

# Installed Capacity Market Mitigation Measures

Dan Jerke - Supervisor, ICAP Market Mitigation Laura Gribbin – Sr. Business Analyst, Capacity Market Products

New York Independent System Operator

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# Agenda

- Purpose of ICAP Market Mitigation Measures
- Supply-Side Mitigation (SSM)
  - Pivotal Supplier measures
  - Physical withholding
- Buyer-Side Mitigation (BSM)
  - Walk-through of BSM narrative/numeric example
    - Part A Test: "Default Net CONE"
    - Part B Test: Unit Net CONE
    - ICAP Spot Market Auction forecast price
    - Determination and application of Offer Floor
  - BSM postings for Class Year 2011
- ICAP AMS Mitigation Screens including changes for new Locality



# **Purpose of Mitigation**

- The purpose of <u>supply-side mitigation</u> is to prevent physical or economic withholding by ICAP Suppliers that may have an incentive to raise prices.
  - 1. Pivotal Supplier measures
    - Spot offer price shall not be higher than the greater of (a) the lowest of the applicable UCAP Offer Reference Levels and (b) the Going-Forward Cost of the Resource, if applicable
    - Must offer requirement for Mitigated UCAP
  - 2. Physical withholding provision
    - Audit and review of proposals or decisions to retire, remove, or derate capacity.



# **Purpose of Mitigation**

- The purpose of <u>buyer-side mitigation</u> is to prevent uneconomic entry from artificially suppressing capacity prices.
  - **1.** *Mitigation Exemption Test for Examined Facilities* 
    - Generator and UDR Projects
    - Special Case Resources (MST, Att. H, Sec. 23.4.5.7.5)
  - 2. Offer Floor (applied to non-exempt Spot Market offers)
  - **3.** BSM UCAP Clearing Rule
    - "UCAP that has cleared for any twelve, not-necessarily-consecutive, months shall cease to be subject to the Offer Floor requirement" (referred to as the "BSM UCAP Clearing Rule"; MST, Att. H, Sec. 23.4.5.7).



## **Brief History**

- In-City divested generation owner (DGO) bid caps were in effect through April 2008.
- In-City Pivotal Supplier rules replaced DGO bid caps and In-City buyer-side mitigation measures became effective in May 2008.
- On June 6, 2013, FERC accepted ICAP mitigation measures for all future New Capacity Zones, similar to those in NYC.
- On January 28, 2014, FERC accepted Demand Curves\* for Capability Years 2014/2015, 2015/2016, and 2016/2017, for the NYCA and the NYC, Long Island, and G-J Localities.

\*Subject to compliance filing, which is pending FERC acceptance (Docket No. ER14-500).



## Supply-Side Mitigation – Designation of Affiliated Entities

- Market Parties that have "Control" of Mitigated Capacity Zone (MCZ) resources are required to identify their "Affiliated Entities", based on the criteria in the Market Services Tariff, Attachment H, Section 23.2.1.
  - Special Case Resources (UCAP) are counted in the portfolio.
- The Market Party must use the "MP Affiliate Form" screen in the ICAP Automated Market System.
  - The pull-down menu options correspond to criteria in the MST Attachment H, Section 23.2.1
- The ICAP event calendar specifies the deadlines for identifying Affiliated Entities.



# **Pivotal Supplier**

#### • Definition from MST, Att. H, Sec. 23.4.5

- "Pivotal Supplier' shall mean (i) for the New York City Locality, a Market Party that, together with any of its Affiliated Entities, (a) Controls 500 MW or more of Unforced Capacity, and (b) Controls Unforced Capacity some portion of which is necessary to meet the New York City Locality Locational Minimum Installed Capacity Requirement in an ICAP Spot Market Auction; (ii) for the G-J Locality, a Market Party that, together with any of its Affiliated Entities, (a) Controls 650 MW or more of Unforced Capacity; and (b) Controls Unforced Capacity some portion of which is necessary to meet the G-J Locality Locational Minimum Installed Capacity Requirement in an ICAP Spot Market Auction..."
- Each month, at the close of the certification period, the NYISO determines which Market Parties are Pivotal Suppliers in each Mitigated Capacity Zone, based on the two thresholds described above.
  - For each portfolio, for all Affiliated Entities in the portfolio, the Control MW is calculated as the sum of all MP adjusted market positions for the month for each Mitigated Capacity Zone.
  - For each Mitigated Capacity Zone, a Market Party, together with its Affiliated Entities, is deemed to be a Pivotal Supplier if its Control MW exceeds the greater of (a) and (b) in the definition above.



## **Illustration: Pivotal Control Threshold**





# **Going-Forward Costs**

- An ICAP Supplier in a Mitigated Capacity Zone may request a Going-Forward Cost (GFC) determination from the NYISO for any of its in the Mitigated Capacity Zone (See MST, Att. H, Sec. 23.4.5.3)
- The NYISO calculates GFCs as either (a) the costs that the ICAP Supplier can avoid by ceasing to supply ICAP or by retiring, net of anticipated Energy and Ancillary Services revenues, or (b) the opportunity cost of foregone sales, net of cost of the sale if it had taken place.
- A Pivotal Supplier for which the NYISO has provided GFCs can offer into the ICAP Spot Market with an offer price up to the greater of the lowest applicable UCAP Offer Reference Level and the NYISO-determined GFC.



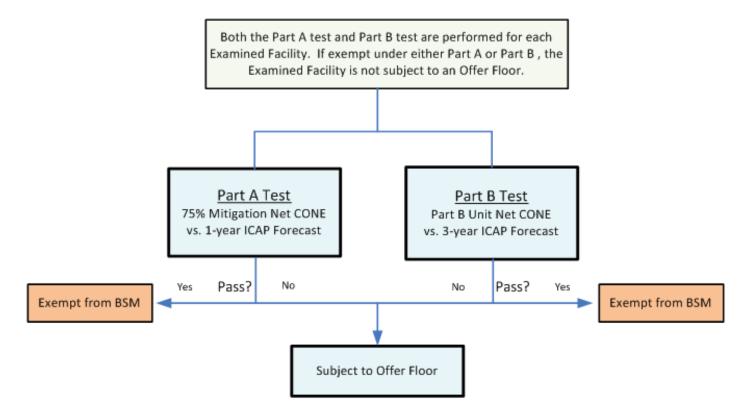
# **Physical Withholding**

- Any proposal or decision to retire, remove, or de-rate ICAP from a supplier in a Mitigated Capacity Zone may be subject to an audit and review.
- The audit and review will assess whether the proposal or decision has a legitimate economic justification.
- If the proposal or decision constitutes physical withholding, and would increase the Spot Market Auction price by at least the greater of 5% or \$0.50/kW-month, a penalty shall be assessed.



# **Buyer-side Mitigation**

#### Mitigation Exemption Tests





# Part A Test & Default Net CONE

- Both the Part A Test and Part B Test are performed for each Examined Facility.
- Part A Test
  - The Examined Facility is exempt if the 1-year ICAP forecast exceeds 75% of Mitigation Net CONE (Default Net CONE).
  - The forecast is calculated for one Capability Year occurring three years from the Summer Capability Period of the Class Year, i.e. May 2014 to April 2015 for Class Year 2011.
    - Each Examined Facility is assumed to offer as a price-taker.
    - The Capability Year forecast is calculated as the sum of 6 \* Summer price + 6 \* Winter price.
- Default Net CONE
  - Mitigation Net CONE = ARR \* [1 Excess/(DCL-1)]
  - Default Net CONE = 0.75 \* Mitigation Net CONE
    - Note: The term "Mitigation Net CONE" was defined by the NYISO in its Aug. 12, 2010 Compliance Filing, which is pending before the Commission (Docket Nos. EL07-39, ER08-695, and ER10-2371.)



# Part B Test & Unit Net CONE

#### Part B Test

- The Examined Facility is exempt if the 3-year average annual ICAP forecast exceeds its Unit Net CONE.
- The forecast is calculated for three Capability Years beginning three years from the Summer Capability Period of the Class Year, i.e. May 2014 to April 2017 for Class Year 2011.
  - Each Examined Facility is assumed to offer at a price equal to its Offer Floor (MST, Att. H, Sec. 23.4.5.7.3.2). Offer Floors will be inflated or escalated, as appropriate, for all periods.
  - The average annual forecast is calculated as the average of the three Capability Year forecasts.

#### • Unit Net CONE

Annual Net CONE =

Investment Cost \* Carrying Charge + Fixed O&M – Net E&AS Revenues

- The Annual Net CONE is converted to UCAP and inflated/escalated to the three years of the Mitigation Study Period.
- Unit Net CONE =  $(ANC_{MSP1} + ANC_{MSP2} + ANC_{MSP3})/3$



## **ICAP Forecasts**

- MST, Att. H, Sec. 23.4.5.7.3 describes how the NYISO is required to compute the "reasonably anticipated ICAP Spot Market Auction forecast price"
- Section 5.1 of the BSM narrative further identifies the assumptions that the NYISO employs in the forecasts
  - Demand Curve inputs
    - Reference Point, Demand Curve length, Load Forecast, Locational Minimum Installed Capacity Requirement, Locational Derating Factor
  - Supply curve inputs
    - Existing Generation, SCRs, UDRs, Additions, Examined Facilities, Unoffered MW, Expected Retirements
- In general, inputs are taken from the most recently-published NYISO Load and Capacity Data (Gold Book), the currentlyeffective ICAP Demand Curves, or the most recent market data.



# **Offer Floor Determination**

- If an Examined Facility is not exempt under either the Part A Test or Part B Test, it is subject to an Offer Floor.
- Determination
  - The Offer Floor is equal to the lower of the Default Net CONE and the Annual Net CONE in year 1 of the Mitigation Study Period.
  - The seasonal shaping formula converts the annual Offer Floor into two monthly values: one for the Summer Capability Period and one for the Winter Capability Period.
- Application
  - The seasonal Offer Floors are adjusted to the applicable year's dollars prior to their use.
    - If an Examined Facility first offers to sell capacity prior to the first year of the Mitigation Study Period, its Offer Floor is discounted to the present year's dollars.
    - If an Examined Facility first offers capacity after the first year of the Mitigation Study Period, its Offer Floor is inflated.
  - The Offer Floor is adjusted annually for inflation.



## **BSM Postings for Examined Facilities**

- The NYISO is required to post the following information prior to the commencement of the Class Year Project Cost Allocation Process and its issuance of BSM determinations:
  - Forecast inputs of the reasonably anticipated ICAP Spot Market Auction forecast
  - Examined Facilities
  - Expected Retirements
- Additionally, the posting includes:
  - Inflation and/or escalation values
  - Derivation of the Default Net CONE and the shaping to monthly UCAP values



## Mitigation Measures: Special Case Resources

- Mitigation exemption test, performed monthly
  - Applies to any new SCR in a Mitigated Capacity Zone (G-J Locality and NYC)
  - MST Att. H Sec. 23.4.5.7.5 describes the process for SCRs subject to buyer-side mitigation analysis.

### Offer Floor applied to non-exempt Spot Market offers

• The aggregation that includes the SCR with an Offer Floor must offer the associated MW at or above the Offer Floor.

### Clearing Rule:

 "... Special Case Resource shall be subject to an Offer Floor beginning with the month of its initial offer to supply Installed Capacity, and until its offers of Installed Capacity have been accepted in the ICAP Spot Market Auction at a price at or above its Offer Floor for a total of twelve, not necessarily consecutive, months" (MST 23.4.5.7.5).



## Mitigation: Special Case Resources in G-J Locality

- A Special Case Resource shall be exempt from the Offer Floor if
  - (a) it is located in a Mitigated Capacity Zone except New York City and is enrolled as a Special Case Resource with the ISO for any month within the Capability Year that includes March 31 in an ICAP Demand Curve Reset Filing Year in which the ISO proposes a New Capacity Zone that includes the location of the Special Case Resource,
  - or (b) the ISO projects that the ICAP Spot Market Auction price will exceed the Special Case Resource's Offer Floor for the first twelve months that the Special Case Resource reasonably anticipated to offer to supply UCAP
- (a) Beginning with the month of May 2014, SCRs will be evaluated for BSM mitigation in G-J Locality if:
  - First time enrolled beginning May 2013 through April 2014,
  - Enrolled in Zones G, H, and I, and
  - Enrolled beginning month of May 2014 or later in the Capability Year.
- (b) all new SCRs enrolled in G-J Locality beginning May 2014



## Mitigation Process: Special Case Resources

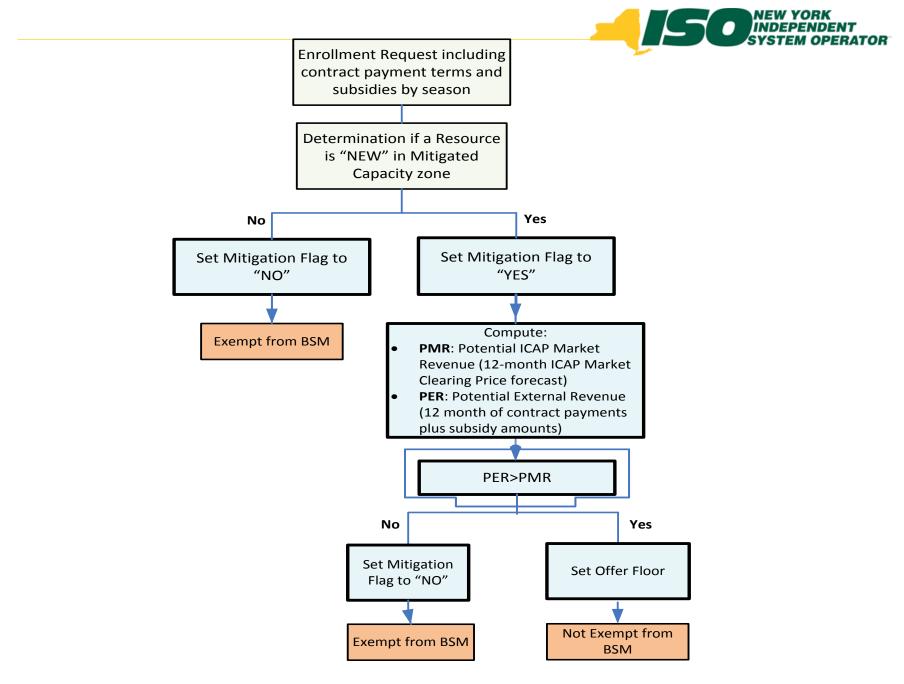
## The NYISO must receive from the RIP:

#### SCR contract data, including:

- ICAP SCR service start and end dates
- Payment timing (monthly, capability period, etc.)
- Payment terms (for example):
  - Percentage of auction clearing price
  - Guaranteed minimum payment
  - Other terms

#### Other payments or benefits received by the SCR, including:

- Name of provider organization and program
- Payment or benefit start and end dates
- Payment timing, amount, and type (one-time, per-kilowatt, etc.)
- The Offer Floor calculation excludes payments or the value of benefits provided under programs administered or approved by New York State or a government instrumentality of New York State.





# **SCR: Example 1**

## Offer Floor

- ICAP SCR enrollment months: May 2014 Apr 2015
- Payment timing: monthly
- Payment terms: 85% Spot Market Clearing Price

## Determination

 Exempt from the Offer Floor because 85% of the Spot Market Clearing Price is less than the Spot Market Clearing Price



# **SCR: Example 2**

## Offer Floor

- ICAP SCR enrollment months : May 2014 Apr 2015
- Payment timing: monthly
- Payment terms: 75% Spot Market Clearing Price plus \$1.00/kW-month

## Determination

- If price forecast = \$3.00/kW-month
  - Not exempt because: 0.75\*(\$3.00) + \$1.00 = \$3.25, which is greater than the forecast price of \$3.00
- If price forecast = \$5.00/kW-month
  - Exempt because 0.75\*(\$5.00) + \$1.00 = \$4.75, which is less than the forecast price of \$5.00



# **Mitigation Screen Changes**

- Supply-Side Mitigation
  - Activities
  - Screens
- Buyer-Side Mitigation
  - Activities
  - Screens



## **Supply-Side Mitigation Activities**

- MCZ ICAP Suppliers may make additions/deletions to list of Affiliated Entities via the MP Affiliate Form screen
- System determines portfolios
- MCZ ICAP Suppliers may request Going-Forward Cost
   Determinations for individual resources
- ICAP Suppliers certify capacity during the certification period
- System calculates UCAP Offer Reference Level for each MCZ
- System calculates Pivotal Control Threshold for each MCZ
- System performs Pivotal Control Test to determine Pivotal Suppliers
- Pivotal Supplier has "must offer" requirement
- ICAP Spot Market Auction Offer Validation



## **Supply-Side Mitigation – Parameters**

- (FERC Approved) Minimum Pivotal Control Threshold <sub>MCZ</sub>
- (Monthly) Pivotal Control Threshold MCZ =
- Total UCAP <sub>MCZ</sub> Minimum Locational Requirement UCAP <sub>MCZ</sub>
- UCAP Offer Reference Level (dc\_ref\$ <sub>MCZ</sub>) = y-coordinate on UCAP Demand Curve <sub>MCZ</sub> at Total UCAP <sub>MCZ</sub> (x-coordinate)
- Market Party is "Pivotal" in a Mitigated Capacity Zone if it fails the 2-Part Pivotal Control Test



### Supply-Side Mitigation - MP Affiliate Form Screen

	IOR MD Affilia	ed Capacity Inte Form						
Auction *   Mitigation *   Certify *   Bids/C	Offers *   Load Forecast *   Calendar	*   Rights *   Derating Fact	tor *   DMINC *   SCR	*   Admin *   Billing *	Upload/Download			
	MP Name Acme Gas	s & Electric	V A	ctive Affiliations onl	y? No 🗸	Display		
Legal Information								
Selected Market Participant	Acme Gas & Electric	6		Current Time				
Previous Spot Auction Month	h	(	Deadline to Submit (	hanges for Previous Sp	oot Auction Month		_	
Current Spot Auction Month			Deadline to Submit	Changes for Current Sp	ot Auction Month		_	
Next Spot Auction Month	P - 1 - 1		Deadline to Submit	t Changes for Next Spo	t Auction Month			1.00
MP Affiliate Form	Relationship of Affiliated Er	ntity	Affiliation Start Date	First Effective Spot Auction Month	Affiliation End Date	Last Effective Spot Auction Month	Last Updated By	Las
Valley View Cogen	Interests in Mitigated Capa	city Zone ICAP Supplier	04/01/2014	May 2014				3
Bigapple Gas	Interests in Mitigated Capa	Interests in Mitigated Capacity Zone ICAP Supplier		May 2014				3
Breezy Wind Park	Parties to agreement with rep related to UCAP	porter	04/01/2014	May 2014				1
Energy Solutions Inc.	Controlling Persons/Entitie	es	04/01/2014	May 2014			S 5	1

## See ICAP Automated User Guide Section 4.10 for instructions on how to complete the MP Affiliate Form.



### Supply-Side Mitigation - MP Affiliate Form Screen

 Relationship of Affiliated Entity drop down to Table 4.33 in the ICAP Automated Market System User's Guide.

MP Affiliate Form	
Affiliated Entity	Relationship of Affiliated Entity
×	
Save	Controlling Persons/Entities NYISO Market Participants under common control Interests in Mitigated Capacity Zone ICAP Supplier Providers of UCAP services to reporter Parties to agreement with reporter related to UCAP

See *ICAP Automated User Guide Section 4.10* for instructions on how to complete the MP Affiliate Form and Table 4.33 which aligns to the drop down list illustrated above.



## Supply-Side Mitigation -*View Default Reference Prices Screen*

Building The Energy Markets Of Tomorro	Installed Capacity View Default Reference Prices			
Auction • Mitigation • Certify • Bids/Offers	▼ Load Forecast ▼ Calendar ▼ Rights ▼ Derating Factor ▼ DMNC ▼ SCR ▼	Billing 🔻 Upload/Download		
	Season: Summer 2014	▼ Display		
Default Reference Prices G-	J Locality			
Auction Month	Default Reference Price (\$/kW-month)	Generator UCAP	SCR UCAP	Total UCAP
05/2014		() <del></del> - ()		
06/2014	- <del></del>			
07/2014				244
08/2014	1.222	1000		100
09/2014		8.000		2777
10/2014		6 (STT.)	5755.0	2 (5.5)
Default Reference Prices N	C Default Reference Price (\$/kW-month)	Generator UCAP	SCR UCAP	Total UCAP
05/2014				
06/2014		0		
07/2014	1.000			
08/2014	1.000	2	1 <del></del> 5	
09/2014	1220	( <b></b> )	(222)	[222]
10/2014	3. <u>2.4</u>	S <u>222</u> )	2220	1222

#### See ICAP Automated User Guide Section 4.10



Auction * Mitigation * Certify * Bids/Offers * Load Forecast * Calendar * Rights * Derating Factor * DMWC * SCR * Admin * Billing * Upload/Download           MP Name         Acme Energy         Month May/2014 *         Display           Mitigation Information         May/2014 *         Original         Original           MP Name         Acme Energy         Current Eastern Time         Original           Month         May/2014         Posted Date         Original			ima <b>ry</b>	
Mitigation Information           MP Name         Acme Energy         Current Eastern Time	Auction * Mitigation * Certify *	Bids/Offers * Load Forecast * Calendar * Rights * Derating Factor * 0	DMINC * SCR * Admin * Billing * Upload/Do	wnload
MP Name Acme Energy Current Eastern Time		MP Name Acme Energy	Month M	Aay/2014 Display
	Mitigation Informati	on		
May/2014 Posted Date	MP Name	Acme Energy	Current Eastern Time	
	Month	May/2014	Posted Date	
Affiliate Portfolio Information           Affiliate           Pertfolio: 5552           Pertfolio: 1000           Pertfolio: 9300   Current NYC Mitigation Parameters	Affiliate Perdiole: 5552 Perdiole: 1000 Perdiole: 9300			

Pivotal Supplier?	No	Minimum Pivotal Control Threshold	500.0
Default Reference Price	3.24	Pivotal Control Threshold	812.0

#### NYC PTID Information

	PTID Name	Adjusted Reference Price
12	2222 Big Apple 2	7.45
12	2347 Big Apple 7	

#### Current G-J Locality Mitigation Parameters

Pivotal Supplier?	Yes	Minimum Pivotal Control Threshold	650.0
Default Reference Price	2.65	Pivotal Control Threshold	1165.3

#### GHI PTID Information

PTID Name	Adjusted Reference Price
1244 Happy Hudson Steam	6.35



## Supply-Side Mitigation – Offer To Sell Screens

 Insert Offers to Sell and Maintain Offers to Sell screens perform offer validation on offers of Mitigated UCAP.



NYC offer for 0.1 MW for and 5.00 \$/kW/Month exceeds the Reference Price of 4.20 \$/kW/Month

#### ICAP Automated Market System User's Guide Section 6:

If the offer is submitted by a Pivotal Supplier, Spot Market Offer Price cannot exceed the **higher of** the lowest applicable **UCAP Offer Reference Level** defined in the Market Services Tariff - Attachment H and the **Adjusted Reference Price** (if a GFC determination is in effect for this PTID as per the provisions in Market Services Tariff - Attachment H, Section 23.4.5.3).



## Supply-Side Mitigation -Spot Offer Summary Screen

Building The Energy Markets Of Tom	Inst arrowToday Spo	t <b>alled Capacity</b> ot Offer Summary	/				
Auction * Mitigation * Certify * Bids/Offers	* Load Forecast * Cal	endar * Rights * Derating Fact	or * DMNC * SCR * Admin *	Billing * Upload/Download			
MP Name: Acme Energy	*	Season: Summer 20	14 Y Location	GHI Month:	May/2014 Y Display		
Search Criteria		Arme	Lnergy	Location	GHI		
Season		Summer 2014		Month	May/2014		
Current Eastern Tim	e	13-Feb-20:	4 12:56:48				
Spot Offer Summary							
PTID Name	Availa	ble For Offer	Capacity Un	-Offered	Must Offer		
12345 Happy Valley GT 1		150.1 150.1 Yes			Yes		



## **Buyer-Side Mitigation Activities**

- NYISO conducts Buyer-Side Mitigation 2-Part Exemption Test (Illustration on Slide 11)
- NYISO configures Summer/Winter Floor Prices (Offer Floors) in the ICAP AMS with a Resource Name
- ICAP Spot Market Auction Non-exempt MWs subject to Offer Floor
- Current Resource Exemptions applied based on "BSM UCAP Clearing Rule"
  - Note: Current Resource Exemption is tracked by Resource Name on the "Floor Prices" and "Allocate Sales" screens and is the same as the "UCAP that has cleared pursuant to the "BSM UCAP Clearing Rule".



## Buyer-Side Mitigation -*Floor Prices Screen*

Sultaing the Energy Markets Of TomorrowToday Floor Prices							
Auction * Mitigation * Certify * Bids/Offers * Load Forecast * Calendar * Rights * Derating Factor * DMNC * SCR * Admin * Billing * Upload/Download							
PTIDs Subject to a F	loor Price						
PTID Name	Start Month	End Month	Resource Name	Summer Floor Price	Winter Floor Price	Last Update Date	Last Updated By
12111 BV <u>1</u> 11	Jun/2014		BIG VALLEY	9.00	4.50 -		
12222 BV <u>2</u> 22	Jun/2014		BIG VALLEY	9.00	4.50	_	



## Buyer-Side Mitigation -*Allocate Sales Screen*

-1	Soulding The Energy Mark	PERATOR	Installed Capacity Allocate Sales	,			
Auction *	Mitigation 🔻 Certify 🔻	Bids/Offers 🔻 Load Foreca	st * Calendar * Rights * Derating Facto	r * DMNC *	SCR * Admin * Bil	ling * Upload/Downlo	ad
MP N	Acme Energ	Ŷ	Season: Summer 201	4 👻	Location: All	Y Month: J	un/2014 💙
			Dishial				
Locatio	on Sales Sum	mary					
	Location		Auction and Bilateral Sales		U	nallocated Balance	
	GHI		300.0			0.0	
Buyer-	Side Mitigatio	on Resource Su	mmary				
Re	esource Name	Resour	ce Current Exemption MW	Res	ource Current Exem	ption MW Remainin	9
	BIG VALLEY		55.5		10.0	D	
Sales Allocations							
Location	PTID Name	Available UCAP	Allocated Auction and Bilateral Sales	Unsold UCAP	Resource Name	Last Updated By	Last Update Date
GHI	12111 BV 111	150.0	40.0	110.0	BIG VALLEY		
GHI	12222 BV 222	150.0	5.5	144.5	BIG VALLEY		



## Buyer-Side Mitigation – Offer To Sell Screens

 Insert Offers to Sell and Maintain Offers to Sell screens perform offer validation on offers that are not exempt from buyer-side mitigation.



• NYC Offer for 5.0 MW and 5.00 \$/kW/Month is less than the Floor Price of 9.00 \$/kW/Month

### ICAP Automated Market System User's Guide Section 6:

If a Spot Market Auction offer is subject to Buyer-Side Mitigation and the offer price is less than the Offer Floor, then an Offer Validation Error Message displayed .



## Recap: Supply-Side Mitigation Screens

- MP Affiliate Form
- View Default Reference Prices
- Supply-Side Mitigation Summary
- Enter Offers to Sell, Maintain Offers to Sell
- Spot Offer Summary



# Recap: Buyer-Side Mitigation Screens

- Floor Prices
- Allocate Sales
- Enter Offers to Sell, Maintain Offers to Sell



# **ICAP Mitigation**

- The NYISO's tariff has general rules in its mitigations measures that prohibit market manipulation
- FERC and other regulatory agencies also have rules to prevent anticompetitive behavior
- The NYISO analyzes for compliance whether and how ICAP resources participate in the market and reports
- The independent Market Monitoring Unit also has oversight responsibilities
- Each year the NYISO files an annual report with FERC on ICAP withholding



# **Reference** Materials

• Market Services Tariff, Attachment H – Market Power Mitigation Measures

http://www.nyiso.com/public/webdocs/markets\_operations/documents/Tariffs/Market\_Services/Attachments/att\_h.pdf

BSM Narrative and Numerical Example

http://www.nyiso.com/public/webdocs/markets\_operations/market\_data/icap/In-City\_Mitigation\_Documents/In-City\_Mitigation\_Documents/BSM\_Narrative\_and\_Numerical\_Example\_March\_29\_2013.pdf

• ICAP BSM Test Data for Class Year 2011

http://www.nyiso.com/public/webdocs/markets\_operations/market\_data/icap/In-City\_Mitigation\_Documents/In-City%20ICAP%20Buyer-side%20Mitigation%20Test%20Data%20for%20Class%20Year%202011,%20July%2017,%202013.pdf

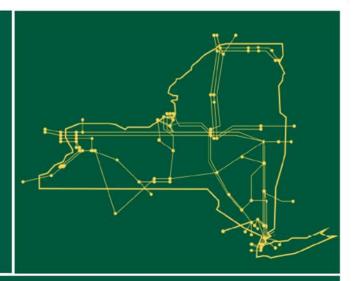
Assessment of the BSM Exemption Test for the Hudson Transmission
 Partners Project – Potomac Economics

http://www.nyiso.com/public/webdocs/markets operations/market data/icap/In-City Mitigation Documents/In-City Mitigation Documents/HTP Report 11-6-12 Final.pdf

- ICAP Automated Market System (AMS) public postings.
- Additional mitigation materials available on the NYISO's website, under Markets & Operations, ICAP, Mitigation Documents.



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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