Appendix 7: Examples for Reference

Examples of program incentive elements:

1. Assessment Incentive – Grantee will propose incentive amounts to offer owners to cover retuning assessment services

   Example: 100% of costs up to $X
2. Implementation Incentive – Grantee will propose incentive amounts to offer during the implementation phase of retuning

   Example: $X to cover complimentary upgrades/energy conservation measures (ECMs) identified in walkthrough OR % of total costs up to $X
3. Performance Incentive – Grantee will propose amounts to offer for verified savings achieved after retuning

   Example: $.25/kWh Saved up to $X

Examples of participant eligibility criteria:

1. Building types include houses of worship, affordable housing and Class B and C commercial buildings
2. Participant is responsible for energy bills
3. Participant is able to secure permission to complete suggested no- and low-cost measures
4. Participant is committed to improving indoor environmental quality (IEQ) and implementing no- and low-cost measures identified in the investigation phase
5. The building is older than 2 years
6. Participant is able to provide utility data to benchmark in EPA Portfolio Manager

Example elements of a standardized building retuning checklist:

1. Identify any HVAC, HVAC controls, pumps or ductwork issues that can be addressed in retuning
2. Separate checklists or sections of checklists for buildings with rooftop units, economizers, ducted vs. ductless or packaged
3. Identify any immediate interior or exterior lighting or lighting controls issues that can be addressed
4. Identify any domestic water systems issues that can be addressed
5. Identify any areas of infiltration/exfiltration in building envelope through blower door testing and/or infrared camera investigation that can be addressed

6. Identify and remediate any occupant comfort issues and identify IEQ concerns that arise from pollutant migration among dwelling units, common areas and/or commercial spaces
7. Identify any indoor air quality, mold or humidity issues through testing procedures for CO2, volatile organic compounds (VOCs), fine particulate matter (PM2.5), mold, radon, lead, etc. as appropriate
8. Identify any building automation system or digital direct controls (DDC) issues that can be addressed
9. Separate checklists for buildings with Building Automation Systems/Energy Management Systems (BAS/EMS)/trending capability vs. no BAS/EMS/trending capability
10. Where no BAS/EMS exists, identify opportunities to install basic BAS with digital direct control that enables the implementation of setbacks and modulation of equipment when appropriate
11. Identify and remediate any commercial kitchen operations issues that can be addressed in retuning (if applicable)

Examples of potential complementary upgrades offered to pilot program participants in the implementation phase.

1. HVAC equipment tune-up, controls updates, revised set points/set-backs and automated scheduling, potentially including, as appropriate, the following:
    a. Reduce minimum outside air flow
    b. Correct economizer operation
    c. Eliminate simultaneous heating and cooling
    d. Repair compressed air leaks
    e. Reduce supply air static pressure set points
    f. Eliminate chilled water short-circuiting
    g. Improve chiller and/or other equipment sequencing
    h. Correct refrigerant charge
    i. Improve equipment scheduling
    j. Reduced air flow in constant volume air handling systems
2. Smart Thermostat installation plus basic building controls hardware enabling digital direct control of major equipment for the purposes of ongoing commissioning
3. LED lamp upgrades/CFL replacements
4. Lighting controls and occupancy sensors
5. Installing signs to turn off lights when not in use

6. Reducing envelope air infiltration using caulk and spray foam, air sealing
7. Replacing worn weather stripping on exterior doors and windows
8. Duct sealing and attic insulation
9. Turning on electronic devices' energy-saving features
10. Low-flow shower heads and aerators
11. Water heater thermostat/timer set point adjustment
12. Insulating exposed water heater and refrigerant pipes
13. Installing timers on water coolers
14. Refrigeration upgrades, controls, ventilation measures for commercial kitchens as applicable

Examples elements of O&M documentation include the following:

1. Facility and systems descriptions, equipment inventory
2. Usage guidance by system
3. Operating parameters, including heating and cooling temperature set points and setbacks
4. Maintenance procedures to ensure persistence of savings, including maintenance plans, checklists, records, and spare parts inventory
5. Utility data measurement and reporting
6. Training plans and materials
7. Regulatory requirements and permits