

NYISO Study on ROS BSM and Uneconomic Retention/Repowering



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Rensselaer, NY*

- ◆ On March 19, 2015 the FERC issued an order directing the NYISO to establish, and report on, a stakeholder process
 - *150 FERC ¶ 61,214, FERC Docket No. EL13-62-000*
- ◆ In general, FERC asked that the NYISO look at:
 - *Whether there are circumstances that warrant the adoption of BSM measures in Rest of State (ROS)*
 - *Whether there is a need for, and what mitigation measures would need to be in place to address, repowering agreements with the potential to suppress capacity prices*
- ◆ Stakeholder discussions
 - *At the April 30th ICAPWG, the NYISO presented to Stakeholders, and sought input on, an overview of study objectives and issues raised for consideration in the FERC Order*
 - *At the May 18th ICAPWG, the NYISO presented to Stakeholders, and solicited feedback on, an update to the analysis it had performed as part of its study and on further analysis it expected to perform*
- ◆ The NYISO's report to the FERC is due June 17, 2015

- ◆ **Present additional findings from the NYISO study**
 - *ROS capacity obligations of Transmission Owners' distribution company customers*
 - *The elasticity of ROS supply and the longevity of price fluctuations*
 - *Interregional liquidity and elasticity – reconfiguration auction detail*
 - *The elasticity of internal supply*
 - *The value of subsidized, uneconomic new entry to an LSE in ROS*
 - *Overview of assumptions and methodology*
 - *Net present value (NPV) of a subsidized new entrant*
 - *Repowering & uneconomic retention*
 - *Repowering pursuant to “agreements similar to Dunkirk’s”*

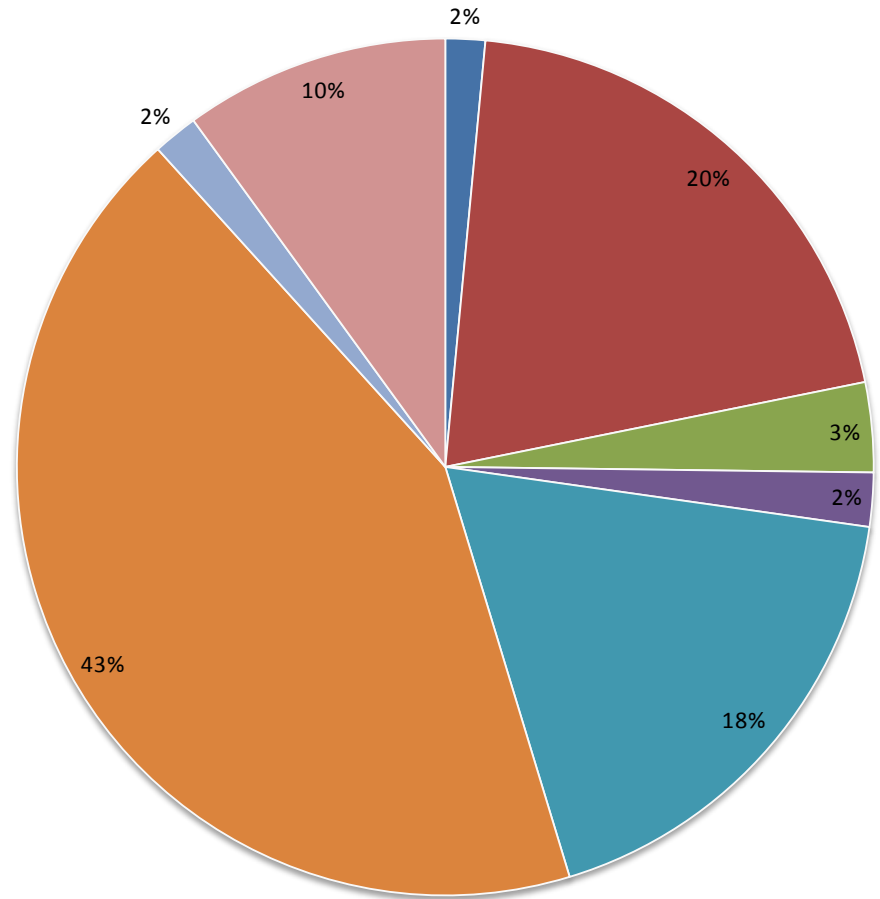
- ◆ **Describe further work and next steps**
 - *Report to FERC*
 - *Continuation of the NYISO study and of Stakeholder discussions*

- ◆ **Solicit Stakeholder feedback**

ROS Capacity Obligations of Distribution Company Customers by Transmission Owner

ROS Capacity Obligations of Transmission Owners' Distribution Company Customers

- Stakeholders requested that the NYISO consider the capacity obligations of distribution company customers by Transmission Owner (i.e., subject to a non-bypassable wires charge)
- It was suggested that the potential for an entity to spread costs over these larger footprints may make them relevant to determining market power



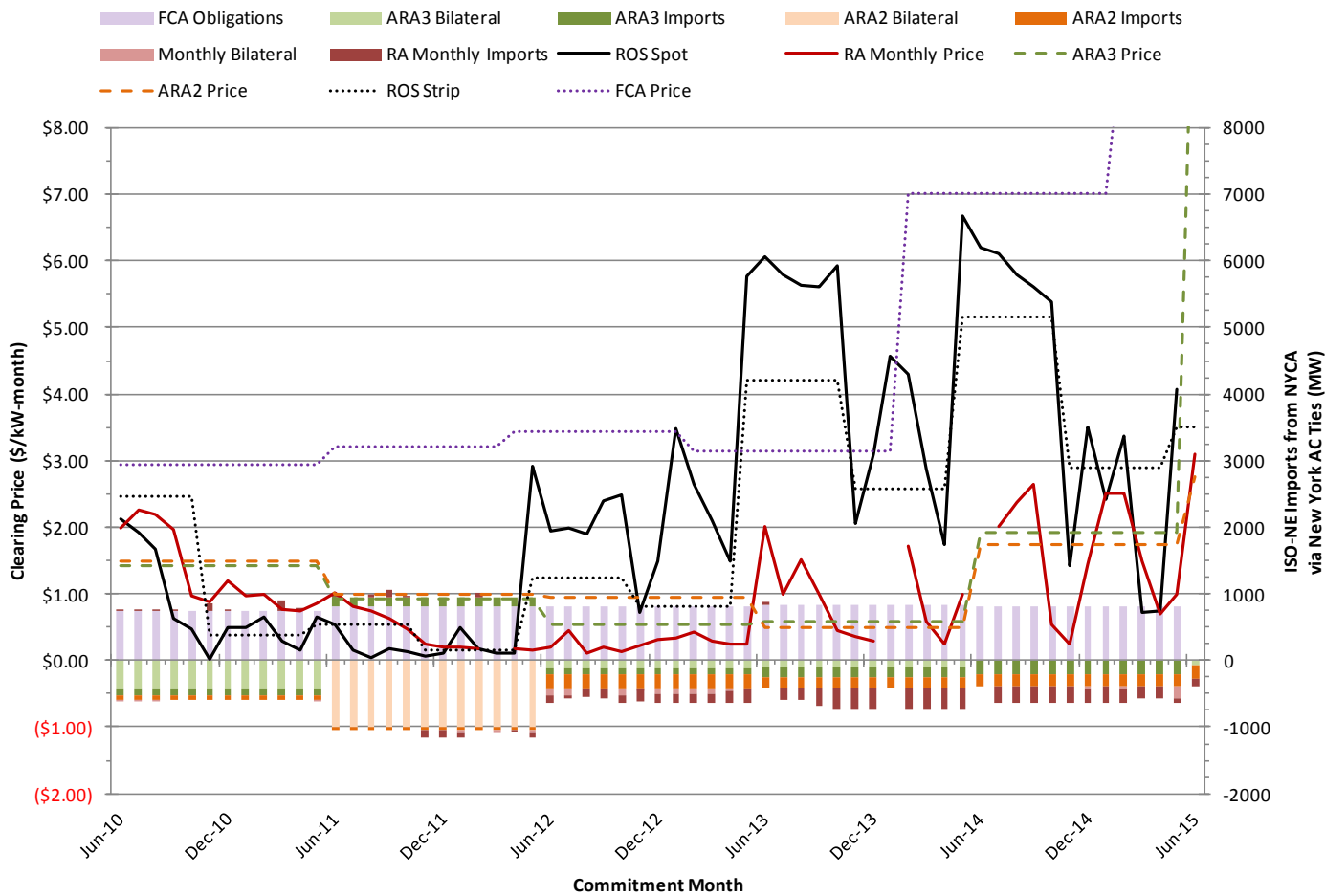
■ C.HUDSON ■ CONED ■ LIPA ■ NYPA ■ NYSEG ■ NGRID ■ O&R ■ RGE

ISO-NE Reconfiguration Auctions



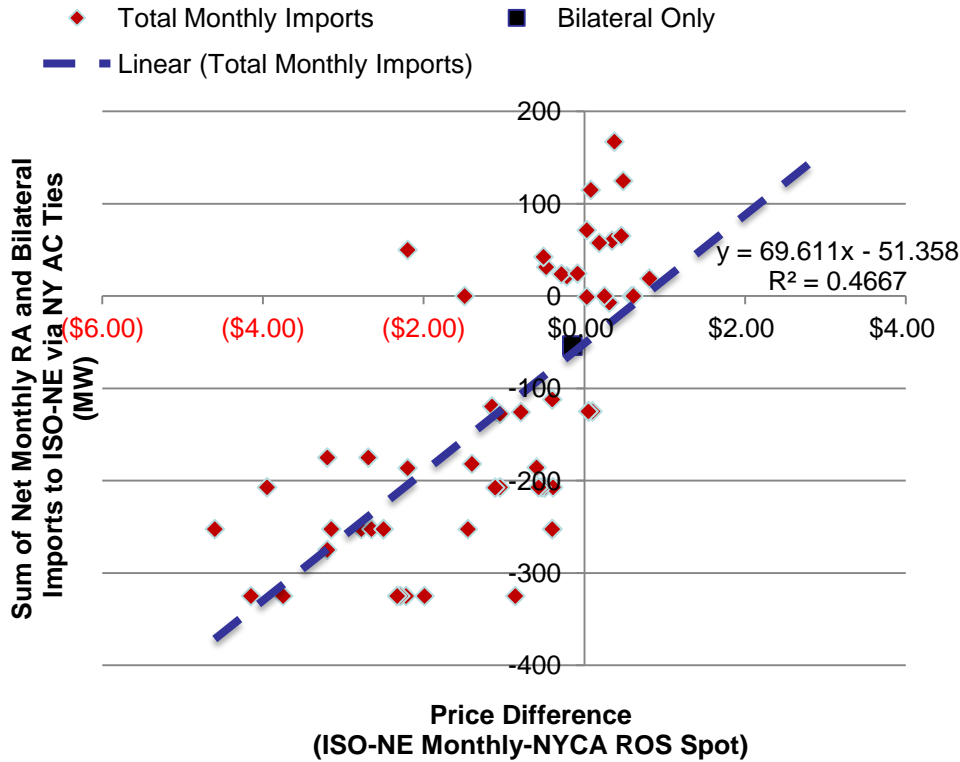
- In continuation of its analysis regarding interregional elasticity, the NYISO examined the MW transacted in ISO-NE's reconfiguration auctions*
- ISO-NE holds Annual Reconfiguration Auctions (ARAs) and Monthly Reconfiguration Auctions (RA Monthly)*
- In addition, bilateral transactions can be performed for both annual and monthly terms*
- There was no credible evidence of significant elasticity in the historic ARA activity examined*

ISO-NE Incremental Auction Imports

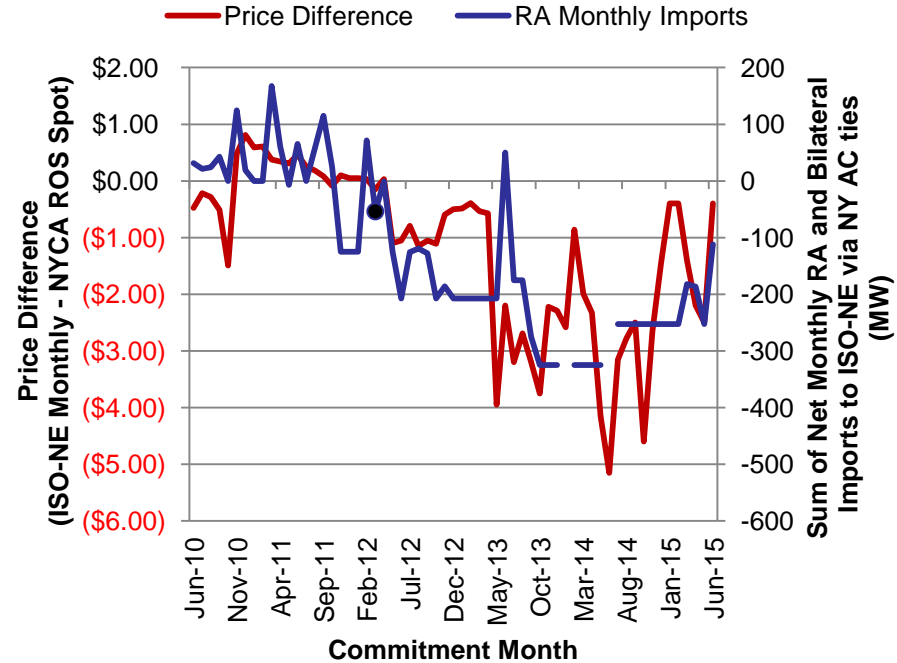


NOTE: Annual Reconfiguration Auction #1 (ARA1) occurs approximately 1 year after the FCA for the same Commitment Period
 ARA2 occurs approximately 2 years after the FCA
 ARA3 occurs approximately 3 years after the FCA

Monthly RA Import Elasticity



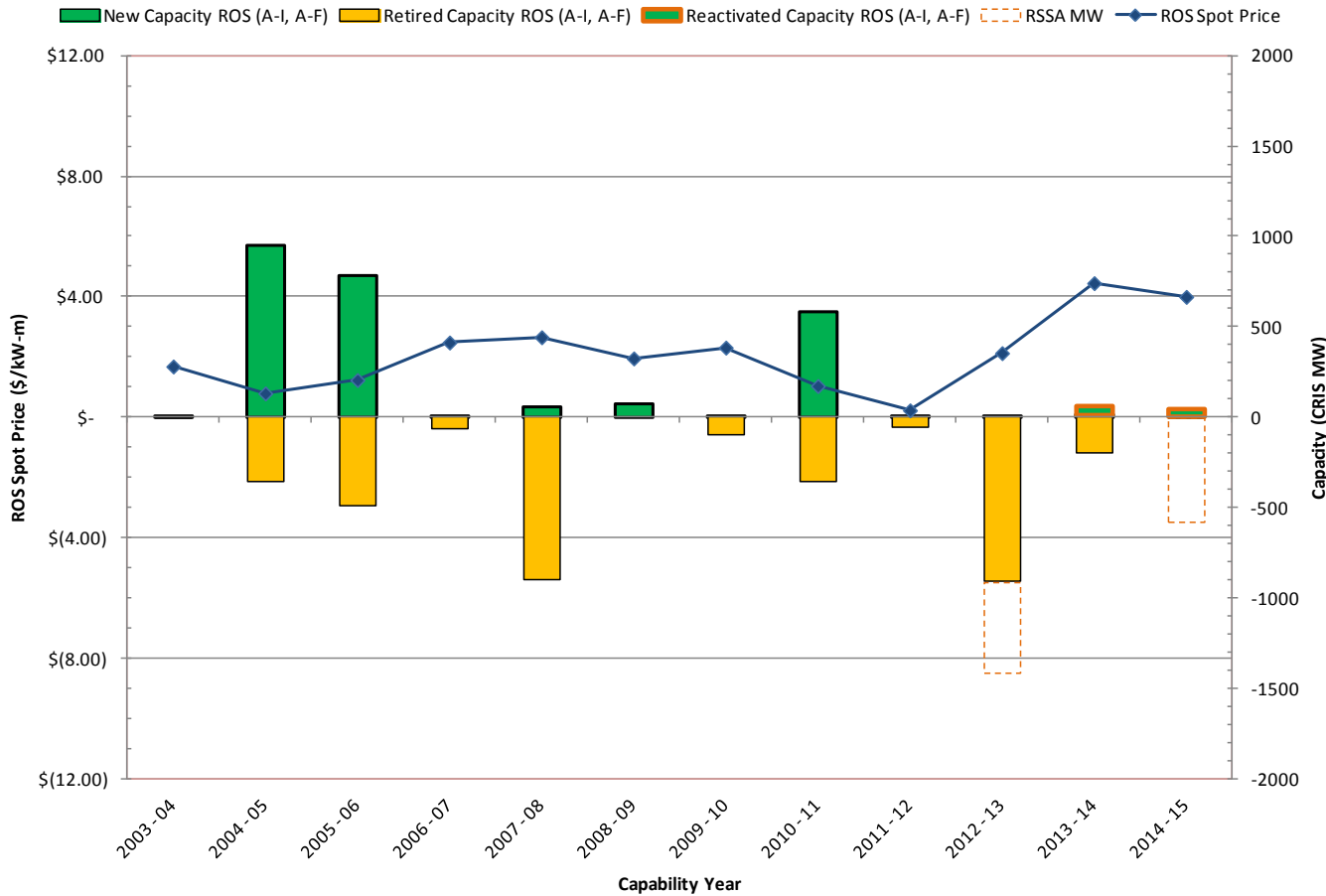
Monthly RA Imports Seen by ISO-NE



- A linear regression shows that there appears to be a relationship between import & export activity and the spread between ISO-NE’s Monthly Reconfiguration Auction price and the ROS Spot price
- The observed relationship constitutes a small response, which is further limited by interface limits
 - *The historical range of net imports, i.e. max(imports) – max(exports), is 500MW*
- Changing market conditions in ISO-NE make it difficult to draw any conclusions about future behavior

Elasticity – Internal Supply

Entry & Exit of ROS Supply*



- **2005-06**
 - Significant increase in unsold capacity & exports during Winter
- **2006-07**
 - Large unsold capacity as in 05-06
 - Significant decrease in imports during winter
- **2007-08**
 - 11 units retired to sum almost 1,000MW
- **2008-09**
 - IRM reduction of 500MW
- **2010-11**
 - Increase of 600MW in LI UDRs
 - 905MW decrease in peak load forecast
- **2011-12**
 - Decrease of 1,200MW in ICAP req.
 - Low prices resulted in substantial unsold capacity
- **2012-13**
 - 1,800MW in Mothballs & Retirements
 - Dunkirk 1&2 RSSAs
 - Cayuga 1&2 RSSAs
- **2013-14**
 - SCR drop of 470MW from Summer 2012 due in part to rule clarifications and changing market
- **2014-15**
 - Increase of 300-470MW in imports
 - Ginna RSSA

- **Internal supply appears to be responsive to price fluctuations**
- **Price fluctuations in the ROS ICAP Market appear to be limited in duration**
 - **Historic data indicates that they are limited to about 3 years**
- **Suggests that a reasonable entity would assume a limited horizon for benefits stemming from price suppression**

*As of the start of the 2014-2015 Capability Year, Zones G, H, and I were no longer in ROS

NPV of Subsidized New Entry



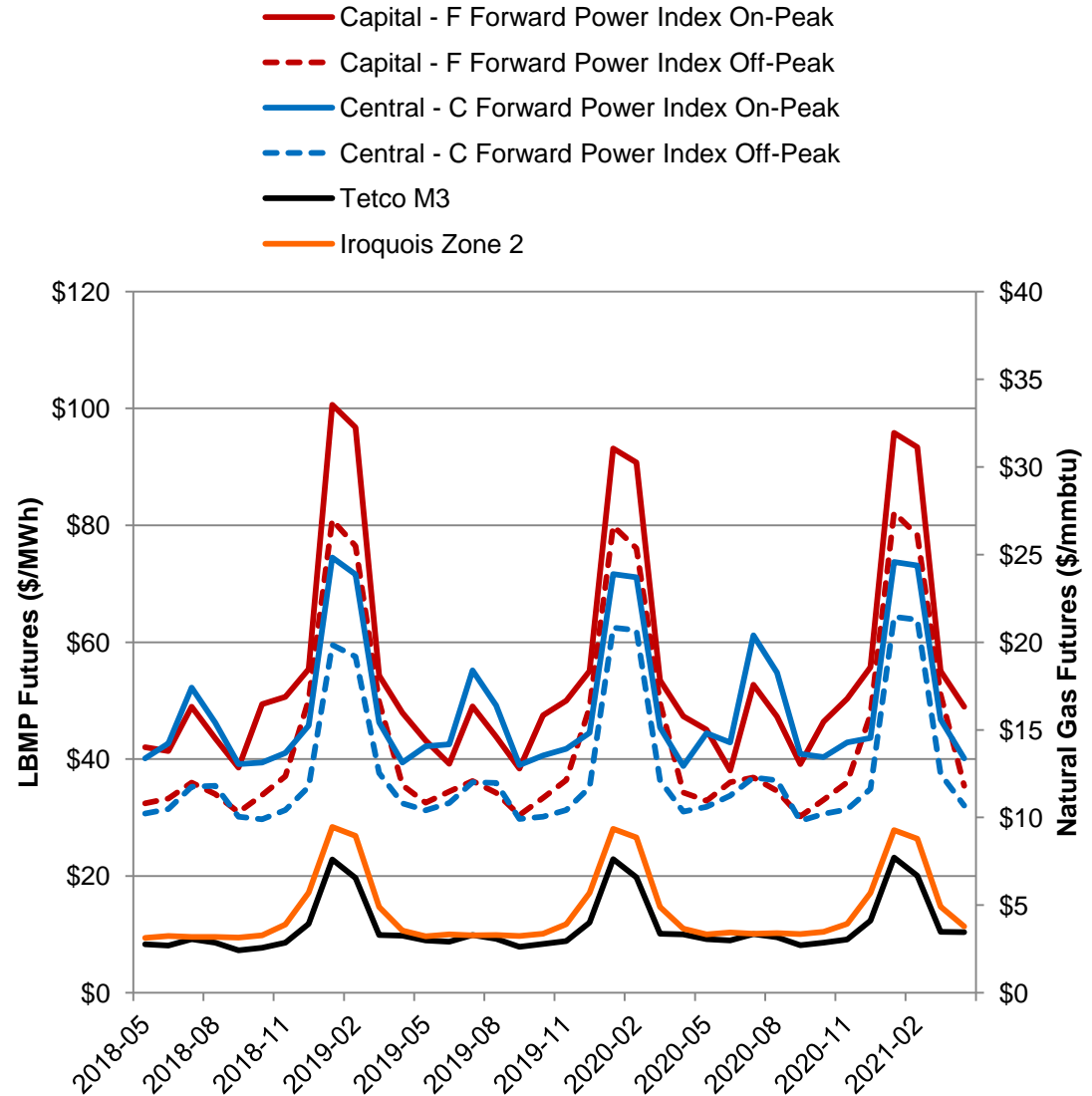
The NYISO performed a net present value calculation in order to explore the potential for subsidized new entry in ROS to be used as a vehicle to suppress prices

- ***Looked at the NPV of a subsidized new entrant in current market conditions, and at the NPV of the same entrant considering the cost savings that an LSE would experience as a result of reduced ICAP prices***
- ***Based on the overnight capital cost estimates from the 2013 Demand Curve Reset, tweaked to reflect a subsidy in the form of a PPA***
 - Adjusted for inflation to 2015\$
 - 10% higher EPC costs to reflect more aggressive performance guarantees
 - Financing costs updated
- ***Financing structure based on that of a regulated entity***
 - 50/50 Debt/Equity
 - 4.8% interest rate for Debt, 9.65% ROE
- ***ICAP prices were assumed to be \$42/kW-year***
- ***Market share (30%) and leakage due to elasticity (10%) based on analysis performed & presented on in this study***
 - Cost savings to the LSE are assumed to dissipate in 3 years
- ***Updated Net Energy & Ancillary Service Revenue***

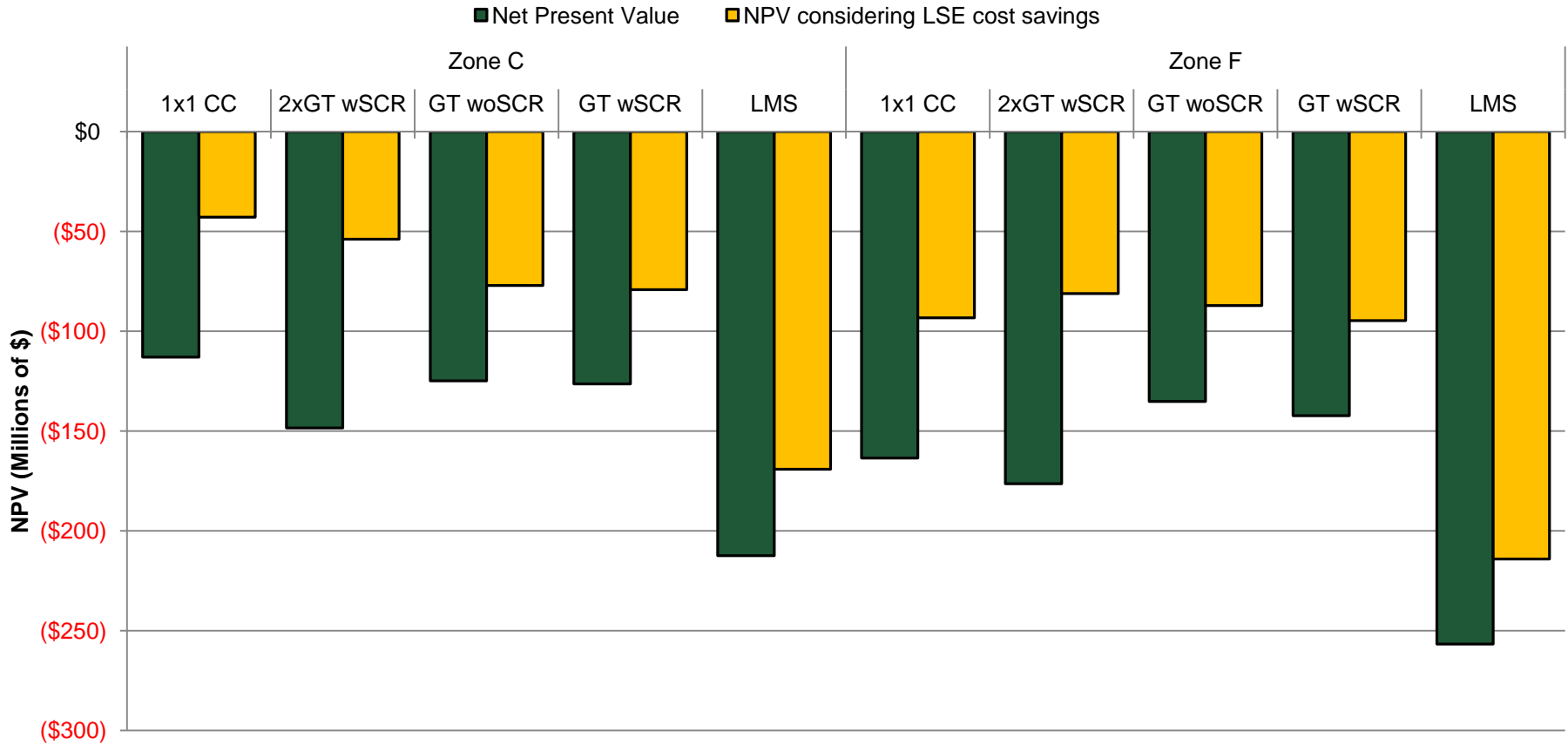
LBMP & Natural Gas Forward Prices

- **Forecast based on forward curves for both energy and natural gas**
 - Iroquois Zone 2 was assumed for Zone F
 - TETCO M3 was assumed for Zone C
 - Historic daily volatility was introduced in the natural gas and energy prices

- **A simple dispatch model with daily peak/off-peak resolution was used to estimate net E&AS revenues for 5/1/2018 to 4/30/2021**
 - Beyond this period, revenues are only adjusted for inflation
 - Unit specific data from the DCR was utilized wherever practicable



Net Present Value of Subsidized New Entry in ROS



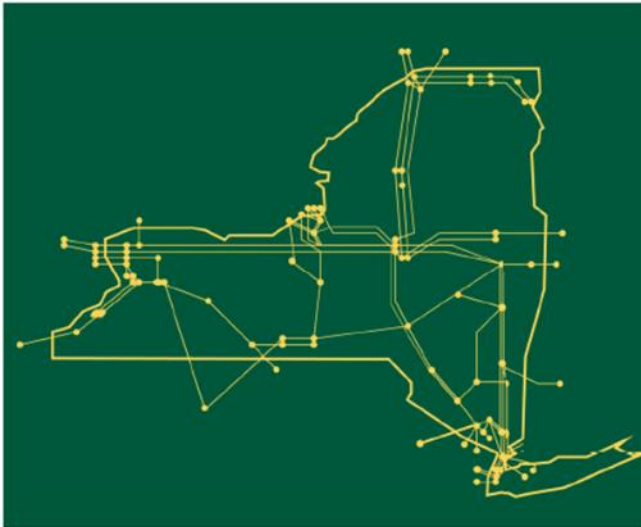
- *The analysis suggests that in current market conditions, subsidized new entry does not pose a credible buyer-side market power concern in ROS*
- *NPVs calculated considering the cost savings from price suppression as cash flows do not suggest that this is a sound financial strategy*

- ◆ Based on preliminary analysis, there may be reason for concern about the potential market effects of repowering pursuant to “agreements similar to Dunkirk’s”
- ◆ The NYISO believes that these concerns should be addressed through the RMR tariff process and rules the NYISO is developing in compliance with FERC’s RMR Order*
 - *Agreements that raise these potential concerns have arisen in the context of addressing a reliability issue*
 - *The RMR tariff process will establish appropriate terms and conditions of agreements applicable to units that are needed to address a reliability issue*
 - *The RMR rules and process are being designed so that the potential concerns raised by such agreements are avoided*
- ◆ The NYISO also notes that repowerings in Mitigated Capacity Zones with certain characteristics (e.g., that trigger the interconnection process) are subject to the current BSM rules
- ◆ The NYISO will continue its analysis and consider input received during today’s meeting
- ◆ The NYISO expects to return to the ICAP Working Group to further discuss and seek input on further analysis of the repowering issue

*RMR Order: 150 FERC ¶ 61,116

- ◆ **The NYISO's compliance report to FERC is due June 17**
 - *The NYISO intends to include in it a discussion of the analysis to date and the outcome of stakeholder discussions*
 - *At this point, and subject to stakeholder input today, the NYISO anticipates indicating that:*
 - The NYISO's analysis and stakeholder discussions did not provide compelling evidence suggesting a need to apply the current BSM rules to new entry in Rest of State
 - Concerns regarding potential market effects of repowering pursuant agreements similar to Dunkirk's should be addressed through the RMR tariff process and rules that are being developed by the NYISO
- ◆ **The NYISO will continue its analysis and consider input received during today's meeting**
 - *The NYISO expects to return to the ICAP Working Group to further discuss and seek input on the results of the study*

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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Appendix 1



Capital Costs, Financing Terms, and Plant Performance Inputs

		(2) LMS 100 GTs				1x1 CC w/ Siemens Frame GT							
		Zone F		Zone C		Zone F		Zone C					
		DCR	Updated	DCR	Updated	DCR	Updated	DCR	Updated				
Capital Cost (2015 k\$)		\$ 275,212	\$ 296,578	\$ 271,722	\$ 279,797	\$ 446,546	\$ 474,933	\$ 419,991	\$ 446,793				
CONE (\$/kW _{ICAP})		1,499	1,615	1,459	1,502	1,479	1,572	1,392	1,481				
Financing Terms	Debt/Equity Split	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50				
	Interest Rate (Nominal)	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%				
	ROE Rate (Nominal)	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%				
	Inflation	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%				
Plant Performance	Output (ICAP Conditions)	183.6	183.6	186.3	186.3	302.0	302.0	301.7	301.7				
	Summer Heat Rate	9.271	9.271	9.247	9.247	7.286	7.286	7.177	7.177				
	Winter Heat Rate	9.053	9.053	9.045	9.045	7.108	7.108	7.044	7.044				
	Forced Outage Factor	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%				
		Siemens Frame GT w/o SCR				Siemens GT w/ SCR				(2) Siemens GTs w/ SCR			
		Zone F		Zone C		Zone F		Zone C		Zone F		Zone C	
		DCR	Updated	DCR	Updated	DCR	Updated	DCR	Updated	DCR	Updated	DCR	Updated
Capital Cost (2015 k\$)		\$ 155,248	\$ 167,300	\$ 152,853	\$ 164,719	\$ 172,461	\$ 185,734	\$ 169,975	\$ 183,055	\$ 306,007	\$ 329,465	\$ 301,335	\$ 324,434
CONE (\$/kW _{ICAP})		752	810	744	802	842	906	834	898	747	804	739	796
Financing Terms	Debt/Equity Split	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
	Interest Rate (Nominal)	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%	7.00%	4.80%
	ROE Rate (Nominal)	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%	12.50%	9.65%
	Inflation	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Plant Performance	Output (ICAP Conditions)	206.5	206.5	205.4	205.4	204.9	204.9	203.7	203.7	409.8	409.8	407.5	407.5
	Summer Heat Rate	10.731	10.731	10.732	10.732	10.818	10.818	10.819	10.819	10.818	10.818	10.819	10.819
	Winter Heat Rate	10.241	10.241	70.250	70.250	10.296	10.296	10.306	10.306	10.296	10.296	10.306	10.306
	Forced Outage Factor	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%	2.17%

- The NYISO’s analysis included an adjustment to the 7% debt rate used in the 2013 Demand Curve Reset
 - *Motivated by current market conditions, and to account for the differences between a merchant entrant, as was studied in the DCR, and a subsidized entrant*
 - *A mix of upstate utilities have an average mixed Bond Rating of Baa & A2 and when averaged over the last three months, a corporate bond yield of 4.78%*
- The NYISO assumed a debt rate of 4.8% for the purpose of this study
- The NYISO also assumed a Return on Equity of 9.65% for the purpose of this study, based on the average of allowed returns for upstate NY utilities

Upstate NY Utilities		
National Grid	Baa1	Average ROE 9.65%
NYS Electric & Gas	Baa1	
Central Hudson Gas & Electric	A2	
Rochester Gas & Electric	Baa1	

Rating	March	April	May
Baa	4.54	4.48	4.89
Aaa	3.64	3.52	3.98
Presumed A2, A3	4.09	4	4.435

Ratings listed for A2 and A3 rated bonds are averages of the published values for Aaa and Baa, which they fall between

Source: Moody’s Analytics as of 06/04/2015 and Federal Reserve as of 06/01/2015

Appendix 3

Summary of Net Energy & Ancillary Services Revenue Estimates & Comparables

Unit Type	Zone	Installed Capacity	ROS BSM Net Revenue	MMU 2014 SOM Net Revenue	2013 DCR Net Revenue
		(MW _{CAP})	(\$/kW-year)	(\$/kW-year)	(\$/kW-year)
(2) LMS 100 GTs	C, Central	186.3	\$ 40.81	\$ 135.00	\$ 23.12
	F, Capital	183.6	\$ 39.81	\$ 70.00	\$ 36.02
1x1 CC w/ Siemens Frame GT	C, Central	301.7	\$ 108.92	\$ 191.00	\$ 59.88
	F, Capital	302.0	\$ 106.56	\$ 81.00	\$ 67.15
Siemens Frame GT w/o SCR	C, Central	205.4	\$ 14.66	Unavailable	\$ 15.48
	F, Capital	206.5	\$ 12.82	Unavailable	\$ 18.48
Siemens Frame GT w/ SCR	C, Central	203.7	\$ 25.75	\$ 127.00	\$ 15.10
	F, Capital	204.9	\$ 21.51	\$ 37.00	\$ 17.76
(2) Siemens Frame GTs w/ SCR	C, Central	407.5	\$ 27.62	Unavailable	\$ 14.99
	F, Capital	409.8	\$ 22.92	Unavailable	\$ 17.66

Appendix 4

Net Present Value – Detail

Generator Type	MW (Summer/Winter Average)	Zone	NPV Term	NPV	Internal Rate of Return (IRR)	NPV considering LSE cost savings	IRR considering LSE cost savings
1x1 CC	319.7	Zone C	25	\$ (113,033,302)	6.90%	\$ (42,950,810)	9.47%
	316.2	Zone F		\$ (163,486,119)	5.76%	\$ (93,320,923)	8.12%
2xGT w/SCR	432.6	Zone C	20	\$ (148,515,973)	4.72%	\$ (53,848,970)	10.87%
	433.7	Zone F		\$ (176,337,088)	3.27%	\$ (81,127,861)	9.41%
GT w/o SCR	217.7	Zone C	20	\$ (124,879,062)	-1.98%	\$ (77,161,544)	4.39%
	218.2	Zone F		\$ (135,139,225)	-3.62%	\$ (87,166,159)	2.83%
GT w/SCR	216.3	Zone C	20	\$ (126,461,117)	-0.13%	\$ (79,127,615)	5.31%
	216.8	Zone F		\$ (142,349,902)	-2.24%	\$ (94,745,288)	3.27%
LMS 100	198.8	Zone C	25	\$ (212,381,350)	0.31%	\$ (169,112,665)	2.25%
	194.4	Zone F		\$ (256,723,103)	-1.95%	\$ (214,070,053)	-0.25%

Analysis Group "NYISO Capacity Market: Evaluation of Options", May 2015.

Data for Figures 5- 8, Average Revenues and Costs, Select Technologies, by Capacity Zone

For a more complete description of sources, please see Appendix I "Model Inputs", pages 116-121.

All values expressed as \$2014/kW-Month

Zone	Resource Type	Energy/ Ancillary		Fixed Cost	Taxes	Capital Investment	NRC Nuclear Costs	Environmental Costs
		Payments	Variable Costs					
NYCA	Combined Cycle	\$12.82	\$12.40	\$1.19	\$1.31	\$0.59	\$0.00	\$0.11
NYCA	Simple Cycle	\$0.45	\$0.43	\$0.59	\$1.31	\$0.22	\$0.00	\$0.00
NYCA	Nuclear	\$25.42	\$4.11	\$9.53	\$1.31	\$1.42	\$0.48	\$1.88
NYCA	Wind	\$8.60	\$0.00	\$1.74	\$1.31	\$0.00	\$0.00	\$0.00
NYCA	Biomass + Refuse	\$24.62	\$9.99	\$2.10	\$1.31	\$1.37	\$0.00	\$0.50
NYCA	Oil/Gas Steam	\$0.24	\$0.24	\$2.11	\$1.31	\$0.48	\$0.00	\$0.20
NYCA	Coal	\$12.80	\$12.45	\$5.61	\$1.31	\$0.82	\$0.00	\$0.88
NYC	Combined Cycle	\$23.55	\$22.76	\$2.28	\$2.48	\$0.59	\$0.00	\$0.02
NYC	Simple Cycle	\$1.11	\$1.03	\$1.44	\$2.48	\$0.08	\$0.00	\$0.00
NYC	Oil/Gas Steam	\$8.41	\$8.27	\$5.14	\$2.48	\$0.41	\$0.00	\$0.10
Long Island	Combined Cycle	\$23.91	\$22.97	\$2.15	\$1.31	\$0.59	\$0.00	\$0.13
Long Island	Simple Cycle	\$1.82	\$1.75	\$1.31	\$1.31	\$0.12	\$0.00	\$0.00
Long Island	Methane	\$35.44	\$16.24	\$4.03	\$1.31	\$0.16	\$0.00	\$0.00
Long Island	Biomass + Refuse	\$32.77	\$16.10	\$4.03	\$1.31	\$1.37	\$0.00	\$0.00
Long Island	Oil/Gas Steam	\$5.06	\$4.82	\$4.59	\$1.31	\$0.48	\$0.00	\$2.54
G-J Locality	Simple Cycle	\$0.00	\$0.00	\$0.82	\$1.31	\$0.07	\$0.00	\$0.00
G-J Locality	Biomass + Refuse	\$32.27	\$10.79	\$2.24	\$1.31	\$1.37	\$0.00	\$0.00
G-J Locality	Oil/Gas Steam	\$1.00	\$1.00	\$2.11	\$1.31	\$0.48	\$0.00	\$0.26
Source:		2014 Preliminary CARIS II Base Case GE MAPS Simulation Results	2014 Preliminary CARIS II Base Case GE MAPS Simulation Results	NYISO	Analysis Group Estimate, Industry Research	Analysis Group Estimate, based on regulated utility FERC Form 1 data	Analysis Group Estimate, Industry Research	Analysis Group Estimate, in consultation with NYISO

Appendix 6

ROS Units Removed from the ICAP Market

Owner, Operator, and / or Billing Organization	Station Unit	Zone	Retire Date	Years In Service	CRIS MW	Unit Type	Primary Fuel	Year
Erie Blvd. Hydro - North Salmon	Hogansburg	D	2015-03-17	85.2	0.3	HY	WAT	2015
Rochester Gas and Electric Corp.	Station 9	B	2014-03-03	44.3	15.8	JE	NG	2014
Syracuse Energy Corporation	Syracuse Energy ST1	C	2013-09-20	22.1	11.0	ST	BIT	2013
Syracuse Energy Corporation	Syracuse Energy ST2	C	2013-09-20	22.1	58.9	ST	BIT	2013
Dynegy Danskammer, LLC	Danskammer 1	G	2013-01-03	61.8	67.0	ST	FO6	2013
Dynegy Danskammer, LLC	Danskammer 2	G	2013-01-03	59.0	62.7	ST	FO6	2013
Dynegy Danskammer, LLC	Danskammer 3	G	2013-01-03	53.9	137.2	ST	BIT	2013
Dynegy Danskammer, LLC	Danskammer 4	G	2013-01-03	46.0	236.2	ST	BIT	2013
Dynegy Danskammer, LLC	Danskammer 5	G	2013-01-03	46.7	2.5	IC	FO2	2013
Dynegy Danskammer, LLC	Danskammer 6	G	2013-01-03	46.7	2.5	IC	FO2	2013
Erie Blvd. Hydro - Seneca Oswego	Fulton 1	C	2013-08-01	89.6	0.7	HY	WAT	2013
Erie Blvd. Hydro - Seneca Oswego	Fulton 2	C	2013-08-01	85.6	0.3	HY	WAT	2013
ReEnergy Chateaugay LLC	Chateaugay Power	D	2013-07-01	20.4	18.6	ST	WD	2013
NRG Power Marketing LLC	Dunkirk 1	A	2013-06-01	62.6	96.2	ST	BIT	2013
New York Power Authority	Kensico 1	I	2012-09-25	29.2	0.6	HY	WAT	2012
New York Power Authority	Kensico 2	I	2012-09-25	29.2	0.6	HY	WAT	2012
New York Power Authority	Kensico 3	I	2012-09-25	29.2	0.6	HY	WAT	2012
NRG Power Marketing LLC	Dunkirk 3	A	2012-09-11	53.0	201.4	ST	BIT	2012
NRG Power Marketing LLC	Dunkirk 4	A	2012-09-11	52.1	199.1	ST	BIT	2012
Rochester Gas and Electric Corp.	Beebee GT	B	2012-02-18	42.7	15.0	GT	FO2	2012
Standard Binghamton LLC	Binghamton Cogen	C	2012-02-15	11.0	43.8	GT	NG	2012
AES Eastern Energy, LP	Greenidge 4	C	2011-03-18	57.3	106.1	ST	BIT	2011
AES Eastern Energy, LP	Westover 8	C	2011-03-18	59.3	83.8	ST	BIT	2011
Project Orange Associates	Project Orange 1	C	2010-11-12	18.4	43.6	GT	NG	2010
Project Orange Associates	Project Orange 2	C	2010-11-12	18.4	44.0	GT	NG	2010
Energy Systems North East LLC	Energy Systems North East	A	2010-11-01	18.3	82.0	CC	NG	2010
AES Eastern Energy, LP	Greenidge 3	C	2009-12-31	59.8	52.8	ST	BIT	2009
AES Eastern Energy, LP	Westover 7	C	2009-12-31	66.0	43.5	ST	BIT	2009
Onondaga Cogeneration, LP	Onondaga Cogen	C	2008-05-01	14.5	87.1	CC	NG	2008
Mirant Energy Trading, LLC	Lovett 5	G	2008-04-30	39.1	188.5	ST	BIT	2008

Appendix 6 (cont'd)

ROS Units Removed from the ICAP Market

Owner, Operator, and / or Billing Organization	Station Unit	Zone	Retire Date	Years In Service	CRIS MW	Unit Type	Primary Fuel	Year
Rochester Gas and Electric Corp.	Russell 3	B	2008-04-24	54.6	48.5	ST	BIT	2008
Rochester Gas and Electric Corp.	Russell 4	B	2008-04-01	51.2	80.2	ST	BIT	2008
Rochester Gas and Electric Corp.	Russell 2	B	2008-02-15	57.3	56.5	ST	BIT	2008
Rochester Gas and Electric Corp.	Russell 1	B	2008-01-31	59.2	45.0	ST	BIT	2008
AG Energy, L.P.	Ogdensburg	E	2007-10-01	13.9	76.7	CC	NG	2007
Seneca Power Partners, L.P.	Swinging Bridge 1	G	2007-07-01	77.4	7.9	HY	WAT	2007
NRG Power Marketing LLC	Huntley 65	A	2007-06-02	53.5	69.5	ST	BIT	2007
NRG Power Marketing LLC	Huntley 66	A	2007-06-02	52.5	68.6	ST	BIT	2007
Mirant Corporation	Lovett 4	G	2007-05-09	41.2	174.0	ST	BIT	2007
Mirant Corporation	Lovett 3	G	2007-05-08	52.2	68.5	ST	NG	2007
NRG Power Marketing LLC	Huntley 63	A	2006-04-17	63.4	93.0	ST	BIT	2006
NRG Power Marketing LLC	Huntley 64	A	2006-04-17	57.4	91.3	ST	BIT	2006
NYSEG Solutions, Inc.	S. Glens Falls Engy	F	2006-02-01	14.3	60.2	CC	NG	2006
NRG Power Marketing LLC	Ilion	E	2005-12-31	12.9	54.4	CC	NG	2005
Fulton Cogen Assoc., L.P.	Fulton Cogen	C	2005-12-01	14.7	42.7	CC	NG	2005
Erie Blvd. Hydro - Seneca Oswego	Oswego Falls W 3	C	2005-11-01	91.8	0.3	HY	WAT	2005
AES Corp.	Hickling 1	C	2005-05-01	56.6	34.6	ST	BIT	2005
AES Corp.	Hickling 2	C	2005-05-01	52.9	47.1	ST	BIT	2005
AES Corp.	Jennison 1	E	2005-05-01	59.6	35.4	ST	BIT	2005
AES Corp.	Jennison 2	E	2005-05-01	55.0	37.5	ST	BIT	2005
PSEG Power New York Inc.	Albany 2	F	2005-03-01	52.2	90.7	ST	NG	2005
PSEG Power New York Inc.	Albany 3	F	2005-03-01	51.4	89.7	ST	NG	2005
PSEG Power New York Inc.	Albany 4	F	2005-03-01	50.4	88.7	ST	NG	2005
Niagara Mohawk Power Corp.(2)	Carthage Paper (Climax)	E	2005-01-01	19.0	0.1	HY	WAT	2005
Niagara Mohawk Power Corp.(2)	Waste Mgmt. of NY	E	2005-01-01	13.2	1.0	IC	MTE	2005
PSEG Power New York Inc.	Albany 1	F	2004-10-01	52.0	92.0	ST	NG	2004
New York State Elec. & Gas Corp.	Lancaster LF Ph.1	A	2003-08-01	13.6	1.9	IC	MTE	2003
New York State Elec. & Gas Corp.	Lancaster LF Ph.2	A	2003-08-01	12.7	2.1	IC	MTE	2003
Niagara Mohawk Power Corp.	Harden Furniture	E	2003-01-01		0.3	ST	WD	2003
Niagara Mohawk Power Corp.	Moreau Mfg	F	2003-01-01		2.1	HY	WAT	2003
PP&L EnergyPlus Co. (EPLUS)	Bethlehem Steel	A	2001-08-01		21.5	CC	COG	2001

Appendix 6 (cont'd)

ROS Units Reactivated from Retirement in the ICAP Market

<i>Owner, Operator, and / or Billing Organization</i>	<i>Station Unit</i>	<i>Zone</i>	<i>Retire Date</i>	<i>Years In Service</i>	<i>Returned to Service</i>	<i>Years Out of ICAP Market</i>	<i>CRIS (MW)</i>	<i>Unit Type</i>	<i>Primary Fuel</i>	<i>Year</i>
ReEnergy Chateaugay LLC	Chateaugay Power	D	2013-07-01	20.4	2015-05-01	1.83	18.6	ST	WD	2015
Danskammer Energy, LLC	Danskammer 3	G	2013-01-03	53.9	2014-12-16	1.96	137.2	ST	NG	2014
Standard Binghamton LLC	Binghamton Cogen	C	2012-02-15	11.0	2014-12-16	2.96	43.8	GT	NG	2014
Danskammer Energy, LLC	Danskammer 4	G	2013-01-03	46.0	2014-11-01	1.83	236.2	ST	NG	2014
Danskammer Energy, LLC	Danskammer 1	G	2013-01-03	61.8	2014-09-22	1.72	67.0	ST	NG	2014
Danskammer Energy, LLC	Danskammer 2	G	2013-01-03	59.0	2014-09-22	1.72	62.7	ST	NG	2014
Niagara Generation, LLC	Niagara Bio-Gen	A	2013-05-10	21.8	2014-01-23	0.82	50.5	ST	WD	2014
Erie Blvd. Hydro - Seneca Oswego	Baldwinsville 2	C	2012-07-03	85.5	2013-08-01	1.08	0.2	HY	WAT	2013

ROS New Entry in the ICAP Market

<i>Owner, Operator, and / or Billing Organization</i>	<i>Station Unit</i>	<i>Zone</i>	<i>In-Service Date</i>	<i>CRIS (MW)</i>	<i>Unit Type</i>	<i>Primary Fuel</i>	<i>Year</i>
Empire Generating Co, LLC	EMPIRE_CC_1	F	2010-09-02	285.6	CC	NG	2010
Empire Generating Co, LLC	EMPIRE_CC_2	F	2010-09-02	285.6	CC	NG	2010
PSEG Energy Resource & Trade, LLC	Bethlehem Energy Center 1	F	2005-07-01	746.7	CC	NG	2005
Athens Generating Company, LP	Athens 1	F	2004-05-01	316.6	CC	NG	2004
Athens Generating Company, LP	Athens 2	F	2004-05-01	315.6	CC	NG	2004
Athens Generating Company, LP	Athens 3	F	2004-05-01	312.8	CC	NG	2004
Jamestown Board of Public Utilities	Jamestown 7	A	2002-01-01	38.7	GT	NG	2002
Hess Corporation	Binghamton Cogen	C	2001-03-01	40.9	CC	NG	2001

Entry & Exit of NYCA Supply and ROS Spot Price

