

Adjustments to Energy Market Credit Requirements

Management Committee

Sheri Prevratil, Manager Corporate Credit September 30, 2009 Agenda 4



Background

 The current credit requirements for purchases of Energy and Ancillary Services are based on historic purchase volumes and historic energy prices.

 Market Participants have expressed concerns that this methodology does not adjust for fluctuations in energy prices from year to year.



Current Energy Market Credit Requirement

- The Energy and Ancillary Services credit requirement is the higher of:
 - Basis Amount for Energy and Ancillary Services x 50
 Days In Basis Month

OR

Total Charges Incurred for Energy and Ancillary
 Services for the previous 10 Days

x 50

10

 Basis Amount is defined as "the greatest amount owed to the ISO for purchases of Energy and Ancillary Services in any month during the Prior Equivalent Capability Period..."



Proposed Adjustment to Credit Policy

- The NYISO is proposing to adjust the existing formula for calculating the Energy and Ancillary Services credit requirement to provide for fluctuations in energy prices from year to year based on projected fluctuations in gas prices.
- Gas prices and energy prices tend to be highly correlated.
- Under the revised credit policy, the NYISO would calculate a Price Adjustment approximately two weeks before the start of each Capability Period for each month in the Prior Equivalent Capability Period and updates would be performed monthly.



Proposed Adjustment to Credit Policy

- The "Price Adjustment" would equal the futures Henry Hub spot gas price for the like month in the upcoming Capability Period divided by the average Henry Hub spot gas price in the like month in the Prior Equivalent Capability Period.
- The NYISO would then multiply the Price Adjustment by the amount owed the ISO for purchases of Energy and Ancillary Services in the like month in the Prior Equivalent Capability Period.



Proposed Adjustment to Credit Policy

- Under the revised credit policy, the Energy and Ancillary Services credit requirement would continue to equal the higher of:
 - Basis Amount for Energy and Ancillary Services x 50
 Days In Basis Month

OR

Total Charges Incurred for Energy and Ancillary
 Services for the previous 10 Days
 10

 However, Basis Amount would be defined as "the greatest amount owed to the ISO for purchases of Energy and Ancillary Services, <u>after applying the</u> <u>Price Adjustment</u>, in any month during the Prior Equivalent Capability Period..."



Example 1 – Assume 2008/2009 Gas Prices

- The NYISO would calculate the Energy and Ancillary Services credit requirement under the revised credit policy as follows:
 - Determine the Price Adjustment

| Month | 2008 Average Henry Hub Spot Gas Price (\$/Million BTU) | 2009 Henry Hub Futures Gas Price (\$/Million BTU) | Price Adjustment* |
|-----------|--|---|----------------------|
| May | 11.26 | 3.69 | 0.33 |
| June | 12.69 | 3.83 | 0.30 |
| July | 11.06 | 3.99 | 0.36 |
| August | 8.25 | 4.11 | 0.50 |
| September | 7.67 | 4.18 | 0.55 |
| October | 6.73 | 4.31 | 0.64 |

| Month | Amount Owed in 2008 for Energy and Ancillary Services | Price Adjustment* | Adjusted Energy and Ancillary Services Amount |
|-----------|---|-------------------|---|
| May | 2,000,000 | 0.33 | 655,950 |
| June | 4,600,000 | 0.30 | 1,387,612 |
| July | 4,500,000 | 0.36 | 1,623,418 |
| August | 2,400,000 | 0.50 | 1,196,218 |
| September | 2,050,000 | 0.55 | 1,118,279 |
| October | 1,400,000 | 0.64 | 896,999 |

^{*} Due to rounding conventions, the price adjustment figure shown does not match exactly the actual figure used in the calculation.



Example 1 (continued)

- Determine highest month based on adjusted Energy and Ancillary Services amount.
 - July 2008 \$1,623,418
 - Note: Credit requirement under today's rules would use June 2008.
- Determine credit requirement for current capability period using adjusted Energy and Ancillary Services amount.
 - (\$1,623,418/31) * 50 = \$2,618,416
 - Note: The credit requirement under today's rules would be \$7,666,667 [\$4,600,000/30 * 50], however the 10-day run rate would capture any increases in load and/or price under the proposed rules as well.



Example 2 – Assume 2007/2008 Gas Prices

- The NYISO would calculate the Energy and Ancillary Services credit requirement under the revised credit policy as follows:
 - Determine the Price Adjustment

| Month | 2007 Average Henry Hub Spot Gas Price (\$/Million BTU) | 2008 Henry Hub Futures Gas Price (\$/Million BTU) | Price Adjustment* |
|-----------|---|---|----------------------|
| May | 7.63 | 10.21 | 1.34 |
| June | 7.36 | 10.30 | 1.40 |
| July | 6.21 | 10.40 | 1.67 |
| August | 6.23 | 10.46 | 1.68 |
| September | 6.08 | 10.47 | 1.72 |
| October | 6.80 | 10.52 | 1.55 |

| Month | Amount Owed in 2007 for Energy and Ancillary Services | Price Adjustment* | Energy and Ancillary Services Amount |
|-----------|--|-------------------|---|
| May | 2,000,000 | 1.34 | 2,674,967 |
| June | 4,600,000 | 1.40 | 6,434,375 |
| July | 4,500,000 | 1.67 | 7,534,058 |
| August | 2,400,000 | 1.68 | 4,027,608 |
| September | 2,050,000 | 1.72 | 3,530,855 |
| October | 1,400,000 | 1.55 | 2,165,882 |

^{*} Due to rounding conventions, the price adjustment figure shown does not match exactly the actual figure used in the calculation.



Example 2 (continued)

- Determine highest month based on adjusted Energy and Ancillary Services amount.
 - July 2007 \$7,534,058
 - Note: Credit requirement under today's rules would use June 2007.
- Determine credit requirement for current capability period using adjusted Energy and Ancillary Services amount.
 - (\$7,534,058/31) * 50 = \$12,151,706
 - Note: While the credit requirement under today's rules would be \$7,666,667 [\$4,600,000/30 * 50], in most cases, during 2008 Market Participants were required to post significantly more due to the 10-day run rate.



Example 3 - Hurricane Katrina

- The NYISO would calculate the Energy and Ancillary Services credit requirement under the revised credit policy each month as follows:
 - Determine the Price Adjustment

Initial Adjustment

| nida Adjustile it | | | |
|-------------------|---|--|----------------------|
| Month | 2004 Average Henry Hub Spot Gas Price (\$/Million BTU) | 2005 Henry Hub Futures Gas Price (\$/Million BTU) | Price Adjustment* |
| May | 6.29 | 7.00 | 1.11 |
| June | 6.30 | 7.10 | 1.13 |
| July | 5.93 | 7.21 | 1.22 |
| August | 5.44 | 7.28 | 1.34 |
| September | 5.11 | 7.32 | 1.43 |
| October | 6.39 | 7.36 | 1.15 |

| Month | Amount Owed in 2004 for Energy and Ancillary Services | Price Adjustment* | Adjusted Energy and Ancillary Services Amount |
|-----------|---|-------------------|---|
| May | 6,000,000 | 1.11 | 6,674,404 |
| June | 10,800,000 | 1.13 | 12,176,571 |
| July | 11,750,000 | 1.22 | 14,294,182 |
| August | 11,700,000 | 1.34 | 15,655,202 |
| September | 10,300,000 | 1.43 | 14,746,536 |
| October | 11,000,000 | 1.15 | 12,674,961 |

^{*} Due to rounding conventions, the price adjustment figure shown does not match exactly the actual figure used in the calculation.



Example 3 - Hurricane Katrina (continued)

- Determine highest month based on adjusted Energy and Ancillary Services amount.
 - August 2004 \$15,655,202
 - Note: Credit requirement under today's rules would have used July 2004.
- Determine credit requirement for current capability period using adjusted Energy and Ancillary Services amount.
 - (\$15,655,202/31) * 50 = \$25,250,326



Example 3 - Hurricane Katrina (continued)

- Each month the NYISO would recalculate the Energy and Ancillary Services credit requirement using the updated futures gas price as follows:
 - Determine the Price Adjustment

One Month Forward Adjustment

| Month | 2004 Average Henry Hub Spot Gas Price (\$/Million BTU) | 2005 Henry Hub Futures Gas Price (\$/Million BTU) | Price Adjustment* |
|-----------|---|--|----------------------|
| May | 6.29 | 7.00 | 1.11 |
| June | 6.30 | 6.45 | 1.02 |
| July | 5.93 | 7.44 | 1.25 |
| August | 5.44 | 7.85 | 1.44 |
| September | 5.11 | 9.54 | 1.87 |
| October | 6.39 | 11.34 | 1.77 |

| Month | Amount Owed in 2004 for Energy and Ancillary Services | Price Adjustment* | Adjusted Energy and Ancillary Services Amount |
|-----------|---|-------------------|---|
| May | 6,000,000 | 1.11 | 6,674,404 |
| June | 10,800,000 | 1.02 | 11,050,286 |
| July | 11,750,000 | 1.25 | 14,743,971 |
| August | 11,700,000 | 1.44 | 16,881,121 |
| September | 10,300,000 | 1.87 | 19,229,354 |
| October | 11,000,000 | 1.77 | 19,514,241 |

^{*} Due to rounding conventions, the price adjustment figure shown does not match exactly the actual figure used in the calculation.



Example 3 - Hurricane Katrina (continued)

- Determine new highest month based on adjusted Energy and Ancillary Services amount.
 - October 2004 \$19,514,241
 - Note: Credit requirement under today's rules would continue to use July 2004.
- Determine credit requirement for current capability period using the updated adjusted Energy and Ancillary Services amount.
 - (\$19,514,241/31) * 50 = \$31,474,582
 - Note: The credit requirement under today's rules would be \$18,951,613 [\$11,750,000/31 * 50], in most cases, during Katrina Market Participants were required to post significantly more due to the 10-day run rate.



Impact to Current Energy Requirements

- Current 2009 Summer Capability Period credit requirements for the Energy and Ancillary Services Markets total ~\$2.1B.
- Proposed Energy and Ancillary Services credit requirements would total ~\$760M, representing a decrease of approximately 64%.



Schedule

• CPWG July 31, 2009

BIC
 September 9, 2009

MC September 30, 2009

BOD October 2009

FERC Filing
 October 2009

Implementation – Manual Upon FERC Approval

Implementation - Automated June 2010



Questions?