

OMS Resources Work Group  
Feedback on Locational and Seasonal Proposals  
9/17/2015

The OMS Resources Work Group (OMS RWG) appreciates this opportunity to provide feedback on MISO's updated *Locational Considerations* and *Seasonality* proposals. Our response is focused on providing answers to the questions asked and input on issues we've seen related to the process as a whole.

## **PROCESS FEEDBACK**

After participating in several very quick rounds of feedback requests and updated proposals, the OMS RWG would once again like to point out that the timeline being pursued is overly compressed and the quality of the end product may be less than that desired. MISO is basing its proposal updates on feedback that was developed too rapidly, adversely impacting the overall quality and effectiveness of both the feedback and the updated proposals. In addition, the current process leaves little-to-no lead time for stakeholders to analyze additional or replacement information or data that stakeholders may require to make meaningful recommendations. We understand that there are aspects of the existing capacity construct that need immediate attention; however, no one asked for the "urgent needs" timeline to be imposed on the entire solution set. At the outset of this process, most stakeholders agreed that it would be wise to address a wide range of inter-related issues at the same time, under the same forum, but not for all to be implemented at the same time.

Another observation that the RWG members have is related to the format of MISO's proposals. Like other stakeholders, the RWG was appreciative of the "report format" papers that MISO produced (i.e., the RA issues paper and the three original straw proposals). The report format allowed for a clear presentation of background information, figures, and a reasoned discussion of the proposal in detail. OMS RWG suggests MISO continue to use the whitepaper format to present background information to the stakeholders throughout the pendency of the RA forum. The strength of PowerPoint presentations is found in presenting meeting materials at a higher level in large gatherings and does not allow for the significant depth of detail the RA forum requires in its analysis. OMS RWG suggests MISO limit its use of PowerPoint to meeting presentations and return to the use of short report-papers to provide background analytical materials for the remaining RA discussions.

## **LOCATIONAL CONSIDERATIONS**

### **External Resources / Zones**

- If an external zone (e.g. PJM) is interconnected with multiple MISO LRZs, how should the resource transaction be modeled? Should transaction sink to one zone or multiple zones and could multiple External Zones be necessary?
  - Identify resources eligibility criteria and performance requirements that are available on both sides of the seam, including zonal transfer limits, and model various scenarios of the transactions sinking to one or more zones or sinks. Use the results to determine which scenario would lead to less congested flow gates.
  - An LRZ could be modeled with the maximum amount of resources that can be purchased in the zone (the Maximum Capacity Limit). Using the total of the existing and proposed new resources in the zone, then the available import capacity into each zone could be determined.
- Is the relationship between Transmission Service and the capacity construct appropriately considered in the External Zone proposal? Should all yearly Transmission Service be considered the same?
  - Also need to consider seasonal here.

- PJM has experienced curtailment of firm transmission by surrounding systems and, yes, MISO should consider the relationship of firm transmission service with the capacity construct. Why is firm transmission service being interrupted? If customers are paying for firm service, it should not be interrupted. A firm transmission service of any duration should be held as the same since it is a contract for firm service, not interruptible service.
  - The total transfer capability and the available transmission contracts across the seam should be determined to ensure that existing and new firm transmission contracts are not impacted or interrupted.
- Is pricing external zones at the system price appropriate? If not, what are the alternatives considering the current inconsistency in which externals receive the sink price while non-zonal MISO resources receive the price of physical location of the generation.

MISO has scheduled its first Pseudo-Tie Task Force for Sept. 18. MISO should make it clear whether it plans to address these external zone issues within the task force or the RA Forum.

The MISO IMM recommends that a BA should reach an agreement on how to dispatch with another BA instead of layering an abundance of pseudo-ties on the market that lead to inefficiency and unnecessary complexity.

#### **Zonal Configuration**

- It is important for Capacity Resources to deliver energy to load. When does a transmission constraint become a resource adequacy concern?
  - Pursuant to Order 747 dated March 17, 2011, NERC requires that each planning coordinator (MISO) annually document the projected load and resource capability for each area and transmission constrained sub-area identified in its analysis report. If a transmission constraint is hampering resource adequacy or the deliverability of energy into specific zones or sub-zones then that should be considered a RA concern.

#### **Capacity Hedge**

- What would a framework look like if parties other than Load Serving Entities were eligible for hedges?
- What type of supply arrangements should be incented and/or recognized by a hedging framework?
- How complex of a hedging solution is needed for Resource Adequacy?
  - Pursue a framework to “refund” or allocate excess revenue collected in the auction
  - Pursue a framework for participants to purchase “insurance” or right to a hedge between LRZs?
- Why is a hedging framework that doesn’t guarantee full funding of some or all hedges sufficient? If it is not sufficient, then what is an appropriate funding mechanism?

The OMS RWG is concerned that privatizing the benefits of RTO system capability can lead to inefficient auction outcomes; however, the OMS RWG understands the need to provide a hedge to those that have built and paid for transmission facilities that enable the delivery of a specific resource to load. Any solution needs to be simple in nature as it will be layered on top of the RAC and may lead to inefficiency if unnecessarily complex.

### **SEASONAL**

#### **Current Proposal**

- What months should be included in each season?

- There are several outstanding data requests that will help inform these decisions, including load shape by zone and LFU by month. From what we know so far, there is a clear summer season of June – September and winter of December – February. This would leave an Oct/Nov fall season and Mar/Apr/May spring season. Although this loses the symmetry of a 4x3 construct, differing months per season would be more able to capture the summer peak, which can occur in September. Ensuring that the summer peak is located in the summer season will also reduce the uncertainty associated with a fall season that would have the impact of lowering the PRM for fall.
  - At the last SAWG meeting, a May 15 – Sept 15 summer season was discussed. Although this wouldn't follow the current Planning Year schedule, it would be interesting to know what types of downstream impacts this change would have. This season would definitely capture the summer peak as well as reduce the uncertainty in both the spring and fall seasons.
  - The work group is aware that not all LSEs would be able to realize cost savings from reduced staffing during shoulder seasons; however, the current annual approach – and MISO's two-season proposal – prevents LSEs who may be able to realize these savings from attempting to do so. The increased flexibility from having distinct shoulder seasons would allow an LSE to choose whether or not to do this while providing transparency around what amount of generation is actually needed during those periods.
  - The capability of the transmission system is not fixed throughout the year. Seasonal thermal limits and flow direction can open up additional capacity movement, increasing system efficiency and providing transparency around how the system is actually working.
  - The uncertainty described on slide 11 may not be accurate since September is included in the fall season, which could make it seem artificially uncertain. More data is needed to complete this analysis.
- What specific benefits to reliability, flexibility, and efficiency are achieved with separate shoulder seasons? Are those benefits still achieved if each season was two months (e.g. Fall is October and November)?
    - Reliability will be maintained no matter what. Mandatory requirements will still be met and NERC standards will continue to be complied with.
    - There are many flexibility benefits from having separate shoulder seasons, including:
      - more opportunities for entry and exit;
      - ability to structure contracts with increased granularity;
      - increased transparency of capacity requirement needed in each season;
      - and the ability to capture seasonal variation of resource capacity and fuel availability.
    - The flexibility and efficiency benefits of four seasons is at least equal to those of two seasons and should not be considered a question, as it was in MISO's most recent detailed report proposal.
    - The efficiency benefits of having shoulder seasons include those mentioned in the IMM's 2014 State of the Market Report, which MISO should be very familiar with.
  - What incremental costs are associated with holding multiple Planning Resource Auctions? Do these costs increase due to uncertainty if auctions are held throughout the year?
    - The work group believes that LSEs are in a better position to accurately answer this question. We have heard two different sides to this story, with some LSEs pointing out that there would be little to no additional administrative costs, while a few have said that multiple PRAs would lead to an increased work load. Also, any uncertainty could potentially be addressed by separating the auctions, reducing forecast and resource availability uncertainty.
    - One LSE voiced concern that its retail customers would be confused by having its fixed charge change on its retail bill three or four times each year which would lead to or negative customer impacts. That LSE preferred two seasons.

## Next Steps

- How should the Planning Resource Auction offer cap be modified in a less than annual auction?
  - Stakeholders are currently examining potential changes to the PRA offer cap outside of the RA forum process. It may make sense to move that discussion within MISO's seasonal RA proposal.
  - Bilateral agreements that are structured on a seasonal basis may be the best source of data for setting an offer cap.
- How should planned outages be accounted for in a seasonal construct?
  - Planned outages could be accounted for to make sure zones are adequate and there's no additional LOLE risk. LSEs, TOs, and IPPs usually would have detailed planned outage schedules 12-60 months out, especially in the off peak periods. These could be accounted for in whatever seasonal construct is decided. The existing scheduling protocol should mesh into any and all seasonal constructs.
- How should Load Modifying Resources and other Planning Resource performance obligations and accreditation be accounted for in a seasonal construct? What factors should be used to set capacity credit?
  - Testing can be done in multiple seasons to produce seasonal capacity ratings. MISO already has a method for modifying Generation Verification Test Capacity (GVTC) results based on differing weather assumptions and this could be expanded to seasonal assumptions.
  - LMRs could specify their seasonal availability during registration, which could then be verified in tests or drills.
- Are there any operating characteristics of resources in Spring or Fall that differ from Summer or Winter?
  - The temperature of cooling water, ambient air temperature, and humidity level will always impact the efficiency of thermal units. Since all three of these variables change rather predictably on a seasonal basis, the operating characteristics of units can change as well.
  - The availability of hydro varies by season.
  - Solar resources would operate differently in the spring and fall given the changing intensity and duration of daylight.
  - On an annual basis wind resources follow a predictable pattern with large variation by season. The intensity of wind ramp may also vary by season and should be investigated further to gain an understanding of how this may impact the need for ramp product availability.

## **Appendix:**

Feedback Request: September 2 and 3 Joint LOLEWG – SAWG Locational and Seasonal Proposals

Please provide feedback on the proposals on Locational and Seasonal items at the September 2 and 3 Joint LOLEWG – SAWG meeting, specifically the questions below. Comments should be sent by September 17 to [RAdequacy@misoenergy.org](mailto:RAdequacy@misoenergy.org).

Supporting materials are available on the MISO website at:  
<https://www.misoenergy.org/Events/Pages/LOLEWG20150902.aspx>