

8.0 EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

Like any development project, energy consumption will occur during construction and occupancy of the proposed residences, but energy use in this development will not be significant. The project will utilize existing electrical infrastructure that is available in the local area, as further described in section 3.5. During the short-term construction period, energy will be used for power equipment (primarily electricity available at the site) and construction vehicles (primarily gasoline and diesel fuel obtained off-site). Once construction is completed and the residences occupied, energy will be used over the long term for space heating, air conditioning, household appliances and assorted electrical equipment. Occupancy will also consume heating oil and/or LP (propane) gas delivered to the site. As these are seasonal-use second homes, use of electricity at the residents' primary homes (primarily located in NY City) will be reduced commensurate with the energy use at these homes during periods of occupancy.

Pursuant to the DEIS Scope, guidance of the New York State Department of Environmental Conservation relating to the evaluation of energy use¹ is utilized in this section. This guidance provides an overview of issues and methods of evaluating potential impacts of a project resulting from its energy use by both direct and indirect means in construction and operation of the project, thereby directly or indirectly causing the production of greenhouse gases (GHG) that ultimately are linked to climate change and global warming. In this case, neither the Scope of the DEIS nor the nature of the project necessitate quantitative assessment through modeling of GHG emissions but the Scope asks for a discussion of energy use in relation to the project design. This analysis will provide a qualitative assessment of potential energy use and the GHG emissions that are related to energy use.

8.1 Energy Sources

Short Term Energy Sources – Construction Period

The sources of energy associated with the project construction period, which is considered short term use, will be manufactured (gasoline and diesel fuel) or generated (electricity) outside of the project site and generally outside of Sullivan County. The primary energy use during construction will be fuel for construction equipment. Trucks, graders, excavators and similar equipment will be required for the grading, building site work, construction of roads and installation of utilities and infrastructure. The construction of the residence buildings will require less heavy equipment, but will entail the use of electricity for tools and vehicle fuel for the delivery of materials to and around the site.

Long Term Energy Sources – Operational Period

Energy sources for residential heating, ventilating and cooling will include fuel oil, propane and electricity. Electricity will provide energy for lighting, heating water, household appliances and incidental domestic electrical uses. The operation of the residences, and multipurpose facilities including the swimming pools, will place long-term demands on various energy sources. Indoor climate control systems will demand the largest quantity of energy consumed over the lifetime of the project.

¹ "Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements", New York State Department of Environmental Conservation, DEC Policy guidance issued July 15, 2009.