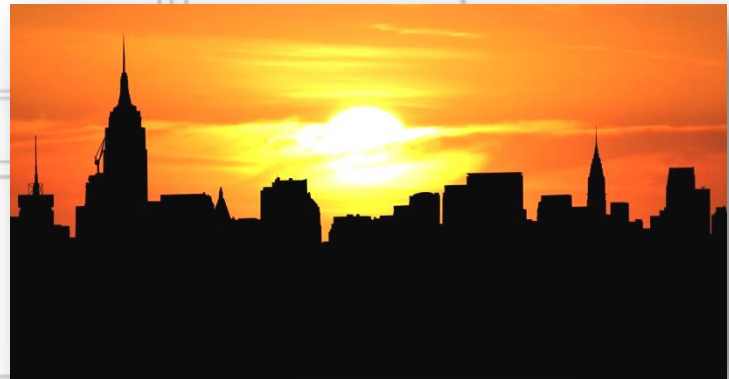


2013 Summer Outlook



May 2013

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Roles of the NYISO

Reliable operation of the bulk electricity grid

- *Managing the flow of power nearly 11,000 circuit-miles of transmission lines from more than 300 generating units*

Administration of open and competitive wholesale electricity markets

- *Bringing together buyers and sellers of energy and related products and services*

Planning for New York's energy future

- *Assessing needs over a 10-year horizon and evaluating projects proposed to meet those needs*

Advancing the technological infrastructure of the electric system

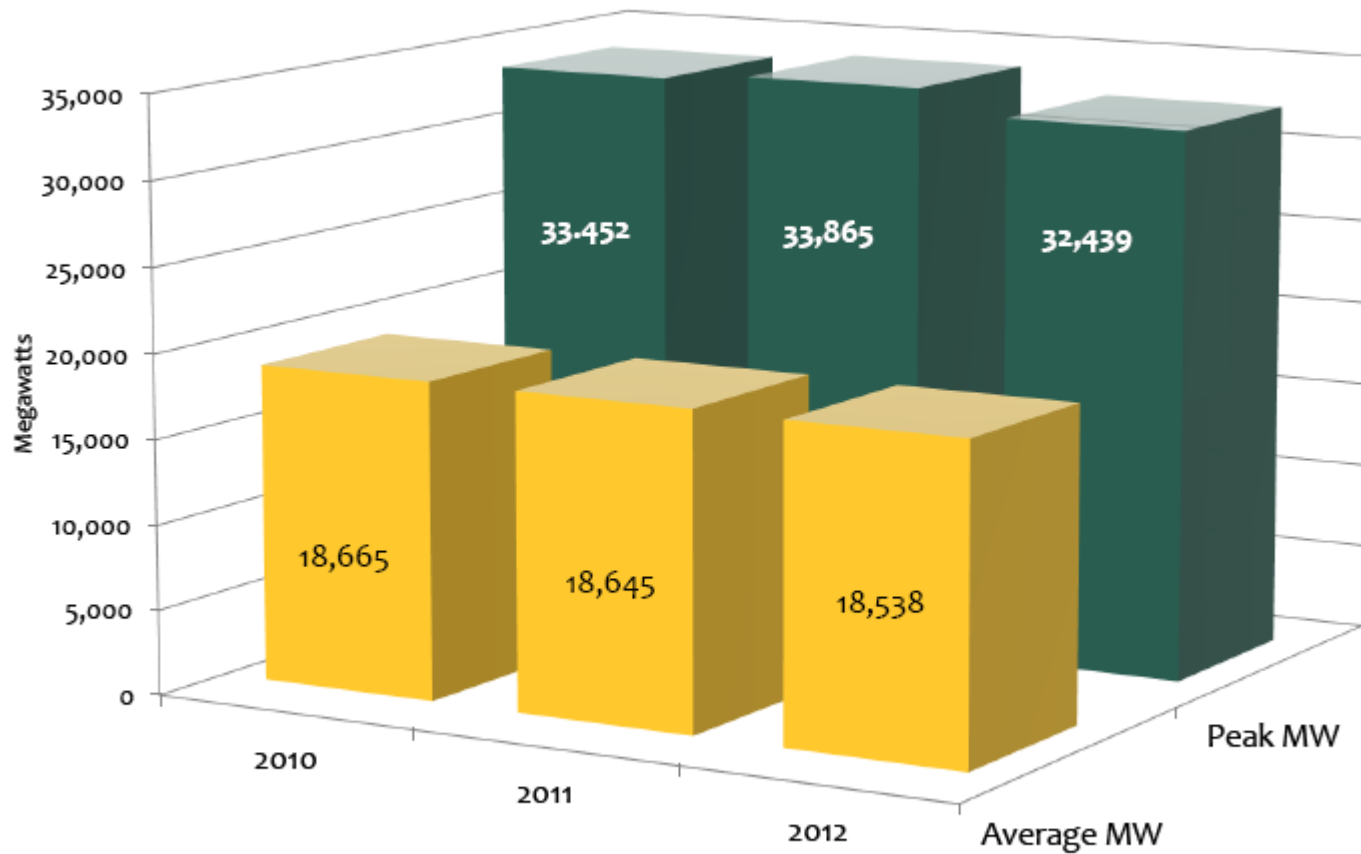
- *Developing and deploying information technology and tools to make the grid smarter*



Understanding Peaks

- ◆ Electricity demand **changes constantly** as consumers use different amounts of power during the day and as their power needs change throughout the seasons of the year
- ◆ Power demand **can spike sharply during extreme summer weather conditions**, as air conditioning and cooling systems increase electricity consumption
- ◆ New York State's summer **peak** demand can increase 70-80% above the **average** level of electricity use

Peak vs. Average Demand



Summer Peaks

Summer '13 Forecast (<i>normal weather</i> ¹)	33,279 MW
Summer '13 Forecast (<i>extreme weather</i> ²)	35,767 MW
Summer '12 Forecast	33,295 MW
Summer '12 Actual (<i>7/17/12</i>)	32,439 MW
Summer '12 Normal ³	33,106 MW
Record Peak (<i>8/2/06</i>)	33,939 MW

1 – Normal summer weather = 95° F in New York City.

2 – Extreme summer weather = 100° F in New York City.

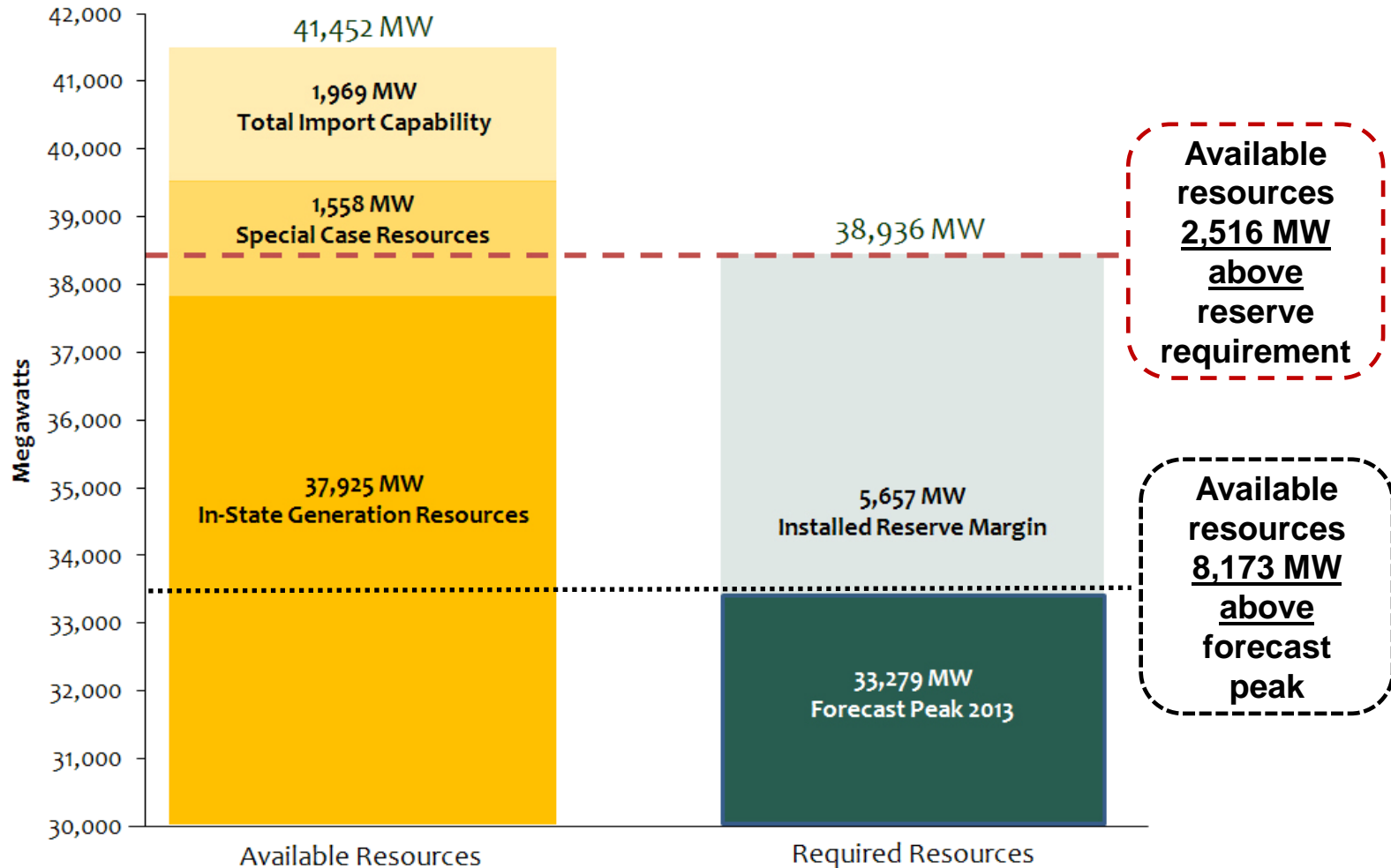
3 – The 2012 summer peak day was cooler than normal. Given normal weather conditions, 2012 peak demand would have been 33,106 MW.

Reliability Requirements

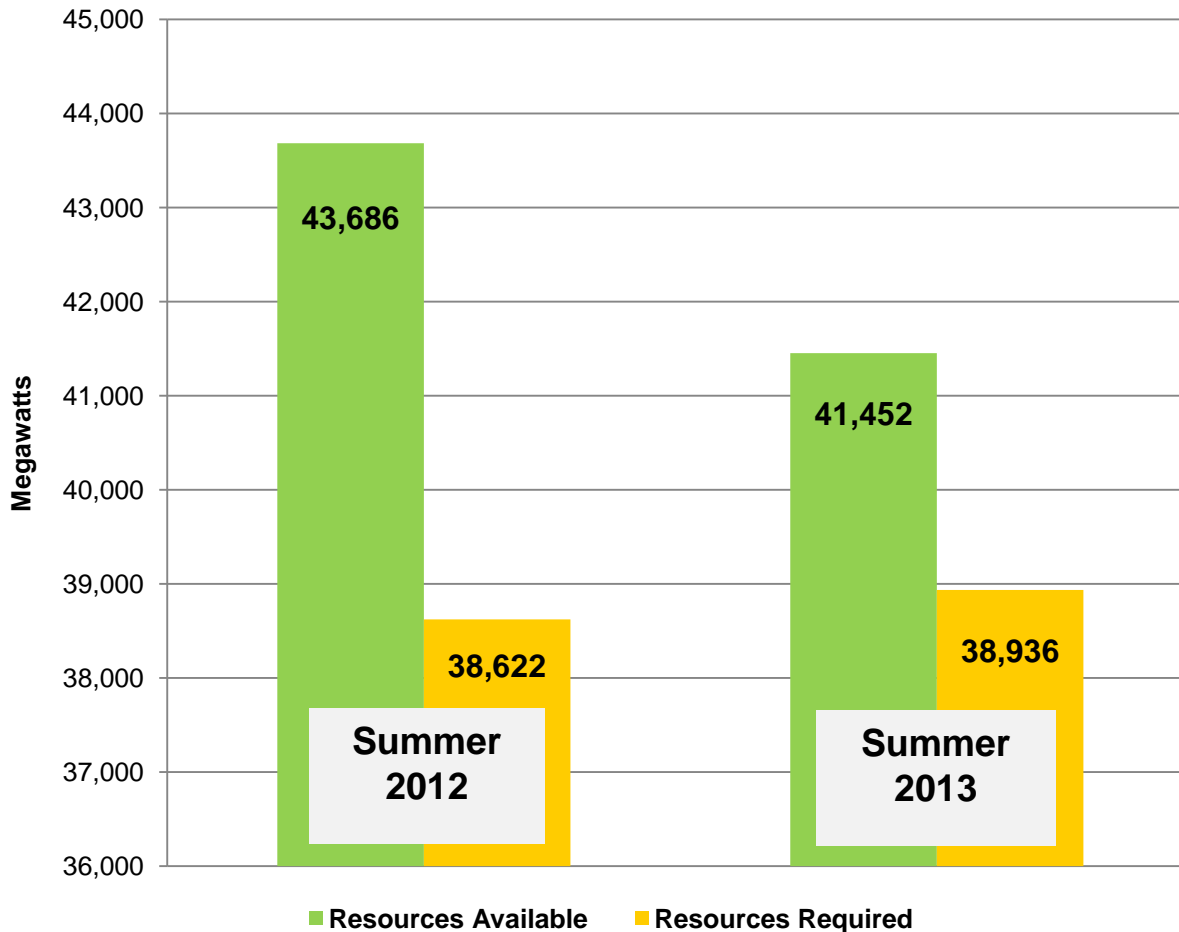
- ◆ The power system must have adequate capacity to meet peak demand – even though demand spikes to peak levels only a few days each year
- ◆ New York State’s electric system reliability standards include resource adequacy requirements for reserves over and above the amount needed to meet forecasted peak demand
- ◆ **38,936 MW** - a reserve margin of 17% above the summer peak demand forecast - is required in 2013
- ◆ The total capacity available to New York in 2013 is expected to be **41,452 MW**, which includes
 - *37,925 MW of in-state generation,*
 - *1,558 MW of demand response resources (programs under which consumers reduce usage),*
 - *1,969 MW of import capability that could be used to supply energy from neighboring regions to New York*

Statewide Resource Availability

Summer 2013

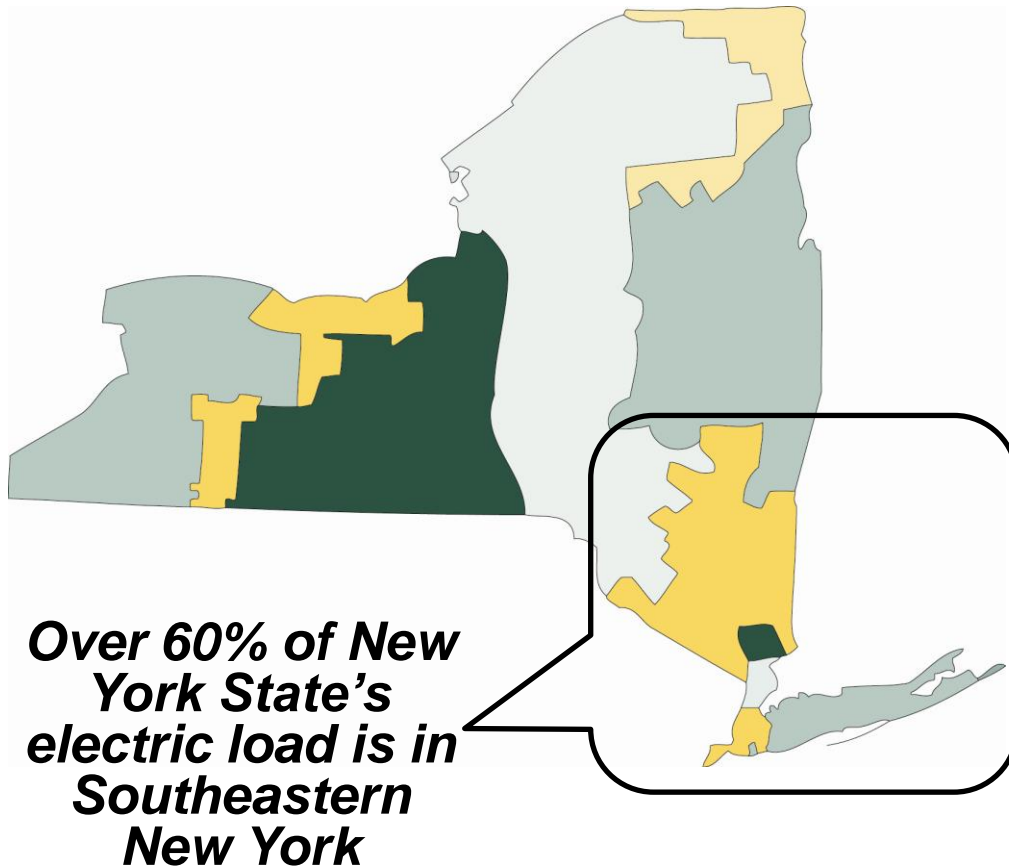


Tighter Margin in 2013



- ◆ Resources available in 2013 are about 2,220 MW below 2012
- ◆ Retirement of power plants with nearly 1,700 MW of summer generating capability is the largest factor in the decline

Southeastern New York



- ◆ Absent unexpected generation unit outages or extreme weather events, New York has adequate resources to meet demand this summer
- ◆ A surplus of capacity is available for the state as a whole, but transmission constraints narrow the margins of supply for the high-demand Southeastern New York region

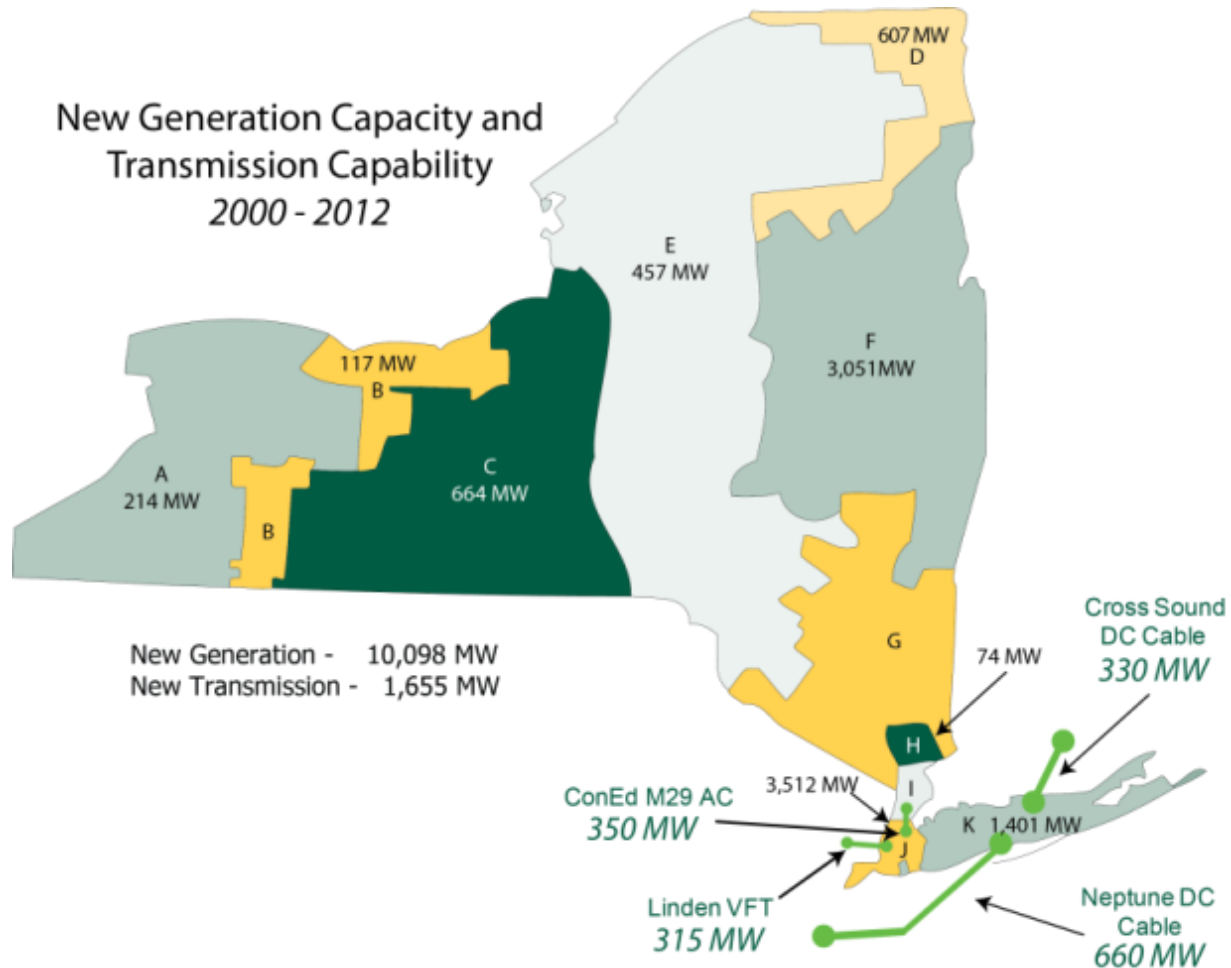
Building Reliability

Since 2000, New York has added:

- ***10,000+ MW of new generation capacity***
- ***1,600+ MW of new transmission capability***
- ***1,500+ MW of demand response resources***

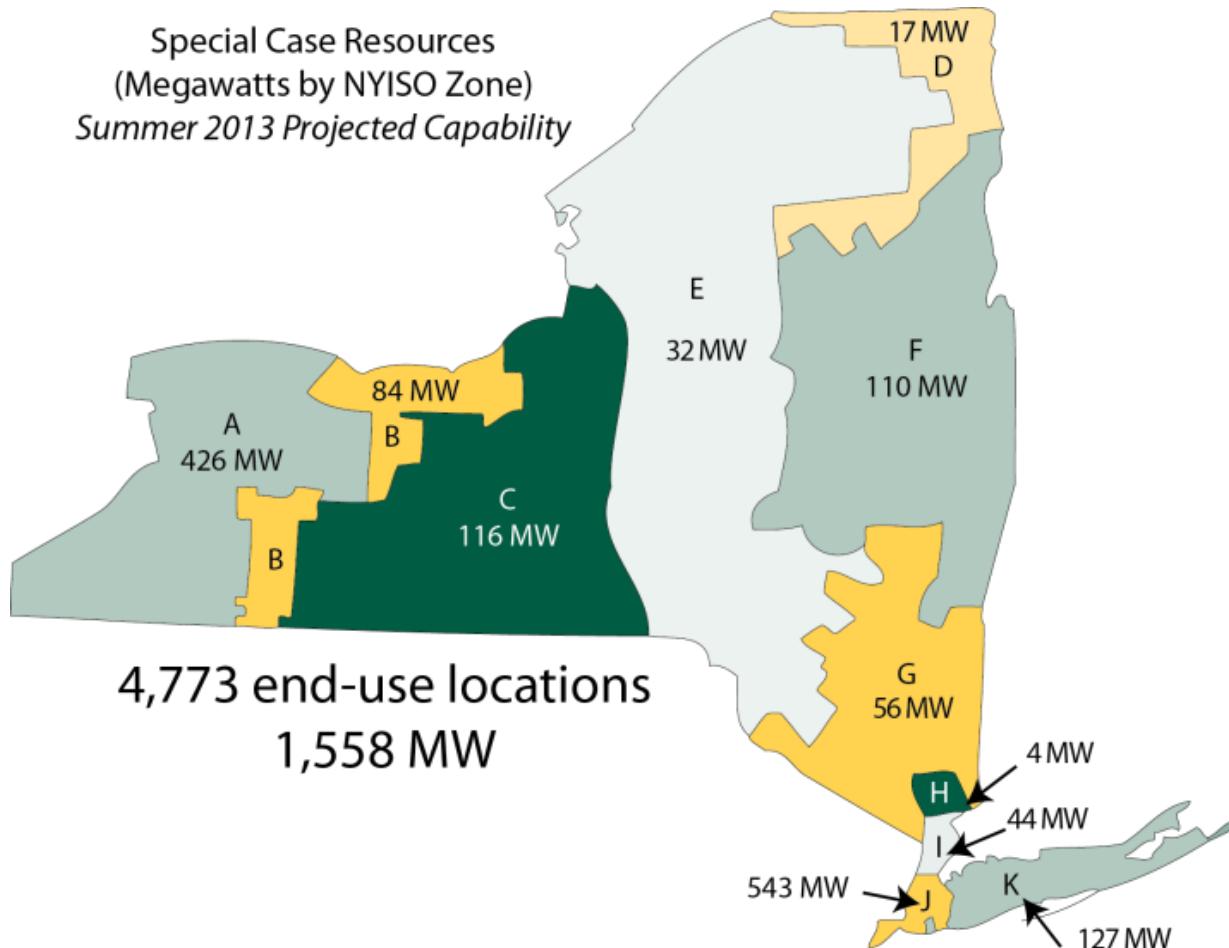
NOTE: These additions offset retirement of 5,800+ MW in generation capacity since 2000

Generation & Transmission



Demand Response

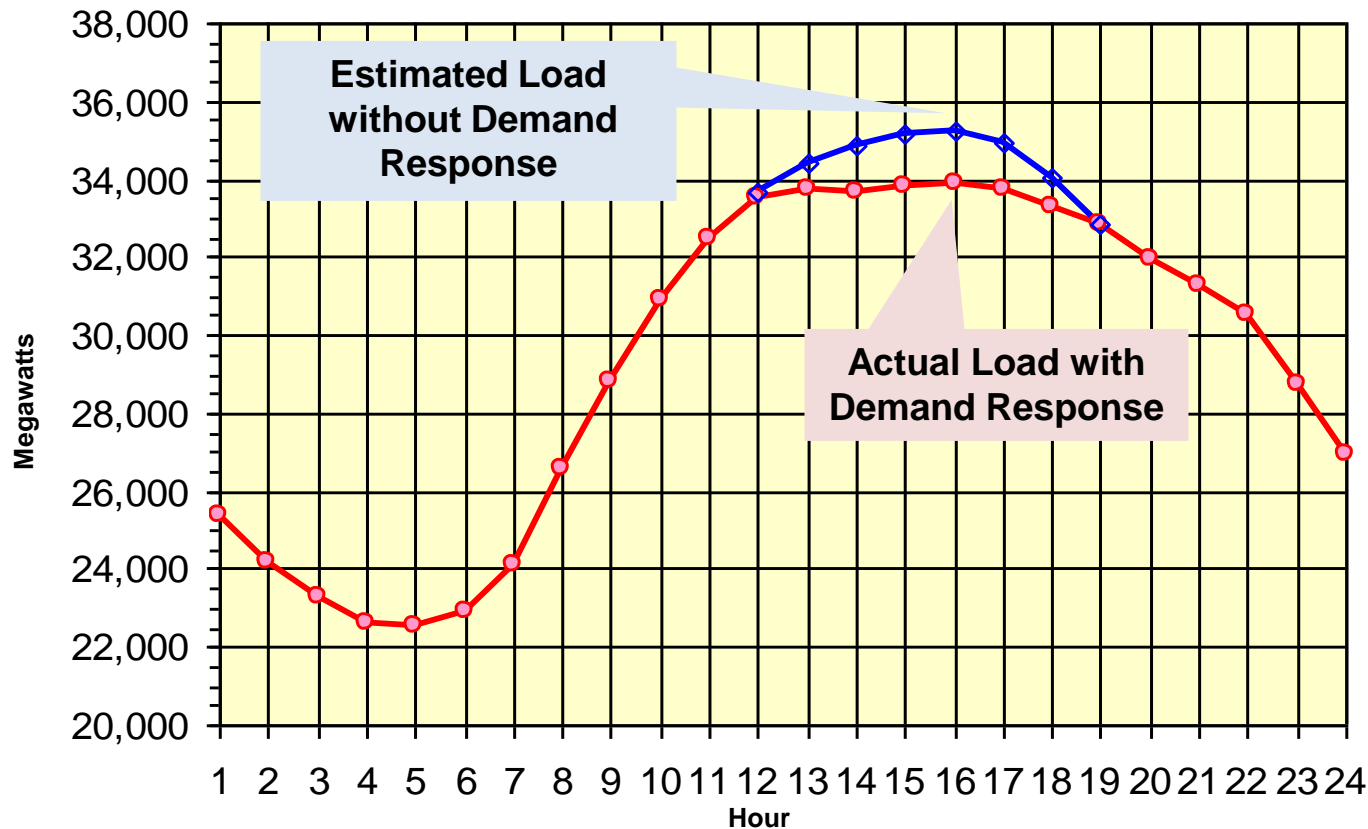
Special Case Resources
(Megawatts by NYISO Zone)
Summer 2013 Projected Capability



- ◆ Demand response programs enlist power consumers to reduce usage during times of peak demand
- ◆ The NYISO's Special Case Resource program is expected to provide 1,500+ MW of demand response capacity in the summer of 2013

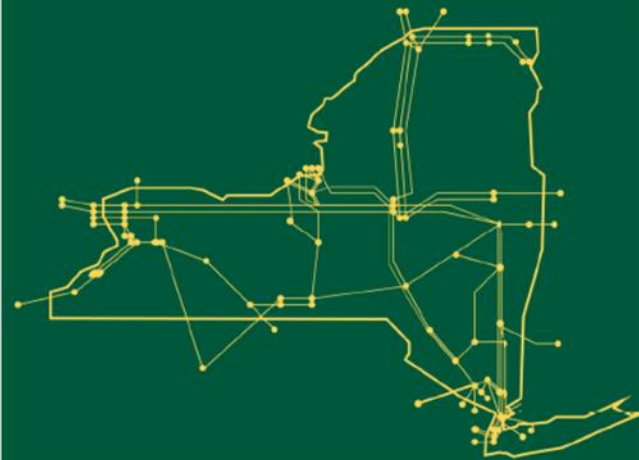
Shaving the Peak

July 22, 2011



July 2011 heat waves may have pushed demand to over 35,000 MW – a new record peak – had Demand Response programs not reduced load by more than 1,400 MW

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.



www.nyiso.com