

POC:

Date:

Indicate likelihood of ECM viability: **H** (high), **M** (medium), **L** (low), **!** (Exists wth Problems), **~** (Exists,/Ignore) or **N/A**:

### *Scheduling*

- 1.1 **Trim Building Schedule**
- 1.2 Holiday HVAC Exceptions
- 1.3 HVAC Start-Up Optimization
- 1.4 HVAC Shut-Down Optimization
- 1.5 Zone-Level Scheduling
- 1.6 DHW Return Pump Scheduling
- 1.7 Interior Lighting Circuit Scheduling
- 1.8 Exterior Lighting Circuit Scheduling
- 1.9 Electrical Equipment Scheduling

### *Setpoint Value Adjustments*

- 2.1 **Adjust zone temperature setpoints**
- 2.2 Adjust zone humidity setpoints
- 2.3 Adjust MAT setpoint
- 2.4 Adjust coil discharge setpoint
- 2.5 Adjust hydronic supply setpoint
- 2.6 Adjust pressure discharge setpoint
- 2.7 Adjust zone CFM setpoints
- 2.8 Adjust lighting levels (delamp)

### *Automatic Setpoint Reset Sequences*

- 3.1 **Duct Static Pressure Setpoint Reset**
- 3.2 Supply Air Temperature Setpoint Reset
- 3.3 Mixed Air Temperature Setpoint Reset
- 3.4 Min OA Flow Setpoint Reset
- 3.5 Zone Flow Setpoint Reset
- 3.6 Hydronic Storage Temperature Setpoint Reset
- 3.7 Hydronic Pressure Setpoint Reset
- 3.10 Hydronic Temperature Setpoint Reset
- 3.11 Zone Temperature/Humiditdy Setback
- 3.12 Low-Use Equipment Standby
- 3.13 Daylight Sensors

### *No-Load Disables*

- 4.1 Time-Delay Hydronic Pump Disable
- 4.2 **Outside-Air Boiler/Chiller Lockout**
- 4.3 Valve-Based Boiler/Chiller Lockout
- 4.4 HVAC Equipment Standby/Override Only
- 4.5 HVAC Occupancy Sensors
- 4.6 Lighting Occupancy Sensors or Timers
- 4.7 Exterior Lighting Motion Sensors or Timers
- 4.8 Electrical Equipment Demand-Only

### *Oversized Equipment*

- 5.1 **Pump Optimization (Throttle, VFD, or Trim)**
- 5.2 Fan Resheave
- 5.3 Thermal Flywheel or Buffer Tank
- 5.4 Boiler/Chiller Resizing
- 5.5 Reduce Lighting via Fixture/Bulb Replacement

### *Load Reduction*

- 6.1 Remove Air-Side Pressure Drop
- 6.2 Remove Water-Side Pressure Drop
- 6.3 **Simultaneous Heating & Cooling Mitigation**
- 6.4 Envelope Entry Improvements
- 6.5 Decommission Unused Electronic Equipment

### *Variable Volume*

- 7.1 **Constant to VAV AHU Retrofit**
- 7.2 VAV Multizone or Dual Duct Retrofit
- 7.3 Return/Relief Fan Optimization
- 7.4 Variable Exhaust or Flow Hood Retrofit
- 7.5 Variable Hydronic (Pump/System DP)
- 7.6 Variable Hydronic (OA or Valve-Based)
- 7.7 Primary-Secondary Reconfiguration

### *BAS Repairs*

- 8.1 **Correct BAS Communication Errors**
- 8.2 Correct BAS Logic Errors
- 8.3 Calibrate Sensors: Temp, Pressure, Occ, or CO2
- 8.4 Relocate/Replace Sensors
- 8.5 Repair Actuators: Damper, Valve, or Relay
- 8.6 Control Loop Tuning
- 8.7 BAS Replacements or Upgrades

### *Equipment Efficiency*

- 9.1 Drive Upgrades: Motor, Pump, Fan, VFD, or Belt
- 9.2 **Maximized Condensing Boiler Operations**
- 9.3 Optimized Chiller Staging
- 9.4 Zone-level 1st Stage HVAC
- 9.5 Economizers: Optimized Enable/Disable
- 9.6 DHW Heater: Condensing/Instant/Utility Switch
- 9.7 Lighting Bulb Type Retrofit

**Installation:**  
**Building:**

# ECM Checklist



## *Human Behavior & Occupant Comfort*

- \_\_\_\_\_ 11.1 Inadequate Signage or Instruction
- \_\_\_\_\_ 11.2 Occupant Start-up/Shutdown Procedures
- \_\_\_\_\_ 11.3 Occupant Bypass of Facility Systems
- \_\_\_\_\_ 11.4 Missing HVAC/Lighting Override Capabilities
- \_\_\_\_\_ 11.5 Energy Conservation Incentivization
- \_\_\_\_\_ 11.6 Thermal Comfort Complaints

## *Water Savings*

- \_\_\_\_\_ 11.1 Utility-Level Leak Detection
- \_\_\_\_\_ 11.2 HVAC Makeup Water Tracking
- \_\_\_\_\_ 11.3 Irrigation Improvements
- \_\_\_\_\_ 11.4 Optimize Non-Potable Water Flows
- \_\_\_\_\_ 11.5 Mitigate Evaporative Cooling Water Losses
- \_\_\_\_\_ 11.6 Process/Cleaning Process Improvements

## *O&M Processes*

- \_\_\_\_\_ 10.1 Filter Replacements
- \_\_\_\_\_ 10.2 Equipment Tuning/Treatment/Blowdown
- \_\_\_\_\_ 10.3 **MCC/Controller H-O-A or DDC Overrides**
- \_\_\_\_\_ 10.4 Gaps in Staffing, Training, or Workflow

## *Misc*

- \_\_\_\_\_ 12.1 \_\_\_\_\_
- \_\_\_\_\_ 12.2 \_\_\_\_\_
- \_\_\_\_\_ 12.3 \_\_\_\_\_
- \_\_\_\_\_ 12.4 \_\_\_\_\_
- \_\_\_\_\_ 12.5 \_\_\_\_\_
- \_\_\_\_\_ 12.6 \_\_\_\_\_
- \_\_\_\_\_ 12.7 \_\_\_\_\_
- \_\_\_\_\_ 12.8 \_\_\_\_\_

Notes: