Up-to Congestion Credit Requirements

Credit Subcommittee
February 7, 2013
Overview

• General credit issues
• Likely proposal components
  – Bid screen
  – Minimum financial requirements
• Initial analysis of three proposals
• Next Steps
• Considerations included in credit screen algorithm
  – Peak/Off-peak
  – Seasonality
  – Historical data period
  – Historical measurement (mean, etc.)
  – Balance between risk and credit requirements
General Credit Issues

• Considerations in addition to credit screen algorithm
  – Minimum participation requirement
  – Method of accounting for concurrent multiple days of exposure
  – Non-algorithmic minimum requirement per MWH bid
  – Credit bucket
• Minimum participation requirements
  – PJM initial recommendation $500,000 minimum
  – Recent experience has demonstrated that extreme volatility does exist
  – Congestion product, like FTRs
Up-to Analysis

• Credit requirements calculated for three proposals
  – A: FTR-style: DA price - adjusted prior two-month RT path congestion
  – B: Virtual bid style: the smaller current virtual bid calculation for the two nodes in the path
  – C: Virtual path style: using historical downside volatility
    • Current iteration uses mean historical spread;
    • PJM intends to run additional scenarios at other percentiles
• Analysis completed to date is representative only, since proposals may be modified
  – Additional proposal scenarios may be calculated in order to present alternatives with potentially better balance of credit coverage / credit excess
• Analysis focused on daily shortfalls and excesses for the period of April 2011
  – Actual experienced path losses and profits were included in daily totals when measuring credit excesses and shortfalls
  – Credit shortfalls and excesses were measured against half of the credit requirement since credit needs to cover at least two days of activity
Activity varies significantly between active members.
Average Daily Credit Excess (Shortfall)

On average daily basis over a month, all proposals appear to require excess credit for virtually all members.

Not shown include:
- Prop B Bid $2.8M and $1.0M,
- And Prop B Cleared $1.4M and 537K
However, individual days can still have significant exposure

Not shown include:
Prop B Bid $1.9M and $787K,
And Prop B Cleared $800K and $364K
Total Exposure of Days with Credit Shortfalls

Exposure is concentrated in a few members
Underlying exposures can greatly exceed observed daily portfolio aggregates.
Proposal C will change with subsequent scenarios that better reduce credit exposure.
Next Steps

- Ongoing support for proposal B?
- Additional proposal C scenarios above the mean historical volatility
- March 7 Credit Subcommittee conference call
  - Review additional scenarios
- Subsequent
  - Update to Market Implementation Committee
  - Credit Subcommittee poll on remaining proposals