

The Purpose and Role of CIRs

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- CIRs represent a right to input generation as a Capacity Resource – as defined in the Reliability Assurance Agreement (RAA) – into the transmission system at the point of interconnection where the facility connects to the PJM transmission system. [OATT Part VI, §230]
- CIRs are required to participate in RPM as a generating resource.

- Introduced around 2000 with the implementation of PJM's LMP energy market and generation interconnection queues.
- Deliverability of individual MAAC units was tested and CIRs assigned.
- As more TO zones were integrated into PJM, the deliverability of existing generators was tested and CIRs assigned. Any “undeliverable” units were required to perform system upgrades to maintain Capacity Resource status.

- Determine the cap on the Accredited UCAP value of a Capacity Resource
- Provide Universal Deliverability
 - Generation Deliverability
 - Ensure there is no “bottled generation”
 - Load Deliverability
 - Ensure there are no isolated “load pockets”
 - CETO/CETL Studies

Accurately
reflects current
summer unit
capability

Ensures
Reliability

Allows RPM
Participation

Transferability

- CIRs are not equal to Accredited UCAP
- Holding CIRs does not result in an obligation to offer or clear in RPM (Attachment DD Section 6.6)
- CIRs are not a guarantee that the unit will be able to run in the energy market
 - CIRs are a right but not a guarantee; no dispatch priority

| | Thermal | Wind/Solar | Limited Duration | Hydro w/ Storage | Other Intermittent | DR |
|---|-----------------|---|--|------------------|--------------------|---------------------------|
| ICAP (cannot exceed CIRs) | Summer rating | <N/A> (in Capacity Exchange, ICAP is set to UCAP) | Lesser of summer rating or 10-hour rule derating | Summer rating | Summer rating | Nominated value |
| UCAP | ICAP* (1-EFORd) | 368-hour rule (average of last 3 years, cannot exceed CIRs) | ICAP*(1-EFORd) | ICAP* (1-EFORd) | ICAP* (1-EFORd) | [Nominated value]*(1+FPR) |
| CIR eligibility of Planned resources should not exceed→ | ICAP | Class average or unit-specific 368-hour rule | ICAP | ICAP | ICAP | <N/A> |
| CIR retention for existing resources is highest of last 3 years metric→ | Summer test | 368-hour rule | Summer test | Summer test | Summer test | <N/A> |
| Other term | <N/A> | Capacity value = 368-hour rule = UCAP | <N/A> | <N/A> | <N/A> | Nominated value |
| DA Must Offer | ICAP | Varies | Varies | Varies | Varies | <N/A> |
| CP penalty/bonus | UCAP | UCAP | UCAP | UCAP | UCAP | UCAP |
| RPM MW value for sales, delivery, FRR, replacement transactions, etc. | UCAP | UCAP | UCAP | UCAP | UCAP | UCAP |

- CIRs are not factored into the Accredited UCAP calculation
- Basing transmission needs on average resource outputs (as is the case with wind and solar today) may prevent the resources from achieving their full utilization.
- CIRs are administratively set for intermittent units and perhaps consideration should be given to allowing developers to select any value of CIRs up to the maximum expected summer net output of the unit.

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