

Business Energy Efficiency Programs

2024 Mid-Year Application Requirement Changes

Below is a list of changes resulting from our mid-year review of measure requirements. If you see any discrepancies between the information on this document and that within the most up-to-date versions of the Program Application, Catalog, or Policies and Procedures Manual, please consider this guide as the single source of truth.

Changes Affecting Many Measures in Multiple Categories

A variety of minor changes to measure requirements, including eliminations, were made to many measures throughout the Catalog to improve clarity, consistency and alignment with MPSC requirements (too numerous to list each and every change). Listed below are specific, significant changes that affect many measures in multiple categories.

- **Compliance with local and/or state code and authorities having jurisdiction**
 - » Removed requirement from individual measures and moved to general project requirements section, as this requirement is applicable to all measures. (Catalog pg. 8)
- **Backup and Redundant Equipment** (backup and redundant equipment is not eligible for incentives)
 - » Revised to require verification of whether all units in the system are required to run simultaneously to meet the peak facility or process heating or cooling demand, vs. unit capacities and peak facility or process heating or cooling demand for all applicable measures.
- **Equipment Utilization**
 - » May submit annual hours of operation vs. detailed operating schedule for nearly all applicable measures.
 - » Clarified whether number of operating shifts is based on a 5-day week vs. a 7-day week, as appropriate.
- **Size of Affected Area**
 - » May submit a list of areas and square footages vs. a scaled floor plan for nearly all applicable measures.
- **Pre-Existing and New Equipment Design or Control Strategy Documentation**
 - » Replaced generic design or control strategy documentation requirements with a specific documentation requirements for nearly all applicable measures.
- **Elimination of Redundant Statements of Requirements**
 - » Eliminated redundant statements of requirements in favor of stating in documentation requirements only.

Changes Affecting Individual Measures

Listed below are specific, significant changes that affect individual measures.

- **Exterior LED Lighting (LT201)**
 - » Removed canopy lighting fixtures from the list if ineligible fixture types. (Catalog pg. 12)
- **Non-Defined LED Lighting (LT302 - LT303)**
 - » May submit several areas on the same measure sheet vs. each area on a separate sheet. (Catalog pg. 16, Application pg. 11)
 - » Eliminated simple payback period eligibility requirement and corresponding "Electric Utility Rate", "Annual Cost Savings" and "Simple Payback Period" fields on Application. (Catalog pg. 16, Application pg. 11)
- **New Construction LED Lighting Power Density (LT401 - LT403)**
 - » May submit COMcheck certificate, scaled building plans, or lighting fixture and lamp schedules (vs. all three) with the Pre-Notification Application. (Catalog pg. 17)

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Changes Affecting Individual Measures (continued)

- **Interior Lighting Occupancy Sensor Controls (LC101a, LC101b, LC101c)**
 - » Eliminated requirement to submit inventory of controlled fixtures (still required for LC102). (Catalog pg. 18)
- **Lighting Controls (LC101 - LC109)**
 - » Eliminated "# of Sensors" field on Application. (Application pg. 13)
- **Networked Lighting Controls (LC110, LC111)**
 - » Eliminated energy use reporting capability and data submittal requirement for facilities with controlled areas totaling less than 100,000 square feet. (Catalog pg. 21)
 - » Eliminated simple payback period eligibility requirement and corresponding "Current Energy Cost" and "Simple Payback Period" fields on Application. (Catalog pg. 21, Application pg. 13)
 - » Eliminated outdated requirements and clarified remaining requirements. (Catalog pg. 21)
- **Variable Frequency Drives - Fixed Speed (VF106 - VF110, VF205, VF206, VF208, VF212, VF213)**
 - » Eliminated motor rated frequency documentation requirement. (Catalog pgs. 22, 23, 25-28)
 - » Simplified post-installation frequency documentation requirement. (Catalog pgs. 22, 23, 25-28)
- **Variable Frequency Drives on Process Pumps and Fans - Fixed Speed (VF205, VF206)**
 - » Eliminated metering requirement for motors rated greater than 50 HP. (Cat. pgs. 24-25, App. page 15)
- **Variable Frequency Drives on Open Loop Pumping Systems (VF208)**
 - » Eliminated VFD Information Worksheet and Metering requirements for motors rated greater than 50 HP. (Catalog pg. 25-26, Application pg. 15)
 - » Revised control methodology requirement to be specific to open loop pumping systems vs. the current generic requirement. (Catalog pg. 26)
- **Variable Frequency Drives on Process Cooling Tower Fans (VF212)**
 - » Eliminated metering requirement for motors rated greater than 50 HP. (Cat. pgs. 26-27, App. page 15)
- **VSD, VD and 2-Stage Air Compressors (CA101 - CA109)**
 - » Reduced existing air compressor documentation requirements to system configuration and flow control methods, and added corresponding check boxes on Application. (Catalog pgs. 30-33, Application pg. 17)
 - » Reduced new air compressor documentation requirement to model number, rated horsepower and annual hours of operation, and added "Estimated New Air Compressor Hrs/Year" field to Application. (Catalog pgs. 30-33, Application pg. 17)
- **Two-Stage Rotary Screw Air Compressor (VSD/VD/LNL Type) (CA109)**
 - » Measure name and requirements revised to clarify only VSD, VD and LNL type air compressors are eligible for this measure. (Catalog pg. 33)

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Changes Affecting Individual Measures (continued)

- **Compressed Air Dryers (CA110 - CA116)**
 - » Added check boxes on Application for flow control type for air compressors and eliminated existing air compressor characteristics verification requirements except (Catalog pgs. 33-34, Application pg. 17):
 - ◊ **CA113, CA116** - Verify total combined system horsepower for air compressors. (Catalog pgs. 33-34)
 - » Added check boxes on Application for existing compressed air dryer type and eliminated existing compressed air dryer characteristics verification requirements. (Catalog pgs. 33-34, Application pg. 17)
- **Compressed Air Energy Audit and Leak Repair (CA201 - CA206)**
 - » Reduced compressed air system total combined rated horsepower eligibility threshold from 50 HP to 10 HP. (Catalog pg. 37-38, Application pg. 18)
- **High-Efficiency Plastic Injection Molding Machines, All-Electric or Hybrid (MA101a, MA101b)**
 - » Eliminated requirement to verify annual production rate and eliminated corresponding fields on Application. (Catalog pg. 45-46, Application pg. 20)
- **Fiber Laser Cutting Equipment (MA102)**
 - » Eliminated requirement to verify cycle time. (Catalog pgs. 46)
- **Process Dryer Flow Rate Control with Relative Humidity Sensor (MA103)**
 - » Clarified that this is a natural gas measure, not an electric measure. (Catalog pg. 44, Application pg. 20)
 - » Eliminated TAB agent certification requirement for air flow data that is required to be recorded and submitted. (Catalog pgs. 46-47)
- **Process Oven Exhaust Flow Rate Reduction (MA108 - MA111)**
 - » Increased minimum annual operating hours requirement to 4,567 hours (vs. 4,000 hours). (Catalog pg. 48)
- **Recuperative or Regenerative Thermal Oxidizer (MA112, MA113)**
 - » Eliminated requirement to verify exhaust gas temperature while in operation. (Catalog pg. 48-49)
- **Barrel Wrap Insulation for Injection Molders or Extruders (MA115)**
 - » Eliminated requirement to verify barrels are uninsulated prior to installation. (Catalog pg. 49)
 - » Eliminated pre-notification requirement. (Catalog pg. 49, Application pg. 21)
- **Inverter Welders (MA116)**
 - » Eliminated Arc Mode time eligibility requirement. (Catalog pg. 49)
- **High-Efficiency Data Center, Telecom, or Computer Room Air Conditioning Systems (HV102)**
 - » Eliminated pre-notification requirement from Application (Catalog was correct). (Application pg. 22)
- **High-Volume, Low-Speed Fans (HV301, AG112)**
 - » Added requirement to submit a list of existing fans in the affected space, or verify there are no existing fans, with the Final Application. (Catalog pg. 55, 105)

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Changes Affecting Individual Measures (continued)

- **Destratification Fans (HV302)**
 - » Eliminated temperature measurement requirements, except if documentation cannot be provided to verify the affected area for a non-HVLS fan. (Catalog pg. 55)
 - » Added eligibility to use submitted documentation to determine affected area vs. using five times fan diameter based affected area calculation. (Catalog pg. 55)
 - » Replaced fan diameter limitation on use of five times fan diameter based affected area calculation with HVLS vs. Non-HVLS fan diameter determination requirements. (Catalog pg. 55)
- **Infrared Heaters (HV313, HV314)**
 - » Eliminated thermostat setpoint reduction requirement and corresponding Affidavit requirement. (Catalog pg. 57, Application pg. 25)
 - » Replaced requirement to provide a drawing with requirement to provide a list of space heating equipment being replaced. (Catalog pg. 57)
- **Web-Based, and Light Commercial, Building Automation Systems (BA101, BA102)**
 - » Eliminated requirement to provide estimated cost with Pre-Notification Application. (Catalog pgs. 59-60)
- **Web-Based, and Light Commercial, Building Automation Systems (BA101, BA102)**
 - » Eliminated requirement to provide estimated cost with Pre-Notification Application. (Catalog pgs. 59-60)
- **Optimal Start on Air Handling Units (BA103)**
 - » Eliminated requirement to verify specific equipment controlled. (Catalog pgs. 61)
- **Hydronic HVAC Pump Control (BA106)**
 - » Eliminated current annual operating hours threshold eligibility requirement. (Catalog pg. 62)
 - » Reduced minimum hours per year the pump must be disabled from 3,000 to 2,200 hours. (Catalog pg. 62)
- **Hotel Guest Room Occupancy Sensors (BA201a, BA201b)**
 - » Eliminated requirement to verify temperature setpoints. (Catalog pgs. 64-65)
- **Occupancy Sensor Control for Smart Thermostats (BA203)**
 - » Eliminated potential intermittent occupancy data logging requirement. (Catalog pgs. 65-66)
 - » Eliminated requirement to verify temperature setpoints. (Catalog pgs. 65-66)
- **Demand Controlled Ventilation for HVAC System (BA204)**
 - » Eliminated controlled space temperature range requirement. (Catalog pg. 66)
 - » Eliminated requirement to verify pre-retrofit fresh air setpoint. (Catalog pg. 66)
- **Occupancy Sensor Control for HVAC System (BA205, BA206)**
 - » Eliminated potential intermittent occupancy data logging requirement. (Catalog pgs. 66-67)
 - » Eliminated requirement to verify temperature setpoints. (Catalog pgs. 66-67)

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Changes Affecting Individual Measures (continued)

- **Occupancy Sensor Controlled Restroom Exhaust Fans (≥ 70 CFM) (BA207)**
 - » Added minimum air flow rate requirement. (Catalog pg. 67, Application pg. 28)
- **Boiler Outdoor Reset Control (BA306)**
 - » Eliminated minimum water temperature setpoint requirement. (Catalog pg. 69)
- **Convert Air Handling System from Constant Volume (CV) to Variable Air Volume (VAV) Control (AE101)**
 - » Eliminated requirement to verify existing air handling system design and control strategy. (Catalog pg. 71)
 - » May submit a sequence of operation or mechanical drawings (vs. both) with the Final Application. (Catalog pg. 71)
- **HVAC Energy Recovery Units (AE102, AE103)**
 - » Eliminated requirement to provide model number and design supply fan air volume flow rate documentation with final app, as it is redundant with the general requirement to provide specifications. (Catalog pgs. 71-72)
- **Dust Collector Exhaust Air Energy Recovery (AE104)**
 - » Eliminated TAB agent certification requirement for air flow data that is required to be recorded and submitted. (Catalog pg. 72)
- **Waste Heat Recovery for Water Heating (AE107)**
 - » Only required to submit one or two months of makeup water usage data (vs. one year of data) with the Pre-Notification Application. (Catalog pg. 73)
 - » Eliminated requirement to submit boiler inlet water temperature measurement data with the Pre-Notification Application. (Catalog pg. 73)
- **Automatic Boiler Blow-Down Reduction (AE108)**
 - » Only required to submit one or two months of makeup water usage and water test data (vs. one year of data) with the Pre-Notification Application. (Catalog pg. 73)
- **Operating Room Air Changes per Hour (ACH) Setback (AE211, AE212)**
 - » Eliminated requirement to submit operating room schedule. (Catalog pg. 77)
 - » Eliminated requirement to submit existing air handling system controls documentation. (Catalog pg. 77)
- **Combustion Equipment Tune-ups (TU101 - TU106)**
 - » Replaced requirement to provide "Serial # or National Board #" with requirement to provide "Manufacturer and Model Number" on the Application. (Application pg. 33)
 - » Added "before" and "after" combustion efficiency fields on the Application (requirement to submit date and time stamped documentation of the "after" combustion efficiency test results remains). (Catalog pgs. 81-83, Application pg. 33)
 - » Moved list of required maintenance items from the Tune-up Checklist to the Catalog. (Catalog pgs. 81-83)
 - » Eliminated requirement to submit Tune-up Checklist. (Catalog pgs. 81-83)

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- **Chiller Tune-up (TU201)**
 - » Replaced requirement to provide "Serial # or National Board #" with requirement to provide "Manufacturer and Model Number" on the Application. (Application pg. 34)
 - » Eliminated requirement to verify nameplate cooling capacity. (Catalog pg. 83)
 - » Eliminated requirement to submit tune-up checklist. (Catalog pg. 83)
- **Steam Trap Monitoring System for Space or Process Heating System (TU202, TU203)**
 - » Eliminated requirement to provide steam system characteristics. (Catalog pg. 84)
- **Replaced or Repaired Outside Air Damper Assembly (TU204)**
 - » Eliminated "Size of Damper" and "# of Dampers" fields on Application. (Application pg. 34)
- **Occupancy Sensors for Case Cooler and Freezer LED Lighting (RL117)**
 - » Replaced requirement to provide specifications for the controlled lighting with a requirement to verify the refrigerated case has LED lighting. (Catalog pg. 90)
 - » Eliminated the following requirements (Catalog pg. 90):
 - ◇ Sensor must monitor at least two doors each.
 - ◇ Sensors must have at least a three year warranty.
 - ◇ Refrigerated case LED lighting must have an efficacy ≥ 35 lumens/watt.
 - ◇ Refrigerated case LED lighting must have a CRI ≥ 72 .
- **Refrigerated Space Doorway Strip Curtains (RL211, RL212)**
 - » Eliminated 4-year age eligibility threshold (requirement that existing strip curtain cannot have any remaining useful life remains). (Catalog pg. 92)
- **Laundry Ozone Generation System (RL301)**
 - » Eliminated requirement that hot water use must be reduced by at least 80%. (Catalog pg. 93)
- **General Requirements for Roof Insulation Measures (BE102, BE103)**
 - » Replaced requirement to submit roof construction detail sketches with requirements to provide documentation sufficient to verify the nominal insulation rating of the existing and proposed roof assemblies, which can be satisfied by providing a description of insulation types, thicknesses and R-values. (Catalog pg. 95)
- **Window Reduction (BE104)**
 - » Reduced minimum insulating rating requirement for new window assembly to R-11. (vs. R-13). (Catalog pg. 96)
 - » Replaced detailed sketch requirement with requirement to verify square footage of the window glazing and nominal insulation rating of the new window assembly. (Catalog pg.96)
 - » Eliminated requirement to submit pre-construction pictures. (Catalog pg. 96)

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- **High-Efficiency Window Film and High Performance Window Glazing (BE105, BE107)**
 - » Revised existing window eligibility criteria to allow an existing, clear, single or double-pane window to be eligible (eliminated minimum specifications). (Catalog pg. 96-97)
 - » Eliminated minimum remaining manufacturer's warranty requirement. (Catalog pg. 96-97)
- **Manual or Semi-Automatic Pool Covers (BE111)**
 - » Revised measure name and description to include semi-automatic pool covers. (Catalog pg. 98, Application pg. 38)
- **General Requirements for Pipe Insulation Measures (IN101 - IN113)**
 - » Eliminated requirement to verify the age and condition of the piping. (Catalog pg. 99)
- **Space Heating Hydronic, Steam and Steam Condensate Pipe Insulation (IN101 - IN103)**
 - » Eliminated minimum hydronic space heating system design supply water temperature requirement. (Catalog pg. 100)
- **PEX Pipe Insulation (IN107 - IN109)**
 - » Eliminated program staff inspection requirement. (Catalog pg. 101)
 - » Eliminated requirement to verify piping surface temperature. (Catalog pg. 101)
 - » Reduced DHW water temperature requirement to 100 degrees Fahrenheit (vs. 120 degrees Fahrenheit). (Catalog pg. 101)
- **Grain Dryers (AG102, AG103)**
 - » Split into two separate measure specifications, **New Grain Dryers (AG102)** and **Add Heat Recovery to Grain Dryer (AG103)**, and revised requirements for both measures, as MPSC requirements vary significantly between these measures in some categories. (Catalog pg. 103)
- **Grain Storage Temperature and Moisture Management Controllers (AG104)**
 - » Reduced existing aeration fans minimum annual operating hours to 800 hours (vs. 1,000 hours). (Catalog pg. 104)
- **Greenhouse Floor or Bench Heating Systems (AG109, AG110)**
 - » Eliminated boiler minimum efficiency requirement. (Catalog pg. 105)
 - » Eliminated requirement to verify the post-installation status of the existing heating system. (Catalog pg. 105)
- **Variable Speed Drive on Agricultural Irrigation System Pumps (AG114)**
 - » Increased minimum annual hours of operation requirement to 750 hours (vs. 500 hours). (Catalog pgs. 106)

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- **Micro (Drip) Irrigation Systems (AG116)**
 - » Eliminated requirement to verify existing irrigation type. (Catalog pg. 107)
 - » Replaced requirement that all sprinkler heads must be removed with requirement that post-installation system pressure cannot exceed 35 psig. (Catalog pg. 107)
- **Low-Pressure or Zero-Energy Sprinkler Nozzles (AG117)**
 - » Replaced requirement to complete a one-to-one conversion with requirement that post-installation system pressure cannot exceed 35 psig. (Catalog pg. 107)
- **Variable Speed Drive on Milk Pumps with Pre-Cooler Heat Exchanger (AG206, AG207)**
 - » Eliminated minimum daily milk production requirement. (Catalog pg. 108)
- **Dairy Refrigeration Equipment Tune-up (AG210)**
 - » Eliminated requirement to submit a Tune-up Checklist, consistent with other tune-up measures. (Catalog pg. 109)
 - » Added a list of required maintenance items, consistent with other tune-up measures. (Catalog pg. 109)
- **LED Dairy, Poultry and Indoor Grow Lighting, and Indoor Agriculture measures (AG211 - AG215)**
 - » Eliminated "Pre # of Lamps/Fixture" and "Post # of Lamps/Fixture" fields on Application for AG211a, AG211b, AG212 and AG213. (Application pg. 41)
 - » Reorganized measures into revised and new measure tables on Application. (Application pgs. 41-42)
- **Variable Frequency Drive Information Worksheet**
 - » Revised the metering requirement stated on this worksheet to indicate the specified metering is only required for custom projects, and if specified for prescriptive measures. (Catalog pg. 116, Application pg. 48)