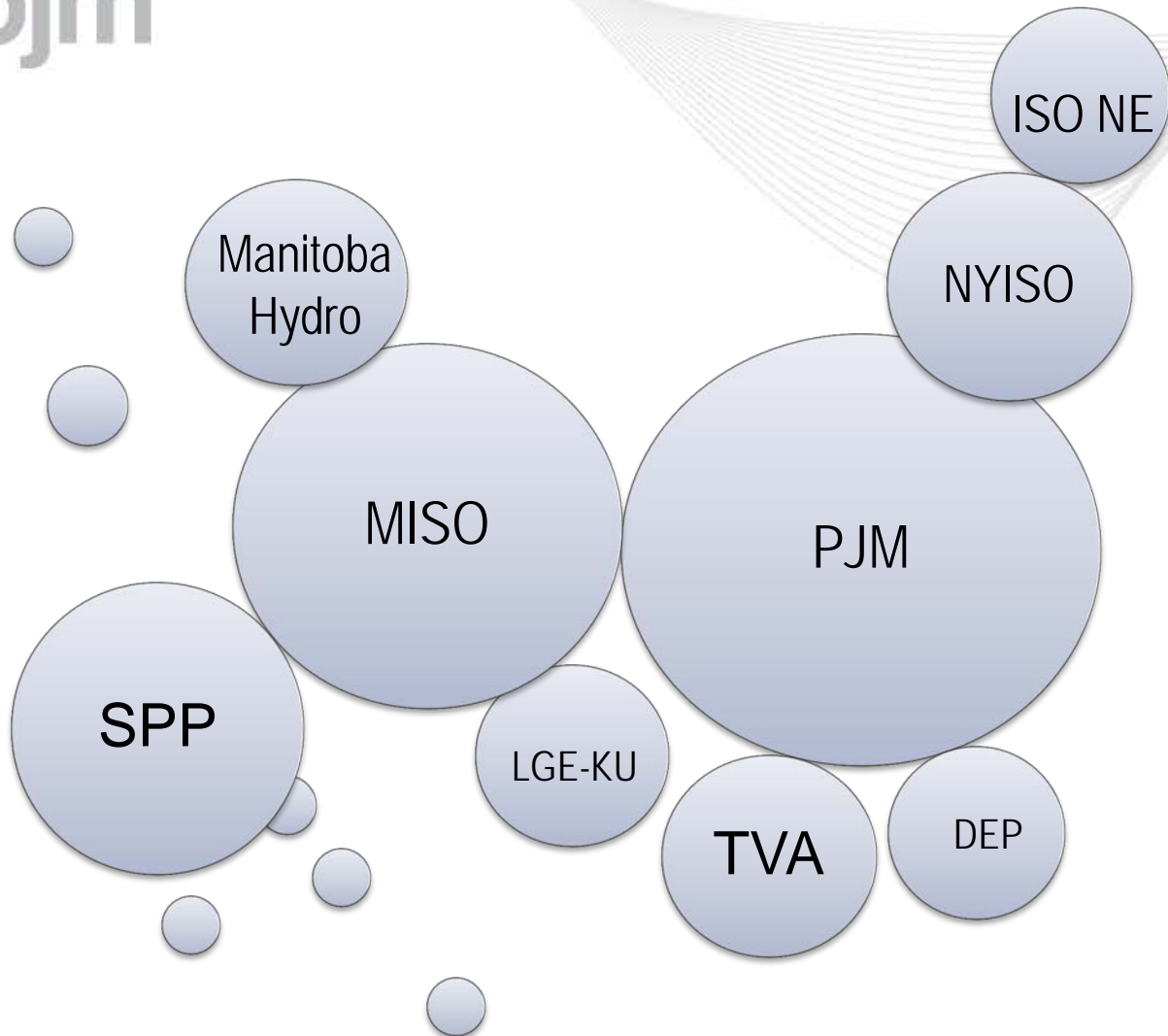




Interregional Coordination Update

Tim Horgler
Director, Energy Market Operations
Members Committee
May 16, 2018



PJM has multiple interregional agreements and groups focused on the following key areas

- **Markets**
- **Planning**
- **Reliability/Operations**

MISO

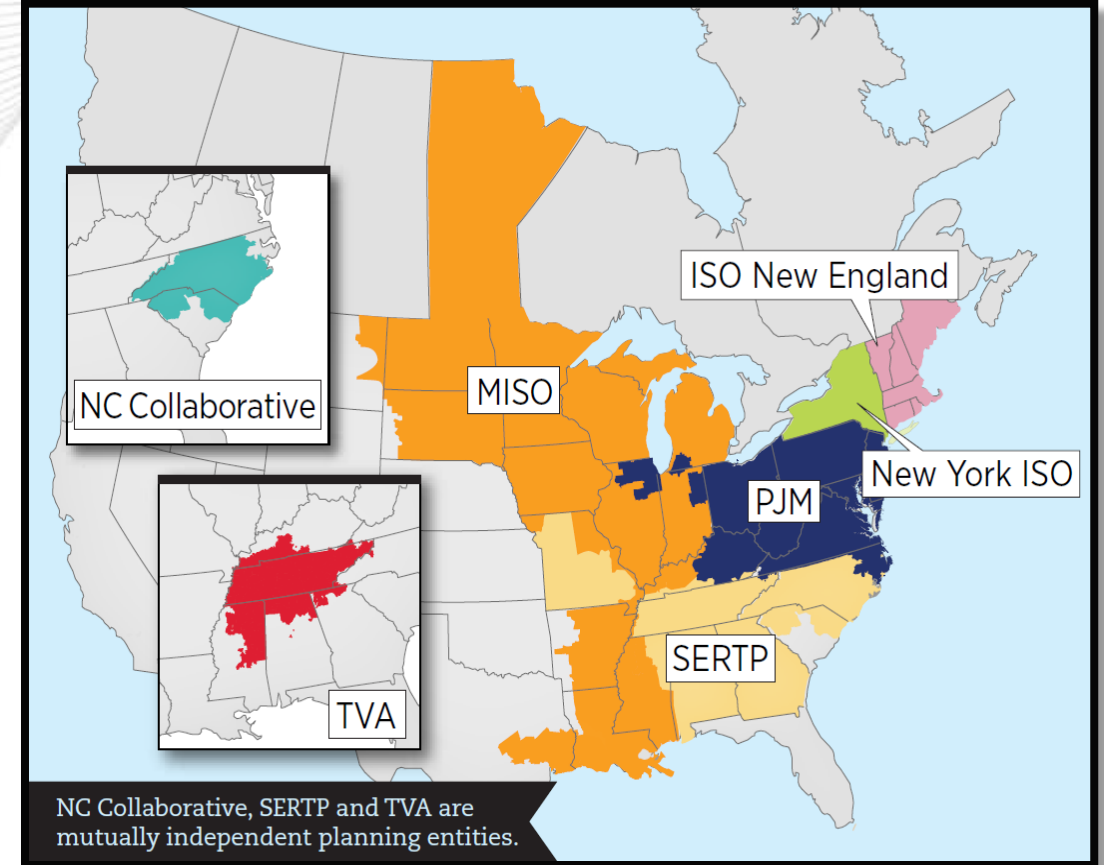
- PJM-MISO Joint Operating Agreement

NYISO & ISO NE

- PJM-NYISO Joint Operating Agreement
- Planning Northeastern ISO/RTO Planning Coordination Protocol

Non-Market Entities

- Markets Congestion Management Agreement (MISO, SPP, TVA, Manitoba Hydro, LGE-KU)
- Joint Reliability Coordination Agreement (TVA)
- PJM-Duke Energy Progress Joint Operating Agreement
- PJM-VACAR South Reliability Coordination Agreement



Firm Flow Entitlement Freeze Date: Congestion Management Process Working Group (CMPWG) is enhancing the calculation of Firm Flow Entitlements (FFE) on each other's system.

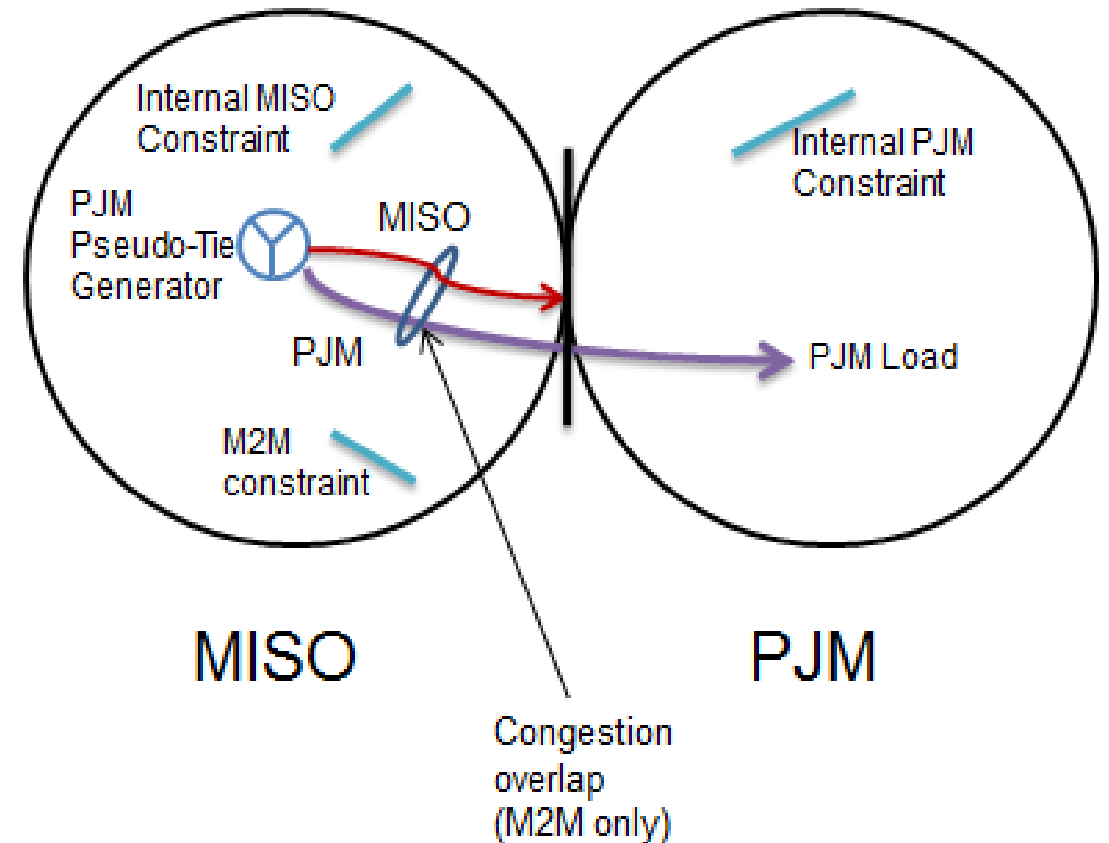
- FFE represents the historical entitled level of flow on a coordinated transmission facility (flowgate).
- Enhancements include:
 - Updating FFEs to account for new and retired resources (June 1, 2018)
 - Alignment with planning construct (June 1, 2019, pending agreement)



External Capacity Resource “Double Counting” of Congestion

FERC complaints from pseudo-tie owners have been made about double counting of congestion for the delivery of energy from the pseudo-tie unit to the PJM-MISO interface.

- PJM and MISO developed a collaborative solution that includes Day-Ahead Market adjustments to remove congestion impacts, RTO-RTO M2M settlement adjustments, deviations credits/charges, and hedging product options.
- Implementation pending FERC approvals



External Capacity

PJM and NYISO continue discussions on ways to accommodate potential PJM capacity resources located in NYISO.

Value of Tie Facilities

PJM and NYISO are initiating a process to evaluate the regional benefit of PJM-NYISO tie facilities for resilience, congestion and other factors.

PJM-NYISO Joint Operating Agreement (JOA)

PJM and NYISO are coordinating a timeline for JOA-related updates for the remainder of 2018. This includes a general review of the JOA along with updates to the M2M processes (primary focus on FFE and PAR coordination), emergency energy transfers, data exchange and Transmission Planning coordination.



PJM-TVA JRCA Updates: PJM and TVA are performing a review of the Joint Reliability Coordination Agreement (JRCA), which includes a general review of the JRCA, updates to data exchange requirements in accordance with NERC Standards, inclusion of a tie line list (appendix), and updates to the Planning section. PJM and TVA are also including LGE-KU in the JRCA. LGE-KU falls under the TVA Reliability Coordinator footprint and is a Congestion Management Process (CMP) member.



PJM-DEP JOA Updates: PJM and DEP have submitted JOA updates to the FERC for approval. The primary focus of these changes is five-minute settlements and tie line updates.

