Sequences of Operation

The return fan speed will be modulated to maintain a slightly positive building pressure in relation to the outdoors. The fan will not be allowed to operate below 15 Hz frequency.

The outdoor, exhaust and return air dampers modulate simultaneously to maintain the supply air temperature at set point when the economizer is engaged. Economizer disables at outdoor air temperature of 70°F. During occupied hours, they will not allow outdoor air flow to drop below minimum ventilation requirements.

Changes in downstream VAV box dampers will affect the static pressure in the supply air duct. Closing VAV dampers will raise the pressure, which will be an indication less flow is needed and the supply fan should slow down. The fan will modulate to maintain static pressure at set point but will not be allowed to operate below 15 Hz frequency.

The hot water and chilled water control valves will be modulated when needed to maintain the supply air temperature at set point. They should never be opened at the same time during normal operation, but the chilled water control valve may be opened at the same time the economizer is engaged.