

ELCC Classes

Andrew Levitt
Applied Innovation
May 20, 2020
PJM CCSTF

www.pjm.com | Public PJM©2020



1. Class Distinctions/Definitions

Note: subclasses as listed here would be treated identical to classes

Class	Subclasses		
Onshore wind			
Offshore wind			
Solar	Tracking	Fixed	
Landfill gas			
Intermittent hydro			
Hydro with storage			
Energy Storage Resources	6 hours at max power	10 hours at max power	Derating allowed*
Gen+storage hybrids	Solar+battery	Other	
Generic limited duration resources	6 hours at max power	10 hours at max power	Derating allowed

^{*}Required by Order 841

www.pjm.com | Public 2 PJM©2020



Classes vs. Performance Estimates/Adjustment

 Note: fine distinctions among classes, by technology (e.g., bigger wind rotors) or geography (mountain vs plains) would be accounted for in performance adjustment.

www.pjm.com | Public 9JM©2020



- Tracking is a ground-mount solar technology with mechanical systems to orient the panels towards the sun throughout the day.
- Fixed is solar (ground mount or roof mount) without tracking.



Energy Storage Resources

- "ESR Duration" is defined as the ratio of nameplate energy to nameplate power. ESR duration corresponds to the maximum amount of time an ESR can run at max power when starting out fully charged.
- E.g., a 100 MW ESR with 300 MWh of energy storage inventory is a "3 hour ESR".
- ESR with less than 6-hours can de-rate to meet 6-hour ELCC value, and likewise for the 10-hour class.

www.pjm.com | Public 5



 Targeting June 4 CCSTF meeting for PJM release of potential approach for hybrid classes.