Proposal for the Annual ICAP, Annual Demand Response, and Semi-Annual Demand Response Reports

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Installed Capacity Working Group

July 18, 2018, Rensselaer, NY



Agenda

Background/History

Annual ICAP Report

- Respond to stakeholder comments
- Updates since the 4/24/18 discussion
- NYISO's proposal regarding future reporting
- Annual & Semi-Annual Demand Response Reports
 - Description of reports and proposal for future reporting



Prior Discussions

Date	Working Group	Discussion points and links to materials
12-15-16	ICAPWG	Discussion with stakeholders regarding potential filing with FERC, requesting to discontinue compliance obligations to submit the Annual ICAP Report and Semi-Annual Demand Response Report
02-15-17	ICAPWG	Based on stakeholder requests, provided description of each section of the Annual ICAP Report and Semi-Annual Demand Response Report and the NYISO's proposal regarding each section
04-24-18	ICAPWG	Discussed proposal with stakeholders and took feedback



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History of the ICAP Annual Report

 The obligation originated in 2003 with FERC's orders in Docket No. ER03-647, which accepted the NYISO's ICAP Demand Curves.



Annual ICAP Report

Updates since the last discussion on 4/24/18



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Historical Generator Status Document

- The NYISO proposes to add a tab to the current "Generator Status Updates" posting
 - The additional tab will contain a comprehensive list of generator status changes from 2009 to present.
 - See today's meeting materials for a mock-up of this document.

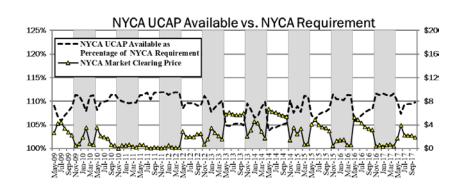
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New Summary Document

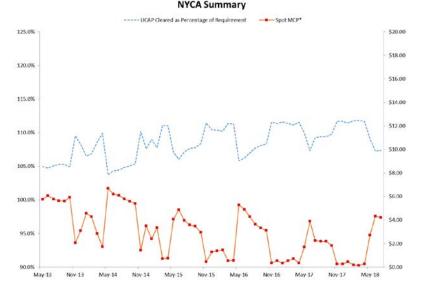
- For stakeholder convenience, the NYISO proposes to add a new posting to the NYISO website, which contains links to the alternate sources of ICAP Annual Report information.
- See today's meeting materials for a mock-up of this document.

- This report will be expanded to include charts and data that are currently provided in Charts 1-9 of the Annual Report
 - The new posted information will include the most recent 5 years of data from the from like Capability Period to like Capability period.
 - Additionally, the Monthly Report will begin providing Masked Unsold Spot Market Offer data, which is currently supplied in Attachment II of the Annual Report.
 - This information will be provided with a 4-month lag from the date of the auction, in adherence with Tariff timing restrictions for publishing this data.





Annual ICAP Report Chart 1

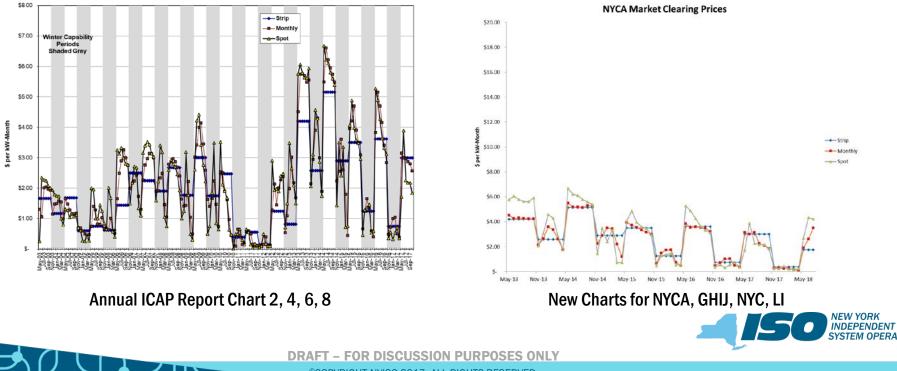


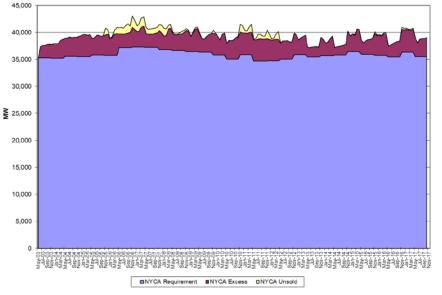
New Charts for NYCA, GHIJ, NYC, LI

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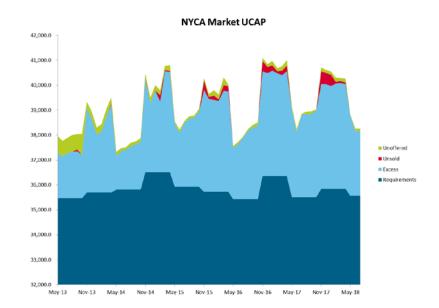
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NEW YORK INDEPENDENT





Annual ICAP Report Chart 3, 5, 7, 9



New Charts for NYCA, GHIJ, NYC, LI



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Tables for underlying data – Rolling 5 last Capability Years

		NYC	A				NYC	A .				NYCA	
			UCAP Available as							Date	Strip	Monthly	Spot
		Percentage of		Date	Requirements	Excess	Unsold	Unoffered	Jul-18	\$ 1.75	\$ 3.50	\$ 4.22	
Date	UCAP Available	Requirements	Requirement	Spot MCP	Jul-18	35,561.7	2,625.9	-	74.6	Jun-18	\$ 1.75	\$ 2.60	\$ 4.33
Jul-18	,	35,561.70	107.38%		Jun-18	35,561.7	2,582.7	-	112.9	May-18			\$ 2.70
Jun-18	,	35,561.70	107.26%		May-18	35,561.7	3,219.1	-	42.4	Apr-18			
May-18		35,561.70	109.05%		Apr-18	3 35,849.5	4,193.5	69.2	158.7			•	
Apr-18		35,849.50	111.70%		Mar-18	35,849.5	4,236.8	81.1	124.4	Mar-18			\$ 0.15
Mar-18	,	35,849.50	111.82%		Feb-18	35,849.5	4,215.2	69.0	172.9	Feb-18	\$ 0.37	\$ 0.25	\$ 0.20
Feb-18	,	35,849.50	111.76%		Jan-18	· ·	4,109.8	466.5	125.2	Jan-18	\$ 0.37	\$ 0.25	\$ 0.44
Jan-18	,	35,849.50	111.46%		Dec-17	· ·	4,193.5	452.8	116.8	Dec-17	\$ 0.37	\$ 0.30	\$ 0.25
Dec-17	,	35,849.50	111.70%		Nov-17	· ·	4,193.5	520.2	138.6	Nov-17	\$ 0.37	\$ 0.31	\$ 0.25
Nov-17	,	35,849.50	111.70%		Oct-17	· ·	3,476.9	520.2	44.4	Oct-17	\$ 3.00	\$ 1.85	\$ 1.84
Oct-17	,	35,512.80	109.79%		Sep-17	· ·	3,470.9	-	105.6	Sep-17		•	
Sep-17		35,512.80	109.38%			· ·	-	-					
Aug-17		35,512.80	109.38%		Aug-17		3,331.5	-	95.7	Aug-17	-	•	\$ 2.18
Jul-17	38,811.80	35,512.80	109.29%		Jul-17	· ·	3,299.0	-	37.7	Jul-17	\$ 3.00	\$ 3.15	\$ 2.26
Jun-17	38,117.20	35,512.80	107.33%	\$3.89	Jun-17	· ·	2,604.4	-	120.9	Jun-17	\$ 3.00	\$ 3.00	\$ 3.89
May-17	39,042.00	35,512.80	109.94%	\$1.72	May-17	35,512.8	3,529.2	-	106.4	May-17	\$ 3.00	\$ 3.15	\$ 1.72

UCAP Available vs. Requirements

UCAP Offered and Unoffered

Market Clearing Prices



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AUCTION TYPE	AUCTION MONTH	LOCATION DESCRIPTION	Masked PTID Name	OFFER CAPACITY MW	OFFER PRICE	AWAREDED CAPACITY MW	MARKET CLEARING PRICE	UNSOLD MW
Spot	Nov-2016	ROS	Offer I	36.2	\$1.00	0.0	\$0.35	36.2
Spot	Nov-2016	ROS	Offer II	50.0	\$0.95	0.0	\$0.35	50.0
Spot	Nov-2016	ROS	Offer III	50.0	\$0.85	0.0	\$0.35	50.0
Spot	Nov-2016	ROS	Offer IV	33.9	\$1.48	0.0	\$0.35	33.9
Spot	Nov-2016	ROS	Offer V	1.7	\$0.50	0.0	\$0.35	1.7
Spot	Nov-2016	ROS	Offer VI	50.0	\$0.90	0.0	\$0.35	50.0
Spot	Nov-2016	ROS	Offer VII	53.0	\$0.50	0.0	\$0.35	53.0
Spot	Nov-2016	ROS	Offer VIII	100.0	\$0.75	0.0	\$0.35	100.0
	Nov-2016 Total							374.8
Spot	Dec-2016	ROS	Offer I	86.2	\$1.00	0.0	\$0.55	86.2
Spot	Dec-2016	ROS	Offer II	100.0	\$0.75	0.0	\$0.55	100.0
Spot	Dec-2016	ROS	Offer III	33.9	\$2.22	0.0	\$0.55	33.9
	Dec-2016 Total							220.1
Spot	Jan-2017	ROS	Offer I	50.0	\$0.54	0.0	\$0.32	50.0
Spot	Jan-2017	ROS	Offer II	52.6	\$0.50	0.0	\$0.32	52.6
Spot	Jan-2017	ROS	Offer III	33.9	\$2.22	0.0	\$0.32	33.9
Spot	Jan-2017	ROS	Offer IV	1.7	\$0.35	0.0	\$0.32	1.7
Spot	Jan-2017	ROS	Offer V	50.0	\$0.77	0.0	\$0.32	50.0
	Jan-2017 Total							188.2
Spot	Feb-2017	ROS	Offerl	33.9	\$2.22	0.0	\$0.54	33.9
Spot	Feb-2017	ROS	Offer II	50.0	\$0.54	39.6	\$0.54	10.4
	Feb-2017 Total							44.3
Spot	Mar-2017	ROS	Offer I	50.0	\$1.09	0.0	\$0.71	50.0
Spot	Mar-2017	ROS	Offer II	50.0	\$1.32	0.0	\$0.71	50.0
Spot	Mar-2017	ROS	Offer III	50.0	\$0.86	0.0	\$0.71	50.0
	Mar-2017 Total							150.0
Spot	Apr-2017	ROS	Offer I	50.0	\$1.01	0.0	\$0.35	50.0
Spot	Apr-2017	ROS	Offer II	50.0	\$0.35	10.7	\$0.35	39.3
Spot	Apr-2017	ROS	Offer III	50.0	\$0.57	0.0	\$0.35	50.0
Spot	Apr-2017	ROS	Offer IV	1.7	\$0.50	0.0	\$0.35	1.7
Spot	Apr-2017	ROS	Offer V	50.0	\$0.79	0.0	\$0.35	50.0
	Apr-2017 Total							191.0
	Grand Total							1168.4

					Unsold
Month	Offer Capacity	Offer Price	MCP	Awarded Capacity	MW
Mar-18			\$ 0.15	6.2	11.9
Mar-18			\$ 0.15	0	0.8
Mar-18	30.6	\$ 0.65	\$ 0.15	0	30.6
Feb-18	0.8	\$ 0.50	\$ 0.20	0	0.8
Feb-18	30.4	\$ 2.47	\$ 0.20	0	30.4
Jan-18	0.8	\$ 0.50	\$ 0.44	0	0.8
Jan-18	4.5	\$ 0.75	\$ 0.44	0	4.5
Jan-18	77.6	\$ 0.75	\$ 0.44	0	77.6
Jan-18	18	\$ 0.75	\$ 0.44	0	18
Jan-18	77.6	\$ 0.85	\$ 0.44	0	77.6
Jan-18	18	\$ 0.85	\$ 0.44	0	18
Jan-18	4.5	\$ 0.85	\$ 0.44	0	4.5
Jan-18	77.6	\$ 0.95	\$ 0.44	0	77.6
Jan-18	18	\$ 0.95	\$ 0.44	0	18
Jan-18	4.5	\$ 0.95	\$ 0.44	0	4.5
Jan-18	77.5	\$ 1.05	\$ 0.44	0	77.5
Jan-18	4.3	\$ 1.05	\$ 0.44	0	4.3
Jan-18	18	\$ 1.05	\$ 0.44	0	18

New Unsold Table (Masked*)

Annual ICAP Report Attachment II

Unsold Capacity Offers (Masked*)



*Masked to the extent necessary to protect Confidential Information,

and subject to any restrictions on the disclosure.

New Unsold Table will contain masked unsold ROS bids from 4-month prior to comply with the timeline outlined in Section 6.3 of the NYISO Market Services Tariff and to remain consistent with current NYISO postings:

"Disclosure of Bid Information Pursuant to Commission requirements, the ISO shall make public Bid information from the Energy, Capacity and Ancillary Services markets, including Bids submitted for Virtual Transactions, but not the names of the bidders making any of these Bids, three months after the Bids are submitted. The ISO shall post the data in a way that permits third parties to track each individual bidder's Bids over time. Prior to such disclosure, Bid information submitted to the ISO by Market Participants shall be considered Confidential Information"

					Unsold
Month	Offer Capacity	Offer Price	MCP	Awarded Capacity	MW
Mar-18	18.1	\$ 0.15	\$ 0.15	6.2	11.9
Mar-18	0.8	\$ 0.50	\$ 0.15	0	0.8
Mar-18	30.6	\$ 0.65	\$ 0.15	0	30.6
Feb-18	0.8	\$ 0.50	\$ 0.20	0	0.8
Feb-18	30.4	\$ 2.47	\$ 0.20	0	30.4
Jan-18	0.8	\$ 0.50	\$ 0.44	0	0.8
Jan-18	4.5	\$ 0.75	\$ 0.44	0	4.5
Jan-18	77.6	\$ 0.75	\$ 0.44	0	77.6
Jan-18	18	\$ 0.75	\$ 0.44	0	18
Jan-18	77.6	\$ 0.85	\$ 0.44	0	77.6
Jan-18	18	\$ 0.85	\$ 0.44	0	18
Jan-18	4.5	\$ 0.85	\$ 0.44	0	4.5
Jan-18	77.6	\$ 0.95	\$ 0.44	0	77.6
Jan-18	18	\$ 0.95	\$ 0.44	0	18
Jan-18	4.5	\$ 0.95	\$ 0.44	0	4.5
Jan-18	77.5	\$ 1.05	\$ 0.44	0	77.5
Jan-18	4.3	\$ 1.05	\$ 0.44	0	4.3
Jan-18	18	\$ 1.05	\$ 0.44	0	18

New Unsold Table (Masked)



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Proposed addition: historical data from the Monthly ICAP Market Report to facilitate data tracking and analysis

			Generation										MW Cleared	% Cleared
	Spot Auction Price		UCAP	SCR UCAP			Gen Unoffered	SCR Unoffered	Resale Unoffered		Total MW	UCAP	Above	Above
Date	(\$/kW-Month)	EFORd	Available*	Available	Imports	Exports	MW	MW	MW**	Unsold MW	Cleared***	Requirements	Requirements	Requirements
Jul-18	\$4.22	8.56%	36,717.0	1,276.8	1,213.6	945.2	11.4	0.4	62.8	0.0	38,187.6	35,561.7	2,625.9	7.38%
Jun-18	\$4.33	8.56%	36,759.3	1,271.9	1,168.1	942.0	46.6	1.3	65.0	0.0	38,144.4	35,561.7	2,582.7	7.26%
May-18	\$2.70	8.56%	36,504.2	1,246.9	1,563.5	491.4	23.2	1.2	18.0	0.0	38,780.8	35,561.7	3,219.1	9.05%
Apr-18	\$0.25	8.43%	38,657.0	868.5	1,304.2	558.8	93.5	10.7	54.5	69.2	40,043.0	35,849.5	4,193.5	11.70%
Mar-18	\$0.15	8.43%	38,885.9	877.8	967.5	439.4	57.8	7.1	59.5	81.1	40,086.3	35,849.5	4,236.8	11.82%
Feb-18	\$0.20	8.43%	38,899.8	893.1	953.0	439.3	111.6	7.7	53.6	69.0	40,064.7	35,849.5	4,215.2	11.76%
Jan-18	\$0.44	8.43%	38,894.1	896.3	1,198.6	438.0	107.8	10.3	7.1	466.5	39,959.3	35,849.5	4,109.8	11.46%
Dec-17	\$0.25	8.43%	38,896.1	889.0	1,327.9	500.4	85.0	4.9	26.9	452.8	40,043.0	35,849.5	4,193.5	11.70%
Nov-17	\$0.25	8.43%	38,851.2	868.0	1,671.4	688.8	96.7	6.5	35.4	520.2	40,043.0	35,849.5	4,193.5	11.70%
Oct-17	\$1.84	9.29%	36,239.1	1,239.7	2,257.7	702.4	14.9	11.5	18.0	0.0	38,989.7	35,512.8	3,476.9	9.79%
Sep-17	\$2.18	9.29%	36,242.9	1,201.7	2,306.2	799.7	44.9	12.9	47.8	0.0	38,845.5	35,512.8	3,332.7	9.38%
Aug-17	\$2.18	9.29%	36,232.6	1,203.6	1,989.2	485.4	77.8	3.0	14.9	0.0	38,844.3	35,512.8	3,331.5	9.38%
Jul-17	\$2.26	9.29%	36,212.1	1,190.0	1,979.2	531.8	20.2	2.2	15.3	0.0	38,811.8	35,512.8	3,299.0	9.29%
Jun-17	\$3.89	9.29%	36,147.4	1,154.3	1,421.6	485.2	55.0	5.1	60.8	0.0	38,117.2	35,512.8	2,604.4	7.33%
May-17	\$1.72	9.29%	36,103.5	1,150.6	2,202.7	308.4	62.4	39.4	4.6	0.0	39,042.0	35,706.5	3,335.5	9.34%

Example table for NYCA



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Alternative Withholding Analysis

 The NYISO is still working through a proposal for the alternative withholding analysis. We will return to future working groups to discuss this topic.



NYISO Commitment to Continue Posting Data

 In the filing to FERC asking to discontinue the filing obligation for the Report, NYISO will affirm its commitment to continue providing the information discussed in this presentation in its alternate locations.



Annual and Semi-Annual Demand Response Reports

NYISO's proposal regarding future reporting



Annual and Semi-Annual Demand Response Reports

- Proposal to post to the NYISO website a single annual report, as presented at the February 15, 2017 ICAPWG
 - See appendix

Annual ICAP & Annual and Semi-Annual **Demand Response** Reports NYISO's proposal regarding future reporting



Elimination of Filing Obligation

 Given the information provided elsewhere, the NYISO proposes to discontinue the annual reporting obligation for the ICAP Annual Report and Annual and Semi-Annual Demand Response Reports.



Next Steps



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Next Steps

- Incorporating stakeholder feedback
- Return to future working groups to discuss open items, which include
 - Alternative withholding analysis

FERC Filing

Questions?



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The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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Appendix

Annual and Semi-Annual Demand Response Reports



Annual and Semi-Annual Demand Response Reports

• The NYISO proposes to

- Post on its website, a single annual report containing all information currently included in the annual (January) report to FERC
- Discontinue the obligation to file with FERC the annual report and to file and prepare the semi-annual (June) report
- The June report duplicates significant information in the January report
- Most of this information is relatively static from report to report. For instance, the four DSM
 programs have evolved, and are updated by the NYISO from time-to-time, but any changes to
 those programs tend to be fairly incremental
- It would be more efficient to annually post the information on DSM now contained in the annual DSM rather than filing a report

