

Sept 18, 2015

MISO

Attn: Jesse Moser, Jeanna Furnish
720 City Center Drive
Carmel, IN 46032

RE: NIPSCO's Feedback in response to Capacity Deliverability on August 20, 2015 at MISO-PJM JCM

Issues with the External NR Proposal:

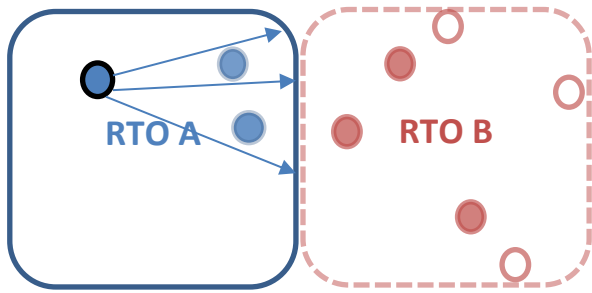
- NIPSCO is concerned that external capacity deliverability has the potential of causing further issues along the seams by falling into a regional evaluation gap if inter-RTO transfer of capacity is not effectively analyzed. MISO still needs to assess the issues of transmission cost shifts, cost shifts between RTOs, proper assessment of physical capabilities of existing transmission, and how to handle transmission rights due to external capacity.
- Throughout the MISO Generation Deliverability Study white paper (see link below), units external to MISO are treated with a **fixed dispatch** equivalent to MMWG. Currently, PJM units, or any external RTO's units, would not be effectively dispatched (in other words ramped up) per the deliverability methodology as is done with all MISO units that are internal to MISO's footprint for the purpose of proving deliverability. This dispatch issue creates a gap in analysis along the seam where deliverability from PJM to MISO could potentially be over-subscribed since PJM dispatch is fixed at base levels (reduced) in the entire PJM area in the case. This masks the more realistic and elevated generation dispatch which should be applied for the purpose of demonstrating deliverability during stressed conditions. Instead, the reduced dispatch assumptions will result in real time / day ahead issues since capacity levels are not being dispatched commensurately between RTOs in the study.
- The deliverability methodology that MISO uses is referenced in multiple BPMs to perform generation deliverability in a common manner within MISO. However, it has not been updated since 2006.

<https://www.misoenergy.org/layouts/MISO/ECM/Redirect.aspx?ID=90065>

It has been previously mentioned by MISO staff that they have been exercising changes associated with generation deliverability method in GI process that have never been updated in documentation. It is uncertain whether the exercised changes have gone through proper vetting in the stakeholder process. Regardless, the outdated documentation creates confusion and unnecessary stakeholder disconnects which is a transparency issue that may affect technical study results. If changes are being made to the deliverability methodology to effectively test external capacity requests, it is imperative that MISO document the approved changes accordingly along with any other approved changes.

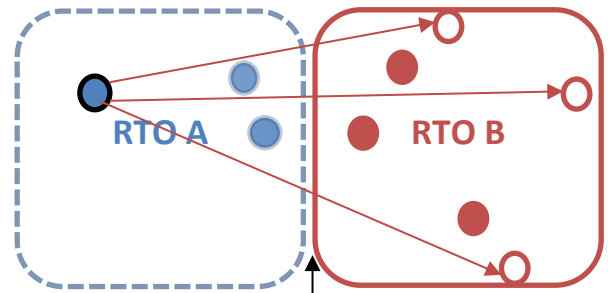
- MISO states in the proposed BPM-015 language that external NRIS requests requires the prerequisite procurement of firm Transmission Service (or TSR) to the MISO border in order to validate the External NRIS request. MISO has not defined "the MISO border" (e.g. an external bus, MISO bus, interconnection flowgate?) for deliverability study purposes and how generation at its borders is equivalently reflected in the study or if this is merely an assumption made through a policy requirement? Is it meant to preclude that the external resource is deliverable up to the MISO border but not all of MISO footprint; therefore, MISO requires a deliverability study of this external resource to ensure deliverability within MISO footprint from the MISO border? How does MISO ensure that a TSR in RTO A + Deliverability in RTO B = Deliverability from a single originating point in RTO A to ALL of adjacent RTO B? See below:

Firm Transmission to border of A only →



Generator in A requesting into B: ●
Generators contributing transmission flow: ● ● ●
Load in B: ○

MISO Deliverability Study of Gen in A to all load in B →



NOTE: Gen in A ● is not dispatched up (stressed) in this test. Only Gen in B ● is stressed per MISO Deliverability method.
→ Flowgates along seam potentially impacted

This method mentioned above is not proven and is not equivalent treatment of an external unit to an internal unit since the analysis is performed in 2 distinctly different studies in 2 distinctly different regions, and using separate methods and separate dispatch assumptions resulting in the flow gates between those areas not being stressed in a similar manner. These analysis gaps due to study inadequacy will either lead to cost shifts between RTOs or TOs if caught in planning processes or lead to real time/day ahead constraints since both RTOs would expect resources to be fully deliverable given the results of the deliverability study. However, there will instead be over-subscribed flow gates being applied additional capacity since MISO's study is not taking into account the proper stressed dispatch in external areas needed to ensure deliverability from the adjacent RTO into and throughout MISO.

Potential fixes: RTO joint deliverability with equivalent treatment of all generation resources in each region or coordinate network resource service (NR) generation dispatch between RTOs to apply to MISOs NRIS/Deliverability study's ramping method in its stressed peak case. This would basically dispatch external PJM generation the same as internal MISO units to determine if units are deliverable under peak conditions. Furthermore, an off peak case will likely be required since MISO's capacity is moving towards a seasonal construct where an off peak case would be needed. This would further necessitate an update to the Deliverability white paper document for method of performing off peak analysis along with the treatment of external RTO generation which takes into account proper coordinated dispatch assumptions in the off peak case in external areas as well. Simply using existing dispatch assumptions from MMWG (base level dispatch) in an off peak MISO case would amount to additional deliverability study issues.

Equity Issues remain even with study fixes: How is equity maintained between the RTOs? How do the RTO's ensure transmission capacity is not being shared or double counted between the RTOs? Would there be an exchange/compensation for use above entitlement? How is the entitlement determined? Least cost copper sheet or local merit order may be options. Regarding M2M payments for energy, flowgate entitlements should be 100% based on ownership. Cost allocation of resulting upgrades could be allocated based on Adjusted FFE.

- MISO has not stated to what extent any granted External NRIS unit would be maintained through MTEP deliverability analysis or any other MISO studies with merely the addition in BPM-015 for handling of External NRIS in other studies. Would external NRIS units be included in the MTEP deliverability case and studied in the same manner along with internal NRIS units and treated/maintained the same as internal units? If external generation is to be included in all studies, it should be documented as such since it would assumed that TOs will be required to

maintain the deliverability of External generation units and build any upgrades when deliverability is not maintained, therefore, TOs especially along the seams have a vested interest in ensuring the process/study captures the impacts properly up front.

- In summary, utilizing MISO's external NRIS product as currently proposed for a capacity service in a single direction from PJM-to-MISO does not address the interregional deliverability issues mentioned previously as well as the equity issues. Furthermore, the external capacity, when studied through MISO's external NR method, may create regional reliability and congestion issues within MISO. This would likely result in cost shifts and the masking of reliability issues. These issues should be caught up front in the network resource integration process where it can be properly accounted for and where upgrades can be properly assigned before capacity is granted rather than being shifted into real time or to a local TOs reliability obligations. Furthermore, this allows external generation to enter with the same level of stringency and treatment so they can decide whether to acquire capacity into a different RTO in an equivalent manner as any other internal MISO participants would.