

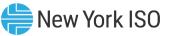
Capacity Market Settlement Data

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Program Lead, Market Training

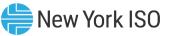
Intermediate ICAP Course

May 14-15, 2025 Remote Learning



Topics of Discussion

- The ICAP Auction Award Settlement
- Two NYISO applications where ICAP billing information can be found
 - The Settlement information found in the Consolidated billing menu of the ICAP Automated Market System (AMS)
 - The Settlement information in the Customer Settlements Interface (CSI)



Capacity Settlements

- ICAP Auction Award settlement = Auction Award MW Amount x Auction Clearing Price
 - An "award" is a sale/purchase that clears in an auction
 - The NYCA and each Locality has a separate Market Clearing Price for each auction
 - Awards are in MWs, and Auction Clearing Prices are in \$/kW-month
 - As a result, a unit conversion occurs
 - Auction Award settlements appear in the obligation procurement period's invoices
 - Bilateral Transactions are settled financially between parties outside of NYISO systems



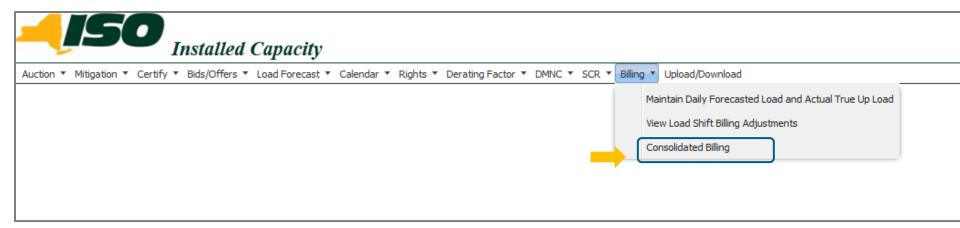
ICAP Billing Information

- ICAP Automated Market System (AMS) Billing Information
 - Consolidated Billing
 - Summary
 - Detail
 - Report
- Customer Settlements Interface (CSI)
 - Consolidated Invoice
 - ICAP Detail Report
 - Invoice Summary Report

Topic: ICAP Automated Market System



ICAP AMS Billing Information

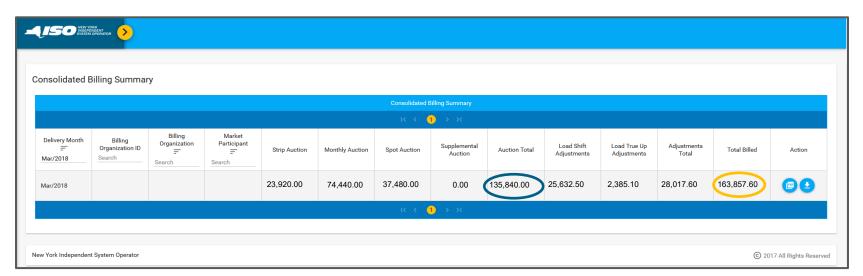


Consolidated Billing Menu

- Summary
- Detail
- Report



ICAP AMS -Consolidated Billing Summary

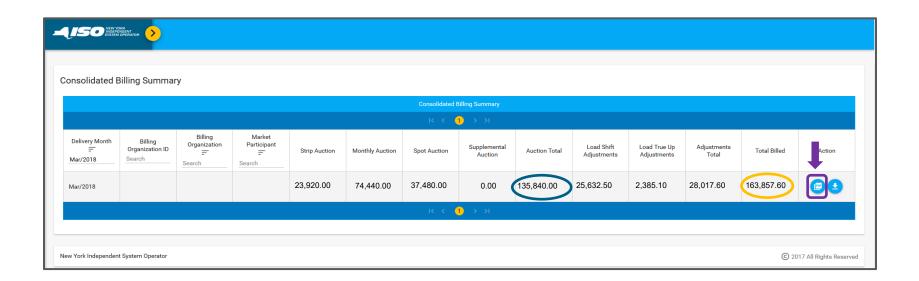


* Sign convention followed: Positive: Charge to the MP (Negative): Credit to the MP

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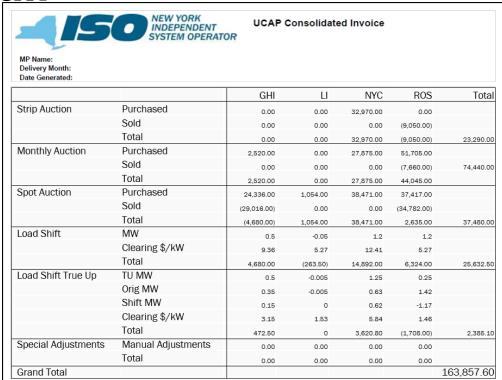
ICAP AMS - Consolidated Billing Detail



ICAP AMS - Consolidated Billing



Detail

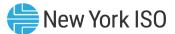


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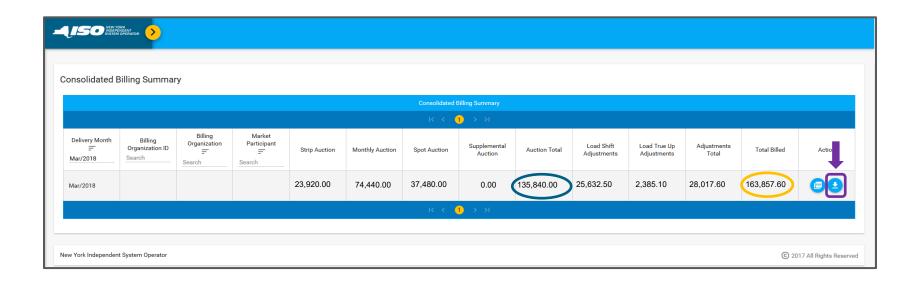
AUCTION TOTAL

TOTAL BILLED

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ICAP AMS- Consolidated Billing Report



Report - Strip Auction, Example Month



GHI	Purchase MW	0
0	Purchase Clearing Price	\$8.25
	Purchase Extended Award Value	\$0.00
	Sold MW	0
	Sold Clearing Price	\$8.25
	Sold Extended Award Value	\$0.00
		,
١	Total	\$0.00
LI	Purchase MW	0
	Purchase Clearing Price	\$4.15
	Purchase Extended Award Value	\$0.00
	Sold MW	0
	Sold Clearing Price	\$4.15
	Sold Extended Award Value	\$0.00
	Total	\$0.00
NYC	Purchase MW	3
	Purchase Clearing Price	\$10.99
	Purchase Extended Award Value	\$32,970.00
	Sold MW	0
	Sold Clearing Price	\$10.99
	Sold Extended Award Value	\$0.00
	Total	\$32,970.00
ROS	Purchase MW	0
	Purchase Clearing Price	\$0.00
	Purchase Extended Award Value	\$0.00
	Sold MW	2.5
	Sold Clearing Price	\$3.62
	Sold Extended Award Value	(\$9,050.00)
	Total	(\$9,050.00)
		(+=,======

HQ	Sold MW	0
	Sold Clearing Price	\$3.62
	Sold Extended Award Value	\$0.00
	Total	\$0.00
IESO	Sold MW	C
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	Total	\$0.00
NE	Sold MW	C
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	Total	\$0.00
PJM	Sold MW	C
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	Total	\$0.00

Total (Strip Auction) = \$23,920.00

4

4

Report – Monthly Auction, Example Month



GHI	Purchase MW	0.3	
	Purchase Clearing Price	\$8.40	
	Purchase Extended Award		
	Value	\$2,520.00	
	Sold MW	0	
	Sold Clearing Price	\$8.40	
	Sold Extended Award Value	\$0.00	
	Total	\$2,520.00	←
LI	Purchase MW	0	
	Purchase Clearing Price	\$4.00	
	Purchase Extended Award		
	Value	\$0.00	
	Sold MW	0	
	Sold Clearing Price	\$4.00	
	Sold Extended Award Value	\$0.00	
	Total	\$0.00	
NYC	Purchase MW	2.5	
	Purchase Clearing Price	\$11.15	
	Purchase Extended Award		
	Value	\$27,875.00	
	Sold MW	0	
	Sold Clearing Price	\$11.15	
	Sold Extended Award Value	\$0.00	
	Total	\$27,875.00	+
ROS	Purchase MW	13.5	
	Purchase Clearing Price	\$3.83	
	Purchase Extended Award		
	Value	\$51,705.00	
	Sold MW	2	
	Sold Clearing Price	\$3.83	
	Sold Extended Award Value	(\$7,660.00)	
	Total	\$44,045.00	←

HQ	Sold MW	0
	Sold Clearing Price Sold Extended Award	\$3.83
	Value	\$0.00
	Total	\$0.00
IESO	Sold MW	0
	Sold Clearing Price Sold Extended Award	\$0.00
	Value	\$0.00
	Total	\$0.00
NE	Sold MW	0
	Sold Clearing Price Sold Extended Award	\$3.83
	Value	\$0.00
	Total	\$0.00
PJM	Sold MW	0
	Sold Clearing Price Sold Extended Award	\$0.00
	Value	\$0.00
	Total	\$0.00

Total (Monthly Auction) = \$74,440.00

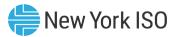
Report - Spot Market Auction, Example Month # New York ISO



GHI	Purchase Deficiency MW	0	1
O	Purchase Excess MW	2.6	
	Purchase Clearing Price	\$9.36	
	Purchase Extended Award	40.00	
	Value	\$24,336.00	
	Sold Offered MW	0	
	Sold Excess MW	3.1	
	Sold Clearing Price	\$9.36	
	Sold Extended Award Value	(\$29,016.00)	
	Total	(\$4,680.00)	4
LI	Purchase Deficiency MW	0	`
	Purchase Excess MW	0.2	
	Purchase Clearing Price	\$5.27	
	Purchase Extended Award		
	Value	\$1,054.00	
	Sold Offered MW	0	
	Sold Excess MW	0	
	Sold Clearing Price	\$5.27	
	Sold Extended Award Value	\$0.00	
	Total	\$1,054.00	4
NYC	Purchase Deficiency MW	0	`
	Purchase Excess MW	3.1	
	Purchase Clearing Price	\$12.41	
	Purchase Extended Award		
	Value	\$38,471.00	
	Sold Offered MW	0	
	Sold Excess MW	0	
	Sold Clearing Price	\$12.41	
	Sold Extended Award Value	\$0.00	
	Total	\$38,471.00	4

ROS	Purchase Deficiency MW	0
	Purchase Excess MW	7.1
	Purchase Clearing Price	\$5.27
	Purchase Extended Award Value	\$37,417.00
	Sold Offered MW	3.9
	Sold Excess MW	2.7
	Sold Clearing Price	\$5.27
	Sold Extended Award Value	(\$34,782.00)
	Total	\$2,635.00
HQ	Sold Offered MW	0
	Sold Clearing Price	\$5.27
	Sold Extended Award Value	\$0.00
	Total	\$0.00
IESO	Sold Offered MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	Total	\$0.00
NE	Sold Offered MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	Total	\$0.00
PJM	Sold Offered MW	0
	Sold Clearing Price	\$5.27
	Sold Extended Award Value	\$0.00
	Total	\$0.00

Total (Spot Market Auction) = \$37,480.00



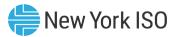
Report -Load Adjustments, Example Month



Total (Load Shift) = \$25,632.50	
Total (Load Shift True Up) = \$2,385.1	0

			_
<u>Load</u>	Shift True Up		
GHI	Clearing \$/kW	\$3.15	
	TU MW's	0.5	
	Orig MW's	0.35	
	Shift	0.15	
	Total	\$472.50	<
LI	Clearing \$/kW	\$1.53	
	TU MW's	-0.005	
	Orig MW's	-0.005	
	Shift	0	
	Total	\$0.00	
NYC	Clearing \$/kW	\$5.84	
	TU MW's	1.25	
	Orig MW's	0.63	
	Shift	0.62	
	Total	\$3,620.80	
ROS	Clearing \$/kW	\$1.46	
	TU MW's	0.25	
	Orig MW's	1.42	
	Shift	-1.17	
	Total	(\$1,708.20)	





Strip Auction

\$23,920.00

Monthly Auction

\$74,440.00

Spot Market Auction

\$37,480.00

Supplementary Auction

\$0.00

Load Shift

\$25,632.50

Load Shift True Up

\$2,385.10

135,840.00

Sign convention followed: Positive: Charge to the MP (Negative): Credit to the MP

Total billed (Month)

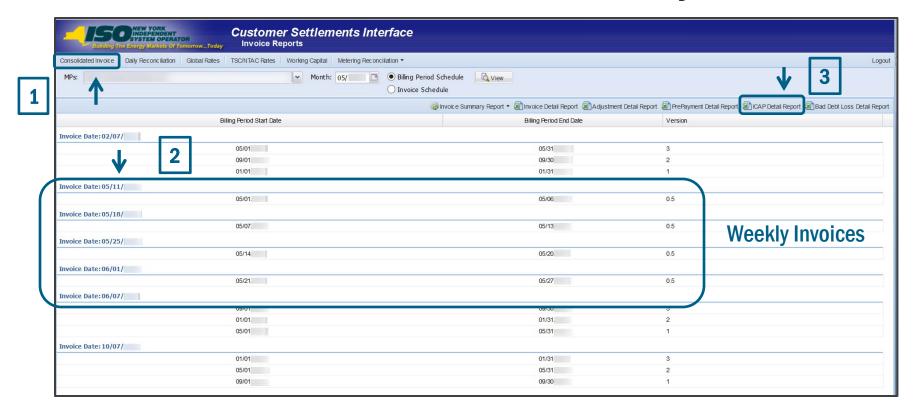
\$163,857.60

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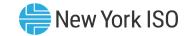
Topic: **Customer Settlements** Interface (CSI)



Customer Settlements Interface – Weekly Invoices



Customer Settlements Interface – ICAP



Detail Report

NYISO Market Participant ICAP Details - Invoice Dated May 11,20XX							
Market Participant Name: Invoice Number:							
ICAP Detail - Invo	ICAP Detail - Invoice with Flexible Billing Period						
Flexible Billing P	Flexible Billing Period of 05/01/20XX - 05/06/20XX						
ICAP AuctionDivided byNumber of Days in MonthNumber of Days in byEquals Flexible Billing Period MonthICAP Transactions/Payment to Market Participant (\$)							
(\$135,840.00) / 31 x 6 = (\$26,291.61)							

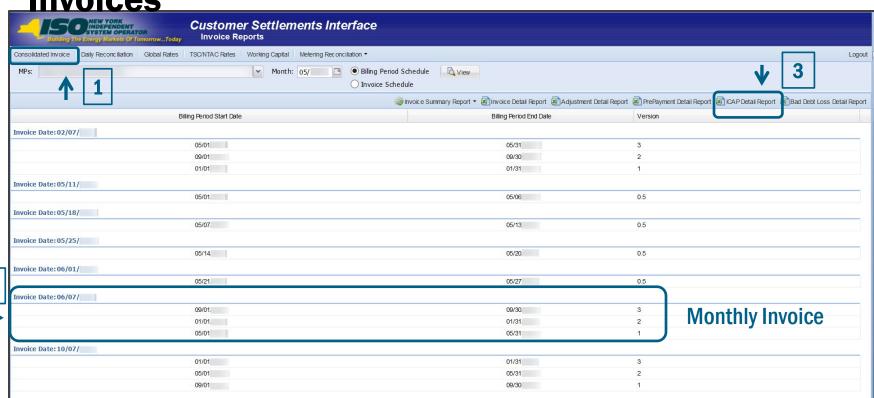
NYISO Market Participant ICAP Details - Invoice Dated May 18, 20XX							
Market Participa	Market Participant Name: Invoice Number:						
ICAP Detail - Invo	ice with Fl	exible Billin	g Period				
Flexible Billing Pe	riod of 05	/07/20XX	- 05/13/20	XX			
ICAP Auction Totals (\$)							
(\$135,840.00) / 31 x 7 = (\$30,673.55)							

Note: Sign convention used Positive: Credit to the MP (Negative): Charge to the MP

Customer Settlements Interface – Monthly #New York ISO



Invoices



Customer Settlements Interface – ICAP Detail



Report

Note: Sign convention used Positive: Credit to the MP (Negative): Charge to the MP

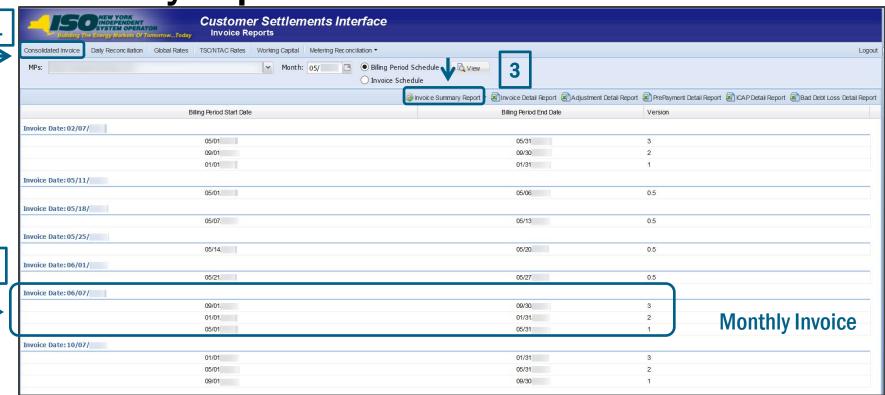
1	NYISO Market Par	ticipant ICAP Deta	ils - Invoice Dated June	e 07, 20XX
Market Participa	nt Name:			Invoice Number:
ICAP Detail - Invo	oice with Initial M	onth Billing Period		
Flexible	Billing Period	Billing Period	ICAP Transactions/Pa	nyment to Market
Invoice Date	Start Date	End Date	Participant	
			(\$) from Previous Invo	pices
5/11/20XX	5/1/20XX	5/6/20XX	(\$26,291.61)	
5/18/20XX	5/7/20XX	5/13/20XX	(\$30,673.55)	
5/25/20XX	5/14/20XX	5/20/20XX	(\$30,673.55)	
6/1/20XX	5/21/20XX	5/27/20XX	(\$30,673.55)	
		Flexible Total	(\$118,312.26)	
	_			
ICAP Auction	minus	Flexible Total	Equals	ICAP
Totals with Load				Transactions/Payment to
Shift and True-				Market Participant (\$)
Up (\$)				
(\$163,857.60)	-	(\$118,312.26)	=	(\$45,545.34)

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Customer Settlements Interface- Invoice

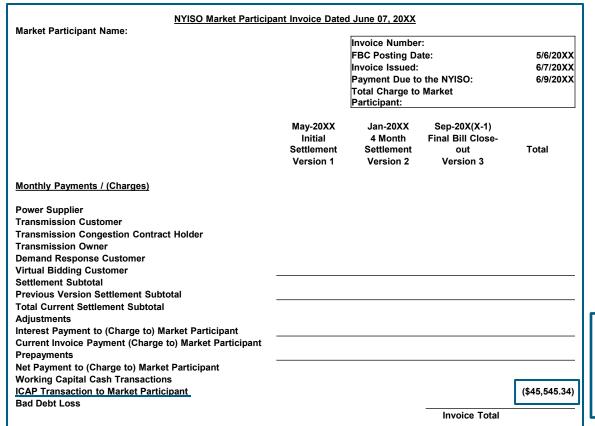


Summary Report



Customer Settlements Interface - Invoice Summary New York ISO

Report



*Sign convention used: Positive: Credit to the MP (Negative): Charge to the MP

Learner's Activity

For the May Monthly auction, a supplier is awarded 100 MW of UCAP in NYC at a clearing price of \$3.1/kW - Month

There are 4 days in the flexible invoice period

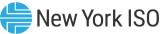
What is the settlement for this supplier for the 'weekly' invoice?

\$70,000

\$40,000

\$10,000

\$31,000



Summary: Topics of Discussion

- The ICAP Auction Award Settlement
- Two NYISO applications where ICAP billing information can be found
 - The Settlement information found in the Consolidated billing menu of the ICAP Automated Market System (AMS)
 - The Settlement information in the Customer Settlements Interface (CSI)

Additional Resources



- Tariffs: OATT and MST
- Installed Capacity Manual
- ICAP Automated Market System User's Guide
- Settlement Data Applications User's Guide (CSI User Guide)