

INFRASTRUCTURE REQUIREMENTS

Exhibit VIII. C.17.b

Careful consideration was given to reduce peak water and electricity demands at the project. With 100 percent of the irrigation proposed on-site using reclaimed water and not potable water and the proposed 6,665 toilets on site using reclaimed water for toilet flushing, the reclaimed water demand is estimated to be 133,000 gallons per day (gpd). Currently, the existing Tuxedo Ridge Ski Center uses surface water and a pump to make snow during the ski season. To better preserve surface water in the watershed, it is proposed to use reclaimed water for snowmaking, resulting in an additional 50,000 gpd (estimated) in reclaimed water demands.

Peak electricity usage will be reduced by using several specific peak shaving strategies. Reduction of electrical usage will be possible through ongoing energy consumption monitoring. As the systems design is finalized electric loads will be identified that can be easily terminated or regulated without impact to the Sterling Forest Resort during restrictions. Strategies that have been employed in similar facilities to reduce demand during high-demand periods include removing loads such as larger equipment like chillers from the central site plant to operate only during off-peak hours. Loads will be prioritized by the time of day that they need to be in operation.

The systematic use of onsite electrical generation through renewable energy sources also will be available to this project (see **Exhibit X. C.6**). Having the capability to add capacity during peak periods or times of restriction is another approach that is being incorporated in the overall infrastructure plan.

Lastly there will be on-site high-efficiency generators that will be available for usage in extreme cases. Stand-by generators would be brought on-line in a limited capacity but could be included in the overall plan to address electrical restrictions during peak demand periods.