



Cleantech Corridor:

NYPA Presentation

May 21, 2012



Overview

- New York Power Authority (NYPA)
- Long Island – New York City Offshore Wind Project

NYPA's Mission

- Provide clean, low-cost and reliable energy consistent with our commitment to the environment and safety, while promoting economic development and job development, energy efficiency, renewables and innovation, for the benefit of our customers and all New Yorkers.

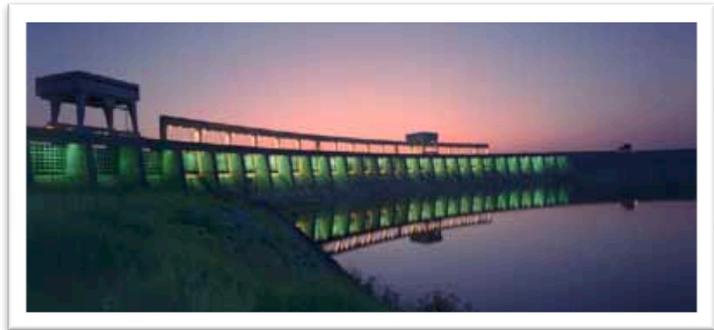
NYPA Facts

- NYPA sells low cost electricity to governmental customers, municipal electric systems and rural cooperatives, private businesses for economic development, and others.
- Largest state public power organization in the U.S.
- Owns and operates 17 power plants which, along with other power purchases provides about 20% of the state's electricity.
- Operates more than 1,400 circuit-miles of the state's high voltage transmission system.
- NYPA's power programs help sustain hundreds of thousands of jobs statewide.
- Uses no tax revenues or state credit.

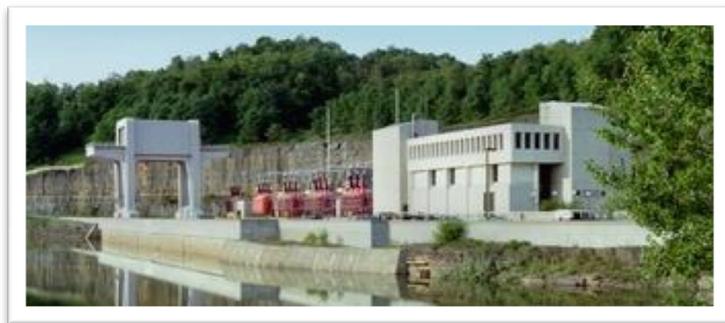
NYPA Generation



Niagara Power Project (2,755 MW)



St. Lawrence-FDR Project (912 MW)



Blenheim-Gilboa Pumped Storage (1,160 MW)



500 MW Combined-Cycle (500 MW)

Richard M. Flynn Power Plant (170 MW)



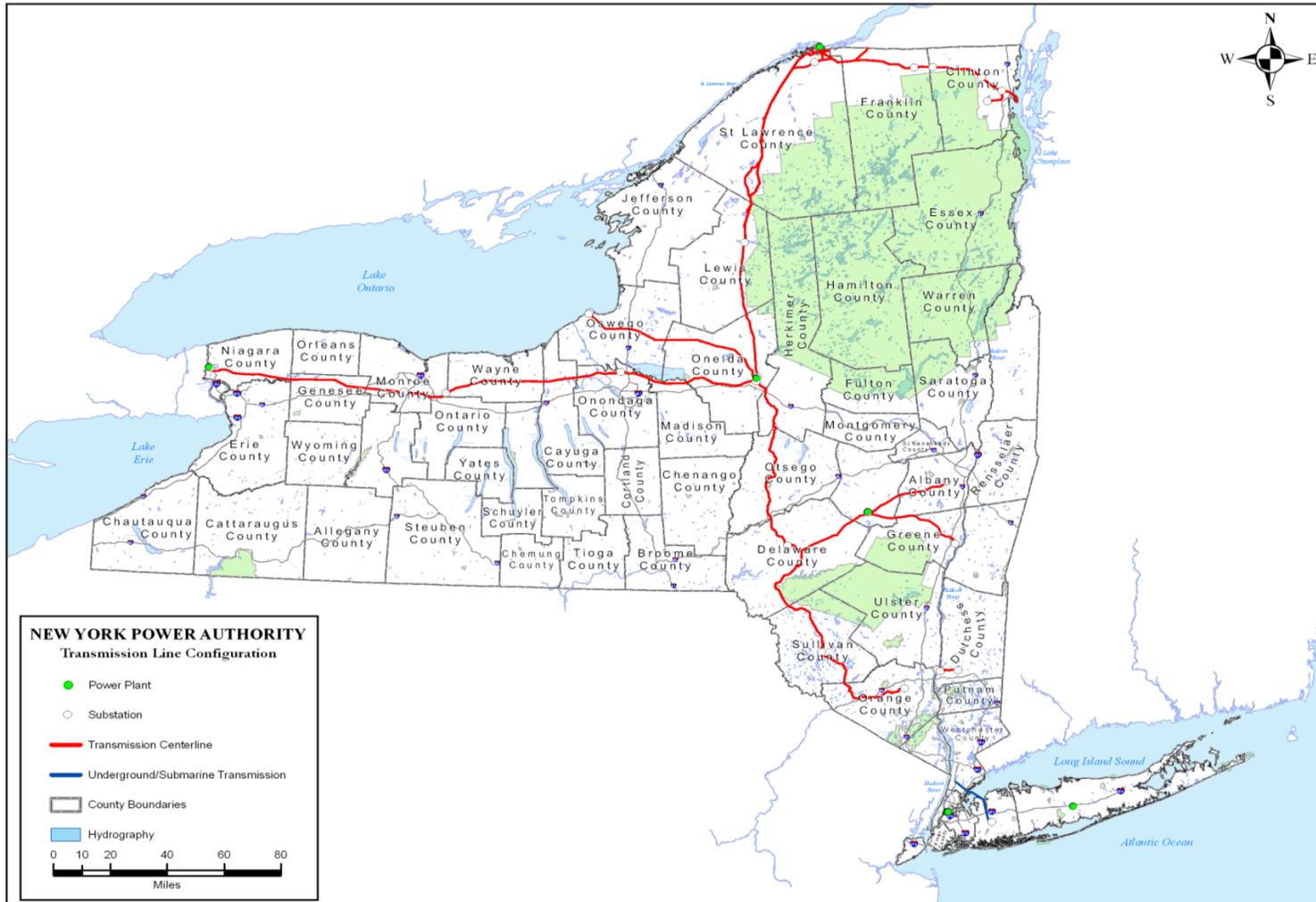
•Small Clean Power Plants (517 MW))



Small Hydro plants (40 MW)



NYPA Transmission

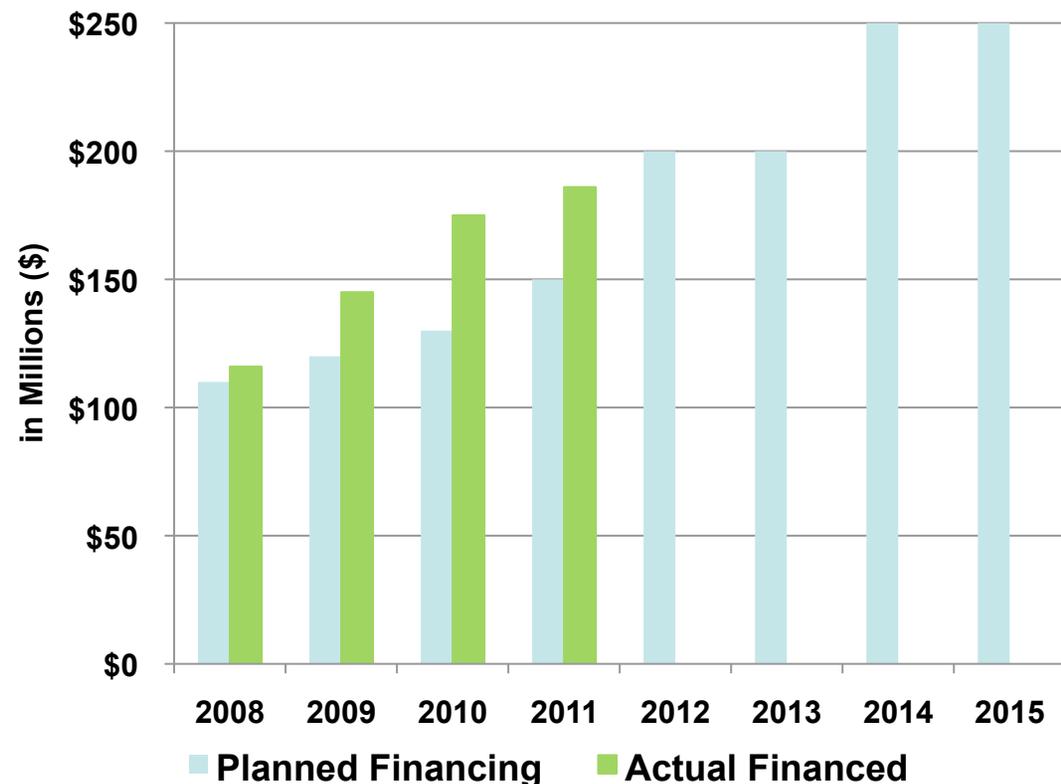


NYPA Energy Efficiency

NYPA Energy Services provides turnkey project development including audit, design, construction, and financing to eligible participants.

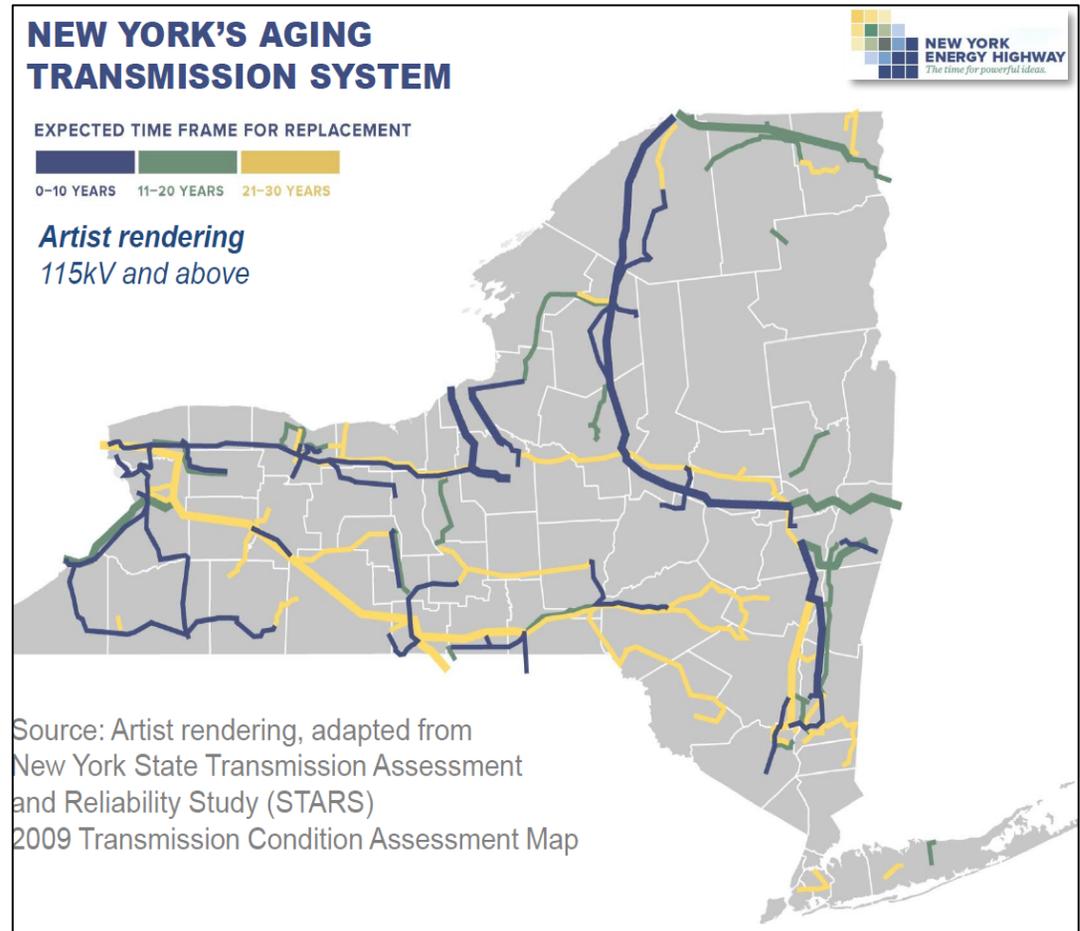
- Since the mid-1980s, nearly \$1.5 billion financed in energy efficiency and clean technology.
- In 2008, NYPA committed to finance an additional \$1.4 billion by 2015.
- More than 3,800 public facilities serviced
- Saving \$140 million a year
- Avoiding 835,000 tons of greenhouse gases and 2.6 million barrels of oil a year.

NYPA Energy Services



New York Energy Highway

- The Energy Highway is a significant initiative to upgrade and modernize New York State's electric power system
- NYPA President & CEO Gil Quiniones appointed Co-Chair of Task Force by Gov. Cuomo
- April 2012 Energy Highway Summit brought together experts on transmission and generation solutions
- RFI submissions due to Energy Highway Task Force May 31
- Action Plan to the Governor- Summer 2012



Long Island - New York City Offshore Wind Project

Collaborative

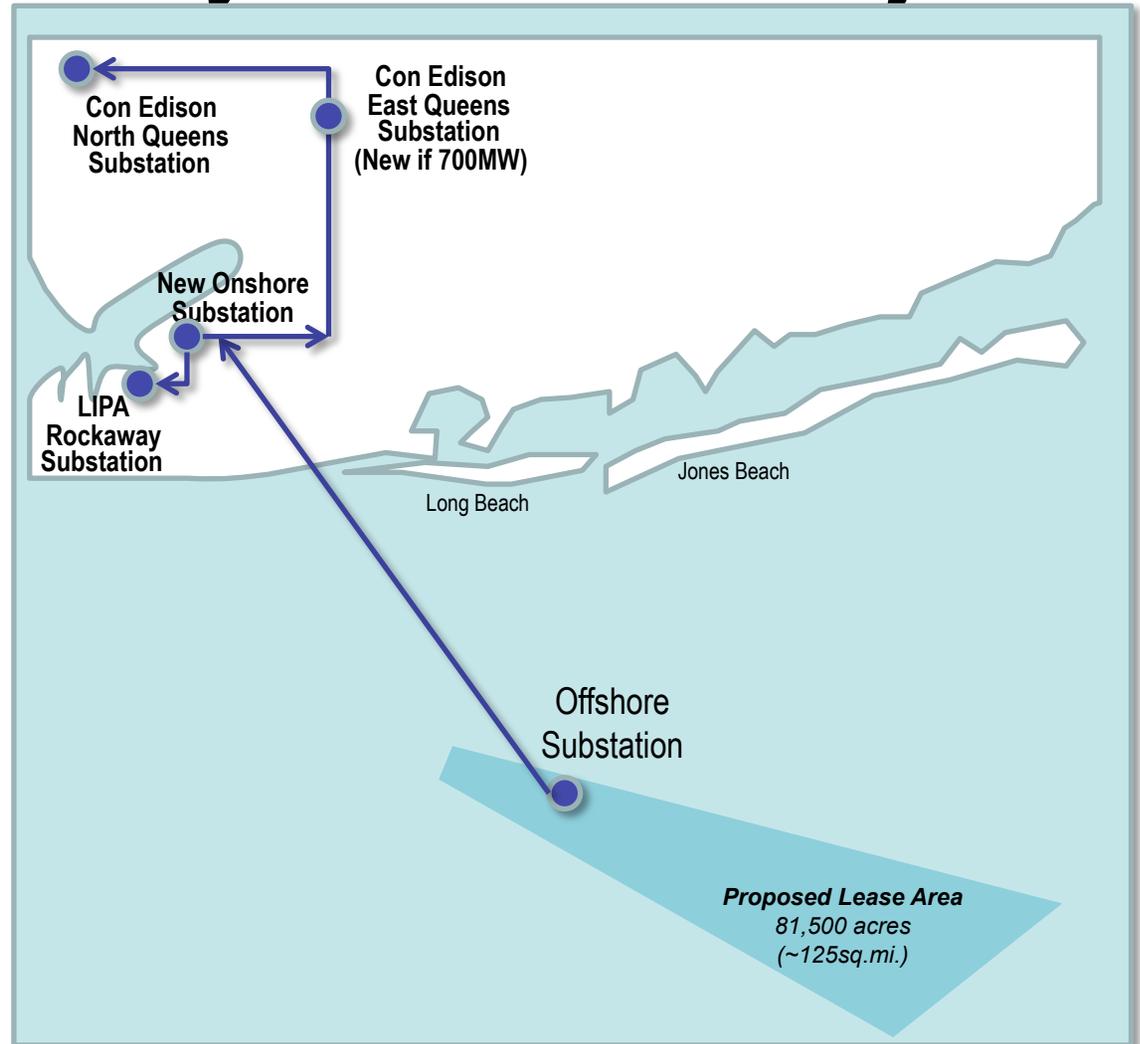
- Con Edison, Long Island Power Authority (LIPA), NYPA
- NYPA filed lease application with federal Bureau of Ocean Energy Management (BOEM)- September 2011

Project Size

- Large enough for up to 700 MW, expected to be 350 MW initially
- To be developed 13 to 15 nautical miles south of Long Island

BOEM actions

- Convened April 2012 public meeting of federal, state, local, tribal officials
- Will make determination of competitive interest in lease area



Long Island – New York City Offshore Wind Project

Results of initial desktop studies:

- No significant challenges identified but more analysis needed
 - Environmental, meteorological, geological
- Water depths range 60 - 130 feet (18 - 40 m)
 - Within reach of today's technology
- Minimum of 13 nautical miles from shore, turbines barely visible
- No aviation issues identified as a fatal flaw.
 - Potential radar concerns in discussion with Department of Defense.
- Expected wind speeds approximately 8.8 m/s
 - Projected capacity factors of 34 to 43%
- Predicted extreme wave heights
 - Not as severe as at some European projects
- Loads from wind, waves and ocean currents
 - Can be addressed by system design

Long Island - New York City Offshore Wind Project

Project Benefits

- Would achieve a meaningful level of renewable resources that directly interconnects into the New York City and Long Island electric systems
- Displace local fossil fuel generation, reducing air emissions in non-attainment zone
- Wind and other renewable energy sources will provide stable prices for customers, i.e., no fuel price volatility

Stakeholder Reception

- Lease application positively received by environmental groups, elected officials
- Public outreach to continue



Questions?

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