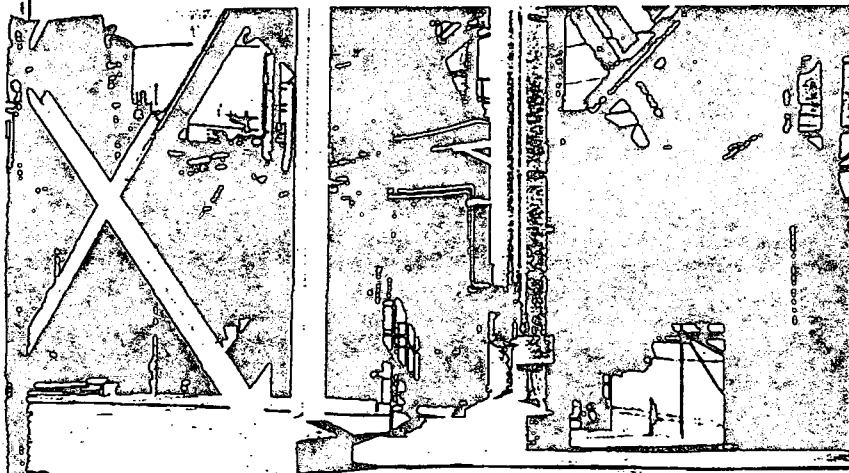


*The two forced-draft fans at River Crest are driven by Elliott 1250-hp, 900-rpm motors. These motors and the boiler-feed pump drives, all located out-of-doors, are built to withstand any kind of weather, from sandstorm to winter blizzard.*



the rate of 69,000 gpm. It is returned by canal to the opposite side of the lake. Water for the lake is pumped from the Sulphur River by two 10,000-gpm pumps.

Electricity is generated at the plant at 13,800 volts and increased to 138,000 volts by two 65,000-kva, 3-phase power transformers operating in parallel. The 138-kv electricity is fed through an oil circuit breaker to the switchyard, which in turn is connected to the transmission system by two 138-kv transmission lines constructed of 636,400 circular mil conductor. Since the River Crest station is a single-unit plant and the generator is connected to the system through high-voltage switches, an auxiliary source of power was necessary to start up the plant in the beginning and again after it has been shut down for overhaul or inspection. This start-up power is supplied through a 15,000-kva, 138,000-66,000-2400-volt, 3-phase trans-

former which is connected to one of the 138-kv transmission lines. When in normal operation, the plant receives auxiliary power from a 13,800-2400-volt auxiliary power transformer connected directly to the main generator bus.

A three-story brick control building allots its top floor to an air-conditioned control room with tinted thermopane windows for glare prevention. This room is the nerve center of the plant and from this location the operators control the equipment and the switching of load on the outgoing lines.

An air-conditioned brick service building provides offices for the operating personnel, an assembly room, a locker and wash room, and a laboratory with the latest testing equipment. A 40- by 100-foot steel frame, aluminum-covered building houses a storeroom and a complete machine shop for repairing and maintaining equipment.



*At right, two Elliott C-W, 100-hp, 1200-rpm motors drive air compressors. There are also two 15-hp, Scaledpower motors driving water-treating pumps.*