Appendix 3

Location and Operations
Automatic Hydroelectric Project

The Automatic hydroelectric plant (Automatic) was originally constructed in 1924 and is located approximately 5 miles downstream of Rice Rips hydroelectric plant (FERC No. 2556, LIHI Project No. 59). The project consists of: (1) an 81-foot-long, 33-foot-high concrete gravity dam with (a) a 33-foot-long nonoverflow section, (b) a 20-foot-long by 2-foot-wide gated section with one Tainter gate, 14 feet high by 16 feet wide, (c) a 30-foot-long spillway section topped with 2-foot-high flashboards, (d) an intake section beneath the spillway and (e) an earthen section containing a 30-foot-long retaining wall; (2) a concrete and brick powerhouse, 63 feet high by 19 feet wide by 31 feet long, housing one horizontal Francis turbine and General Electric generator combination with a rated capacity of 800 kW; (3) a 4.5-mile-long impoundment with a gross storage capacity of 900 AF; and (4) appurtenant facilities.

Operation of Automatic is dependent on inflow to Messalonskee Lake and discharge from the upstream Oakland and Rice Rips Hydroelectric projects. When inflow to Messalonskee Lake is greater than approximately 570 cfs, Automatic is operated as a run-of-river project. When inflow is less than approximately 570 cfs the project is cycled. Fifteen cfs is discharged at all times through the Automatic project as well as the upstream Oakland and Rice Rips hydroelectric projects and the downstream Union Gas hydroelectric project. All additional water that does not go through the turbines is discharged over the spillway.