Joint and Common Market

# CONSTRAINT RELAXATION – JOA CHANGES

**Joe Rushing**
**Interregional Market Ops**

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# Overview

- ## Purpose
  - ➤ Provide update on Constraint Relaxation on MISO/PJM M2M flowgates

- ## Key Takeaways
  - ➤ MISO/PJM pursuing turning off constraint relaxation on M2M flowgates
  - ➤ Constraint Relaxation was deactivated for MISO internal constraints on Feb 1, 2012
  - ➤ Constraint Relaxation was deactivated by PJM for internal constraints in Feb 2019
  - ➤ JOA language changes in Attachment

# Background of Constraint Relaxation

- Until Feb 2019, PJM practice was to use constraint relaxation whereby transmission constraint penalty factors do not directly set the constraint shadow price for a transmission constraint which cannot be adequately controlled.

- In Feb 2019, PJM removed transmission constraint relaxation on internal Constraints and allowed the transmission constraint penalty factor to set the shadow price of a transmission constraint in the market clearing software when the constraint cannot be adequately controlled in the market clearing software.
  - MISO M2M exception to allow constraint relaxation logic on a individual constraint basis

# Background of Constraint Relaxation

- Prior to 2/1/2012 MISO used constraint relaxation for all constraints, this practice often:
  - produced inefficient shadow prices, that distorted the associated LMPs, and
  - understated the reliability cost of violating a constraint
- On 2/1/2012, discontinued the use of constraint relaxation on constraints except for Market-to-Market (M2M) flowgates and started to use a single step Marginal Value Limits (MVLs).
  - The default MVL depends on the type of constraint and the voltage level of the monitored elements of that constraint
  - Single step MVLs caused increase price volatility
- In October 2013, MISO implemented a 2-Step Transmission Constraint Demand Curve (TCDC) detailed in Schedule 28 A

# Next Steps

- File the JOA changes to FERC in Dec 2019 (Appendix)

- Target for deactivating Constraint Relaxation on MISO/PJM M2M flowgates : 2020 - Q1

# Contacts

Please send your comments to:

- Joe Rushing [joseph.rushing@pjm.com](mailto:joseph.rushing@pjm.com)

- Andy Witmeier [awitmeier@misoenergy.org](mailto:awitmeier@misoenergy.org)