

# New York ISO Load Response Programs: Concerns About Competition, the Environment and Energy Efficiency

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# NY ISO LOAD RESPONSE PROGRAMS

❖ EMERGENCY: Avoid  
“Lights Out”

❖ ECONOMIC: Facilitate  
Consumers Responding to Price

# NYISO Emergency Program

- Pay Greater of \$500/MWH or LBMP
- Pay Capacity: \$110,000/MW/Yr in NYC
- Warning: Usually 24 Hrs, Always 2 Hrs
- Penalties: None, Except Capacity

# Load Relief Measures -

Total	-	1,580 MW
– <b>EDRP &amp; SCR</b>	-	<b>580 MW</b>
– Voltage Reduction	-	350 MW
– Public Appeals	-	270 MW
– NYS Government	-	220 MW
– TO Programs	-	130 MW

# Emergency Demand Response Program

## Registration:

- *LSEs: 13 (12 registered, 1 in process)*
- *Aggregators: 9 (5 registered, 4 in process)*
- *End-Use Customers: 7 (all registered)*
- *275 Resources registered*

<b>Zone</b>	<b>TOTAL MW</b>	<b>Interruptible Load</b>	<b>On-Site Generation</b>	<b>Load + Generation</b>
<b>All (A-K)</b>	<b>679.1</b>	<b>520.6</b>	<b>120.5</b>	<b>38</b>
A	295.3	294.8	0.5	0
B	12.7	12.2	0.5	0
C	77.2	68.9	3.9	4.4
D	0.7	0.5	0	0.2
E	41.2	37.3	3.9	0
F	98.9	76.3	3.9	18.7
G	25.4	18.7	6.4	0.3
H	6.8	1.8	5	0
I	12.4	1.4	6.3	4.7
J	83.3	8.7	65.4	9.2
K	25.3	0 DeWitt	5 24.8	0.5

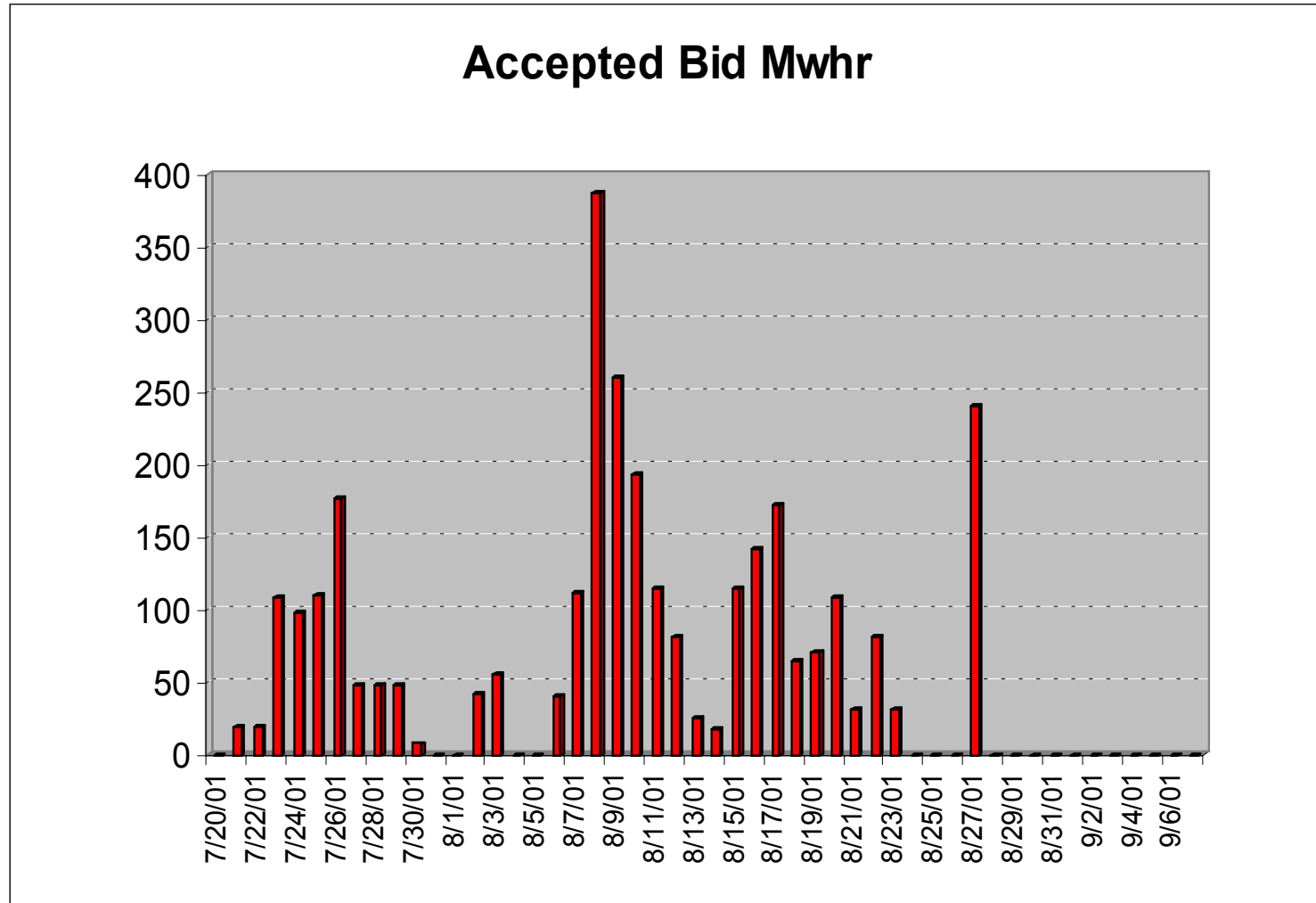
# Day Ahead Economic Program

- Bid Day Ahead as Negative Generator
- Bid Strip of One or More Hours, Including “Curtailment Initiation Costs”
- Demand Reduction Bids Can Set LBMP
- All Accepted Bids (Gen or Neg-Gen) Receive LBMP

# Day Ahead Demand Reduction Payments

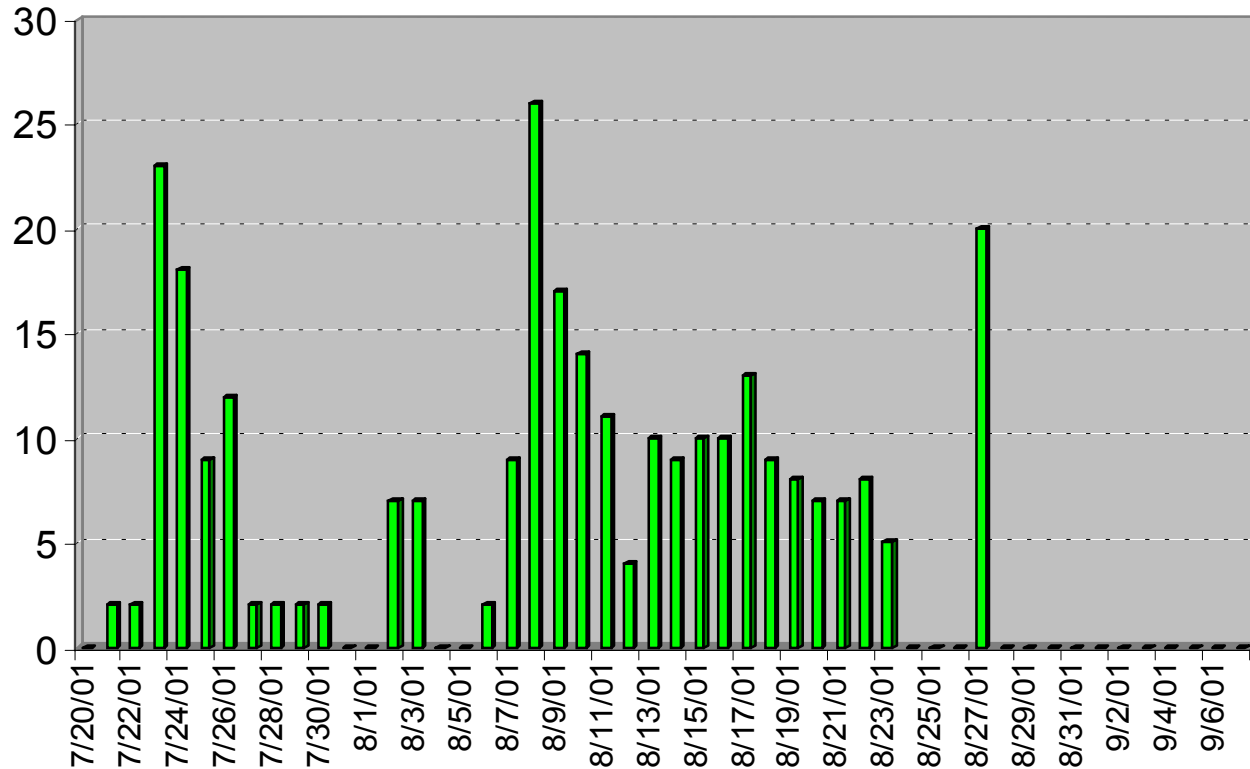
- True Load Reduction: Paid LBMP and Get “Spread” Between Retail Rate and LBMP
- Non-Diesel Self-Generation: Avoid High LBMP
- Diesel: Barred from Economic Program (May Participate in Emergency Program)

# Day-Ahead Demand Response Program



# Day-Ahead Demand Response Program

## Peak Coincident MW Accepted



# Big Concerns: Price Response

- Can We Get 10% of Load to Respond to Price?
- Will this Response be Mostly Industrial?
- How Many “Rs and Cs” want to Confront Day-Ahead or Real Time Prices?
- How Much Response Below \$200/MWH?
- How Many Consumers are Motivated by 10% to 15% Energy Cost Savings?
- Are There Significant Enviro Benefits to Price Responsiveness?

# Big Concerns: Energy Efficiency

- Need Aggressive ESCO/LSE Market if Efficiency to be Sold to “Rs and Cs”
- ESCO/LSEs Will Need Multi-Year Contracts to Recover Investments in EE
- Customers Must be sure that HVAC, Telecom and Computers will not get Messed Up
- Need Least Cost Planning to Work Well for EE to be a T&D Alternative