

# Capacity Resource versus Energy Resource

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Task Force  
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- When a new generator connects to PJM's system through the PJM Interconnection Process, it chooses request to be a Capacity Resource or an Energy Resource
  - If it chooses to be a Capacity Resource, it will be studied as such and will be granted Capacity Interconnection Rights ("CIRs")
- A DR or EE resource is considered a Capacity Resource if it has been accredited as such under RAA Schedule 6.

- All available megawatts of an Existing Generation Capacity Resource must be offered in each RPM Auction for a Delivery Year (“DY”)
- Simplified example: 100 MW Existing Generation Capacity Resource -
  - Capacity Market Seller (CMS) of that resource must offer 100 MW in BRA; clears 50 (thus 50 MWs still available)
  - Must offer 50 MWs in 1<sup>st</sup> Incremental Auction (“IA”); clears 25 (thus 25 MWs still available)
  - Must offer 25 MWs in 2<sup>nd</sup> IA; clears 0 (thus 25 MWs still available)
  - Must offer 25 MWs in 3<sup>rd</sup> IA; clears 0 (it is still a Capacity Resource, and must do this all again in the next DYs set of RPM Auctions)

- Currently, two must offer exception sections – one that is general and one that is specific to Capacity Performance
- General must offer exceptions in Tariff, Att. DD, sec. 6.6(g):
  - is reasonably expected to be physically unable to participate in the relevant Delivery Year;
  - has a financially and physically firm commitment to an external sale of its capacity, or
  - was interconnected an Energy Resource and not subsequently converted to a Capacity Resource.

- What does “physically unable to participate” mean?
  - Documented plan to retire during or prior to the DY and has submitted its Deactivation notice to PJM
  - Significant physical operational restrictions cause long term or permanent changes to the installed capacity value of the resource, or the resource is under major repair that will extend into the applicable DY
  - Involved in an ongoing regulatory proceeding specific to the resource (e.g., environmental) and has received an order...or other final directive that will result in the retirement of the resource
  - It is only considered “Existing” because it cleared an RPM Auction, but will not be in service by the start of the applicable DY

- Under Tariff, Attachment DD, section 6.6A
  - Physically incapable of being a CP resource
    - The review process is the same as under 6.6(g)
  - Intermittents and storage are categorically exempt

- The must offer exception process is generally an auction-by-auction process
  - Some requestors ask for several auctions or Delivery Years in a row knowing their circumstances will support the exception for that time-period – PJM evaluates that on a case-by-case basis
- But there's no process to give up CIRs and become an Energy Resource



## **Tariff, sec. 36.1.1 Interconnection Services for Generation:**

Generation Interconnection Customers **may request** either of two forms of Interconnection Service, i.e., **interconnection as a Capacity Resource or as an Energy Resource**. Energy Resource status allows the generator to participate in the PJM Interchange Energy Market pursuant to the PJM Operating Agreement. Capacity Resource status allows the generator to participate in the PJM Interchange Energy Market to be utilized by load-serving entities in the PJM Region to meet capacity obligations imposed under the Reliability Assurance Agreement and/or to be designated as a Network Resource under Part III. Capacity Resources also may participate in Reliability Pricing Model Auctions and in Ancillary Services markets pursuant to the PJM Tariff or the Operating Agreement. Capacity Resource status is based on providing sufficient transmission capability to ensure deliverability of generator output to the aggregate PJM Network Load and to satisfy the contingency criteria in the Applicable Standards. Specific tests performed during the Generation Interconnection Feasibility Study and later System Impact Study will identify those upgrades required to satisfy the contingency criteria applicable at the generator's location.

**RAA, sec. 1.8 Capacity Resources** Capacity Resources shall mean megawatts of (i) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources meeting the requirements of Schedules 9 and 10 that are or will be owned by or contracted to a Party and that are or will be committed to satisfy that Party's obligations under this agreement, or to satisfy the reliability requirements of the PJM Region, for a Delivery Year; (ii) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources not owned or contracted for by a Party which are accredited to the PJM Region pursuant to the procedures set forth in Schedules 9 and 10; and (iii) load reduction capability provided by Demand Resources or Energy Efficiency Resources that are accredited to the PJM Region pursuant to the procedures set forth in Schedule 6.

## **Tariff, sec. 1.11A Energy Resource:**

A generating facility that is not a Capacity Resource.



**Tariff, sec. 1.3C Capacity Interconnection Rights:**

The rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection where the generating facilities connect to the Transmission System.