



# Enhancement of Pivotal Supplier Rules

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# Agenda

- **Current Rule**
- **Background and Proposals for Updates to Pivotal Supplier Rules**
  - *Align G-J and J*
  - *Align G-J and J and change calculation for Pivotal Supplier threshold*
- **Timelines**
- **Next Steps**

# Background: Pivotal Supplier Definition

- **Pivotal Supplier Definition (MST, Att. H, Sec. 23.2)**
  - *“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.*

# Current Rule

- Under current rule, calculation is performed prior to the spot auction
  - *The Pivotal Supplier threshold in both Zone J and the G-J Locality is calculated as the difference between Total UCAP Available and UCAP Requirement, subject to a minimum*
    - In Zone J, should the calculation solve for a value less than 500MW, 500MW will prevail as the Pivotal Supplier threshold
      - Mathematically this can be expressed as the following: Portfolio threshold Zone J =  $\text{Max}(500\text{MW}, \text{Total UCAP Available} - \text{UCAP Requirement})^*$
    - In the G-J Locality, should the calculation solve for a value less than 650MW, 650MW will prevail as the Pivotal Supplier threshold
      - Mathematically this can be expressed as the following: Portfolio threshold for the G-J Locality =  $\text{Max}(650\text{MW}, \text{Total UCAP Available} - \text{UCAP Requirement})^*$
  - Example on following slide
    - \*This nomenclature will be used for the remainder of the presentation

# Current Rule: Example

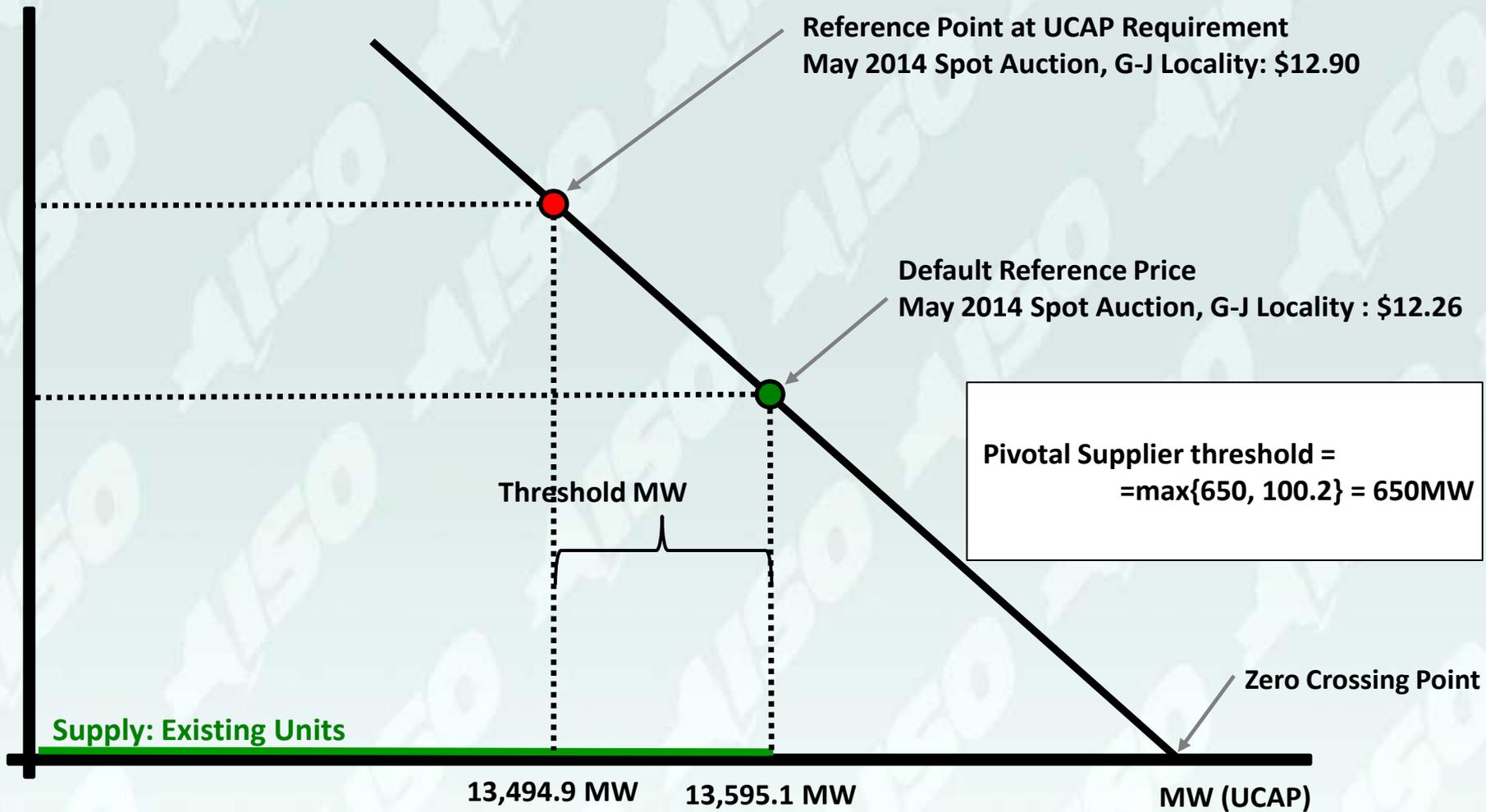
- **Example**

- *Given the following MW values:*

Zone J			G-J Locality		
Minimum Threshold	Total UCAP Available	UCAP Requirement	Minimum Threshold	Total UCAP Available	UCAP Requirement
500	10,000	9,250	650	15,000	14,550

- *Pivotal Supplier threshold Zone J =  $\text{Max}(10,000 - 9,250, 500)$* 
  - $\text{Max}(750, 500) = 750\text{MW}$
- *Pivotal Supplier threshold G-J Locality =  $\text{Max}(15,000 - 14,550, 650)$* 
  - $\text{Max}(450, 650) = 650\text{MW}$

# Illustration: Pivotal Supplier Threshold



# Background: Filings and Orders

- **Docket No. ER13-1380-000**
  - *June 2012, NYISO proposed SSM rule that would apply to all New Capacity Zones*
  - *April 2013 , NYISO proposed Tariff language and the Pivotal Supplier threshold for the G-J Locality. That filing was accepted by FERC in August 2013*
  - *May 2014, FERC order*
- **Dr. Patton describes the deficiency in the Supply-side Mitigation Measure as**
  - *“UCAP that sold in advance of the monthly spot auction is deducted from the portfolio of the supplier “*
  - *“Hence, a large supplier with market power can reduce the amount of capacity that it is deemed to control by selling some of its capacity in the Capability Period Auction or the Monthly Auction”*
  - *Dr. Patton points out that the supply-side mitigation measures proposed for the NCZ and currently applied to New York City could be completely ineffective under certain circumstances/scenarios.*
  - *See NYISO April 30, 2013 Filing, Patton Aff. ¶ 29 para 27-32*

# Background: Filings and Orders cont'd

- **May 27, 2014 Order FERC agrees with Dr. Patton's argument grants rehearing on this issue with respect to the new capacity zone**
  - *We agree that a supplier could withhold some or all of the capacity it sells in a spot auction and can thereby unjustifiably raise prices not only in the spot auction but also in subsequent capability and monthly auction.*
  - *We grant rehearing on this narrow issue and direct NYISO to revise the rebuttable presumption of its pivotal supplier threshold for a new capacity zone by deleting the current exclusion of forward capacity sales in section 23.4.5.5(1).*
  - *We grant rehearing only with respect to the new capacity zone. Because this proceeding only involves the new capacity zone, if NYISO desires to propose similar revisions for its New York City zone, it may do so in a separate proceeding.*
- **See 147 FERC ¶ 61,152, FERC Docket No. ER13-1380-003 para 37 & footnote #75**

# Current Rule: Zone J

- **Capacity sales prior to the Spot are counted differently in Zone J and the G-J Locality**
  - *The Zone J Pivotal Supplier test does not include capacity sold and certified in the Capability Period (strip) or Monthly Auctions for the applicable month when performing this test*
- **Example using previous slides values;**
  - ***Pivotal Supplier Test Zone J:***
    - Pivotal Supplier threshold = 750MW
    - An ICAP Supplier controls 800MW of UCAP
      - Supplier sells 600 MW in the strip and Monthly Auctions
    - At the time the Pivotal Supplier test is performed (prior to Spot Auction), this supplier would not be Pivotal
      - $800 - 600 = 200$
      - $200 < 750$ , not Pivotal

# Current Rule: G-J Locality

- Capacity sales prior to the Spot are counted differently in Zone J and the G-J Locality
  - *The G-J Pivotal Supplier test includes capacity sold and certified in the Capability Period (strip) or Monthly Auctions for the applicable month when performing this test*
- Example using previous slides values;
  - *Pivotal Supplier Test G-J Locality:*
    - Pivotal Supplier threshold = 650MW
    - An ICAP Supplier controls 800MW of UCAP
      - Supplier sells 600 MW in the strip and Monthly Auctions
    - At the time the Pivotal Supplier test is performed (prior to Spot Auction), this supplier would be Pivotal
      - 800
      - $800 > 750$ , Pivotal

# Basis for Alignment

- The MMU has recommended an enhancement of the Pivotal Supplier rules
  - *“...to prevent a large supplier from circumventing the mitigation rules by selling capacity in the forward capacity auctions (i.e., the strip and monthly auctions) to avoid being designated as a pivotal supplier.”*
    - 2015 State of the Market Report at p. 31, and Recommendation #6, p. 116, and SOM Reports beginning 2012
- When the G-J Locality was created, the supply-side mitigation rules for that locality were modified to address this issue
- That proceeding only related to the G-J Locality, and at time, the Commission ruled that the revision could only apply to the G-J Locality. (147 FERC ¶ 61,152 (2014) at PP 36-37.)
- Therefore, different rules exist in Zone J and the G-J Locality
  - *The Zone J Pivotal Supplier test does not include capacity sold and certified in the Capability Period (strip) or Monthly Auctions for the applicable month when performing this test*

# Pivotal Supplier Rules: Proposals

- The NYISO has identified two approaches to enhance the Pivotal Supplier test on which it is requesting stakeholder input. Each of these enhancements have their own benefits and/or constraints and are not necessarily mutually exclusive
  - *Both enhancements, as under the current rule, would be calculated/determined at Certification for the given Spot Auction and therefore would change from month to month*
  - *First proposal to update Pivotal Supplier rules solves only the concerns addressed by the MMU in prior State of the Market reports, to address the mis-alignment of capacity counted in total portfolio size*
  - *Second proposal would align the rules in order to address concerns raised by the MMU in prior state of the Market reports, as well as to update the Pivotal Supplier threshold calculation method*

# Proposal 1

- First proposal would align rules for all Mitigated Capacity Zones, (*i.e.*, Zone J and any future NCZs) to reflect what currently exists for G-J
  - *All MW, including those sold in the strip or Monthly Auction for the applicable month, would be used to calculate a supplier's portfolio*
    - This rule already exists for the G-J Locality
  - *Continue to use the calculation and minimum Pivotal Supplier threshold as they exist today*
    - Pivotal Supplier threshold J =  $\text{Max}(\text{Total UCAP Available} - \text{UCAP Requirement}, 500\text{MW})$
    - Pivotal Supplier threshold G-J Locality =  $\text{Max}(\text{Total UCAP Available} - \text{UCAP Requirement}, 650\text{MW})$
- Consistent application of mitigation measures to all Mitigated Capacity Zones:
  - *Addresses the market power concerns*
  - *Alignment of supply-side mitigation measures across all Mitigated Capacity Zones*
- NYISO proposes revising the supply-side mitigation tariff language for NYC and any NCZ that may be created in the future
  - *Tariff changes to MST, Att. H, Section 23.4.5.5*

# Proposal 2

- **Second proposal includes alignment of capacity counted towards an ICAP Suppliers' total portfolio (Proposal 1), as well as modifying the method used to calculate the Pivotal Supplier threshold, in each Mitigated Capacity Zone, to reflect incentives to withhold under given market conditions**
  - ***(Proposal 1): All MW including those sold in the strip or Monthly Auction for the applicable month would be used to calculate a supplier's cumulative threshold, in all Mitigated Capacity Zones***
    - This rule exists for the G-J Locality and was put in place with the implementation of the NCZ
  - ***(Additionally): Take into account the ability to affect the ICAP Spot Auction market clearing price(s) by withholding some of the capacity in a given Mitigated Capacity Zone. This will be achieved by altering the first half of the existing calculation***
    - Examples on following slides to illustrate this proposal

# Proposal 2: Calculation

- The second proposal is an enhanced method to calculate the Pivotal Supplier threshold at which a supplier has an incentive to withhold
  - This Pivotal Supplier threshold (PST) would be calculated prior to each Spot Auction by dividing the UCAP Offer Reference Level\* (K) by the absolute value of the slope of the Demand Curve (s)
    - $PST = 100 \times (K/s)$
  - Suppliers with portfolios greater than this value would be Pivotal Suppliers and therefore would have a must offer requirement for the Spot Auction with applicable offer cap
- *\*In the ICAP AMS and the presentation at the July 13th, 2016 ICAPWG meeting, the UCAP Offer Reference Level is referred to as the “Default Reference Price (\$/kW-month)” and the “Default Reference Price (DRP)”, respectively*

# Proposal 2: Example

- Proposal 2 performs calculation prior to the spot, which includes:

- Calculation:**

- Pivotal Supplier Threshold Zone J =  $\text{Max}(100*(K/s), 500\text{MW})$
    - Pivotal Supplier Threshold G-J Locality =  $\text{Max}(100*(K/s), 650\text{MW})$

- Example

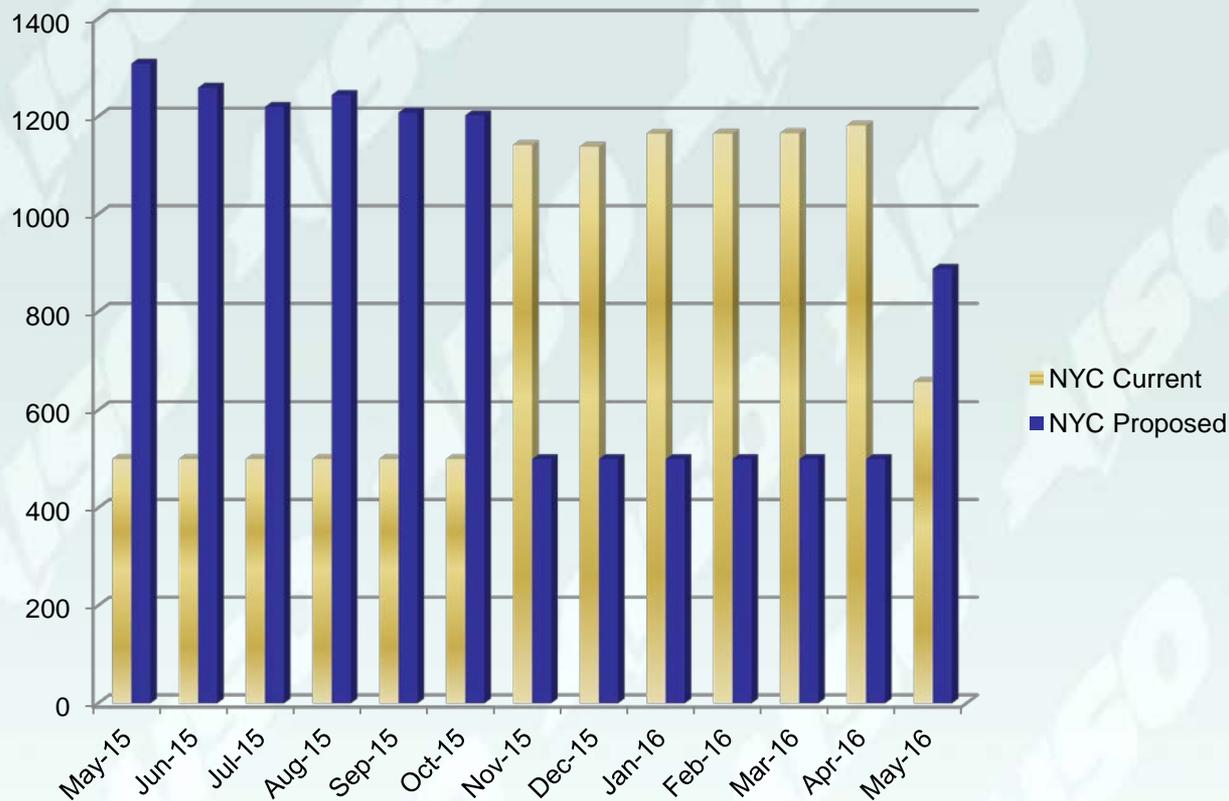
- Given the following values:**

Example For NYC			Example for G-J		
Auction Month	Default Reference Price (\$/kW-month)	Slope	Auction Month	Default Reference Price (\$/kW-month)	Slope
May-16	\$12.30	1.38480	May-16	\$9.26	0.67930

- Pivotal Supplier Threshold Zone J =  $\text{Max}(100*(12.3/1.3848, 500)$** 
      - $\text{Max}(888, 500) = 888\text{MW}$
    - Pivotal Supplier Threshold G-J Locality =  $\text{Max}(100*(9.26/0.67930, 650)$** 
      - $\text{Max}(1363, 650) = 1363\text{MW}$

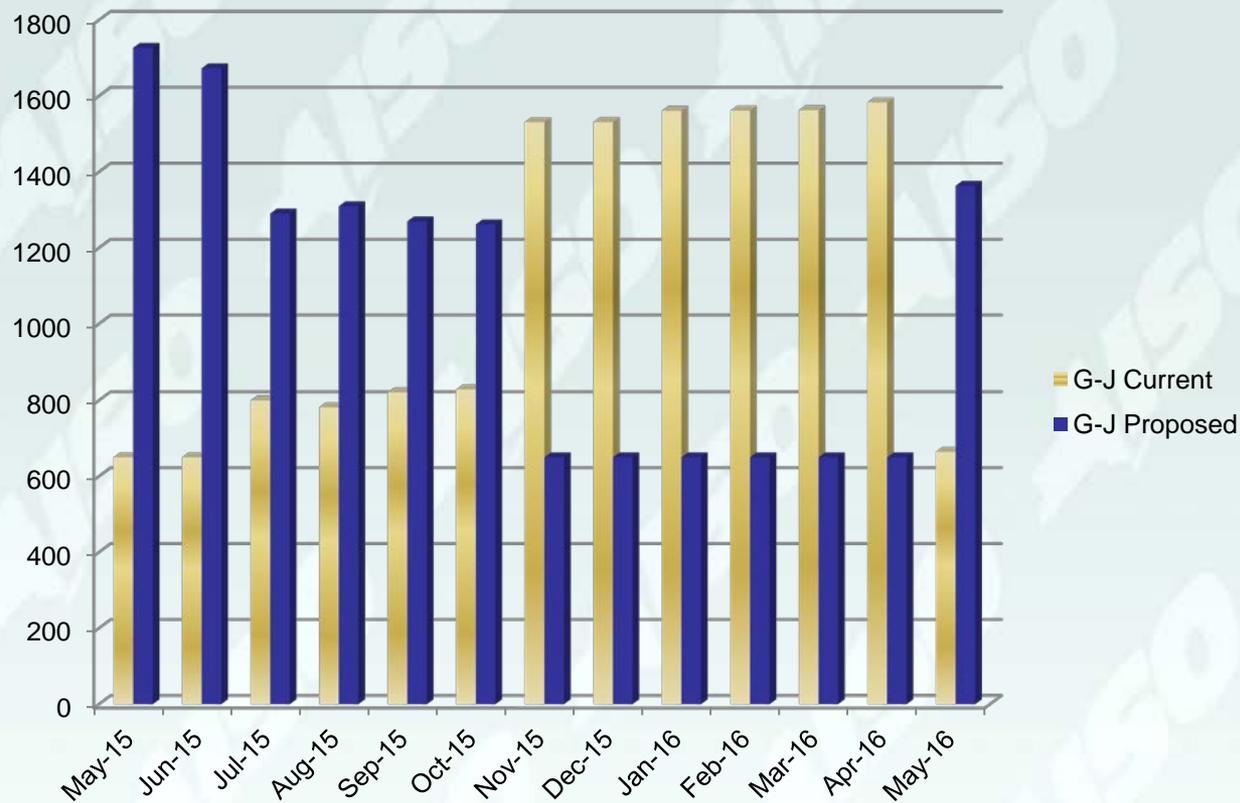
# Proposal 2: Example

- **Current and proposed values for Zone J**
  - *Data used for charts located in Appendix*



# Proposal 2: Example

- **Current and proposed values for the G-J Locality**
  - *Data used for charts located in Appendix*



# Additional Concept for Discussion

- **The NYISO is soliciting feedback on the minimum pivotal threshold of 500MW in Zone J and 650MW in the G-J Locality, in the calculations for Proposal 2**

# Enhancements - Timelines

- **Proposal 1:**
  - *Requires Tariff changes but not software changes*
- **Proposal 2:**
  - *Requires Tariff changes and software changes*
  - *Software changes will need to be prioritized and scheduled*

# Next Steps

- **The NYISO will consider input received during today's ICAPWG meeting**
- **Stakeholders may also provide additional comments in writing to [deckels@nyiso.com](mailto:deckels@nyiso.com)**
- **Further review of proposal(s) at a future ICAPWG meeting**

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# Appendix

- Tables used for charts

Example For NYC

Auction Month	Default Reference Price (\$/kW-month)	Total UCAP	Slope	NYC Calc'd Portfolio	NYC Proposed Portfolio	Net Difference
May-15	\$15.96	9,632.10	1.22	500	1308	808
Jun-15	\$15.36	9,681.70	1.22	500	1259	759
Jul-15	\$14.88	9,720.80	1.22	500	1220	720
Aug-15	\$15.18	9,696.10	1.22	500	1244	744
Sep-15	\$14.74	9,732.40	1.22	500	1208	708
Oct-15	\$14.67	9,738.40	1.22	500	1202	702
Nov-15	\$6.11	10,057.50	1.32	1141.4	500	-641
Dec-15	\$6.16	10,054.10	1.32	1138	500	-638
Jan-16	\$5.81	10,080.70	1.32	1164.6	500	-665
Feb-16	\$5.80	10,081.00	1.32	1164.9	500	-665
Mar-16	\$5.79	10,081.90	1.32	1165.8	500	-666
Apr-16	\$5.58	10,097.70	1.32	1181.6	500	-682
May-16	\$12.30	9,246.70	1.38	657.7	888	231

Example for G-J

Auction Month	Default Reference Price (\$/kW-month)	Total UCAP	Slope	G-J Calc'd Portfolio	G-J Proposed Portfolio	Net Difference
May-15	\$10.88	14,297.40	0.63	650	1727	1077
Jun-15	\$10.54	14,352.50	0.63	650	1673	1023
Jul-15	\$8.13	14,734.10	0.63	799.7	1290	491
Aug-15	\$8.25	14,715.90	0.63	781.5	1309	528
Sep-15	\$8.00	14,755.40	0.63	821	1270	449
Oct-15	\$7.95	14,763.40	0.63	829	1262	433
Nov-15	\$3.34	15,069.00	0.67	1530.9	650	-881
Dec-15	\$3.34	15,069.20	0.67	1531.1	650	-881
Jan-16	\$3.14	15,098.70	0.67	1560.6	650	-911
Feb-16	\$3.14	15,099.30	0.67	1561.2	650	-911
Mar-16	\$3.13	15,100.50	0.67	1562.4	650	-912
Apr-16	\$2.99	15,120.90	0.67	1582.8	650	-933
May-16	\$9.26	14,179.00	0.68	664.5	1363	699