

A. INTRODUCTION

The *New York City Environmental Quality Review (CEQR) Technical Manual* recommends a detailed assessment of energy impacts only for actions that could significantly affect the transmission or generation of energy or that generate substantial indirect consumption of energy (such as a new roadway).

Because the proposed action would not exceed these CEQR thresholds, this chapter simply discloses the proposed action's anticipated energy consumption. This chapter concludes that because the proposed action would not significantly affect the transmission or generation of energy there would be no potential for significant adverse impacts on energy.

B. EXISTING CONDITIONS

Consolidated Edison (Con Edison) delivers electricity to New York City and almost all of Westchester County. The electricity is generated by a number of independent power companies as well as Con Edison. Annual electric sales total nearly 50 billion kilowatt hours (KWH) of electricity supplied to Con Edison's delivery area (New York City and Westchester County). This is equivalent to about 170.75 trillion British Thermal Units (BTUs) and does not include the energy content in the natural gas and other energy sources used in New York City. Based on CEQR rates of 76,400 and 145,500 BTUs per square foot per year for academic and residential uses, respectively, current energy use on the project site is estimated to be 82,760 million BTUs per year for all heating, cooling, and electric power. This is a minimal amount of energy when compared to overall energy used in New York City.

C. THE FUTURE WITHOUT THE PROPOSED ACTION—2014

In December 2004, the New York State Energy Planning Board released the Draft New York State Energy Plan and Draft Environmental Impact Statement. This plan sets out the New York State policies and objectives for the next five years. The plan's policy objectives are to support safe, secure, and reliable operation of the energy and transportation systems; to stimulate sustainable economic growth through competitive market development; to increase energy diversity; to promote a cleaner and healthier environment; and to ensure fairness, equity, and consumer protection. These objectives continue the policies developed in earlier energy plans. Therefore, no large-scale changes in energy generation and consumption policies are foreseen. In the future, Con Edison and other energy providers are expected to continue to deliver energy throughout New York City.

By 2014 in the future without the proposed action, three residential buildings with 876 total units are expected to be built on the project site with an estimated energy use of 107,161 million BTUs per year for all heating, cooling, and electric power. Therefore, the overall energy consumption on the project site is expected to increase minimally from existing conditions.

D. PROBABLE IMPACTS OF THE PROPOSED ACTION—2014

As fully described in Chapter 1, “Project Description,” the initial phase of construction would result in new academic and dormitory facilities, which would place new demands on the city’s infrastructure. Specifically, by 2014 the proposed action would create a new Law School, new dormitory space, and below-grade parking. This section discloses the approximate anticipated future demand of the proposed action by 2014.

As described in the *CEQR Technical Manual*, all new structures requiring heating and cooling are subject to the New York State Energy Conservation Code. This code governs performance requirements of heating, ventilation, and air conditioning systems, as well as the exterior building envelope. The code, promulgated on January 1, 1979, pursuant to Article 11 of the Energy Law of the State of New York, requires that new and recycled buildings (both public and private) be designed to ensure adequate thermal resistance to heat loss and infiltration. In addition, it provides requirements for the design and selection of mechanical, electrical, and illumination systems. In compliance with the code, the basic designs would incorporate all required energy conservation measures, including meeting the code’s requirements relating to energy efficiency and combined thermal transmittance. Therefore, those actions that would result in new construction, such as the proposed action, would not result in adverse energy impacts, and do not require a detailed energy assessment.

PROJECTED ENERGY CONSUMPTION

The proposed action would require approximately 62,231 million BTUs of energy per year, as detailed in Table 14-1. The additional consumption would be very small compared with the existing energy demands of New York City. Further, this additional demand is not expected to overburden the energy generation, transmission, and distribution system and would not result in a significant adverse energy impact.

Table 14-1
2014 Projected Energy Consumption

Use	Size (Square Feet)	Rate (BTUs/Square Foot/Year)	Consumption (Million BTUs/Year)
Dormitory	210,032	145,500	30,560
Academic	382,421	76,400	29,217
Parking	89,551	27,400	2,454
Total Energy Consumption			62,231

POTENTIAL ENERGY CONSERVATION MEASURES

Fordham University is currently exploring ways to incorporate “green” building elements into the proposed buildings to maximize energy performance. Based on those outlined by the Leadership in Energy and Environmental Design (LEED) Certification by the United States Green Building Council (USGBC), such measures may be used in the design of buildings and facilities on the project site.

E. THE FUTURE WITHOUT THE PROPOSED ACTION—2032

The energy generation, transmission, and distribution systems are expected to increase in size to accommodate anticipated growth in New York City. However, the basic systems are expected to remain essentially the same.

F. PROBABLE IMPACTS OF THE PROPOSED ACTION—2032

Full development of the Master Plan would create 1,450 new dormitory beds and approximately 1.26 million square feet of new academic space.

Upon full completion, the proposed action would require approximately 173,273 million BTUs of energy per year, as detailed in Table 14-2. The additional consumption would be very small compared with the existing energy demands of New York City. Overall, this additional demand is not expected to overburden the energy generation, transmission, and distribution system and would not result in a significant adverse energy impact.

**Table 14-2
2032 Projected Energy Consumption**

Use	Size (Square Feet)	Rate (BTUs/Square Foot/Year)	Consumption (Million BTUs/Year)
Dormitory	506,238	145,500	73,658
Academic	1,263,861	76,400	96,559
Parking	111,551	27,400	3,056
Total Energy Consumption			173,273

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