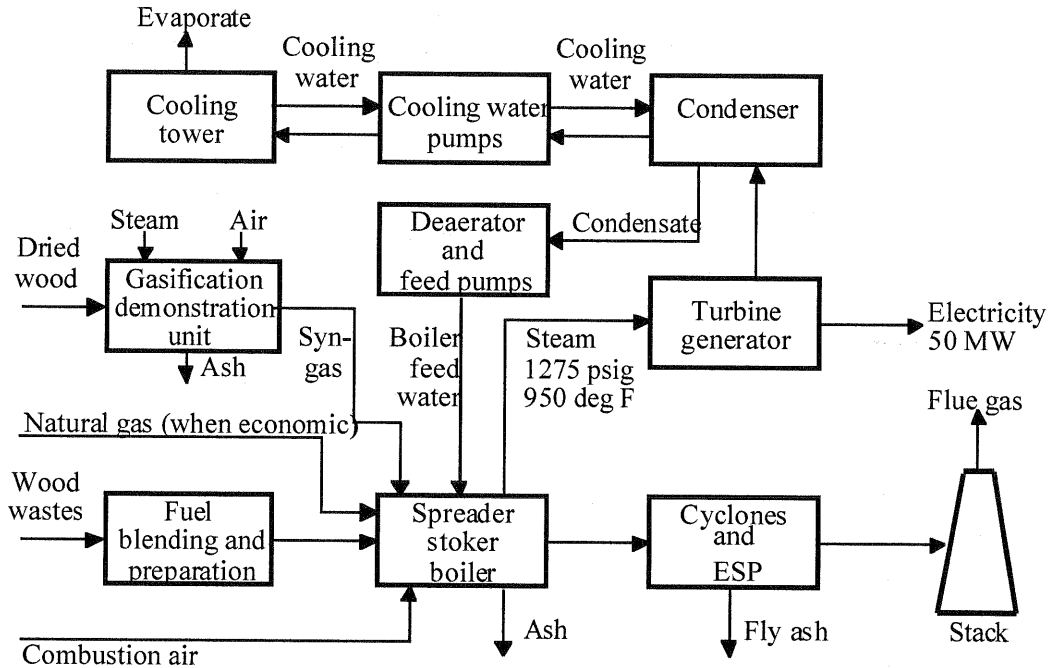


renewable portfolio requirement as a precondition to retail choice in Vermont, and creation of competitive “green markets” that use indigenous resources.

Plant Flowsheet and Design Information

McNeil Generating Station



Boiler

The boiler, a two-drum, top-supported Sterling design with water wall construction, was furnished and erected by Zurn Industries. It was originally designed to be capable of PC firing in the future. Initially, three oil burners were installed for startup and flame stabilization with a maximum heat input of 250 MBtu/h. Provisions were made for an additional three burners for future consideration. The boiler has two traveling grates and is rated at 480,000 lb/h at 1275 psig and 950°F when burning 100% wood at 55% moisture content.

Turbine Generator

The turbine generator for the McNeil Station was manufactured by Brown Boveri Corporation in Oerlikon, Switzerland. It has 36 stages of rotating blades, five extraction points for feedwater heating, and 25-in. last stage blades. The turbine is directly connected to a 3600-rpm air-cooled generator rated at 60,037 MVA. The turbine generator was specifically designed to accommodate the cycling service expected at the station, as well as possible future district heating capability. The turbine generator set can supply a maximum of 59.4 MW gross when exhausting 348,000 lb/h of steam to the condenser at 2 in. of mercury. Approximately 42,000 gpm of cooling water are required.