

HYDRONIC DIFFERENTIAL PRESSURE RESET

No/Low Cost Opportunity



OVERVIEW

Variable speed drive (VSD) equipped pumps are programmed to increase or decrease speed according to a differential pressure across the supply and return pipes in a chilled water or hot water system. By allowing the differential pressure setpoint to modulate, pumps can further reduce their speed during low load conditions. This sequence can be programmed to modulate based on zone demands within the space.

CONSIDERATIONS

- More effective in buildings with varying internal loads.
- Diagnose and repair rogue zones that may prevent the sequence from rendering.
- Requires variable speed pumping, calibrated pressure sensors, and direct digital control (DDC) building automation.

KEY PERFORMANCE INDICATORS (KPIs)

- ▶ **0.5-1 point energy use intensity (EUI) reduction potential**
- ▶ **0.5% sitewide electric savings**
- ▶ **<1 year simple payback** *if system is of a variable flow configuration*