

PJM Interface Pricing Methodology



Interface Pricing Methods

Section 2.6A of Attachment K of the OATT

- **Tie-Line Weighting (ex. NYISO)**
 - Uses external pnodes on the sending end of tie-lines
 - Weights price based on tie-line flows
- **Marginal Cost Proxy (ex. CPLEIMP/EXP)**
 - Has lower Tier methods such as High/Low
 - Determines the marginal unit(s) in the external area
 - Averages LMPs at marginal pnodes in external area
 - May also result in High/Low under some conditions
- **Other methods (ex. Geographic, External Congestion Analysis)**
- Interface prices use external generator pnodes **ONLY**

Tie-Line Weighting

- Uses a fixed set of pnodes as tie lines between areas that do not typically change
 - NYISO (DUNKIRK 20%, ROSETON 80%)
- Permits for changes in definition and weighting up to every 5-minutes
 - 5-minute changes to either occur infrequently
 - PJM historically has not provided notification of the exact weighting and definition changes
- PJM currently posts the bus definitions but not weightings

Marginal Cost Proxy Method (MCP)

- Used for interfaces between PJM and non-market areas
 - Overlap SOUTHIMP/EXP region to provide more locational prices where applicable
 - CPLEIMP/EXP, DUKIMP/EXP, NCMPAIMP/EXP
- Most flexible interface pricing method
 - Pnodes used in the determination of the interface price can and likely do change every 5 minutes
 - Weightings used for included pnodes can and likely do change every 5 minutes
- PJM posts a list of all pnodes that may be used to determine the interface price
- PJM does not provide notification each time the pnode composition and/or weighting of the interface price changes.

Geographic Method

- A set of pnodes that *geographically* represent an interface
 - SOUTHIMP and SOUTHEXP
 - Permits for up to 5 minute changes in pnode definition and weighting but typically does not utilize this.
 - PJM historically has not provided notification of the exact weighting and definition changes.
 - Very infrequent - Network model changes

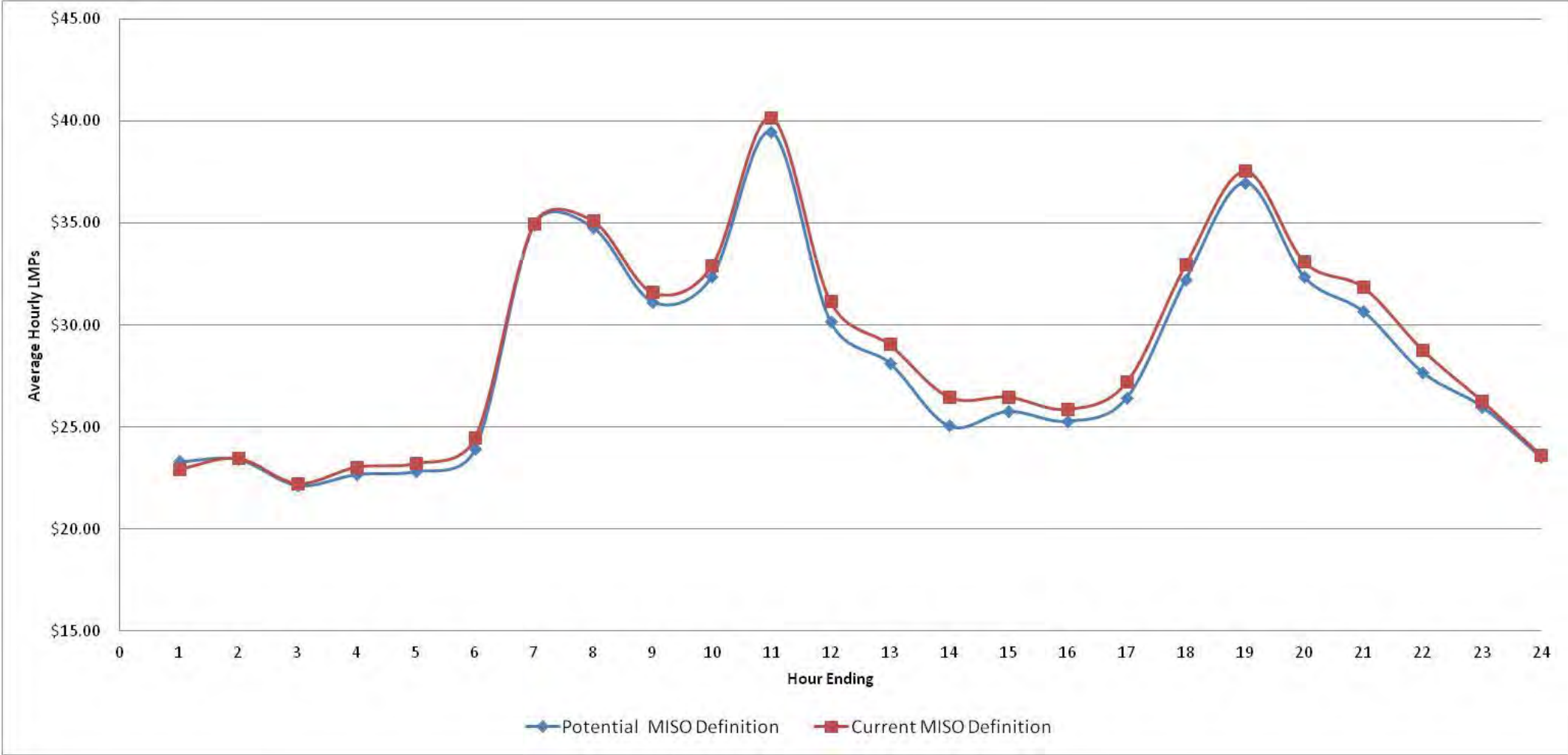
External Congestion Analysis

- Perform historic analysis on external area congestion and select impactful pnodes to define the interface
 - MISO Interface
 - PJM does not envision the definition and/or weighting changing every 5-minutes but this flexibility would be analogous to other approved interface pricing methods.
- Accurately represents M2M congestion

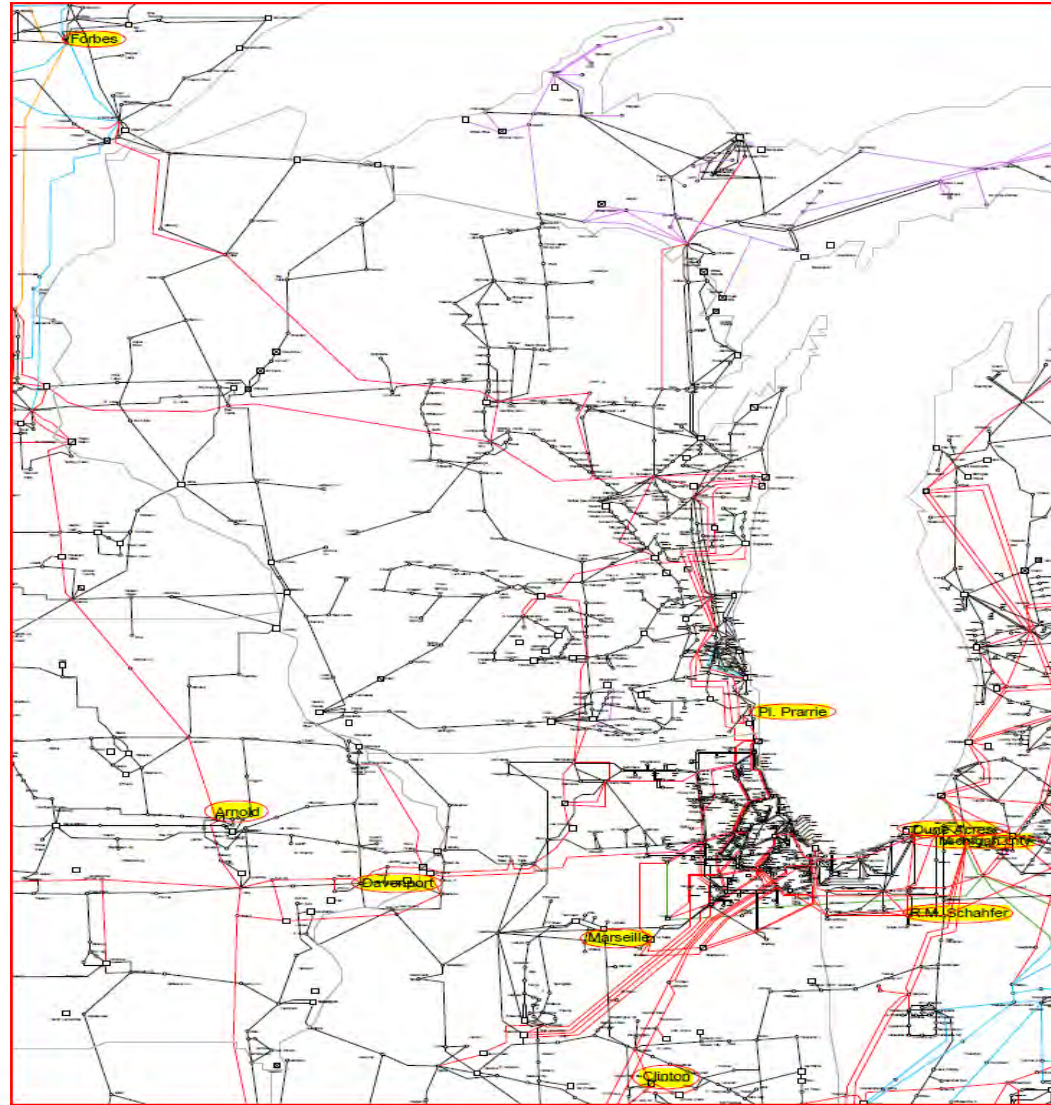
MISO Interface Analysis

- Calculated total number of congested hours on relevant flowgates for prior year
 - Considered major transmission upgrades that could impact future congestion
 - Identified external generator pnodes on sending end of top 15-20 congested facilities
 - Performed “what-if” analysis on the MISO Interface under various configurations to determine pricing impacts

MISO Interface Analysis



MISO Interface Graphic



NYISO Interface Graphic

