

Greenpoint-Williamsburg Rezoning EIS

CHAPTER 15: ENERGY

A. INTRODUCTION

Although present uses at the projected development sites create some demand for energy, development resulting from the proposed action would place an increased overall demand on energy services. As discussed in this chapter, although the development of the projected sites would create new demands on energy, the additional demand would not be large enough to constitute significant adverse impacts on these services.

B. EXISTING CONDITIONS

The Energy System¹

Consolidated Edison (Con Edison), along with other transmission companies delivers electricity to New York City and almost all of Westchester County. The electricity is generated by Con Edison as well as a number of independent power companies, including Keyspan Energy. In Greenpoint-Williamsburg, Con Edison supplies electricity, while Keyspan supplies natural gas.

The New York Power Authority (NYPA) is the governing authority responsible for overseeing power distribution across the state. The recent deregulation of the energy market across New York State has led to the transition of formerly government-regulated utilities to independently owned energy generators. Con Edison has sold many of its power generating facilities and is now primarily involved in energy distribution.

Electrical energy is created from non-renewable sources such as oil, natural gas, coal, nuclear fuel, and renewable sources like hydroelectric, biomass fuels, solar, and wind. New York City's energy is produced within the City, from across the Northeast, and from locations as far as Canada. Once electrical energy is generated in the form of high voltage electrical power, a transmission grid provides high voltage electrical power to and within New York City. The interconnected power grid extending across New York State and the Northeast, allows for power to be imported from other regions as the demand requires. Substations located throughout New York City convert high-voltage electrical to low-voltage electrical power for distribution to end users.

According to the New York Independent System Operator (NYISO) *2004 Load & Capacity Data* report, the peak electrical demand for New York City in Summer 2003 was 10,240 Megawatts (MW), and the

¹ Unless otherwise noted, information in this section is excerpted from the *No. 7 Subway Extension - Hudson Yards Rezoning and Development Program Draft Generic Environmental Impact Statement*, June 2004, Chapter 17: Energy.

peak demand for Summer 2004 is forecasted at 11,150 MW.² Typically, the electricity generated within the City is sufficient to satisfy the demand. However, during the peak summer demand period, needed electricity must be supplemented by the transmission grid across the Northeast. Con Edison's distribution grid has a finite capacity, and during heavy demand periods, the transmission grid is strained. There is an ongoing service and distribution improvement program for Con Edison infrastructure which upgrades localized areas that are continually high demand zones. Electricity required for these local hot zones are supplied by other regions of New York City or from sources elsewhere within the larger grid if necessary.

Con Edison provides the electrical power transmission system for the City through a series of substations. Transmission substations receive electricity from the generating stations through the transmission system and reduce the voltage to a level that can be delivered to area substations. Area substations receive electricity from a transmission substation and reduce the voltage to a level that can be delivered into the distribution system or "grid" in the streets. In the distribution system, the electricity's voltage is reduced further to be delivered to customers. Each area substation serves one or more distinct geographic areas, called networks which are isolated from the rest of the local distribution system. The purpose of the networks is that if one substation goes out of service, the problem would be localized to that network area and would not spread to other parts of the City. Substations are designed to have sufficient capacity for the network to grow.

A number of power plants are located in the five boroughs, providing electric generation resources to New York City. According to NYISO's *Locational Installed Capacity Requirements Study* for the 2004-2005 capability year, New York City has an existing installed capacity of 8,811 (not including Special Case Resources).³ The power plants located within Brooklyn have a combined capacity of approximately 1,346 MW, or approximately 15% of the City's capacity.⁴

KeySpan Energy Delivery includes the natural gas business formerly known as Brooklyn Union, the fifth largest gas utility in the United States. KeySpan Energy Delivery provides natural gas service to more than 2.5 million customers in the New York City boroughs of Brooklyn, Queens and Staten Island, in Nassau and Suffolk Counties on Long Island and in Massachusetts and New Hampshire. The company operates more than 21,000 miles of gas main in its service territory, and owns and operates generating plants on Long Island and New York City with total capacity of more than 6,400 megawatts.⁵

Recent Energy Conservation Directives

In 2001, New York State began taking measures to address the increasing capacity needs of the metropolitan New York City region. The New York State Independent System Operator (NYISO) implemented the Emergency Demand Response and the Day-Ahead Demand Bidding programs to reduce

² New York Independent System Operator 2004 Load & Capacity Data, revised 06/08/04 – www.nyiso.com/services/planning.html

³ NYISO *Locational Installed Capacity Requirements Study Covering the New York Control Area For the 2004-2005 Capability Year*, February 20, 2004. According to the Study, Special Case Resources (SCRs) are "loads capable of being interrupted, and distributed generators, rated at 100 kW or higher, that are not directly telemetered."

⁴ Source: "NYC Electric Generation Resources" information provided on Con Edison's website – www.coned.com/PublicIssues/

⁵ Source: Keyspan Energy website: http://www.keyspanenergy.com/corpinfo/about/facts_all.jsp

utility electrical power demand during peak load periods. New York State Governor's Executive Order No. 111 (EO 111), was introduced in June of 2001, directing state agencies, state authorities and other affected entities to address energy efficiency, renewable energy, green building practices, and alternate fuel vehicles. EO 111 identified the New York State Energy Research and Development Authority (NYSERDA) as the organization responsible for coordinating and assisting agencies and other affected entities with their responsibilities. The NYSERDA and other utilities have implemented programs to encourage businesses to reduce energy usage and increase energy efficiency. The NYPA has purchased and constructed 11 new 44-MW, natural gas-fired, simple cycle turbine generating units (10 of which are located within New York City).

The independent, non-profit New York State Reliability Council (NYSRC) has determined that a minimum of 80 percent of the City's peak load must be provided by generating sources within the City to maintain compliance with the criteria established by the regional and national reliability councils. Presently, there is sufficient capacity within the City to meet this 80 percent local energy generation requirement. As the energy demand increases over time, additional in-city generation would be needed to satisfy this requirement.

Plans for new electrical power generation facilities are typically reviewed by the New York State Board on Electric Generation Siting and the Environment (Siting Board) under Article X of the Public Service Law. Article X, enacted in 1992 and modified in 1998, established a comprehensive permitting process for the siting of electric generating facilities of 80 megawatts of capacity and above. Article X expired on December 31, 2002. Power plant applications that were submitted before the expiration of the law are still eligible for review. Nine projects were certified under Article X before the law expired, including Con Edison's East River repowering project at East 14th Street in Manhattan.

The NYISO, which manages the safety and reliability of the state's electric transmission system, reported in March 2003 that the State requires between 5,000 and 7,000 megawatts of new power over the next five years to maintain a reliable supply of electricity. Of that amount, the NYISO estimates 2,000 to 3,000 MWs must be located in New York City. A number of proposals to extend and modify the Article X law were introduced in the State Senate and Assembly during the 2003 legislative session and have been reintroduced in 2004. Currently, plants capable of generating up to 1,430 MWs are under construction. Of these projects, approximately 40 percent of the combined electrical generating capacity is located within the City, and all proposed plants are anticipated to be constructed and operating by 2005. Because of these projects, it is expected that an adequate generating capacity, which would exceed projected demands, would be available in the New York City metropolitan area through the proposed action's analysis year of 2013.

Existing Demand

In estimating the existing annual energy consumption at the 76 projected development sites, the rates provided in Table 3N-1 of the *CEQR Technical Manual* were utilized. The measure of energy used in the analysis is BTUs per year. One BTU, or British Thermal Unit, is the quantity of heat required to raise the temperature of one pound of water one Fahrenheit degree. According to the *CEQR Technical Manual*, this unit of measure can be used to compare consumption of energy from different sources (e.g., gasoline, hydroelectric power, etc.), taking into consideration how efficiently those sources are converted to energy. Its use avoids the confusion inherent in comparing different measures of output (e.g., horsepower, kilowatt hours, etc.) and consumption (e.g., tons per day, cubic feet per minute, etc.). In general 1 kilowatt (KW) is equivalent to 3,413 BTUs per hour. As shown in Table 15-1, current annual energy use on the

TABLE 15-1
Estimated Existing Energy Consumption on Projected Development Sites

Projected Dev. Site #	EXISTING USE					Estimated Annual Energy Consumption ¹ (BTUs) in millions
	Industrial/ Manufacturing (SF)	Vehicle/Open Storage (SF)	Automotive (SF)	Residential (SF)	Commercial (SF)	
3	0	559,363	0	0	0	24,668
10	0	5,000	0	0	0	221
15	0	10,000	0	0	0	441
19	45,662	0	0	2,000	0	2,305
22	18,202	0	0	18,132	0	3,441
26	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	5,000	0	0	0	221
32	0	0	23,000	0	0	630
33	17,217	0	0	0	0	759
39	0	0	0	0	0	0
43	4,733	0	0	0	0	209
45	60,951	0	0	0	0	2,688
55	114,361	0	0	0	0	5,043
56	259,549	0	0	0	0	11,446
57	5,877	0	0	0	0	259
60	0	0	0	0	0	0
90	0	6,405	0	0	0	282
98	0	0	0	0	0	0
100	0	0	0	0	0	0
102	10,000	0	2,500	0	0	510
105	20,625	0	0	1,485	0	1,126
108	0	7,500	0	0	0	331
110	0	5,000	0	0	0	221
111	0	10,000	0	0	0	441
119	0	0	0	12,251	0	1,783
125	10,800	0	0	0	0	476
130	34,100	0	0	0	0	1,504
143	7,500	0	0	0	0	331
144	2,500	0	0	0	0	110
145	0	0	0	0	0	0
148	43,800	0	0	0	0	1,932
149	18,045	0	4,933	0	0	931
160	16,660	0	0	0	2,500	874
160.1	27,720	0	0	0	0	1,222
161	25,875	0	0	0	0	1,141
163	17,500	2,500	0	0	0	882
171	55,000	0	0	0	0	2,426
172	20,526	0	0	0	0	905
174	2,500	12,500	0	0	0	662
185	0	0	0	0	0	0
186	0	0	0	0	0	0
190	9,000	0	0	0	0	397
191	3,519	3,775	0	0	0	322
193	0	0	0	0	0	0
194	0	0	0	0	0	0
199	0	0	0	0	0	0
203	2,000	0	0	0	0	88
206	2,500	0	0	0	0	110
207	0	0	0	0	0	0
208	0	0	11,300	0	0	310
211	299,805	40,200	0	0	0	14,994
215	45,950	0	0	0	0	2,026
218	9,680	2,000	0	0	0	515
220	0	0	0	0	0	0
224	65,000	0	0	0	11,000	3,480
227	0	0	0	0	0	0
230	7,550	0	0	0	0	333
235	72,448	0	0	0	0	3,195
236	0	0	0	56,847	0	8,271
240	20,688	0	0	62,120	0	9,951
259	13,359	0	0	0	0	589
266	36,106	0	0	41,161	0	7,581
268	0	0	0	0	0	0
270	0	0	0	0	0	0
277	0	8,575	0	0	0	378
295	16,044	0	0	0	0	708
302.1	0	0	0	0	1,462	82
308	7,489	0	0	4,339	0	962
309	0	14,748	1,876	0	0	702
314	0	0	0	0	0	0
321.1	4,327	0	0	8,654	0	1,450
320	0	0	0	0	0	0
328	0	0	0	0	0	0
331	0	2,300	0	0	0	101
335	0	0	0	0	0	0
TOTAL	1,455,168	694,866	43,609	206,989	14,962	126,964

¹ Based on the following assumptions

Residential Use: utilize rate for "Lodging" in *CEQR Technical Manual* Table 3N-1, of 145,500 BTUs per sf per year

Commercial Use: utilize rate for "Mercantile & Service" in *CEQR Technical Manual* Table 3N-1, of 55,800 BTUs per sf per year

Industrial/Manufacturing: utilize rate for "Warehouse & Storage" in *CEQR Technical Manual* Table 3N-1, of 44,100 BTUs per sf per year

Vehicle and Open Storage: utilize rate for "Warehouse & Storage" in *CEQR Technical Manual* Table 3N-1, of 44,100 BTUs per sf per year

Automotive Use: utilize rate for "Parking Garage" in *CEQR Technical Manual* Table 3N-1, of 27,400 BTUs per sf per year

Note: 1 KW is equivalent to 3,413 BTUs per hour

76 projected development sites is estimated to be approximately 127 billion BTUs for all heating, cooling, and electric power.

C. THE FUTURE WITHOUT THE PROPOSED ACTION

If the proposed action is not implemented, the identified projected development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning or through a BSA variance and reflect current trends if they are vacant, occupied by vacant buildings, or occupied by low intensity uses and are deemed likely to support more active uses. As discussed in Chapter 2, “Land Use, Zoning and Public Policy,” DCP has identified 30 of the projected development sites on which development is projected to occur within as-of-right zoning or through BSA variances in the future without the proposed action, resulting in additional new dwelling units as well as additional commercial space. The RWCDS also includes two development scenarios, identified throughout the EIS as Scenario A and Scenario B. Under Scenario A, Bayside Fuel is assumed to continue to occupy its current site in the future without the proposed action, whereas under Scenario B, a 1,100 megawatt TransGas power plant is assumed to be an approved development in the future without the proposed action.

As discussed below, each of the two scenarios would result in higher energy consumption on the 76 projected development sites in the future without the proposed action than under existing conditions. However, under Scenario B, in which a 1,100 MW power plant would be developed on a portion of projected development Site 211, there would be an increase in energy supply. Each of the two scenarios is discussed below.

Scenario A

No major changes to the energy supply or infrastructure are expected to occur under this scenario. Standard upgrades and/or reinforcements of the system are expected to be undertaken as necessary by the various energy suppliers. According to the New York Independent System Operator (NYISO) *2004 Load & Capacity Data* report, the forecasted summer peak load for New York City in the analysis year of 2013 is expected to be 12,396 MW, and the annual energy requirements are forecasted at approximately 61,375 gigawatt hours (GWH).⁶

In the future without the proposed action under Scenario A, it is expected that the 76 projected development sites would contain 866 dwelling units (DUs), 83,462 sf of commercial/retail space, 1,294,281 sf of industrial/manufacturing space, 642,686 sf of vehicle and open storage, and 32,309 sf of automotive uses. For Scenario B, the power plant development would result in more industrial/manufacturing square footage (refer to Table 15-2 below).

Table 15-2 summarizes the annual energy consumption for each use under No-Action conditions, for both Scenario A and Scenario B, and compares it to existing conditions. The same assumptions utilized for existing conditions were applied in calculating energy consumption on the 76 projected development sites

⁶ New York Independent System Operator *2004 Load & Capacity Data*, revised 06/08/04 – www.nyiso.com/services/planning.html

in the future without the proposed action. As shown in Table 15-2, it is estimated that the 76 projected development sites would use approximately 245.5 billion BTUs of energy annually in the future without the proposed action under Scenario A.

TABLE 15-2

Estimated Annual Energy Consumption on Projected Development Sites Under No-Action Conditions (for Scenarios A and B), Compared to Existing Conditions

USE		EXISTING		NO-ACTION	
	Consumption Rates	SF	Annual Energy Use (million BTUs*)	SF	Annual Energy Use (million BTUs*)
SCENARIO A					
Industrial/Manufacturing	44,100 BTUs/sf/yr	1,455,168	64,173	1,294,281	57,078
Vehicle/Open Storage	44,100 BTUs/sf/yr	694,866	30,644	642,686	28,342
Automotive	27,400 BTUs/sf/yr	43,609	1,195	32,309	885
Residential	145,500 BTUs/sf/yr	206,989	30,117	1,062,176	154,547
Commercial	55,800 BTUs/sf/yr	14,962	835	83,462	4,657
TOTAL			126,964		245,509
SCENARIO B					
Industrial/Manufacturing (1)	44,100 BTUs/sf/yr	1,455,168	64,173	1,422,001	62,710
Vehicle/Open Storage	44,100 BTUs/sf/yr	694,866	30,644	642,686	28,342
Automotive	27,400 BTUs/sf/yr	43,609	1,195	32,309	885
Residential	145,500 BTUs/sf/yr	206,989	30,117	1,062,176	154,547
Commercial	55,800 BTUs/sf/yr	14,962	835	83,462	4,657
TOTAL			126,964		251,141
Based on the following assumptions:					
Residential Use: assume 145,500 BTUs per sf per year					
Commercial Use: assume 55,800 BTUs per sf per year					
Industrial/Manufacturing, and Vehicle and Open Storage: assume 44,100 BTUs per sf per year					
Automotive Uses: assume 27,400 BTUs per sf per year					
(1) For the TranGas facility, assume the rate for “warehouse & storage” of 44,100 BTUs per year per sf. Estimate for square footage of the 1,100 MW TransGas Facility is based on information provided in the Article X Application material regarding proposed structures: Gas Turbine Building @ 400'x290', Steam Turbine Building @ 175'x100', existing Warehouse Building @ 265'x50'x3 stories, Water Demineralization & Deionization Building @ 125'x75', and Gas Compressor Building @ 90'x50'.					
* 1 KW is equivalent to 3,413 BTUs per hour					

Scenario B

Under Scenario B, it is assumed that the current proposal by TransGas Energy Systems, LLC, to construct a 1,100 megawatt power plant on the site of the Bayside Fuel facility is approved. As such, under Scenario B, the TransGas power plant is assumed to be an approved development in the future without the proposed action, which would remain in the future with the proposed action, and that site would be excluded from the proposed park.

TransGas Energy (TGE) Facility Article X Application (March 2003) describes the proposed facility as a combined-cycle and cogeneration plant that can generate up to a nominal 1,100 MW of electric power and up to 2 million pounds per hour (mmlbs/hr) of steam. The plant would provide enough power and steam to supply approximately 10% of the City's current peak requirements. The Article X application indicates that the facility would be fueled primarily by natural gas with very low-sulfur distillate as a backup fuel. Natural gas would be delivered by pipeline operated by KeySpan Energy Delivery (KeySpan), operator of the local natural gas system. Backup fuel oil would be delivered to the project site via an existing on-site petroleum pipeline operated by the Buckeye Pipeline Company and barge deliveries. The Facility would provide electric power to the New York City transmission cable system operated by the New York Independent System Operator (NYISO). Power would be delivered at the highest system voltage, 345 kilovolts (kV), connecting to nearby existing underground cables.⁷

The TGE Article X application did not indicate an estimate of the energy that would be used in operating the proposed power plant. As such, Table 15-2 makes an assumption based on the estimated square footage of the facility, utilizing the standard rates provided in Table 3N-1 of the *CEQR Technical Manual*. As shown in Table 15-2, it is estimated that the 76 projected development sites would use approximately 251.1 billion BTUs of energy annually in the future without the proposed action under Scenario B.

D. THE FUTURE WITH THE PROPOSED ACTION (WITH-ACTION)

As discussed in Chapter 1, "Project Description," the proposed action is expected to result in new residential and some commercial development on the projected development sites, which would replace most of the industrial/manufacturing and automotive uses, and all of the vehicle/open storage uses. In the future with the proposed action, it is anticipated that a total of approximately 8,257 dwelling units and approximately 337,160 square feet of local retail space would be developed on the 76 upland and waterfront projected development sites.

Compared with future conditions without the proposed action, the projected incremental (net) change that would result from the proposed action at the 76 projected development sites under Scenario A is 7,391 DUs, 253,698 sf of local retail, a new park with approximately 27.8 acres of land area, -642,686 sf of vehicle and open storage uses, -1,136,269 sf of industrial/manufacturing/warehouse space, and -24,876 sf of automotive uses, as well as -949,997 sf of vacant land and -557,906 sf in vacant buildings. Under Scenario B, the projected incremental (net) change that would result from the proposed action at the 76 projected development sites is 7,391 DUs, 253,698 sf of local retail, a new park with approximately 15.9 acres of land area, -642,686 sf of vehicle and open storage uses, -1,076,864 sf of industrial/manufacturing/warehouse space, and -24,876 sf of automotive uses, as well as -555,764 sf of vacant land and -557,906 sf in vacant buildings.

Projected development resulting from the proposed action would be required to comply with the New York State Conservation Construction Code, which governs performance requirements of heating, ventilation, and air conditioning systems, as well as the exterior building envelope of new buildings. In compliance with the Code, the buildings to be constructed on the projected and potential development

⁷ TransGas Energy Facility Application for a Certificate of Environmental Compatibility and Public Need Pursuant to Article X of the New York State Public Service Law; TRC Environmental Corporation; December 2002 (Revised March 2003); Volume 1, p. 3-1.

sites would incorporate all required energy conservation measures, including meeting the Code's requirements relating to energy efficiency and combined thermal transmittance. Electricity and gas supplied by Con Ed, Keyspan Energy, or other power companies, would continue to provide heating, cooling, and lighting to Greenpoint-Williamsburg.

The same assumptions utilized for the various uses under future No-Action conditions were applied in calculating estimated annual energy consumption on the 76 projected development sites in the future with the proposed action. Table 15-3 shows the energy expected to be consumed by each of the projected development sites in the future with the proposed action, as well as the estimated total energy consumption on the 76 projected development sites under Scenario A and Scenario B.

Based on the above assumptions, it is estimated that the 76 projected development sites would use approximately 1.28 trillion BTUs of energy annually in the future with the proposed action under Scenario A, and approximately 1.29 trillion BTUs annually under Scenario B. Therefore, the proposed action would result in an incremental increase of approximately 1.04 trillion BTUs in annual energy use compared to No-Action conditions, under both scenarios. This annual demand would represent approximately 0.28% of the City's forecasted peak summer load of 12,396 MW in 2013, and an infinitesimal amount of the City's forecasted annual energy requirements for 2013, and is therefore not expected to be a significant additional load. As such, the operational energy from the proposed action would not have significant adverse impacts.

Although under Scenario B, the TransGas power plant would increase the energy supply in the City, the available energy supply is anticipated to be sufficient to accommodate the additional demand generated by the proposed action with or without the TransGas power plant.

TABLE 15-3
Estimated Energy Consumption on Projected Development Sites with the Proposed Action

Projected Dev. Site #	PROJECTED USE					Estimated Annual Energy Consumption ¹ (BTUs) in millions
	Industrial/Manufacturing (SF)	Vehicle/Open Storage (SF)	Automotive (SF)	Residential (SF)	Commercial (SF)	
3	0	0	0	2,350,262	55,000	345,032
10	0	0	0	15,000	0	2,183
15	0	0	0	30,000	0	4,365
19	0	0	0	42,750	5,000	6,499
22	0	0	0	36,334	0	5,287
26	0	0	0	16,500	0	2,401
29	0	0	0	2,640	0	384
30	0	0	0	10,500	4,500	1,779
32	0	0	0	0	20,000	1,116
33	0	0	0	51,651	0	7,515
39	0	0	0	12,524	0	1,822
43	0	0	0	14,982	0	2,180
45	0	0	0	61,000	0	8,876
55	102,361	0	0	0	12,000	5,184
56	0	0	0	2,029,252	60,000	298,604
57	0	0	0	58,632	0	8,531
60	0	0	0	120,000	0	17,460
90	0	0	0	12,810	0	1,864
98	0	0	0	38,580	0	5,613
100	0	0	0	220,000	20,000	33,126
102	0	0	2,500	0	10,000	627
105	0	0	0	180,780	0	26,303
108	0	0	0	22,500	0	3,274
110	0	0	0	15,000	0	2,183
111	0	0	0	30,000	0	4,365
119	0	0	0	61,270	0	8,915
125	0	0	0	60,000	0	8,730
130	0	0	0	65,075	10,000	10,026
143	0	0	0	22,500	0	3,274
144	0	0	0	22,500	0	3,274
145	0	0	0	105,000	0	15,278
148	0	0	0	43,800	0	6,373
149	10,545	0	4,933	0	7,500	1,019
160	0	0	0	58,500	0	8,512
160.1	0	0	0	36,000	18,000	6,242
161	0	0	0	51,750	0	7,530
163	0	0	0	55,500	4,500	8,326
171	0	0	0	55,000	0	8,003
172	0	0	0	46,650	0	6,788
174	0	0	0	45,000	0	6,548
185	0	0	0	57,166	0	8,318
186	0	0	0	10,000	0	1,455
190	9,000	0	0	0	0	397
191	0	0	0	10,276	0	1,495
193	0	0	0	34,800	4,500	5,315
194	0	0	0	2,868	0	417
199	0	0	0	1,194,630	70,000	177,725
203	0	0	0	18,000	4,500	2,870
206	0	0	0	31,666	0	4,607
207	0	0	0	0	4,000	223
208	0	0	0	22,600	0	3,288
211 ²	0	0	0	0	0	0
215	0	0	0	135,000	0	19,643
218	0	0	0	52,000	0	7,566
220	0	0	0	4,200	0	611
224	0	0	0	160,600	0	23,367
227	0	0	0	10,000	0	1,455
230	0	0	0	15,100	0	2,197
235	0	0	0	208,100	10,000	30,837
236	0	0	0	87,097	0	12,673
240	0	0	0	82,808	0	12,049
259	0	0	0	33,750	0	4,911
266	36,106	0	0	72,212	0	12,099
268	0	0	0	12,438	0	1,810
270	0	0	0	21,327	0	3,103
277	0	0	0	22,295	0	3,244
295	0	0	0	0	15,810	882
302.1	0	0	0	4,851	1,850	809
308	0	0	0	15,675	0	2,281
309	0	0	0	36,572	0	5,321
314	0	0	0	12,100	0	1,761
321.1	0	0	0	12,980	0	1,889
320	0	0	0	37,028	0	5,388
328	0	0	0	81,005	0	11,786
331	0	0	0	15,180	0	2,209
335	0	0	0	9,240	0	1,344
TOTAL SCENARIO A	158,012	0	7,433	8,623,806	337,160	1,280,749
TOTAL SCENARIO B²	345,137	0	7,433	8,623,806	337,160	1,289,001

¹ Based on the following assumptions

Residential Use: utilize rate for "Lodging" in *CEQR Technical Manual* Table 3N-1, of 145,500 BTUs per sf per year
Commercial Use: utilize rate for "Mercantile & Service" in *CEQR Technical Manual* Table 3N-1, of 55,800 BTUs per sf per year
Industrial/Manufacturing: utilize rate for "Warehouse & Storage" in *CEQR Technical Manual* Table 3N-1, of 44,100 BTUs per sf per year
Vehicle and Open Storage: utilize rate for "Warehouse & Storage" in *CEQR Technical Manual* Table 3N-1, of 44,100 BTUs per sf per year
Automotive Use: utilize rate for "Parking Garage" in *CEQR Technical Manual* Table 3N-1, of 27,400 BTUs per sf per year

² Under Scenario A, Bayside Fuel is assumed to continue to occupy its current site in the future without the proposed action, whereas under Scenario B, a 1,100 megawatt TransGas power plant is assumed to be an approved development in the future without the proposed action. For the TransGas facility, assume the rate for "warehouse & storage" of 44,100 BTUs per year per sf. Square footage of the 1,100 MW TransGas Facility is estimated at approximately 187,125 sf.

NOTE: 1 KW is equivalent to 3,413 BTUs per hour