

Reserve Certainty Project Spin Activation Basepoint Changes

Erkan Tuna and Jeff Hoffman, EMS Support

Reserve Certainty Sr. Task Force

May 15, 2024



Current Spin Activation

When Dispatch declares a spin event today:

- Dispatch issues an All Call
- Two status points are sent to members over ICCP and DNP protocols:
 - Subzone (MAD) spin
 - RTO spin
- Members are instructed to ramp up their units as much as possible
- PJM has non-performance concerns on units response during spin events that it requires for system recovery.



New Spin Activation Control

- Dispatchers will now have the option to activate spin events by entering a flat MW amount or a percentage (%) of the total available spin awards.
 - If the dispatcher enters a MW number, the Deployment % becomes:

Deployment % = Flat MW amount / Total

Using the Deployment % (either calculated as above or as entered by dispatcher):

Current Unit Output + (Deployment % * Unit Assignment) = Spin Basepoint



New Spin Activation Spin

- When the spin event is activated AGC will take a snapshot of all the current generators' output and Markets spin awards. The spin amount (adjusted for any partial deployment) and the current gen output amount will be added to obtain a new spin basepoint sent as their economic basepoint (ECOBP signal via ICCP/DNP link).
- Dispatchers and Members will observe a stepped jump when the basepoint and the spin assignment is added.



- When a subzone (MAD) spin event is activated then just the units in that subzone will have their basepoints updated
- If a subzone spin event is triggered first and then a RTO event is activated: Only the non-subzone units will be updated
 - (RTO Subzone = Non-Subzone)
- When the spin event is over all basepoints will go back to SCED basepoint values





Facilitator: Lisa Morelli, Lisa.Morelli@pjm.com

Secretary: Amanda Egan, Amanda.Egan@pjm.com

SME/Presenter: Erkan Tuna, Erkan.Tuna@pjm.com Jeff Hoffman, Jeff.Hoffman@pjm.com

Spin Activation Basepoint Changes

Member Hotline (610) 666 – 8980 (866) 400 – 8980 custsvc@pjm.com



Acronyms

FJM GIOSSary

Acronym	Term & Definition
AGC	Automatic Generation Control is equipment that automatically adjusts generation.
DNP	Distributed Network Protocol is a type of communication method to send/receive signals between a remote generation site and a control center.
ICCP	Inter-Control Center Communication Protocol is a type of communication method between two control centers that allows them to share signals.
MAD	A spinning event subzone, also referred to as Mid-Atlantic & Dominion
MW	A Megawatt is a unit of power equaling one million watts (1 MW = 1,000,000 watts) or one thousand kilowatts (1 MW = 1,000 KW). To put it in perspective, under non-severe weather conditions, one MW could power roughly 800 to 1,000 average-sized American homes.
SCED	Security Constrained Economic Dispatch is the optimization engine used to calculate dispatch and reserve assignments and to set prices.
www.pjm.com Public 7 PJM © 2024	

