

6.0 EFFECTS ON THE USE AND CONSERVATION OF ENERGY

The SLW Project would have significant, long lasting positive impacts on the use and conservation of energy. When the Project is in operation, it would deliver approximately 136 MW of clean renewable energy at the point of interconnection to the electricity grid. The Project would accomplish this without having to produce, transport, store, or burn any fossil fuel in the process. Production of this clean, renewable energy would not create air or water pollution or add to greenhouse gases in the atmosphere. This is enough electricity for over 45,000 homes in New York State (on an average annual basis).

Some of the principal benefits of the Project are in accordance with the 2002 State Energy Plan (New York State Energy Planning Board, 2002), namely:

- "Stimulating sustainable economic growth;"
- "Increasing energy diversity...including renewable-based energy;" and
- "Promoting and achieving a cleaner and healthier environment."

The SLW Project would add to and diversify the state's sources of power generation. Greater use of renewable energy would displace use of other less desirable sources of electricity generation, such as the fossil fuels that pollute the air and water and contribute to global warming.

NYSERDA commissioned a study entitled *The Effects of Integrating Wind Power on Transmission System Planning, Reliability and Operations* (February 2005, the "NYSERDA Report"). The NYSERDA Report concludes, based on load and wind profiles from 2001 and 2002 that 65 percent of the electricity displaced by wind generation would come from natural gas, 15 percent from coals, 10 percent from oil and 10 percent from imports.

The NYSERDA Report also found that 3,000 MW of wind energy would result in total annual New York wholesale electricity market variable cost reductions of over \$400 million per year. Of this total, the SLW Project would be responsible for almost \$15-20 million in benefits to energy consumers each year. In addition, the NYSERDA Report found that it is not necessary to start up additional traditional generation to back up wind generation.

The New York PSC issued an Order approving a Retail RPS Policy on September 24, 2004. The Order presented the PSC's renewable energy policy. The Order identified targets and procedures to achieve an increase in renewable energy used in the State to at least 25 percent by the year 2013. The SLW Project would be part of the effort to achieve the state's goals of the Renewable Portfolio Standard.



The SLW Project also supports compliance with Executive Order 111, issued by Governor George Pataki on June 10, 2001. The Executive Order requires all New York State agencies to purchase 10 percent of their electricity from renewable sources by 2005 and 20 percent by 2010.