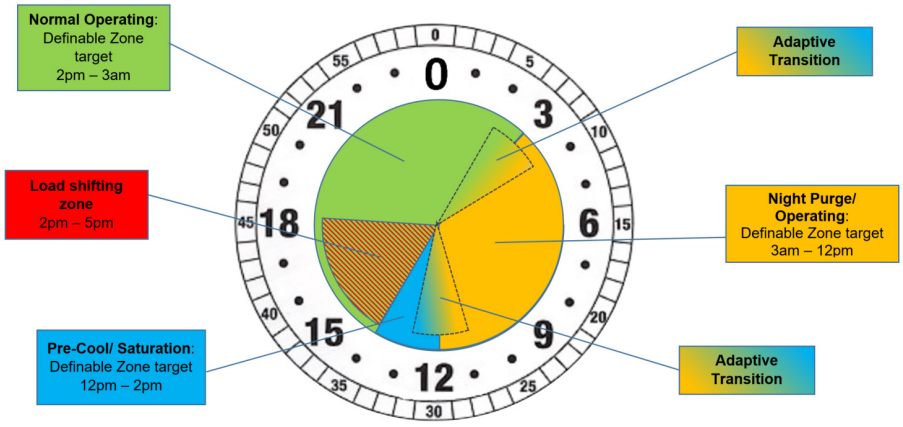
PHOENIXET
An IoT BI Analytics Company

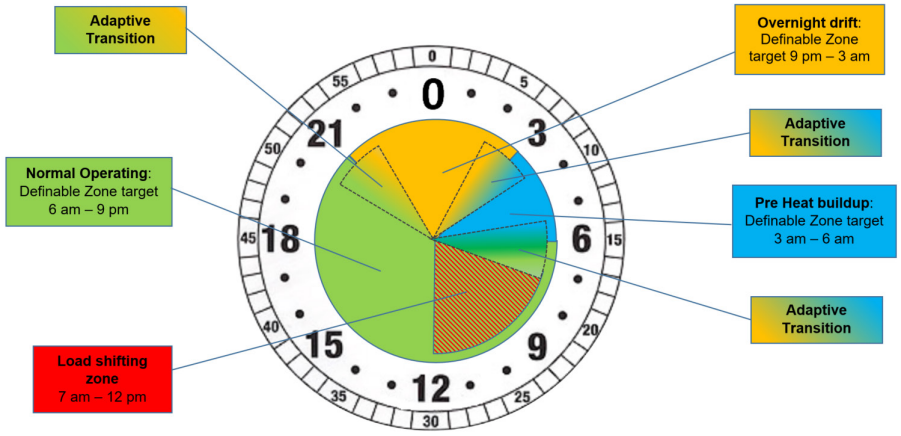
INTRODUCTION TO ADAPTIVE ENERGY MANAGEMENT (AEM)

Adaptive Energy Management (AEM) is an innovative and proprietary approach to energy management. AEM is a dynamic approach, continuously analyzing current conditions and proactively acting to take advantage of less expensive energy sources. This approach preserves the desired conditions while preparing for peak demand days - without compromising comfort or kWh usage. These optimizations are managed through a combination of Adaptive Heat Control and Adaptive Cooling Control.

Adaptive Cooling Control



Adaptive Heat Control (electric heat)



ADAPTIVE COOLING CONTROL

- Night Purge: Infusion of cooling into the building - The process uses "free" cooling when available, and mechanical cooling only when necessary to meet goals
- Adaptive Transition: Allowing building temperature to drift downward just enough to meet minimum comfort requirements
- Pre-Cool: Active infusion of mechanical cooling to supplement the thermal capacity that had been built up
- Load Shifting: Various tactics applied to suppress demand as the draw down of thermal capacity is at its peak
- Normal Operation/Recovery Period
- Adaptive Transition: Movement toward Night Purge

ADAPTIVE HEAT CONTROL (ELECTRIC)

- Overnight Drift: Temperature drifts at a controlled rate toward the unoccupied set point
- Adaptive Transition: Transition from overnight drift to pre-heat based on current temperatures
- Pre-Heat: Active infusion of heating in anticipation of winter morning peak demand
- Adaptive Transion: Allowing building temperature to drift downward slightly to shift demand for occupancy
- Load Shifting: Various tactics applied to suppress demand as thermal capacity is at its peak (intersection of demand control and comfort)
- Normal Operation/Recovery Period

For more information, please visit **www.phoenixet.com** or email **sales@phoenixet.com**

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