Functional Test

Project:_____

FT-____ HEATING FAN COIL FCU-1

Related Tests: Boilers

1. Participants

Party	Participation

Party filling out this form and witnessing testing _____
Date of test _____

2. Prerequisite Checklist

a. The following have been started up and startup reports and prefunctional checklists submitted and approved ready for functional testing:__ FCU-1
b. __ Boilers 1; 2 have successfully completed functional testing.
c. __ All control system functions for this and all interlocking systems are programmed and operable per contract documents, including final setpoints, schedules, debugging, loop tuning and sensor calibrations complete.

_____ _____
Controls Contractor Signature or Verbal Date

d. __ All A/E punchlist items for this equipment corrected.
e. __ Safeties and operating ranges reviewed.
f. __ Test requirements and sequences of operation attached.
g. __ Schedules and setpoints attached.
h. __ Have all energy savings control strategies, setpoints and schedules been incorporated that this equipment and control system are capable of? If not, list recommendations below.
i. __ **BAS Program Review.** Review the BAS software control program(s) for this equipment. Parameters, setpoints and logic sequences appear to follow the specified written sequences.
j. __ **Packaged Control Program Review.** Review the packaged control program(s) for this equipment. Parameters, setpoints and logic sequences appear to follow the specified written sequences.
k. __ Record of All Values for Current Setpoints (SP), Control Parameters, Limits, Delays, Lockouts, Schedules, Etc. Changed to Accommodate Testing:

Parameter	Pre-Test Values	Returned to Pre-Test Values √
FCU-1 setpoint		

Parameter	Pre-Test Values	Returned to Pre-Test Values √

Notes:

3. Sensor Calibration Checks.

Check the sensors listed below for calibration and adequate location. This is a sampling check of calibrations done during prefunctional checklisting. Test the packaged controls and BAS readings.

"In calibration" means making a reading with a calibrated test instrument within 6 inches of the site sensor. Verify that the sensor reading (via the permanent thermostat, gage, packaged control panel or building automation system (BAS)) compared to the test instrument-measured value is within the tolerances specified in the prefunctional checklist requirements (_____). If not, install offset in BAS, calibrate or replace sensor. Use the same test instruments as used for the original calibration, if possible.

Sensor & Location	Loc-ation OK[1]	**1st** Gage or Pkg & BAS Values	Instru. Meas'd Value	**Final** Gage or Pkg & BAS Values	Pass Y/N?
FCU-1 stat temp.		Stat:		Stat:	

[1]Sensor location is appropriate and away from causes of erratic operation.

4. Device Calibration Checks.

---NONE---

5. Verification of Misc. Prefunctional Checks.

Misc. site checks of the prefunctional checklist and startup reports completed successfully. Pass? Y / N _____
__ Unit mounted securely. __ Unit accessible for servicing. __ No unusual noise or vibration in fan.

6. Functional Testing Record

Proced. No. & Spec. Seq. ID[1]	**Req ID No.[2]**	**Test Procedure[3]** (including special conditions)	**Expected and Actual Response[4]** [Write ACTUAL response in brackets or circle]	**Pass Y/N & Note #**
1 Seq. 1		Adjust the stat setpoint until it is equal to the space temp.	__Fan starts. __ Heating coil valve opens; __warm air delivered.	
2 Seq. 1		Adjust the stat setpoint until it is 4F below the space temp.	Fan stops. Heating coil valve closes.	
3	**--**	**Return all changed control parameters and conditions to their pre-test values[5]**	**Check off in Section 2 above when completed**	

Record Foot Notes
[1]Sequences of operation specified in Contract Documents (attached).
[2]Mode or function ID being tested, per testing requirements section of the project Specifications.
[3]Step-by-step procedures for manual testing, trend logging or data-logger monitoring.
[4]Include tolerances for a passing condition.
[5]Record any permanently changed parameter values and submit to Owner.

-- END OF TEST --

Notes: