

Regulation Up & Down Effective Megawatt Requirement Definition

Note: The requirement megawatt values are subject to change after the annual review and adjustment process. However, the values for both Up and Down will be the same at the implementation go live.

Seasons	Dates	Hours Ending	Up Requirement MW	Down Requirement MW
Winter	Nov. 1–Feb. 28	HE 5–10, HE 17–24	750	750
		HE 1, HE 11	650	650
		HE 2–4, HE 12–16	550	550
Spring	March 1–April 30	HE 19–1, HE 6–9	750	750
		HE 2, HE 10	650	650
		HE 3–5, HE 11–18	550	550
Summer	May 1–Sept. 15	HE 5–24, HE 1	750	750
		HE 2	650	650
		HE 3–4	550	550
Fall	Sept. 16–Oct. 31	HE 6–9, HE 18–24	750	750
		HE 1, HE 10	650	650
		HE 2–5, HE 11-17	550	550
HE – Hour Ending				

Annual Review and Adjustment Process

Goal: Codify an annual review of system performance metrics and adjust requirement using seasonal hourly statistics from the past year.

The selected control metrics used to determine requirement adjustment are:

ACE Time Out of Bounds (TOB): Time Net ACE spends “out of bounds” Bounds set as 2*NERC L10 value for PJM (CPS2) (NERC BAL-001)	Regulation Utilization (RU): Quantifies how PJM typically relied on regulation during a period of time
BAAL Minutes (BAAL): Reflects PJM’s negative impact on system frequency Sum of BAAL minutes in the interval (NERC BAL-001)	Min/Max Deployment: Time that regulation is pegged in either direction Quantifies severity of operational need during a period of time

Annual Adjustment Metrics

	Δ Requirement			
	-25 MW	No Change	+25 MW	+50 MW
ACE TOB (>2*L10)	10%	> 10% and < 50%	50%	60%
BAAL	NA	< 50 Mins.	50 Mins.	75 Mins.
RU	20%	> 20% and < 80%	80%	90%
Min/Max Deploy.	NA	< 7.5%	7.5%	10%
Step-Down Constraint: Result cannot be < the prior hour by 150 MW or more.				

***Adjustment levels -25/+25/+50 are based on 10%/20% of NERC L₁₀ value (CPS2).*

The regulation requirement megawatts will be reviewed annually in October at the Operating Committee meeting. The adjusted values shall be effective from Nov. 1 of the current year through Oct. 31 of the following year.