

Considerations for Principles That Define the Purpose and Role of CIRs

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Resource Adequacy Planning
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Key work activity #3 in the Issue Charge requires a discussion to:
“Develop and achieve consensus on fundamental, equitable and consistent principles that define the purpose and role of CIRs.”

This presentation is intended to start that conversation, offering PJM’s perspectives on the purpose and role of CIRs

All stakeholders are encouraged to share support for these perspectives and/or offer different opinions on the role and purpose of CIRs

- 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 advent 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
- CIR is not a term that can be applied to the generator itself like UCAP or ICAP (it just represents the right to inject)
- 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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