Growth of distributed energy resources (DER) is increasing across the country due to new and more affordable technology and customer preferences. The potential for DERs to occupy a prominent space on the distribution systems of state-jurisdictional utilities inherently leads to state regulator involvement and has effects on state-jurisdictional resource adequacy planning. Simultaneously, increases in DERs can affect the transmission system and the wholesale markets, impacting key roles played by RTOs. This includes transmission planning, reliable system operation, and efficient market operation. In addition, a FERC Notice of Proposed Rulemaking on battery storage and DER aggregation (RM16-23) remains open for potential policy changes at the federal level.

It is important that OMS take a leadership role on the integration of DERs onto the bulk electric system and into wholesale markets. There is an overlapping jurisdictional framework regarding DERs — setting retail rate structures for DER, PURPA avoided cost determinations, and resource adequacy generally, are squarely within state jurisdiction; while the transmission system and wholesale markets are primarily under federal jurisdiction. The state regulators are uniquely situated to facilitate the exchange of information between MISO, the utilities, and the broader stakeholder community to develop policy on this issue.

Proper information sharing between the distribution and transmission systems concerning DER location and operation is essential to ensure that DERs are efficiently and reliably integrated into both systems. It is important that all parties better understand the risks and opportunities associated with DERs, leading to the establishment of appropriate policies to govern the integration of DERs in a way that respects potential jurisdictional issues. It is important to engage in this issue now so that OMS and the MISO region can proactively establish the optimal approach to DER integration, from the distribution-level to the transmission-level, to prevent any potential issues.
The following proposal is intended to capture the key actions to facilitate inclusive, OMS-led, policy development on DER in MISO.

**Key Considerations for Work Plan**
- Education and awareness – since DER deployment in MISO has not been regionally significant to date, it has not been at the forefront of discussions among OMS members or among MISO stakeholders, though more recently, the topic is beginning to be raised on an individual basis. The time is now to get ahead of DER in the MISO region.
- Transmission planning – ensure that the MISO transmission planning process considers growth in amount and location of DER in advance to avoid overbuilding or underbuilding of the transmission system.
- Reliability and resource adequacy – introduction of more DER can impact resource planning at the state level which, at sufficient amounts, can impact the operation of the transmission system and thus requires close coordination in transmission planning and operations to maintain reliability and ensure efficient deployment of infrastructure.
- Markets – market products in MISO were developed to accommodate existing resources in wholesale markets and utilization of the bulk electric system. Integration of significant amounts of DER will likely require new market products to enable non-discriminatory participation and properly monetize the value of DER.
- Pending federal policy development – FERC issued a Notice of Proposed Rulemaking in 2016 focused on how RTOs incorporate battery storage and DER aggregations into wholesale markets. OMS should be prepared for any potential federal policy proposal by proactively developing policy appropriate for the MISO region.

**Action Items**

1. Conduct internal OMS discussion
   a. Potentially develop position statement - possible finalization at July Board Meeting
   b. Lay groundwork for Board Members of basic information necessary to understand and address the issue
      i. Conduct series of education sessions geared toward staff and board members (webinars and/or presentations at board meetings)
         1) May need to include NERC reliability requirements
      ii. Individual state outreach as necessary/appropriate
      iii. DER Workshop (listed below)
   c. OMS Resource Work Group draft working definition of DER to establish which resources to concentrate on in this effort
   d. Collection of publicly available OMS state policies and reports
      i. Amount of deployment and future expectations
      ii. Policies that exist in each state
      iii. Central compilation of submitted data for AEG study
e. Potential state-by-state outreach to understand positions, potential opportunities, and concerns of jurisdictional utilities and other state stakeholders

2. Submit AC Hot Topic submission form - DONE
   a. Shape questions for September AC meeting

3. Communicate with stakeholders
   a. Inform why OMS is engaged in this issue and should lead the discussion
      i. Make statement at MISO Annual meeting in June asking that stakeholders contact us if they’re interested
      ii. Conduct discussions with stakeholders to understand positions
   b. Gauge willingness of utilities to participate and information gather
      i. Meet with Coalition of Utilities with Obligation to Serve (CUOS) – follow-up on discussion with IPL

4. Host OMS-led DER Workshop to convene relevant stakeholders
   a. Hold kickoff call(s) to further explain effort and gather information in preparation for workshop
   b. Put content together to convene stakeholders to solicit feedback on best practices, concerns, etc.

5. Communicate with MISO
   a. Clearly explain the OMS effort and why it’s important that regulators take the lead
   b. Gain understanding of information currently available and how it’s used
   c. Discuss possibility of whitepaper, identifying informational needs

6. Identify areas of DER Impact
   a. Transmission planning
      i. Ensure the appropriate accounting of DER in future transmission planning processes to avoid overbuild or underbuild of transmission
      ii. Address the implementation challenges of DER as Non-transmission Alternatives (NTAs)
   b. Reliability and Operations
      i. Ensure that appropriate DER amounts and locations are utilized to maintain reliability and ensure efficient grid operations
         1) Identify rules and standards that allow DER to participate in wholesale markets reliably.
         2) Ensure market rules and standards do not interfere with state jurisdiction and policies related to DERs that are not participating in wholesale markets.
   c. Market
      1. Impact on and utilization of market prices for DER economic and efficient use and deployment
         1) Creation, or modification, of market products
      ii. Awareness and evaluation of potential aggregations in proposed in FERC NOPR (RM16-23)
   d. Resource Adequacy
      1. Ensure DERs are appropriately accounted for in Module E
1) Load vs. supply side
2) Capacity ratings and performance data

7. Submit Issue Submission Form to MISO Steering Committee to propose appropriate MISO stakeholder process
   a. Participate in MISO stakeholder process to craft appropriate tariff language and other rules as appropriate to implement a plan for economic and efficient incorporation of DER in MISO
   b. Determine appropriate process, goals, and timing