

PPL Electric Utilities (PPL EU)

Act 129 EE&C Stakeholder Meeting – November 19, 2014

This stakeholder meeting provided an overview of our Phase II evaluation results for program year 5 (June 2013-May 2014), a summary of Phase II results through August 2014, high level program highlights, and proposed changes to the plan. Finally, stakeholders were asked for their input on the types of programs they would like to see in Phase III.

Comments, Questions and Responses

Evaluation Results for Phase II

Question: What % of low- income savings is from low-income qualified programs?

Answer: 30-33%

Summary of Phase II Results

Question: Is Direct Discount reflected in the chart?

Answer: It's reflected in the Prescriptive sections for each sector

Question: When does school benchmarking start?

Answer: Outside of LED exit signs, next year. There are no direct savings in this program. The savings are reflected in other programs if schools implement energy efficient improvements.

Program Highlights

Question: What do schools need to do to participate in free LED exit sign retrofit component of the School Benchmarking Program?

Answer: Schools can be included only if they participate in benchmarking.

Question: Why has Small C&I been so successful?

Answer: Lighting, lighting, lighting.

Question: Is lighting popular because it's easy to understand?

Answer: The way we deliver, particularly Direct Discount, makes it easy for customers to participate. Trade allies promote the program well through their natural business model to sell lighting projects, by conducting free lighting assessment for customers and process all the paperwork. Lighting projects have relatively low cost, quick payback, and do not usually need landlord approval. Because of the low cost and quick payback, most of the lighting retrofits are early replacements; the customer does not usually wait for the equipment to fail beyond repair like with HVAC equipment.

Question: How will the changes to the portfolio financially impact Small C&I?

Answer: Residential (including low-income) is expecting to increase approximately \$3 million, Small C&I (including GNI) will be up approximately \$6 million, and large C&I (including GNI) will go down approximately \$11 million.

Question: What are the some of the best practices that can be transferred to other programs?
What can be done more with non-lighting?

Answer: We are looking to stakeholders for input, especially for Phase III. Some of our proposed changes to the Phase II EE&C plan will be pilots, including changes to incentives to better understand how to encourage customers to implement non-lighting measures which will influence decisions for Phase III.

Question: If you look at HVAC changes, have you looked at Tier levels?

Answer: Yes. We likely will propose changes to the HVAC rebate levels in our current EE&C plan. We are considering tiered rebates, such as \$200 for SEER 15 and \$800 for SEER 16 air source heat pumps.

Question: If the customer has oil and cannot afford it and is using space heaters, can we look at making electric heater rebates?

Answer: PPL EU is proposing a de facto heating pilot for low-income as part of its proposed changes to the current EE&C plan. Under the pilot, PPL EU would install high-efficiency electric heat, such as an air source heat pump or a ductless heat pump, to replace a non-working oil heater where they are using space heaters and the premise has no access to natural gas. PPL

EU expects to limit this pilot to approximately 20 customers who are homeowners. All measures would be installed at no cost to the customer. This pilot will not provide financial assistance to customers with working oil heat, who cannot afford to pay for that heat. There are other programs, such as LIHEAP, designed for that circumstance.

Question: What about providing training to contractors and building owners?

Answer: PPL EU proposed that type of training in a previous EE&C Plan revision, but it was not approved. We will look at again for Phase III.

Input for Phase III

Question: How will you reach customers outside of lighting?

Answer: We don't know yet and that is why we are seeking stakeholder input. We think incentives must be much higher to encourage customers to replace equipment before failure or to install a higher efficiency unit when it fails. We also think we may need to pay an incentive to the HVAC contractor (in addition to the incentive paid to the customer) to encourage them to take the extra time and effort to provide payback information to the customer and to convince customers to buy the higher efficiency units.

Some feedback from others on this question:

- Use tools, such as apps where trade allies can punch in manufacturing rebates, financing, and utility rebates. He also recommended smart, Wi-Fi enabled thermostats.
- Educate and reach out to people who have completed the Building Operator Certification who are heavily involved with local government facility managers.
- Build a building analysis system? Warning when equipment is about to fail or you are being inefficient. Example: The heat is on while the AC is also running.
- Create more tools for trade allies including marketing materials, etc.
- Ensure all programs and applications are easy for customers. Can trade allies fill-out all paperwork like the Direct Discount component for lighting?
- Please make the WRAP application easier.

Comment: There are better ways to reach customers, especially in rural areas, by utilizing community based organizations such as SEDA-COG.

Answer: PPL EU welcomes your suggestions for Phase III program design.

Question: Will PPL EU explore more geo-thermal as a heating/cooling measure?

Answer: PPL EU had geothermal rebates in Phase I and expects to consider them during Phase III program design.

Question: What was the most successful marketing for Small C&I?

Answer: The Direct Discount mechanism for lighting. The trade allies (lighting contractors) promote the program and engage customers directly, at no cost to PPL EU other than training and collateral material developed by PPL EU.

Question: What was your customer participation saturation?

Answer: In Phase I, approximately 300,000 customers participated in at least one program. That figure excludes the upstream lighting program, so in reality, many more customers participated. That is approximately 25% of all customers, probably more considering some of our accounts are not occupied (such as cable company amplifiers), which is a very significant penetration rate.

Comment: The PY5 customer saturation seems very low, excluding participation in upstream lighting. Answer: PPL EU is following its approved Phase II EE&C Plan very closely and the portfolio savings is on target and under budget. The objective of this EE&C Plan is not to maximize customer participation. It is to achieve the approved savings, within the budget, and to meet cost-effective requirements. If stakeholders want programs changed to maximize customer penetration, we welcome that input for Phase III.

Question: How is the PUC setting Phase 3 targets for comprehensive programs?

Answer: PPL EU does not understand how the PUC can accurately estimate market potential, particularly achievable and program potential, without understanding the type of programs desired by each EDC and its stakeholders. The SWE and PUC are seeking Phase III input from

EDCs and all stakeholders at their December 2nd stakeholder meeting in Harrisburg. The SWE and PUC are not seeking input from the EDCs separately from other stakeholders. The types of programs, the mix of measures, the allocation of programs across customer sectors, and the level of comprehensiveness significantly impact the achievable potential and the program acquisition cost and, therefore, the Phase III targets and rules. Since PA EDCs have a fixed dollar budget under Act 129, higher program acquisition costs will result in lower program potential. This issue is one of the key reasons for today's meeting (Nov. 19). It is important for PPL EU to understand the types of programs and level of comprehensiveness desired by stakeholders, and the impact of these issues on Phase III market potential and program design. PPL EU encourages stakeholders to attend the PUC/SWE's December 2nd meeting, ask questions, and provide input about the types of programs desired for Phase III.

Question: Has there been a study on whether customers have received back what they have put in?

Answer: Yes. PPL EU has conducted some studies on this topic for some customer groups. In general, customers who participate in Act 129 programs achieve benefits such as energy savings and rebates that exceed their Act 129 costs. The average residential customer pays approximately \$22 per year for Act 129. If they install 4 or 5 LEDs, that saves enough to recover their Act 129 costs each year. The cost-effectiveness results also confirm benefits are approximately two times greater than costs.

Question: Will PPL include on-bill financing or on-bill collection?

Answer: PPL EU is not in favor of these for many reasons and does not think they are essential to reach our compliance targets. There are significant implementation costs (such as modifications to billing systems), credit and collections risks, questions about how to handle partial payments of the electric bill, what happens when the customer leaves (does the loan follow the customer or stay with the premise/meter)?

Question: Are we introducing an LED Street Light Tariff rate and has PPL looked at the Vermont Law?

Answer: We will look into and get back on the Vermont Law/Rules, but the issue of street lighting is difficult and who actually owns the lights is something to consider. Eventually, there will have to be a tariff rate for LED street lights.

Question: Has PPL looked into possibly partnering with a gas provider?

Answer: PPL has investigated coordinating its programs with gas providers, especially for low-income. We will continue to look into this but there are many logistical and other challenges, especially a major difference in available funding. EDCs have much higher EE&C budgets than gas companies so joint projects would be very limited.