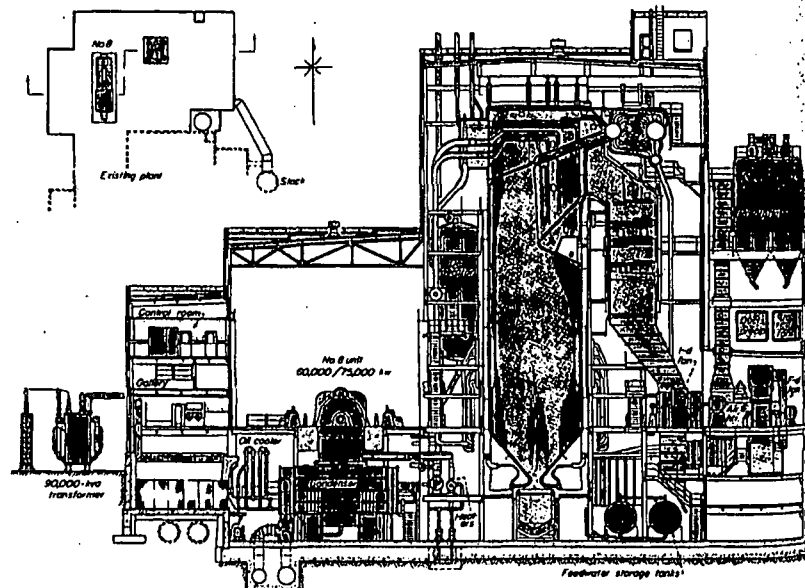


Goudey Station *continued*



NO. 8 REHEAT UNIT rated at 60/75 mw uses 1000/1000 F steam temperatures, 1950-psig throttle pressure. Only 5 of 6 bleed points are used for feedwater heating and evaporator supply. Generating capacity of 8 units adds up to 174,000 kw.



SINGLE 560,000-LB-PER-HR reheat boiler feeds turbine. Two-stage superheater controlled by water attemperation as well as the single-stage reheat. Two sets of f-d and l-d fans supply boiler. Precipitator discharges flue gas to an existing stack.

New Unit Gave Welcome Opportunity to Build Modern Electrical Control Room For All Units in Station

GOUDEY STATION on the Susquehanna River in Johnson City, N. Y., now has four steam-pressure levels with the addition of the first reheat unit on the N. Y. State Electric & Gas system. Studies showed that installing the new unit at Goudey yielded substantial savings over a new site. A weir placed across the river solved the principal problem of adequate cooling-water supply.

We are experimenting with various types of coal spouts between bunkers and feeders. Three of them, of rectangular cross section, taper to narrower cross sections at feeder inlets. Two of these have 3/4-in. 20% stainless clad steel in the upper section and 3/4-in. carbon steel lined with 1/2-in. stainless steel in the lower section. The third has 3/4-in. carbon steel lined with 1/2-in. rubber. The remaining chute is a 24-in.-dia round-flanged rubber pipe connected to the feeder through a stainless-steel lined adapter.

An air-conditioned control room on the main floor houses controls and major instruments for boiler and turbine. Three-element feedwater control and combustion controls are major components in this room.

The new unit started Dec. 17, 1951. With exception of some very minor difficulties this was the most successful start we have had. We attribute this

BOWLTYPE PULVERIZERS each handle 21,600-lb-per-hr coal. Three mills, grinding normal coal, supply full-load boiler demand. Integral exhausters, 250-hp drive motors, main parts of mill stand immediately below grating. Permanent 10-ton crane eases maintenance work.



EACH OF TWO BOILER FEED PUMPS can carry full boiler load, 630,000 lb per hr at 1682 psig; 2000-hp electric motors drive pumps through hydraulic couplings



TWO HORIZONTAL SINGLE-STAGE centrifugal pumps develop 37-ft total head to pass 20,500 gpm water through 42,500 sq ft, 2-pass condenser, reversing valves

