STANDARD OPERATING PROCEDURE # FDO 4.012

Subject: Heating Hot Water Boiler (No 1 & No. 2) Routine Start-Up on Fuel Oil

Purpose and Scope: A standard procedure used to put the No. 1 and No. 2 boiler in service using fuel oil when other campus heating systems are not in use.

Procedures:

1. Check to confirm that no other heating systems are in service.
2. Confirm that the secondary hot water loop is filled with water and the make-up water supply regulator maintains 50 psig.
3. Establish a water flow through the secondary hot water loop by placing the Variable Frequency Device (VFD) controls in the “AUTO” position to activate the Siemens automated control system.
4. Start the primary circulating pump to establish a water flow through the boiler.
5. Open all valves on the fuel oil supply and return line.
6. Start one of the fuel oil supply pumps using the selector switch on the control panel.
7. Verify that the fuel oil pressure holds steady at 80 psig.
8. Place the fuel selector switch on the boiler control panel in the “OIL” position.
9. Place the manual/auto damper control switch in the “AUTO” position.
10. Open the boiler control panel and place the internal auto/manual proportional control switch in the “MANUAL” position and turn the potentiometer clockwise to its’ limit.
11. Place the on/off switch in the “ON” position.
12. Monitor the boiler start-up sequence and turn the on/off switch to the “OFF” position if proper ignition of the burner does not occur.
13. When the burner flame has stabilized, adjust the proportional control potentiometer to increase the burner firing rate to a level that will slowly bring the secondary hot water circulating loop temperature within normal operating range.
14. Place the internal auto/manual proportional control switch in the “AUTO” position and turn the proportional control potentiometer counterclockwise to the maximum setting.
15. Close and lock the boiler control panel.
16. Place the external auto/manual control switch in the “AUTO” position to activate the Siemens automated control system.

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