

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, fuel, and natural gas. Electricity will be provided by Orange and Rockland Utilities 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 287 single family residences will use approximately 7,200 kwh of electricity per residence per year for a total of nearly 2.02 mwh per year.¹²⁵ O&R now purchases all of the power for its New York and Pennsylvania customers from the power market administered by the New York State Independent System Operator (NYISO). Therefore, it is expected that they remain able to provide sufficient electric and gas service to the proposed subdivision.¹²⁶

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.¹²⁷ 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.¹²⁸ 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.

¹²⁵ <https://www.nyseg.com/>

¹²⁶ <http://www.oru.com/energyandsafety/electricity/electricsupply.html>.

¹²⁷ 9 NYCRR 7810-7816.

¹²⁸ New York State Environmental Conservation Law, Article 15, Section 15-0314.