Up-to Congestion Credit Requirements

Credit Subcommittee
April 18, 2013
Overview

- Alternatives Matrix as of April 18, 2013
- Analyses of Alternatives
  - April 2011, July 2012 and January 2013
  - January through October 2012
- Comparison of Alternatives
- Final Revisions to Alternatives Matrix
- Credit Subcommittee Polling
- Next Steps
Alternatives Matrix
## Alternatives Matrix as of April 18, 2013

### Up-to Congestion Credit Requirement - Alternatives as of April 18, 2013

<table>
<thead>
<tr>
<th>Component</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
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Alternative A

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: $70^{th}$ Percentile on Prevailing Flow Paths; $80^{th}$ Percentile on Counterflow Paths
- Cleared Portfolio: $70^{th}$ Percentile on Prevailing Flow Paths; $70^{th}$ Percentile plus 6x Adder on Counterflow Paths
Alternative A – Bid Screen Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- April 2011 = $4,215,289 and ($26,103)
- July 2012 = $8,006,037 and ($232,640)
- January 2012 thru October 2012 Large Losses = $1,855,641 and ($835,839)
- January 2013 = $6,914,442 and ($2,535,721)
Alternative A – Cleared Portfolio Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- January 2013 = $3,491,754 and ($235,117)
- April 2011 = $1,601,566 and ($600,920)
- July 2012 = $3,914,439 and ($697,108)
- January 2012 thru October 2012 Large Losses = $821,456 and ($2,067,182)
Alternative B

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: Mean * 0.9 on Prevailing Flow Paths
  Mean * 1.1 on Counterflow Paths
- Cleared Portfolio: Mean * 0.9 on Prevailing Flow Paths
  Mean * 1.1 on Counterflow Paths
Alternative B – Bid Screen Test Periods

**Sum of Members’ Average Daily Excess Collateral Requirement**

- **April 2011**: $3,021,966 and ($296,839)
- **July 2012**: $6,316,674 and ($397,776)
- **January 2012 thru October 2012 Large Losses**: $1,293,132 and ($1,788,342)
- **January 2013**: $5,549,672 and ($2,889,039)
Alternative B – Cleared Portfolio Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- April 2011 = $319,745 and \(\$1,377,325\)
- July 2012 = $698,787 and \(\$1,810,553\)
- January 2012 thru October
  - 2012 Large Losses = \(\$63,264\) and \(\$3,839,538\)
- January 2013 = $838,097 and \(\$4,740,701\)
Alternative C

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: 80th Percentile on Prevailing Flow Paths; 80th Percentile on Counterflow Paths
- Cleared Portfolio: 80th Percentile on Prevailing Flow Paths; 80th Percentile on Counterflow Paths
Alternative C – Bid Screen Test Periods

Sum of Members’ Average Daily Excess Collateral Requirement

- April 2011 = $4,342,716 and ($24,931)
- July 2012 = $8,047,925 and ($229,176)
- January 2012 thru October 2012 Large Losses = $1,946,388 and ($655,444)
- January 2013 = $7,166,613 and ($2,502,891)
Alternative C – Cleared Portfolio Test Periods

Sum of Members’ Average Daily Excess Collateral Requirement

- April 2011 = $768,461 and $(784,621)
- July 2012 = $1,168,020 and $(1,317,298)
- January 2012 thru October 2012 Large Losses = $166,877 and $(2,921,131)
- January 2013 = $1,285,608 and $(4,349,104)
Alternative D

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: 70th Percentile on Prevailing Flow Paths; 90th Percentile on Counterflow Paths
- Cleared Portfolio: 70th Percentile on Prevailing Flow Paths; 90th Percentile on Counterflow Paths
Alternative D – Bid Screen Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- April 2011 = $4,921,035 and ($20,616)
- July 2012 = $9,006,312 and ($158,845)
- January 2012 thru October 2012 Large Losses = $2,349,419 and ($492,105)
- January 2013 = $8,170,105 and ($2,406,936)
Alternative D – Cleared Portfolio Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- April 2011 = $1,065,565 and ($594,351)
- July 2012 = $1,572,070 and ($1,012,840)
- January 2012 thru October 2012 Large Losses = $259,932 and ($2,381,684)
- January 2013 = $1,639,425 and ($4,022,880)
Alternative E

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: 95th Percentile on Prevailing Flow Paths; 95th Percentile on Counterflow Paths
- Cleared Portfolio: 95th Percentile on Prevailing Flow Paths; 95th Percentile on Counterflow Paths
Alternative E – Bid Screen Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

- April 2011 = $7,603,290 and ($1,226)
- July 2012 = $13,954,926 and ($41,301)
- January 2012 thru October 2012 Large Losses = $4,096,462 and ($281,978)
- January 2013 = $12,418,278 and ($2,111,330)
Alternative E – Cleared Portfolio Test Periods

Sum of Members' Average Daily Excess Collateral Requirement

January 2012 thru October 2012 Large Losses = $758,696 and ($914,774)

April 2011 = $2,349,774 and ($57,183)

July 2012 = $3,268,641 and ($462,961)

January 2013 = $2,993,647 and ($3,214,196)
Alternative F

- Credit Requirements based on Differences Between Bid Price and Rolling Two-Month Historical Real-Time Costs by Path
- Bid Screen: 70th Percentile on Prevailing Flow Paths; 80th Percentile on Counterflow Paths
- Cleared Portfolio: 70th Percentile on Prevailing Flow Paths; 95th Percentile on Counterflow Paths
Alternative F – Bid Screen Test Periods

Sum of Members’ Average Daily Excess Collateral Requirement

- April 2011 = $4,215,289 and ($26,103)
- July 2012 = $8,006,037 and ($232,640)
- January 2012 thru October 2012 Large Losses = $1,855,641 and ($835,839)
- January 2013 = $6,914,442 and ($2,535,721)
Alternative F – Cleared Portfolio Test Periods

Sum of Members’ Average Daily Excess Collateral Requirement

<table>
<thead>
<tr>
<th>Sum of Each Member's Largest Shortfall</th>
</tr>
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<tbody>
<tr>
<td>($5,000,000)</td>
</tr>
<tr>
<td>($4,000,000)</td>
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<tr>
<td>($3,000,000)</td>
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<tr>
<td>($2,000,000)</td>
</tr>
<tr>
<td>($1,000,000)</td>
</tr>
<tr>
<td>$0</td>
</tr>
</tbody>
</table>

- **April 2011**: $1,881,356 and ($230,230)
- **July 2012**: $2,521,658 and ($611,725)
- **January 2012 thru October 2012**: Large Losses = $568,257 and ($1,321,495)
- **January 2013**: $2,478,945 and ($3,321,969)
Bid Screen Credit Requirements Comparison
Bid Screen Comparisons – General Observations

• Alternatives A and F utilize the same bid screen construct at the same percentiles, so their points are identical for all bid test periods analyzed

• For all bid test periods analyzed, Alternative E would have resulted in the lowest remaining exposure and highest credit requirements

• For all bid test periods analyzed, Alternative B would have resulted in the highest remaining exposure and the lowest credit requirements
Alternatives Bid Screen Comparison – April 2011

Sum of Members’ Average Daily Excess Collateral Requirement

- Alt. B = $3,021,966 and ($296,839)
- Alt. C = $4,342,716 and ($24,931)
- Alt. A & F = $4,215,289 and ($26,103)
- Alt. D = $4,921,035 and ($20,616)
- Alt. E = $7,603,290 and ($1,226)
Alternatives Bid Screen Comparison – July 2012

Sum of Members’ Average Daily Excess Collateral Requirement

- Alt. B = $6,316,674 and ($397,776)
- Alt. A & F = $8,006,037 and ($232,640)
- Alt. C = $8,047,925 and ($229,176)
- Alt. D = $9,006,312 and ($158,845)

- Alt. E = $13,954,926 and ($41,301)
Alternatives Bid Screen Comparison – Large Losses January 2012 Through October 31, 2012

Sum of Members' Average Daily Excess Collateral Requirement

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Alt. A & F = $1,855,641 and ($835,839)

Alt. B = $1,293,132 and ($1,788,342)

Alt. C = $1,946,388 and ($655,444)

Alt. D = $2,349,419 and ($492,105)

Alt. E = $4,096,482 and ($281,978)
Cleared Portfolio Credit Requirements Comparison
• For the majority of the cleared portfolio test periods analyzed, Alternatives A and E would have resulted in the lowest remaining exposure and the highest credit requirements.

• For all cleared portfolio test periods analyzed, Alternative B would have resulted in the highest remaining exposure and the lowest credit requirements.
Alternatives Cleared Portfolio Comparison – April 2011

Sum of Members’ Average Daily Excess Collateral Requirement

- Alt. C = $768,461 and ($784,621)
- Alt. B = $319,745 and ($1,377,325)
- Alt. D = $1,065,565 and ($594,351)
- Alt. A = $1,601,566 and ($600,920)
- Alt. E = $2,349,774 and ($57,183)
- Alt. F = $1,881,356 and ($230,230)
Alternatives Cleared Portfolio Comparison – January 2013

Sum of Members' Average Daily Excess Collateral Requirement

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- **Alt. B**: $838,097 and ($4,740,701)
- **Alt. C**: $1,285,608 and ($4,349,104)
- **Alt. D**: $1,639,425 and ($4,022,880)
- **Alt. E**: $2,993,647 and ($3,214,196)
- **Alt. F**: $2,478,945 and ($3,321,969)
Alternatives Cleared Portfolio Comparison – Large Losses January 2012 Through October 31, 2012

Sum of Members' Average Daily Excess Collateral Requirement

- Alt F = $568,257 and ($1,321,495)
- Alt. E = $758,698 and ($914,774)
- Alt. A = $821,456 and ($2,067,182)
- Alt. D = $259,932 and ($2,381,684)
- Alt. C = $166,877 and ($2,921,131)
- Alt. B = $63,264 and ($3,639,538)
## Alternatives Matrix as of April 18, 2013

### Up-to Congestion Credit Requirement - Alternatives as of April 18, 2013

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Credit Subcommittee Polling
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• Survey Open April 23rd through April 26th
• Questions:
  – Support for each Alternative
  – Ranking of Preference Amongst Alternatives

• Results Review:
  – April 30th Credit Subcommittee Conference Call
  – May 8th Market Implementation Committee Meeting
Next Steps

- **Credit Subcommittee**
  - April 23-26 – Survey Monkey polling of alternatives
  - April 30 – Results of polling presented
- **Market Implementation Committee**: May 8 vote
- **Markets and Reliability Committee**: April 25 first read, May 30 vote
- **Members Committee**: June 27 vote
- **FERC**: Filing as soon as possible after Members Committee endorsement
- **Target implementation**: ~ 60 days following FERC filing *(no need to be on first day of a calendar month)*