13 Energy

Introduction

A CEQR energy assessment focuses on an action's consumption of energy and, where relevant, potential effects on the transmission of energy from implementing the action. In most cases, an action does not need a detailed energy assessment, but its operational energy is projected.

As noted the 2014 *CEQR Technical Manual*, electricity used in New York City is generated both within and outside the City, and Con Edison delivers it to most New York City users. The New York State Independent System Operator and Con Edison forecast projected generation and transmission requirements to ensure that the City's power supply and transmission systems have the capacity to meet expected future demand.

All new structures requiring heating and cooling are subject to the New York City Energy Conservation Code, which reflects state and City energy policy. Accordingly, a detailed energy assessment is not necessary for most actions that entail new construction. Detailed energy analyses are typically limited to actions that may substantially affect the transmission or generation of energy.

The Proposed Actions are not expected to induce development that would not otherwise occur under the No Action scenario. However, because the Proposed Actions would modify land use actions necessary to facilitate site development (e.g., certifications, authorizations, and special permits), they have the potential to increase the number of as-of-right development sites relative to all development sites. An energy screening analysis was conducted based on the development of the four prototypical analysis sites under the With Action scenario versus the No Action scenario.

Principal Conclusions

The Proposed Actions would not result in significant, adverse impacts on the generation or transmission of energy. The energy screening analysis for the Proposed Actions considers the projected operational energy

consumption for the prototypical analysis sites under the With Action scenario versus the No Action scenario. Based on the incremental change in energy use at each prototypical analysis site, the Proposed Actions would not have a substantial impact on the City's energy systems.

Screening Analysis

The 2014 *CEQR Technical Manual* notes that, while most actions do not warrant a detailed energy analysis, an action's projected energy consumption should be disclosed during the environmental review process. The incremental demand generated by most projects results in incremental supply to meet that demand; consequently, an individual project's energy consumption typically does not have a significant impact on energy supply. Detailed analyses are generally limited to those actions that would have a substantial effect on energy generation and/ or transmission.

The Proposed Actions are not expected to induce development or cause a significant change in the overall amount, type, or location of development, beyond that which would occur under the No Action scenario. However, because the proposed regulations would modify and potentially eliminate land use actions applicable to some development sites, they could increase the number development sites proceeding as-of-right. The sites where development would be facilitated under the Proposed Actions cannot be accurately projected, given the generic nature of the proposed regulations. Therefore, a screening assessment was completed to determine the potential for adverse energy impacts. The screening assessment is based on a comparison of the development of the four prototypical analysis sites under the No Action scenario with the With Action scenario, as described in **Chapter 1**, *Project Description*.

Table 13-1 presents energy usage rates by building type, which is provided in Table 15-1 of the 2014 *CEQR Technical Manual* for the purposes of estimating a project's energy consumption. Annual energy use for each prototypical analysis site was estimated for the No Action and the With Action scenarios by applying the rates in **Table 13-1** to the size (in square feet) of the use type. **Table 13-2** presents the annual energy consumption for each site and incremental energy usage under the No Action and With Action scenarios.

Table 13-1. Average Annual Whole-Building Energy Use in New York City

Building Type	Source Energy (Thousand BTU (MBTU)/square feet)
Commercial	216.3
Industrial	554.3
Institutional	250.7
Large Residential (>4 Dwelling Units)	126.7
Small Residential (1-4 Dwelling Units)	94

Source: Table 15-1, 2014 *CEQR Technical Manual*

Table 13-2. Annual Energy Use, Prototypical Analysis Sites

Proto-typical Analysis Site	No Action Development Size by Use (Square Feet)	No Action Energy Usage (MBTU)	With Action Development Size by Use (Square Feet)	With Action Energy Usage (MBTU)	Increment Energy Usage (MBTU)
1	Small Residential: 3,000	282,000	Small Residential: 3,000	282,000	**0**
2	Small Residential: 2,250	211,500	Small Residential: 2,250	211,500	**0**
3	0	0	Small Residential: 6,000	564,000	**+564,000**
4	Small Residential: 4,000	451,200	Small Residential: 3,600	338,400	**--37,600**

*** This table has been modified for the FEIS.**

As indicated in **Table 13-2**, annual energy usage would not change for two of the four prototypical analysis sites, and annual energy usage would decrease for one site. One site would generate an increase in demand for energy, at site 3. The incremental energy consumption for site 3 would be 564,000 MBTU, a negligible increase.

The Proposed Actions would generate a nominal increase in demand for energy under the With Action scenario compared to the No Action scenario when compared to the overall demand within Con Edison's New York City and Westchester County service area. Consequently, the Proposed Actions would not affect energy generation or transmission.

Conclusion

The Proposed Actions are not expected to induce development that would not otherwise occur under the No Action scenario; therefore, they are not expected to result in an adverse energy impact. However, because the Proposed Actions would modify and potentially eliminate land use actions applicable to some development sites, they could

increase the ratio of development sites proceeding as-of-right. A screening analysis was completed for the prototypical analysis sites to quantify the potential increase in energy demand that could result under the Proposed Actions. The screening results indicate that the With Action scenario would generate a nominal increase in demand for energy over the No Action scenario when compared to the overall demand within Con Edison's service area. Therefore, the Proposed Actions would not result in an adverse impact on the City's energy system.