E. STEAM FLOW - (LIGHT GREEN)

Steam at 120-140 psig and 400-450°F is delivered to the system through Terminal Point E. The steam flow is measured by the vortex meter, FT-8. The vortex meter is pressure and temperature compensated for with an absolute pressure transmitter, PT-8, and a temperature transmitter, TT-8A. The flow is recorded by FR-8 and is totallized with FQ-8.

Steam flow to the unit can be adjusted by changing the setpoint on the steam flow controller, FIC-8. The controller modulates the steam flow control valve, FCV-8, to maintain the setpoint (Design = 37,000 lb/hr) that is measured by the vortex meter.

F. CONDENSATE - (GREEN)

Condensate drains from the first effect waterbox into the Condensate Level Tank. The level in this tank is measured by a differential pressure transmitter, LT-9, which sends a signal to the direct acting controller, LIC-9. The controller maintains level in the tank (set at 50%) by throttling flow out of the tank through LCV-9A or LCV-9B (in the condensate purity is poor). A low alarm (set at 25%) and a high alarm (set at 75%) are provided to monitor proper level control.

A conductivity cell, CE-9, measures the conductivity of the condensate. If the conductivity is high (CSH-9 set at 10 micromhos), the condensate is dumped to Body #3 steam chest (should only happen when Body #1 is on wash) through LCV-9B. Normally, good condensate will be sent to the Condensate Flash Tank through LCV-9A.

The condensate flow is measured by the vortex meter, FT-9. This flow can be read off FI-9. A small portion of the condensate (12-16 gpm) is continuously recycled to the desuperheating nozzle to desuperheat the incoming steam.

Good condensate is flashed down in the Condensate Flash Tank to the second effect steam chest. Level in this tank is controlled (Loop 20) identically to the Condensate Level Tank (Loop 9). Condensate leaves the system at Terminal Point F.

G. VAPOR - (LIGHT BLUE)

Vapor produced in Effects 1 through 4 passes through a wire mesh mist eliminator and through the tubes of the following effect. A small portion of vapor is vented from the tube bundle to insure that minimal air and sulfur dioxide are held up in the