

Updated Winter Deliverability Approach Hybrid (Solar + BESS)

Lisa Krizenoskas, Manager,
Interconnection Planning Analysis

Interconnection Process
Subcommittee

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Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.

Applicability

- Applies to Solar + BESS hybrid facilities
- Mainly where BESS CIR < BESS MWE capability
- Effective for any cycle/parallel studies using the TC2 PH3 models and beyond as well as starting with the 2027 series RTEP studies and beyond



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What's Changing:

- **BESS Winter Ramping**
 - Battery will now ramp to full MWE output
 - Previously ramped only to BESS CIR (aka MWC)
- **Solar Winter Ramping**
 - Solar continues to ramp to its winter P80, typically ~5% of nameplate capacity (MWE)
- **Hybrid Plant Winter Cap**
 - Total winter ramping (Solar + BESS) will be capped at the hybrid plant CIR (aka MWC)
 - Previously capped at the MFO of the hybrid plant

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Updated Winter Ramping Process:

- Ramp Solar to winter P80 (~5%)
- Ramp BESS to full MWE capability
- Sum Solar + BESS ramping
- Apply ramping cap at hybrid CIR

Example:

Solar/BESS:

MFO: 100 MW, CIRs: 75 MWC

Solar portion:

100 MW (50 MW CIRs)

BESS portion:

100 MW Energy

25 MW CIRs

NextGen “battery max output” = 100 MW (i.e. max MWE output)

Winter GD = ramp: solar (5 MW) + BESS (100 MW) = 105 MW, but cap at 75 MW CIRs.

Applicability	Effective	What's Changing?
Solar + BESS hybrid facilities	- Any cycle/parallel studies using the TC2 PH3 models and beyond, and - Starting with the 2027 series RTEP studies and beyond	- Battery will now ramp to full MWE output - Total winter ramping (Solar + BESS) will be capped at the hybrid plant CIR (aka MWC)

Presenter:
Lisa Krizenoskas;
Lisa.Krizenoskas@pjm.com

Updated Winter Deliverability Approach



Member Hotline

(610) 666 – 8980

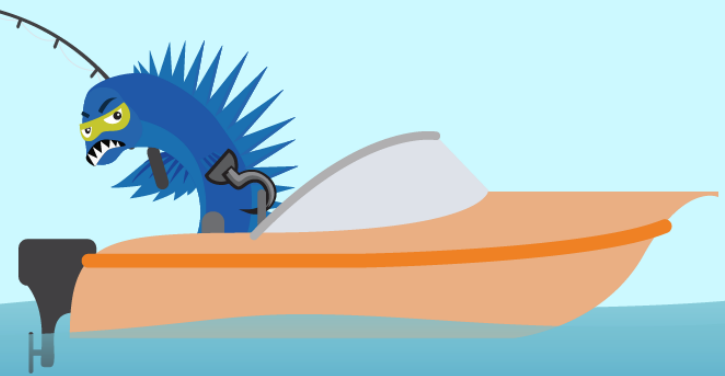
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custsvc@pjm.com

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