

## OMS Resources Work Group

### RASC Feedback on Management Plan and Priorities

January 25, 2017

The OMS Resources Work Group (“RWG” or “work group”) provides feedback on the three priorities as approved by MISO Advisory Committee in December for the Resource Adequacy Sub Committee (“RASC”), which are: (1) Improve the Planning Resource Auction (“PRA”), (2) Gas-Electric Coordination, and (3) Improve the OMS-MISO Survey.

#### A. Improve the PRA.

1. **SEASONAL:** MISO should continue discussions with stakeholders on seasonal construct changes to its Tariff and Business Practice Manual (BPM) through the RASC and LOLEWG (Loss of Load Expectation Working Group). Additional analysis on the number of seasons will likely be needed as part of this process.
2. **LONG TERM OUTAGE:** MISO should work with stakeholders to change the Tariff and BPM regarding resources out on planned or forced outages during most of the year, since currently, resources that are expected to be on planned or forced outage for the majority of the planning year are not penalized from participating in the PRA. This can also relate to the seasonal construct noted in #1 above.
3. **PARTIAL UNIT:** MISO currently has the ability to have a unit partially clear in the PRA, on a pro rata basis, resulting in those resources clearing a small percentage of their unforced capacity (“UCAP”) and resulting in capacity revenues less than the costs of maintaining capacity on partially cleared resources. MISO should work with stakeholders to revise this revenue deficiency.
4. **BTMG ACCREDITATION:** MISO should work with stakeholders on Behind the Meter Generation (“BTMG”) in the MISO Tariff and BPM regarding the treatment, classification, and if any, capacity accreditation, of these resources.
5. **ENERGY STORAGE:** MISO should work with stakeholders on Energy Storage classification, treatment and capacity accreditation since there is currently no clear tariff or BPM accreditation formula, definition, or treatment specific for them, especially with the latest FERC Rulemaking [Docket No. PL17-2-000], (NOPR RM16-23).
6. **HYDRO:** Several load serving entities would like the accreditation rules for hydro assets to be reviewed or revised, since the current rules are too burdensome and do not recognize the full benefits provided by these assets.

## B. Gas-Electric Coordination

The Resources Work group supports MISO on working on the first targeted priority of "gas usage profile for gas system operators" since it strongly ties with the Seasonal and Outage Priorities listed above. However, OMS does not support MISO interfering directly with natural gas generators, but rather does support facilitating information-sharing via its MISO website, continued participation on NAESB and NERC gas coordination meetings, and continued outreach with the gas industry and regulators.

## C. Improve the OMS-MISO Survey (See Appendix A)

The Resources Work group has added our filed comments from December 2016 in Appendix A.

## **APPENDIX A – Feedback on Survey**

### **OMS Resources Work Group Feedback on OMS-MISO Resource Adequacy Survey Process Improvements December 15, 2016**

The OMS Resources Work Group (“RWG” or “work group”) provides feedback on the OMS-MISO Survey focused on the documents as they were provided at the November 20, 2016 Resource Adequacy Sub Committee (RASC) meeting, and questions distributed to stakeholders directly.

#### **How should New Resources be included in the OMS-MISO survey regional and zonal rollups?**

- Information on all of the various resources types should be collected be reported in the survey just like the detailed information on the generation sources from all retail and non-retail Load Serving Entities (LSE), generators, and power producers.
  - High-level estimates of LSE Distributed Energy Resources (DER) accumulation may suffice, as MISO will not need to know about every resource interconnected at the distribution level. In limited instances of high DER penetration, for purposes of MISO's real-time operational awareness and transmission reliability, there may be a need to gather some granular DER information from LSEs, or applicable Local Distribution Companies (LDCs). For this purpose, perhaps a penetration threshold needs to be defined. The survey could ask if a certain cumulative amount of DER for the LDC, as % of peak load, is estimated to be interconnected over the planning period. If that threshold is met then additional questions about DER diversity, size, and quantity may be useful. This additional info may be best gathered in a separate tab of the survey spreadsheet.
  
- If some of these resources are classified by the LSE as Load-Modifying Resources, and result in the LSE’s reduced load, then that should be accounted for in the survey spreadsheet.
  
- Any inter-zonal transfers or firm transmission rights should be separately delineated and explained.
  
- Any of the above operating and planned resources with a signed Generator Interconnection Agreement ("GIA") should be included in the Tier 1 category.

### **At what point should New Resources be included in the rollups?**

- If a generator, power producer, or LSE can provide a public announcement to MISO on the building process such as foundations (photos are worth a 1000 words), then the project should be moved to the high certainty category, Tier 1.
- If a generator, power producer, or LSE provides a copy of their annual report page (FERC Form 1 or something similar) which would detail their current construction work in progress (CWIP). MISO would know already from the GIA process the estimated project cost and if the CWIP is more than 30% of the total forecasted cost, then the project should be classified as a high certainty resource, Tier 1.
- If a generator, power producer, or LSE provides a copy of their testimony or an exhibit in a case, or a Commission order approving the CWIP or the project (Certificate of Need). MISO would know already from the GIA process the estimated project cost and if the CWIP is 30% of the total projected cost, then the project should be classified as a high certainty resource, Tier 1.
- If the CWIP is less than 30% of the total forecasted cost, then the project should be classified a low certainty resource, Tier 2.

### **All resources in MISO Queue?**

- MISO can continue to label the remaining generation sources as Tier 2 or Tier 3, but show in the results a stronger association between Tiers 1 and 2, than between Tiers 2 and 3.

### **Others?**

- Any new Tier 2 and Tier 3 resources should be presented in the summary of the survey and tabulated on the balance sheet for the total results. MISO agreed at the November 30, 2016 RASC meeting to provide information to the stakeholders on the percentage of generator types that move forward in the queue process. For example, if 95% of thermal units in the queue have eventually gone on to interconnect to the system, it would be reasonable to present a large portion of those units in Tier 2 as being certain and if only 50% of wind units in the queue have gone on to interconnect to the system, it would be reasonable to present a large portion of those units in Tier 3 as being uncertain.

### **If additional new Resources beyond resources with a GIA are included, how should they be included in the rollup?**

- Answered above, just break out all of the resources in the spreadsheet for all reporting of known, possible, and probable resources. Resources beyond the GIA should be represented as a line or dash across the range of generation levels that are presented for each zone in the roll-up. The dash should represent the lowest level of certain resources plus the additional resources identified as described above (see Figure 1. below). Two dashes could represent Tier 2 and Tier 3 resources, with Tier 1, including resources with a GIA and resources presenting additional qualifying information as described above, represented in the bar chart.

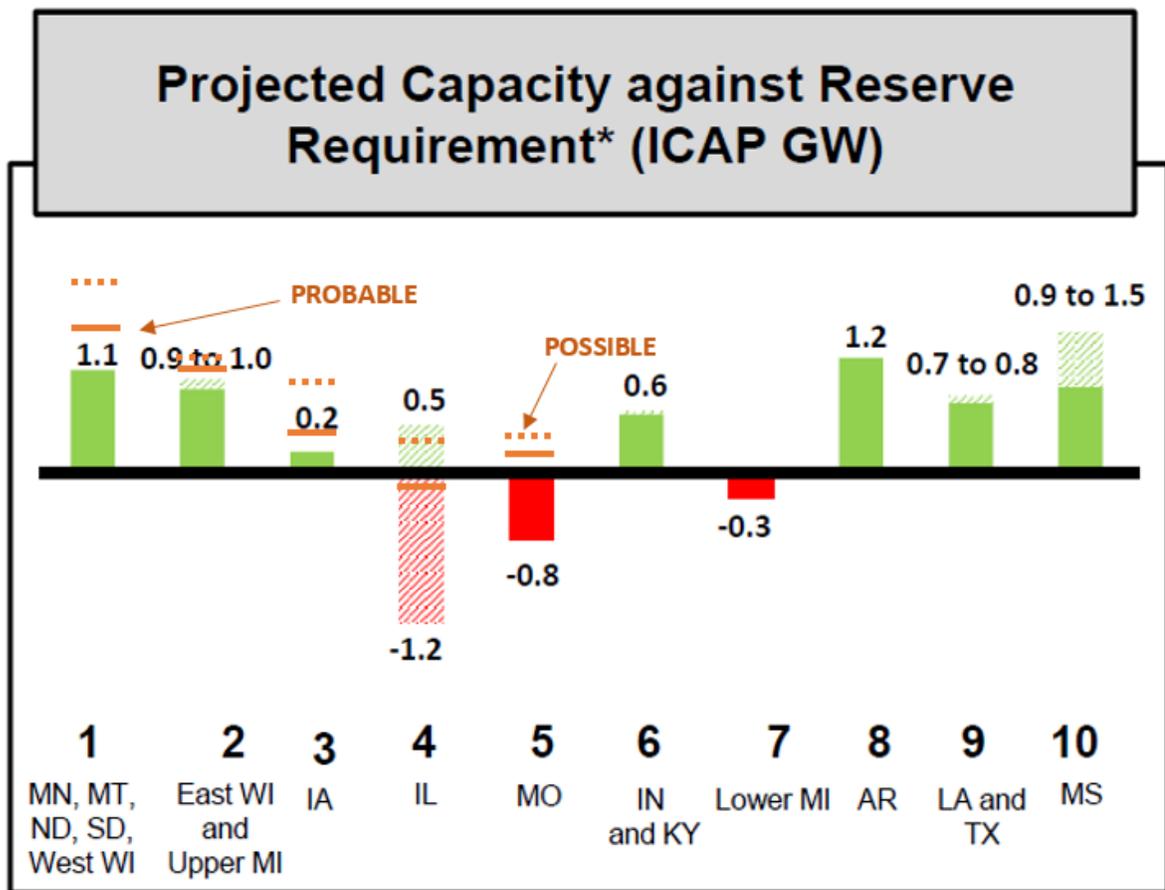


Figure 1. Proposed representation of probable and possible queue generation on survey results roll-up.