

ATTACHMENT J-3

ENERGY SAVINGS PERFORMANCE CONTRACT TECHNOLOGY CATEGORIES AND ASSOCIATED ENERGY CONSERVATION MEASURES

This attachment lists the technology categories (TCs) authorized under this contract, and provides energy conservation measure (ECM) examples for each TC. This list is not intended to be inclusive of all potential ECMs authorized under each TC.

TC.1 Boiler Plant Improvements - ECMs such as, but not limited to:

- Boiler control, including new controls and retrofits to existing controls
- Replacement of existing boilers with high efficiency boilers
- Boiler decentralization

TC.2 Chiller Plant Improvements - ECMs such as, but not limited to:

- Chiller retrofits or replacements
- Chiller plant pumping, piping, and controls retrofits and replacements

TC.3 Building Automation Systems (BAS)/Energy Management Control Systems (EMCS) - ECMs such as, but not limited to:

- Heating, Ventilating, and Air Conditioning (HVAC) upgrade from pneumatics to Direct Digital Control
- Upgrade or replacement of existing EMCS systems

TC.4 Heating, Ventilating, and Air Conditioning (HVAC, not including boilers, chillers, and Building Automation System/Energy Monitoring/Management Control System (EMCS)) - ECMs such as, but not limited to:

- Packaged air conditioning unit replacements
- HVAC damper and controller repair or replacement
- Window air conditioning replacement with high efficiency units
- Cooling tower retrofits or replacements
- Economizer installation
- Fans and pump replacement or impeller trimming
- Thermal energy storage
- Variable air volume retrofit

TC.5 Lighting Improvements - ECMs such as, but not limited to:

- Interior and exterior lighting retrofits and replacements
- Intelligent lighting controls
- Occupancy sensors
- Light Emitting Diode technologies
- Daylighting
- Spectrally enhanced lighting

- Fiber optic lighting technologies

TC.6 Building Envelope Modifications - ECMs such as, but not limited to:

- Insulation installation
- Weatherization
- Window replacement
- Reflective solar window tinting

TC.7 Chilled Water, Hot Water, and Steam Distribution Systems - ECMs such as, but not limited to:

- Piping insulation installation
- Hot water heater repair and replacement
- Steam trap repair and replacement
- Repair or replacement of existing condensate return systems and installation of new condensate return systems

TC.8 Electric Motors and Drives - ECMs such as, but not limited to:

- Motor replacement with high efficiency motors
- Variable speed motors or drives

TC.9 Refrigeration - ECMs such as, but not limited to:

- Replacement of ice/refrigeration equipment with high efficiency units

TC.10 Distributed Generation - ECMs such as, but not limited to:

- Cogeneration systems installation
- Micro-turbines installation
- Fuel cells installation

TC.11 Renewable Energy Systems - ECMs such as, but not limited to:

- Photovoltaic system installation
- Solar hot water system installation
- Solar ventilation preheating system installation
- Wind energy system installation
- Passive solar heating installation
- Landfill gas, waste water treatment plant digester gas, and coalbed methane power plant installation
- Wood waste and other organic waste stream heating or power plant installation
- Replacement of air conditioning and heating units with ground coupled heat pump systems

TC.12 Energy/Utility Distribution Systems - ECMs such as, but not limited to:

- Transformers installation
- Power quality upgrades
- Power factor correction

- Gas distribution systems installation

TC.13 Water and Sewer Conservation Systems - ECMs such as, but not limited to:

- Low-flow faucets and showerheads
- Low-flow plumbing equipment
- Water efficient irrigation
- On-site sewer treatment systems

TC.14 Electrical Peak Shaving/Load Shifting - ECMs such as, but not limited to:

- Thermal energy storage
- Gas cooling

TC.15 Energy Cost Reduction Through Rate Adjustments - ECMs such as, but not limited to:

- Change to more favorable rate schedule
- Lower energy cost supplier(s) (where applicable)
- Energy service billing and meter auditing recommendations

TC.16 Energy Related Process Improvements - ECMs such as, but not limited to:

- Production and/or manufacturing improvements
- Recycling and other waste stream reductions
- Industrial process improvement

TC.17 Commissioning - ECMs such as but not limited to:

- Retro-commissioning services
- Continuous commissioning services

TC.18 Advanced Metering Systems

TC.19 Appliance/Plug-load reductions - ECMs such as but not limited to:

- Replace air-cooled ice/refrigeration equipment
- Replace refrigerators
- De-lamp vending machines
- Plug timers
- Energy Star® products

TC.20 Future ECMs - (not currently authorized):

- Non-Building Applications