UC DAVIS TES CHP 3 & 4 FLOW CONTROL

Chiller Start-Up

If either chiller is active both pumps should be ON.

Upon start of lead chiller CH-3, or CH-4, the initial flow rate setpoint shall be set to 4,500 gpm for 15 minutes.

Upon start of lag chiller CH-3, or CH-4, the pump speed shall be held constant for 15 minutes.

Operation if tank is not fully charged

If the average of top two tank sensors is > 46F (ADJ), then:

Perform the following trim and respond code every 30 Sec:

If average of active compressors % RLA is less than 95% increase flow set-point by 100 GPM

If average of active compressors % RLA is greater than 98% decrease flow set-point by 100 GPM

Operation if tank is full

While the average temperature of the top two tank sensors is <= 46 F, the flow setpoint shall then be reset using the following logic every 30 seconds:

Comments: this line functions to avoid overloading chillers

If average %RLA of active compressors is > 98%, decrease flow set-point by 100 gpm

Comments: this line functions to load up chillers by having the chiller take on load currently being served by tank

If average %RLA of active compressors is < 95% and tank discharge rate > 500 gpm (ADJ), increase flow set-point by 100 gpm

Min flow shall never fall below 1,600 GPM

Max flow shall not go above 8,500 GPM

**NOTE: this assumes that the tank discharge flow rate responds appropriately and will decrease or increase flow to compensate for changes in TES CH3 & CH4 flow.*

**NOTE: Care should be taken to make sure the sign (charging or discharging) for the tank flow rate is accurate and that the charging flow rate is never used.*