

C&I Energy Efficiency and Electrification Program Guidelines

Building Automation Systems

The following is the minimum information required for energy conservation measures (ECM's) related to centralized Building Automation System (BAS) controls.

1. Overview:

The BAS comprises of both hardware and software that combine to produce a seamless architecture and complete integration of a building's HVAC systems and may include control over, or monitoring of, lighting, security, and fire systems in the building. The BAS can continuously and automatically monitor and—through control of the HVAC mechanical and refrigeration systems—maintain desired ambient temperature, static pressure, relative humidity, indoor air quality (IAQ), and energy management.

The control system normally comprises several microprocessor-based controllers that have electronic sensors connected to measure temperatures, pressures, electrical current, status, and other environmental variables. These inputs can be either binary (on/off), such as fan status, or analog (variable), such as static pressure. The signals from the analog inputs are digitized for further processing. The controllers run a program to compare the measured values to the desired results and, using proportional-integral-derivative (PID) algorithms, fuzzy logic, or other such mechanism, determine how the system outputs should be controlled.¹

2. Eligibility Requirements

a. Eligible Projects

Projects must involve either:

- **First-time installation** of a building-level BAS, or
- **Expansion of an existing BAS** by adding **new** control sequences

b. Projects NOT Eligible

The following are **not eligible** for BAS incentives:

- Replacement of an existing BAS **in-kind**, even if obsolete
- Software-only upgrades
- Local controls on individual equipment that are **not integrated** into a building-level BAS
- Variable frequency drive installations operating in **local-only** mode without BAS integration
- Projects lacking building-level interoperability or centralized programming
- Subscription BASs with contract term durations less than 7 years. Subscription contracts must be submitted with all subscription BAS measures for eligibility considerations.

3. Application Pathways

The Con Edison C&I Program supports two pathways for BAS incentive applications:

Pathway 1 – Con Edison BAS Tool

Recommended path for most commercial buildings when scope of work involves implementation of the below noted BAS operational sequences:

¹ ASHRAE Guideline 13-2024

1. System Schedules & Unoccupied Setbacks
2. Optimal Start/Stop
3. Chilled Water Temperature Reset
4. Boiler Hot Water Temperature Reset
5. Demand Control Ventilation
6. Economizer Control (Dry Bulb or Dual Enthalpy)
7. Supply Air Discharge Temperature Reset
8. Supply Air Discharge Static Pressure Reset
9. Condenser Water Temperature Reset

Required Documentation

1. Completed Con Edison BAS calculator.
2. If fossil fuel is not gas, most recent annual fossil fuel billing usage data. (Note: Gas provided by other utility companies is not incentivized.)
3. Simplified Scope of Work using [Table 1](#) as a template at the time of application.
4. Finalized detailed sequence of operation after installation and commissioning.

Pathway 2 – Custom

Use this pathway when:

- The building uses unique or advanced control strategies not modelled in the Con Edison BAS calculator.
- Existing building type or system configurations are not reflected in the tool
- Robust, project specific and supported Building Energy Modeling or Technical Analysis, is used to calculate energy savings. Submitted models must conform to the allowable custom modelling software requirements stipulated in the Con Edison C&I Program Manual.

It is strongly recommended that applicants utilize Pathway 1 when applicable.

Required Documentation

1. A detailed scope of work narrative that contains:
 - a. Scope of Work area (areas that are impacted by the BAS project).
 - b. Nature of the project: **Installation of New BAS** or **Expansion of Existing BAS** by adding new control sequences.
 - c. Information on the existing HVAC system and its current operation (including equipment name, capacity, efficiency, hours of operation, control strategies etc) that is impacted by the BAS project.
 - d. Proposed control measures with information on detailed control strategies and what equipment/major parts (name and quantity) are installed to enable the control sequence(s).
2. Building existing mechanical equipment schedule that contains all controlled mechanical equipment, including air handlers, chillers, pumps, cooling towers, heat exchangers, etc.
3. Existing detailed sequence of operation for equipment with associated control parameters, such as capacities, flow rates, and set points.
4. Proposed detailed sequence of operation from the BAS vendor, with associated control parameters such as start/stop time, setback values, temperature/static pressure reset points, etc. The contents related to saving calculations should be highlighted in the document.
5. An engineering analysis of the estimated energy savings (saving calculation) based on implementation of the proposed measures. It must:

- a. Meet all requirements for custom engineering analysis defined in Con Edison guideline for Custom Measures under C&I Program.
 - b. Use the existing system operation as the baseline.
 - c. In cases where a project includes multiple ECMs, the engineering analysis must ensure that energy savings impacts due to each measure do not overlap. For example, if one measure is system scheduling/unoccupied setback, and the next measure is static pressure reset, the baseline energy consumption for the static pressure reset measure shall use the reduced hours after scheduling measure is implemented.
6. If fossil fuel is not gas, most recent annual fossil fuel billing usage data. (Note: Gas provided by other utility companies is not incentivized.)

4. Savings Capping Rules (Apply to ALL BAS Projects)

Effective **January 30, 2026**, all projects that include BAS measures, regardless of the pathway selected, are subject to the following savings caps:



15% Maximum Allowable Savings on Building Electric Consumption



**21% Maximum Allowable Savings on Building Fossil Fuel Consumption
(Gas, Oil, or Steam)**

- Caps are applied based on 12-months of total annual building consumption over the preceding 12 months using the month of the application submission date for the project. Savings caps will not be retroactively applied to projects submitted prior to the Jan 30, 20226 effective date.
- All BAS projects for the same building, whether submitted as a single project, in phases, or as multiple separate applications, are treated as one aggregated BAS effort for the purpose of applying savings caps. Submitting work in smaller or sequential pieces does not reset or increase the allowable savings limit. In these cases, the total annual building consumption would be derived from the consumption during the 12 months preceding the first BAS application submission month.
- If the building is undergoing other large-scale energy efficiency project(s), for example building level envelope upgrade or heat pump installation at approximate same time, the highest saving potential of the project will be based on estimated annual consumption after those other project(s) completed.

Examples

Example Case 1: Multi-Phase New BAS Installation

Building A is installing a new BAS and plans to finish the project in 2 phases. The proposed control sequences are the same for both phases. Phase 1 project is for the lower floors, to be submitted and completed in 2026, while phase 2 project is for the upper floors, to be submitted and completed in 2027. The phase 1 project is submitted in February 2026. The total saving to be claimed from these two projects cannot be higher than 15% of electric consumption and/or 21% of fossil fuel consumption of the building during 2025.02~2026.01.

Example Case 2: Multi-Phase BAS Upgrade

Building B is upgrading an existing BAS by adding new control sequences to it. The project will be done in two phases. Phase 1 project is chiller plant optimization, submitted in February 2026 and to be completed in June 2026, while phase 2 project is AHU optimization, submitted in March 2026 and to be completed in September 2026. The total saving to be claimed from these two projects cannot be higher than 15% of electric consumption and/or 21% of fossil fuel consumption of the building during 2025.02~2026.01.

Example Case 3: Heat Pump Electrification and BAS upgrade

Building C installed heat pump system to serve the lower floors in November 2025 (project submitted to Con Edison in March 2025) and has an additional project which will install more heat pumps in 2026 so that the entire building will be fully on electric heating. A BAS project is also planned in 2026 to control the building's upgraded HVAC system. The BAS project and the 2026 heat pump project are both submitted in February 2026. Because the heat pumps are recently installed or yet to be installed, majority building energy consumption during the previous 12 months at the time of BAS project application are based on fossil fuel heating system. The total savings to be claimed from the BAS project cannot be higher than 15% of electric consumption and/or 21% of fossil fuel consumption of the building during 2024.3~2025.2 minus savings from the two heat pump projects.

Table 1

Scope of Work for Affected Area 1 (To be filled by or with assistance from BAS vendor) *						
Sub-Measures	In SOW (Y/N)	Existing Operations	Existing Control Set Points	Proposed Modification	Proposed Control Set Points	Equipment Installed to Enable this Measure
System Schedules and Unoccupied Setbacks	Y	No scheduling and the HVAC system operates 24/7 with the same setting for occupied and unoccupied mode.	70F for heating and 72F for cooling, ventilation fan on for all time periods.	HVAC system scheduling based on space operation hours.	4F temperature setback, ventilation fan off for unoccupied periods.	BMS hardware and occupancy sensors that enable remote building level monitoring, control, and adjustments.
Optimal Start / Stop	Y	Fixed start and stop times for HVAC systems, regardless of actual indoor or outdoor conditions.	Maintain standard comfort levels (e.g., 72°F cooling, 70°F heating) from well before occupancy begins until long after it ends.	BMS dynamically adjusting system start and stop time based on factors including indoor temperature trends, outdoor weather, and building thermal response.	Setpoints remain the same during occupied hours but are applied more efficiently, with the system starting only as early as needed to reach setpoints by occupancy and shutting down as soon as conditions allow.	Advanced BMS hardware and software with predictive algorithms, temperature sensors throughout the building, and integration with weather forecasting tools.
Reset Chilled Water Temperature						
Reset Air Static Pressure						
Reset Boiler Water Temperature						

Scope of Work for Affected Area 1 (To be filled by or with assistance from BAS vendor) *						
Sub-Measures	In SOW (Y/N)	Existing Operations	Existing Control Set Points	Proposed Modification	Proposed Control Set Points	Equipment Installed to Enable this Measure
Demand Control Ventilation						
Economizer Control - Dry Bulb or Dual Enthalpy						
Reset Supply Air Discharge Temperature						
Reset Condenser Water Temperature						

*This table is an example. Please make sure to fill in information related to your project.