The Trending Screen provides for real time parameter comparison. Both time and value measurements can be changed to see large or small process changes. All plant values are archived and can be easily brought back for any purpose.
Process Controllers for each plant control loop can be assembled as building blocks to facilitate closer operation when conditions warrant.
The back pressure steam turbine acts as a rotating pressure reduction. Here the display is set to record and monitor the various bearing supply and discharge water temperatures.
The control system display provides for monitoring of station voltage and power conditions.
Fuel storage and supply parameters are displayed for operator’s information. Natural gas supply flow and pressure are displayed for the various plant uses. Transitioning between the two main fuels is automatic for the continuous operation of the main gas turbine system.
The back pressure steam turbine is shown here supplied with steam generated in any of the three main boilers. The exhaust from the turbine being slightly superheated is then supplied throughout the campus at 13 PSIG. Two PRV valves are maintained in parallel to the turbine system to provide backup pressure control in the advent of turbine maintenance or a tripped condition.
Feed water supply to the main boilers is monitored in order to overcome variances in the plant steam production. Returned steam in the form of hot condensed liquid is then pumped to the main de-aeration tank. The maintenance of liquid level in both systems is crucial in providing the optimum conditions for the boiler water supply.