## 8.1 Use and Conservation of Energy Resources Comments and Responses

**Comment 8-1 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Green Building Design - The Department recognizes and appreciates that the project sponsor is requiring all amenity buildings and all future single family homes to meet the "certified" category with either the Leadership in Energy and Environmental Design (LEED) or the National Green Building Standard (NGBS).

> ***Response 8-1:*** *Comment noted. The Applicant will require in the covenants and restrictions that every home be designed and built to meet green building design certification requirements. Irrespective of obtaining the actual certification by LEED or another organization, conformance with the certification requirements will be ascertained through a letter issued by a third party professional, paid for by the Applicant, certifying such conformance prior to issuance of a certificate of occupancy. Further discussion is presented in Response 2-9.*

**Comment 8-2 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Assessment of Energy Use and Greenhouse Gas Emissions - Transportation – The document mentions that a majority of the residences will be seasonal or part-time. The DEIS should provide a qualitative discussion of how far and how often the expected part-time owners will be traveling and what mass transportation is available to reduce the number of personal vehicle trips. In the qualitative discussion include the location of major shopping centers that will generate trips. For daily commutes to work, provide a discussion of the typical distance to the workplace for an owner of one of these residences.

> ***Response 8-2:*** *In the Applicant's experience, most resort visitors and property owners live off-site and within about 100 miles of the project. Part-time owners typically will visit the resort twice per month on average, or about 16 times during the golf season. Some of the residents enroute to and from the site will stop at larger regional malls including Woodbury Commons in the Town of Woodbury near the Interstate 87 and NYS Route 17 interchange, and the Galleria at Crystal Run in the Town of Wallkill near the Interstate 84 and NYS Route 17 interchange. These would be diverted trips of less than one mile and thus the malls will generate few additional trips from the site. Local trips in Monticello include shopping north of NYS Route 17: a Walmart and Thompson Square Mall on Route 42, and within five miles are various shops in the Village of Monticello. There is Shortline bus service from the Village of Monticello[1], taxi and limousine services from Monticello and Port Jervis, and Sullivan County Transportation operates two bus lines through Monticello, although it is anticipated that the vast majority of the resort clientele will travel by car to and from the site.*
>
> *If demand for transportation services develops over time, the resort will consider offering additional transportation alternatives to residents and guests.*

[1] Shortline has a terminal in the Village of Monticello with service to New Jersey (ten municipalities), Pennsylvania (nine municipalities), New York (83 municipalities) and to the two malls, as well as connections to other key transfer points as Harriman Park and Ride Lot NYS Route 17 and Harriman Metro Train Station, allowing further connections to the Greater NY Metro area. *http://www.coachusa.com/shortline/,* September 22, 2010.

*US Census data indicate mean travel time to work is 31.8 minutes for Forestburgh residents that travel (approximately 25 miles). A small percentage (5.6%) of the workforce work at home. Public transit use involves 1.5 percent of the resident workforce, according to the Census. Resort lot owners that use the site as a second residence will typically continue to commute to work from their primary residence, thus the number of owners that might demand transportation services to the workplace is expected to be very small. Within the property, there may be 10 or 12 resort employees who reside in the resort (based on Eagle Rock Resort) and may use alternative means of transportation that would reduce energy use and greenhouse gas emissions of the project.*

**Comment 8-3 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** According to the DEIS, the Department guidance document "Guidance for Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements" is being utilized to supplement the Assessment of Energy Use and Greenhouse Gas Emissions. Within this guidance document, various mitigation measures are offered to increase energy efficiency and reduce greenhouse gas emissions from proposed projects. Several mitigation measures applicable to transportation that were not discussed include the following:

- Design project to support alternative transportation (walking and bicycling)
- Purchase alternative fuel and/or fuel efficient vehicles for fleet, including the range of maintenance and operation vehicles used on-site.
- Develop or support multi-use paths to and through site
- Provide bicycle storage and showers/changing rooms

The Department recommends these mitigation measures be further evaluated in the DEIS and incorporated into the project design where applicable.

***Response 8-3:*** *Alternative transportation within the project is advocated by the leisure lifestyle of the community, which incorporates narrow, paved roads in a wooded setting that allow for accessibility of golf carts, bicycles, and pedestrians from home sites to the golf course and other resort amenities. The resort is designed to be entirely walkable, including provision of a multi-purpose recreation trail system that explores the "wild" portions of the property off of the paved roadway system to encourage passive walking opportunities for its residents. The primary trail system within the project is shown on the revised Master Plan. Being a rural location, there is no formal path system that exists off the site nearby to which the on-site system could connect.*

*The resort maintenance personnel will use either hybrid, LP gas, or electric powered vehicles. All golf carts will be electric. The resort will have bicycles for use by patrons. Like at Eagle Rock Resort, this project will include bicycle racks at the main recreation facilities for use by residents to secure their bicycles. While there may be 10 or 12 resort employees who reside in the resort (based on Eagle Rock Resort), it cannot be determined whether any will use alternative transportation to get to their workplace, however bicycle racks will be available for their use.*

**Comment 8-4 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Utilities - The document states that the project will include a private wastewater treatment plant in relation to energy use. The DEIS should provide a qualitative discussion of the proposed treatment plant. It is stated that the Lost Lake Resort is expected to be developed over a period of decades. The DEIS should also discuss how the wastewater treatment plant will be designed to treat the initial waste generated, and be capable of being expanded to keep up with the continued development of the resort, without being oversized in the initial stages of development and thereby result in treatment inefficiency.

***Response 8-4:*** *DEIS Appendix K outlines the conceptual design of the fully built WWTP. Briefly, the plant will be an activated sludge type wastewater treatment facility that will be constructed in modular form to allow for the expansion of plant facilities, and thus its capacity, as the development of the Resort progresses and need for capacity increases. The specific process to be used for treatment has not been selected at this time since the final discharge limits have not yet been determined by NYSDEC. The actual plant design will reflect the requirements of the SPDES discharge limits to be set by NYSDEC, which based on initial discussions with the agency will include three (or more) incremental flow rates, thereby allowing for the anticipated modular plant design that will operate at greater efficiency with less energy use than would otherwise be necessary for an oversized plant.*

*The conceptual design for the WWTP encompasses all of the plant facilities for the fully built project and encompasses sufficient area on the site for its construction in phases. Sheets 9 and 14 in FEIS Appendix J illustrate how the full build WWTP design will fit on the site.*

**Comment 8-5 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Emissions from Waste Generation - Please provide a qualitative discussion of the expected solid waste generation from the project. Identify where the ultimate disposal of the waste will occur, and what measures and requirements for recycling or reuse will be included in the proposed project.

***Response 8-5:*** *Solid waste (garbage) will be generated by the normal, everyday use of the residences and the resort amenities, as well as by construction operations. Responsibility for the temporary storage of solid waste will occur at each home site, resort facility, and construction site. Larger facilities and construction sites are expected to have small dumpsters for safe, clean storage between pickups. In addition, separation of recyclable waste materials will be encouraged in individual homes, and required at the resort-operated facilities. Recyclables currently accepted by the County facility are #1 to #7 plastic containers, steel and aluminum cans, glass bottles and jars, corrugated and cardboard, newspaper, and mixed paper. Curb-side collection of waste and recyclables will be performed by private carters on a regular schedule. Household and commercial waste is expected to be carted to Sullivan County Landfill and Recycling Center in Monticello.*

**Comment 8-6 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Solar Design – The DEIS should provide a qualitative discussion on the layout of home sites and the assessment that was

conducted to determine the potential performance of solar technology employed on residences built on the sites. In addition, the DEIS should discuss measures to provide individual home owners with solar and other renewable energy technology easements to protect renewable energy installation investments from future encroachment by trees or other structures.

***Response 8-6:*** *The DEIS states that it is anticipated that some homes will incorporate solar panels or other alternative energy sources, although the proportion of such sources is expected to be small. According to the Design Guidelines 'The design of each home must respond to the unique characteristics of its site, the trees and vegetation, topography, natural drainage patterns, views and sun orientation'. The Design Guidelines recommend that homes be sited to take advantage of solar orientation and prevailing breezes. The layout of the Master Plan at a conceptual level for the DEIS does not include the details of individual home sites, nor was an assessment conducted to determine the potential performance of solar technology on a residence site. However the Lost Lake Design Guidelines encourage the individual lot owners to consider these energy efficiencies in the selection and development of their home sites.*

*To protect an individual lot owner's renewable energy investments from future encroachment by trees or other structures on an adjoining lot, the lot owners are encouraged to purchase the adjoining lot for this purpose. Provision of easements to preserve solar rights on lots will be considered on a lot by lot basis in consultation with the Planning Board during the Site Plan review and approval process.*