

# Annual Update for 2022-2023 ICAP Demand Curves

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**ICAPWG**

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# Agenda

- **Background**
- **Process Overview**
- **Winter-to-Summer Ratio Values**
- **Gross CONE Composite Escalation Factor Value**
- **Net Energy and Ancillary Services Revenue Offset Values**
- **ICAP Reference Point Values**

# Background

# Background

- As a part of the 2021-2025 ICAP Demand Curve reset process, annual updates to the ICAP Demand Curves are completed each year within the reset period.
- ICAP Demand Curve reference points are calculated for the upcoming Capability Year

# Process Overview

# Annual Update Process Overview

- **Three components of the ICAP Demand Curve input parameters will be updated**
  - Gross cost of new entry (CONE) for peaking plants using a composite escalation factor
  - Net Energy and Ancillary Services (Net EAS) revenue offset
  - Winter-to-Summer ratio (WSR) values

# Annual Update Process Overview

- **The 2022-2023 Capability Year (CY) ICAP Demand Curves will use data from September 1, 2018 – August 31, 2021 for updating the WSR and Net EAS revenue offset values**
  - Year 1: September 1, 2018 – August 31, 2019
  - Year 2: September 1, 2019 – August 31, 2020
  - Year 3: September 1, 2020 – August 31, 2021
  - *Rolled Off: September 1, 2017 – August 31, 2018*

# Annual Update Process Timeline

## ■ October:

- Updated WSR values (posted to NYISO website)

## ■ November:

- Updated Gross CONE values
- Updated Net EAS revenue offset values
- ICAP Demand Curve reference point values

All annual update information is posted in the “Installed Capacity Market (ICAP)” section of the NYISO public website under “Reference Documents” > “Demand Curve Reset Annual Updates” > “2022”



# Winter-to-Summer Ratio

# Winter-to-Summer Ratio

- **The WSR captures differences in quantity of ICAP available between winter and summer seasons given differences in seasonal operational capability**
- **The annual update process requires adjustments for certain qualifying resource entry and exit circumstances**

# Adjustments for Qualifying Generators

## ■ Entry adjustments for Year 3 WSR:

- Arkwright Wind
- Red Rochester
- Dahowa Hydroelectric
- Fulton LFGE
- Hudson Ave GT 3

## ■ Exit Adjustments for Year 3 WSR:

- Indian Point 3
- Gowanus GT 1-8

<b>ZONE</b>	<b>GEN_PTID</b>	<b>GEN_NAME</b>	<b>Year 3</b>	<b>Year 2</b>	<b>Year 1</b>
A	323751	Arkwright Summit Wind	Add		
A	23543	Kintigh		Remove	
B	24207	Monroe Livingston		Remove	
B	323720	Red Rochester	Add		
C	24147	Auburn-State St.		Remove	
C	23584	Cayuga 1		Remove	
C	323667	Steuben County LF		Remove	
F	323615	Albany LFGE		Remove	
F	323763	Dahowa Hydroelectric	Add		
F	323630	Fulton LFGE	Add		
F	23756	Gilboa 1			Add
G	323756	Cricket Valley CC1		Add	
G	323757	Cricket Valley CC2		Add	
G	323758	Cricket Valley CC3		Add	
H	23530	Indian Point 2		Remove	
H	23531	Indian Point 3	Remove		
J	323718	Arthur Kill Cogen			Add
J	24113	Gowanus GT1-8	Remove		
J	23810	Hudson Ave GT 3	Add		
J	23810	Hudson Ave GT 3		Remove	
J	23540	Hudson Ave GT 4			Remove

# 2022-2023 WSR Ratio Values

Three-year WSR	2021-2022 CY (Demand Curve Reset)		2022-2023 CY Annual Update	
NYCA	1.038		1.035	
GHIJ	1.059		1.062	
NYC	1.076		1.078	
LI	1.073		1.077	

  

One-year WSR	2020-2021 (Year 3)	2019-2020 (Year 2)	2018-2019 (Year 1)	2017-2018 Rolled Off
NYCA	1.033	1.027	1.046	1.040
GHIJ	1.067	1.060	1.059	1.059
NYC	1.081	1.074	1.080	1.075
LI	1.084	1.076	1.069	1.074

# Gross CONE Composite Escalation Factor

# Gross CONE Escalation Factor Process

- **Update escalation factor indices in the demand curve model**
  - Materials, Labor, and Turbine costs
    - Source: Bureau of Labor Statistics
  - General/non-EPC cost index
    - Source: Bureau of Economic Analysis
- **Use most recently available data published as of October 1<sup>st</sup>**
  - Preliminary values and missing data are not used
  - May include revisions by the index publisher to a prior year's data values that are re-used in the current calculation

# Material Cost Index

## Materials Cost Index

**Source:** BLS Producer Price Index - Commodities  
**Seasonal:** Not Seasonally Adjusted  
**Series Id:** WPUID612  
**Group:** (ID6) Intermediate demand by commodity type  
**Item:** (12) Materials and components for construction  
**Base Date:** 198200  
**Years:** 2007 to 2020  
**Access:** <http://data.bls.gov/cgi-bin/dsrv?wp>

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	202.3	203.5	204.6	206.1	207.4	206.6	206.3	206.2	205.9	205.9	206.3	207.0
2011	208.3	209.5	210.9	212.1	212.8	213.7	214.7	214.6	214.5	214.4	214.2	214.2
2012	215.3	216.9	217.4	218.3	219.1	219.2	218.5	218.7	219.2	219.1	219.5	219.9
2013	221.2	222.2	222.7	223.4	222.9	222.6	222.4	223.0	222.9	222.9	223.0	223.1
2014	224.8	225.8	226.6	226.9	227.4	227.4	227.7	228.2	228.5	228.6	228.5	228.4
2015	229.0	229.1	229.1	229.4	229.1	229.0	228.8	228.0	227.5	227.7	227.6	227.2
2016	227.5	227.5	227.8	228.3	228.7	229.1	229.7	230.3	230.0	229.7	229.7	230.1
2017	231.5	232.5	233.2	234.4	234.6	234.8	234.7	235.6	236.0	237.0	237.5	237.7
2018	239.7	241.2	244.3	245.4	248.1	249.0	249.4	249.2	249.6	249.6	249.1	249.7
2019	250.7	251.5	251.2	251.9	251.7	251.2	252.3	251.3	251.1	250.8	250.8	250.8
2020	252.1	252.8	254.3	252.9	252.8	253.8	255.3	258.8	263.2	262.5	261.4	263.4
2021	269.1	273.8	280.4	288.1	296.5	305.6	307.4	307.9				
2022												
2023												



# Construction Labor Cost Index

## Construction Labor Cost Index

**Source:** BLS Quarterly Census of Employment and Wages  
**Series Id:** ENU360005052371  
**State:** New York  
**Area:** New York -- Statewide  
**Industry:** NAICS 2371 Utility system construction  
**Owner:** Private  
**Size:** All establishment sizes  
**Type:** Average Annual Pay  
**Years:** 2007 to 2019  
**Access:** <http://data.bls.gov/cgi-bin/dsrv?en>

Year	Annual
2010	78,635
2011	79,665
2012	87,406
2013	88,850
2014	92,531
2015	97,529
2016	102,788
2017	101,108
2018	105,039
2019	107,893
2020	105,547
2021	
2022	
2023	

# Turbine Cost Index

## Gas and Steam Turbine Index

**Source:** BLS Producer Price Index - Commodities  
**Seasonal:** Not Seasonally Adjusted  
**Group:** (11) Machinery and Equipment  
**Item:** (97) Turbines and Turbine Generator Sets  
**Series ID:** WPU1197  
**Base Date:** 198706  
**Years:** 2007 to 2020  
**Access:** <http://data.bls.gov/cgi-bin/dsrv?wp>

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	222.9	221.2	220.2	220.5	221.6	221.5	221.8	222.1	221.9	223.0	223.0	223.8
2011	225.5	224.9	224.5	225.7	227.7	228.8	225.9	224.2	226.0	223.7	221.7	223.5
2012	218.9	220.0	222.1	222.3	224.3	225.2	225.4	224.4	222.9	225.1	226.2	225.7
2013	225.4	225.4	226.3	226.4	227.2	226.6	228.8	227.8	229.1	229.0	232.0	231.7
2014	230.8	231.2	232.7	232.2	231.7	232.2	231.6	233.6	236.1	237.2	237.5	238.5
2015	229.7	230.9	234.4	230.9	231.7	227.9	233.5	230.0	232.9	232.8	232.4	233.1
2016	231.9	232.2	232.5	231.2	231.4	233.2	233.5	232.7	232.5	NA	NA	NA
2017	NA	224.3	223.9	223.4	223.5	227.7	225.6	225.8	225.8	224.5	217.5	211.6
2018	210.1	215.1	221.0	221.0	219.4	219.7	219.8	221.4	221.0	224.4	225.9	228.8
2019	229.4	231.0	231.1	231.6	232.7	233.3	233.7	234.4	234.8	234.3	234.9	236.3
2020	237.8	238.4	238.9	238.9	239.5	241.3	242.0	241.4	241.2	241.6	242.3	242.7
2021	243.1	243.8	244.2	244.5	250.4	246.7	247.1	245.3				
2022												
2023												

# General/Non-EPC Cost Index

## Non-EPC Cost Index

**Source:** Bureau of Economic Analysis: Gross Domestic Product Implicit Price Deflator, Index 2012 = 100.  
**Seasonal:** Seasonally Adjusted  
**Timing:** Quarterly  
**Table:** 1.1.9  
**Table Location:** Line 1  
**Access:** [https://apps.bea.gov/iTable/index\\_nipa.cfm](https://apps.bea.gov/iTable/index_nipa.cfm)

Year	Quarter			
	I	II	III	IV
2010	95.499	95.943	96.222	96.763
2011	97.283	97.922	98.553	98.703
2012	99.32	99.713	100.225	100.737
2013	101.139	101.431	101.918	102.517
2014	102.937	103.512	103.957	104.123
2015	104.031	104.596	104.926	104.937
2016	104.865	105.592	105.95	106.469
2017	107.01	107.34	107.872	108.598
2018	109.237	110.176	110.614	111.14
2019	111.514	112.152	112.517	112.978
2020	113.346	112.859	113.888	114.439
2021	115.652	117.413		
2022				
2023				

# 2022-2023 Composite Escalation Factors

## ■ NYCA

		Construction Labor Cost	Materials Cost	Gas and Steam Turbine Cost	GDP Deflator
Base Year	[A]	107,893	253	239	112.9
Escalation Year	[B]	105,547	281	244	117.4
Growth Rate	[B]/[A]-1	-2.17%	10.83%	2.28%	4.04%
Weights (By Technology)		24%	19%	32%	25%
<b>Escalation Factor:</b>		$24\% \times -2.17\% + 19\% \times 10.83\% + 32\% \times 2.28\% + 25\% \times 4.04\% =$ <b>3.33%</b>			

## ■ GHJ, NYC, LI

		Construction Labor Cost	Materials Cost	Gas and Steam Turbine Cost	GDP Deflator
Base Year	[A]	107,893	253	239	112.9
Escalation Year	[B]	105,547	281	244	117.4
Growth Rate	[B]/[A]-1	-2.17%	10.83%	2.28%	4.04%
Weights (By Technology)		27%	23%	26%	24%
<b>Escalation Factor:</b>		$27\% \times -2.17\% + 23\% \times 10.83\% + 26\% \times 2.28\% + 24\% \times 4.04\% =$ <b>3.46%</b>			

Note: Values in the table for each index are rounded, while the calculation uses unrounded values.

# 2022-2023 Gross CONE Values

	2021-2022 Gross CONE (\$/kW-year)	2022-2023 Escalation Factor	2022-2023 Gross CONE (\$/kW-year)
NYCA	\$ 107.07	3.33%	\$ 110.62
G-J	\$ 139.63	3.46%	\$ 144.45
NYC	\$ 188.53		\$ 195.05
LI	\$ 148.97		\$ 154.11

*Note: Values in the table for each composite escalation factor are rounded, while the calculation uses unrounded values.*

# Net Energy and Ancillary Services Revenue Offset

# Net EAS Revenue Offset Update Process

- **Collect data from September 1, 2020 – August 31, 2021**
  - NYISO DAM and RTM LBMPs
  - NYISO DAM and RTM Time-Weighted Ancillary Services prices
  - NYISO Rate Schedule 1 charges
  - Fuel and emission costs
- **Run Net EAS model with new data**
  - Model runs for three-year historical period (Sep 1, 2018 – Aug 31, 2021)
  - Detailed results in the Appendix of this presentation

# 2022–2023 Net EAS Revenue Values

- **Decreases in Net EAS revenues in NYCA, GHJ, and NYC can be primarily attributed to higher LBMP period being removed from the historical dataset.**
  - High LBMPs in late December 2017 – early January 2018 can be attributed to extremely cold temperatures.
    - Data from 9/1/2017-8/31/2018 was rolled off for purposes of this annual update and replaced with data from 9/1/2020-8/31/2021
- **Increase in the Net EAS revenues in Long Island can be attributed to higher LBMPs in summer 2021 that were added to the historical dataset for purposes of this annual update.**



# Raw Net EAS Revenues

	2021-2022 Raw Net EAS Revenues (\$/kW-year)	2022-2023 Raw Net EAS Revenues (\$/kW-year)	Delta
NYCA	\$30.12	\$21.84	\$(8.28)
G-J	\$32.31	\$27.15	\$(5.16)
NYC	\$30.61	\$27.29	\$(3.32)
LI	\$50.87	\$57.03	\$6.16

*Note: "Raw" values do not include the \$2.04/kW-year adder for estimated voltage support service (VSS) revenue and are not escalated to dollar values for the applicable Capability Year to which the ICAP Demand Curves are effective.*

# Net EAS Escalation

- Net EAS revenues are escalated using the unweighted annual change in the general component (GDP Deflator) from the Gross CONE composite escalation factor over the three-year historical data period.
- The Net EAS escalation rate is 4.69%

	2022-2023 Raw Net EAS Revenues (\$/kW-year)	2022-2023 Net EAS Revenues (w/ VSS Adder \$2.04)	EAS Escalation Rate	2022-2023 Final Net EAS Revenues (\$/kW-year)
NYCA	\$21.84	\$23.88	4.69%	\$25.00
G-J	\$27.15	\$29.19		\$30.56
NYC	\$27.29	\$29.33		\$30.71
LI	\$57.03	\$59.07		\$61.84

# 2022-2023 ICAP Demand Curve Reference Points

# ICAP Demand Curve Reference Points

	2021-2022 Final ICAP Ref. Point (\$/kW- month)	2022-2023 Final ICAP Ref. Point (\$/kW- month)	Delta
NYCA	\$7.81	\$8.87	\$1.06
G-J	\$13.28	\$14.72	\$1.44
NYC	\$21.28	\$22.77	\$1.49
LI	\$17.60	\$17.59	\$(0.01)

Current Year (2022-2023)					
	Source	C - Central	G - Hudson Valley (Rockland)	J - New York City	K - Long Island
Gross Cost of New Entry (\$/kW-Year)	[1]	\$110.62	\$144.45	\$195.05	\$154.11
Net EAS Revenue (\$/kW-Year)	[2]	\$25.00	\$30.56	\$30.71	\$61.84
Annual ICAP Reference Value (\$/kW-Year)	[3] = [1] - [2]	\$85.63	\$113.90	\$164.34	\$92.28
ICAP DMNC (MW)	[4]	326.7	347.0	348.8	348.8
<b>Total Annual Reference Value</b>	<b>[5] = [3] * [4]</b>	<b>\$27,974,635</b>	<b>\$39,521,634</b>	<b>\$57,322,490</b>	<b>\$32,185,694</b>
Level of Excess (%)	[6]	100.9%	102.5%	103.5%	106.5%
Ratio of Summer to Winter DMNCs	[7]	1.035	1.062	1.078	1.077
Summer DMNC (MW)	[8]	329.3	348.2	348.5	351.1
Winter DMNC (MW)	[9]	344.7	369.9	374.1	373.0
<b>Assumed Capacity Prices at Tariff Prescribed Level of Excess Conditions</b>					
Summer (\$/kW-Month)	[10]	\$8.24	\$12.31	\$18.33	\$11.28
Winter (\$/kW-Month)	[11]	\$5.65	\$6.22	\$8.46	\$3.76
Monthly Revenue (Summer)	[12] = [10]*[8]	\$2,713,630	\$4,284,914	\$6,387,726	\$3,962,093
Monthly Revenue (Winter)	[13] = [11]*[9]	\$1,948,830	\$2,301,999	\$3,166,008	\$1,402,182
Seasonal Revenue (Summer)	[14] = 6 * [12]	\$16,281,777	\$25,709,486	\$38,326,357	\$23,772,560
Seasonal Revenue (Winter)	[15] = 6 * [13]	\$11,692,982	\$13,811,992	\$18,996,050	\$8,413,090
<b>Total Annual Reference Value</b>	<b>[16] = [14]+[15]</b>	<b>\$27,974,760</b>	<b>\$39,521,478</b>	<b>\$57,322,407</b>	<b>\$32,185,649</b>
<b>ICAP Demand Curve Parameters</b>					
<b>ICAP Monthly Reference Point Price (\$/kW-Month)</b>		<b>\$8.87</b>	<b>\$14.72</b>	<b>\$22.77</b>	<b>\$17.59</b>
ICAP Max Clearing Price (\$/kW-Month)		\$14.43	\$19.65	\$27.21	\$22.09
Demand Curve Length		12%	15%	18%	18%

# Next Steps

# Next Steps

- Updated ICAP Demand Curve reference point values become effective for the 2022-2023 Capability Year (beginning May 1, 2022)
- Data and results posted on the NYISO website
  - Available on the Installed Capacity Market (ICAP)” section of the NYISO public website at:
    - <https://www.nyiso.com/installed-capacity-market>
    - [“Reference Documents” > “Demand Curve Reset Annual Updates” > “2022”](#)

# Questions?



# Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit 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 policymakers, stakeholders and investors in the power system



# Appendix

# Net EAS Revenue Update Summary

Load Zone		Annual Average Net EAS Revenues (\$/kW-year)	Annual Average Run Hours	Annual Average Unit Starts	Annual Average Hours per Start
C	Upstate	\$23.88	542	55	9.8
G	G-J	\$29.19	982	61	16.0
J	NYC	\$29.33	1,084	78	14.0
K	Long Island	\$59.07	2,320	140	16.6

# Fuel Type by Year

September, 2018 - August, 2019							
Load Zone		Run-Time Hours			Net Energy Revenues (\$/kW-year)		
		Gas	Oil	Total	Gas	Oil	Total
C	Upstate	603	-	603	\$8.35	-	\$8.35
G	G-J	1,022	-	1,022	\$11.31	-	\$11.31
J	NYC	1,013	-	1,013	\$13.27	-	\$13.27
K	Long Island	2,382	5	2,387	\$30.60	\$0.24	\$30.84

September, 2019 - August, 2020							
Load Zone		Run-Time Hours			Net Energy Revenues (\$/kW-year)		
		Gas	Oil	Total	Gas	Oil	Total
C	Upstate	316	-	316	\$3.12	-	\$3.12
G	G-J	443	-	443	\$3.92	-	\$3.92
J	NYC	738	-	738	\$6.98	-	\$6.98
K	Long Island	1,509	-	1,509	\$22.96	-	\$22.96

September, 2020 - August, 2021							
Load Zone		Run-Time Hours			Net Energy Revenues (\$/kW-year)		
		Gas	Oil	Total	Gas	Oil	Total
C	Upstate	706	-	706	\$11.61	-	\$11.61
G	G-J	1,482	-	1,482	\$23.27	-	\$23.27
J	NYC	1,500	-	1,500	\$24.61	-	\$24.61
K	Long Island	3,064	-	3,064	\$79.26	-	\$79.26

# Run Hours by Year

Run Hours September, 2018 - August, 2019															
Day-Ahead Commitment			Energy				Reserve				None				Total
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited	
C	Upstate	Gas Only, tuned to 15ppm, without SCR	330	11	176	0	258	35	7,024	0	15	0	911	0	8,760
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	861	89	291	0	161	75	7,273	0	0	0	10	0	8,760
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	851	15	142	0	162	107	7,472	0	0	0	11	0	8,760
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	2,183	14	246	0	202	71	6,037	0	2	0	5	0	8,760

Run Hours September, 2019 - August, 2020															
Day-Ahead Commitment			Energy				Reserve				None				Total
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited	
C	Upstate	Gas Only, tuned to 15ppm, without SCR	158	0	82	0	158	35	8,312	0	0	0	39	0	8,784
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	313	14	39	0	119	46	8,006	0	11	0	236	0	8,784
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	614	0	53	0	121	81	7,663	0	3	0	249	0	8,784
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	1,303	0	200	0	204	22	6,876	0	2	0	177	0	8,784

Run Hours September, 2020 - August, 2021															
Day-Ahead Commitment			Energy				Reserve				None				Total
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited	
C	Upstate	Gas Only, tuned to 15ppm, without SCR	533	16	173	0	156	46	6,737	0	17	0	1,082	0	8,760
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	1,268	49	176	0	214	69	6,749	0	0	0	235	0	8,760
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	1,345	0	115	0	155	106	6,796	0	0	0	243	0	8,760
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	2,808	0	251	694	251	44	4,547	14	5	0	146	0	8,760

# Net EAS Results by Year

Net EAS Revenues September, 2018 - August, 2019 (\$/kW-yr)																
Day-Ahead Commitment			Energy				Reserve				None				Total	Total with Adders (VSS, AS)
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited		
C	Upstate	Gas Only, tuned to 15ppm, without SCR	\$3.17	\$0.04	\$2.87	\$0.00	\$4.71	\$0.11	\$11.44	\$0.00	\$0.48	\$0.00	\$0.00	\$0.00	\$22.80	\$24.84
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	\$8.23	\$2.63	\$3.25	\$0.00	\$3.08	\$0.28	\$13.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.21	\$33.25
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	\$9.56	\$0.10	\$1.79	\$0.00	\$3.71	\$0.42	\$14.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.14	\$32.18
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	\$23.93	\$0.13	\$2.88	\$0.00	\$6.90	\$0.27	\$11.62	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$45.74	\$47.78

Net EAS Revenues September, 2019 - August, 2020 (\$/kW-yr)																
Day-Ahead Commitment			Energy				Reserve				None				Total	Total with Adders (VSS, AS)
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited		
C	Upstate	Gas Only, tuned to 15ppm, without SCR	\$0.83	\$0.00	\$0.72	\$0.00	\$2.28	\$0.11	\$14.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.03	\$20.07
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	\$2.19	\$0.07	\$0.21	\$0.00	\$1.71	\$0.10	\$10.20	\$0.00	\$0.02	\$0.00	\$0.00	\$0.00	\$14.50	\$16.54
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	\$4.75	\$0.00	\$0.40	\$0.00	\$2.23	\$0.22	\$9.43	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17.03	\$19.07
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	\$17.41	\$0.00	\$2.54	\$0.00	\$5.54	\$0.04	\$8.76	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$34.29	\$36.33

Net EAS Revenues September, 2020 - August, 2021 (\$/kW-yr)																
Day-Ahead Commitment			Energy				Reserve				None				Total	Total with Adders (VSS, AS)
Real-Time Dispatch			Energy	Reserve	Buyout	Limited	Energy	Reserve	Buyout	Limited	Energy	Reserve	None	Limited		
C	Upstate	Gas Only, tuned to 15ppm, without SCR	\$7.12	\$0.41	\$2.85	\$0.00	\$4.38	\$0.12	\$9.68	\$0.00	\$0.11	\$0.00	\$0.00	\$0.00	\$24.67	\$26.71
G	G-J	Dual Fuel, tuned to 25ppm, with SCR	\$19.36	\$1.37	\$1.95	\$0.00	\$3.91	\$0.17	\$8.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.74	\$37.78
J	NYC	Dual Fuel, tuned to 25ppm, with SCR	\$21.61	\$0.00	\$0.81	\$0.00	\$3.00	\$0.23	\$9.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.70	\$36.74
K	Long Island	Dual Fuel, tuned to 25ppm, with SCR	\$70.23	\$0.00	\$4.06	\$1.11	\$8.98	\$0.13	\$6.48	\$0.02	\$0.05	\$0.00	\$0.00	\$0.00	\$91.06	\$93.10