

## **OMS Regional Planning Work Group (RPWG)**

### **Suggestions for MTEP15 Scope and Process Improvements for MTEP16**

**September 12, 2014**

#### **MTEP15 Scope Suggestions:**

##### **1. Continue EPA 111(d) Modeling**

The Organization of MISO States (OMS) Regional Planning Work Group (RPWG) encourages MISO to continue to its modeling efforts to identify various emission reduction strategies to meet EPA’s Clean Power Plan proposed rule and to examine the assumptions that EPA has made in its rule.

##### **2. DSM Update**

The Global Energy Partners (GEP) study is outdated and this has been a hotly debated issue as it relates to the adjustment in demand and energy growth rates. MISO should conduct a study to update and more carefully model DSM.

##### **3. Reserve Sharing and Capacity Deliverability Issues**

MISO should explain how the capacity import and export limits affect transmission planning. This should include an explanation of the eligibility of capacity resources that are outside a Local Resource Zone but within MISO and for resources external to MISO, including the non-RTO areas. What are the opportunities, issues and barriers? It would be helpful if MISO could provide a regional perspective on the role of capacity imports/exports in helping to meet reserve requirements.

##### **4. Distributed Generation**

The OMS RPWG requests that MISO analyze the potential impact of increased uses of distribution generation (“DG”) technologies upon the transmission needs of the MISO footprint. The Energy Information Administration (EIA) projects significant percentage increases in the use of DG in the time period out to 2040, particularly with respect to solar photovoltaic. The OMS RPWG would like MISO to scope the potential penetration levels of the technologies of solar photovoltaic, natural gas fuel cells, and battery storage within the MISO footprint. The OMS RPWG would like MISO to scope

any impacts that significantly increased levels of DG within the MISO footprint would have on the future needs of transmission development within MISO. The OMS would also like MISO to scope out what impact significantly increased levels of DG would have upon the needs for ancillary services such as reactive power and operating reserves. Finally, the OMS would like MISO to scope any potential impacts that increased levels of DG would have upon the geographic distribution of other generation types.

#### Observations Regarding a DG Study:

Because DG resources are generation resources connected to utility distribution systems, typically at feeders operating at 33kV, 16kV, 12kv and 4kV, and not MISO's bulk transmission system, LSEs are in the best position to estimate potential DG penetration rates based on their customers' geo-demographics and distribution system types (rural vs urban), interconnection and upgrade costs applicable to those systems, and individual state renewable incentive policies.

Growing concerns with the costs imposed by DG and net metering on LSEs will likely lead to shifts in the aggregate capacity and location of DG, from the current "unguided", or customer ad-hoc location, model of DG development, to a model "guided" by the LSE, where DG is preferably developed in those distribution feeders with the lowest integration cost (and possibly positive operational impact). If this DG development model is chosen by the LSEs and endorsed their state regulators, then the LSEs would be the appropriate MISO market participants to provide MISO with locational DG penetration forecasts.

In sum, a study of the potential impact of DG across MISO will require a high level of OMS involvement, including a state by state examination of current DG incentives, regulations and interconnection practices, in order to provide the necessary guidance to distribution utilities regarding future DG installed capacity goals and acceptable customer rate impacts. These, in turn, would enable the LSEs to conduct DG market potential and system impact studies to provide MISO with DG penetration forecasts that reflect DG regulatory environments likely to exist over the DG forecast's horizon.

### **5. System Support Resources Analysis**

The OMS would like MISO to do more extensive analysis of specific generation options to address each particular SSR request well in advance of an SSR filing.

## **6. Non-Transmission Solutions**

FERC Order 1000 requires transmission providers to evaluate non-transmission alternatives on a comparable basis (Order No. 1000, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051 (July 21, 2011) at paragraph 148). MISO and the stakeholders should consider this matter and develop a process by which non-transmission solutions are identified and considered when they could be reasonably cost-competitive for an identified transmission system issue.

### **Process Improvements for MTEP16:**

Each year the stakeholders spend a lot of time discussing the various assumptions and methodologies used in the development of futures (particularly energy efficiency and renewables). Clarification on some of these issues should be documented so we don't have to rehash the questions on methodology year after year. For example, it would be helpful if MISO could provide a thorough explanation of how DSM is handled in the modeling process.

The OMS RPWG is also concerned that MISO changed the average of the sector weightings on the futures for MTEP15, and the statement made by MISO staff that the weightings on the low growth and high growth future should be equal. Understanding that sector bias can be a problem, a possible solution is to throw out the high and low sector weighting and then calculate the sector average weighting for each future. Another suggestion is to have an outside panel of independent experts weight each future.