IPU Energy Efficiency Programs
April 11, 2024

The Industry Public Utilities ("IPU") Energy Efficiency ("EE") Programs outlines the parameters for customers to receive incentives and rebates for the installation of eligible Energy Efficiency Measures ("EEMs"), equipment or systems, and for IPU to receive payments for eligible projects that benefit IPU customers through energy efficiency, conservation, or reduced peak-demand. EE Program payments to customers are based on expected annual energy savings, while funding for IPU projects is based on actual project costs. The EE Program is funded by the IPU's Public Purpose Program.

EE Programs

Currently IPU provides electric service to 114 customers. Sixty-nine with monthly maximum demand greater than 20 kilowatts ("kW") are classified as Large General Service; thirty non-residential customers with monthly maximum demand less than 20 kW are classified as General Service; and fifteen residential customers are classified as Domestic Service. The IPU's EE Program is designed to encourage energy efficient lighting systems and the exploration and implementation of energy efficient technologies. These technologies may address either equipment or operational change, and if IPU can quantify a demand reduction and/or energy savings, there is a basis for providing an incentive or a rebate to assist the customer achieve its energy efficiency goals. The EE Program provides incentives in four program categories: Large General Service Program; General Service Program; Domestic Service Program; and IPU EEM. The EE Incentive Program will be part of annual fiscal year budget effective fiscal year 2021-2022 and 2.85% of forecasted gross revenue of IPU.

1. Large General Service Program. Large General Service customers are eligible to receive energy efficiency rebates based upon the annual kilowatt hour ("kWh") savings, and or kilowatt ("kW") peak-demand reduction, as calculated or accepted by IPU. Customers must schedule an onsite energy audit prior to installation and onsite post verification of installation; submit an EE Program application, including energy savings calculations and paid invoices, within 90 days of the project completion. A customer is only eligible to receive up to $50,000.00 over the two-year budget cycle; unless otherwise approved by the IPUC.

1.1 Energy Audits: On-site energy audits and recommendations are designed to potentially improve energy operating efficiency and reduce load requirements. IPU Large General Service customers are eligible for one ASHRAE Level I, II, or III energy audits at no cost once every two years. The number of energy audits completed each fiscal year shall be limited based on available funding. Energy audits will be scheduled.

on a first-come, first-serve basis according to the date the EE Program application is received. The energy audit procedures are attached as Appendix B.

1.2 **Lighting Incentives**: EE Program payment for the installation of energy efficiency lighting upgrades that reduce annual energy usage. This lighting upgrade can be interior inside the building as well as exterior building security lights and include parking lot lights as long as the power source is coming from IPU. A pre and post inspection is required. The EE Program payment is based on a rate of $0.059 /kWh for one year of energy savings and $150/kW for each on-peak kW that has been reduced and shall not exceed 50 percent of the lighting material cost.

1.3 **Customized Incentives:** EE Program payment for the installation of energy efficient equipment/technology that conserves energy and permanently reduces coincident summer/winter peak demand and exceeds state-mandated codes, federal-mandated codes, industry accepted performance standards or other baseline energy performance standards. EE Program payment is based on a rate of $0.059/kWh for one year of energy savings and $150/kW for each on-peak kW that has been reduced and shall not exceed 50 percent of the total cost associated with the equipment/materials.

1.4 **Construction Incentives**: One-time EE Program payment for construction projects that include equipment components that exceed state-mandated codes, federal-mandated codes, industry-accepted performance standards, or other baseline energy performance standards by more than 10 percent. The EE Program payment is based on the lessor of 25 percent of the cost difference between standard and upgraded equipment and/or materials.

2. **General Service Program.** General Service customers must schedule an energy survey to receive a one-time program allowance, for the installation of specified energy measures, up to $1,000.00 every two years. A description of the energy survey process is included in Appendix C and a list of the direct installed measures are included in Appendix E.

2.1 **Energy Surveys:** Energy survey of General Service customer's facilities and financial feasibility of recommended energy efficiency measures.

2.2 **Direct Install Program:** This program offers a list of energy efficiency measures including: light-emitting diode ("LED") lighting upgrades; lighting controls; refrigeration upgrades; Heating/Ventilation/Air-Conditioning ("HVAC") tune-ups; and pumps and motor replacement.

3. **Domestic Service Program.** Residential customers are eligible to receive a rebate of approved Energy Star® appliances up to $250.00 per residence; and program allowance for the installation of specified energy measures, up to $500.00 every two

years. A description of the direct installed and rebate programs is described in Appendix D and a list of the direct installed measures are included in Appendix E.

3.1 Domestic Rebate Program: The qualified list of IPUC approved Energy Star® appliances are included in Appendix D.

3.2 Direct Install Program: The Domestic Direct Install Program includes an energy survey of the residence, energy survey report and direct installed measures. This program offers a list of energy efficiency measures including: energy efficiency lighting; HVAC tune-up and filter change out; and programmable/smart thermostat.

4. **IPU Energy Efficiency Measures.** Payment for eligible projects must be authorized by the IPUC and shall not exceed $10,000.00 per year.

4.1 IPU Energy Efficiency Measures: Payment for IPU energy efficiency measures promote a benefit to IPU customers in terms of energy efficiency, conservation, or reduced peak-demand.

V. EE Program Terms and Conditions:

1. Participants are limited to IPU and its electric customers with all associated utility accounts in good standing.

2. The Public Utilities Director or designee reserves the right to temporarily suspend the EE Program, or any component thereof, at any time. However, cancellation of or any permanent modifications to the EE Program must be approved by the IPUC.

3. Payments issued under EE Program Categories are limited to the availability of funds.

4. Independent of the EE Program payment, eligible energy efficiency projects must be cost effective from the customer's perspective based upon the value of total estimated energy savings over the life of the installed measures. The installed equipment must have a useful life of at least five years.

5. Demand reduction and direct energy savings attributable to energy efficiency must be evaluated by IPU's engineering consulting firm using accepted industry calculations or energy model. Savings calculations must include product specifications, hours of operations, the derivation of baseline conditions and all other assumptions used to support estimates.

6. Energy savings can be incentivized based on calculations using existing conditions of equipment or using efficiency values based on either accepted State (California Code of Regulations Title 24) or federal standards, whichever is higher.

7. When there is uncertainty of energy savings or demand reduction, IPU may require measurement and verification (M&V) up to two years after installation of the project. If IPU determines that M&V is necessary, IPU customer service will request that the applicant prepare and submit an M&V plan for review and approval by the Public Utilities Director or designee. For projects where M&V is required, 100 percent of the approved rebate/incentive will be paid after the project installation is confirmed, upon the final M&V report.

8. To verify eligibility and reserve funding, initial EE Program applications must be submitted to the IPU Electrical Utility Operations Manager or online on IPU Website. and pre-approved by the IPU Engineer or designee before equipment is installed. The EE Program application must be accompanied by the estimates of demand reduction and annual energy savings outlined in Section V.5. above. Upon review of the application, IPU Electrical Utility Operations Manager will arrange to conduct a pre-inspection by IPU engineering consultant to verify the conditions of the preexisting equipment and field verify the proposed project. IPU Engineer or designee will provide written notice to the applicant of pre-approval status and determination of potential eligible amount based on the pre-inspection report. The funding reservation, pre-inspection, and M&V requirements, if applicable, shall be included in such notice.

9. EE Program payment requests must be submitted by the applicant, in writing, within 120 days of issuance of the pre-approval notice to prevent cancellation of the funding reservation. Written requests must be accompanied by sufficient information to document project costs and must include, at a minimum, a copy of the dated sales receipt. The sales receipt is subject to verification and must note all necessary information to properly identify the qualifying product/equipment/materials, including, but not limited to: make/model, vendor, date, and price per qualifying unit. IPU might also conduct a post-inspection to verify the installation of the energy efficiency measure.

10. Payments will only be issued to IPU customers for projects that demonstrate an overall reduction in usage or demand as required under the appropriate EE Program Category, as determined and approved by the IPU Engineer or designee.

11. EE Program applications are subject to pre- and post-installation inspections. Customer agrees to fully cooperate with any authorized agents of IPU for the purpose of such inspections. Customers who are not in compliance with terms and conditions of the EE Program, or to have provided false or inaccurate information on the EE Program application will be billed up to the full amount of the rebate, as may be appropriate.

12. All equipment installed must be new (not used, refurbished, or available for resale); used at the service address listed on the EE Program application; replace existing, operational, less energy-efficiency equipment; and utilize the same fuel source as existing equipment (electric for electric, not gas for electric).

13. With the exception of IPU Projects, rebates/incentives are based on product cost only. Labor, equipment rentals, taxes and non-material costs are excluded.

14. Individual Large Service General customers may not receive EE Program incentives in excess of $50,000.00 during any given two years life of the program unless recommended by IPU staff and specifically approved by the IPUC. Upon approval of the incentives and rebates, the check will be issued by IPU and should be expected to arrive to the customer no later than six weeks after.

15. Rebate checks will only be issued and mailed to the IPU customer listed on the application for service or as indicated in an official notification subsequently submitted to IPU in writing following the initial application for service.

16. If the Customer is not satisfied with the EE Program incentive provided, the Customer may appeal to the IPUC. The appeal must be submitted in writing to the IPUC, together with the reasons for the dispute within ten (10) days following mailing of the Public Utilities Director or designee's determination. In the absence of a timely filed appeal, the Public Utilities Director or designee's determination will be final. Upon receipt of a timely appeal, the matter will be reviewed by the IPUC within 45 days of receipt. A written final decision of the IPUC shall be delivered to the Customer by personal delivery or certified mail within fifteen days following the appeal hearing.

17. IPU does not endorse or recommend specific products or dealers and disclaims any warranty, whether expressed or implied, regarding the equipment installed, or for any material or labor associated with its installation, maintenance, repair, safety, satisfactory performance, or any energy savings associated with its use

Appendix A

IPU

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

Energy Audit Procedures

1. Level I Audit

A Level I audit, which may also be called a site assessment audit or preliminary audit, is used to identify no-cost and low-cost energy saving opportunities, and a general view of potential capital improvements. Activities include an assessment of energy bills and a brief site inspection of the facility.

The steps to be taken and scope of services provided under a Level I Audit are as follows:

1.1. IPU Representative will either schedule a meeting with facility staff or request an in-person meeting. During the initial contact, IPU Representative will collect:
- 1.1.1. Business name, address, phone number, facility square footage and usage type
- 1.1.2. Customer contact name, address, phone number and e-mail address
- 1.1.3. Building owner name, address, phone number and e-mail address
- 1.1.4. One year of the most recent electric utility bill information

1.2. If scheduled in advance, prior to the meeting, IPU Representative will prepare for the meeting by:
- 1.2.1. Reviewing and analyzing the energy bills to identify any unusual usage patterns
- 1.2.2. Benchmarking the buildings energy consumption and comparing it to similar buildings based on the Energy Use Intensity (EUI)

1.3. IPU Representative will conduct an initial high-level interview with the building owner or the building owner's representative and the facility manager (when applicable). IPU Representative will:
- 1.3.1. Discuss goals and objectives of the audit as well as the deliverables
- 1.3.2. Discuss the audit schedule, escorts and points of contact for the IPU Representative. Also, discuss any trade secrets, potential for industrial espionage, or facility areas that are "off limits"
- 1.3.3. Discuss any safety and security protocols observed at the site and equipment access procedures
- 1.3.4. Determine customer's processes, systems, lighting, HVAC, controls and other equipment, and how they are used
- 1.3.5. Determine and document operating schedules, shift work, controls and operational characteristics of the different areas of the facility
- 1.3.6. Discuss and document customer-specific financial considerations and issues

1.3.7. Discuss and document any critical equipment or functions that cannot contribute to energy efficiency solutions, or that the customer is unwilling to modify
1.3.8. If available, review facility site map to develop strategy for site walkthrough
1.3.9. Collect facility information:
    1.3.9.1. Year Built
    1.3.9.2. Utility Meter Information
    1.3.9.3. Hours of Operation (Weekdays & Weekends)
    1.3.9.4. Number of Stories
    1.3.9.5. Single Tenant/Multi-Tenant?
    1.3.9.6. Annual Percent Occupancy
    1.3.9.7. HVAC system type(s)

1.4. IPU Representative will conduct a walkthrough and document all possible low-cost and no-cost recommendations, whether or not they have immediate potential for inclusion in the project. This may include pictures, nameplate data and details regarding:
    1.4.1. Building envelope
    1.4.2. Lighting
    1.4.3. Heating and cooling
    1.4.4. Refrigeration
    1.4.5. Miscellaneous Equipment

1.5. IPU Representative will conduct data analysis of the facility including:
    1.5.1. Benchmarking the buildings energy consumption and comparing it to similar buildings based on the Energy Use Intensity (EUI)
    1.5.2. The energy analysis will include a review of the existing equipment to identify low-cost and no-cost recommendations in addition to capital improvements
    1.5.3. The cost analysis will include a review of current energy costs, measure implementation costs, potential energy cost savings per year, possible rebate and incentive amounts and simple payback period.

1.6. IPU Representative will create a report including the following:
    1.6.1. Cover Page: The Report shall begin with a cover page identifying Customer, title of the audit, address of the facility, and date completed.
    1.6.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include a statement on the scope and methodology of the audit.
    1.6.3. Facility Description: A brief description of the facility, square footage, hours of operation, use, location
    1.6.4. Benchmarking: Comparing the building's energy use to similar buildings based on the Energy Use Intensity (EUI)
    1.6.5. Energy Efficiency Opportunities: This subsection lists the measures found and provides a brief explanation of low-cost and no-cost energy savings opportunities

1.6.5.1. Measure Identification Number #
1.6.5.2. Measure Description
1.6.5.3. Measure Quantity
1.6.5.4. Description of Energy Saving Opportunities
1.6.5.5. Rough Estimate on Project Implementation/Retrofit Cost ($)
1.6.5.6. Estimated Utility Rebates/Incentives (if applicable) ($)
1.6.5.7. Estimated Simple Payback
1.6.5.8. Potential measures for future consideration

1.7. After the report is complete, but before presenting to the customer, IPU Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPU, IPU Representative will present the findings to the customer.

2. Level II Audit

Level II audits, also called energy surveys or engineering analysis audits, identify no-cost and low-cost opportunities, as well as potential capital-intensive energy savings opportunities. Level II audits include an in-depth analysis of energy costs, energy usage and building characteristics, and a more refined survey of how energy is used in the facility.

A Level II audit will be implemented for those measures that the customer selects from the Level I audit report. It is also possible for a customer to request a Level II audit without a Level I audit performed if that customer verifies that the resulting products for selected equipment are viable within the next year. The customer may proceed with measure implementation following the Level I Audit without having a Level II Audit.

The Level II audit will entail a detailed analysis on measures selected by the customer, or the measures considered by the IPU Representative to be cost-effective. Each measure will be accompanied with detailed energy saving calculations, cost estimates and financial analysis. In addition to Level I activities, the Level II audit report will include the following:

2.1. During the initial contact, IPU Representative will collect:
2.1.1. Two years of the most recent electric utility bill information
2.1.2. The building as-built plans, and mechanical and electrical schedules
2.1.3. A detailed HVAC equipment list from the building's current HVAC contractor (if applicable) to cross reference with the as-built plans

2.2. IPU Representative will conduct a detailed interview with the building owner or the building owner's representative, the facility manager and facility Engineer (when applicable)

2.2.1. Determine customer's preference of return-on-investment (ROI) or payback period
2.2.2. Determine and document operating schedules, occupancy (especially multi-tenant situations), process operation, shift work, controls and operational characteristics of the different areas of the facility. The purpose is to gain a better understanding of the customer's needs, wants and expectations regarding energy efficiency, and to compile a complete inventory of all energy consuming devices at the site

2.3. IPU Representative will conduct a thorough walkthrough of the facility and document all existing equipment, whether or not they have immediate potential for inclusion in the project. This may include pictures of, and data on:
2.3.1. Building envelope
2.3.1.1. Construction details including orientation, construction material type, insulation levels, glazing type and area on each side
2.3.2. Lighting
2.3.2.1. Type, hours of use and control type and count
2.3.3. Heating, Ventilation and Air Conditioning (HVAC) System
2.3.3.1. Nameplate information on each piece of system equipment, hours of operation and zones served
2.3.4. Process/heavy equipment
2.3.4.1. Nameplate information on each piece of equipment, hours of operation, count
2.3.5. Refrigeration
2.3.5.1. Nameplate information on each piece of equipment, count
2.3.6. Miscellaneous Equipment
2.3.6.1. Nameplate information on each piece of equipment, hours of operation, count

2.4. Detailed equipment energy analysis, as selected by the customer or determined by the IPU Representative for possible recommendations, including:
2.4.1. HVAC System: An analysis on the HVAC system will include: system type; capacity; confirmed or estimated age of equipment, efficiency; Expected Useful Life (EUL); and number of units. A special note will be written if the equipment exceeds its useful life. Reference how the system was designed and how it is currently operating, and highlight any major differences discovered through the audit process
2.4.2. Building Controls: The analysis will include: manufacturer; year installed; equipment being controlled; and protocols used by the system
2.4.3. Lighting: The analysis will include: type, wattage; quantity; how the lighting is being controlled (sensors, daylight harvesting, control system, etc.); and the typical facility hours of operation for each lighting system
2.4.4. Refrigeration: The analysis will include: compressor type; wattage; quantity; and evaporator fan motor type and controls
2.4.5. Compressed Air: The analysis will include: system components; layout; equipment nameplate data; usage type; and hours of operation

2.4.6. Miscellaneous Equipment: The analysis will include: type; wattage; quantity; and hours of operation

2.5. IPU Representative will create a detailed energy audit report including:

2.5.1. Cover Page: The report will contain a cover page identifying the customer; title of the audit; address of the facility; and date completed.

2.5.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include: a detailed facility description; current conditions; and summary of savings from the energy efficiency recommendations.

2.5.3. Building Envelope: A description of the building's orientation; construction material type; insulation levels; glazing type; and area on each side.

2.5.4. Utility Billing: This will include an analysis on the electric consumption for the previous twelve months and the average rate charge.

2.5.5. Energy Balancing: The goal of the energy balance is to calibrate the facility's energy consumption and the existing equipment with information collected during the audit such as hours of operation and equipment nameplate data.

2.5.6. Detailed End-use Breakdown: This will include a percent and chart breakdown for each equipment type obtained from the energy balancing. The end-use breakdown is used to better understand the building and be able to compare it with similar facilities.

2.5.7. Energy Efficiency Recommendations: This portion of the report will include a description of the existing equipment and the recommended upgrades or replacement equipment. Only cost-effective measures, as determined by the energy analysis, will be presented to the customer as recommendations.

2.5.7.1. Measure Identification Number #

2.5.7.2. Measure Type (energy efficiency, demand response, distributed generation)

2.5.7.3. Measure Description

2.5.7.4. Measure Location(s)

2.5.7.5. Measure Quantity

2.5.7.6. Description of Energy Efficiency Opportunities

2.5.7.7. Detailed energy and cost savings

2.5.7.8. Potential measures for future consideration

2.5.8. Detailed energy and cost analysis on energy efficiency recommendations will include:

2.5.8.1. Energy demand reduction (kW)

2.5.8.2. Annual electric consumption savings (kWh)

2.5.8.3. Bill impact analysis with net annual cost savings ($)

2.5.8.4. Total Measure/Project Implementation/Retrofit Cost ($)

2.5.8.5. Assumptions and references (RSMeans, actual quotes, etc.)

2.5.8.6. Detailed payback analysis to include simple payback, internal rate of return (IRR), and other customer-specific financial analyses.

2.5.9. Utility Programs: Detailed list of rebate and incentive programs offered by the customer's utility provider.

2.5.10. Equipment Inventory: Detailed list of all equipment found on the facility

2.5.10.1. Electrical
2.5.10.2. Mechanical

2.6. After the report is complete, but before presenting to the customer, IPU Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPU, IPU Representative will present the findings to the customer.

3. Level III Audit

A Level III audit, also called a detailed analysis of capital-intensive modification audit or investment grade audit, provides detailed recommendations and financial analysis for major capital investments related to energy conservation. In addition to Level I and Level II activities, Level III audits include monitoring/metering equipment, Building Energy Modeling (BEM) and custom engineering analysis.

A Level III audit may be implemented for those measures that the customer selects from the Level II audit report or for targeted capital investments.

The steps taken and scope of services provided under a Level III audit are:

3.1. Perform an audit to collect building and equipment information, as outlined in Level I and Level II audits with the addition of:
3.1.1. Determine the HVAC zoning per unit
3.1.2. Collect square footage of each zone
3.1.3. Collect equipment and lighting information per zone
3.1.4. Determine specific processes performed on-site

3.2. Meter/record detailed information on targeted equipment performance
3.2.1. Determine which equipment requires monitoring or trending data (energy measurements prior to project starting) include, but are not limited to:
3.2.1.1. Pneumatic to Electric Air Dryers
3.2.1.2. Blowers
3.2.1.3. Chiller Compressor Retrofit
3.2.1.4. Chiller Cross Tie (Cross Connect)
3.2.1.5. Chiller Replacement (if multiple chillers at site)
3.2.1.6. Commercial Laundry with Heat Recovery
3.2.1.7. EMS or DDC Installation
3.2.1.8. Engine Jacket Water Heating
3.2.1.9. Central Plant Optimization (Hartman Loop)
3.2.1.10. Pump Replacement (pump check analysis to establish efficiency of the pump)
3.2.1.11. Pump VFD and Pump Station VFD
3.2.1.12. Fan VFD

3.2.2. Review mechanical or electrical equipment plans and determine the data type that needs to be collected and monitored. Strategize on meter location
3.2.3. Install data logger, current transducers or applicable sensor type
3.2.4. Record required data for prescribed period

3.3. Analyze whole building performance with a Building Energy Modeling (BEM) software
3.3.1. Construct an energy model of the current building and baseline conditions, specifics include:
3.3.1.1. Building shell(s): building type, envelope, orientation, glazing type, climate zone, HVAC zoning, square footage
3.3.1.2. HVAC system type and location: Chiller, package unit, split unit, condenser coil, boilers, cooling towers, air handlers, make-up air units, ventilation fans, etc.
3.3.1.3. Lighting: Lighting Power Density (LPD) per zone
3.3.1.4. Equipment: Watts per square foot for each zone
3.3.1.5. Miscellaneous Equipment: Watts per square foot for each zone
3.3.1.6. Controls: Include any existing controls such as VFDs, EMS, daylight harvesting, occupancy sensors, etc.
3.3.1.7. Occupancy: Include the number of people per facility/zone and the percent occupancy depending on building type (per day/week/month)
3.3.1.8. Schedules: Include the specific operation hours for equipment, elevators, HVAC units, interior and exterior lighting

3.3.2. Calibrate the energy model to 10% (or less) of the billing data to accurately simulate energy performance
3.3.2.1. Normalize billing data to increase monthly energy consumption accuracy
3.3.2.2. Analyze and adjust equipment usage until the energy model is well calibrated to meet the required building performance

3.3.3. Conduct parametric runs to simulate each energy efficiency measure
3.3.3.1. Analyzes each energy efficiency measure and provides detailed energy and demand savings
3.3.3.2. Calculates the interactive effects each measure will have on other systems and the positive or negative effects on the building's energy consumption

3.4. Perform high precision cost and savings calculations
3.4.1. Perform customized engineering calculations for equipment that requires metering
3.4.2. Detailed financial analysis, incorporating estimated project cost, rebates, incentives, projected savings from detailed engineering analysis and finance assumptions

3.5. IPU Representative will create a detailed energy audit report including:

3.5.1. Cover Page: The report will contain a cover page identifying the customer, title of the audit, address of the facility and date completed.

3.5.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include a detailed facility description, current conditions and summary of savings from the energy efficiency recommendations.

3.5.3. Building Envelope: A description of the building's orientation, construction material type, insulation levels, glazing type and area on each side

3.5.4. Utility Billing: This will include an analysis on the electric consumption for the previous twelve months and the average rate charge.

3.5.5. Energy Balancing: The goal of the energy balance is to calibrate the facility's energy consumption and the existing equipment with information collected during the audit such as hours of operation and equipment nameplate data.

3.5.6. Detailed End-use Breakdown: This will include a percent and chart breakdown for each equipment type obtained from the energy balancing. The end-use breakdown is used to better understand the building and be able to compare it with similar facilities.

3.5.7. Energy Efficiency Recommendations: This portion of the report will include a description of the existing equipment and the recommended upgrades or replacement equipment. Only cost-effective measures, as determined by the energy analysis, will be presented to the customer as recommendations:

- 3.5.7.1. Measure Identification Number #
- 3.5.7.2. Measure Type (energy efficiency, demand response, distributed generation)
- 3.5.7.3. Measure Description
- 3.5.7.4. Measure Location(s)
- 3.5.7.5. Measure Quantity
- 3.5.7.6. Description of Energy Efficiency Opportunities
- 3.5.7.7. Detailed energy and cost analysis
- 3.5.7.8. Potential measures for future consideration

3.5.8. Detailed energy and cost analysis on energy efficiency recommendations will include:

- 3.5.8.1. Energy demand reduction (kW)
- 3.5.8.2. Annual electric consumption savings (kWh)
- 3.5.8.3. Bill impact analysis with net annual cost savings ($)
- 3.5.8.4. Total Measure/Project Implementation/Retrofit Cost ($)
- 3.5.8.5. Assumptions and references (RS Means, actual quotes, etc.)
- 3.5.8.6. Detailed payback analysis to include simple payback, internal rate of return (IRR), and other customer-specific financial analyses

3.5.9. Utility Programs: Detailed list of rebate and incentive programs offered by the customer's utility provider

3.5.10. Equipment Inventory: Detailed list of all equipment found on the facility

- 3.5.10.1. Electrical
- 3.5.10.2. Mechanical

After the report is complete, but before presenting to the customer, IPU Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPU, IPU Representative will present the findings to the customer.

Appendix B

IPU Energy Efficiency Program

General Service Energy Survey Process and Direct Install Program

1. Energy Survey Process and Direct Install Program

1.1 The IPU Representative will meet with the General Service customer and if necessary, receive a “Property Owner’s Agreement” signed by the property owner or property manager.

1.2 The IPU Representative will conduct a walk-through and enter in the database all the applicable energy measures for lighting, heating, cooling, and equipment.

1.3 Consistent with IPU EE Policy, IPU Representative will recommend the appropriate energy efficiency measures to be installed.

1.4 With the Customer and IPU’s approval, IPU Representative will install the energy efficiency measures recommended.

1.5 The General Service customer or property manager will sign the work order listing the measures installed.

Appendix C

IPU

Domestic Direct Install and Rebate Program

1. Energy Survey Process and Direct Install Program

1.1 The IPU Representative will meet with the residential customer and if necessary, receive a "Property Owner's Agreement" signed by the property owner or property manager for each rental unit that will be participating.

1.2 The IPU Representative will conduct a walk-through and enter in the database all the applicable energy measures for lighting, heating, cooling, and equipment.

1.3 Consistent with IPU EE Policy, IPU Representative will recommend the appropriate energy efficiency measures to be installed.

1.4 With the Customer and IPU's approval, IPU Representative will install the energy efficiency measures recommended.

1.5 The homeowner or property manager will sign the work order listing the measures installed.

2. Domestic Rebate Program

Energy Star® Equipment	Rebate Amount ($)	Energy Star Estimated Annual Savings* (kWh)
LED Lights (5-10 Watts)	$5.00	Varies
LED Lights (11-20 Watts)	$8.00	Varies
LED Lights (>20 Watts)	$10.00	Varies
Refrigerator	$100.00	185.0
Freezer	$50.00	47.0
Dishwasher	$50.00	25.0
Programmable/Smart Thermostat	$125.00	Varies
Ceiling Fan	$50.00	48.6
Clothes Washer	$200.00	49.5
Window Air Conditioner Unit	$50.00	918.0

*Estimated Annual Savings are from Energy Star or the U.S. Department of Energy.

Appendix D
IPU Energy Efficiency Program
General Services and Domestic Direct Install Measures

Listed below is the description of the installed measures included in the Direct Install Program and the allowance provided to General Service and Residential Customers

Measure Code	Installed Measure	Measure Price
INTERIOR LIGHTING		
	Linear Fluorescent Retrofit	
LGT362	4ft 4L 32W T8 High Perf w/EB	$ 80.00
LGT367	4ft 4L 32W T8 High Perf w/2EB	$ 93.00
LGT373	4ft 3L 32W T8 High Perf w/2EB	$ 85.00
LGT373a	4ft 3L 32W T8 High Perf w/Elec	$ 72.00
LGT383	4ft 2L w/EB (Retro)	$ 58.00
LGT381	4ft 2L T8 U6 w/EB	$ 71.00
LGT393	4ft 1L 32W T8 High Perf w/EB	$ 56.00
LGT401	8ft 4L T8 High Perf w/2EB	$142.00
LGT404	8ft 4L T8 High Perf w/EB	$111.00
LGT405	8ft 2L T8 w/EB	$100.00
LGT406	8ft 2L 28-32W w/EB & retro kit	$112.00
LGT403	8ft 2L T8HO w/EB (Retrofit)	$146.00
LGT407	8ft 1L T8 w/EB	$ 80.00
LGT408	6ft 4L 28-32W w/EB & retro kit	$110.00
LGT409	6ft 2L 28-32W w/EB & retro kit	$ 93.00
LGT410	3ft 2L 25W 2nd gen T8 w/EB	$ 65.50
LGT412	3ft 1L 25W 2nd gen T8 w/EB	$ 60.00
LGT415	3ft 4L 25W 2nd gen T8 w/EB (6-ft conv kit)	$ 95.00
LGT416	2ft 4L F17 2nd gen T8 w/EB	$ 68.00
LGT420	2ft 2L 32T8 U6 w/EB	$ 1.00
LGT422	2ft 2L F17 2nd gen T8 w/EB	$ 0.00
LGT425	2ft 1L F17 2nd gen T8 w/EB	$ 57.00
LGT426	4ft tube guard	$ 10.00

LGT427	8ft tube guard	$ 10.00
PARTS01_042017	Clear Acrylic Lens Cover (wrap fixture)	$ 59.00
PARTS01	Clear Acrylic Lens Cover	$ 18.00
	Linear Fluorescent New Fixture	
LGT377	4ft 2L w/EB (New Fixt)	$111.00
LGT403a	8ft 2L T8HO w/EB (New Fixt)	$137.00
	T8 Lamps	
LGT 347	8ft T8 Bulbs Only	$ 9.00
LGT 347	4ft T8 Bulbs Only	$ 7.00
INTERIOR LIGHTING T8 DELAMPING		
	4ft Retrofit / Delamping	
LGT461	4ft 3L T8 Retro/Delamp	$102.00
LGT462	4ft 2L T8 Retro/Delamp	$ 74.00
	4ft New Fixture / Delamping	
	4ft 4L T8 New Fix/Delamp	$166.00
LGT463	4ft 3L T8 New Fix/Delamp	$163.00
LGT464	4ft 2L T8 New Fix/Delamp	$154.00
	4ft F25T8 retrofit / Delamping with Anti-Striation Ballast	
LGT610	4ft 3 Lamp F25T8 Retrofit	$125.00
LGT611	4ft 2 Lamp F25T8 Retrofit	$ 96.00
LGT612	4ft 1 Lamp F25T8 Retrofit	$ 89.00
	HID Replacement to Linear Florescent Fixture	
LGT473	4ft 4 Lamp T8 High Bay Fixture	$264.00
LGT474	4ft 2 Lamp T5HO High Bay Fixture	$270.00
LGT475	4ft 6 Lamp T8 High Bay Fixture	$288.00
LGT476	4ft 4 Lamp T5HO High Bay Fixture	$300.00
LGT477	4ft 8 Lamp T8 High Bay Fixture	$327.00
LGT478	4ft 6 Lamp T5HO High Bay Fixture	$335.00

LGT479	4ft 10 Lamp T8 High Bay Fixture	$442.00
LGT480	4ft 8 Lamp T5HO High Bay Fixture	$428.00
	8ft T12 HO Exterior Retrofit to 8ft T8 HO	
LGT481	8ft 1 Lamp T8HO Exterior Retrofit	$ 92.00
LGT482	8ft 2 Lamp T8HO Exterior Retrofit	$103.00
LGT483	8ft 3 Lamp T8HO Exterior Retrofit	$137.00
LGT484	8ft 4 Lamp T8HO Exterior Retrofit	$162.00
LGT485	8ft 6 Lamp T8HO Exterior Retrofit	$207.00
CFL		
LGT428	CFL 5-13W**	$ 21.00
	5 W Screw-n CFL**	$ 21.00
	7 W Screw-in CFL**	$ 21.00
	9 W Screw-in CFL**	$ 21.00
LGT428c	9 W Globe CFL**	$ 21.00
	13W/60W Spiral - Indoor CFL**	$ 21.00
	CFL 14-26W	
	11 W Screw-in CFL**	$ 21.00
LGT429i	14 W A-Type Screw-in**	$ 22.00
LGT429a	14W Screw-in CFL**	$ 17.00
LGT429l	18W Screw-in CFL**	$ 22.00
LGT429k	23W Screw-in CFL**	$ 18.00
LGT430	>= 27W**	$ 25.00
LGT430a_0715	l 27W/100W Spiral Indoor CFL**	$ 22.00
LGT432	CFL 11W R20**	$ 21.00
	9 W R20 Flood Type**	$ 21.00
LGT432a	11 W R20 Flood Type R20 2700K**	$ 22.00
	11 W R20 Flood Type R20 4000K**	$ 22.00
LGT433	CFL 15W R30**	$ 21.00
LGT433e	9W CFL Candle/Base**	$ 19.00
LGT433	CFL Indoor Flood, 14 W R20**	$ 22.00
LGT433a	CFL Indoor Flood, 15 W R30 2700K**	$ 22.00
LGT434e	23W CFL PAR38 2700K**	$ 25.00
LGT434f	14W CFL PAR20 2700K**	$ 19.00
LGT434g	19 W CFL R40 2700K**	$ 25.00
	19 W Screw-in Par 38 CFL**	$ 23.00
	20 W Screw-in Par 38 CFL**	$ 23.00

	CFL Indoor Flood, 20 W R40 2700K**	$ 23.00
	CFL Indoor Flood, 20 W R30 3200K**	$ 23.00
LGT435	CFL Indoor Flood, 25 W R30 2700K**	$ 21.00
LGT436	32W CRL Wall Pack Fixture**	$129.00
LGT437	CFL 65W Floodlight Fixture**	$132.00
LGT438	CFL 65W Yardlight Fixture**	$129.00
	PAR16 / MR16 Incandescent to CFL 9-11 W PAR16	
LGT558	9W PAR16**	$ 32.00
LGT559	11W PAR16**	$ 32.00
	PAR20 Incandescent to CFL 9-14W PAR20	
LGT560	9W PAR20**	$ 30.00
LGT561	11W PAR20**	$ 30.00
LGT562	14W PAR20**	$ 30.00
	PAR30 Incandescent to CFL 15-19W PAR30	
LGT564	19W PAR30**	$ 30.00
	PAR38 CFL 19-23W PAR38	
LGT565	19W PAR38**	$ 31.00
LGT566	20W PAR38**	$ 31.00
LGT567	23W PAR38**	$ 31.00
	PAR16 / MR16 Incandescent to CMH PAR16	
LGT568	20W PAR16**	$109.80
	PAR20 Incandescent to CMH PAR20	
LGT569	20W PAR20**	$ 72.00
LGT570	39W PAR20**	$ 85.00
	PAR30 Incandescent to CMH PAR30	
LGT571	20W PAR30**	$ 60.00
LGT572	35W PAR30**	$ 72.00
LGT573	70W PAR30**	$ 85.00
	HID Fixture Replacement to CFL	
LGT579	80W CFL Spiral 120V Retrofit**	$162.00

LGT584	100W CFL Spiral 120V/277V Retrofit**	$174.00
LGT587	150W CFL Spiral 120V/277V Retrofit**	$195.00
LGT588	200W CFL Spiral 120V/277V Retrofit**	$209.00
	HID Wall pack Replacement to CFL Wall pack	
LGT590	42W CFL Wall pack Fixture**	$148.00
	Chandelier Incandescent replacement to CFL Chandelier	
LGT596	2W CFL Tear Drop Candelabra**	$ 26.00
LGT597	14W CFL Tear Drop Candelabra**	$ 26.00
LGT598	5W CFL Flame Tip Bulb**	$ 26.00
LGT617	Cold Cathode CFL (1-6W)**	$ 26.00
LGT617a	Cold Cathode CFL (7-15W)**	$ 31.00
LED LIGHTING		
	4ft LED Retrofit	
LGT486	4ft 4L Linear LED Retrofit	$149.00
LGT486_2c_0317	4ft 3L (6pc) LED Retrofit Bi-Level	$142.00
LGT486a	4ft 4L LED Retrofit Plug-n-Play	$108.00
LGT487	4ft 3L Linear LED Retrofit	$116.00
LGT487_1b_0717APU	4FT 2L LED lamp only Plug-n-Play	$ 55.00
LGT487_1c_0717APU	4FT 4L LED lamp only Plug-n-Play	$ 81.00
LGT487_1d_0717APU	4FT 3L LED lamp only Plug-n-Play	$ 68.00
LGT487a	4ft 3L LED Retrofit Plug-n-Play	$ 95.00
LGT488	4ft 2L Linear LED Retrofit	$ 96.00
LGT487b	4ft 4L LED (New Fixt)	$192.00
LGT488a	4ft 2L LED Retrofit Plug-n-Play	$ 80.00
LGT489a	4ft 1L LED Retrofit Plug-n-Play	$ 67.00
LGT489a_0216	4ft 1L Linear LED Retrofit	$ 81.00
LGT489_2b	4ft 1L (2pc) LED Retrofit	$ 73.00
LGT486_2a_1	2ft 2L U6 (3pc) LED Retrofit	$ 90.00
LGT486_2a	4ft 2L (4pc) LED Retrofit	$ 98.00
LGT486_2c	4ft 3L (6pc) LED Retrofit	$120.00
LGT-LED-09	4ft 4L (8pc) LED Retrofit	$153.00

	4ft T8 Tubes with Daylight Harvesting (Ballast with Sensor)	
LGT451-B (LGT451 in database)	4ft 1L LED With Daylight Harvesting Ballast and sensor	$191.00
LGT451-B (LGT451 in database)	4ft 2L LED With Daylight Harvesting Ballast and sensor	$209.00
LGT452	4ft 3L LED With Daylight Harvesting Ballast and sensor	$230.00
LGT453	4ft 4L LED With Daylight Harvesting Ballast and sensor	$248.00
	4ft T8 Strips with Daylight Harvesting (Ballast with Sensor)	
LGT451-B (LGT451 in database)	4ft (2 PCS) LED With Daylight Harvesting Ballast and sensor	$190.00
LGT451-B (LGT451 in database)	4ft (4 PCS) LED With Daylight Harvesting Ballast and sensor	$206.00
LGT452	4ft (6 PCS) LED With Daylight Harvesting Ballast and sensor	$226.00
LGT453	4ft (8 PCS) LED With Daylight Harvesting Ballast and sensor	$242.00
	4ft LED Retrofit / Delamping	
LGT490	4ft 3L LED Retrofit 57W	$137.00
LGT491	4ft 2L LED Retrofit 38W	$ 99.00
LGT492	4ft 1L LED Retrofit 19W	$ 84.00
	4ft LED New Fixture / Delamping	
LGT493	4ft 3L LED New Fixture	$205.00
LGT494	4ft 2L LED New Fixture	$180.00
LGT495	4ft 1L LED Fixture 19W	$145.00
	Chandelier Incandescent replacement to LED Chandelier	
LGT497	3W LED Dimmable Candelabra	$ 34.00
	Incandescent Replacement to LED	
LGT500	9W A-type LED	$ 34.00
LGT503	12W A-type LED	$ 34.00
LGT504	7W Globe-Type LED	$ 37.07
LGT506	9W Globe-Type LED	$ 40.00
LGT509	12W Globe-Type LED	$ 40.00
	PAR16 / MR16 incandescent to LED 2-6 W PAR16 / MR16	
LGT539_2b	LED 5W PAR/MR16	$ 42.00
LGT539_2c	LED 5W GU10 PAR/MR16	$ 44.00

LGT541	4W PAR16	$ 42.00
LGT542	6W PAR16	$ 42.00
LGT542a	10W PAR16	$ 42.00
	PAR20 Incandescent to LED 3-9W PAR20	
LGT543	3W PAR20	$ 39.00
LGT544	4W PAR20	$ 39.00
LGT545	6W PAR20	$ 39.00
LGT546	8W PAR20	$ 39.00
	PAR30 Incandescent to LED 7-19W PAR30	
LGT547	7W PAR30	$ 45.00
LGT547_2b	LED 16W PAR30	$ 45.00
LGT547a_0715	8W PAR30	$ 45.00
LGT548	10W PAR30	$ 45.00
LGT549	11W PAR30	$ 45.00
LGT550	13W PAR30	$ 45.00
LGT551	14W PAR30	$ 45.00
LGT552	15W PAR30	$ 45.00
LGT553	19W PAR30	$ 45.00
	PAR38 Incandescent to LED 16-23W PAR38	
LGT554a	13W PAR38	$ 50.00
LGT554	16W PAR38	$ 50.00
LGT555	20W PAR38	$ 50.00
LGT556	23W PAR38	$ 50.00
	LED Wall Packs	
LGT510_2a_0818	100W LED Bulb	$285.00
LGT510	30W LED Wall Pack 5000K	$292.50
LGT511	60W LED Wall Pack 5000K	$326.00
LGT512	90W LED Wall Pack 5000K	$356.00
LGT512b_0317	80W LED Wall Pack High Power	$423.00
LGT512_b_0921	150W LED Wallpack High Power	$543.00
LGT512_C	200W LED Wallpack High Power	$711.00
LGT512_D	300W LED Wallpack High Power	$837.00
	HID to LED	

LGT513	100W LED Highbay 5000K (Warehouse)	$403.00
LGT514	240W LED Highbay 5000K (Warehouse)	$526.00
LGT514a_0317(AvJet)	320W LED High Bay Fixture 5000K	$630.00
	Flood Lights	
LGT515_1	30W LED Flood Light	$209.00
LGT515_2	50W LED Flood Light	$239.00
	Area/Street Lighting	
LGT515_4	50W Area/Street Light 5000K	$366.00
LGT515_5	80W Area/Street Light 5000K	$457.00
LGT515_6	100W Area/Street Light 5000K	$571.00
LGT515_7	150W Area/Street Light 5000K	$610.00
LGT515_8	200W Area/Street Light 5000K	$725.00
LGT515_9	300W Area/Street Light 5000K	$852.00
	Canopy Station	
LGT515_10	40W LED Canopy Light 5000K	$282.00
LGT515_11	60W LED Canopy Light 5000K	$340.00
LGT515_12	90W LED Canopy Light 5000K	$506.00
LGT515_13	120W LED Canopy Light 5000K	$542.00
	Gas Station	
LGT515_14	40W LED Gas Station Canopy Light 5000K	$349.00
LGT515_15	60W LED Gas Station Canopy Light 5000K	$459.00
LGT515_16	90W LED Gas Station Canopy Light 5000K	$515.00
	Downlights (Recessed)	
LGT515_17	13W LED Downlight 4 Inch 5000K	$119.00
LGT515_18	22W LED Downlight 6 Inch 5000K	$126.00

LGT515_19	35W LED Downlight 8 Inch 5000K	$176.00
LED PANELS		
	2FT X 4 FT LED Flat Panel Retrofit	$232.00
	2FT X 2FT LED Flat Panel Retrofit	$232.00
	Solar Tubes	
LGT627	VELUX 10 in. Sun Tunnel Tubular Skylight with Rigid Tunnel and Low Profile Plastic and Metal Flashing	$731.00
LGT627	ODL 10 in. Tubular Skylight with Seamless Composite Flashing	$731.00
LED EXIT/OPEN SIGNS		
LGT439	LED Exit Sign-Red Replacement Battery Back-up	$118.00
LGT440	LED Exit Sign-Green Replacement Battery Back-up	$118.00
LGT500d	LED Open signs replaces Neon	$151.00
LGT500	Green or Red Photo luminescent Exit Sign (Single sided)	$158.00
LGT501	Green or Red Photo luminescent Exit Sign (Double sided)	$256.00
WINDOW FILM		
HVACS202	Medium Reflectivity Window Film	$ 9.00
HVACS202b_2	Low Reflectivity Window Film	$ 9.00
HVACS202c_2	High Reflectivity Window Film	$ 9.00
HVAC		
HVACS203	HVAC Tune-Up Basic Diagnostic < = 5 Ton Unit	$210.00
HVACS205	HVAC Tune-Up Basic Diagnostic > = 5 Ton Unit	$210.00
HVACS206	HVAC Tune-Up Basic Diagnostic > = 10 Ton Unit	$230.00
HVACS222	HVAC Tune-Up Comprehensive Diagnostic < = 10 Ton Unit	$530.00
HVACS208	Duct Sealing, Non-Residential CZ 15 (per Ton)	$348.50
HVACS208	Duct Test and Seal >= 5 Ton Unit (ducting	$430.00
HVACS209	Ceiling Fan with Thermostatic Control 30" to 36" (tied to the HVAC System)	$2,160.00

HVACS210	Ceiling Fan with Thermostatic Control 42" to 44" (tied to the HVAC System)	$2,300.00
HVACS211	Ceiling Fan with Thermostatic Control 52" to 56" (tied to the HVAC System)	$2,645.00
HVACS217	Refrigerant, Non-Residential CZ 15 (per Ton)	$161.50
HVACS220	Dirty Condenser Coil Cleaning	$85.00
T-STATS		
HVACS207	7 Day Programmable Thermostat	$150.00
HVACS207f	5 Day Programmable Thermostat	$150.00
HVACS208	All in One Thermostat	$150.00
HVACS209	Reprogramming/Education Existing Programmable Thermostats	$ 86.00
HVACS210	Thermostat Lock Box	$ 82.00
	Smart Thermostat RTA	$344.00
	Smart Thermostat Nest	$422.00
	Smart Thermostat EcoBee3	$397.00
	Smart Thermostat Honeywell	$373.00
	Common Wire attachment	$156.00
	Thermostat Training and Education	$ 37.00
	Outreach Customers for Thermostat	$ 67.00
	Hourly HVAC Service Tech Rate	$ 68.00
REFRIGERATION		
APPLS008	Refrigeration Curtains Med. Per Linear ft.	$195.00
APPLS008a	Freezer Curtains Med. Per Linear ft.	$212.00
	Refrigeration	
APPLS009_1	Walk-In Cooler - Tune Up	$196.00
APPLS009_2	Walk-In Freezer - Tune Up	$196.00
APPLS009_3	Under Counter & Self Contained - Tune Up	$196.00

APPLS009_4	Split Systems w/Multiple Coils - Tune Up	$196.00
APPLS010	Refrigerator Main Cooler Door Gaskets Med. Temp. per Linear ft.	$ 20.00
APPLS011	Freezer Main Cooler Door Gaskets Low Temp. per Linear ft.	$ 20.00
APPLS012	Door Closer	$199.00
APPLS013	Heavy duty UV Refrigeration Pipe-Insulation per Linear ft.	$ 13.00
APPLS21 Greenwize	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Freezer	$626.88
APPLS21_1 Sentry	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Freezer	$466.88
APPLS22 Greenwize	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Cooler	$584.38
APPLS22_2 Sentry	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Cooler	$499.38
APPLS23	Replace Standard Fan Motors with Electronically Commutated Motors (ECM)	$241.00
APPLS23	16W Electronically Commutated Motor	$205.00
APPLS23-a	1/15HP-1/20HP Electronically Commutated Motor	$233.00
APPLS24	Install Fan Controllers	$286.40
APPLS25	Suction Line Insulation (per linear foot)	$ 20.00
APPLS26	Refrigerant charge for refrigerators/freezers (per pound)	$ 86.00
	Refrigeration LED Retrofit	
APPLS018	4ft 1L LED (Low Temp)	$ 86.67
APPLS018a	5ft 1L LED (Low Temp)	$116.24
APPLS019	6ft 1L LED (Low Temp)	$129.38
APPLS020	4ft 2L LED (Low Temp)	$149.50
WEATHERIZATION – all electric homes		
WTHRS005	Seal Doors - Mohair (per linear foot)	$ 5.00
WTHRS007	Door Sweeps per Door	$ 69.00
WTHRS008	Caulking (per linear foot)	$ 4.25
WTHRS009	Expandable Foam (per linear foot)	$ 20.00

WTHRS006	Seal Windows - Silicon (per linear foot)	$ 10.00
WTHRS010	External Water Heater Insulation (=> 50-Gal Tank) and piping insulation (up to 20ft)	$326.00
SENSORS/TIMERS		
LGT445	Wall sensor	$100.00
LGT445a	Dual Wall Sensor	$135.00
LGT447	Lighting timers	$128.00
LGT448	Lighting dimmers	$100.00
	Toggle Switch	$100.00
APPLS016	Appliance Timer 120V 10A	$ 95.00
LGT599	Photo Cell Sensor	$ 83.70
LGT600	Ceiling Mount Sensor	$186.30
LGT603	HB3x0-Lx High Bay Line Voltage Passive Infrared Occupancy Sensor	$186.00
VDM01	Vending Miser Unit and Installation	$231.19
VDM02	Plug Miser Unit and Installation	$167.57
VDM03	Cooler Miser Unit and Installation	$192.00
VDM04	Snack Miser Unit and Installation	$180.50
VDM05	VendingMiser/PlugMiser/CoolerMiser/Snack Miser Installation Only	$ 86.00
VDM06	Trickle Star Device	$ 62.10
	Title 24 Sensors	
T24S01	Light Control Package (Occ. Sensor & Ceiling Mount wireless)	$313.00
T24S02	Power Pak Dimming Module	$248.00
T24S03	Wireless Vacancy Corner Sensor	$158.00
T24S04	Dimmable Wireless Ballast	$111.00
T24S05	Daylight Sensor	$179.00

T24S06	Wireless Control Switch	$109.00
T24S08	Dual-Circuit Occupancy Sensor Switch	$173.00
T24S09	Outdoor photocell sensor	$ 90.00
T24S10	Astronomical Time Clock With Holiday Programing	$358.00
T24S11	Outdoor Motion Sensor	$210.00
T24S12	Indoor Time Clock	$328.00
CONTROLS		
CTRLS01	Demand Side Electrical System Control and Monitoring	$4,200.00
PUMPS AND MOTORS		
EM01	Motors 1.5 HP NEMA Premium Eff.	$540.00
EM02	Motors 2 HP NEMA Premium Eff.	$663.00
EM03	Motors 3 HP NEMA Premium Eff.	$908.00
EM04	Motors 1.5 HP NEMA Premium Eff. totally enclosed	$724.00
EM05	Motors 2 HP NEMA Premium Eff. totally enclosed	$908.00
EM06	Motors 3 HP NEMA Premium Eff. totally enclosed	$1,277.00
EM07	Variable-Speed Water Pump <= 5 HP	$1,277.00
AC/APPLIANCE REPLACEMENT		
ACS22	Room AC Replacement 5,000 - 5,999 BTU per Unit	$375.00
ACS23	Room AC Replacement 6,000 - 6,999 BTU per Unit	$594.00
ACS24	Room AC Replacement 7,000 - 7,999 BTU per Unit	$850.00
ACS12	Room AC Replacement 8,000 - 8,999 BTU per Unit	$897.00
ACS25	Room AC Replacement 9,000 - 9,999 BTU per Unit	$915.00
ACS26	Room AC Replacement 10,000 - 10,999 BTU per Unit	$945.00

ACS27	Room AC Replacement 11,000 - 11,999 BTU per Unit	$1,050.00
ACS13	Room AC Replacement 12,000 - 12,999 BTU per Unit	$1,073.00
ACS17	Room AC Replacement 13,000 - 13,999 BTU per Unit	$1,158.00
ACS18	Room AC Replacement 14,000 - 14,999 BTU per Unit	$1,220.00
ACS19	Room AC Replacement 15,000 - 15,999 BTU per Unit	$1,230.00
ACS20	Room AC Replacement 16,000 - 16,999 BTU per Unit	$1,230.00
ACS21	Room AC Replacement 17,000 - 17,999 BTU per Unit	$1,230.00
ACS14	Room AC Replacement 18,000 - 23,999 BTU per Unit	$1,230.00
ACS15	Room AC Replacement 24,000 BTU per Unit	$1,230.00
ACS16	Power Cord	$ 33.72
ACS30	Pig Tails	$ 28.32
	Heat Pump Units (HP)	
ACS28	Room HP Replacement 5,000 - 5,999 BTU per Unit	$431.25
ACS29	Room HP Replacement 6,000 - 6,999 BTU per Unit	$683.10
ACS30	Room HP Replacement 7,000 - 7,999 BTU per Unit	$908.27
ACS31	Room HP Replacement 8,000 - 8,999 BTU per Unit	$963.70
ACS32	Room HP Replacement 9,000 - 9,999 BTU per Unit	$1,012.00
ACS33	Room HP Replacement 10,000 - 10,999 BTU per Unit	$ 1,105.00
ACS34	Room HP Replacement 11,000 - 11,999 BTU per Unit	$ 1,105.00
ACS35	Room HP Replacement 12,000 - 12,999 BTU per Unit	$ 1,120.00

ACS36	Room HP Replacement 13,000 - 13,999 BTU per Unit	$ 1,230.00
ACS37	Room HP Replacement 14,000 - 14,999 BTU per Unit	$ 1,230.00
ACS38	Room HP Replacement 15,000 - 15,999 BTU per Unit	$ 1,250.00
ACS39	Room HP Replacement 16,000 - 16,999 BTU per Unit	$ 1,250.00
ACS40	Room HP Replacement 17,000 - 17,999 BTU per Unit	$ 1,250.00
ACS41	Room HP Replacement 18,000 - 23,999 BTU per Unit	$ 1,270.00
ACS42	Room HP Replacement 24,000 BTU per Unit	$1,270.00
ACS43	AC/HP Drain Pan	$ 60.96
ACS44	AC/HP Adapter Plug	$ 13.36
MISCELLANEOUS		
LABORS06	High Ceiling charge per fixture	$ 3.50
LABORS07	Scissor Lift per day	$280.00
ADDITIONAL SERVICES (CONSULTING)		
LABOR04	RHA Labor (hourly)	$ 66.00
LABOR05	Small Business Energy Audit & Report less than 75kW	$200.00
LABOR06	Small Business Advanced Energy Audit & Report	$500.00
LABOR06a	Billing Inquiry/High Bill Complaint Energy Audit & Report	$500.00
LABOR07	Measurements and Verification (Metering hourly rate)	$110.00
LABOR08	IT Consulting Services (hourly)	$ 90.00
LABOR11	Smart Thermostat Installation Only	$164.00