

*Table ZS-6
ATC Real Time Market Constraints (January 1, 2007 through December 31, 2007)*

Shadow Price*	Hours Rank**	Constraint (Common Name)	Potential Solution
\$104,383	2	Ellington – Hintz 138 kV	Increased line clearance (Completed, August 2007) Morgan – Highway 22 – Gardner Park (Planned, 2009)
\$62,007	3	Paddock 345/138 kV Transformer T21	Paddock – Rockdale 345 kV (Planned, 2010)
\$59,568	1	Eau Claire – Arpin 345 kV	Arrowhead – Gardner Park 345 kV (Completed, 2008)
\$21,491	7	Blount – Ruskin 69 kV (Line 6904)	Special Protection System (SPS) on circuit (Expected, 2008) North Madison – Huiskamp 138 kV (Planned, 2009)
\$20,589	5	Stiles – Pulliam 138 kV (Line 64451)	Morgan – Highway 22 – Werner West 345 kV (Planned, 2009)
\$19,463	13	Badger – Belle Plaine – Caroline – Whitcomb 115 kV	Gardner Park – Highway 22 – Morgan 345 kV (Planned, 2009)
\$17,659	6	Highway V – Preble 138 kV	Morgan – Highway 22 – Werner West 345 kV (Planned, 2009)
\$15,043	8	Pleasant Prairie – Racine 345 kV	No solution identified
\$14,209	9	Pleasant Valley – Arthur Road 138 kV	Reconductor of circuit (Completed, 2008)
\$13,122	12	Stone Lake – Gardner Park 345 kV	Arrowhead – Gardner Park 345 kV (Completed, 2008)
\$11,969	4	Stiles – Pulliam 138 kV (Line 64441)	Morgan – Highway 22 – Werner West 345 kV (Planned, 2009)
\$9,228	17	Cornell Tap – Felch Tap 69 kV	ATC Michigan Energy Collaborative will investigate potential solutions (2008).
\$9,132	15	McGulpin – Straits 138 kV (Line 9901)	ATC Michigan Energy Collaborative will investigate potential solutions (2008).
\$8,640	34	Sand Lake – Port Edwards 138 kV	No solution identified
\$7,638	39	Kenosha – Lakeview 138 kV	No solution identified
\$499,244			Total for all ATC Real Time constraints, 1/1/07 - 12/31/07

* Sum of shadow prices throughout year – i.e. the amount of money to be saved if this constraint is relieved by one MW.

** Hours rank is based on the constraints that occur most often on the system, regardless of severity (shadow price).