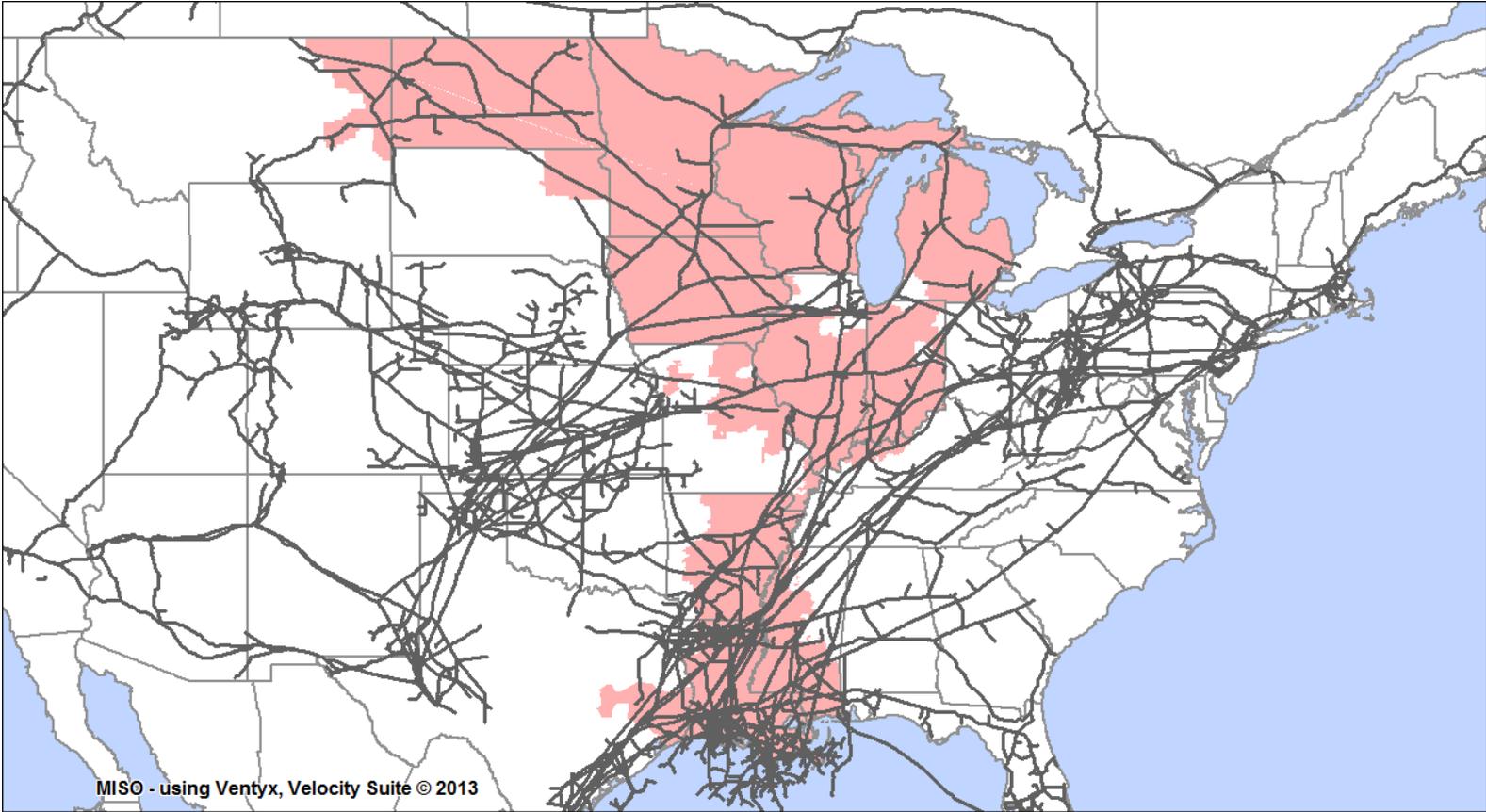


# MISO Gas-Electric Coordination Update

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October 17, 2013

# Major Interstate Pipelines in the MISO Footprint



# System Operations Update

- No significant operating events occurred in MISO during the summer of 2013.
- Summer 2013 characterized by below average to average temperatures with one moderate heat wave during the week of July 15<sup>th</sup>

# System Operations Update

- Above normal summer temperatures occurred across the footprint throughout the week of July 15<sup>th</sup>.
- Peak loads increased throughout the week resulting in a 2013 instantaneous peak of 95,777 MW set on July 18<sup>th</sup>.

# System Operations Update

- All time peak set on July 23<sup>rd</sup>, 2012 of 98,576 MW.
- MISO declared Hot Weather Alerts and Conservative Operations on multiple days because of the tight operating conditions.

# System Operations Update

- On July 17<sup>th</sup>, MISO declared a Maximum Generation Alert when projected peak hour capacity surplus was expected to be less than 1% of requirements.

# Phase III Gas Study: MISO Midwest Takeaways

- There is a clear trend of decreasing sub-regional constraints and increasing interconnectivity in the MISO Midwest footprint, with isolated exceptions.

# Phase III Gas Study: MISO Midwest Takeaways

- Shifting supply and demand fundamentals outside and inside the Midwest Market will increasingly position the region as a destination rather than a waypoint for gas en route to other markets.

# Phase III Gas Study: MISO Midwest Takeaways

- Increased retention of supply passing through the region, greater diversity of supply options and growth in Bakken production will provide end users with opportunities to reassess asset portfolios.

# Phase III Gas Study: MISO Midwest Takeaways

- Strong supply basins in the Northeastern US will continue to impact Midwestern flow patterns and increasingly help serve Midwestern demand; however, infrastructure expansion is still needed to move gas into the region and to address area-specific constraints.

# Phase III Gas Study: MISO South Takeaways

- End users in the MISO South Region will continue to have access to numerous supply sources due to an exceptionally well-connected pipeline network.

# Forward Resource Adequacy

- While the gas delivery system is becoming more robust, the potential for a 3-7 GW resource shortfall in MISO Midwest in 2016/2017 still exists, as uncertainty surrounding commitments to build capacity persists.

# OMS Survey

- MISO is working with the Organization of MISO States to gauge generation resources available to the MISO footprint in the 10-year planning horizon by surveying Load Serving Entities (LSEs) on future load expectations, resources to serve this load, and potential new resources and EE/DR programs.

# Coordination Field Trial

- MISO kicked off a 6-month coordination field trial with ANR Pipeline Company this October.
- The field trial aims to further coordination between industries, enhance operator situational awareness and improve reliability.

# Coordination Field Trial

- Will include a joint monthly review of pipeline outages and potential service impacts, as well as short-term notice of unplanned pipeline events and communication during Emergency Conditions, when possible.

# Coordination Field Trial

- At the completion of the field trial, MISO will work with stakeholders and the gas industry to review outcomes.

# Additional Gas-Electric Initiatives

**Initiative:** Stakeholder Task Force Issue Summary Paper on Misalignment of the Gas/Electric Days

**Status:** Completed Aug. 2013;  
recommendation to MISO Steering Committee to survey market participants on moving up MISO Day Ahead market schedule

# Additional Gas-Electric Initiatives

**Initiative:** Stakeholder Task Force Issue Summary Paper on Resource Adequacy

**Status:** Will be completed Oct. 2013; examines GADS reporting, seasonal aspects of resource adequacy, and LOLE methodology

# Additional Gas-Electric Initiatives

**Initiative:** Loss of Load Expectation Study (LOLE) to capture fuel risk

**Status:** In progress; study completion targeted for Q1 2014

# Additional Gas-Electric Initiatives

**Initiative:** Stakeholder Task Force Issue Summary Paper on Coordinated Operations

**Status:** In progress; examines opportunities for info/data sharing; recommends trial communication exchange with NG pipelines

# Additional Gas-Electric Initiatives

**Initiatives:** Develop database of NG generators and associated infrastructure in the MISO footprint; develop web platform to consolidate critical pipeline notices impacting MISO, and pipeline overlay overhead display for MISO Ops

**Status:** Being investigated / in progress