

Other major projects proposed or planned throughout the City include:

- *A substantial volume of new housing for all five boroughs by both the private and public sectors;*
- *Office development of at least 44 million square feet to be completed by 2025;*
- *Major public capital projects, and new developments and expansions by universities and hospitals in the City;*
- *Construction of 90 new schools throughout the five boroughs from 2005-2009, at a cost of more than \$4.6 billion, as part of the New York City School Construction Authority's (SCA) capital plans, and SCA renovations and expansions expected to cost twice that amount.*

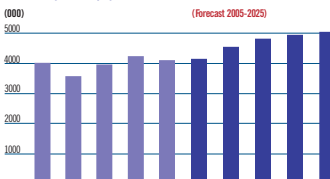
These projects will transform major districts throughout the City and add substantial new capacity for office, residential and commercial space, public facilities and transportation. All will require significant new electricity resources. The proposed Hudson Yards project alone is estimated to require 200 MW of electricity at the level of development assumed by 2025.²

It is expected that 6,000 to 7,000 MW of additional electric resources will be needed in New York City between now and 2025. This new capacity is required to accommodate growth, for replacement of existing power plants that will reach their useful age limitation during this time, and for stability of electricity prices.

Robust Growth Expected by 2025

Total jobs in New York City are expected to increase from 4.15 million in 2002 to 4.46 million in 2010, a gain of 315,000, or 7.6 percent. By 2025, total employment levels are forecast to reach 5.03 million, for a total gain of 887,300 jobs, a 21 percent increase over 2002.

New York City Total Employment, 1970-2025



²Total employment includes wage and salary workers, the self-employed, and sole proprietors. Source: Urbanomics, for the New York Metropolitan Transportation Council (NYMTC), September 2004.

The latest projections also suggest that New York City's population could increase from the estimated level of 8,072,000 in 2002 to 8.4 million by 2010, a gain of over 400,000, and reach 9,352,500 by 2025 for a total gain of 1.28 million or 16 percent.

Population gains are expected to be largest in Queens, which is forecast to increase by 527,000 residents between 2000 and 2025, followed by 300,000 in Brooklyn, and 150,000 in Manhattan.

This population growth will require significant electricity resources to supply new households and the appliances they use.

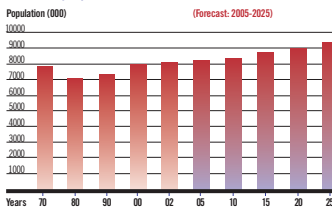
The rate of electricity usage by households and offices has intensified in recent years, largely due to the increased use of air conditioning, computer equipment, and peripherals. Since 1990, this intensified usage has contributed to an annual increase in electricity demand averaging almost 1.5 percent per

²Full development of Hudson Yards is expected to extend beyond 2025.

year. This trend is expected to continue throughout the forecast period, even as more efficient appliances and office equipment are used.

The planned projects, together with expectations for growth in employment and population, will require between 2,400 to 3,000 additional MW of new electric capacity in or directly connected to the City by 2025, just to accommodate peak load demand.

New York City Population 1970-2025



Source: Urbanomics, for the New York Metropolitan Transportation Council (NYMTC), September 2004.

Plant Replacement

New generation facilities are needed to replace New York City's aging power plants. Of the existing New York City electric generating capacity, plants producing the equivalent of 3,500 MW will be 60 years old or more in the next twenty years. Plants producing about 6,000 MW will be 45 years old or older by 2025.

It is assumed that approximately 3,000 MW of this aging generation capacity will have to be replaced by 2025. The new facilities will be more energy efficient and feature better and cleaner technology, thereby providing important environmental benefits to the City.

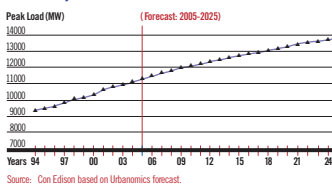
Market Stability

To help avoid wide swings in the price of electricity in the newly deregulated electricity market, an estimated additional 1,000 MW of new electric capacity is needed by 2025.

For New York City to realize the expected growth in demand, there must be planning and approval mechanisms in place to assure that electricity and other energy resources are available.

Because the existing transmission system limits the amount of power that can be imported into the City, New York City is considered to be a "load pocket." Consequently, the New York State Reliability Council (NYSRC) requires that 80 percent of peak load demand must be provided by electric capacity located within the five boroughs of New York City, or directly connected to the City's electric distribution system.

New York City Peak Load 1994-2025



Source: Con Edison based on Urbanomics forecast.

Power Required for Planned New York City Development Projects

Estimated Completion by 2010 Estimated Completion by 2025

2010

2025

12 Major Projects – 175 MW

11 Major Projects – 500 MW

Comprehensive Development Projects:

WTC Site
First Phase Hudson Yards
Atlantic Terminal, Brooklyn
Queens West

Completion of WTC Site
Further Phase, Hudson Yards
Brooklyn Nets / Atlantic Yards
Queens Waterside Redevelopment
Columbia University Expansion

Office Towers:

Bloomberg LP
Goldman Sachs
New York Times
Atlantic Terminal

Bank of America
Downtown Brooklyn Rezoning

Major Transportation Projects:

Permanent PATH Station
Fulton Transit Center
Second Avenue Subway, 1st Stage
#7 Extension

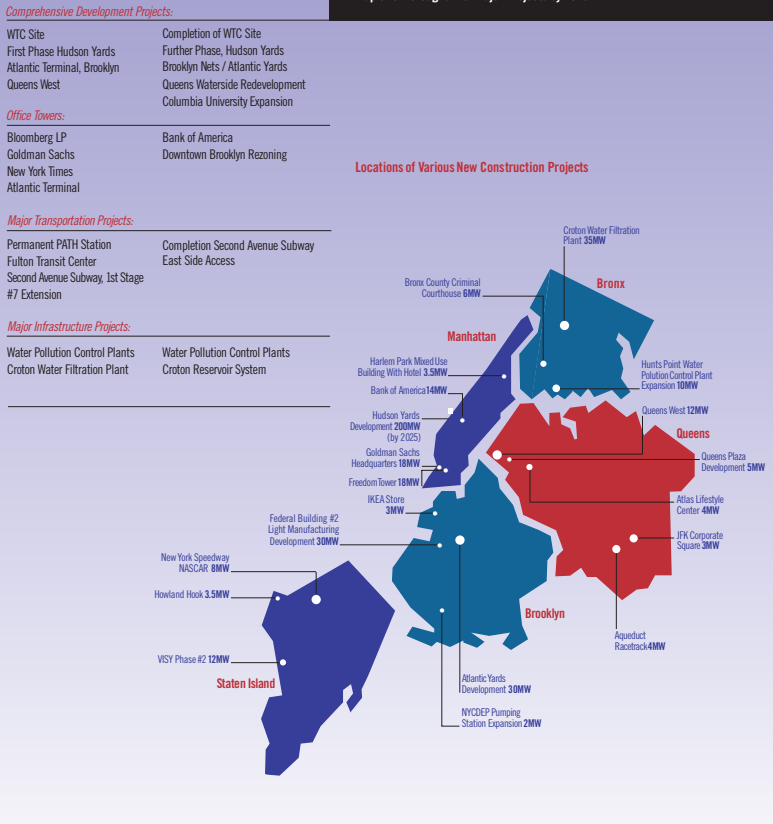
Completion Second Avenue Subway
East Side Access

Major Infrastructure Projects:

Water Pollution Control Plants
Croton Water Filtration Plant

Water Pollution Control Plants
Croton Reservoir System

Map of 5 Boroughs with Major Projects by 2025



A Long-Term Deficit Looms, As Do Potential Shortages in 2010-2015

While some new generating capacity has been built or is under construction since the New York Building Congress and other City-based business and labor groups first brought attention to this issue in 2001¹, the long-term problem of needed supply and demand-side management remains.

The 2001 report, *Electricity Outlook: A Matter of Urgency*, demonstrated a need for 2,000-3,000 MW of new electricity resources by 2006. Since then:

- 775 MW of new generation capacity has been completed or will be in place by year-end 2005, with an additional 1,000 MW expected by 2006 for a total of 1,775 MW.
- Peak-load demand in New York City has grown from 10,500 MW in 2001 to 11,304 MW in July 2005.
- The 500 MW goal for energy efficiency and other distributed resources has not been realized.
- The New York State Article X power plant approval process has expired and no agreement has been reached on legislation that would reauthorize or replace this important streamlining mechanism that is necessary for the approval of new power plants and the repowering of existing plants.

By year-end 2005, 125 (net) MW were added with the completion of Con Edison's East River Repowering project. In 2006, an additional 1,000 MW are expected from the completion of the New York Power Authority's (NYPAA) 500 MW Portlet Plant and the 500 MW SCS plant in Astoria. The latter project is going forward due, in part, to a 10-year power purchasing contract with Con Edison. These projects received approval prior to the expiration in December 2002 of the Article X licensing process.

Two other projects in New York City with full approval are currently on hold: Reliant's 562 (net) MW Phase I and II Repowering Project in Astoria, and the 500 MW of SCS Phase II Astoria Energy Project.

Most urgent is the immediate problem of a potential shortage in projected capacity reliability by the years 2010-2015.

In its December 21, 2005 *Reliability Needs Assessment* report, the New York Independent System Operator (NYISO) stated that, beginning in 2008, "the Lower Hudson Valley and south will need system reinforcements equivalent to 500 MW of capacity, which could consist of transmission reinforcements, additional generation, demand side management, or a combination of the three...the Hudson Valley, New York City and Long Island will need 1,250 MW of electricity capacity by the end of 2010 and 2,250 MW by 2015."⁴

The years between 2005 and 2009 are expected to see substantial new developments in office, residential and infrastructure construction throughout the five boroughs.

Without the assurance of new electricity capacity in the construction pipeline, the start dates of many of the proposed projects could be jeopardized.

Meeting the Short-Term Deficit: Assuring Sufficient Electricity Resources by 2010-2015

The New York Power Authority (NYPAA) issued a Request for Proposal (RFP) in mid-March 2005 seeking 500 MW of In-City electricity capacity by

2008, from either generation or transmission, to serve its New York City government customers.

This amount, together with up to 675 MW from a distributed resources program planned by Con Edison and the New York State Energy Research and Development Authority (NYSERDA), could help forestall the impending problems that begin in 2008.

With the long lead time needed for approval, planning and construction of new generation, transmission and distribution projects, the opportunity for planning and constructing these new facilities is rapidly narrowing.

What is Needed to Meet the City's Electricity Needs?

Additional electric generating capacity
Additional electric transmission and distribution infrastructure
Additional demand-side management programs: energy efficiency, clean on-site generation, peak load management, and high performance building design.

Major Projects Also Require:

Substations
Electric Cables
Gas and Steam Mains

Telecommunications
Water
Sewer

Substantial investment will be required over the next twenty years to provide the necessary infrastructure for major projects and for housing and commercial development throughout the five boroughs.

Who Can Solve the Problem?

Both the public and private sectors share the responsibility of ensuring that New Yorkers continue to have adequate power. To do so requires:

- *Aggressively promoting the construction of new power plants, transmission and distribution facilities and additional natural gas pipeline capacity; and*
- *maintaining and strengthening energy efficiency programs in both the public and private sectors, investing in small, clean distributed generation technologies, and exploring options for renewable energy such as wind and solar power.*

While the New York City Mayor and City Council have no direct legislative role in or control over the process of generating or providing electricity, including the matter of local plant siting, the ultimate imperative – if not the authority – of assuring that New York City has sufficient power for its residents and businesses will be borne by the City government.

The *Comprehensive Reliability Planning Process* released by NYISO in December 2005, and the *System Reliability Assurance Study* released by Con Edison on December 30, 2005, have identified the long-term electric infrastructure needs of the New York City area to ensure system reliability through the year 2015. These new studies underscore the urgent need for New York's Governor and Legislature to enact the laws and regulations to facilitate the siting, placement, approval, and financing of environmentally sound, efficient power plants, and ensure that they are built in a timely fashion so that needed electricity supply is available.

New York City businesses, residents and government need to know that the mechanisms to provide this vital electric capacity are in place.

¹A Matter of Urgency: New York City's Electric Supply Needs, New York Building Congress et al. 2001.

⁴Comprehensive Reliability Planning Process (CRPP), Reliability Needs Assessment, NYISO, December 21, 2005.