SECTION 25 3528  
GUIDELINES FOR CONTROL SEQUENCES

PART 1 - GENERAL

1.1 SUMMARY
a. Section includes control sequence guidelines for building control systems. The project will develop the required sequence of operations. This section provides Stanford’s desired theory of operation for key processes.
b. Related Sections:
   1). 25 0000 Integrated Automation

1.2 REFERENCES
a. Refer to 25 0000 Integrated Automation

1.3 DEFINITIONS
a. Refer to 25 0000 Integrated Automation

1.4 SYSTEM DESCRIPTION
a. Refer to 25 0000 Integrated Automation

1.5 SUBMITTALS
a. Refer to 25 0000 Integrated Automation

1.6 QUALITY ASSURANCE
a. Refer to 25 0000 Integrated Automation

PART 2 - PRODUCTS

2.1 NOT USED

PART 3 - EXECUTION

3.1 UTILITY HOT WATER TO BUILDING HEATING HOT WATER INTERFACE
   A. Heating Hot Water temperature set point shall be reset based upon outside air or other Owner approved demand based reset input.
   B. Heating Hot Water temperature set point shall be reset as needed to always be at least 5 deg F below the actual Utility Hot Water supply temperature.
   C. The Utility Hot Water return temperature should be kept as low as possible through control and monitoring all applicable systems.

3.2 AIR HANDLING UNIT
   A. Include supply static pressure reset based on VAV requests
   B. Include supply temperature reset based on VAV requests. Supply temperature sequence shall initiate when static pressure sequence has reached its minimum value.
C. Include optimal start sequence.

D. Include economizer sequences such as damper sequencing, and economizer set point offset from supply air set point.

E. Include freeze protection for chilled water coil.

F. Use of hot water coil as pre-heat only (55° fixed set point)

3.3 VARIABLE AIR VOLUME WITH RE-HEAT

A. Include box minimum flow set point

B. Include heating max and cooling max flow

C. Cooling PI loop to reset actual flow set point

D. Heating PI loop to reset supply air temp set point and min/max heating flow

E. Effective room set point shall be the combination of center set point +/- thermostat adjustment and global offsets.

F. Room temperature, damper and valve requests multiplied by zone priority with be summed together with similar rooms to generate resets to serving air handlers.

END OF SECTION