New York (NYISO) Electric Regions

This map was created using Patts PowerMap.
Overview

Geography

State covered: New York

Reliability region: New York ISO (NYISO) sub-region of the Northeast Power Coordinating Council (NPCC)

Balancing authority: NYISO

Zones: Capital (Zone F), Central (Zone C), Dunwoodie (Zone I), Genesee (Zone B), Hudson Valley (Zone G), Long Island (Zone K), Millwood (Zone H), Mohawk Valley (Zone E), New York City (Zone J), North (Zone D), West (Zone A)

RTO/ISO

NYISO (established 1999) operates the region’s power grid and wholesale electric markets:

- Energy market: two-settlement (day ahead and real-time) spot market with locational marginal pricing,
- Regional and locational capacity market, and
- Financial transmission rights market.

NYISO 2008 State of the Markets Report

Market Monitor:
Nicole Bouchez – Manager, Internal Market Monitor, New York ISO
David Patton – Independent Market Advisor, Potomac Economics, LTD.
RTO/ISO (continued)

Also, market participants trade electricity bilaterally through brokers, the Intercontinental Exchange (ICE) and the New York Mercantile Exchange’s (Nymex) ClearPort, using Zone A (West) as a pricing point.

Generation/Supply

Marginal fuel type: natural gas

Generating capacity (summer 2006): 39,704 MW

Capacity reserve (summer 2006): 5,765 MW

Reserve margin (summer 2006): 17%

The New York City metropolitan area (NYC) and Long Island (LI) are areas of concentrated demand. Both localities have requirements for installed generating capacity that are more stringent than the rest of the region, to ensure reliability of service.

Demand

All time peak demand: 33,939 MW (set August 2, 2006)

In summer of 2006, demand reached record levels on several occasions due to extremely hot weather.

Peak demand growth: 5.6 % (2006-2005)


Load pockets: Zone J New York City and Zone K Long Island
Prices

Annual Average Day-Ahead Price

Zone J New York City
2004: $63.16/MWh
2005: $93.77/MWh
2006: $70.90/MWh

Zone K Long Island
2004: $63.20/MWh
2005: $99.32/MWh
2006: $86.15/MWh

Prices increased in 2005 as a result of disturbances to the natural gas market. Prices declined in 2006 as natural gas storage levels remained above historical ranges throughout the injection season (April through October).
Daily Average of NYISO Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data.

Updated: February 7, 2011
Daily Average of NYISO Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data.
Eastern Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data.

Updated: February 03, 2011
Eastern Daily Bilateral Day-Ahead On-Peak Prices

Month: January 2011

Price ($/MWh)

Source: Derived from Platts data.

Updated: February 03, 2011
Implied Heat Rates at Eastern Trading Points Weekly Averages

Source: Derived from Platts on-peak electric and natural gas price data.

Updated: February 04, 2011
Weekly Electric Generation Output and Temperatures
New York

Source: Derived from EEI and NOAA data.
New York Electric Forward Price Curves and Implied Heat Rates

Source: Derived from Nymex data.
Weighted Average ICAP Clearing Prices and Volumes: New York City

Price ($/kW-mo)

Volume (GW)

Source: Derived from NYISO data.

Updated: February 04, 2011

February 2011
Weighted Average ICAP Clearing Prices and Volumes: Long Island

Source: Derived from NYISO data.

Updated: February 04, 2011
Weighted Average ICAP Clearing Prices and Volumes: New York State, excluding New York City

Source: Derived from NYISO data.
Note: PJM values are for Base Residual Auctions only.
ISO-NE results are based on preliminary FCM auction before pro-rationing and EAS adjustment.
Source: Derived from PJM, NYISO and ISO-NE data
New York Electric Market: Financial Market Volumes

Various New York Swap Volumes

Source: Derived from ICE and Nymex ClearPort data.

Note: ICE on-peak swaps (financial) volume are for zones A, G and J and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month. Nymex ClearPort on-peak swaps (financial) volume are for zones A, G and J and are traded by month.

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