

On September 9, 2008 at 12:00 EST, the IESO implemented a new scheduling protocol with all MISO transactions. This protocol was reviewed over the past few years and has been implemented by the IESO through a manual process. The intention of the protocol was to alleviate the difficulty in acquiring transmission on MISO interfaces due to the timing between IESO and MISO sequences.

MISO Protocol example for HE 12

9:07 – IESO 2 hour ahead predispatch completes for HE 12

9:10-9:20 – IESO adjusts all existing MISO e-tags to match 2 hour ahead schedule (seen as RC curtailment)

9:25 – MISO performs transmission “resink” for transmission based on Energy MW values from etags

9:30 – 10:30 MISO reevaluates ramp based on Energy MW values on tags and grants ramp reservations where available to transactions with submitted E-tags.

10:00 – 10:30 – Participants acquire transmission in MISO

10:20 – Any pre-reserved ramp reservation in MISO that does not have an associated tag is released

10:07 – IESO 1 hour ahead predispatch for HE 12 completes

10:10-10:20 – IESO adjusts all existing MISO E-tags to match 1 hour ahead schedule (seen as RC reload)

10:30 – MISO reevaluates ramp based on Energy MW values on tags and grants ramp reservations where available to transactions with submitted E-tags.

10:40 – MISO and IESO checkout for HE 12

11:00 - Schedules begin to flow

Since implementation the IESO has had numerous conversations with MISO and has learned the following:

SPOT Reservation

Every MISO market participant is given a TSR on the MISO OASIS upon becoming a MISO customer. It allows them 6-NN level use of the MISO transmission system for imports to MISO of any magnitude at any time from any interface through the SPOT reservation. It's use, at this time, requires no AFC check. Participants request this product by putting their assigned TSR # in the Transmission Allocation portion of etag. Any failures that the IESO currently sees for MISO transmission on our exports to MISO would be caused by participants not using this number or trying to acquire a different type of transmission. The IESO is considering applying an OTH code to any export transaction to MISO that fails for lack of transmission.

TRANSMISSION allocation

As discussed above this is more applicable to **Imports to IESO** as Imports to MISO can acquire transmission of any magnitude at any time.

MISO performs a “resink” at 9:35 for HE 12 (11:00 – 12:00), which looks at the schedule data and *not* the reservation data from the e-tag on the interface or flowgate (i.e. not the previously approved TSRs). Therefore, the MISO AFC’s will reflect a curtailed tag as having a zero contribution to the flowgate. Any transmission available for this hour will be sold between 10:00 and 10:30. Therefore, when tags are adjusted by the IESO prior to T-90 (at 10:20) the MISO AFC will recalculate and transmission will become available, allowing market participants to procure Non Firm transmission via their TSR.

If a tag of a market participant with firm transmission is subsequently reloaded (at 10:25), MISO will allow both that schedule and the schedule with the newly acquired transmission. In the case where a flowgate is subsequently binding MISO would call a TLR and the non-firm tag would be curtailed first.

RAMP allocation in MISO

MISO’s ramp capabilities are always visible to participants via MISO’s Market portal. Participants may pre-reserve ramp via the Ramp Reservation System (RRS) and hold it for 2-hours or 40 minutes prior to the dispatch hour (whichever comes first) before submitting E-tags. However, once the E-tag is submitted the ramp reservation held must exactly match the schedule that will be associated to it. MISO is discussing allowing the ramp reservation to be adjusted.

E-tags may be submitted without a ramp reservation and MISO’s RRS will automatically create a reservation for the tag and calculate its availability. According to MISO, 90% of the ramp requests are processed this way. Ramp requests may be submitted by market participants until T-30. The RRS will calculate availability for all PSE changes to the MW profile of each transaction on a first come first served basis.

However, if an E-Tag is curtailed, either as a function of a Balancing Authority, Transmission Provider or Reliability Coordinator, the associated ramp reservation is automatically updated to match the curtailed profile. Curtailments are not validated for ramp, but the Reservation profile is changed automatically to reflect the profile of the E-Tag. Reloads follow the same logic. If a tag is reloaded, the reservation profile is changed automatically to reflect the profile of the E-Tag. Only if the reload causes any over usage of ramp will it be denied.

Benefits and Risks

Currently the process the IESO uses to implement the MISO protocol applies to both imports and exports. Therefore, even though IESO exports to MISO do not require that MISO transmission be released we are adjusting both the import and export tags.

This adjustment has a definite benefit for participants who experience difficulty acquiring transmission and ramp in the import direction and ramp in the export direction provided the participants have their tags in the system early enough to take advantage of the MISO protocol.

There is a very small risk with the MISO protocol, for those participants who have submitted an E- tag 2 hours prior to the dispatch hour, the tag is evaluated and ramp is reserved for this transaction. The

schedule is not economic in IESO's 2 hour out pre-dispatch and the E-tag is subsequently reduced, and the ramp reservation will automatically be adjusted. If this transaction becomes economic in the final run of pre-dispatch, there is a small risk that the reload will cause an overusage in ramp and MISO will deny it.

Outcomes to Date

In the month of October we saw 629 instances when a transaction became more economic in the hour ahead predispatch than the 2 hour ahead predispatch, and the tag was therefore reloaded. Of these instances 32 have failed for inability to acquire ramp, 3 of which were exports to MISO.