



June 1, 2023

DPL Delaware Residential Energy Efficiency Portfolio 2024 – 2026 Cycle 2

Customer Solutions

Agenda

- **Purpose**

- Present an overview of the DPL Delaware proposed residential energy efficiency portfolio filing for cycle 2 (2024-2026)
- Provide background and context for how the portfolio was developed
- Describe how stakeholder feedback was incorporated
- Provide breakdown of costs and energy savings for each program

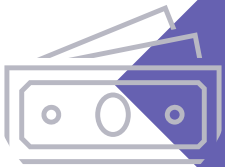
- **Next Steps**

- Meet with & receive recommendation for the proposed filing from EEAC
- File application with Delaware PSC

Goals of the Cycle 2 Proposed Portfolio



Expanding access and providing continuity for EE programming



Helping customers save energy and money on their utility bills



Enabling climate solutions while maintaining affordability

Building on Strong Cycle 1 (2020 – 2022) Performance

August 2017

- DPL applied to the Delaware PSC seeking approval for a residential energy efficiency portfolio

September 2019

- PSC approved an \$8.4M settlement portfolio consisting of Lighting, Appliance Recycling, and Behavioral programs

January 2020 – December 2022

- DPL administered its three-year program cycle, overachieving in savings and underspending in budget

May 2023

- DPL presented the impressive Cycle 1 results in front of the Commission

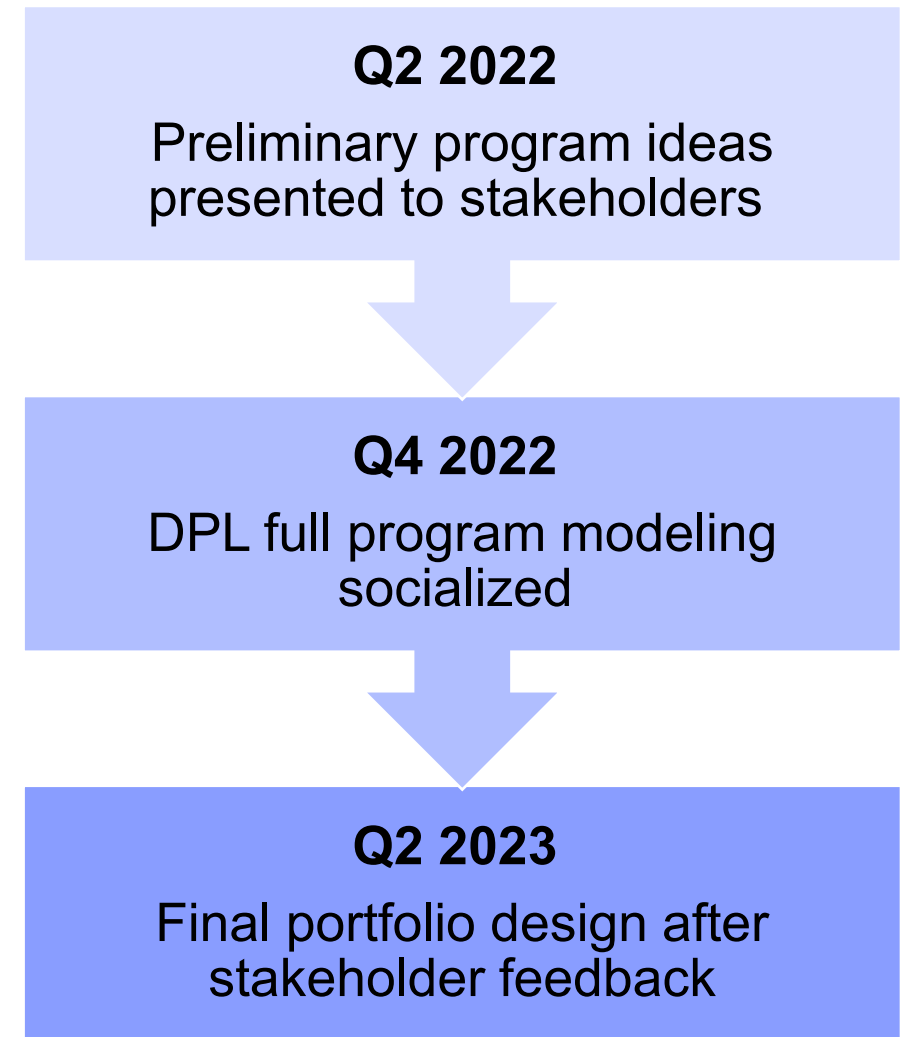
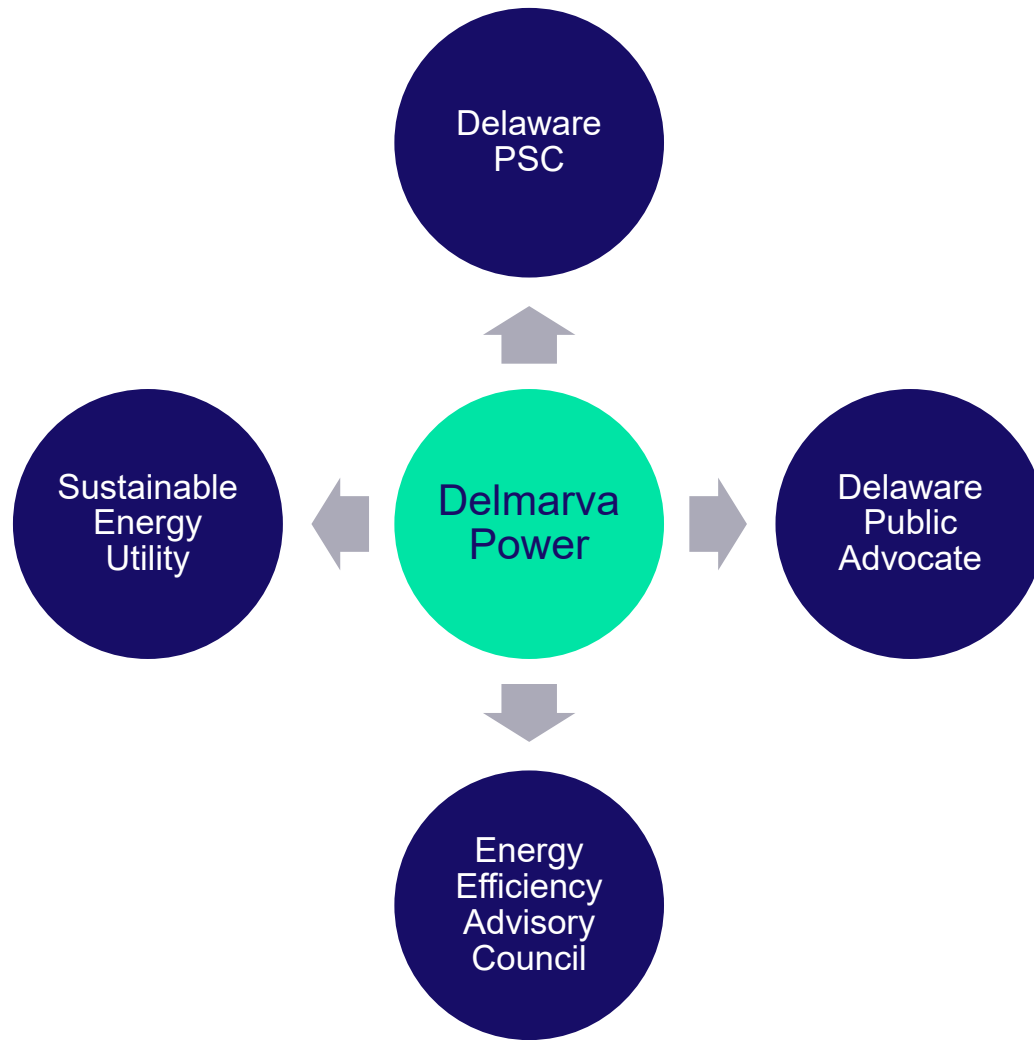
| Year | Reported Savings (MWh) | Target Savings (MWh) | Savings Achieved | Reported Expenditures | Budgeted Expenditures | Budget Spend |
|-------------|------------------------|----------------------|------------------|-----------------------|-----------------------|--------------|
| 2020 | 27,588 | 10,619 | 260% | \$ 1,791,368 | \$ 2,353,952 | 76% |
| 2021 | 38,339 | 25,387 | 151% | \$ 2,138,907 | \$ 2,672,716 | 80% |
| 2022 | 42,406 | 32,499 | 130% | \$ 2,582,847 | \$ 3,394,509 | 76% |
| Cycle Total | 108,333 | 68,505 | 158% | \$ 6,513,122 | \$ 8,421,177 | 77% |

Proposed Cycle 2 Portfolio

| Program | 2024 | 2025 | 2026 | Total |
|----------------------------|--------------------|--------------------|--------------------|---------------------|
| ENERGY STAR® for New Homes | \$1,136,500 | \$1,291,350 | \$1,506,600 | \$3,934,450 |
| Quick Home Energy Check-up | \$982,589 | \$989,602 | \$1,016,313 | \$2,988,504 |
| Appliance Recycling | \$555,345 | \$581,366 | \$606,978 | \$1,743,689 |
| Behavioral | \$999,000 | \$1,034,000 | \$1,069,000 | \$3,102,000 |
| Total | \$3,673,434 | \$3,896,318 | \$4,198,891 | \$11,768,643 |

80,079 MWh total energy savings

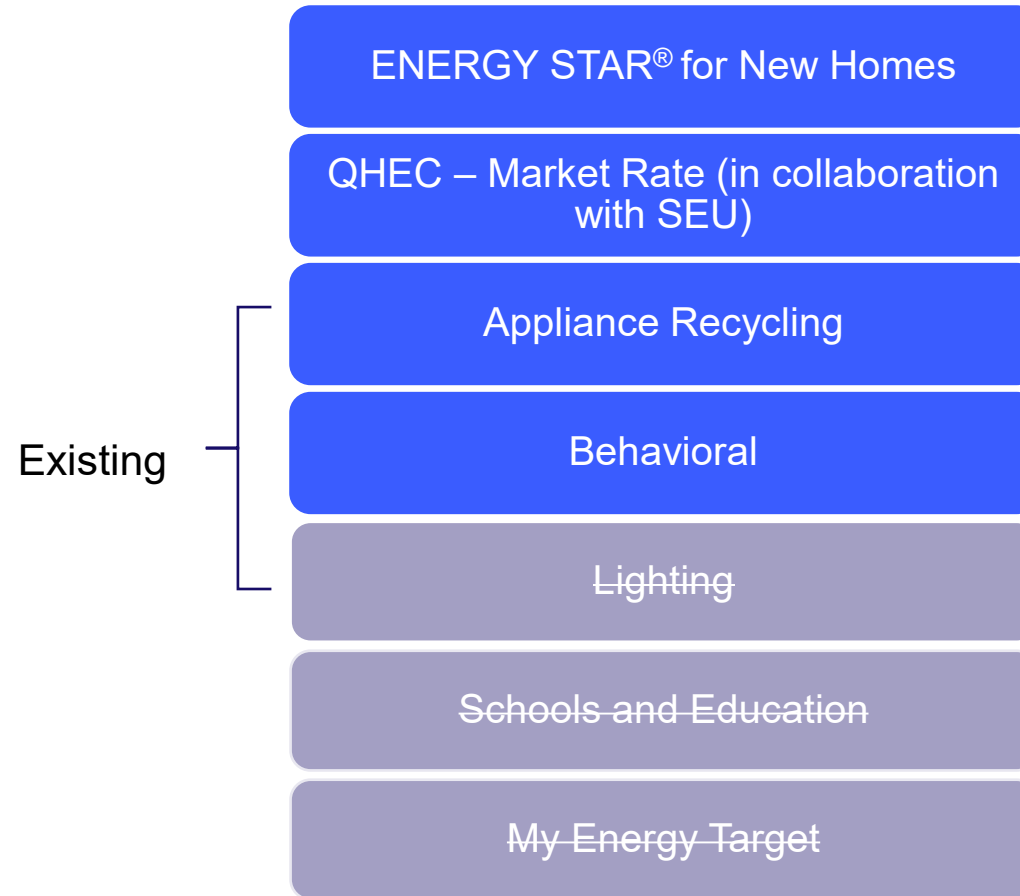
Stakeholder Outreach and Feedback



Key Takeaways from Stakeholders

| Takeaway | Outcome |
|---|--|
| Schools & Education – poor alignment between school districts and DPL service territory | Removed Schools & Education program |
| My Energy Target – low cost-effectiveness and too much overlap with Behavioral | Removed My Energy Target program |
| New Homes – concerns that program will disproportionately benefit higher-income customers | Modeled program participation to include multifamily and townhomes, in addition to single-family homes |
| Portfolio costs too high | Scaled down programs |
| Opportunity to collaborate with SEU, who runs existing programs in the state | DPL to partner with SEU, who will administer the QHEC program with DPL funding |

Programs Selected for Formal Submission



Approach to Portfolio Development

- The development of implementation frameworks draw from DPL's experience in Delaware and with similar programs in Maryland. Current codes and standards, best practices, and stakeholder feedback also contributed to program design.
- Programmatic screening and selection considered rising EE codes and baselines, customer free ridership, the impact on avoided costs due to lower energy costs, and cost effectiveness.
- Marketing and promotion will include advertising, direct mail and email, bill inserts, community events, case studies, trade ally development, and program-specific outreach & education.



| Program Name | MWh Savings (Gross) | | | | MW Savings (Gross) | | | | Other Metrics | |
|----------------------------------|---------------------|---------------|---------------|---------------|--------------------|-------------|-------------|-------------|---------------|------|
| | PY1 | PY2 | PY3 | Total | PY1 | PY2 | PY3 | Total | TRC | NTG |
| ENERGY STAR® for New Homes | 926 | 1,382 | 1,855 | 4,163 | 0.31 | 0.46 | 0.62 | 1.39 | 2.56 | 0.90 |
| Quick Home Energy Check-up | 2,018 | 2,028 | 1,989 | 6,035 | 0.12 | 0.10 | 0.09 | 0.31 | 2.62 | 0.85 |
| Appliance Recycling | 1,623 | 1,705 | 1,791 | 5,119 | 0.26 | 0.27 | 0.29 | 0.82 | 1.46 | 0.50 |
| Behavioral (Home Energy Reports) | 20,331 | 22,017 | 22,414 | 64,762 | 4.71 | 5.10 | 5.19 | 5.19 | 6.86 | 1.00 |
| Total | 25,898 | 27,132 | 28,049 | 80,079 | 5.40 | 5.93 | 6.19 | 7.71 | | |

| Program Name | Total Costs | | | |
|----------------------------|--------------------|--------------------|--------------------|---------------------|
| | PY1 | PY2 | PY3 | Total |
| ENERGY STAR® for New Homes | \$1,136,500 | \$1,291,350 | \$1,506,600 | \$3,934,450 |
| Quick Home Energy Check-up | \$982,589 | \$989,602 | \$1,016,313 | \$2,988,504 |
| Appliance Recycling | \$555,345 | \$581,366 | \$606,978 | \$1,743,689 |
| Home Energy Reports | \$999,000 | \$1,034,000 | \$1,069,000 | \$3,102,000 |
| Total | \$3,673,434 | \$3,896,318 | \$4,198,891 | \$11,768,643 |

Annual Estimated Program Budgets and Energy Impacts

| | Incentives | | | Marketing Development | | | Outside Services | | | Utility Admin | | | EM&V | | |
|---|--------------------|--------------------|--------------------|-----------------------|------------------|------------------|--------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Program Name | PY1 | PY2 | PY3 | PY1 | PY2 | PY3 | PY1 | PY2 | PY3 | PY1 | PY2 | PY3 | PY1 | PY2 | PY3 |
| ENERGY STAR® for New Homes | \$381,500 | \$565,350 | \$758,600 | \$330,000 | \$315,000 | \$320,000 | \$325,000 | \$304,000 | \$310,000 | \$60,000 | \$62,000 | \$65,000 | \$40,000 | \$45,000 | \$53,000 |
| Quick Home Energy Check-up | \$709,589 | \$732,102 | \$737,313 | \$184,000 | \$167,500 | \$185,000 | \$0 | \$0 | \$0 | \$55,000 | \$57,000 | \$59,000 | \$34,000 | \$33,000 | \$35,000 |
| Appliance Recycling | \$258,345 | \$271,366 | \$284,978 | \$106,000 | \$111,000 | \$117,000 | \$100,000 | \$104,000 | \$108,000 | \$75,000 | \$78,000 | \$80,000 | \$16,000 | \$17,000 | \$17,000 |
| Behavioral (Home Energy Reports) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$848,000 | \$879,000 | \$911,000 | \$99,000 | \$101,000 | \$103,000 | \$52,000 | \$54,000 | \$55,000 |
| Total Core Portfolio | \$1,349,434 | \$1,568,818 | \$1,780,891 | \$620,000 | \$593,500 | \$622,000 | \$1,273,000 | \$1,287,000 | \$1,329,000 | \$289,000 | \$298,000 | \$307,000 | \$142,000 | \$149,000 | \$160,000 |

\$11,768,643 total cost

Annual Program Budget Breakdowns

Program Overview

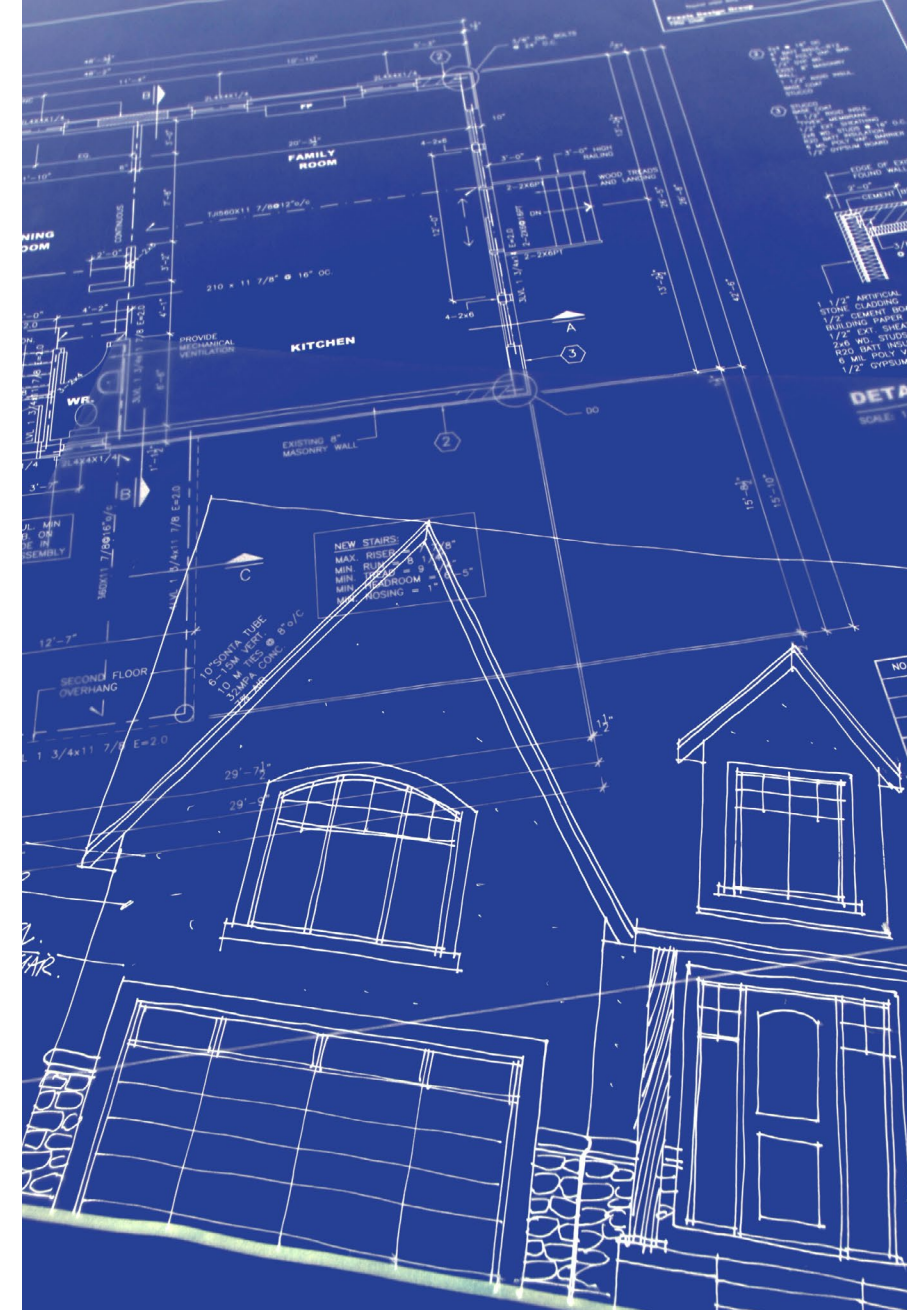
Overview

- National framework designed by the EPA.
- Encourages builders to construct energy efficient new homes through incentives, training, and builder support. The program can also promote the ENERGY STAR® brand.
- Savings are only claimed for energy savings above and beyond code through building energy modeling software.

Considerations

- Stakeholders raised concerns that this program would only benefit large single-family homes.
 - Participation for multifamily low-rise units and townhomes/duplexes make up 60% of the forecasted units making this program more accessible.
 - In our Maryland jurisdictions, affordable housing developers make up 10%-15% of the homes in the program. DPL also expects to serve these efforts in DE.
 - The incentive structure is set such that larger homes don't receive disproportionately higher incentives.

→ **ENERGY STAR® for New Homes**



Overview

- The Quick Home Energy Check-Up (QHEC) program is designed to educate customers on energy efficiency in their place of residence and provide direct install (DI) measures during a concise contractor visit at no additional cost and at the customer's convenience.

Design Considerations

- The same concept is currently offered by Energize DE for low-income customers only. DPL's contribution would expand this program to non-low-income customers.
- **This program will be implemented by the DE SEU to increase efficiency and streamline customer participation**
- Close collaboration with the SEU over the preceding year has yielded a program with significant non-incentive cost savings relative to similar programs regionally
- QHEC participation can generate leads to drive participation in current and future EE programs in Delaware.

→ **QHEC – Market Rate**



Appliance Recycling

- Program is designed to remove old, inefficient appliances from the DE grid by taking an appliance out of service rather than a customer using a haul-away or resale service.
- Encourages residents to responsibly recycle major appliances.
- Benefits include lowering electricity demand and customer energy costs, preventing emissions of ozone depleting substances and GHGs, and saving landfill space and energy via responsible recycling.

Behavioral – Home Energy Reports

- Customers receive reports containing savings tips, home energy usage comparisons to similar customers, and education about a customer's use relative to previous years
- Continues to constitute the majority of 1st Year Energy Savings
- Existing successful program that achieved **63,188 MWh** of savings in the last 3-year cycle (2020-2022) (17% above goal)

Saving is great with 78°F

For big savings without sacrificing comfort, remember: 78°F is the perfect thermostat setting for when you're home this summer.

When you're away, set it higher—every degree you raise the temperature can save you 3-5% on cooling costs.



FIND MORE WAYS TO SAVE

→ Existing Programs

Next Steps

June 2023

- June 6: present to EEAC and receive their recommendation
- Submit Cycle 2 application

January 2024

- Anticipated program launch date

Appendix

Rate Impact

| 2024-2026 Cycle | | | | | |
|-----------------|--------------------------------------|----------|----------|----------|----------|
| | EE Projected Surcharge Rate | CY 2024 | CY 2025 | CY 2026 | CY 2027 |
| | | 0.000532 | 0.001191 | 0.001272 | 0.000716 |
| | | | | | |
| | Monthly Bill Impact | CY 2024 | CY 2025 | CY 2026 | CY 2027 |
| | (at 840 kWh per month) | 0.45 | 1.00 | 1.07 | 0.6 |
| | | | | | |
| | Total Electric Bill - before EE Rate | 136.68 | 136.68 | 136.68 | 136.68 |
| | (at 840 kWh per month) | | | | |
| | | | | | |
| | Percent of Total Electric Bill | 0.3% | 0.7% | 0.8% | 0.4% |
| | | | | | |
| 2020-2022 Cycle | | | | | |
| | EE Projected Surcharge Rate | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| | | 0.000383 | 0.000877 | 0.001044 | 0.000638 |
| | | | | | |
| | Monthly Bill Impact | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| | (at 840 kWh per month) | 0.32 | 0.74 | 0.88 | 0.54 |
| | | | | | |
| | EE Actual Surcharge Rate | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| | | 0.000383 | 0.000828 | 0.000792 | 0.000365 |
| | | | | | |
| | Monthly Bill Impact | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| | (at 840 kWh per month) | 0.32 | 0.70 | 0.67 | 0.31 |

| | Program Year | | | |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Program Budgets</i> | PY1 | PY2 | PY3 | Total |
| Incentives | \$381,500 | \$565,350 | \$758,600 | \$1,705,450 |
| Marketing Development | \$330,000 | \$315,000 | \$320,000 | \$965,000 |
| Outside Services | \$325,000 | \$304,000 | \$310,000 | \$939,000 |
| Utility Admin | \$60,000 | \$62,000 | \$65,000 | \$187,000 |
| EM&V | \$40,000 | \$45,000 | \$53,000 | \$138,000 |
| Total | \$1,136,500 | \$1,291,350 | \$1,506,600 | \$3,934,450 |

| | Program Year | | | |
|-------------------------------|--------------|------------|------------|--------------|
| <i>Program Savings</i> | PY1 | PY2 | PY3 | Total |
| Gross Wholesale MWh | 926 | 1,382 | 1,855 | 4,163 |
| Gross Wholesale MW | 0.31 | 0.46 | 0.62 | 1.39 |
| Net Wholesale MWh | 833 | 1,243 | 1,670 | 3,747 |
| Net Wholesale MW | 0.28 | 0.41 | 0.56 | 1.25 |

→ Energy STAR® for New Homes

| | Program Year | | | |
|------------------------|------------------|------------------|--------------------|--------------------|
| Program Budgets | PY1 | PY2 | PY3 | Total |
| Incentives | \$709,589 | \$732,102 | \$737,313 | \$2,179,004 |
| Marketing Development | \$184,000 | \$167,500 | \$185,000 | \$536,500 |
| Outside Services | \$0 | \$0 | \$0 | \$0 |
| Utility Admin | \$55,000 | \$57,000 | \$59,000 | \$171,000 |
| EM&V | \$34,000 | \$33,000 | \$35,000 | \$102,000 |
| Total | \$982,589 | \$989,602 | \$1,016,313 | \$2,988,504 |

| | Program Year | | | |
|------------------------|--------------|------------|------------|--------------|
| Program Savings | PY1 | PY2 | PY3 | Total |
| Gross Wholesale MWh | 2,018 | 2,028 | 1,989 | 6,035 |
| Gross Wholesale MW | 0.12 | 0.10 | 0.09 | 0.31 |
| Net Wholesale MWh | 1,715 | 1,723 | 1,691 | 5,130 |
| Net Wholesale MW | 0.10 | 0.09 | 0.07 | 0.26 |

→ QHEC – Market Rate

Lighting measures reduced over cycle forecast, so savings are stagnant as participation grows.

| | Program Year | | | |
|------------------------|------------------|------------------|------------------|--------------------|
| Program Budgets | PY1 | PY2 | PY3 | Total |
| Incentives | \$258,345 | \$271,366 | \$284,978 | \$814,689 |
| Marketing Development | \$106,000 | \$111,000 | \$117,000 | \$334,000 |
| Outside Services | \$100,000 | \$104,000 | \$108,000 | \$312,000 |
| Utility Admin | \$75,000 | \$78,000 | \$80,000 | \$233,000 |
| EM&V | \$16,000 | \$17,000 | \$17,000 | \$50,000 |
| Total | \$555,345 | \$581,366 | \$606,978 | \$1,743,689 |

| | Program Year | | | |
|------------------------|--------------|------------|------------|--------------|
| Program Savings | PY1 | PY2 | PY3 | Total |
| Gross Wholesale MWh | 1,623 | 1,705 | 1,791 | 5,119 |
| Gross Wholesale MW | 0.26 | 0.27 | 0.29 | 0.82 |
| Net Wholesale MWh | 812 | 853 | 896 | 2,560 |
| Net Wholesale MW | 0.13 | 0.14 | 0.14 | 0.41 |

→ Appliance Recycling

| | Program Year | | | |
|------------------------|------------------|--------------------|--------------------|--------------------|
| Program Budgets | PY1 | PY2 | PY3 | Total |
| Incentives | \$0 | \$0 | \$0 | \$0 |
| Marketing Development | \$0 | \$0 | \$0 | \$0 |
| Outside Services | \$848,000 | \$879,000 | \$911,000 | \$2,638,000 |
| Utility Admin | \$99,000 | \$101,000 | \$103,000 | \$303,000 |
| EM&V | \$52,000 | \$54,000 | \$55,000 | \$161,000 |
| Total | \$999,000 | \$1,034,000 | \$1,069,000 | \$3,102,000 |

| | Program Year | | | |
|------------------------|--------------|------------|------------|--------------|
| Program Savings | PY1 | PY2 | PY3 | Total |
| Gross Wholesale MWh | 20,331 | 22,017 | 22,414 | 64,762 |
| Gross Wholesale MW | 4.71 | 5.10 | 5.19 | 5.19 |
| Net Wholesale MWh | 20,331 | 22,017 | 22,414 | 64,762 |
| Net Wholesale MW | 4.71 | 5.10 | 5.19 | 5.19 |

→ Behavioral (Home Energy Reports)