



Overview of the 2013 State of the Market Report for the NYISO Markets

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Highlights and Market Summary: Energy Market

- This report summarizes market outcomes in 2013.
- The energy markets performed competitively and price variations were driven primarily by fundamentals (i.e., demand, fuel prices, supply availability).
- Average “all-in” prices ranged from \$52/MWh in Western NY to \$88/MWh in NYC and \$94/MWh in Long Island in 2013.
- Energy prices rose 20 to 39 percent from 2012 to 2013 because of:
 - ✓ Increases in natural gas prices of 27 to 72 percent; and
 - ✓ More frequent peak operating conditions in the summer and winter.
- Congestion from west to east on the natural gas pipeline system contributed to a \$359 million (118 percent) increase in DA congestion revenue from 2012. In particular, DA congestion revenue collected from the:
 - ✓ Central-East Interface rose to \$284 million from just \$55 million in 2012; and
 - ✓ Interfaces in western New York and Long Island increased by a combined \$90 million from 2012.
 - ✓ However, congestion upstate was ameliorated by improved performance of the Ramapo Line under market-to-market (M2M) coordination with PJM.



Highlights and Market Summary: Capacity Market & Uplift Charges

Capacity Market:

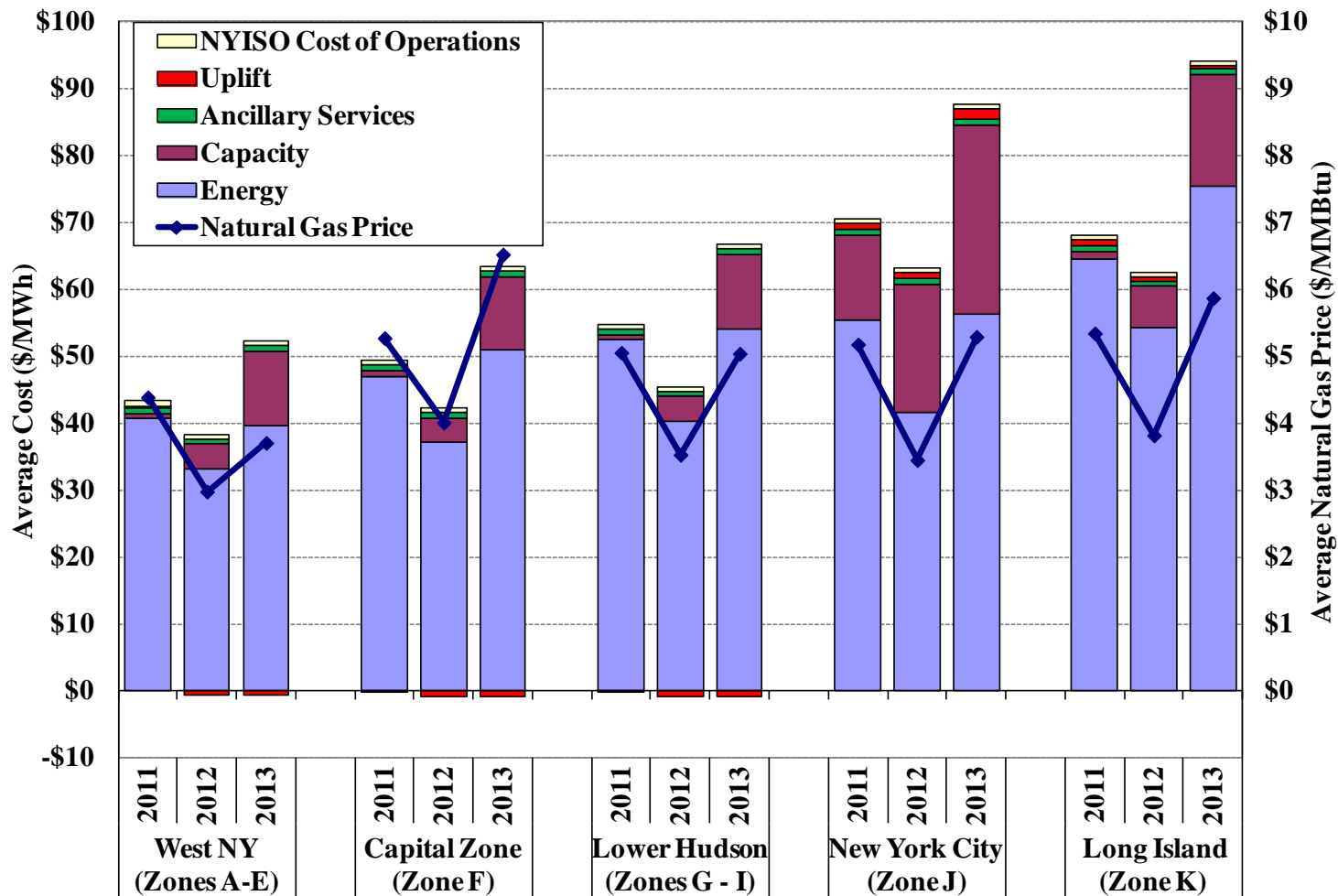
- Spot prices averaged \$12.90/kW-month in NYC, \$5.40/kW-month on Long Island, and \$4.65/kW-month in Rest of State in the 2013/14 Capability Period.
- NYC capacity prices rose 56 percent from the previous period mainly because the requirement rose 330 MW after a retirement in Hudson Valley.
 - ✓ Reduced SCRs and the annual demand curve escalation also contributed.
- In other areas, capacity prices rose 109 to 114 percent because of retirements and mothballs, higher statewide requirements (IRM), and less SCR capacity.

Uplift Charges:

- Guarantee payments rose 13 percent to \$164 million because of higher fuel prices and more reliability commitment in NYC.
- Day-ahead congestion shortfalls rose 188 percent to \$72 million, reflecting more overall congestion and outages necessitated by transmission upgrades.
 - ✓ 109 percent of the shortfall was allocated to the responsible TOs.
- Balancing congestion shortfalls remained low at \$22 million, reflecting good operating performance during TSAs and the benefits of the M2M coordination.



Average All-In Price by Region



See Section II.A

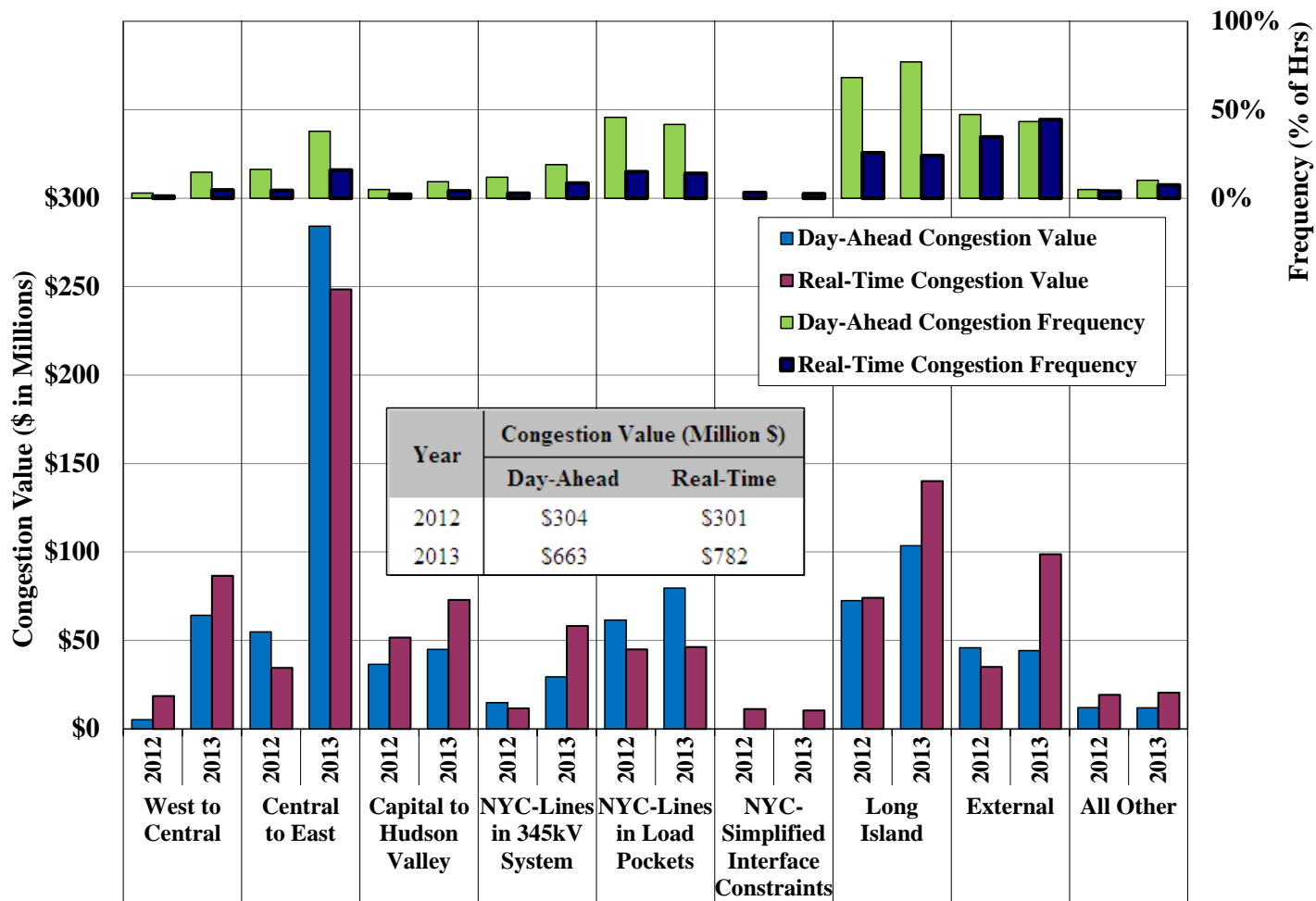
Fuel Prices and Energy Prices by Region

	2012	2013	Percent Change
Fuel Prices (\$/MMBtu)			
Fuel Oil #2	\$21.54	\$20.80	-3%
Fuel Oil #6	\$18.09	\$16.85	-7%
NG - Dominion North	\$2.77	\$3.51	27%
NG - Tx Eastern M3	\$2.98	\$3.93	32%
NG - Transco Z6 (NY)	\$3.25	\$5.13	58%
NG - Iroquois Z2	\$3.65	\$5.69	56%
NG - Tennessee Z6	\$3.91	\$6.74	72%
Energy Prices (\$/MWh)			
West New York (Dominion)	\$33.16	\$39.72	20%
Capital Zone (Iroquois/Tennessee)	\$37.11	\$50.94	37%
Lower Hudson Valley (TxEastern/Iroquois)	\$40.31	\$54.14	34%
New York City (Transco)	\$41.71	\$56.25	35%
Long Island (Iroquois)	\$54.24	\$75.42	39%

See Section II.B



Transmission Congestion



See Section II.E.



Recommendation #1: Capacity Market Design

- Create a dynamic and efficient framework for reflecting locational planning requirements.
- Principle:
 - ✓ Price/Compensation = Reliability Value
- Benefits:
 - ✓ Reduce cost of satisfying resource adequacy criteria
 - ✓ Compensate transmission on equal basis
 - ✓ Provide certainty about market requirements



Recommendation #4: Coordination with Adjacent Control Areas

- Work with adjacent ISOs on rules to better utilize the transfer capability between regions
- Principle:
 - ✓ Use transmission to reduce production costs
- Market Enhancements:
 - ✓ 2013-Q1: M2M Congestion Management with PJM
 - ✓ 2014-Q4: CTS with PJM
 - ✓ 2015-Q4: CTS with ISO New England



Recommendation #5: Use Internal Transmission Efficiently

- Operate PAR-controlled lines to minimize production costs and create financial rights that compensate affected transmission owners
- Principles:
 - ✓ Use transmission to reduce production costs
 - ✓ Modernize grandfathered wheeling agreements
- Benefits:
 - ✓ Reduce production costs
 - ✓ Reduce prices for Long Island customers
 - ✓ Create financial rights that benefit NYC customers



Recommendations #9 & #10: Enhance RT Pricing & Reserve Demand Curves

- Scarcity Pricing in RT model & for external proxies (#9)
- Create Reserve Demand Curve for SENY (#10a)
- Enhance Reserve Demand Curve for NYCA (#10b, #10c)
- Principles:
 - ✓ Price = Cost of Maintaining Reliability
 - ✓ Compensate resources based on performance
- Benefits:
 - ✓ Incent commitment of generation & scheduling of imports
 - ✓ Investment in resources with flexible characteristics
 - ✓ Reduce capacity market costs



Recommendations #11 & #12: Winter Market Operations Enhancements

- Consider allowing generators to submit offers that reflect fuel supply constraints in the day-ahead market. (#11)
- Benefits:
 - ✓ Conserve available fuel supplies
 - ✓ Reduce financial risk for generators
- Require Generators to provide daily information on fuel availability (e.g., inventory, nominations). (#12)
- Benefits:
 - ✓ Helpful for maintaining reliability
 - ✓ Reduce out-of-market actions to maintain reliability