the proposal.
2. "MFO" = Maximum Facility Output
3. "AUCAP" = Accredited UCAP

