

8.0 Effects on the Use and Conservation of Energy Resources

8.1 Energy Sources to Be Used If the Project Is Implemented

The existing and proposed primary energy sources for the project are electricity and gasoline for construction vehicles and automobiles for the use of residents. Electricity will be provided by CH Energy Group for lighting, cooling, cooking and operating internal equipment/appliances.

Alternatives for heating individual dwelling units are liquefied petroleum, gas, or as appropriate, passive or active solar designs. At the present, none of these alternatives are planned. Some dwellings may supplement heating requirements with wood, corn, coal, or pellet burning stoves depending on individual homeowner preferences.

8.2 Increased Energy Consumption

It is estimated that on an annual basis, the 300 single family residences will use approximately 7,200 kwh of electricity per residence per year for a total of approximately 2,160 mwh per year.²¹⁰ CH Energy group is able to either supply electricity to the project site or transmit electricity purchased by the individual consumer on the market.²¹¹ A variety of energy providers, including coal, natural gas, wind, nuclear, hydro, and geothermal providers are available to consumers in the marketplace. Therefore, it is expected that they remain able to provide service to the proposed project.

8.2a SDEIS - Increased Energy Consumption

Based on the Revised Project, an overall reduction of anticipated energy consumption is estimated. It is estimated that on an annual basis, the 140 units will use approximately 7,200 kwh of electricity per residence per year for a total of approximately 1,008 mwh per year. Since the number of residences has been reduced by more than half, the energy consumption has also been reduced by more than half the previously anticipated amount.

8.3 Energy Conservation Measures

All dwelling units will be built in conformance with the energy conservation regulations of the New York State Energy Conservation Construction Codes.²¹² In addition, low-flow water conservation plumbing devices will be installed on all showerheads and faucets consistent with the New York State Environmental Conservation Law and, lighting fixtures will utilize energy saving lamps and ballasts.²¹³ The impact of these water conservation devices is a reduction in the demand water, particularly for hot water, therefore reducing energy demand to heat water.

²¹⁰ <https://www.nyseg.com/>

²¹¹ www.chenergygroup.com

²¹² 9 NYCRR 7810-7816.

²¹³ New York State Environmental Conservation Law, Article 15, Section 15-0314.