

10.4 AUXILIARY BOILER STEAM SYSTEM

10.4.1 DESIGN BASIS

The Auxiliary Boiler Steam System is shown on Figure 10-6. Two auxiliary boilers are provided, each having the following principal characteristics:

Steam generating capacity:	125,000 lbs/hr
Steam pressure:	180 psig (operating) 250 psig (design)
Steam temperature:	380°F
Feedwater temperature:	180°F (normal) 40°F (at startup)

Each auxiliary boiler was sized to satisfy the plant heating plus the condensate startup deaeration steam requirements. If required, the auxiliary boilers can be used to supply the necessary steam supply for the steam generator auxiliary feed pumps and the SGFPs. Component design data is contained in Table 10-1.

10.4.2 SYSTEM DESCRIPTION

Three fuel oil pumps are provided for the two boilers. Each pump has a capacity of 10,000 lbs/hr at a discharge pressure of 150 psig.

Three feedwater pumps are provided for the auxiliary boilers and take suction from a common deaerator. The design flow of each pump is 265 gpm at 580' total discharge head.

The plant fuel oil system consists of two outdoor bulk storage tanks for No. 2 fuel oil serving the auxiliary boilers, the emergency diesel generators, the Station Blackout Emergency Diesel Generator, and the diesel-driven fire pump. There is an additional fuel oil system for the Societe Alsacienne De Constructions Mecaniques De Mulhouse, safety-related diesel generator, No. 1A. This fuel oil has a viscosity range as specified in American Society for Testing and Materials (ASTM) D975-81, Table 1. Two of the storage tanks are tornado-protected. Truck unloading pumps and tank transfer pumps are also provided.