

The attached spreadsheet summarizes the publicly released results of MISO's Market Transition Deliverability Test (MTDT). The spreadsheet lists all of the publicly released constraints impacting generators in the ATC footprint.

The publicly released information on the spreadsheet provided is limited in its ability to relate the true deliverability limitations to the system because the information is based off of only the most limiting constraint for each generator in the ATC footprint.

Looking at all constraints in the deliverability process (instead of only the most limiting constraint for each unit) yields an additional nine constraints to NR units and 14 constraints to ER units. Further, the "MW restricted" column for each constraint is the total MW restricted on units for which this is the most limiting constraint, and does not reflect the MW restricted by this constraint when there are other, more restrictive constraints to a unit. Looking at all impacts of all constraints on each unit (instead of only the most limiting constraint for each unit) yields over 2000 additional MW restricted for NR units, and over 150 additional MW restricted for ER units. These large discrepancies mean that many units are restricted by multiple constraints and would rely on multiple system upgrades in order to become fully deliverable.

The MISO Deliverability Task Force is currently investigating alterations to the deliverability methodology. Of primary focus are the issues of the initial case dispatch and the definition of "pockets of generation". If the methodology is changed, the initial allocations of NR and ER status will remain in effect, but there may be additional capacity for units that enter the GIC queue in order to be re-studied for NR status.

PUBLIC DATA\*

Deliverability constraints for NR units in ATC footprint

Branch	Contingency	NR MW Restricted	Potential fix**
39345 KENOSH45 138 39362 LAKEVIEW 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	669.2	Further study needed
39368 OK CRK-5 230 39371 OC CRK-2 138 1	39367 OK CRK 345 39382 OC CRK N 100 1	166.4	2nd Oak Creek xfmr (2010)
38936 ROCKVALE 138 39283 CONCRD5 138 1 ***	Base Case	67.86	Rockdale-Concord-Bark River 345 line
38598 MANRAP 69.0 39961 CUSTER 69.0 1	38602 REVERE 69.0 39649 LAKFRONT69.0 1	38.9	Further study needed
38852 BAIN 5 138 39345 KENOSH45 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	35.8	Further study needed

Deliverability constraints for ER units in ATC footprint

Branch	Contingency	ER MW Restricted	Potential fix**
38852 BAIN 5 138 39345 KENOSH45 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	437.3	Further study needed
38757 ONTONAGO69.0 39893 ONT 138 138 1	38787 VICTORIA69.0 38806 RKLAND 69.0 1	30.3	Further study needed****
38598 MANRAP 69.0 39961 CUSTER 69.0 1	38602 REVERE 69.0 39649 LAKFRONT69.0 1	9	Further study needed

\* Publicly released data only lists the most restrictive constraint for each unit, meaning that not all constraints to deliverability are listed here, only those that have the greatest impact on some specific unit. Also, the MW Restricted listed here does not include impact on units that are more restricted by other constraints in this list - meaning that the MW Restricted values for listed constraints may be significantly higher when the impact on ALL units is taken into account.

\*\* Potential fixes have not been tested in the deliverability process and may not fully resolve constraints.

\*\*\* Future Rockvale T-D has been postponed and updated rating for Concord-Cooney now available. The next round of deliverability studies will reflect these changes.

\*\*\*\* White Pine TSR completed for 35MW partially resolves this limit, however generating capacity above 35MW is available at the site causing need for further study.