

ATC has been asked to clarify information discussed on a February 2, 2005 MISO conference call, involving three (3) issues in Upper and Lower Michigan that affect ATC and ATC customers. Below is a summary of these items.

1. MISO's Declaration of a Michigan System Emergency – modeling accuracy & communication protocol
2. MISO Day 2 Test – Redispatch as a tool to alleviate Day 2 OSLs and Day 2 use of generation owned by non-market participants
3. MISO Modeling of the UP System – Hiawatha Transformer

Listed below is a summary of ATC's position on the items of concern.

1. On January 13, 2005, MISO declared a Lower Michigan System Emergency for potential voltage collapse in the Northern portion of the Lower Peninsula of Michigan. MISO had requested "Conservative Operations" in the Eastern portion of the Upper Peninsula. ATC's perspective is that if a system emergency was declared, the emergency should have been better communicated to the industry. MISO communicated about the emergency with ATC, but not with any of ATC's UP customer LDCs. ATC felt that customers' load was at risk, and at a minimum, the LDCs should have been notified. As this event unfolded, the emergency turned out to be unfounded. The MISO model was not robust enough and the emergency condition was not real. With the exception of the communication issue identified above, ATC believes that the MISO acted appropriately in calling the emergency. The MISO must have confidence in the tools they use. If their tools indicate an emergency condition exists, they must make a declaration. ATC believes that the declaration needs to be more broadly cast. ATC also believes that the MISO model must be more complete so that the emergency declarations are accurate and reflect real emergencies. There is speculation that the 46 Kv Michigan network, which is not modeled in the MISO model, made the difference in this event of being an actual emergency or not. Based on Wednesday's conversations on this topic, MISO is reviewing their emergency communication procedures. Additionally, METC and MISO are evaluating modeling issues in Lower Michigan.
2. During the MISO Day 2 testing on Saturday morning (January 29, 2005), an Operating Security Limit violation (OSL) occurred. Under Day 1 operating conditions, ATC redispatches generation to resolve this type of violation. During the test, participants were confused as to whether the OSL was to be resolved via the Day 2 test or by the Day 1 ATC redispatch. This confusion led to delays in resolving the violation. The MISO issued confusing orders. These included orders to Wisconsin Electric to start units they neither owned nor controlled. Because the OSL was not being resolved through Day 2 processes, ATC requested Wisconsin Electric to start the City of Marquette generation, available to Wisconsin Electric under contract. This order was ignored, probably

because the market participants thought that the market test would resolve the OSL issue. ATC has initiated work with the MISO on how OSLs of this type will be handled during testing and how they will be handled in Day 2. A group is working on how non-market participants will be included in the resolution of UP violations. The revised approach will be in place during testing over the next few weeks.

3. In recent operations, MISO has asked the ATC System Operator to take action in the UP for the contingency of the Wilton Center to Dumont 765 Kv line. (This line crosses the northern portion of the Illinois-Indiana border). The ordered action was to separate the UP system at Hiawatha. This is described in the MISO Operating Guide for the flowgate #3521. This action is designed to prevent the overload of the Indian Lake transformers when Ludington pumping station is pumping. We have never separated for the 765 Kv contingency. ATC and MISO agree that the 765 Kv contingency has approx. a 0.5% to 1.0% distribution factor on the Hiawatha transformer. The disagreement comes from the initial loading of the Hiawatha transformer. ATC real-time monitoring indicated that the Hiawatha transformer loading was in the range of 25 to 30 megawatts. The MISO does not monitor this point. Rather, they use a state estimator value. The MISO State Estimator value was in the range of 60 to 65 megawatts. The Wilton Center to Dumont line was carrying 2500 megawatts. With distribution factor of 1%, the contingency would add 25 megawatts to the Hiawatha transformer. The transformer rating is 74 megawatts. The real time monitored value of 30 Mw plus the contingency value of 25 Mw is under the 74 Mw rating. The MISO's state estimator value of 60 Mw plus the contingency value of 25 Mw, however, is over the transformer's rating. ATC will abide by the MISO directives, but ATC insists on accurate directives. In this case the MISO UP model is deficient. ATC is working with MISO on modeling and especially additional real-time monitoring in the UP.

If there are any questions regarding this information, please contact ATC System Operations at (262) 506-6700.