



Load Modifying Resource (LMR) Penalty Assessment: December 23, 2022 Max Gen Event

RASC
July 2023

Purpose: Review LMR penalties during the December 23, 2022 emergency event.



Key Takeaways:

- LMRs were only called for the whole MISO footprint
- 91.2% of the Scheduling Instructions were met
- Final penalties were sent to settlements on June 30

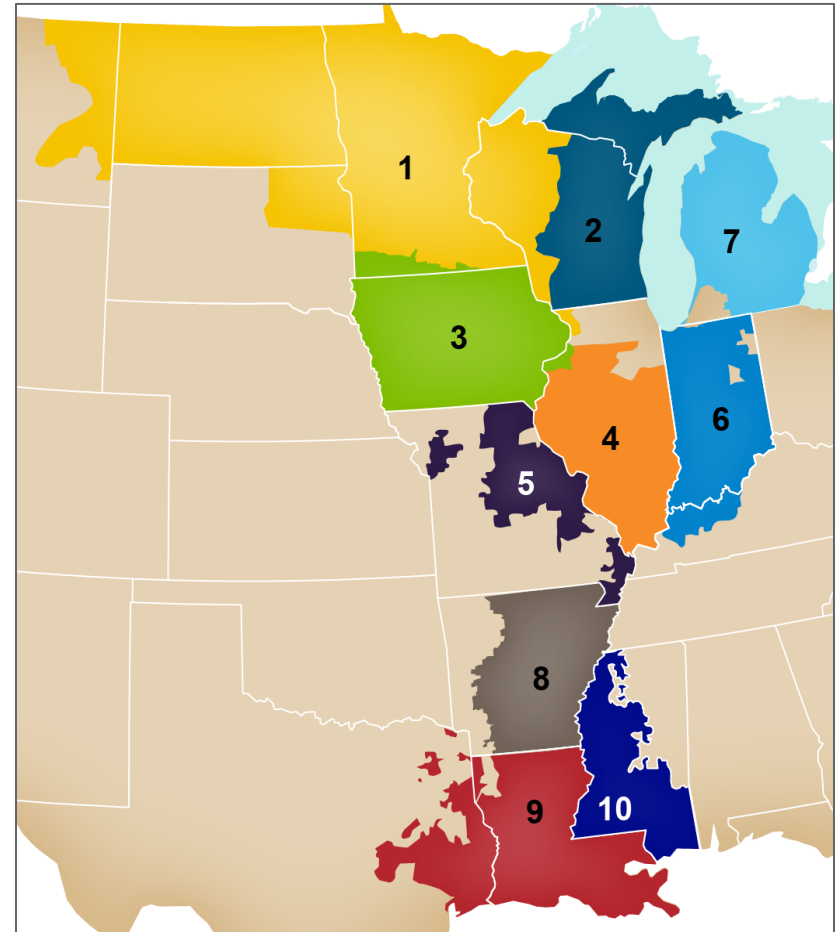
December 23 Max Gen Event LMR Penalty Summary

- Penalties assessed across 24 MPs
- Shortfall penalized represents 8.8% of Scheduling Instruction issued
- $\text{Penalty} = \text{MW Shortfall} * (\text{LMP} + \text{DDC Rate})$
 - DDC = Day-Ahead Deviation and Headroom Charge and is an applicable RSG charge

	HE19	HE20	HE21	Total
Scheduling Instructions (MW)	1,166.2	1,511.9	3,520.2	6,198.3
Shortfall (MW)	36.80	40.27	429.46	547.22
Penalties	\$54,051.71	\$45,570.59	\$588,960.12	\$688,528.42

Penalty Summary by Zone

Zone	Scheduling Instructions (MW)	Shortfall (MW)	Penalties
1	1,892.4	261.5	\$242,180.61
2	325	1.79	\$4,122.58
3	967.3	41	\$23,441.78
4	237.8	24.06	\$21,802.97
5	75.4	0	\$0
6	968.4	16.21	\$19,916.32
7	859	189.44	\$352,094.87
8	801.3	0	\$0
9	67	9.19	\$9,229.21
10	4.7	40.4	\$13,794.10
Totals	6198.3	547.22	\$688,582.42



Appendix

Background – DR M&V

Firm Service Level (FSL)

- Required to reduce load to or below its firm service level

10 in 10 Baseline

- Average of previous 10 non-event weekdays for each hour

Example: A LMR (DR) is registered with an expected demand reduction of 20 MW

