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 (MCPP)

- 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

Average Hourly LMPs

Hour Ending

Potential MISO Definition
Current MISO Definition