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August 20, 2018

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

VIA ELECTRONIC FILING

**RE: Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase III
Energy Efficiency and Conservation Plan; Docket No. M-2015-2515642**

Dear Secretary Chiavetta:

Attached please find for filing with the Pennsylvania Public Utility Commission the Comments of the PP&L Industrial Customer Alliance ("PPLICA") in the above-referenced proceeding.

As evidenced by the attached Certificate of Service, all parties to the proceeding are being served with a copy of this document. Thank you.

Very truly yours,

McNEES WALLACE & NURICK LLC

By 
Alessandra L. Hylander

Counsel to the PP&L Industrial Customer Alliance

c: Office of Administrative Law Judge
Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that I am this day serving a true copy of the foregoing document upon the participants listed below in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant).

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Certificate of Service

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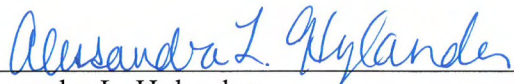
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Alessandra L. Hylander

Counsel to the PP&L Industrial Customer Alliance

Dated this 20th day of August, 2018, at Harrisburg, Pennsylvania

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities Corporation :
For Approval of its Act 129 Phase III Energy : Docket No. M-2015-2515642
Efficiency and Conservation Plan :

**COMMENTS OF THE
PP&L INDUSTRIAL CUSTOMER ALLIANCE**

I. INTRODUCTION

On October 15, 2009, Governor Rendell signed into law House Bill 2200, otherwise known as Act 129 of 2008 ("Act 129" or "Act"). Among other things, Act 129 expanded the Pennsylvania Public Utility Commission's ("PUC" or "Commission") oversight responsibilities and imposed new requirements on Electric Distribution Companies ("EDCs") regarding the reduction of energy consumption and demand through Energy Efficiency and Conservation ("EE&C") Plans. In accordance with the Act, on November 30, 2015, PPL Electric Utilities Corporation ("PPL" or "Company") submitted a Petition for Approval of its Phase III Energy Efficiency and Conservation Plan ("Phase III Plan" or "Plan"), which was approved in part and rejected in part by the Commission in a Tentative Order entered June 9, 2016, at Docket No. M-2015-2515642 ("Phase III Plan Order") and later declared final via a Secretarial Letter on June 27, 2016, at the same docket.

On July 20, 2018, PPL submitted a Petition for Approval of Changes to Its Act 129 Phase III Energy Efficiency and Conservation Plan to the Commission ("Petition").¹ The Petition proposes eight changes, both major and minor, to PPL's Phase III Plan. Although its

¹ *Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase III Energy Efficiency and Conservation Plan*, Docket No. M-2015-2515642 (July 20, 2018).

Petition contains both major and minor changes, PPL requested that Commission staff review the Petition and any Comments or Reply Comments thereto pursuant to the procedures for changes that do not meet the minor change criteria (*i.e.*, major changes) set forth in the PUC's *Minor Plan Change Order*.² PPLICA does not oppose PPL's request to proceed under the process for major plan changes. However, PPLICA opposes other portions of PPL's Petition. Accordingly, PPLICA hereby files the foregoing Comments in response to PPL's Petition.

II. SUMMARY

Consistent with the expedited procedures set forth for qualifying changes in the *Minor Plan Change Order*, PPL requests that Commission "resolve issues, if possible, on the basis of comments and replies to comments on the proposed modifications." June 2018 Petition at pp. 2-3. PPL "respectfully request[ed] that the Commission review and approve of any proposed changes that no party opposes or about which the parties' comments fail to raise any legitimate issues of law or fact." *Id.* at p. 3.

Of the eight proposed modifications to the Phase III Plan, PPLICA is concerned with PPL's proposals to: (i) shift \$2.7 million from the Large Commercial & Industrial ("C&I") sector budget in the non-Residential Energy Efficiency ("EE") program to the Large C&I sector budget in the Demand Response ("DR") program (hereinafter referred to as Proposed Change No. 1); (ii) shift \$5.6 million from the Government, Nonprofit, & Education ("GNE") sector budget in the DR Program to the GNE sector budget in the non-Residential EE program (hereinafter referred to as Proposed Change No. 2); and (iii) reduce the estimated Small C&I savings in the Non-Residential EE program and the DR program (hereinafter referred to as Proposed Change No. 3). PPLICA does not oppose PPL's request to proceed under the process for major plan

² See *Energy Efficiency and Conservation Program*, Docket No. M-2008-2069887 (Order Entered June 10, 2011) ("*Minor Plan Change Order*").

changes. However, PPLICA opposes implementation of Proposed Change No. 2 in its current form and will briefly comment on Proposed Changes Nos. 1 and 3 as changes related to Proposed Change No. 2.

III. COMMENTS

A. The PUC Should Deny PPL's Request to Shift \$5.6 Million From the GNE Sector Budget in the DR Program to the GNE Sector Budget in the Non-Residential EE Program and Alternatively Direct PPL to Address the Increased Demand for GNE EE Programs by Eliminating the GNE Sector, Allocating the Remaining GNE Sector Budget Among the Small C&I and Large C&I Sectors, and Allowing all Small C&I and Large C&I Customers Equal Access to the Respective EE and DR Programs.

Of concern to PPLICA, PPL's Proposed Change No. 2 reflects the Company's increasing reliance on GNE EE savings to meet its Act 129 compliance obligations. PPL reports that it cannot successfully target EE or DR savings from the Small C&I sector because of rising outreach costs necessary to stimulate Small C&I participation in the program. To meet its Act 129 compliance targets, PPL must make up the shortfall between anticipated and actual Small C&I sector EE and DR savings. To that end, Proposed Change No. 2 would reallocate \$5.6 million of budgeted funds from PPL's GNE DR program to the GNE EE program to ensure funds remain available to meet rising demand for GNE EE rebates. However, for the reasons discussed below, PPL's Proposed Change No. 2 should be rejected in favor of making PPL's Non-Residential DR and EE programs available to all Small C&I and Large C&I customers, respectively. This proposal addresses PPL's concerns regarding availability of funds for GNE projects while ensuring that PPL's EE and DR measures are provided equitably to all classes of customers as required by the Act 129 statute.³

³ See 66 Pa. C.S. § 2806(a)(5).

As noted above, PPL's proposed modification to the GNE program budgets derives from an inability to efficiently secure energy savings from the Small C&I sector.⁴ For every kWh in savings achieved from the Small C&I sector, PPL claims to incur acquisition costs more than 50% higher than projected.⁵ As a result, PPL anticipates that its total energy savings from the Small C&I sector will be 120,000 MWh/yr less than the originally projected 462,861 MWh/yr, without any adjustments to the original \$61.9 million GNE program budget.⁶ To compensate for the energy savings shortfall created by the underperforming Small C&I sector, PPL proposes to shift \$5.6 million from its GNE DR program in order to stimulate additional energy savings through its GNE EE program.⁷

Of concern to PPLICA, PPL's proposal to shift costs between GNE programs has cost consequences for Large C&I customers because of the way PPL allocates GNE sector costs to the Large C&I and Small C&I customer classes and the divergent participation in the GNE DR and GNE EE programs. PPL allocates EE&C program costs among five program sectors but recovers the costs of those programs from three customer classes, one of which is the Large C&I class. The Residential customer class funds both Residential and Low-Income Sector programs. Meanwhile, Large C&I and Small C&I customers pay for Large C&I and Small C&I Sector programs and share costs for the GNE sector programs. Throughout PPL's Phase II EE&C Plan, Small C&I customers accounted for approximately the majority of PPL's GNE sector costs.⁸ In response to questions at PPL's most recent Stakeholders Meeting, PPLICA understands that the

⁴ Petition, at 12.

⁵ *Id.*

⁶ *Id.*; see also Appendix A, at 33.

⁷ Petition, at 9-10.

⁸ See PPL Act 129 Phase II EE&C Plan Stakeholders Meeting Presentation, November 19, 2014, at 11 *available at* https://www.pplelectric.com/-/media/PPLElectric/Save-Energy-and-Money/Docs/Act129_Phase2/Act129Phase2StakeholderPresentation11192014.pdf?la=en (showing that PPL allocated 69% of Phase II GNE costs to the Small C&I sector).

GNE costs attributable to Large C&I customers has increased to 56% under the current Phase III Plan, meaning that the majority of GNE costs are now attributable to Large C&I customers.

With Large C&I customers accounting for 56% of PPL's GNE program costs, a proposal that increases the total GNE dollars spent by PPL significantly impacts Large C&I customers. Although PPL emphasizes that shifting \$5.6 million between the GNE DR and GNE EE programs would not modify the aggregate \$20.35 million budget for the GNE sector, PPL's reliance on sector budgets to evaluate cost impacts ignores the fact that program participation rates impact the costs actually incurred by each customer class.⁹ In this case, if PPL declines to transfer the \$5.6 million in the GNE DR program to the GNE EE program, PPL would eventually refund a portion of its GNE DR budget back to Large C&I customers. For example, assuming PPL developed the EE&C rates effective June 1, 2018, to reflect an estimated 56% allocation of GNE program costs to Large C&I customers, PPL would eventually refund approximately \$3.14 million of the GNE DR budget back to Large C&I customers because the GNE sector did not meaningfully participate in DR. Conversely, if Proposed Change No. 2 is approved, the entire \$5.6 million would be allocated to GNE EE measures, where PPL would almost certainly spend every dollar on GNE EE program.

The expectation that any additional revenues flowed to the GNE EE program would increase costs to Large C&I customers is directly supported by PPL's Petition. PPL's Petition identifies Combined Heat & Power ("CHP") projects as the primary driver behind the excess GNE EE savings to date.¹⁰ PPL also indicates that most of the existing CHP projects are attributable to Large C&I customers, stating that "a significant portion of the GNE projects are CHP projects that are greater in number and size than originally estimated in the Phase III EE&C

⁹ See Petition, at 11.

¹⁰ Petition, at 10.

Plan."¹¹ Finally, PPL anticipates that GNE customers will continue submitting CHP projects for rebates if additional funding for the GNE EE program becomes available.¹²

Importantly, PPL is proposing to increase its GNE program spending to meet its overall compliance target, not the separate carve-out for GNE program savings. As disclosed at its most recent EE&C Stakeholder Meeting, PPL has already met its Phase III compliance target for GNE savings.¹³ The Commission required PPL to reduce GNE consumption by 50,507 MWh/yr over the Phase III Plan.¹⁴ In the first year of Phase III alone (PY 8), PPL verified 34,526 MWh/yr of GNE savings, totaling 68.3% of the targeted GNE savings.¹⁵ For the second year of Phase III (PY 9) PPL has reported savings of 29,367 MWh/yr. Assuming PPL verifies the reported savings for PY 9 without material adjustments, PPL will have achieved GNE savings of 63,893 MWh/yr over the first two years of Phase III, or 126.5% of the total 50,507 GNE compliance target.¹⁶ At the projected rate of GNE participation, PPL expects to achieve total GNE savings of 300,668 MWh/yr or 595% of the total GNE compliance target.¹⁷

Particularly as PPL has already met its GNE compliance target, PPLICA is concerned that the growing dependency on GNE CHP projects could unreasonably require all Large C&I customers to pay higher costs to support the GNE EE program, without an opportunity to participate in additional EE programs funded by the additional costs. Rather, because PPL also proposes to reduce the EE program budget for the Large C&I sector, non-GNE Large C&I customers may eventually face the same waitlist scenario currently impacting PPL's GNE customers. PPLICA acknowledges PPL's representation that its proposal to shift costs from the

¹¹ *Id.*

¹² *See id.*

¹³ *See* PPL Act 129 Phase II EE&C Plan Stakeholders Meeting Presentation, July 26, 2018 ("Attachment A"), at 3.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

Large C&I EE program to the Large C&I DR program would not impact its projected Large C&I energy savings, but the Commission must consider that PPL's proposal could impact its ability to meet demand for Large C&I participation in the EE program.¹⁸

To avoid creating a revenue shortfall for the Large C&I sector EE program and ensure that all Large C&I customers, both GNE and non-GNE, retain sufficient access to PPL's EE&C rebates for both DR and EE, PPLICA proposes that PPL terminate its GNE sector and allow GNE customers to apply for the same programs as other non-Residential customers. PPLICA notes that this model has been successfully utilized by PECO Energy Company ("PECO"), which offers both Small C&I and Large C&I programs to all non-Residential customers without reliance on a separate GNE sector.¹⁹ Under this model, GNE customers would be treated in the same manner as any other non-Residential customer, with GNE savings tracked by account rather than segregated into an entirely separate customer sector.²⁰

This recommendation equitably places all Non-Residential customers on equal footing by preserving the chance for all Non-Residential customers to apply for the same rebates made available to GNE customers and vice-versa, consistent with Section 2806.1(a)(5) of the Public Utility Code.²¹ The proposal would also improve transparency by harmonizing PPL's budgeting process for Non-Residential programs with its cost recovery methodology, where all costs for non-Residential EE&C programs are already allocated between the Small C&I and Large C&I

¹⁸ See Petition, at 9. While the amended EE&C Plan attached to the Petition confirms that PPL has not modified its budgeted energy savings for the Large C&I EE program, PPL's Petition itself confirms that projections and actual results often vary. Additionally, PPLICA notes that PPL's forecasted savings from the Large C&I program already exceed the budgeted energy savings by 20,552 MWh/yr. See Attachment A, at 9.

¹⁹ See *Petition of PECO Energy Company for Approval of its Act 129 Phase III Energy Efficiency Program and Conservation Plan*, Docket No. M-2015-2515691, pp. 13-15, 21 (Order entered March 17, 2016) ("PECO Phase III Order").

²⁰ *Id.* at 21.

²¹ See 66 Pa. C.S. § 2806.1(a)(5). As noted in PPL's Petition, the Commission previously found PPL's Phase III Plan to be compliant with the Public Utility Code, including Section 2806.1(a)(5). See Petition, at 8 note 11. PPLICA respectfully requests that the Commission consider its alternative proposal in light of the changed circumstances concerning PPL's increased reliance on GNE savings to meet its Act 129 compliance targets.

customer classes. Additionally, this recommendation would eliminate the necessity to shift \$5.6 million from the GNE DR program to the GNE EE program and shift \$2.7 million from the Large C&I EE program to the Large C&I DR program. Upon terminating the GNE sector and allocating the current GNE program budgets to the corresponding Small C&I and Large C&I DR and EE programs, PPL could combine its Proposed Changes Nos. 1 and 2 and shift only the net \$2.9 million from the revised Large C&I DR program to the revised Large C&I EE program.

For the above reasons, PPLICA recommends that the Commission deny PPL's Proposed Change No. 2 and alternatively direct the Company to terminate the GNE sector and allocate the existing GNE sector budget amongst the Small C&I and Large C&I sectors.

B. The PUC Should Deny PPL's Request to Shift \$2.7 Million From the Large C&I Sector Budget of the EE Program to the Large C&I Sector Budget of the Non-Residential DR Program and Alternatively Direct PPL to Address the Increased Demand for the Large C&I DR Program by Eliminating the GNE Sector, Allocating the Remaining GNE Sector Budget Among the Small C&I and Large C&I Sectors, and Allowing all Small C&I and Large C&I Customers Equal Access to the Respective EE and DR Programs.

For the reasons discussed in the Comments to Proposed Change No. 2, the Commission should deny PPL's Proposed Change No. 1 and grant the alternative relief proposed by PPLICA. Granting the alternative relief proposed by PPLICA would render PPL's proposal to transfer \$2.7 million from the Large C&I EE program to the Large C&I DR program moot as PPL would be able to use budgeted revenue presently restricted to the GNE DR program to meet demand for Large C&I DR.

C. The PUC Should Condition PPL's Request to Reduce the Estimated Small C&I Savings in the Non-Residential EE Program and the DR Program on Approval of PPLICA's Proposal to Eliminate PPL's GNE Sector, Allocate the Remaining GNE Sector Budget Among the Small C&I and Large C&I Sectors, and Allow all Small C&I and Large C&I Customers Equal Access to the Respective EE and DR Programs.

As discussed in PPLICA Comments to Proposed Change No. 2, the underperformance of the Small C&I sector created the energy and demand savings shortfalls precipitating PPL's Proposed Changes Nos. 1 and 2. Contingent on approval of PPLICA's proposed alternative detailed in the Comments to Proposed Change No. 2, PPLICA does not oppose approval of Proposed Change No. 3.

IV. CONCLUSION

WHEREFORE, the PP&L Industrial Customer Alliance respectfully requests that the Pennsylvania Public Utility Commission:

1. Consider and adopt the foregoing Comments;
2. Take any other action as necessary and deemed appropriate.

Respectfully submitted,

McNEES WALLACE & NURICK LLC


By 

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Counsel to the PP&L Industrial Customer Alliance

Dated: August 20, 2018

Attachment A



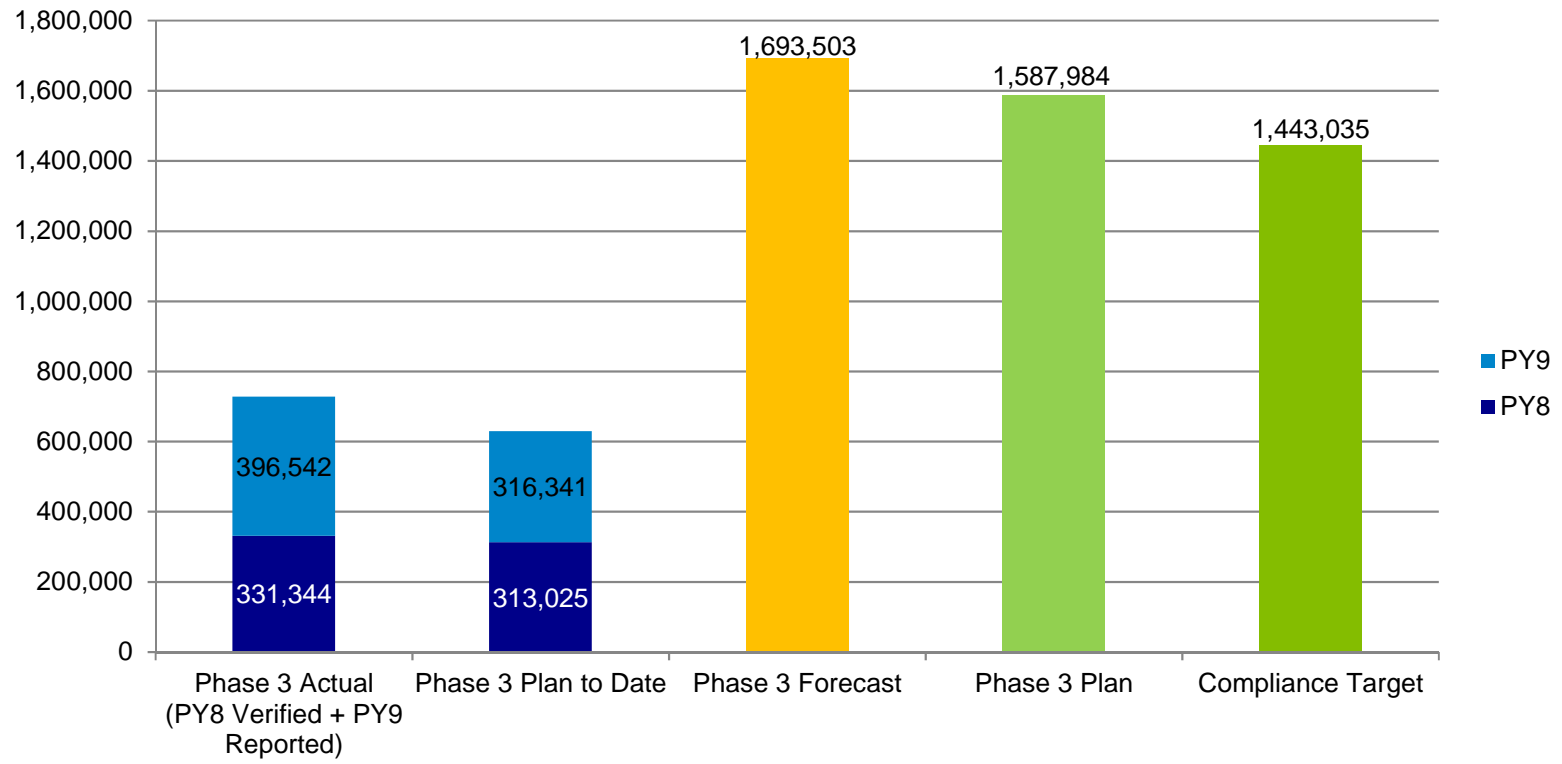
PPL Energy Efficiency Update
PPL Stakeholder Meeting
July 26, 2018



- Overview: Dirk Chiles
- Residential Update: Mary Ann Kelly-Merenda
- Low Income Update: Sean Pressmann
- Non-Residential Update: Heather Bash
- Demand Response Update: Sean Pressmann
- Question and Comment Period: All
- Closing: Dirk Chiles

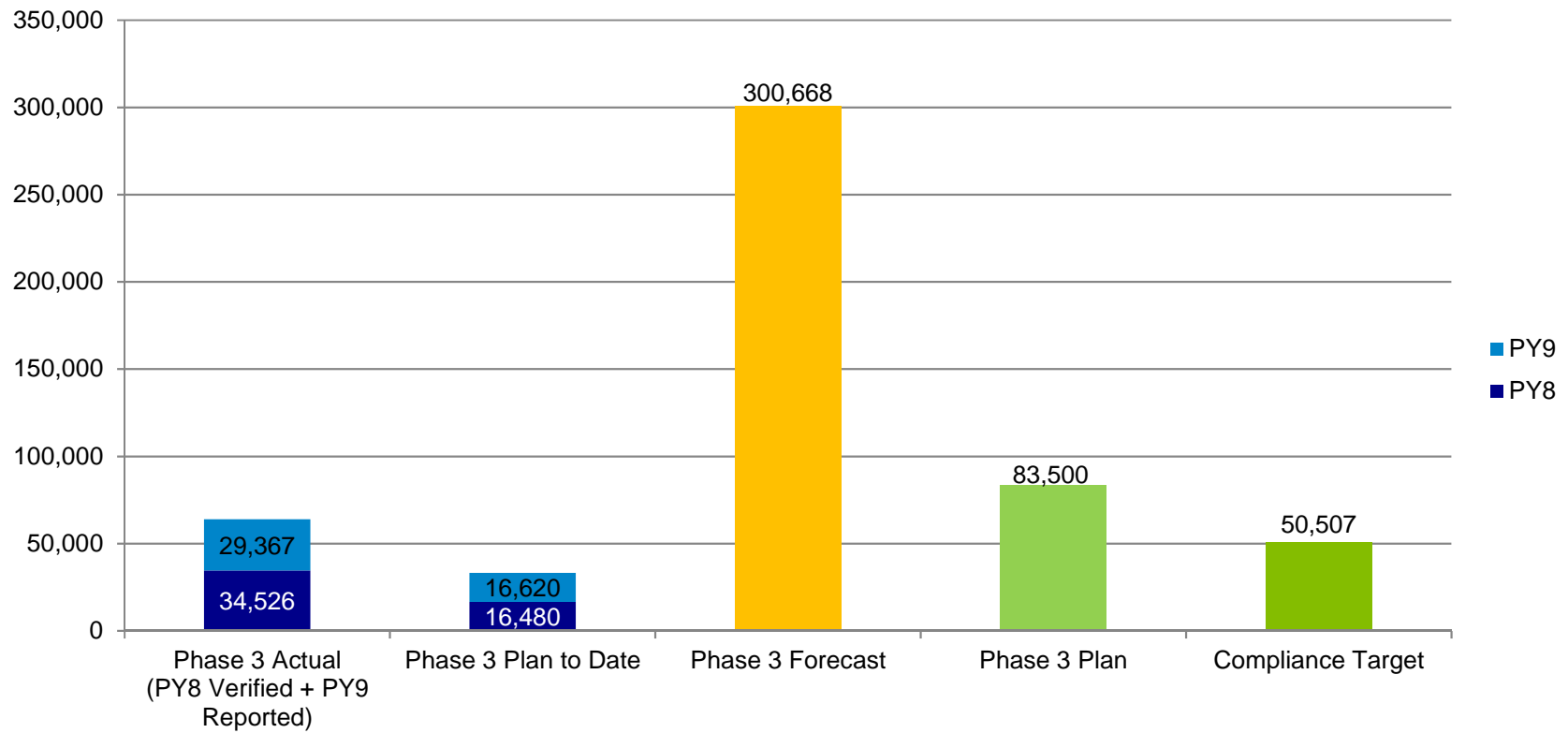


Portfolio Savings (MWh/yr)



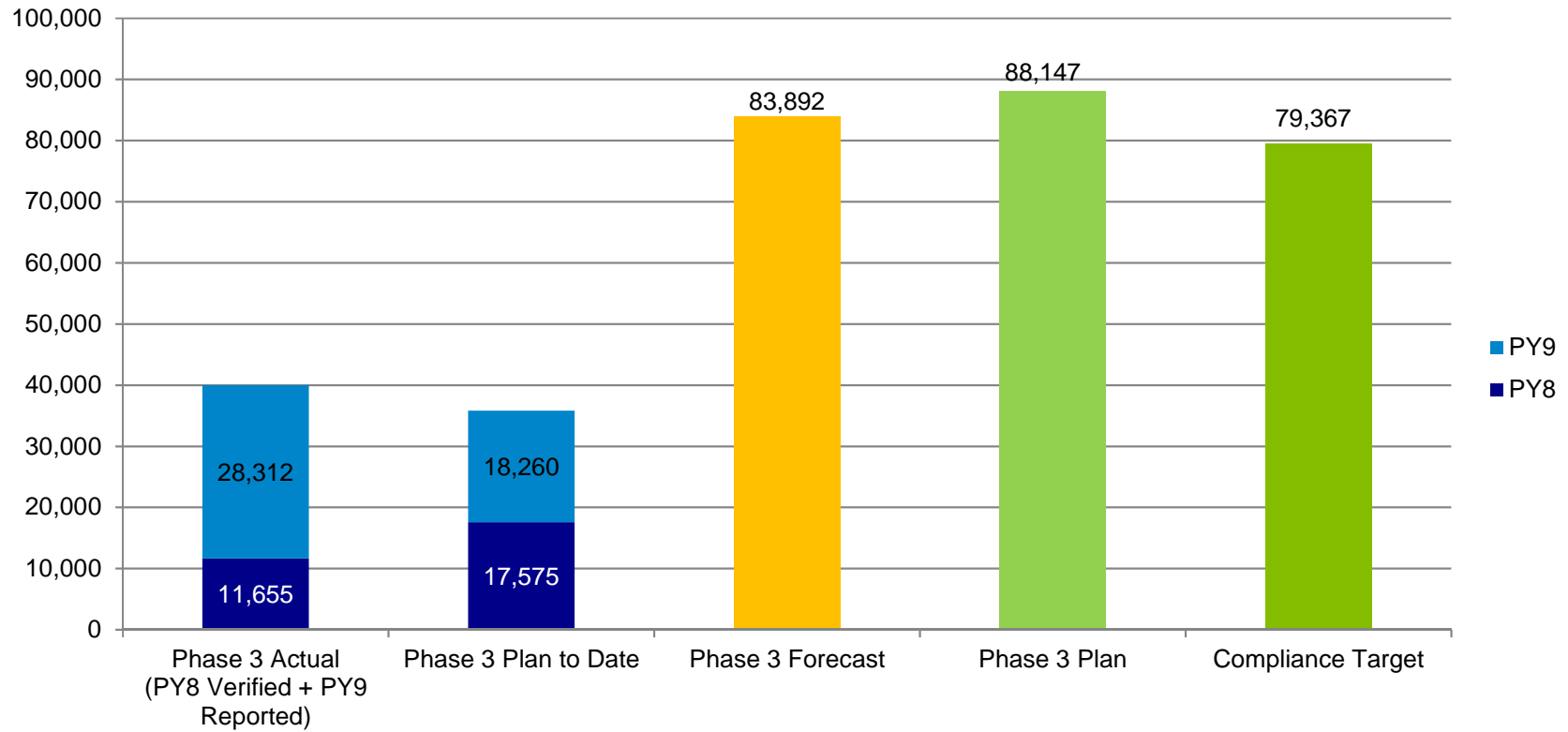


GNE Savings (MWh/yr)



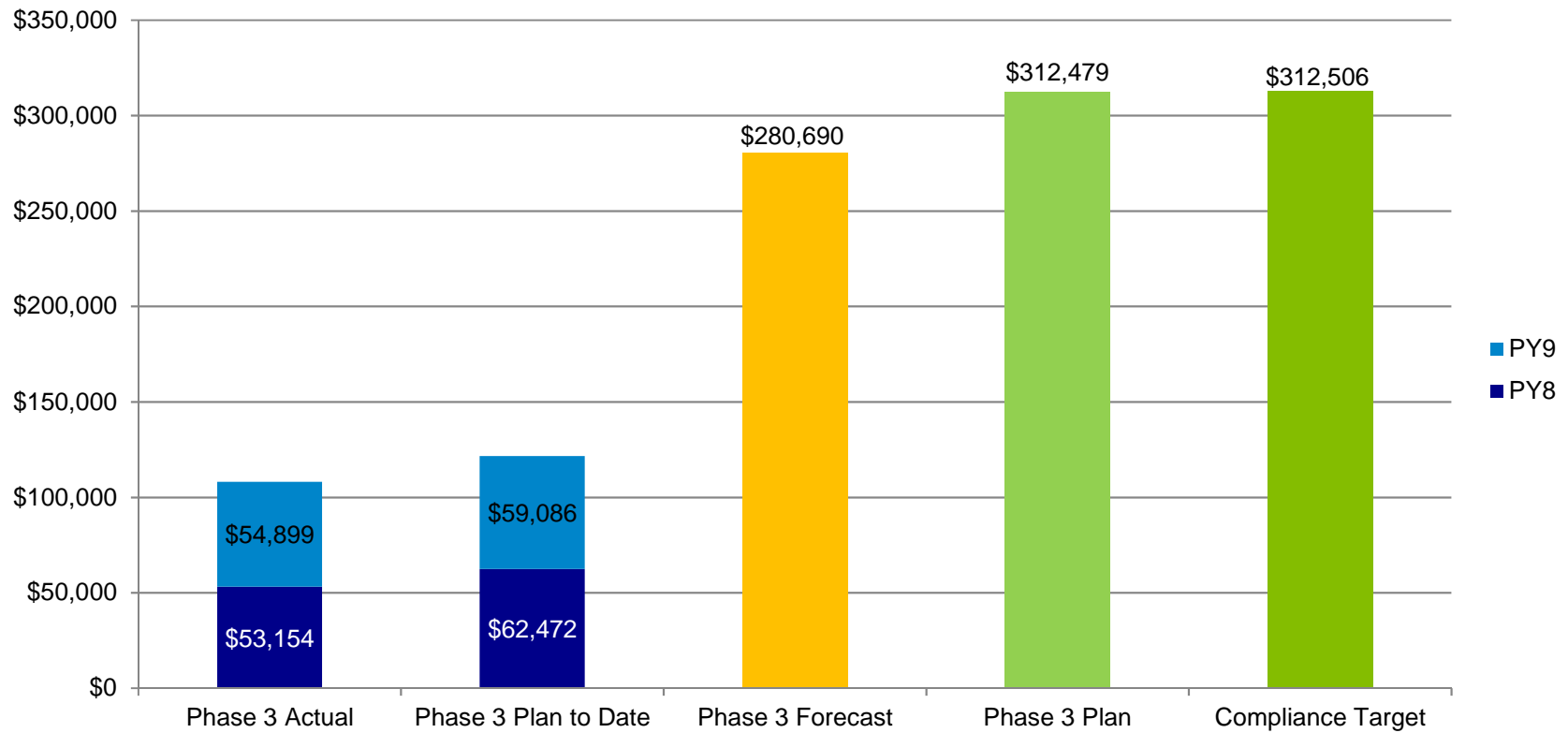


Low Income Savings (MWh/yr)



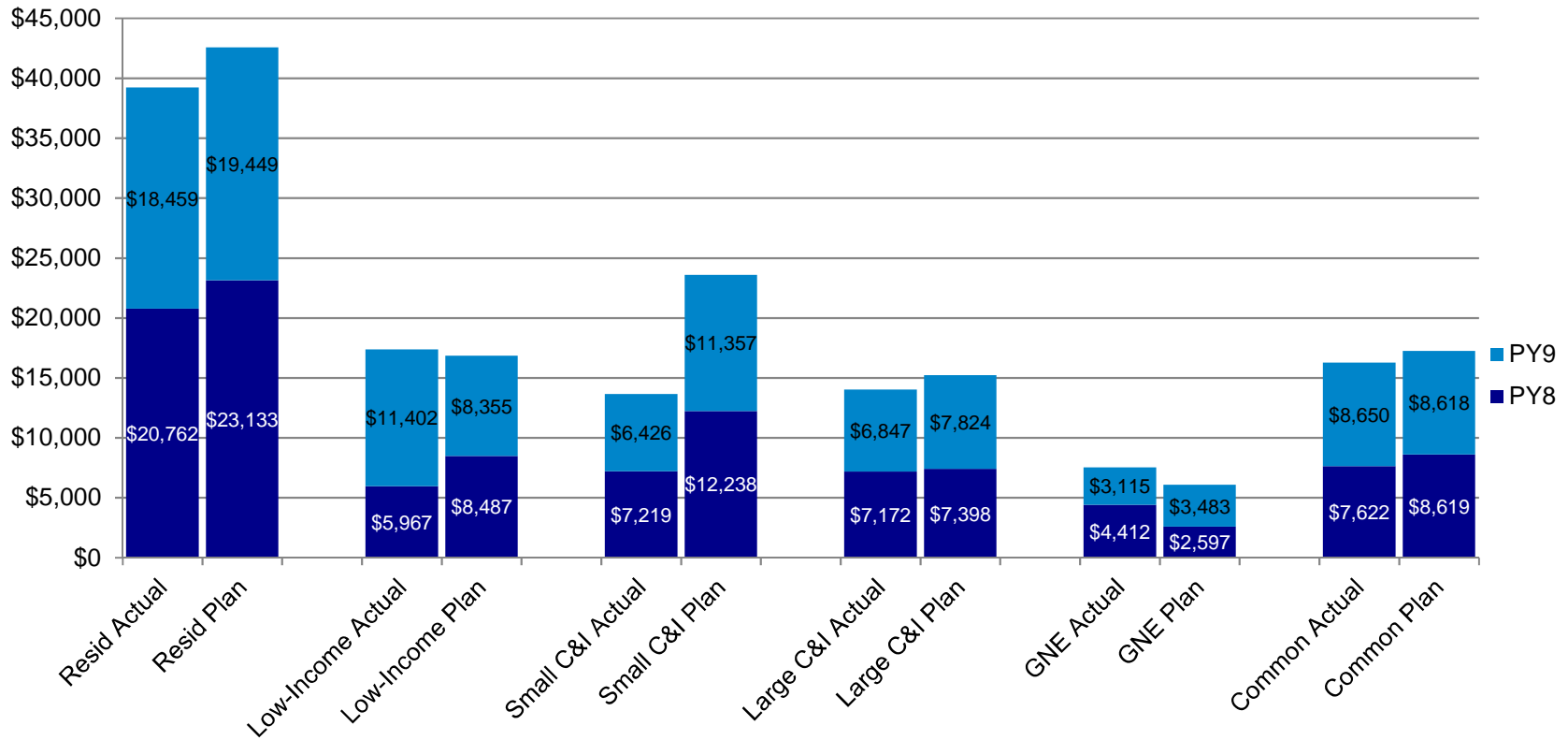


Portfolio Costs (\$1,000)



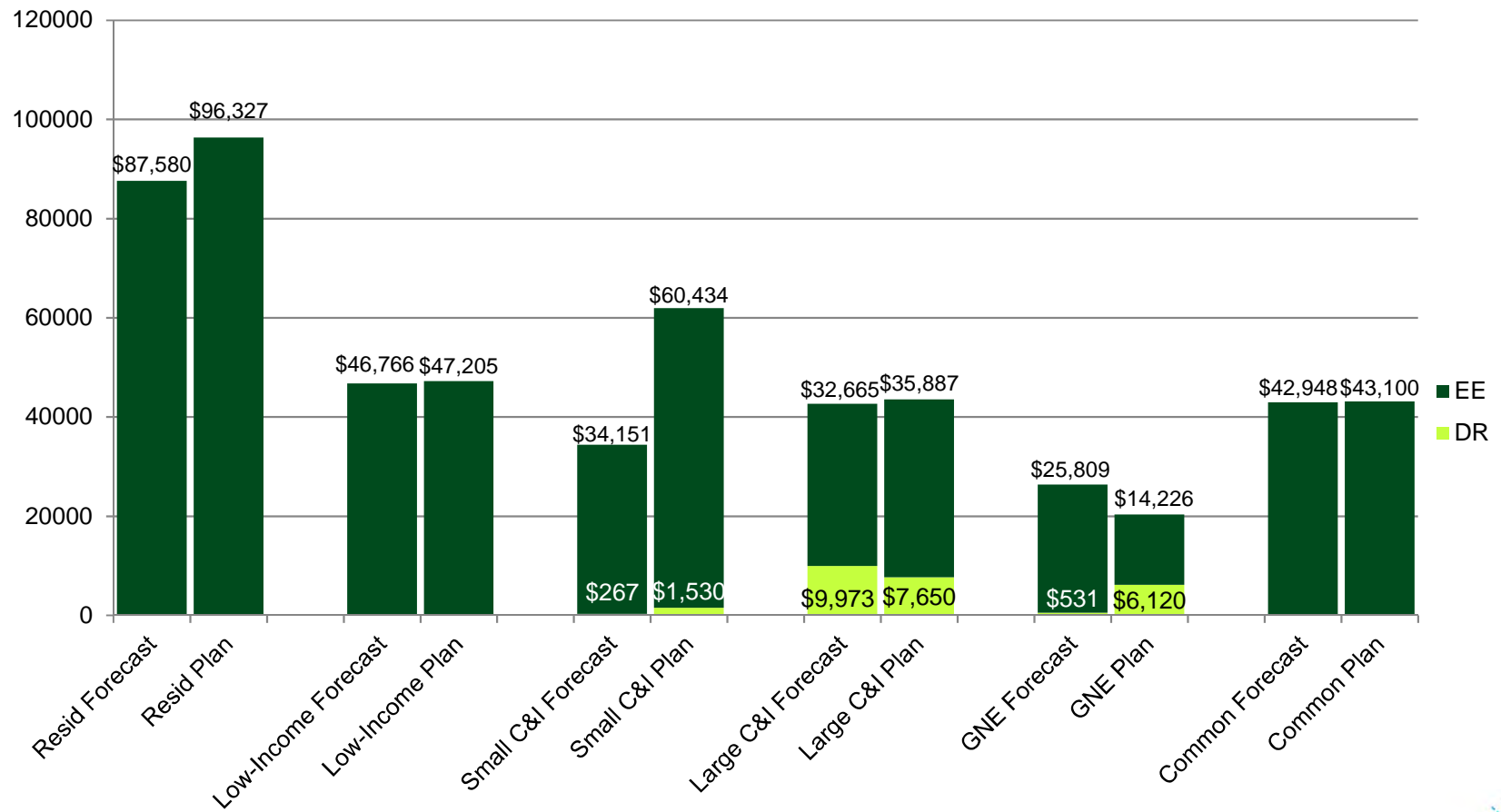


Phase-to-Date Customer Sector Costs (\$1,000)



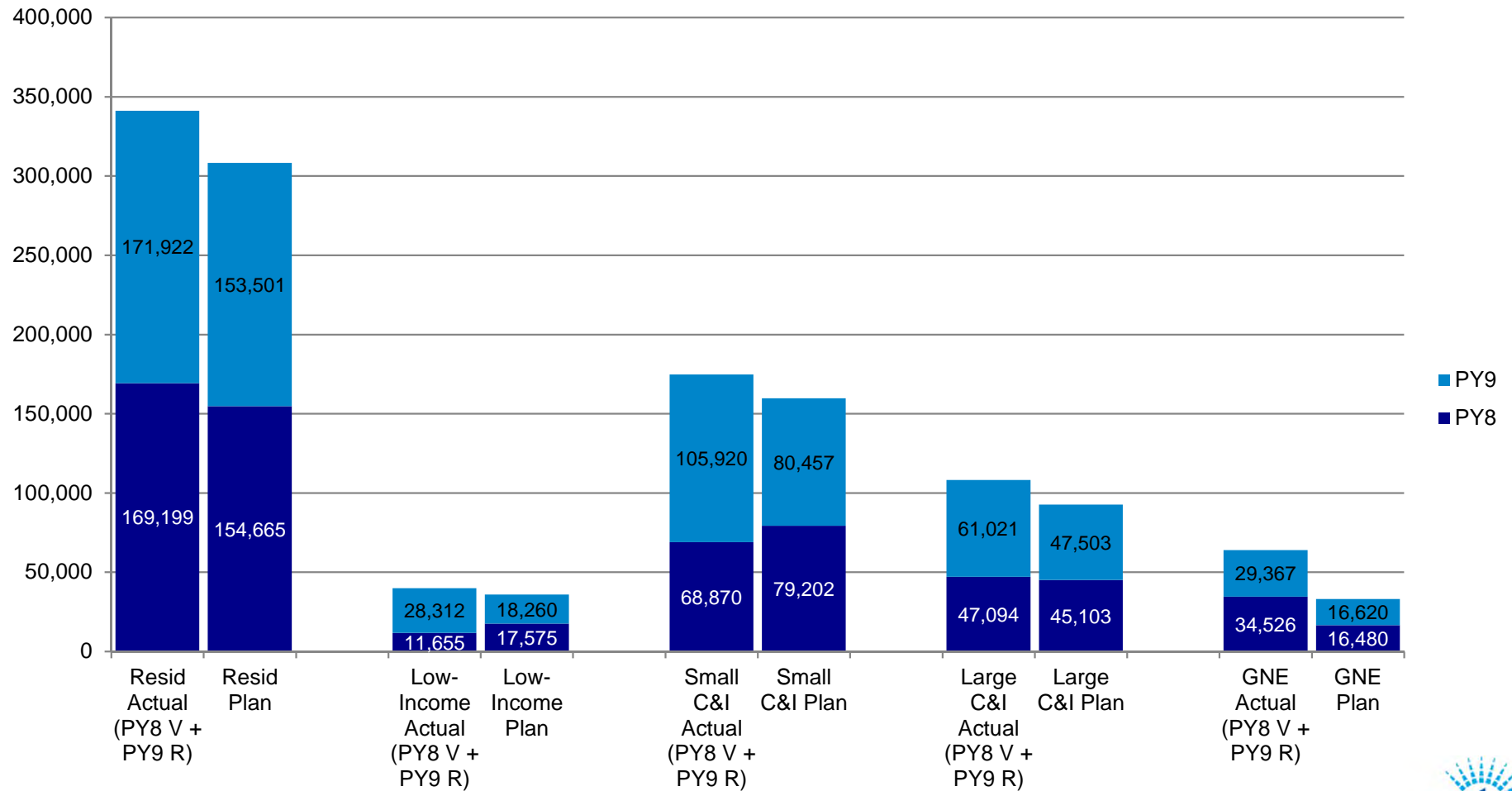


Phase 3 Customer Sector Costs (\$1,000)



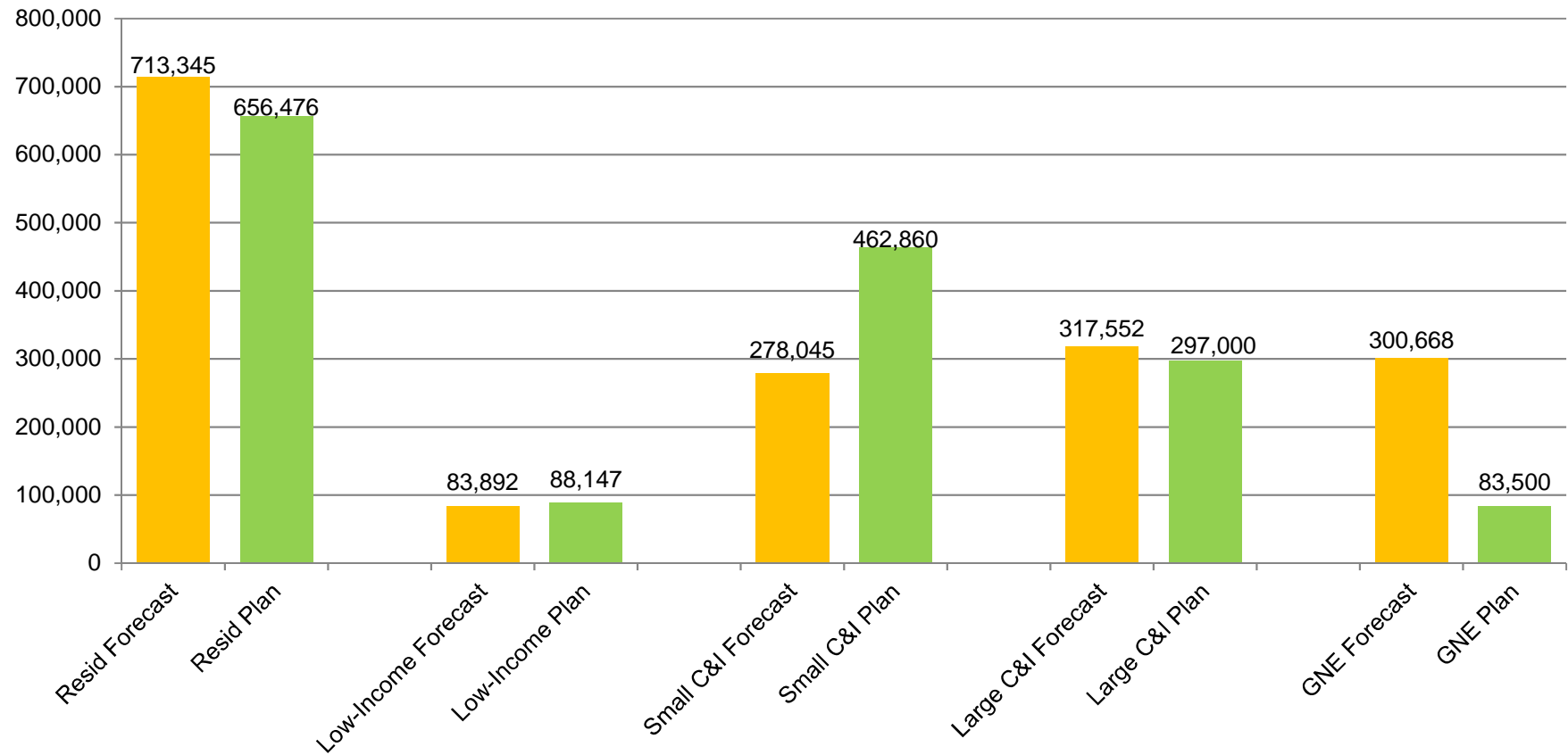


Phase-to-Date Customer Sector Savings (MWh/yr)





Phase 3 Customer Sector Savings (MWh/yr)



Residential Programs

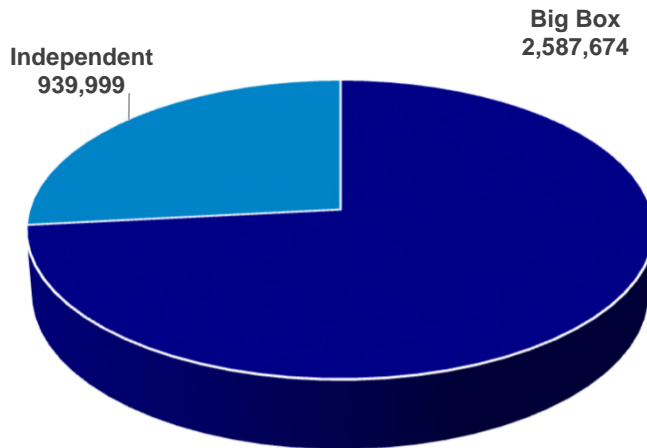




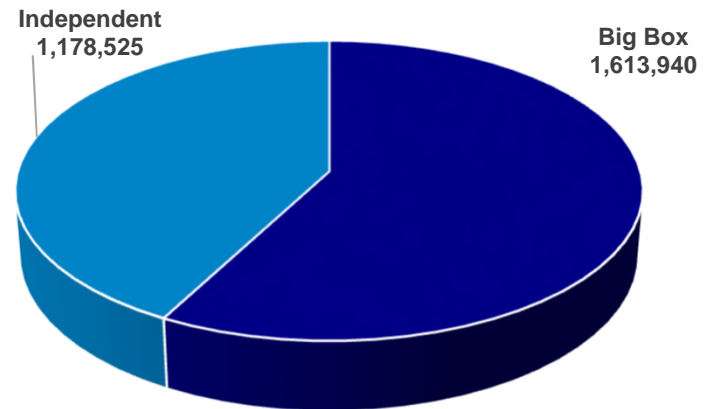
- Over 2.7 Million LEDs in PY9
- Savings 118,444,739 kWh/yr.
- Overall LED sales were 21 % lower than PY 8, but we saw a 25% increase in sales from independent retailers
- Continued to build upon the strong relationships with independent retailers established in PY 8
- Ensured LEDs available to customers in all areas at a variety of retailer types



PY 8 Units - Big Box vs. Independent Retailers



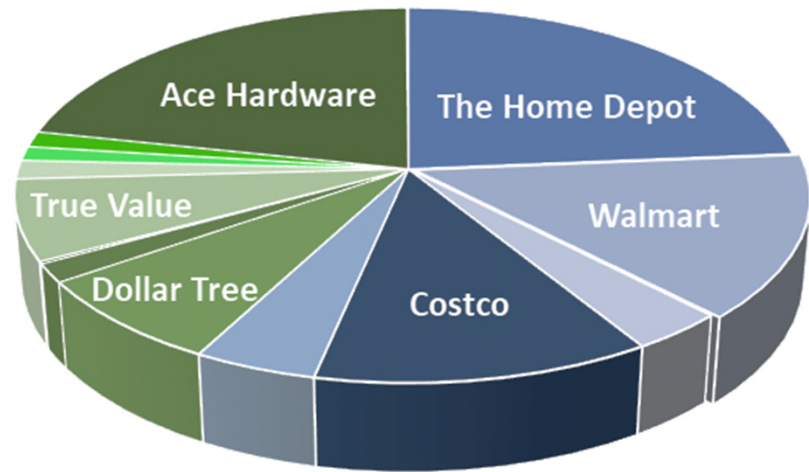
PY 9 Units - Big Box vs. Independent Retailers





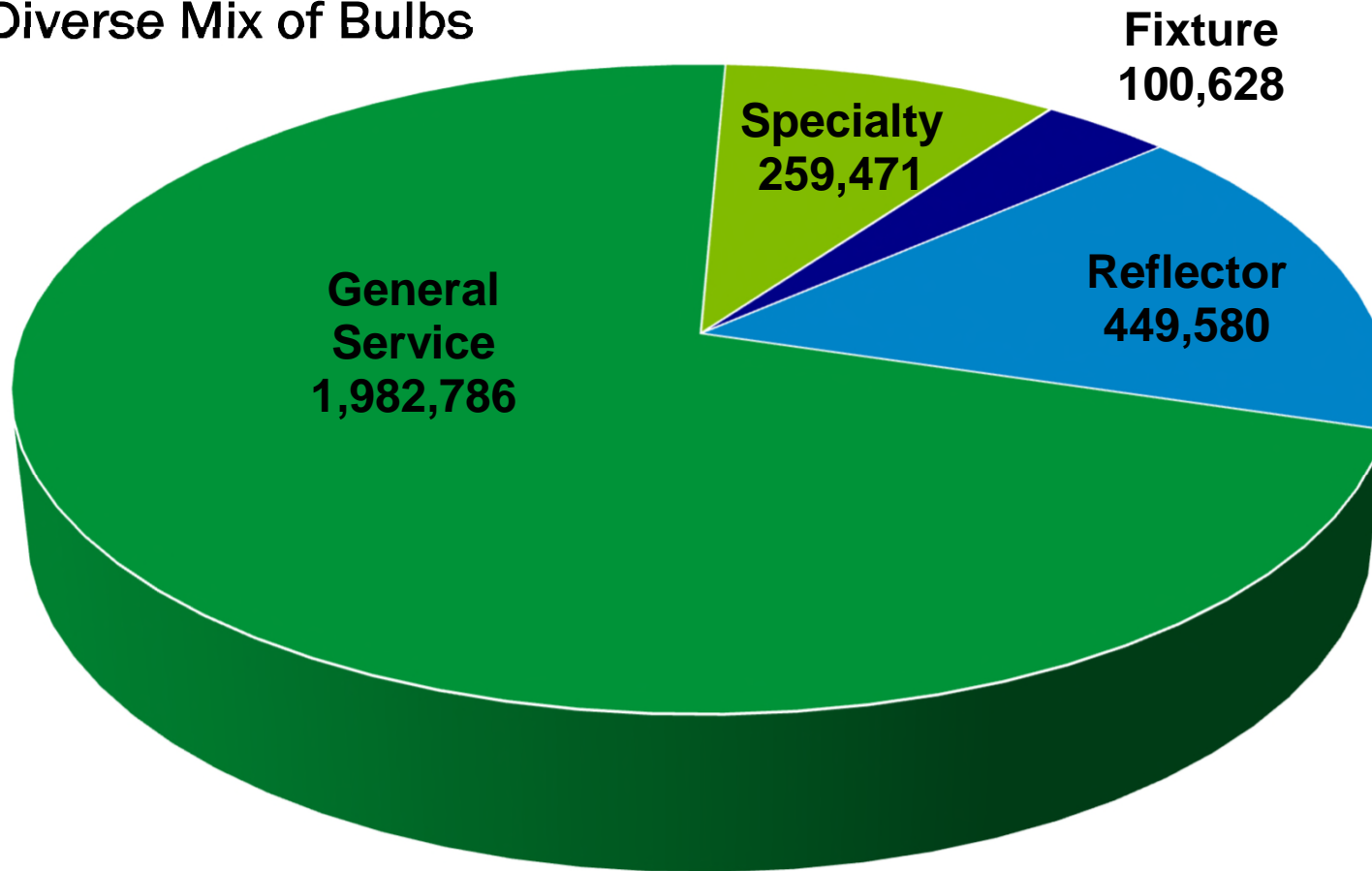
Retailer	Label	Units
The Home Depot	Big Box	660,642
Walmart	Big Box	392,881
Lowe's	Big Box	95,715
Costco	Big Box	340,486
Sams Club	Big Box	124,216
Dollar Tree	Independent	211,975
Batteries Plus	Independent	44,861
Grocery Outlet	Independent	5,660
True Value	Independent	193,782
Costco.com	Independent	10
Do it Best	Independent	45,124
Goodwill	Independent	34,024
Habitat ReStore	Independent	38,166
Ace Hardware	Independent	602,462
Giveaway bulbs	Independent	1,008
HTR	Independent	1,453
		2,792,465

PY9 LEDs by Retailer





PY9 Diverse Mix of Bulbs





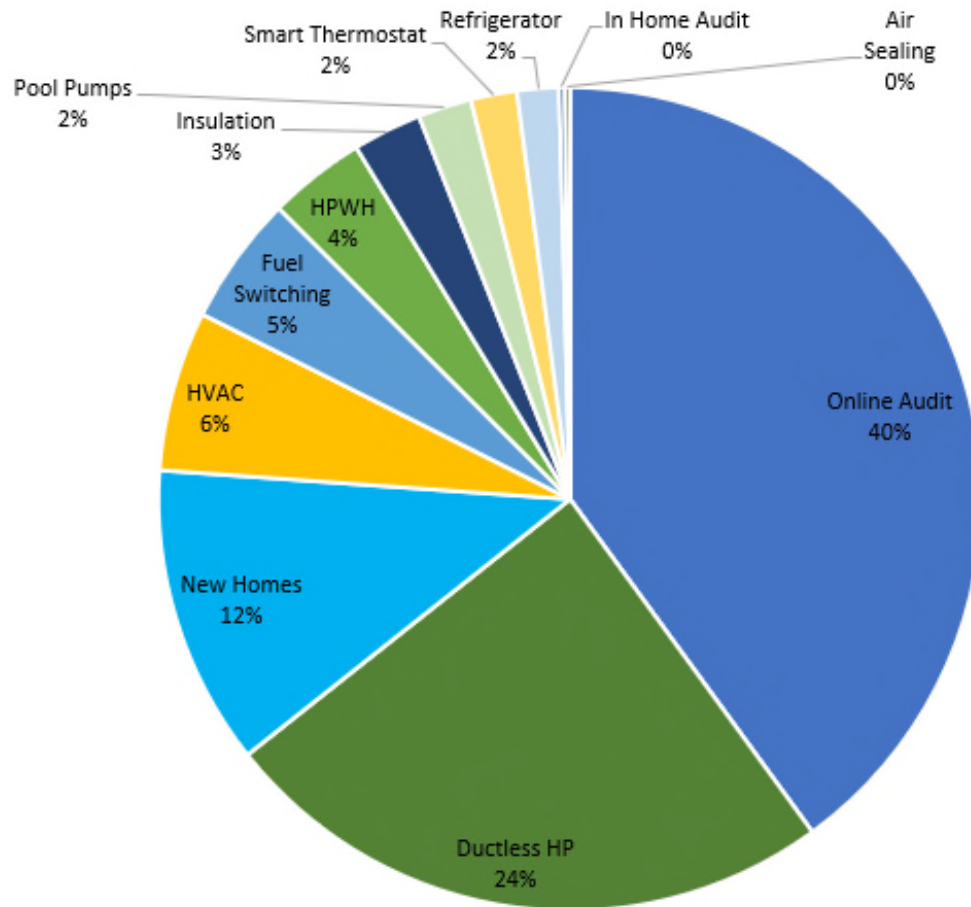
- Launched February 2018
- Intent of pilot is to evaluate the adoption, use and energy savings potential of home automation and smart lighting technologies
- **Goal - 300 Participants**
- Over 48,000 Target Customers Were Emailed
- The pilot offered customers a discounted price of \$95 for the purchase of a connected lighting bundle that included
 - A wink hub
 - Three A-19 standard light bulbs
 - Two BR-30 reflector light bulbs. Participation was limited to the first 300 customers who purchase a kit.



- Throughout the pilot period, PPL will collect information about usage and usability from participating customers, helping them better understand the impact of these technologies on future energy resource planning.
- If the customer meets all the conditions of the pilot, they leave their products installed for six months and answer all three short surveys, they'll also receive a \$50 incentive at the end of the pilot.



- **Significant Interest by New Home Builders**
 - 837 Homes in PY9
 - Over 2,500 MWh in savings
 - Over \$780,000 in incentives
 - 147% growth in incentivized homes over PY8
- **Efficient New Home Construction**
 - Strong Relationships with Builders and Raters, Achieved the Following Key Successes:
 - Providing incentives for more than 1,200 homes verified as 15% more Efficient than IECC or ENERGY STAR® Certified in Phase III to date
 - Driving Incentives Up To \$2,500 Per Home For Participating Builders
 - Achieving An Average Savings of More Than 3,000 kWh/yr per Home Annually



- Savings Achieved PY9: 21,708 MWh/yr. (203% of our PY9 goal)
- Savings Achieved in PY9 doubled from PY8



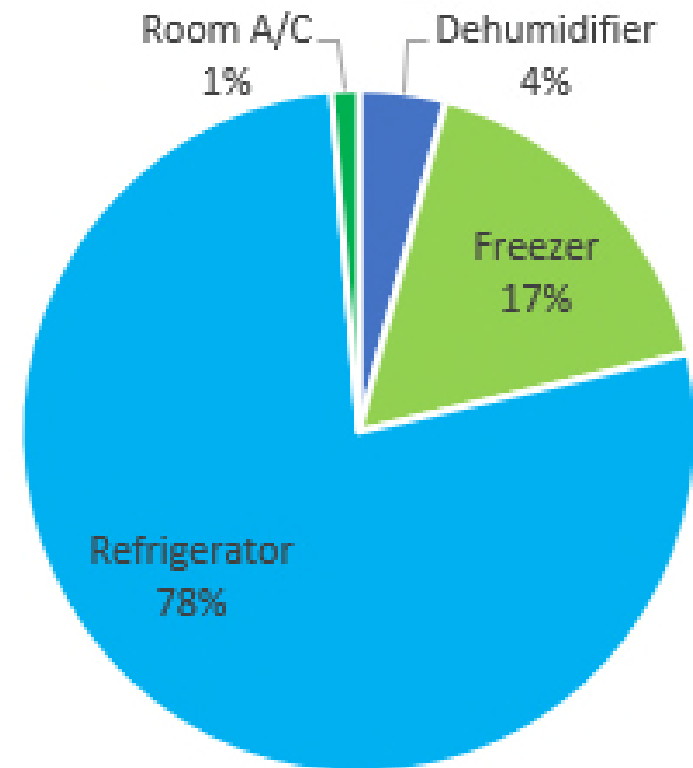
- **PY9**
 - Online Assessment yielded highest savings
 - Ductless HP continues as the most popular measure
- Online Assessment: 23,103 kits
- Ductless HP: 3,838 units or 1,400 projects
- ASHP/CAC: 2,687 units

Measure Category	Total kWh/Year
Online Assessment	8,678,937
Ductless HP	5,288,643
New Homes	2,557,742
ASHP/CAC	1,364,973
Fuel Switching	1,102,082
HPWH	828,457
Insulation	588,186
Pool Pumps	457,941
Smart Thermostat	393,248
Refrigerator	356,209
In Home Audit	49,899
Air Sealing	42,479



Units Collected in PY9

- Participation & Savings on target
- 8,692 Refrigerators
- 2,167 Freezers
- 1,327 Room Air Conditioners
- 665 Dehumidifiers





Community recycling event held in September 2017 to collect used Room Air Conditioners and Dehumidifiers

Event highlights:

- 95 Room Air Conditioners
- 66 Dehumidifiers
- Nearly 70,000 kWh saved from the event's success



- Fully Subscribed in PY9
- 24,000 Students
 - Bright Kids (2nd – 3rd Grade)
 - Take Action (5th – 7th Grade)
 - Innovation (9th – 12th Grade)
- Added a New Augmented Reality App Pilot
 - 436 kits distributed
 - Drive student/parent engagement and lead to higher installation rates



- **HERs Savings Were 15% Less Than Expected in PY8**
 - In April, resumed treatment of the low propensity customers removed from treatment at the beginning of PY8
- **Uplift in Engagement**
 - Launched weekly Challenge emails in February and saw a 2-3x uplift in engagement
 - Rolled out a new & improved HER template
 - Comparisons Are More Accurate
 - Recommendations Are Personalized
 - Customers Are More Interested in How They Can Make Their Usage Estimates and Comparisons To Others More Accurate
 - Much Lower Opt Out Rate



The PPL Residential Rebates Team is always looking for Community and Corporate outreach opportunities.

Community Outreach Events:

March - Upper Bucks Chamber and Career Fair

March - SEEDS Forum in Hawley

April - All Things Home Fair Lancaster

April - U of Scranton Earth Day

April - Bloomsburg U Earth Day

April - Earth Day in the Park Allentown

April - CopsNKids Bethlehem

May - Senior Fair Allentown

May - Halifax School Community Day

May - Businesswomen's Forum Carlisle





Corporate Outreach Events:

November - Kellogg's factory in Lancaster

January - Pentair Annual Training Conference

March - GSK factory in Marietta

April - SEKISUI SPI factory in Bloomsburg

April - MetLife Earth Day in Clarks Summit

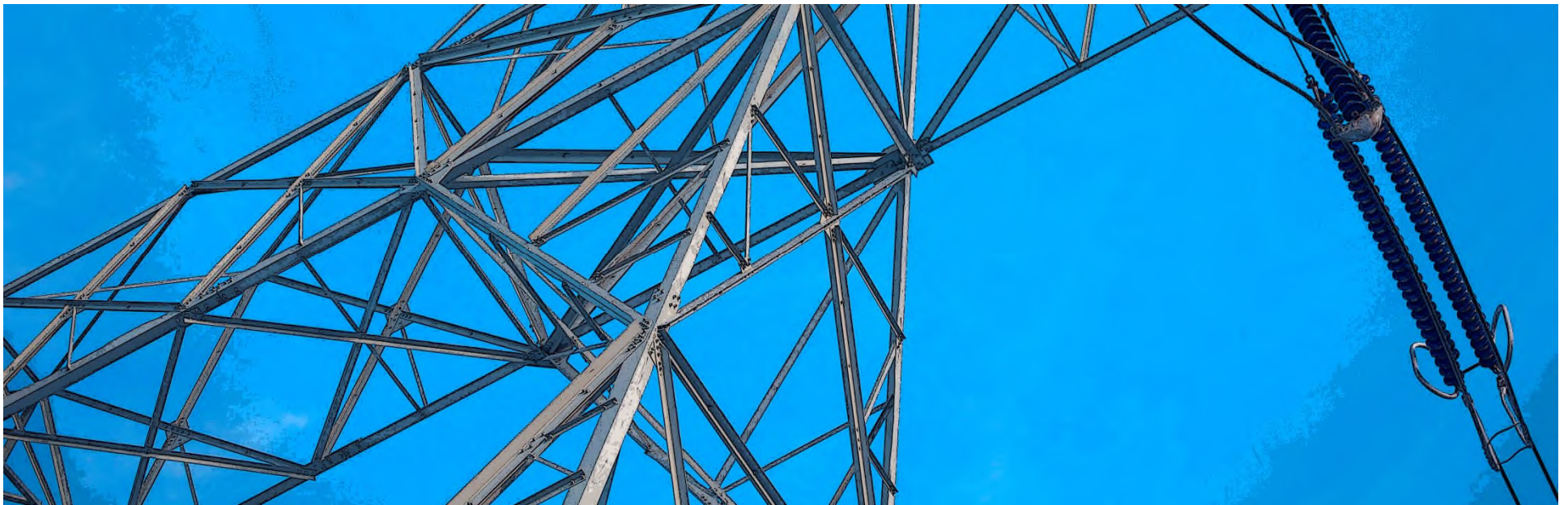
April - Geisinger Health Earth Day in Danville

April - Lehigh Valley Health Network in Allentown

April - Hershey Med Earth Day in Hershey



Low Income Programs





- **Goal: 7,000 WRAP Jobs Per Year**
- **Achieved: 10,705 Completed Jobs in PY 9**
 - 2,718 Jobs in PY8
- **Still a Little Bit Behind on Savings Due To Slow Start, But Gained A Lot of Ground in PY9**
 - 7,670 Jobs Completed Since December 1, 2017
 - Creating More Leads, Increased Marketing, Education
 - Quick Track Programs
 - On-Track Auto-Enroll
 - Needed to Increase Savings Per Job, Especially Educational Component
 - High CSAT (91%)
 - Budget Is On Track



- **Streamlined and Improved the Multi-Family Process**
- **Significant Increase in MF Penetration Compared to Phase 2**
- **Increased Participation:**
 - 6,041 Units Completed; 1,806 Pending Availability and/or Scheduled; 5,159 In Queue (includes Master Metered)
 - Phase 2: 1,400 Completed in 3 Years
- **Single Point of Contact for Multi-Family Customers**
- **Master Meter Multi-Family Housing**
 - Jobs – 2,053 units
 - Total Buildings - 72 at 32 Facilities
 - Most Have Been in GNE, But Not All (approx. 75/25 split of GNE vs. CI)



- **The Good**
 - Collaboration and Leads Generated with Housing Advocates
 - Multiple Outreach Points
 - Educating Landlords Has Increased Consent and Participation
 - Reduced Customer “No-Shows”

- **The Challenges**
 - Little Work Completed in the MF Common Space Since it Tends to Be Cost Prohibitive or Customer Not Interested Unless \$0 Cost Like the Individual Units
 - Issues with Performance Contracts (ESCOs)



- **Goal: 8,000 Kits**
- **Achieved: More than 13,000 Kits**
 - Increased Kits in PY9 to Help Make Up For WRAP Slow Start
 - Continue to Increase Kits and Will Phase Out in PY12
- **Very High CSAT (99%)**
- **Budget Is On Track**



- **Late April in Bethlehem**
 - Held Original Blitz in Hazleton in October 2017
- **Promotes Energy Efficiency For The Entire Community, With A Focus On Low Income**
 - Targeted Eligible Low-Income Customers Through Direct Mail to City of Bethlehem and Local Boroughs and Townships
- **PPL Electric Joined With an Existing Event Known as LV Cops ‘N’ Kids**
 - Celebrated the Concerted Effort in the Bethlehem Area to Help Make Multifamily Buildings, Low-Income Residences and Businesses More Energy Efficient
- **Partnered with LV Cops N Kids - Reading Room, Northampton Community College, Phillips Lighting, Moravian College**



- **Heavy Local Media Presence with Earned Media Through Local Newspaper and Radio Interviews**
 - Social Media Presence by PPL Electric Utilities and Partners
- **Held Presentation with Local Legislators and Other Public Officials on the Importance of Energy Efficiency**
 - Also Recognized Local Businesses Who Participated in EE programs
- **More than 1,500 customers served with a total of approximately 3,000 people in attendance**
 - Approximately 30 WRAP & On Track applications at the event
 - Additional almost 60 WRAP applications based on direct mail to the 4,000 Bethlehem area customers eligible for low-income programs
- **Looking At Future Blitzes In Lancaster and Scranton**



Non-Residential Programs





- Program Achievements PY9
 - 5,919 PY9 Rebates
 - 4,685 Midstream Projects
 - 1,234 Applications
 - 163,876 MWh/yr. claimed in PY9*

* Verified Savings Report to be Released in Fall of 2018



- **Program Performance**
 - Total Non-Residential Savings Are On Track
 - The Mix of Small C&I, Large C&I, and GNE Differ From the Original Plan
 - GNE Savings Are Much Greater Than Expected. Waitlist in place since 1/15/18
 - Large C&I Savings and Costs Are Higher Than The Plan But We Are Confident They Can Be Moderated
 - Small C&I Savings Are Expected To Be Lower Than The Plan
 - EE&C Plan Change Filed in July To Increase GNE Savings Budget, With An Offsetting Reduction For Small C&I, No Change To Overall Planned Costs For Any Customer Sector, But Reallocate Costs Between DR and EE Budgets Within Sectors



- **First Midstream Lighting Channel in Pennsylvania**
- **Goal: Transform the Market Through A Lower Cost Channel**
 - *Bonus:* Involvement From Hard to Reach Customers & Involving Some Small Customers
- **Participation:**
 - June 2017-May 2018
 - Customers: 4,118
 - Distributors: 26 (94 Locations)
- **Challenges:**
 - Data Collection - Similar Requirements To Downstream Programs
 - Installation Verification
 - Leakage

PY9 Stats:
➤ Savings: 19,934,961 kWh/yr.
➤ Incentive Dollars: \$1,476,444



- **Direct Discount (DD) PY9 Updates**
 - Usage cap lifted – All GS1 & GS3 Customers Eligible
 - Rebates paid at \$0.15/kWh
- **Goal: Encourage SCI Customer Participation**
- **Participation:**
 - June 2017 -May 2018
 - Projects: 190
 - Approved Contractors: 67
- **Challenges:**
 - Marketing to Small Business Customers

PY9 Stats:

- Savings: 8,216,310 kWh/yr.
- Incentive Dollars: \$1,053,241



- 14 Projects
 - 6 Completed
 - 8 In Progress
- 2 additional identified potential projects
 - Projected savings not developed yet
- Savings
 - 40,223 MWh/yr. Completed
 - 120,469 MWh/yr. In Progress
- Cost Effectiveness of Completed Projects: 1.14

PY9 Stats:

- CHP projects closed: 1
- Savings: 6,438,169 kWh/yr.
- Incentive Dollars: \$79,189.75



- K-12 Operational & Behavioral Program
- Goal: Create Student & Staff Engagement
 - *Bonus:* Involvement at the residential level

- Participation:
 - *4 districts*
 - *17 buildings in PPL Territory*
 - *Focus:*
 - *1 building as Pilot (PY9)*
 - *Role out District wide (PY10)*

PY9 Stats:

- Cohort Savings: 887,087 kWh/yr.
- Incentive Dollars: \$44,354.35



kWh Savings (Processed to date)

Focus
on
Small
Sector!

Sector	kWh/yr.	kWh Goals	% of Goal
LCI	150,818,346	330,000,000	45%
SCI	98,147,507	480,900,000	20%
GNE	89,712,540	90,000,000	99%
Total	339,786,412	900,900,000	37%

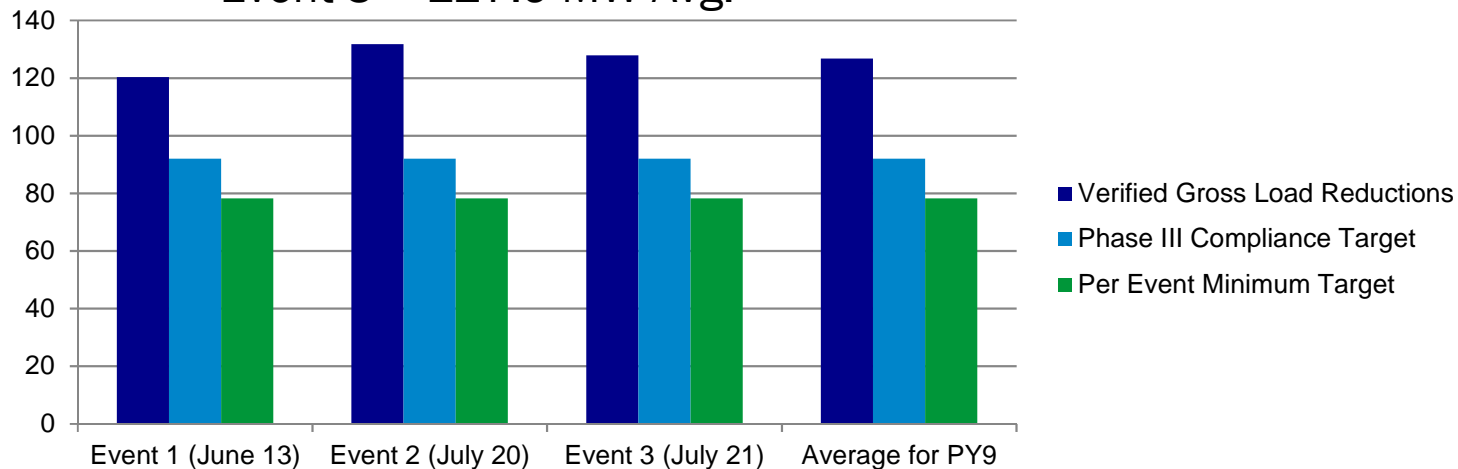
**Primary focus is on the
SCI Business Sector**

Demand Response Program





- Demand Response PY9 Season
 - We Met All PY9 Targets
 - 126.7 MW Verified Average With 92 MW Compliance Target
 - 3 Events Called
 - Event 1 – 120.3 MW Avg.
 - Event 2 – 131.8 MW Avg.
 - Event 3 – 127.9 MW Avg.





- **Demand Response PY10 Season**
 - Approximately 131 MWs Enrolled
 - A 92 MW Compliance Target (Avg. Of All Phase 3 Events)
 - Per Event Target of 78.2 MW
- **Events Are Called The Day Ahead At 10:10 AM (Based on 9:45am Forecast) if PJM Day Ahead Forecast Reaches 96% of PJM Peak Load Forecast**
 - Up To Six Events Per Year
 - Each Event Is Four Consecutive Hours



- **Challenges Remain**
 - Few Customers with Large Amounts of the Portfolio
 - Challenging To Always Confirm Each Customer's Intent To Participate In An Event
 - Cannot Determine Peak Reductions Until Well After The Event Is Over
 - Concerns Raised By Customers Over Consecutive Day Events or Multiple Events In A Week
 - Scenario Occurred on July 20th and 21st, 2017
 - Customer Fatigue
 - Financial/Operational Barriers (ex. Can't Curtail Operations Two Days In A Row Due to Other Commitments)



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Questions? Comments?



Thank you! Drive Safe!

