

FERC Order 741: Credit Reforms in Organized Wholesale Electric Markets

Mary McGarvey - Vice President & Chief Financial Officer Sheri Prevratil – Manager, Corporate Credit New York Independent System Operator

> Credit Policy Working Group November 19, 2010



Summary

- On January 21, 2010, FERC issued a Notice of Proposed Rulemaking (NOPR) to amend its regulations to reform credit practices in organized wholesale electric markets to ensure that credit practices in place in those markets reasonably protect consumers against the adverse effects of default.
- NYISO responded to the NOPR:
 - a) in comments filed with the IRC,
 - b) in comments filed with PJM and ISO-NE, and
 - c) in a separate NYISO filing.



Summary

- On October 21, 2010, FERC issued a final rule in the NOPR proceeding: Order No. 741 – "Credit Reforms in Organized Wholesale Electric Markets."
- Order 741 requires each ISO/RTO to submit a compliance filing including proposed tariff revisions by June 30, 2011, with the tariff revisions to take effect on October 1, 2011.

NYISO Implementation Plan

- <u>IRC:</u>
 - The ISOs/RTOs are discussing implementation options for certain aspects of Order 741 to determine if consistent approaches can be adopted.

Governance Process:

- Initial meetings on November 15 (BOD) and November 19 (Market Participants).
- Ongoing discussions with the BOD and Market Participants will continue between November 2010 and June 2011.
- Software Enhancements:
 - Consolidated Invoice Redesign project will modify NYISO billing software to permit invoicing more frequently than monthly – targeted deployment in August 2011.
 - Additional automation required by Order 741 will be evaluated and incorporated into 2011 project planning activities.



Communication Plan

- <u>CPWG meetings:</u>
 - Monthly Status Updates Progress toward NYISO compliance filing due June 2011
 - 2011 Meetings currently scheduled for 1/21, 2/25, 3/25, 4/25, 5/23, 6/20
- <u>BAWG meetings:</u>
 - Monthly Status Updates Con Invoice Redesign Project
 - 2011 Meetings currently scheduled for 1/19, 2/16, 3/21, 4/12, 5/18, 6/17
- <u>"Credit Contacts" and "Billing Contacts" (as designated by each Market Participant):</u>
 - To be copied on meeting notices & materials for all CPWG and BAWG (if applicable) meetings from November 2010 – October 2011.
 - To be provided proposed calendar of 2011 settlements cycle dates & invoicing elements.
 - To be encouraged to participate in NYISO Market Trials for weekly invoicing transition.
 - Other ad hoc communications by NYISO Finance and/or Customer Relations, as necessary.



Final Rule Order 741



Shortening the Settlement Cycle				
NOPR Proposal	NYISO Comments	FERC Order		
Adopt a settlement period of no more than 7 days and allow no more than an additional 7 days to receive payment.	Summarize NYISO's governance process seeking to implement weekly invoicing. NYISO would require 9-12 months transition period to implement weekly invoicing.	Each ISO/RTO shall establish billing period of no more than seven days and settlement periods of no more than seven days after issuance of bills (p. 17).		
	Consider limited carve-out for municipalities and state agencies.	FERC did not provide an exemption for municipalities and state agencies.		

NYISO Software Automation Required: Market Information System, Billing and Settlement System, Credit Management System, Decision Support System, Con Invoice, Marketplace, Oracle Financials, Payment Application System (new)



Practicality of Daily Billing				
NOPR Proposal	NYISO Comments	FERC Order		
Examine practicality of organized wholesale electric markets implementing daily billing periods within one year of implementation of weekly billing periods.	Do not believe that the Commission should mandate a movement to daily settlements at this time. Instead should allow each ISO/RTO to work with their stakeholders to research the proposal further.	Recognizing the benefits that will flow from requiring billing to be at least weekly, FERC will not require daily billing at this time (p. 19).		

NYISO Software Automation Required: Not applicable at this time.



NOPR Proposal	NYISO Comments	FERC Order		
Limit the amount of unsecured credit extended to any market participant (upon migration to weekly invoicing) to no more than \$50M.	Consistent with recent stakeholder discussions. Index fixed dollar amounts to current market prices, etc. Consider limited exception up to \$85M for investment grade entities using unsecured credit to serve native load only.	Require each ISO/RTO to revise its tariff provisions to reduce the extension of unsecured credit to no more than \$50M per market participant (p. 24). This limit is a ceiling, not a mandated amount (p. 26). FERC did not provide for exceptions to the cap or for indexing.		

NYISO Software Automation Required: No new software development is required to implement this component of the rulemaking (can be accomplished in the Credit Management System by the Credit Department's adjustment of existing parameters).



Use of Unsecured	Credit – Aggregate	Corporate Family Cap

NOPR Proposal	NYISO Comments	FERC Order
Examine whether there should be a further aggregate unsecured credit cap to cover an entire corporate family and whether the cap should be different for markets of different sizes.	NYISO supports the concept but asks that FERC allow each ISO/RTO a degree of flexibility in determining the appropriate dollar amount of the aggregate cap.	Require each ISO/RTO to revise its tariff provisions to account for a maximum level of \$100M in unsecured credit for all entities within a corporate family (p. 26). Parent guarantees are allowed, however, they are simply another form of unsecured credit and the amount utilized would be included in determining the appropriate level of unsecured credit for a market participant and corporate family cap (p. 28).

NYISO Software Automation Required: Software changes will be needed to Credit Management System to incorporate the concept of aggregated credit per corporate family.



Elimination of Unsecured Credit for FTR Markets

NOPR Proposal	NYISO Comments	FERC Order
Eliminate unsecured credit in the FTR markets or their equivalent (i.e. TCC).	Recently included in NYISO's tariffs.	Eliminate unsecured credit for FTR or equivalent (TCC) positions (p. 34).
	NYISO would require limited carve-out to continue to exclude "Fixed Price TCCs" from this requirement.	The Final Rule does not provide exemptions for holders of "fixed price TCCs," or other products, from the prohibition on the use of unsecured credit in this market as they may vary in value despite being called "fixed price" (p. 38).

NYISO Software Automation Required: No new software development is required to implement this component of the rulemaking (can be accomplished in the Credit Management System by the Credit Department's adjustment of existing parameters).



Ability to Offset Market Obligations

NOPR Proposal	NYISO Comments	FERC Order
Market administrator clarify their status as a party to each	The Commission's central counterparty proposal seeks to address a risk that is factually and legally remote.	Require each ISO/RTO to include in its tariffs one of the following options:
transaction so as to eliminate any ambiguity or question as to their ability to manage defaults and offset market participant obligations.	The NYISO's existing tariffs, agreements, and practices support a finding that the mutuality required to net through setoff in a bankruptcy context exists between the NYISO and its Market Participants. The benefit of becoming a central counterparty is unclear, but an increase in ISO/RTO costs is certain (e.g., increases in accounting, auditing, administrative, and regulatory compliance costs). Less disruptive means exist to address this perceived risk.	 Establish a central counterparty. Require market participants to provide a security interest in their transactions. Propose another alternative with the same degree of protection as the two above-mentioned methods. Establish credit requirements for market participants based on their gross obligations (pp. 55-56).

NYISO Software Automation Required: Impact on NYISO systems & processes is dependent upon adoption of specific compliance approach.



Minimum Criteria for Market Participation				
NOPR Proposal	NYISO Comments	FERC Order		
Each ISO/RTO should have language in their tariff to specify minimum participant criteria for all market participants.	Some minimum criteria for market participation could be beneficial, so long as the criteria are carefully crafted to ensure that they do not present an undue barrier to entry. Also, such minimum participation criteria must be recognized as just one component of aggregate credit risk management policies, and not viewed as a measure that prevents all potential defaults.	Require each ISO/RTO to include in its tariff, language to specify minimum participation criteria to be eligible to participate in the organized wholesale electric market (p. 62). Minimum criteria could include the capability to engage in risk management or hedging or to outsource this capability with periodic compliance verification to make sure each market participant has adequate risk management capabilities (p. 62).		
		FERC directs each ISO/RTO to develop these criteria through their stakeholder process (p. 62).		

NYISO Software Automation Required: Impact on NYISO systems & processes is dependent upon adoption of specific compliance approach.



Use of "Material Adverse Change"				
NOPR Proposal	NYISO Comments	FERC Order		
Specify when a market administrator may invoke the material adverse change (MAC) as a justification for requiring more collateral.	Recommend that the list is not exhaustive and that each ISO/RTO are allowed to customize the list of material adverse changes to include in its tariff.	Require each ISO/RTO to specify in their tariffs the conditions under which they will request additional collateral due to a material adverse change. This list should be illustrative rather than exhaustive (pp. 68 – 69). Requires each ISO/RTO to provide reasonable advance notice to a market participant, when feasible, if invoking a material adverse change clause. It should be in writing, contain the reasoning and be signed by a person with authority to represent that ISO/RTO in such actions (p. 71).		

NYISO Software Automation Required: Does not likely require any new software development.



Grace Period to "Cure" Collateral Posting				
NOPR Proposal	NYISO Comments	FERC Order		
Limit to no more than 2 days the time period provided to post additional collateral when additional collateral is requested by the organized wholesale electric market.	Agree to establish an outer limit on the amount of time granted to post additional collateral.	Require each ISO/RTO to include in the credit provisions of its tariff, language to limit the time period allowed to post additional collateral to no more than two days (p. 76).		

NYISO Software Automation Required: Does not likely require any new software development.



Shortening the Settlement Cycle



Summary of FERC Order

- FERC directs each ISO/RTO to submit a compliance filing to establish billing periods of no more than seven days and settlement periods of no more than seven days after issuance of bills (¶ 32, page 17).
- The basic premise for shorter billing periods is that the reduced amount of unpaid debt left outstanding reduces the size of any default...The reductions in outstanding obligations also decreases the amount of collateral a market participant must post... (¶ 33, page 17).

Proposed Settlement Cycle

WEEKLY INVOICING CYCLE:

- <u>Billing Period:</u>
 - Per FERC Order 741, "no more than 7 days"
 - Saturday through Friday billing period
- Invoice Issuance:
 - Invoice to be issued by NYISO the following Wednesday.
- <u>Settlement Period:</u>
 - *Per FERC Order 741, "no more than 7 days after issuance of bills":*
 - Payments due to the NYISO two business days after issuance of invoice (i.e. Friday).
 - Payments made to Market Participants two business days after payment due date (i.e. Tuesday).

Proposed Settlement Cycle

MONTH-END INVOICING CYCLE:

Billing Period:

- Would include initial settlement of partial weeks (at month-end) not yet cleared and a resettlement of weeks within that respective month that have already cleared.
 - This treatment was specifically requested by the BAWG to maintain billing data for complete months and to minimize impact of Market Participant system / process changes
- Would also include monthly true-ups and close-out invoices (consistent with current NYISO practice).
- Invoice Issuance:
 - Invoice to be issued by NYISO on the fifth business day following each respective month (consistent with current NYISO practice).
- <u>Settlement Period:</u>
 - Payments due to the NYISO two business days after issuance of invoice.
 - Payments made to Market Participants two business days after payment due date.



Settlement Cycle – October 2011

	October 2011					
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	1
2	3	4	5	6	7 Invoice Sept Monthly	8
9	10 Columbus Day	11	12 Invoice 10/1 - 10/7	13	14 Pmt Due	15
16	17 PMT Due - Sept Monthly	18 Pmt Made	19 Invoice 10/8 - 10/14	20 PMT Made - Sept Monthly	21 Pmt Due	22
23	24	25 Pmt Made	26 Invoice 10/15 - 10/21	27	28 Pmt Due	29
30	31	1 Pmt Made	2 Invoice 10/22 - 10/28	3	4 Pmt Due	5

Payment Due = Payment Due to MP from NYISO

Payment Made = Payment Made to NYISO from MP



Settlement Cycle – November 2011

November 2011						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2	3	4	5
			laun inn			
		Pmt Made	Invoice 10/22 - 10/28		Pmt Due	
6	7	8	9	10	11	12
		-	_			
	October 2011		Pmt Due			
	Invoice Monthly		Invoice		Pmt Due	
	+ 10/29 - 10/31	Pmt Made	FIP 11/1 -11/4		Pmt Made	
13	14	15	16	17	18	19
			Invoice			
		Pmt Made	11/5 - 11/11		Pmt Due	
20	21	22	23	24	25	26
			Invoice			
		Pmt Made	11/12 - 11/18	Thanksgiving		
27	28	29	30	1	2	3
			Pmt Made			
			Invoice			
	Pmt Due		11/19 - 11/25		Pmt Due	

Payment Due = Payment Due to MP from NYISO

Payment Made = Payment Made to NYISO from MP



Settlement Cycle – December 2011

December 2011						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	1	2	3
					Pmt Due	
4	5	6	7 November 2011 Invoice Monthly + 11/26 - 11/30	8	9	10
		Pmt Made	FIP 12/1 -12/2		Pmt Due	
11	12	13	14 Invoice	15	16	17
		Pmt Made	12/3 - 12/9		Pmt Due	
18	19	20	21	22	23	24
25	26	Pmt Made	12/10 - 12/16	20	Pmt Due	21
25	26 Christmas	27	28 Pmt Made Invoice 12/17 - 12/23	29	30 Pmt Due	31

Payment Due = Payment Due to MP from NYISO

Payment Made = Payment Made to NYISO from MP



Summary of Metering Timelines

Generator and Tie Meter data Submission for Weekly Invoicing:

- Timing of Initial Gen and Tie meter data submissions will not change.
- Unlocks for updating Gen and Tie meter data will continue to occur. Updates/ changes not in time for the Weekly Invoice will be reflected in the Monthly Rebill.
- The Hourly Tie-Line, Generator, and LSE Bus Meter Data Review, Revision, and Lock-down Schedule will not change from it's current form (150 Day Schedule – MST Section 7.4.2).
- The Close Out-Settlement Schedule, 1 Month Final Bill Challenge Cutoff, and 25 Day posting requirements will also remain unchanged (MST Section 7.4.2.2).



Metering Timelines

October 2011						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	1
						Begin Week 1
2	3	4	5	6	7	8
					End Week 1	Begin Week 2
9	10	11 All Gen / Tie Data Due by Noon 10/1 - 10/7	12	13	14	15
		10/1 - 10/7	Invoice	Unlock for 10/6 &		
	Columbus Day	Respun	10/1 - 10/7	10/7	End Week 2	Begin Week 3
16	17 All Gen / Tie Data for 10/8 - 10/14 Due by Noon 10/8 - 10/14	18	19 Invoice	20 Unlock for 10/13	21	22
	Respun		10/8 - 10/14	& 10/14	End Week 3	Begin Week 4
23	24 All Gen / Tie Data for 10/15 - 10/21 Due by Noon 10/15 - 10/21	25	26 Invoice	27 Unlock for 10/20	28	29
	Respun		10/15 - 10/21	& 10/21	End Week 4	Begin Stub Period
30	31 All Gen / Tie Data for 10/22 - 10/28 Due by Noon 10/22 - 10/28 Respun after	1	2 Invoice 10/22 - 10/28	3 Unlock for 10/28- 31 All Days for Oct 2011 Locked	4	5



Invoice Details

- All settlement line items would be invoiced on a weekly basis, other than the following items to be included on the month-end invoice:
 - Thunderstorm Alert Reallocation
 - Quick Start Cost Charges and Credits
 - Station Power Settlements
 - NERC ERO Charges
 - Attachment N Reallocations
 - Disputes and Penalties
 - ICAP and TCC Auction Charges and Credits
 - True-Ups and Close-Outs



Consolidated Invoice Project

Project Description:

- Consolidated Invoice Redesign is a multi-year project focused on replacing the existing ConInvoice system and migrating the Consolidated Invoice application technology to align with the NYISO footprint. This migration will provide flexibility for the existing modules while also ensuring a consistent look and feel across the Consolidated Invoice application suite.
- The basis for the proposed changes to the ConInvoice system is based on input from Market Participants gained over the past several years.

Project Timeline (activities completed to date):

- May 2010: BAWG meeting to review project overview & proposed market design
- September 2010: BAWG meeting to review proposed invoice formats & additional project details
- May October 2010: Market Design



Consolidated Invoice Project

- Project Timeline (remaining activities):
- September December 2010: Software Design
- January June 2011: Software Coding
 - Con Invoice technology migration
 - Marketplace
 - Decision Support System (DSS)
 - Credit Management System (CMS)
 - Oracle Financials
 - Payment Application System (new)
 - Numerous internal support applications
- June August 2011: Quality Assurance Testing
- August 2011: Market Trials
- August 2011: Phase 1 Deployment
 - Provides NYISO and Market Participants with the flexibility to utilize the new invoicing systems on a monthly cycle before transitioning to weekly cycles.



Impact on Credit Requirements

- FERC states in the NOPR and in Order 741 that a reduction in the settlements cycle would have a corresponding reduction in the amount of an ISO/RTO's credit exposure.
- Following NYISO's transition to a weekly invoicing cycle, credit requirements can be adjusted to reflect up to a 68% reduction in market exposure (50 days to 16 days).
 - Reductions in NYISO credit requirements could become effective after the September 2011 monthly invoice is paid (October 17)
 - Calculation of credit requirements under weekly invoicing cycle:
 - Saturday through Friday billing cycle 7 days
 Weekly invoice issued each Wednesday 5 days
 Payment due to NYISO each Friday 2 days
 Various holiday scenarios <u>2 days</u>
 Maximum credit exposure 16 days



Impact on Credit Requirements

- Additional tariff changes to NYISO credit requirements expected as a result of shortening the settlement cycle:
 - Paydown program is no longer applicable
 - Modifications to prepayment program to align with billing week
 - Modifications to Netting of Amounts Receivable to reflect reduced amount available for use



Impact on Working Capital Fund

- Following NYISO's transition to a weekly invoicing cycle, the working capital fund could be reduced from the current \$46.5M balance to \$33.0M to reflect lower risk associated with a shorter initial settlement period.
- Rationale for Working Capital Reduction:

\$50M	Working capital target established based on annual market volumes of ~\$5.5B.
<u>x 2</u>	Increase in annual market volumes (~\$5.5B → \$11B)
\$100M	Increased target based on doubled annual market volumes since 2000-01.
<u>Div. by 2/3</u>	Reduction in billing cycle from monthly to weekly
\$33M	Proposed working capital level upon migration to weekly invoicing.



Impact on Working Capital Fund

- The proposed \$13.5M reduction in Working Capital fund requirements provides an immediate liquidity injection to all Market Participants upon the implementation of weekly invoicing.
- Refunds of Working Capital would be distributed to all Market Participants based on the ratio of each Market Participant's balance to the total Working Capital balance.
- NYISO anticipates the refund of Working Capital could occur in late October 2011 or early November 2011.
- The proposed Working Capital distribution would require revision to the OATT – Attachment V.



Use of Unsecured Credit – Individual Market Participant Cap



Summary of FERC Order

- FERC directs each ISO/RTO to reduce the extension of unsecured credit to no more than \$50 million per market participant (¶ 49, page 24).
- As the timeframe of settlement shrinks, so does the amount of unsecured credit that a participant may need (e.g. following transition to weekly invoicing) (¶ 51, page 25).
- FERC notes that the \$50 million limit on unsecured credit is a ceiling...Any organized wholesale electric market may establish a lower limit (¶ 52, page 26).



Current NYISO Tariff Provisions

- Current unsecured credit provisions are all based on a <u>monthly</u> invoicing cycle.
- Market Concentration Cap:
 - \$150M per Market Participant
 - \$250M limited exception for Market Participants who have a legal right to recover costs for supplying Energy, Ancillary Services, and Capacity to end users, and use for the sole purpose of covering Native Load
 - Amounts could be indexed annually once procedures developed and approved.
 - No aggregate cap on unsecured credit per corporate family exists.
 - <u>Additional Limits on Unsecured Credit for Public Power</u>
 <u>Entities:</u>
 - \$60M for Market Participants who use for the sole purpose of covering Native Load and fulfill additional reporting requirements
 - Amounts could be indexed annually once procedures developed and approved.



Impact on Credit Requirements

- Following NYISO's transition to a weekly invoicing cycle, credit requirements can be adjusted to reflect up to a 68% reduction in market exposure (50 days to 16 days).
 - Reductions in NYISO credit requirements could become effective after the September 2011 monthly invoice is paid (October 17).
- Market Concentration Cap:
 - The \$150M market concentration cap would be reduced to \$50M per Market Participant.
 - The limited exception for "native load" would be eliminated.
 - The proposal to index fixed cap amounts would be removed.
 - <u>Additional Limits on Unsecured Credit for Public Power</u> <u>Entities:</u>
 - \$60M limit would either be eliminated or reduced.



Use of Unsecured Credit – Aggregate Corporate Family Cap



- FERC directs each ISO/RTO to set a maximum level of \$100M of unsecured credit for all entities within a corporate family (¶ 53, page 26).
- Similar to the \$50M cap per Market Participant, FERC views the \$100M threshold on unsecured credit per corporate family credit to be an upper ceiling or limit...limits below can be set (¶ 55, page 28).
- Parent guarantees are simply another form of unsecured credit... (¶56, page 28).



Impact on Credit Requirements

- "Corporate Family" is proposed to include:
 - Affiliates, defined in the NYISO tariffs as "with respect to a person or entity, any individual, corporation, partnership, firm, joint venture, association, joint-stock company, trust or unincorporated organization, directly or indirectly controlling, controlled by, or under common control with, such person or entity. (The term "control" shall mean the possession, directly or indirectly, of the power to direct the management or policies of a person or an entity. A voting interest of ten percent or more shall create a rebuttable presumption of control.)"
 - Market Participants are required to disclose any and all Affiliates on Section G of the NYISO registration package and are required to notify the NYISO within 30 days of the effective date of any change to the original list.
 - Market Participants are also required to respond within 10 days to a NYISO request to update their list of Affiliates.
- Market Participants would instruct NYISO how to allocate unsecured credit up to the aggregated corporate family cap among that Market Participant's corporate family.



Elimination of Unsecured Credit for FTR Markets



- FERC eliminates the use of unsecured credit for FTR or equivalent (i.e. TCC) positions (¶ 70, page 34).
- FERC does not provide exemptions for holders of "fixed price TCCs" from the prohibition on the use of unsecured credit as they may vary in value despite being called "fixed price" (¶ 79, page 38).



Current NYISO Tariff Provisions

- NYISO's tariffs were modified such that unsecured credit could not be utilized to bid or hold TCCs acquired on or after November 12, 2009.
 - Limited exception for Fixed Price TCCs.



Impact on Credit Requirements

- Limited exception for Fixed Price TCCs will be removed.
- Market Participants currently holding "fixed price" TCCs which are set to expire on October 31, 2011 would be required to provide secured credit effective October 1, 2011.



Ability to Offset Market Obligations



- FERC directs each ISO/RTO to submit a compliance filing that includes tariff revisions to include one of the following options:
 - Establish a central counterparty.
 - Require market participants to provide a security interest in their transactions in order to establish collateral requirements based on net exposure.
 - Propose another alternative, which provides the same degree of protection as the two above-mentioned methods.
 - Choose none of the three above alternatives, and instead establish credit requirements for market participants based on their gross obligations (¶ 117, pages 55-56).



- Description
 - Establish a single counterparty to all Market Participant transactions.
 - For example, include language in tariff that NYISO takes title to all products bought and sold in its markets as the original counterparty to all market transactions
- Points of Consideration
 - May provide additional support that debts between the NYISO and the market participant are "mutual debts."
 - Mutuality is required to net through setoff in the bankruptcy context.
 - Taking title as a central counterparty is a common mechanism for establishing mutuality.



- Points of Consideration (continued)
 - Would not necessarily eliminate the risk that FERC seeks to address because bankruptcy law in this area is unsettled.
 - May facilitate clearing by third-party clearinghouses by providing title clarity potentially required for novation of positions to clearinghouses.
 - Establishing credit requirements based on a Market Participant's net position across all markets may minimize the amount of collateral that a Market Participant would need to post with the NYISO.



- Points of Consideration (continued)
 - Potentially exposes NYISO to significant increases in administrative costs (e.g., auditing expenses, regulatory fees and legal expenses, tax liability).
 - Risks to NYISO of unknown/unintended consequences (e.g., regulatory uncertainty from potential multi-agency oversight of NYISO, unknown state and local tax consequences).



- Potential Implementation Requirements
 - The NYISO could become the central counterparty
 - At a minimum, the NYISO would need to revise its tariffs to clarify that the NYISO would take title to every product bought and sold in its markets as the original counterparty to each market transaction.
 - The NYISO could establish an affiliate to serve as the central counterparty
 - Would require creation of a new entity.
 - Would require an agreement between NYISO and affiliate to establish the rights and obligations between the parties, etc.
 - Would require modification of NYISO tariffs to specify the rates, terms, and conditions of the services provided by the affiliate.



MP Security Interests

- Description
 - Require Market Participants to provide a security interest in the receivables of their NYISO transactions in order to establish collateral requirements based on net exposure.
- Points of Consideration
 - Under this option, the NYISO would not need to establish mutuality to protect its netting practices in the bankruptcy context.
 - The NYISO would become a secured creditor in the Market Participant's receivables from the NYISO.
 - In the event the Market Participant files for bankruptcy protection, the NYISO would have a property interest in the Market Participant's receivables that it could use to satisfy the debt owed by the Market Participant to the NYISO.



MP Security Interests

- Points of Consideration (continued)
 - May not be available to all Market Participants.
 - Some Market Participants may be prohibited by law (e.g., municipalities), or pursuant to the terms of their existing lending arrangements from granting a security interest in its NYISO receivables.
 - Some increase in legal and administrative burdens and costs related to entering into Security Agreements with Market Participants and filing UCC-1 financing statements to secure the NYISO's interest in the receivables.



MP Security Interests

- Potential Implementation Requirements
 - The NYISO would need to develop a form Security Agreement for Market Participants to use to grant the NYISO a security interest in its NYISO accounts receivable.
 - A Market Participant with existing liens on its NYISO accounts receivable would need to obtain lien waivers from those lien holders prior to entering into a Security Agreement with the NYISO.
 - The NYISO would need to file a UCC-1 financing statement to perfect its interest in the Market Participant's NYISO accounts receivable and establish the priority of its security interest.
 - The law in the jurisdiction where the debtor is located generally governs perfection and priority issues (e.g., the appropriate location for filing the UCC-1).



Another Alternative?

- Description
 - FERC's order provides the opportunity for an ISO to propose another alternative, which provides the same degree of protection as the two above-mentioned methods (central counterparty or Market Participant security interests).
- Options?
 - NYISO's current credit practices may provide the same degree of protection as the central counterparty or security interest alternatives.
 - Next steps will depend on Commission's clarification of the fourth alternative (establish credit requirements based on gross obligations).



Gross Obligations

- Description
 - Establish credit requirements for Market Participants based on gross obligations.
- Points of Consideration
 - NYISO's current credit practices may meet the requirements of this alternative but need Commission clarification of the following:
 - Definition of "gross obligations"?
 - Definition of an ISO "market"?
 - Could result in increased credit requirements for some Market Participants.
- NYISO plans to seek clarification from FERC regarding the requirements of this alternative to determine next steps.



Minimum Criteria for Market Participation



- FERC directs each ISO to specify minimum participation criteria to be eligible to participate in the organized wholesale electric market, such as requirements related to adequate capitalization and risk management controls (¶131, page 62).
- FERC also directs each ISO to develop these criteria through their stakeholder processes and consider the minimum criteria that are most applicable to its market (¶132, page 62).
- Minimum participation criteria must apply to all Market Participants (¶133, page 63).



- FERC's suggested minimum participation criteria:
 - Minimum criteria for market participation could include the capability to engage in risk management or hedging or to out-source this capability with periodic compliance verification, to make sure that each market participant has adequate risk management capabilities and adequate capital to engage in trading with minimal risk, and related costs, to the market as a whole (¶131, page 62).
 - Such standards might address adequate capitalization, the ability to respond to ISO/RTO direction, adequate expertise to transact in an ISO/RTO market and expertise in risk management (¶133, page 63).



Options for Consideration

- FERC's order instructs the NYISO to consider:
 - Adequate Capitalization
 - Ability to Respond to ISO Direction
 - Adequate Expertise to Transact in ISO Market
 - Expertise in Risk Management
- It is expected that minimum participation criteria would apply to both current <u>and</u> future Market Participants.
- NYISO is currently evaluating criteria and discussing potential options to address this compliance requirement with the other ISOs.
 - Market Participant input/feedback?



Use of "Material Adverse Change"



- FERC requires each ISO/RTO to specify the conditions under which they will request additional collateral due to a material adverse change.
 - This list should not be exhaustive and the tariff provisions should allow the ISOs and RTOs to use their discretion to request additional collateral in response to unusual or unforeseen circumstances.
 - Market Participants should receive a written explanation explaining the invocation of the material adverse change clause (¶147, pages 68-69).
 - Tariffs should clarify when a market administrator may invoke a "material adverse change" clause to compel a market participant to post additional collateral, cease one or more transactions, or take other measures to restore confidence in the participant's ability to safely transact (¶149, page 69).



- The tariff revisions should state examples of which circumstances entitle a market administrator to invoke a "material adverse change" clause, but this list should be illustrative, rather than exhaustive (¶149, page 69).
- The tools used to determine "material adverse change" should be sufficiently forward looking to allow the market administrator to take action prior to any adverse effect on the market, but provide market participants with notice as to what events could trigger a collateral call or a change in activity in the market (¶149, pages 69-70).



Current NYISO Tariff Provisions

- Current MAC tariff language (MST, Attachment K):
 - The amount of Unsecured Credit granted to a Customer, if any, and the amount of the Customer's Operating Requirement shall be subject to change, at the discretion of the ISO, in the event that there is a material adverse change affecting the risk of nonpayment by the Customer.



Options for Consideration

- In comments submitted to FERC's NOPR, the IRC jointly agreed that certain criteria should be considered in the context of potential "Material Adverse Change" usage:
 - Downgrade by a ratings agency
 - Placed on credit watch with negative implication by any rating agency
 - Bankruptcy or other insolvency
 - Significant quarterly loss or decline of earnings
 - Resignation of key officer(s)
 - Filing of a material lawsuit that could materially adversely impact current or future financial results
- NYISO is currently evaluating criteria and discussing potential options to address this compliance requirement with the other ISOs.
 - Market Participant input/feedback?



Grace Period to "Cure" Collateral Posting



- FERC requires each ISO/RTO to limit the time period allowed to post additional collateral (¶160, page 76).
- FERC directs each ISO/RTO to allow no more than two days to "cure" a collateral call (¶160, page 76).
- FERC directs each ISO/RTO to include tariff revisions to establish a two-day limit to post additional collateral due to invocation of a "material adverse change" clause or other provision of an ISO/RTO tariff (¶160, page 76).



Current NYISO Tariff Provisions

- Time Period to Post Collateral:
 - NYISO tariffs do not explicitly establish a maximum timeframe to post collateral in response to a collateral call.
 - NYISO current practice allows a maximum of 2 business days to meet a collateral call.
- Time Period to Cure an Event of Default:
 - OATT Section 2.7.5.2
 - 1 business day to cure a default resulting from failure to timely make a payment due to the ISO.
 - 2 business days to cure a default resulting from failure to comply with the ISO's creditworthiness requirements.
 - 1 business day to cure a default resulting from failure to comply with the ISO's creditworthiness requirements following termination of a Prepayment Agreement.



Impact on Credit Requirements

- Time Period to Post Collateral:
 - Revise MST, Attachment K to prescribe a maximum of 2 business days to meet a collateral call, consistent with NYISO's current business practice.
- Time Period to Cure an Event of Default:
 - No revisions required.



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.

www.nyiso.com