

FERC Order 741: Credit Reforms in Organized Wholesale Electric Markets

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Background



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

IRC:

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

CPWG meetings:

- Monthly Status Updates Progress toward NYISO compliance filing due June 2011
- 2011 Meetings currently scheduled for 1/25, 2/22, 3/25, 4/25, 5/23, 6/20

BAWG meetings:

- Monthly Status Updates Con Invoice Redesign Project
- 2011 Meetings currently scheduled for 1/19, 2/16, 3/21, 4/12, 5/18, 6/17

"Credit Contacts" and "Billing Contacts" (as designated by each Market Participant):

- 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.



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 a 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.



Use of Unsecured Credit – Individual Market Participant Cap

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.



defaults.

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

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

FERC directs each ISO/RTO to develop these criteria through their stakeholder process (p. 62).



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.



FERC Order 741 Implementation



Overview

Credit Reform	Status
Shortening the Settlement Cycle	Limited items for discussion at 2/22 CPWG • Frequency of invoicing certain settlements
Use of Unsecured Credit – Individual Market Participant Cap	Tariff language presented 2/22 CPWG
Use of Unsecured Credit – Aggregate Corporate Family Cap	Tariff language presented 2/22 CPWG
4. Elimination of Unsecured Credit in FTR Markets	Tariff language presented 2/22 CPWG
5. Ability to Offset Market Obligations	Submitted comments to FERC for clarification and rehearing - pending
6. Minimum Criteria for Market Participation	Discussion at 2/22 CPWG
7. Use of "Material Adverse Change"	Tariff language presented 2/22 CPWG
8. Grace Period to "Cure" Collateral Posting	Tariff language presented 2/22 CPWG



Proposed Schedule for Tariff Language

Credit Reform	Status
Shortening the Settlement Cycle	March 25 or April 25 CPWG
Use of Unsecured Credit – Individual Market Participant Cap	February 22 CPWG
Use of Unsecured Credit – Aggregate Corporate Family Cap	February 22 CPWG
4. Elimination of Unsecured Credit in FTR Markets	February 22 CPWG
5. Ability to Offset Market Obligations	Dependent upon FERC response to NYISO request seeking clarification and rehearing
6. Minimum Criteria for Market Participation	April 25 CPWG
7. Use of "Material Adverse Change"	February 22 CPWG
8. Grace Period to "Cure" Collateral Posting	February 22 CPWG



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:

- Billing Period:
 - 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.
- Settlement Period:
 - 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).

Settlement Period:

- 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 from MP to NYISO

Payment Made = Payment Made to MP from NYISO



Settlement Cycle - November 2011

			November 2011			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2	3	4	5
		Dock Manda	Invoice		Deat Date	
	7	Pmt Made	10/22 - 10/28	10	Pmt Due	12
6	7	8	9	10	11	12
	October 2011		Pmt Due			
	Invoice Monthly		Invoice			
	+10/29 - 10/31	Pmt Made	FIP 11/1 -11/4		Veterans Day	
13	14	15	16	17	18	19
	Pmt Due		Invoice			
	Pmt Made	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 from MP to NYISO
Payment Made = Payment Made to MP from NYISO



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	8	9	10			
		_	November 2011	, and the second					
			Invoice Monthly						
			+ 11/26 - 11/30						
		Pmt Made	FIP 12/1 -12/2		Pmt Due				
11	12	13	14	15	16	17			
			I a contra						
		Pmt Made	Invoice 12/3 - 12/9		Pmt Due				
18	19	20	21	22	23	24			
10		20			25				
			Invoice						
		Pmt Made	12/10 - 12/16		Pmt Due				
25	26	27	28	29	30	31			
			Pmt Made						
	Christmas		Invoice 12/17 - 12/23		Pmt Due				
	CHITSUNGS		12/11 - 12/23		FILLDUC				

Payment Due = Payment Due from MP to NYISO

Payment Made = Payment Made to MP from NYISO



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		



- All settlement line items would be invoiced on a weekly basis, with limited exceptions as follows:
 - Thunderstorm Alert Reallocation
 - All charges/credits will be invoiced/settled weekly with adjustments for re-allocations between Zone J and NYISO – wide occurring on the monthly invoice.
 - Quick Start Cost Charges and Credits
 - Due to system limitations, cannot be addressed by October 1, 2011.
 - Averages less than \$200k per month.
 - The NYISO can work with MPs to prioritize this as a weekly settlement item for a future date.



- All settlement line items would be invoiced on a weekly basis, with limited exceptions as follows (continued):
 - Disputes and Penalties
 - Not a part of the normal invoicing cycle.
 - Will be included on the first monthly invoice issued after approval of that charge/credit (same as current practice).
 - NERC ERO Charges
 - Billed to the NYISO quarterly and are charged to MPs on the first monthly invoice issued after receipt of bill.
 - Charges are allocated to the 4-month rebill to reflect actual meter data allocations.



- All settlement line items would be invoiced on a weekly basis, with limited exceptions as follows (continued):
 - Station Power Settlements
 - Daily charges will be on the weekly invoice, if forecast.
 - The process to determine the monthly allocation of 3rd party station power will be reflected on the monthly invoice.
 - Attachment N Reallocations
 - Billed weekly however, rebalancing to correct for actual transmission outages occurs following the initial monthly invoice.
 - Data is reviewed with TOs and reallocated on the 4-month true up.
 - True-Ups and Close-Outs
 - The current process will not change. The true-ups and final bill close-out invoices will still be at the monthly level.



- All settlement line items would be invoiced on a weekly basis, with limited exceptions as follows (continued):
 - TCC Auction Charges and Credits
 - Currently billed on an accelerated schedule prior to the beginning of the month for which it starts. This process will not change.
- Upon implementation, approximately 99% of dollars will be billed weekly.
 - ICAP Auctions
 - Will be billed weekly as described on the following slides.



- ICAP will be invoiced in the same manner as energy:
 - October 1 through October 7 invoiced on October 12 with payments due NYISO on October 14 and payments made to MPs on October 17.
 - The amount invoiced would be the sum of the strip, monthly and spot awards for that month divided by the number of days in that month and multiplied by the number of days being invoiced.
 - Example: October awards total \$31K in purchases. Amount on October 12 invoice due NYISO totals \$7K (\$31K/31 days x 7 days).
 - Days at the end of the month would fall on the monthly invoice with the addition of Load Shift and ICAP true-ups.
- As with energy, September would be invoiced on the October monthly invoice and weekly billing would begin on October 1, 2011.



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
- September December 2010: Software Design
- December 2010: BAWG meeting detailed review of invoice formats and additional project details



Consolidated Invoice Project

- Project Timeline (remaining activities):
- 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
- July/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 Energy and Ancillary Services 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	2 days
•	Maximum credit exposure	16 days



Impact on ICAP Credit Requirements

- Credit requirements for capacity equals the total of all amounts then owed (billed and unbilled) for UCAP purchased.
- While the credit requirement methodology would not change, the amount of credit support required would be reduced weekly, as exposure would decrease each time an invoice is paid.
 - Example:
 - MP holds \$100K for capacity in October 2011 for September through November capacity (\$50K Sept, \$31K Oct, \$19K Nov).
 - On October 14, capacity for October 1 through October 7 will be paid and as such, \$7K (\$31K/31 days x 7 days) will roll off the requirement, reducing the amount to \$93K.
 - On October 17 September's monthly amount of \$50K will be paid, therefore reducing the requirement to \$43K.
 - On October 21, capacity for October 8 through October 14 will be paid and as such an additional \$7K will roll off the requirement, reducing the amount to \$36K.



Impact on Other 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:

3001VI VVOIKIITŲ CAPILAI LATYEL ESLADIISTIEU DASEU OH ATHTUAI THATKEL VOIUTIES OF ~30.0.	\$50M	Working capital target established based on annual market volumes of ~\$5.5l
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<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 Q4 2011.
- The proposed Working Capital distribution would require revision to the OATT – Attachment V.



Minimum Criteria for Market Participation



Summary of FERC Order

- 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).



Summary of FERC Order

- 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).



- FERC's order instructs the NYISO to consider:
 - Expertise in risk management
 - Adequate expertise to transact in ISO market
 - Ability to respond to ISO direction
 - Adequate capitalization
- It is expected that minimum participation criteria would apply to both current <u>and</u> future Market Participants.
 - Failure to meet minimum participation criteria would constitute an event of default and could result in the suspension or termination of the Market Participant from the NYISO administered markets.
 - New applicants that do not meet the minimum participation criteria cannot become NYISO Market Participants until such criteria is met.



- Each Market Participant will be required to provide a notarized officer certificate annually.
 - One certificate will incorporate all minimum participation criteria.
 - An officer of the Market Participant, with signatory authority, will need to attest to the fact that the Market Participant meets all minimum participation criteria.
 - Notarized certificate must be received by January 31 each year.



- Expertise in risk management
 - Market Participant has established adequate risk management capabilities and policies after taking into consideration the following categories:
 - Risk Management Culture And Governance
 - Risk Controls
 - Emerging Risks
 - Strategic Risk Management
 - Market Participant must submit its risk management policies and procedures within 5 business days of a NYISO request.



- Adequate expertise to transact in ISO market
 - Each Market Participant must have each of its NYISO traders/users (e.g. persons authorized to bid and/or offer in the NYISO markets) complete NYMOC (NY Market Orientation Course). In the alternative, the trader/user will have the option to complete a comprehensive training course with exam in lieu of NYMOC.
 - NYMOC currently offered four (4) times per year.
 - Comprehensive training course with exam offered on-line beginning January 1, 2012 and trader/user must pass in order to be exempt from NYMOC.
 - Each Market Participant active in the TCC market or Virtual Transactions must also have each of its NYISO traders/users complete training specific to those products.
 - Training offered on-line. Beginning January 1, 2012 these training courses will conclude with a test to evaluate user understanding.
 - All traders/users must receive ongoing training via an on-line course each year thereafter.
 - Annual training will be offered on-line beginning January 1, 2012. The course will include items such as market changes/issues, critical functions and conclude with a test to evaluate user understanding.



- Adequate expertise to transact in ISO market (continued)
 - Traders/users for new NYISO applicants, or for Market Participants new to the TCC market or Virtual Transactions, must complete training prior to the applicant becoming a NYISO Market Participant.
 - Current Market Participants will have twelve (12) months from October 1, 2011 to complete training.



- Ability to respond to ISO direction
 - Market Participant has established adequate operating procedures and appropriate technical abilities to effectively communicate and respond to NYISO requests.
 - Market Participant must submit its operating procedures within 5 business days of a NYISO request.



- Adequate capitalization
 - \$1 million tangible net worth (TNW) based on that Market Participant/Guarantor's audited financial statements, OR
 - \$10 million in assets based on that Market Participant/Guarantor's audited financial statements, OR
 - Post \$200,000 in security (e.g. cash, letter of credit, surety bond) to meet minimum capitalization requirement.
 - If Market Participant does not have \$1 million TNW or \$10 million in assets and participates in the TCC and/or Virtual Transactions market, provide additional \$500,000 to meet minimum capitalization requirement.

MP	Energy and Other	тсс	VB	Capitalization Amount
1	Х			\$200k
2		Х	х	\$500k
3	Х	х	х	\$700k



- Annual certificate must be in a form acceptable to the NYISO and will require attestation, at a minimum, to the following:
 - Market Participant has written policies, procedures, and controls, approved by the Market Participant's governing body, which provide an appropriate, comprehensive risk management framework that at a minimum, clearly identifies and documents the range of risks to which the Market Participant is exposed, including, but not limited to, legal risk, credit risk, liquidity risk, custody and investment risk, concentration risk, default risk, operation risk, market risk, and business risk.
 - All employees or agents of the Market Participant with the right to bid or schedule in the NYISO-administered markets have adequate expertise to transact in such markets and have complied with the NYISO's training requirements. The certificate will need to include the names of its NYISO traders/users, the training courses attended, and dates taken.
 - Market Participant has established operating procedures and technical abilities that would allow the Market Participant to promptly respond to the NYISO's direction.
 - Market Participant is in compliance with the NYISO's minimum capitalization requirements.



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