Illinois Energy Efficiency Stakeholder Advisory Group

2020 SAG Portfolio Planning Process
Proposed Energy Efficiency Ideas Template

Submitter Contact Information

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Energy Efficiency Idea Questions

Please check the boxes below to identify 1) the type of idea; 2) which Illinois utility or utilities will be impacted by the idea; and 3) which EE sector the idea impacts.

Check	Type of Energy Efficiency Idea
☒	New Measure or New Program Idea
☐	Proposed Program Approach
☐	Innovative Idea

Check	Illinois Utility Impacted by Energy Efficiency Idea
☒	Ameren Illinois
☒	ComEd
☐	Nicor Gas
☐	Peoples Gas & North Shore Gas
☐	All Illinois Utilities

Check	Energy Efficiency Sector Targeted by Energy Efficiency Idea
☐	Residential Customers – Single Family (non-income qualified/income eligible)
☐	Residential Customers – Multifamily (non-income qualified/income eligible)
☐	Residential Customers – Single Family Income Qualified/Income Eligible
☐	Residential Customers – Multifamily Income Qualified/Income Eligible
☐	Small Business Customers (commercial & industrial sector)
☒	Medium/Large Business Customers (commercial & industrial sector)
☐	Other (research & development, emerging technologies, market transformation)

Additional Questions

1. **Description of Idea:** Describe the proposed idea, including the purpose of the suggested idea and rationale. Describe whether this is an idea that could be implemented in an existing EE program, or whether the idea involves establishing a new measure or program. Please indicate whether additional research may be required before implementation.

   Questions to consider: What issue will this proposed change resolve? Will the proposed change increase participation and result in increased energy savings? Will this reduce costs? Will this increase customer satisfaction? Will this help achieve statutory goals? Will this help increase program penetration?

Computers and office equipment waste power in two distinct ways:
- Active Power Waste where the device is on but not performing its main function (e.g. computer and office equipment are on but not being used)
- Passive Standby Waste where power is used by office equipment to keep it ready to switch on

Tier 2 advanced powerstrips for office monitors and eliminates both active and passive plug load energy waste.

Savings are delivered and logged to each office workstation individually, avoiding the "hit or miss" of broader energy management software controls.

This new program would be offered to mid to large commercial and educational facilities. Medium to large Commercial office buildings (75 KW demand to 1000 kW demand consolidated) and universities with high number of computer work stations. The program offers pre and post energy use monitoring and logging of office equipment (PC, Personal printer, lamps, monitor) per work cubicle, per organization unit and/or per floor in buildings by installing a Tier 2 advanced power strip for PC power management at each eligible work station. The program would inform the utility with energy use data for personal work stations which then could be utilized to determine a deemed number for the Tier 2 Advanced Powerstrip measure in the commercial sector. The business IT manager would have a snapshot of the plug load energy use in their facility and the ability to track energy savings through the Tier 2 Advanced powerstrip's cloud platform. This proposed program for plug load management is an opportunity to understand office workspace energy use and curtail

that energy use by 20 to 40%. Plug load energy use is the next phase of easily attainable savings after commercial energy efficient replacement lighting programs.

2. **Implementation:** How will this idea be delivered to the target market? Describe marketing strategies used to reach the target market and minimize market confusion.

This program would be offered to mid to large commercial and educational facilities. The program offers pre and post energy use data logging of office equipment (PC, Personal printer, lamps, monitor) per work cubicle, per organization unit and/or per floor utilizing a Tier 2 advanced power strip for PC power management.
The program would inform the utility with energy use data for personal work stations which then could be utilized to determine a deemed number for the Commercial Tier 2 Advanced Powerstrip measure.

Contract staff would install Tier 2 Advanced Powerstrips with data logging capabilities on each qualified work station. Working with the IT and/or Facility Manager power management software is engaged and collects interval logging data. After a specified time period energy management is engaged and powers down the computer and office equipment when not in use. The Building Owners and Managers Association (BOMA) to promote and recruit for the program Utility Key Account representatives will be tapped for recommendations on interested customers

3. **Background:** Describe where the idea originated from, including whether this idea has been successfully implemented in other jurisdictions. Provide specific background information that will help utilities and SAG participants understand the proposed idea.

   Questions to consider: In what jurisdiction has this idea been successfully implemented? Do you have information on eligible customers, participation achieved, and/or savings achieved? Do you have access to reports describing the successful idea / program approach?

   The Tier 2 Advanced Powerstrips have been field tested at San Diego University and by the state of Minnesota.

San Diego University

https://www.embertec.com/assets/pdf/CA%20Technical%20Forum%20Approved%20Commercial%20Tier%202%20APS.pdf

State of Minnesota

http://mn.gov/commerce-stat/pdfs/card-tier-2-advanced-power-strips.pdf

4. **Idea Impact:** Provide additional information on the customer segment that will be targeted with the program idea, including how and why this idea will have a positive impact on customers participating in Illinois EE programs.

   Questions to consider: What level of impact will this idea have on current EE programs? How much additional market share do you estimate this change will impact?

   Estimated Savings 25 to 40% of the workspace energy use- 200 to 400 kWh per workspace

Estimated Budget: $60 per powerstrip installed includes equipment and data monitoring package

5. **Duration:** Is this idea intended to be offered for the duration of the 4-year EE Plan or as a pilot measure or program? The program will be offered for the duration of the 4-year EE Plan. The energy use data collected will help inform a deemed measure for office Tier 2 Advance Powerstrips.

6. **Estimated Budget:** Provide the total estimated budget for each program year (2022 – 2025). $300,000 per year

7. **Estimated Participation:** Provide participation totals for each program year (i.e. number of measures installed, number of customer participants, etc.) 5,000 Tier 2 Advanced powerstrips installed annually

Sources

If any sources will be useful to Illinois utilities in reviewing ideas, please either provide links within this template or send attachment(s) to the SAG Facilitator with the Energy Efficiency Idea submittal.