

Narrow Constrained Area Mitigation Thresholds

Effective February 25th, 2011

	Thresholds (\$/MWH)
WUMS NCA	\$99.04
North WUMS NCA	\$24.37
SE Minnesota/N Iowa/SW Wisconsin NCA	\$100.00 ¹

Notes:

1. These NCA thresholds are calculated based on the annual fixed costs of a new peaking generator, the net revenue such a generator would likely earn in the NCA, and the number of hours in which constraints are binding into the NCA per the formula in Section 64.1.2 of the Midwest ISO FERC Electric Tariff.
2. Annual fixed cost: Threshold calculation assumes an annual fixed cost for a new peaking generator of \$ 95.69 per KW-year. This annualized cost is calculated using: a) overnight capital costs of 704 \$/kW (inflated to 2010 \$ from EIA's 685 \$/kW in 2009 \$) for a conventional combustion turbine estimated by the Energy Information Administration and used in the EIA 2010 Annual Energy Outlook; and b) financing and other assumptions proposed by the Midwest ISO for use in the Resource Adequacy financial settlements, which are described on p. 6 of the Midwest ISO compliance filing dated November 19, 2008 (Docket No. ER08-394-003).
3. Net Revenue: Net revenue is estimated assuming: a) a heat rate of 10,500 BTU/KWh; b) a gas price basis differential from the Chicago LDC of \$0.61 per MMBTU for WUMS and North WUMS, and of \$0.38 per MMBTU for SE Minnesota; c) a forced outage rate of five percent; and d) a minimum runtime of one hour. Based on these assumptions, the net revenue estimated for the NCAs for the prior 12 months were: \$30.22 for WUMS, 65.28 per KW-year for North WUMS, and \$35.11 per KW- year for SE Minnesota.
4. Constrained Hours: One or more constraints into WUMS and North WUMS were binding in 661 and 1,248 hours, respectively. One or more constraints into the Minnesota NCA were binding in 569 hours in 2010.

¹ The formula from Section 64.1.2 of the Midwest ISO FERC Electric Tariff produces a threshold of \$105.91, so the threshold applicable in the SE Minnesota/N Iowa/SW Wisconsin NCA is capped at the BCA threshold of \$100/MWH from Section 64.2.1.