

In the May 8 meeting of the Resource Adequacy Subcommittee (RASC) stakeholders were invited to submit feedback on RAN Phase 3 (RASC010). The OMS Resources Work Group (RWG) submits the following feedback:

1. What modifications should MISO make to LOLE assumptions for a seasonal resource adequacy construct?
  - The RWG recommends that MISO and its stakeholders should begin applying the assumptions that could be used for the contemplated seasonal RA construct to the current LOLE study. Assumptions could include targeting the four seasons: summer consisting of June, July, August, and September; spring consisting of March, April and May; winter consisting of December, January, and February; and, fall consisting of October and November. Other inputs would need to be categorized by these four seasons for load, dispatch, outage, constraints, topology, and interchange. Additionally, MISO should look further into correlation of extreme weather conditions and apply new assumptions based on this.
2. What is the most important analysis stakeholders would like to see?
  - The RWG recommends review of the impacts of storage as well as behind-the-meter-generation on system performance. Given state jurisdiction over resource adequacy, analysis of estimated seasonal planning reserve margins is an important concern. Additionally, it would be helpful to include updated analysis and prediction of extreme weather scenarios.
  - The RWG would also like to see an analysis of the economic benefits of more accurate information on unit availability and capability in different seasons to show whether or not there are benefits that stem from taking some units offline.
3. How should transfer limit studies be changed for a seasonal resource adequacy construct?
  - The RWG recommends that MISO continue modeling the transfer limit studies for the four seasons with the inputs or applying appropriate proxies for those situations where the CIL or CEL could suffer from generation-limiting circumstances. This includes thorough study to determine appropriate ICAP/UCAP for renewables and storage.
4. What modifications should MISO make to capacity accreditation for a seasonal resource adequacy construct?
  - The RWG recommends capacity accreditation should be set on the four-season basis as noted above since certain capacity resources may be more eligible during the non-peak season due to air quality permits, fuel availability, resource availability, etc. Peak capacity resources such as

air-conditioning load may only be available during the summer, while other resources may be more eligible during the non-peak seasons.

- The RWG also supports capacity accreditation based on historic performance of individual resources, aligned with the respective season, and the RWG supports giving more weight to recent years' performance data to reflect changing operating conditions.
  - Resources should be allowed to provide replacement capacity to avoid negative impacts on outage rates.
  - It would be acceptable to provide different compensation categories for demand-side resources based on their required notification times to incentivize the participation of fast-acting resources.
5. Would resource qualifications need to be changed under a seasonal construct?
- No, however, LMR qualifications may need to be updated from “best capability” to “best seasonal capability” under a new construct.
6. How would a seasonal auction be designed?
- The RWG envisions a single auction with seasonal options to be set up the same way it currently is with little activity since most resources either FRAP or Self-schedule. We would, however, support a four-season auction that could be run on an annual basis like it currently is as long as seasonal offers and system parameters are considered.
7. What obligations should resources have after clearing the Planning Resource Auction under a seasonal construct?
- They should have the same obligations they currently have now but for the specific seasons they nominate their capacity as a resource in all or a selection of the four seasons. Failure to respond could lead to accreditation penalties for same-season offers.
  - The RWG would also like to see an exploration of seasonal response testing with real-power testing remaining the same.
  - The RWG recommends further discussion of different categorization for demand-side resources based on their required notification times to incentivize the participation of more fast-acting resources. Additionally, there may need to be review for accurate seasonal reporting and alignment with retail programs.
8. What feedback do stakeholders have on the draft RAN Phase 3 work plan?
- The RWG continues to support the seasonal RA construct and working with MISO and its stakeholders through the process. We are interested in seeing the effects of the current FERC approved tariff changes go through a year of operations with MISO and thereafter determining if any modifications need to be made prior to implementing Phase 3 of the RAN.