Resource Availability and Need: 2020 Focus

Issue ID#: RASC009, RASC010, RASC011, RASC012

March, 2020
MISO Region’s Reliability Imperative

- Portfolio evolution and industry trends create a reliability imperative for change
- MISO believes that transitional and transformational enhancements must be made to ensure continued reliable and efficient operations
  - Policy & resource planning decisions are being made now (IRPs, retirements, investments)
  - MISO and the region must address future reliability now in order to meet your goals
  - Changes required now in planning, markets and operations
The resource portfolios of our members reflect these changes as well as the increasing diversity between member fleets...

These figures show utilities’ total energy generated by fuel type, in megawatt-hours. Current figures compiled by S&P Global Market Intelligence. 2030 projections compiled from IRPs, investor reports, and other sources.
… leading to regional portfolio evolution and operational challenges that create a reliability imperative
The reliability imperative must address MISO and member needs for Availability, Flexibility and Visibility

Reports and whitepapers frame need for change to address industry evolution

MISO Forward March 2019
RAN Whitepaper Dec. 2019
MISO Forward March 2020
MISO’s Resource Adequacy & Need program addresses these challenges through near and longer term enhancements

- **Identify Reliability Needs**
  - Develop analytic methods to define reliability criteria
  - Identify needed attributes in addition to peak hour MWs

- **Resource Planning Horizon**
  - Define planning timeframe (annual, seasonal, monthly)
  - Determine necessary auction reform
  - Improve accreditation

- **Operating Horizon**
  - Improve pricing for existing products
  - Develop necessary new processes, tools and products
The 2020 focus is on sub-annual planning, accreditation, and scarcity pricing to address planning and operational horizons

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<thead>
<tr>
<th>Problem Statement</th>
<th>Identify Reliability Needs</th>
<th>Planning Horizon</th>
<th>Operating Horizon</th>
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<tbody>
<tr>
<td></td>
<td>Annual LOLE does not address 24/7 risk in transforming grid</td>
<td>Stakeholders require better information to inform planning and investment decisions</td>
<td>Market prices must better reflect underlying system conditions</td>
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<tr>
<td>2020 Focus</td>
<td>Define system reliability needs and capabilities</td>
<td>Sub-annual planning + Planning Resource Auction reform</td>
<td>Scarcity and emergency pricing</td>
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