

# ICAP Market Settlement Data

---

**Mathangi Srinivasan Kumar**

Market Training Program Administrator, Market Training,  
*New York Independent System Operator*

## Accounting & Billing Workshop

November 27 – December 1, 2023  
Remote Learning

# ICAP Market Overview

- **NYISO's ICAP market**
  - ICAP – Installed Capacity
- **Benefits of the ICAP Market**
  - Ensures resource adequacy
  - Resources recover a portion of fixed costs
  - Provides market signal for investment

# ICAP Market Overview

## ■ How does it work?

- Suppliers offer their capacity in one or more ICAP market auctions
- Loads bid to procure capacity in specific auctions
- NYISO runs auctions to match bids and offers to determine a clearing price
  - **Auctions held for**
    - GHI Locality
    - LI (Zone K)
    - NYC (Zone J)
    - ROS (Rest of State)
- Auxiliary processes and activities

# ICAP Market Mechanics

- **Auxiliary processes and activities**
  - Determining the amount of capacity required
  - Determining the amount of capacity available
  - Determining the amount of capacity suppliers are qualified to offer
  - Determining the amount of capacity obligation to be procured

# ICAP Market Auctions



## Strip or Capability Period Auctions

- Every Capability Period (Twice a year)
- Settlement determinants:
  - Market Clearing Price
  - # MWs Sold/Purchased

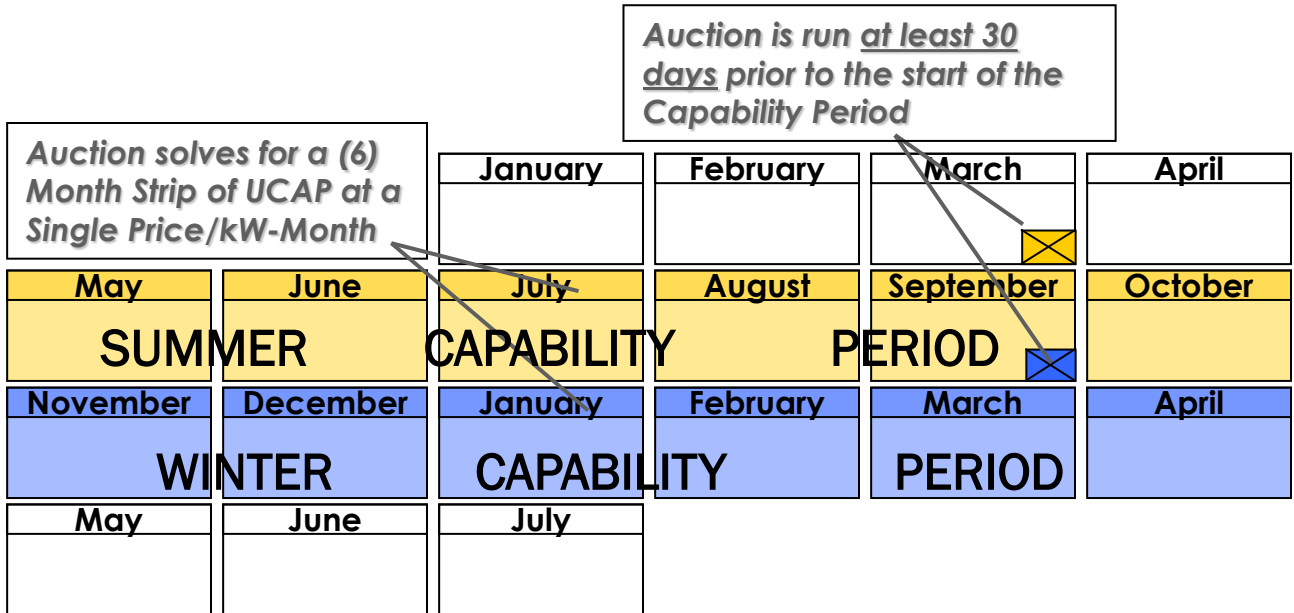
## Monthly Auctions

- Every Month (for the upcoming month)
- Settlement Determinants:
  - Market Clearing Price
  - # MWs Sold/Purchased

## Spot Market Auctions

- Every Month (For the Upcoming Month)
- Settlement Determinants:
  - Market Clearing Price
  - # MWs Sold/Purchased

# Strip or Capability Period Auctions



# Monthly Auctions

*May buy/sell for any month remaining in the Capability Period*

*Auction is run at least 15 days prior to the start of the obligation procurement period*

		January	February	March	April
					☒
May	June	July	August	September	October
☒	☒	☒	☒	☒	☒
November	December	January	February	March	April
☒	☒	☒	☒	☒	
May	June	July			

# Spot Market Auctions

- Auction is run 4-5 business days prior to the start of the month
- May sell for upcoming month only; LSEs do not bid
- Solves using the ICAP Demand Curve

		January	February	March	April
May	June	July	August	September	October
November	December	January	February	March	April
May	June	July			



# Monthly ICAP Market Settlements

## ■ Objectives for Monthly Capacity Market Settlements

- Identify the two NYISO applications where ICAP billing information can be found
- Describe the settlement information found in the Consolidated billing menu of the ICAP Automated Market System (AMS)
- Provide Settlement Description
- Identify Settlement Eligibility
- Name Settlement Determinants
- Describe the settlement information in the Customer Settlements Interface (CSI)
- Note Settlement Reference Material

# 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

# ICAP Automated Market System

# ICAP Settlements –ICAP AMS

## Settlements Description:

- **ICAP Auction Sales:** Intended to pay Capacity Market participants for selling UCAP to meet capacity requirements in New York
  - Sale: Credit to Market Participant
- **ICAP Auction Purchases:** Intended to charge LSEs for purchasing UCAP to fulfil their NYCA and locational capacity obligations
  - Purchase: Charge to Market Participant

# ICAP Settlement Eligibility

- **ICAP Market Participants will be paid if:**
  - They are suppliers who submit offers to sell UCAP in one of the NYISO ICAP auctions and are awarded capacity as a result of the auction
- **ICAP Market Participants will be charged if:**
  - They are LSEs that have to fulfil their NYCA and locational UCAP obligations
    - If LSE bids in Strip Market Auction and selected in the auction: Charged the Strip Auction MCP
    - If LSE bids in Monthly Market Auction and selected in the auction: Charged the Monthly Auction MCP
    - If still deficient in fulfilling capacity obligations: Automatically charged the Spot Auction MCP
- **Suppliers can also purchase capacity, and LSEs can sell capacity under specific conditions**

# ICAP Settlements – ICAP AMS

- **Settlements Result:**

- Total Billed per month(\$)

- **Settlement Intermediates:**

- Auction Total (\$)
  - Strip Auction Total (\$)
  - Monthly Auction Total (\$)
  - Spot Market Auction Total (\$)
- Adjustments Total (\$)
  - Load Shift Adjustment Total (\$)
  - Load Shift True Up Adjustment Total (\$)

- **Settlements Determinants:**

- Auction Award (MW)
- Market Clearing Price (\$/kW-month)

# ICAP Settlements – ICAP AMS

## ■ Settlement Algorithm:

**Total Billed per month(\$)** = Auction Total(\$)<sup>1</sup> + Adjustments Total(\$)


*Where:*

- **Auction Total (\$)** = Strip Auction (\$)<sup>2</sup> + Monthly Auction (\$)<sup>3</sup> + Spot Auction (\$)<sup>4</sup>
- **Adjustments Total (\$)** = Load Shift Adjustments (\$)<sup>5</sup> + Load True Up Adjustments (\$)<sup>6</sup>

*And:*

- **Strip Auction (\$/month)** = Auction Award (MW) \* 1000 \* Market Clearing Price (\$/kW-month)
- **Monthly Auction (\$/month)** = Auction Award (MW) \* 1000 \* Market Clearing Price (\$/kW-month)
- **Spot Market Auction (\$/month)** = Auction Award (MW) \* 1000 \* Market Clearing Price (\$/kW-month)
- **Load Shift Adjustment (\$/month)** = Load Shift (MW) \* 1000 \* Spot Market Clearing Price (\$/kW-month)
- **Load Shift True Up (\$/month)** = Load Shift True Up (MW) \* 1000 \* Spot Market Clearing Price (3 months prior) (\$/kW-month)
  - Load Shift True Up MW = True Up MW – Original MW

# ICAP AMS Billing Information


 **ISO** *Installed Capacity*  
Auction ▾ Mitigation ▾ Certify ▾ Bids/Offers ▾ Load Forecast ▾ Calendar ▾ Rights ▾ Derating Factor ▾ DMNC ▾ SCR ▾ Billing ▾ Upload/Download  
Maintain Daily Forecasted Load and Actual True Up Load  
View Load Shift Billing Adjustments  
**Consolidated Billing**



## Consolidated Billing

- Summary
- Detail
- Report



# ICAP AMS - Consolidated Billing Summary



Consolidated Billing Summary													
Delivery Month	Billing Organization ID	Billing Organization	Market Participant	Strip Auction	Monthly Auction	Spot Auction	Supplemental Auction	Auction Total	Load Shift Adjustments	Load True Up Adjustments	Adjustments Total	Total Billed	Action
Mar/2018	<input type="text"/>	<input type="text"/>	<input type="text"/>										
Mar/2018				23,920.00	74,440.00	37,480.00	0.00	135,840.00	25,632.50	2,385.10	28,017.60	163,857.60	 

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

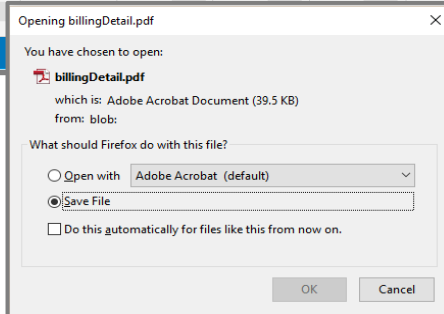
Representative  
 For Training Use Only

# ICAP AMS - Consolidated Billing Detail




## Consolidated Billing Summary

Consolidated Billing Summary													
< < 1 > >													
Delivery Month ▼ Mar/2018	Billing Organization ID Search	Billing Organization Search	Market Participant Search	Strip Auction	Monthly Auction	Spot Auction	Supplemental Auction	Auction Total	Load Shift Adjustments	Load True Up Adjustments	Adjustments Total	Total Billed	Action
Mar/2018													<div>Opening billingDetail.pdf</div> <div>You have chosen to open:</div>



# ICAP AMS - Consolidated Billing Detail

 <b>NEW YORK INDEPENDENT SYSTEM OPERATOR</b>		UCAP Consolidated Invoice				
MP Name:						
Delivery Month:						
Date Generated:						
		GHI	LI	NYC	ROS	Total
Strip Auction	Purchased	0.00	0.00	32,970.00	0.00	
	Sold	0.00	0.00	0.00	(9,050.00)	
	Total	0.00	0.00	32,970.00	(9,050.00)	23,290.00
Monthly Auction	Purchased	2,520.00	0.00	27,875.00	51,705.00	
	Sold	0.00	0.00	0.00	(7,660.00)	74,440.00
	Total	2,520.00	0.00	27,875.00	44,045.00	
Spot Auction	Purchased	24,336.00	1,054.00	38,471.00	37,417.00	
	Sold	(29,016.00)	0.00	0.00	(34,782.00)	
	Total	(4,680.00)	1,054.00	38,471.00	2,635.00	37,480.00
Load Shift	MW	0.5	-0.05	1.2	1.2	
	Clearing \$/kW	9.36	5.27	12.41	5.27	
	Total	4,680.00	(263.50)	14,892.00	6,324.00	25,632.50
Load Shift True Up	TU MW	0.5	-0.005	1.25	0.25	
	Orig MW	0.35	-0.005	0.63	1.42	
	Shift MW	0.15	0	0.62	-1.17	
	Clearing \$/kW	3.15	1.53	5.84	1.46	
	Total	472.50	0	3,620.80	(1,708.00)	2,385.10
Special Adjustments	Manual Adjustments	0.00	0.00	0.00	0.00	
	Total	0.00	0.00	0.00	0.00	
Grand Total						163,857.60

**AUCTION TOTAL**

**TOTAL BILLED**

20

# Consolidated Billing Report - Strip Auction, Example Month

GHI	Purchase MW	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
	<b>Total</b>	<b>\$0.00</b>
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
	<b>Total</b>	<b>\$0.00</b>
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
	<b>Total</b>	<b>\$32,970.00</b>
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)
	<b>Total</b>	<b>(\$9,050.00)</b>

HQ	Sold MW	0
	Sold Clearing Price	\$3.62
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
IESO	Sold MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
NE	Sold MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
PJM	Sold MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>

**Total (Strip Auction) = \$23,920.00**

# Consolidated Billing 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
	<b>Total</b>	<b>\$2,520.00</b>
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
	<b>Total</b>	<b>\$0.00</b>
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
	<b>Total</b>	<b>\$27,875.00</b>
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)
	<b>Total</b>	<b>\$44,045.00</b>



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

**Total (Monthly Auction) = \$74,440.00**

# Consolidated Billing Report – Spot Market Auction, Example Month

GHI	Purchase Deficiency MW	0
	Purchase Excess MW	2.6
	Purchase Clearing Price	\$9.36
	Purchase Extended Award 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)
	<b>Total</b>	<b>(\$4,680.00)</b>
		←
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
	<b>Total</b>	<b>\$1,054.00</b>
		←
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
	<b>Total</b>	<b>\$38,471.00</b>
		←

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)
	<b>Total</b>	<b>\$2,635.00</b>
		←
HQ	Sold Offered MW	0
	Sold Clearing Price	\$5.27
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
IESO	Sold Offered MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
NE	Sold Offered MW	0
	Sold Clearing Price	\$0.00
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>
PJM	Sold Offered MW	0
	Sold Clearing Price	\$5.27
	Sold Extended Award Value	\$0.00
	<b>Total</b>	<b>\$0.00</b>

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

# Consolidated Billing Report – Load Adjustments, Example Month

<u>Load Shift</u>			
GHI	MW's	0.5	
	Clearing \$/kW	\$9.36	
	<u>Total</u>	<u>\$4,680.00</u>	←
LI	MW's	-0.05	
	Clearing \$/kW	\$5.27	
	<u>Total</u>	<u>(\$263.50)</u>	←
NYC	MW's	1.2	
	Clearing \$/kW	\$12.41	
	<u>Total</u>	<u>\$14,892.00</u>	←
ROS	MW's	1.2	
	Clearing \$/kW	\$5.27	
	<u>Total</u>	<u>\$6,324.00</u>	←

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

**Total (Load Shift) = \$25,632.50**

**Total (Load Shift True Up) = \$2,385.10**



# Consolidated Billing Report, ICAP Settlements – Example Month

Representative  
For Training Use Only

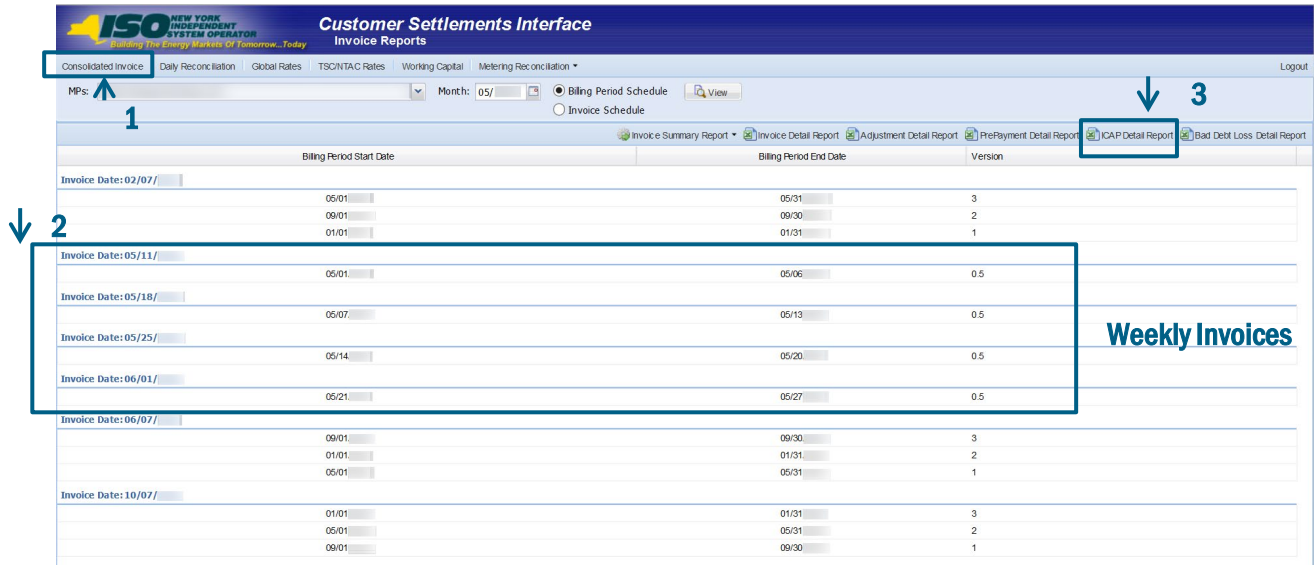
Strip Auction	\$23,920.00	} 135,840.00
Monthly Auction	\$74,440.00	
Spot Market Auction	\$37,480.00	
Supplementary Auction	\$0.00	
Load Shift	\$25,632.50	
Load Shift True Up	\$2,385.10	
<hr/>		
<b>Total billed (Month)</b>	<b>\$163,857.60</b>	

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

# Customer Settlements Interface (CSI)

# Customer Settlements Interface

## – Weekly Invoices



**Customer Settlements Interface**  
Invoice Reports

Consolidated Invoice | Daily Reconciliation | Global Rates | TSC/NTAC Rates | Working Capital | Metering Reconciliation

MPs:  Month: 05/ ☐ Billing Period Schedule ☐ Invoice Schedule

Invoice Summary Report | Invoice Detail Report | Adjustment Detail Report | PrePayment Detail Report | **ICAP Detail Report** | Bad Debt Loss Detail Report

Invoice Date: 02/07/	Billing Period Start Date	Billing Period End Date	Version
	05/01	05/31	3
	09/01	09/30	2
	01/01	01/31	1
Invoice Date: 05/11/	05/01	05/06	0.5
Invoice Date: 05/18/	05/07	05/13	0.5
Invoice Date: 05/25/	05/14	05/20	0.5
Invoice Date: 06/01/	05/21	05/27	0.5
Invoice Date: 06/07/	09/01	09/30	3
	01/01	01/31	2
	05/01	05/31	1
Invoice Date: 10/07/	01/01	01/31	3
	05/01	05/31	2
	09/01	09/30	1

**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 - Invoice with Flexible Billing Period						
Flexible Billing Period of 05/01/20XX - 05/06/20XX						
ICAP Auction Totals (\$)	<i>Divided by</i>	Number of Days in Month	<i>Multiplied by</i>	Number of Days in Flexible Billing Period	<i>Equals</i>	ICAP Transactions/Payment to Market Participant (\$)
(\$135,840.00)	/	31	x	6	=	(\$26,291.61)

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

NYISO Market Participant ICAP Details - Invoice Dated May 18, 20XX						
Market Participant Name:					Invoice Number:	
ICAP Detail - Invoice with Flexible Billing Period						
Flexible Billing Period of 05/07/20XX - 05/13/20XX						
ICAP Auction Totals (\$)	<i>Divided by</i>	Number of Days in Month	<i>Multiplied by</i>	Number of Days in Flexible Billing Period	<i>Equals</i>	ICAP Transactions/Payment to Market Participant (\$)
(\$135,840.00)	/	31	x	7	=	(\$30,673.55)

# Customer Settlements Interface – Monthly Invoices

1



## Customer Settlements Interface

### Invoice Reports

Consolidated Invoice | Daily Reconciliation | Global Rates | TSO/NTAG Rates | Working Capital | Metering Reconciliation

MPs:  Month: 05/  ☒ Billing Period Schedule ☐ Invoice Schedule

☒ Invoice Summary Report
 ☐ Invoice Detail Report
 ☐ Adjustment Detail Report
 ☐ PrePayment Detail Report
 

3

☒ ICAP Detail Report
 ☐ Debt Loss Detail Report

Invoice Date: 02/07/	Billing Period Start Date	Billing Period End Date	Version
	05/01	05/31	3
	09/01	09/30	2
	01/01	01/31	1
Invoice Date: 05/11/	05/01	05/06	0.5
Invoice Date: 05/18/	05/07	05/13	0.5
Invoice Date: 05/25/	05/14	05/20	0.5
Invoice Date: 06/01/	05/21	05/27	0.5
Invoice Date: 06/07/	09/01	09/30	3
	01/01	01/31	2
	05/01	05/31	1
Invoice Date: 10/07/	01/01	01/31	3
	05/01	05/31	2
	09/01	09/30	1

2

Monthly invoice


# Customer Settlements Interface – ICAP Detail Report

NYISO Market Participant ICAP Details - Invoice Dated June 07, 20XX				
Market Participant Name:			Invoice Number:	
ICAP Detail - Invoice with Initial Month Billing Period				
Flexible Invoice Date	Billing Period Start Date	Billing Period End Date	ICAP Transactions/Payment to Market Participant (\$) (\$) from Previous Invoices	
5/11/20XX	5/1/20XX	5/6/20XX	(\$22,291.61)	
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 Totals with Load Shift and True-Up (\$)	<i>minus</i>	Flexible Total	<i>Equals</i>	ICAP Transactions/Payment to Market Participant (\$)
(\$163,857.60)	-	(\$118,312.26)	=	(\$45,545.34)

Representative  
For Training Use Only

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

# Customer Settlements Interface- Monthly Invoice


**Customer Settlements Interface**  
 Invoice Reports

Consolidated Invoice | Daily Reconciliation | Global Rates | TSC/NTAC Rates | Working Capital | Metering Reconciliation \*

Logout

MP:  Month: 05/

☒ Billing Period Schedule ☐ Invoice Schedule

Billing Period Start Date	Billing Period End Date	Version
Invoice Date: 02/07/		
05/01	05/31	3
09/01	09/30	2
01/01	01/31	1
Invoice Date: 05/11/		
05/01	05/06	0.5
Invoice Date: 05/18/		
05/07	05/13	0.5
Invoice Date: 05/25/		
05/14	05/20	0.5
Invoice Date: 06/01/		
05/21	05/27	0.5
Invoice Date: 06/07/		
09/01	09/30	3
01/01	01/31	2
05/01	05/31	1
Invoice Date: 10/07/		
01/01	01/31	3
05/01	05/31	2
09/01	09/30	1

**Monthly Invoice**

# Customer Settlements Interface – Invoice Summary Report

NYISO Market Participant Invoice Dated June 07, 20XX				
Market Participant Name: I		Invoice Number: FBC Posting Date: 5/6/20XX Invoice Issued: 6/7/20XX Payment Due to the NYISO: 6/9/20XX <b>Total Charge to Market Participant:</b>		
	May-20XX	Jan-20XX	Sep-20X(X-1)	
	Initial Settlement	4 Month	Final Bill Close-	Total
	Version 1	Settlement	out	
		Version 2	Version 3	
<b>Monthly Payments / (Charges)</b>				
Power Supplier				
Transmission Customer				
Transmission Congestion Contract Holder				
Transmission Owner				
Demand Response Customer				
Virtual Bidding Customer				
Settlement Subtotal				
Previous Version Settlement Subtotal				
Total Current Settlement Subtotal				
Adjustments				
Interest Payment to (Charge to) Market Participant				
Current Invoice Payment (Charge to) Market Participant				
Prepayments				
Net Payment to (Charge to) Market Participant				
Working Capital Cash Transactions				
<u>ICAP Transaction to Market Participant</u>				(\$45,545.34)
Bad Debt Loss				
			Invoice Total	

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



# Concept Recap

**Which version of invoice in the Customer Settlement Interface includes load shift and true up in the ICAP transactions/payment to the MP?**

- a. Weekly invoice**
- b. Monthly invoice**
- c. Both weekly and monthly invoices**

# Concept Recap

Which version of invoice in the Customer Settlement Interface includes load shift and true up in the ICAP transactions/payment to the MP?

- a. Weekly invoice
- b. Monthly invoice**
- c. Both weekly and monthly invoices

# Concept Recap

For the May Monthly auction, a supplier is awarded 100 MW of UCAP in NYC at a clearing price of \$4.93/kW – Month

There are 4 days in the flexible invoice period

What is the settlement for this supplier for the ‘weekly’ invoice?

- a. \$1,972.00
- b. \$49,300.00
- c. \$63,612.90
- d. \$16,433.33

# Concept Recap

For the May Monthly auction, a supplier is awarded 100 MW of UCAP in NYC at a clearing price of \$4.93/kW – Month

There are 4 days in the flexible invoice period

What is the settlement for this supplier for the ‘weekly’ invoice?

- a. \$1,972.00
- b. \$49,300.00
- c. **\$63,612.90**
- d. \$16,433.33

$$100\text{MW} \times 1,000 = 100,000 \text{ kW/month}$$

$$100,000 \times \$4.93 = \$493,000$$

ICAP Auction Totals (\$)	Divided by	Number of Days in May	Multiplied by	Number of Days in Flexible Billing Period	Equals	ICAP Transactions/Payment to MP (\$)
\$493,000	/	31	x	4	=	\$63,612.90

# ICAP Market Settlements

## Settlement Reference Material

- **OATT and MST**
- **Installed Capacity Manual**
  - Section 5.16 Billing and Settlements
- **ICAP Automated Market System User's Guide**
  - Section 12.4 How to View Consolidated Billing
- **Settlement Data Applications User's Guide (CSI User Guide)**
  - Section 4.2.2.5 ICAP Detail Report