



## Providers of Strategic Energy Services

November 28, 2012 (comment due by COB)

Issue Comment to FTI & NYISO ICAP WG on behalf of Several RIPs/CSPs re FTI's draft "Evaluation of the New York Capacity Market"

Subject: Treatment of Demand Response in the FTI Study

Source Documents: Evaluation of the New York ISO Capacity Market Summary of Draft Report.pdf

New York Capacity Market Final Draft November 7 2012.pdf

Additional Comment Reviewed: Comverge comment of November 27, 2012

Capacity Market Study Draft Comments - Comverge.pdf.pdf

Key issue: The FTI draft creates ambiguity about the role and value of demand resources and who provides them in the capacity market.

Further Argument: Comverge has correctly identified that the value of capacity for Demand Response capability to perform is an ongoing expense for RIPs to administer, not an episodic expense. Episodic expenses could include the energy payments and possibly other payments to the RIP and/or direct customer.

The costs should be aggregated at the level of the RIP and/or direct customer in the event that the resource singly is a direct customer.

The latter case is the only case in which the customer specific costs may be relevant.

The fixed costs of DR that are borne by the RIP and its aggregated customers are not recognized by the formula proposed by FTI.

Overall cost of demand response could be treated as proposed by Comverge, and simply defined as the sum of capacity payments and energy payments to RIPs and/or direct customers. See data below for perspective on what these amounts might mean using 2010 data.



## Providers of Strategic Energy Services

Perspective - In 2010 the three northeastern RTOs transacted about 0.015-0.017 % of their markets via Demand Response under historical assumptions and methodology.

### PJM (9,282 MW of DR in 2010 plus 679 MW of energy efficiency)

In 2010 PJM paid \$520,554,000 for DR resources, including \$2,933,761 to DR for economic energy (RT flow of electrons where demand = supply), \$512,300,658 for capacity in the 3-year forward market to assure capacity adequacy, \$5,319,120 for 10 minute synchronized reserves when the largest unit trips off line and 0\$ for 5 minute regulation reserves to maintain frequency at 60 herz. (Covino, Susan. "Smart Grids and Microgrids." *America's Sustainable Future*, June 15, 2011. Philadelphia: PJM, June 15, 2011.)

According its 2010 Annual Report, PJM's total billings were \$34.8 billion in 2010. By dividing the total paid for DR resources by the total transactions an approximate proration can be calculated, i.e. 0.015%.

### ISO-New England (2116 MW of DR in 2010)

In 2010 ISO-New England paid \$143,741,713 for DR, including \$134,456,420 for capacity, \$8,381,204 for Day Ahead Load Response and \$904,089 for price response. (ISO New England Inc. Internal Market Monitor. "2010 Annual Markets Report." [http://www.iso-ne.com/markets/mkt\\_anlys\\_rpts/annl\\_mkt\\_rpts/2010/amr10\\_final\\_060311.pdf](http://www.iso-ne.com/markets/mkt_anlys_rpts/annl_mkt_rpts/2010/amr10_final_060311.pdf), June 3, 2011.)

TABLE 1

Period	ISO-NE Demand-Response Payments, 2010 (\$)			Total
	DALRP Payments	RTPR Payments	Capacity Payments	
Jan to May	\$515,497	\$278,571	\$74,251,383	\$75,045,451
Jun to Dec	\$7,865,707	\$625,518	\$60,205,037	\$68,696,262
<b>Total 2010</b>	<b>\$8,381,204</b>	<b>\$904,089</b>	<b>\$134,456,420</b>	<b>\$143,741,713</b>

The all-in cost of wholesale electric energy for ISO-NE, which includes capacity and ancillary service payments as well as energy costs, was \$8.5 billion in 2010. By dividing the total paid for DR resources by the total transactions an approximate proration can be calculated, i.e. 0.017%. (2010 ISO-NE Annual Market Report. <http://www.iso->



## Providers of Strategic Energy Services

[ne.com/markets/mkt\\_anlys\\_rpts/annl\\_mkt\\_rpts/2010/amr10\\_final\\_o60311.pdf](http://ne.com/markets/mkt_anlys_rpts/annl_mkt_rpts/2010/amr10_final_o60311.pdf)) pp 17-18.

### NYISO (2,498 MW of DR in 2010)

While E Cubed has not obtained comparable capacity payment data from the NYISO because NYISO does not report capacity payment levels for DR to FERC, E Cubed has estimated in the attached table an approximate payment level of \$95 million in 2010. The amount of NYISO DR ICAP (Special Case Resources) in the eleven zones reported in the Annual Demand Response Report to FERC as revised on January 25, 2011 were assumed to have been paid the amount set by auction for the three six month strips that cover 2010 (November 2009 through April 2010, May through October 2010, November 2010 through April 2011). (NYISO "Supplemental 2010 DR Report to FERC." Letter Report.)

By dividing the total paid for DR resources by the total transactions an approximate proration can be calculated, i.e. 0.015%.

Note that in this instance no estimate has been made of energy payments as suggested by Comverge.

Regards

Ruben Brown, M.A.L.D.  
President  
The E Cubed Company, LLC  
T: 917.974.3146  
E: [brown@ecubedllc.com](mailto:brown@ecubedllc.com)  
[www.ecubedllc.com](http://www.ecubedllc.com)

Jessica Sandland, Ph.D.  
Senior Consulting Associate  
The E Cubed Company, LLC  
T: 781-350-5940  
E: [sandland@ecubedllc.com](mailto:sandland@ecubedllc.com)

Estimation of ICAP Revenue by DR Resources in NYISO's 11 Zones (2010)

NYISO	2010		Strip auction Results \$/kw-mon														
Zone	ICAP #	ICAP (3) MW	Jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total		
A			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
B			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
C			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
D			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
E			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
F			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
G			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
H			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
I			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
J			\$4.65	\$4.65	\$4.65	\$4.65	\$12.90	\$12.90	\$12.90	\$12.90	\$12.90	\$12.90	\$4.60	\$4.60	\$105.20		
K			\$1.75	\$1.75	\$1.75	\$1.75	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$2.47	\$0.39	\$0.39	\$22.60		
NYISO	2010																
Zone	ICAP #	ICAP (3) MW	Jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	TOTAL	AVERAGE	
A	487	507.1	\$887,425	\$887,425	\$887,425	\$887,425	\$1,252,537	\$1,252,537	\$1,252,537	\$1,252,537	\$1,252,537	\$1,252,537	\$197,769	\$197,769	\$11,460,460	\$22.60	
B	236	161	\$281,750	\$281,750	\$281,750	\$281,750	\$397,670	\$397,670	\$397,670	\$397,670	\$397,670	\$397,670	\$62,790	\$62,790	\$3,638,600	\$22.60	
C	287	211.3	\$369,775	\$369,775	\$369,775	\$369,775	\$521,911	\$521,911	\$521,911	\$521,911	\$521,911	\$521,911	\$82,407	\$82,407	\$4,775,380	\$22.60	
D	26	231.8	\$405,650	\$405,650	\$405,650	\$405,650	\$572,546	\$572,546	\$572,546	\$572,546	\$572,546	\$572,546	\$90,402	\$90,402	\$5,238,680	\$22.60	
E	155	72.5	\$126,875	\$126,875	\$126,875	\$126,875	\$179,075	\$179,075	\$179,075	\$179,075	\$179,075	\$179,075	\$28,275	\$28,275	\$1,638,500	\$22.60	
F	193	179.6	\$314,300	\$314,300	\$314,300	\$314,300	\$443,612	\$443,612	\$443,612	\$443,612	\$443,612	\$443,612	\$70,044	\$70,044	\$4,058,960	\$22.60	
G	164	102.4	\$179,200	\$179,200	\$179,200	\$179,200	\$252,928	\$252,928	\$252,928	\$252,928	\$252,928	\$252,928	\$39,936	\$39,936	\$2,314,240	\$22.60	
H	11	7.3	\$12,775	\$12,775	\$12,775	\$12,775	\$18,031	\$18,031	\$18,031	\$18,031	\$18,031	\$18,031	\$2,847	\$2,847	\$164,980	\$22.60	
I	119	42.4	\$74,200	\$74,200	\$74,200	\$74,200	\$104,728	\$104,728	\$104,728	\$104,728	\$104,728	\$104,728	\$16,536	\$16,536	\$958,240	\$22.60	
J	1832	546.8	\$2,542,620	\$2,542,620	\$2,542,620	\$2,542,620	\$7,053,720	\$7,053,720	\$7,053,720	\$7,053,720	\$7,053,720	\$7,053,720	\$2,515,280	\$2,515,280	\$57,523,360	\$105.20	
K	661	176.3	\$308,525	\$308,525	\$308,525	\$308,525	\$435,461	\$435,461	\$435,461	\$435,461	\$435,461	\$435,461	\$68,757	\$68,757	\$3,984,380	\$22.60	
TOTAL	4171	2238.5	\$5,503,095	\$5,503,095	\$5,503,095	\$5,503,095	\$11,232,219	\$11,232,219	\$11,232,219	\$11,232,219	\$11,232,219	\$11,232,219	\$3,175,043	\$3,175,043	\$95,755,780	\$42.78	
Note 3: MW represent reduction MW sold in the ICAP program.																	

Note 3: MW represent reduction MW sold in the ICAP program.

Calculation by The E Cubed Company, LLC from publicly available Strip Auction data.  
[http://icap.nyiso.com/ucap/public/auc\\_view\\_strip\\_detail.do](http://icap.nyiso.com/ucap/public/auc_view_strip_detail.do)