

Maximum Emergency Categories for Qualification

Melissa Pilong, Lead Analyst

Operating Committee April 14, 2022



Maximum Emergency Criteria

Operating Agreement, Schedule 1.10.1A(d)

Offers may only be designated as Maximum Emergency offers to the extent that the Generation Capacity Resource falls into at least one of the following categories:

- i) Environmental limits. If the resource has a limit on its run hours imposed by a federal, state, or other governmental agency that will significantly limit its availability, on either a temporary or long-term basis. This includes a resource that is limited to operating only during declared PJM capacity emergencies by a governmental authority.
- ii) Fuel limits. If physical events beyond the control of the resource owner result in the temporary interruption of fuel supply and there is limited on-site fuel storage. A fuel supplier's exercise of a contractual right to interrupt supply or delivery under an interruptible service agreement shall not qualify as an event beyond the control of the resource owner.
- iii) **Temporary emergency conditions at the unit.** If temporary emergency physical conditions at the resource significantly limit its availability.
- iv) **Temporary megawatt additions.** If a resource can provide additional megawatts on a temporary basis by oil topping, boiler over-pressure, or similar techniques, and such megawatts are not ordinarily otherwise available.



Resource Limitations (M15, Section 6.4):

- Resource limitations are defined in Manual 13 as limitations to primary or alternate on-site fuel, emissions, demineralized or cooling water, and other consumables
- A unit is considered resource limited when it is not capable of running at its maximum capacity for the next 72 hours due to the limitations defined above
- Natural gas-fired units that experience fuel supply/transportation restrictions are not considered resource limited units due to the daily nature of their restrictions



Environmental and Fuel Limits

Manual 13, Section 6.4

	Resource Limitations	
Resource Limited Unit (Type)	On-Site Fuel Only Emissions Cooling Water Demin. Water Oth	er PJM Categorization
	< 72 hours	Considered Resource Limited
	< 24 hours	*PJM may request Maximum Emergency Designation
Combustion Turbine (CT)	< 16 hours	Qualify as Maximum Emergency
	< 240 hours	** PJM may request Maximum Emergency Designation
	< 72 hours	Considered Resource Limited
Steam (includes Combined Cycle)	< 32 hours	Qualify as Maximum Emergency

The below temporary language will be in effected until the Max Emergency Changes for Resource Limitation Reporting work is completed.

*PJM may request the resource owner to move emissions limited CT units into the Maximum Emergency category if the resource's remaining run hours on all fuel types fall or are expected to fall below 24 hours. Unless needed for reliability, the units would remain in Maximum Emergency status until the run hours increased above 24hrs. **PJM may request the resource owner to move fuel or emissions limited steam units into the Maximum Emergency category if the resource's remaining run hours fall below 240 hours (10 days). Unless needed for reliability, the units would remain in Maximum Emergency status until their inventory rose above 21 days (504 hours).



- Currently not addressed in Manual 13
- If temporary emergency is a result of physical conditions at the resource that significantly limit its availability
- An example would be if the Original Equipment Manufacturer (OEM) of a unit's combustion turbines has issued a safety notice that specifies operating limitations for the units until a required upgrade can be implemented at the next outage



Temporary MW Additions

- Currently not addressed in Manual 13
- In order to meet the criteria for temporary MW additions, a generation resource must be able to demonstrate that MW have a time limitation or restriction.
- Acceptable documentation for justifying the use of temporary MW additions include, but are not limited to:
 - OEM documentation showing a time limitation on the MW
 - Air permit showing time restriction



Temporary MW Additions

- Scenarios that do not meet criteria for temporary MW additions:
 - Increased wear and tear or maintenance costs
 - Power augmentation such as duct firing, steam/water injection, evaporative cooling, inlet chilling, wet compression, or peak firing unless OEM specified limitations
 - Inability to provide temporary MWs on demand

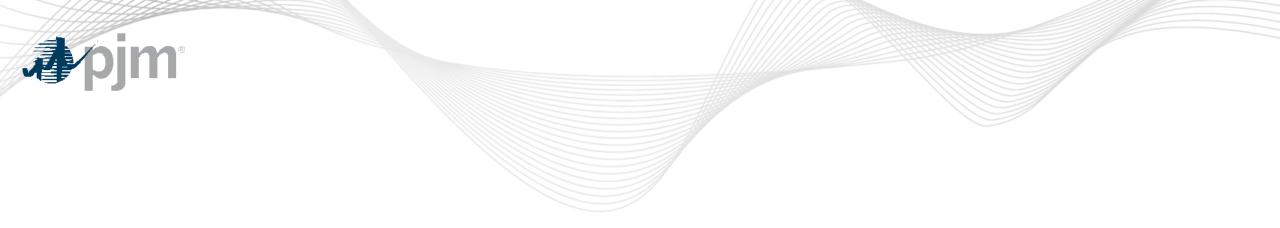




Presenter: Melissa Pilong, <u>Melissa.Pilong@pjm.com</u>

SME:

Mike Handlin, <u>Michael.Handlin@pjm.com</u> **Maximum Emergency Criteria** Member Hotline (610) 666 – 8980 (866) 400 – 8980 custsvc@pjm.com



Appendix



Resources

- Agreement, Schedule 1 Section 1.10.1A(d)
- Manual 13, Section 6.4

