



October 17, 2022

Carmen D. Diaz
Acting Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, NJ 08625-0350

Submitted via e-mail

DOCKET NOS. QO1901040, QO19060748 & QO17091004

Dear Acting Secretary Diaz:

Pursuant to the Board's current filing procedures, herein is the Annual Progress Report for Program Year 2022¹ ("PY22") of New Jersey Natural Gas ("NJNG" or "Company") with respect to its Clean Energy Act of 2018 Energy Efficiency ("EE") and Peak Demand Reduction ("PDR") Programs.

In accordance with the Order issued by the Board in connection with I/M/O the New Jersey Board of Public Utilities' Response to the COVID-19 Pandemic for a Temporary Waiver of Requirements for Certain Non-Essential Obligations, BPU Docket No. EO20030254, Order dated March 19, 2020, this document is being electronically filed. No paper copies will follow.

Energy Efficiency Program Progress - Executive Summary

Overall Portfolio

The SAVEGREEN Project® (SAVEGREEN), the customer branded name for NJNG's energy efficiency programs, has been serving customers since 2009. This report addresses new efforts for the expansion of SAVEGREEN that occurred on July 1, 2021² to meet the requirements of the Clean Energy Act, including the transition of many programs that were previously administered by New Jersey's Clean Energy Program. NJNG worked closely with the other New Jersey Utilities (Utilities) to develop coordinated programs to offer comprehensive solutions for our customers.

Since NJNG had robust energy-efficiency programs in place and a good working relationship with many contractors, NJNG was able to leverage many elements of our existing structure for program expansion, including the ability to refresh our online marketplace and microsite, established communication and marketing channels with customers and contractors, infrastructure and procedures for our On-Bill Repayment Program (OBRP) and knowledgeable employees, experienced in our energy-efficiency programs, many of whom have been with SAVEGREEN since 2009.. However, NJNG continues to devote significant time to the development of a new Program Management Software System (PMSS) to properly support the tracking of the energy savings and investments of our expanded program portfolio and provide enhanced functionality for customers and contractors, as well as on-going coordination efforts with the Utilities. With limited exception noted within this report, NJNG is not using Third Party Implementation Contractors to administer most programs.

All of NJNG's approved programs that were approved and expected to launch in July were accepting applications from customers and contractors in early July 2021. In addition, as noted in our filing and follow-up discussions, NJNG intended to launch certain newer Additional Utility Led Programs, including Moderate Income Weatherization, Energy Management, and direct installation elements of the Multi-family Program, later in the program year. All of these Additional Utility Led Programs have been launched. These newer programs did not have any closed projects as of the end of this reporting year, but customer engagement and enrollment were underway during Program Year 1.

The utilities continue to work on developing the Statewide Coordinator (SWC) system that will facilitate the exchange of investments and energy savings between a Lead Utility and a Partner Utility. As of the date of this report, the SWC system is not yet fully tested and operational, therefore the utilities have not yet transferred information for expenditures and energy savings. As discussed during Utility Working Group discussions, Utilities are supporting incentives for comprehensive projects that address both fuels with the intention to transfer all information through the SWC when the system is operational and integrated with each utility's program management software and tracking system. Accordingly, the information reflected within this annual report reflects all investments made by NJNG, including those as the Lead Utility on behalf of a Partner Utility. Energy savings shown within this report only reflect savings for NJNG's primary fuel with the exception of Appendix G which summarizes electric spending that is pending transfer to our partner utilities.

Collectively, the programs delivered over 326,000 DTh in savings. More information on the composition of the savings is presented both within this report and in Appendices B through I.

Additionally, NJNG is committed to improving our program. During PY22, we concluded a competitive solicitation process to select an independent Evaluation, Measurement, and Verification ("EM&V") firm to review our program activity. DNV Energy Insights was selected as the primary evaluation contractor, and their proposal included the use of APPRISE, Inc, for work on the Home Performance with ENERGY STAR and Moderate-Income Weatherization programs. For the purpose of this report, they will collectively be referred to as the "DNV Team". The DNV team worked closely with NJNG to understand our programs, and the guidance developed by the Statewide Evaluator (SWE) Team under contract to the BPU. Work scopes were submitted to the SWE team and evaluation work is underway.

Residential Sector

Year-to-date highlights include:

- The Energy Efficient Products program was launched on July 1, 2021.
 - SAVEGREEN residential HVAC Program completed 2,705 units.
 - There were 1,707 Community Conservation Kits distributed to NJNG customers.
 - The NJNG Online Marketplace sold 8,238 efficient products online to NJNG customers. The majority of sales were smart thermostats, but NJNG also offered discounted energy conservation kits and other energy saving products for the home. NJNG completed the solicitation process and retained EFI as the vendor.
 - NJNG processed 835 appliance rebates for washer/dryer units.
- The Home Performance with ENERGY STAR (HPwES) Program completed 408 projects.
- The Behavioral program had more than 265,500 customers in our treatment group. NJNG retained Uplight, as the vendor that provides this service throughout this triennium. The Behavioral program sends printed Home Energy Reports (HERs) in the fall and winter periods, but electronic Home Energy Reports (eHERS) are provided during the summer months.
- The Quick Home Energy Check-Up (QHEC) Program completed 944 customer visits. NJNG also offered a QHEC+ option that includes a comprehensive Building Performance Institute (BPI) audit and the potential for the installation of a smart thermostat that is purchased on the NJNG Marketplace for a \$49 fee. All QHEC visits and QHEC+ audits are conducted by NJNG employees with full BPI certification.
- CLEAResult, NJNG's Moderate-Income Weatherization Program Implementer, completed 41 audits.
 - NJNG's weatherization marketing campaigns are in process. Outreach includes:
 - Promotions in the June newsletter to 14 senior communities with housing values of less than \$350,000.
 - Direct mail letters/postcards were sent to more than 10,000 households identified as moderate income and emails to more than 25,000 households.
 - Presentations at senior communities Information provided to agencies in Monmouth, Ocean, and Morris counties, including Affordable Housing and Ocean Inc. These agencies provide information on the Moderate-Income Weatherization Program to customers who are over income limits for Comfort Partners.
 - CLEAResult also serves as our Quality Control vendor.

Commercial Sector

Year-to-date highlights include:

- The NJNG outreach team is actively promoting the programs at events across our service territories. They are also engaged in one-on-one discussions with customers who are interested in learning more about available programs.
- The Prescriptive program completed 2 projects.
- The Direct Install program completed 2 projects. There were 46 applications received.
- During PY22, the Utilities considered feedback from customers and trade allies regarding the structure of the incentive calculations for the Direct Install Program and reached agreement on modifications to the screening tool for Direct Install projects that was implemented on July 1, 2022.
- NJNG also had the infrastructure in place to engage eligible customers in our Engineered Solutions program since we have been running a similar program since early 2019. However, no applications were submitted during PY22.
- NJNG finalized program details to enable the launch of the Energy Management program. No applications were submitted during PY22, but discussions were held with some interested customers.
- As a result of the ramp up of C&I programs, NJNG incurred program costs but had very few closed projects during PY22 so limited energy savings were reported in this period. As a result, the Cost Benefit Analysis results will be negatively affected for PY22.

Multi-family Sector

- Our outreach team is engaged in one-on-one discussions with customers who are interested in learning more about the available program.
- NJNG was available to accept interested customers into the program for the initial screening and to process incentives for prescriptive measures and/or the Multi-family HPwES pathway. As of the end of PY 22, there were four Multi-family HPwES projects in the pipeline which consisted of 756 units.
- NJNG also had the infrastructure in place to engage Multi-family property owners in Engineered Solutions. However, no customer applications were submitted during PY22.
- NJNG conducted a competitive solicitation and selected CLEAResult as a Third-Party Implementation Contractor to support the launch of Direct Install of energy savings measures for the Multi-family program. Program details have been put in place to enable the launch of this pathway.
- As a result of the ramp up of the Multi-family programs, NJNG incurred program costs but had no closed projects during PY22 so limited energy savings were reported in this period. As a result, the Cost Benefit Analysis results will be negatively affected for PY22.

Contractor Summary

- 173 Contractors have been onboarded to participate in our OBRP program, this includes 26 contractors for our HPwES program.
- There were 39 commercial contractors onboarded for our Direct Install program.
- There were 46 contractors for our Prescriptive program who signed a participation agreement to allow them to offer our OBRP program.
- Additionally, any licensed contractor can offer rebates for qualifying residential HVAC equipment and commercial Prescriptive equipment.
- There were 12 engineering firms for our Engineered Solutions program.

Table 1 shows the Company's overall performance as a percentage of retail sales, which includes retail sales reductions achieved by the Comfort Partners program, which is the primary program serving low-income customers and is co-managed with the Division of Clean Energy in conjunction with NJNG and the other investor-owned electric and gas utility companies.

Recognizing the transition to utility programs, the Board's June 10, 2020, CEA Order did not establish specific energy use reduction requirements for PY22. Annual targets will become applicable in future years.

Table 1 - Program Year 2022 Program Results

| Utility-Administered Programs Ex-ante Energy Savings (Dth) | Comfort Partners Ex-ante Energy Savings (Dth) | Other Programs Ex-ante Energy Savings (Dth) ¹ | Total Ex-ante Energy Savings (Dth) | Compliance Baseline (Dth) | Annual Target (%) | Annual Target (Dth) | Percent of Annual Target (%) |
|--|---|--|--|------------------------------|----------------------|------------------------|------------------------------------|
| (A) | (B) | (C) | (D) = (A) + (B) + (C) | (E) | (F) | (G) = (E) * (F) | (H) = (D) / (G) |
| 326,187 | 8,535 | - | 334,722 | 68,709,936 | N/A | N/A | N/A |

¹ - Other Programs includes Company-specific programs that are not part of the Clean Energy Act (CEA) energy efficiency programs, such as legacy programs and pilots. While NJNG has legacy programs that are expected to contribute to reported savings in PY23 and PY24, all legacy program projects that closed within PY22 reflected the complementary efforts with the NJCEP programs. Accordingly, NJNG is not recording any savings for those legacy programs here. Future years will only reflect savings from legacy programs that do not have an overlap with NJCEP, primarily Engineered Solutions.

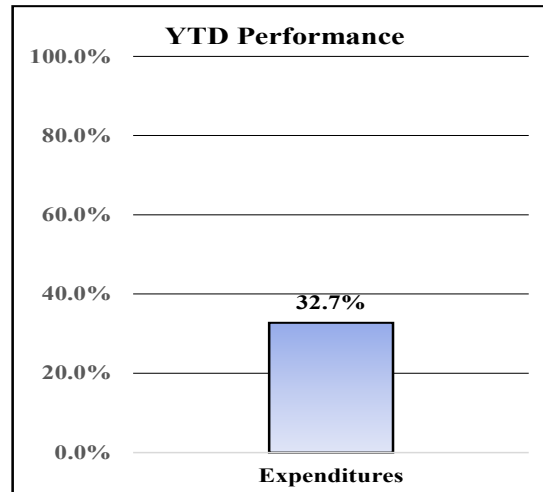


Figure 1: PY22 performance of Annual Energy Savings and Expenditures

Table 2 provides the results of the QPIs for all programs for which utilities are responsible, inclusive of the CEA-funded programs, Comfort Partners program (only included in low/moderate income lifetime savings), and any legacy energy efficiency programs administered by NJNG that were authorized or funded by or through a prior filing or authorization.

Table 2 – Quantitative Performance Indicators

| Quantitative Performance Indicator | Utility-Administered Plan Year Results | Comfort Partners Plan Year Results | Other Programs Plan Year Results | Total Plan Year Results | Annual Target ^{5 & 6} | Percent of Annual Target Achieved |
|---|--|------------------------------------|----------------------------------|-------------------------|------------------------------------|-----------------------------------|
| Annual Energy Savings (Dth) ¹ | 326,187 | 8,535 | - | 334,722 | N/A | N/A |
| Lifetime Savings (Dth) | 1,707,906 | 161,613 | - | 1,869,519 | N/A | N/A |
| Annual Demand Savings (Dth-day) ² | | | | | | |
| Lifetime of Persisting Demand Savings ⁶ (Dth-day-year) | | | | | | |
| Low/Moderate-Income Lifetime Savings ³ (Dth) | 22,446 | 8,535 | - | 30,980 | | |
| Small Commercial Lifetime Savings (Dth) ⁴ | 6,035 | | - | 6,035 | | |
| Net Present Value of Utility Cost Test Net Benefits ⁷ (\$) | \$ 665,739 | | | \$ 665,739 | | |

¹ - Calculated savings at the retail (customer meter) level. Savings are ex-ante.

² - Calculation methodology for Annual Demand Savings and Lifetime of Persisting Demand Savings for natural gas are in development.

³ - Low/Moderate-Income lifetime savings are the total of any income-qualified Residential or Multi-family program, including Comfort Partners.

⁴ - Small Commercial lifetime savings are Direct Install program savings and those from C&I small business customers (<200 kW peak demand) in other programs.

⁵ - The New Jersey Comfort Partners Program does not forecast annual target retail savings (DTh).

⁶ - Annual Targets reflect estimated impacts as filed the Company's 2021-2024 Clean Energy Filing.

⁷ - Cost Effectiveness impacts are not calculated for Comfort Partners or Other Programs.

Sector-Level Participation, Expenditures, and Energy Savings

Participation

NJNG has seen a strong start to the residential programs because we have been offering a range of residential energy-efficiency programs since 2009. NJNG has a robust network of participating contractors, very active communication channels, and marketing efforts.

NJNG is not surprised that there were only a few closed commercial projects. Based on experience supporting the commercial energy efficiency programs run by NJCEP, NJNG recognizes longer lead times for those programs. NJNG had similar expectations for the multi-family program, especially since it launched mid-year during PY22.

Table 3 - Sector-Level Participation

| Sector ¹ | Current Quarter Participants | Annual Participants | Annual Forecasted Participants | Percent of Annual Forecast |
|--|------------------------------|---------------------|--------------------------------|----------------------------|
| Residential | 268,448 | 280,339 | 292,815 | 95.7% |
| Multi-family | - | - | 1,153 | 0% |
| C&I | 2 | 4 | 1,223 | 0.3% |
| Reported Totals for Utility Administered Programs | 268,450 | 280,343 | 295,191 | 95.0% |
| Comfort Partners | 106 | 535 | 873 | 61.3% |
| Utility Total | 268,556 | 280,878 | 296,064 | 94.9% |

¹ - Please note that these numbers are totals across all programs within a sector. Appendix B shows the participation results for individual programs or offerings.

Expenditures

NJNG did not make or request any adjustments to budget or incentives during PY22. As reflected in Table 4 below, NJNG has spent approximately 70% of our Residential sector budget and less than 5% of the Commercial and Multi-family sector budgets. The smaller relative spend for the Commercial and Multi-family programs reflects that limited incentives were processed during PY22; however, there is significant activity occurring on projects in process and regarding outreach to engage further customers.

Table 4 - Sector-Level Expenditures

| Expenditures ¹ | Current Quarter Expenditures (\$000) | Annual Expenditures (\$000) | Annual Budget Expenditures (\$000) | Percent of Annual Budget |
|--|--------------------------------------|-----------------------------|------------------------------------|--------------------------|
| Residential | \$ 6,955 | \$ 23,305 | \$ 33,186 | 70.2% |
| Multi-family | \$ 85 | \$ 301 | \$ 7,399 | 4.1% |
| C&I | \$ 546 | \$ 1,695 | \$ 36,769 | 4.6% |
| Reported Totals for Utility Administered Programs | \$ 7,586 | \$ 25,301 | \$ 77,354 | 32.7% |
| Comfort Partners | \$ 988 | \$ 4,969 | \$ 5,741 | 86.5% |
| Utility Total | \$ 8,574 | \$ 30,270 | \$ 83,095 | 36.4% |

¹ - Expenditures include rebates, incentives, and loans, as well as program administration costs allocated across programs.

Energy Savings

Given that this is the first year of activity after the transition of the NJCEP programs, NJNG expected some of the programs to reflect a slower start. NJNG is working to refine procedures to improve the customer experience, including launching our PMSS, to engage more contractors and reach more customers through marketing and outreach. We expect savings to increase significantly in the future.

Table 5 - Sector-Level Energy Savings

| Annual Energy Savings ¹ | Current Quarter Retail (Dth) | Annual Retail (Dth) | Annual Target Retail ² (Dth) | Percent of Annual Target |
|--|------------------------------------|---------------------------|---|--------------------------------|
| Residential | 86,964 | 325,775 | 256,378 | N/A |
| Multi-family | - | - | 9,248 | N/A |
| C&I | 358 | 412 | 106,160 | N/A |
| Reported Totals for Utility Administered Programs | 87,322 | 326,187 | 371,786 | N/A |
| Comfort Partners | 1,795 | 8,535 | - | N/A |
| Utility Total | 89,117 | 334,722 | 371,786 | N/A |

¹ - Annual energy savings represent the total expected annual savings from all EE measures within each sector. Appendix B shows the annual energy savings results for individual programs or offerings.

² - The New Jersey Comfort Partners Program does not forecast annual target retail savings (DTh).

Portfolio Expenditures Breakdown

Table 6 provides quarterly, and year-to-date costs compared to the full program year budget. Company expenditures during the annual reporting period were approximately 33% of the budget for Program Year 1. Spending will accelerate quickly as other Commercial and Multi-family programs begin to close.

Table 6 - Annual Costs and Budget Variances by Category

| Total Utility EE/PDR ¹ | Quarter Reported (\$000) | Annual Reported (\$000) | Full Year Budget (\$000) | Percent of Budget Spent |
|---|--------------------------------|-------------------------------|--------------------------------|----------------------------|
| Capital Costs | \$ 286 | \$ 823 | \$ 1,350 | 61.0% |
| Utility Administration | \$ 768 | \$ 3,543 | \$ 5,835 | 60.7% |
| Marketing | \$ 129 | \$ 511 | \$ 1,469 | 34.8% |
| Outside Services | \$ 395 | \$ 1,155 | \$ 2,215 | 52.1% |
| Rebates | \$ 1,997 | \$ 6,164 | \$ 34,546 | 17.8% |
| No or Low-Interest Loans | \$ 4,112 | \$ 13,753 | \$ 30,656 | 44.9% |
| Evaluation, Measurement & Verification (EM&V) | \$ 29 | \$ 113 | \$ 2,536 | 4.5% |
| Inspections & Quality Control | \$ 27 | \$ 98 | \$ 159 | 61.6% |
| Utility EE/PDR Total | \$ 7,743 | \$ 26,160 | \$ 78,766 | 33.2% |

¹ - Categories herein align to NJNG's EE plan as approved by the BPU.

Equity Metrics

These equity metrics draw from the considerable work of the New Jersey Office of Environmental Justice's Overburdened Community (OBC) designations. Per New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157, census block groups are identified as being an Overburdened Community when specific census criteria are met¹, and metrics reported herein reflect further direction from BPU Staff².

NJNG devoted significant internal resources to developing the proper reports to extract the information used to populate this table from our Customer Information System to calculate the system wide reference points and our PMSS to develop related participation metrics. NJNG intends to improve our understanding of the implications of these metrics and pursue additional focused strategies to improve the participation levels for customers in OBC as needed.

NJNG has pursued distinct outreach strategies to benefit our low-to moderate income customers living in (and outside, e.g., senior populations) OBCs. These strategies provide our customers with information about special programs and enhanced incentives the energy efficiency programs have to help lower their energy bills and potentially improve the comfort and safety of their homes. Activities include outreach events, customer bill inserts and newsletters, email campaigns, social media advertising, and direct mail. NJNG has begun to work with community partners to reach customers in OBC communities. We continue to develop new approaches and strategies to increase participation. For example, NJNG sponsored a Montclair University Sustainable Institute Green Team to develop outreach strategies for OBC communities. Together with NJNG, this team worked directly with Interfaith Neighbors, a nonprofit organization based in Asbury Park to brainstorm and develop strategies that can then be replicated in other OBCs in our territory.

¹ Per N.J.S.A. 13:1D-157: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as a minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency.

² Per guidance from BPU Staff, Overburdened Communities as used in Table 6 reflect those communities where at least 35 percent of the households qualify as low-income households but exclude those communities that are solely designated as Minority, Limited English, or Minority and Limited English.

Table 7 – Equity Performance

| Territory-Level Benchmarks | Over-Burdened ¹ | Non-Over-Burdened | Total | Ratio ² |
|---|----------------------------|--------------------|-----------------------|--------------------|
| # of Household Accounts ³ | 63,531 | 461,291 | 524,822 | 0.12 |
| # of Large Commercial Accounts ³ | 1,021 | 4,630 | 5,651 | 0.18 |
| # of Small Commercial Accounts ³ | 4,545 | 28,690 | 33,235 | 0.14 |
| Totals | 69,097 | 494,611 | 563,708 | 0.12 |
| Territory-Level Benchmarks | Over-Burdened ¹ | Non-Over-Burdened | Total | Ratio ² |
| Household Accounts - Annual Energy | 50,795,592 | 447,697,984 | 498,493,576 | 0.10 |
| Large Commercial Accounts - Annual Energy | 27,595,311 | 104,746,321 | 132,341,632 | 0.21 |
| Small Commercial Accounts - Annual Energy | 41,411,785 | 235,537,917 | 276,949,702 | 0.15 |
| Totals (Therms) ⁴ | 119,802,688 | 787,982,222 | 907,784,909.89 | 0.13 |
| Totals (Dth) ⁴ | 11,980,269 | 78,798,222 | 90,778,490.99 | 0.13 |

| Program | Sub-Program or Offering | Type of Sub-Program/Offering | Quarter Over-burdened ¹ | Quarter Non-Over-burdened | Quarter Ratio ² | YTD Over-burdened ¹ | YTD Non-Over-burdened | YTD Ratio ² |
|--|---|------------------------------|------------------------------------|---------------------------|----------------------------|--------------------------------|-----------------------|------------------------|
| Participation | | | | | | | | |
| Residential - Efficient Products ⁵ | HVAC | Core | 54 | 806 | 0.06 | 157 | 2,548 | 0.06 |
| | Community Kits | Core | 185 | 499 | 0.27 | 510 | 1,197 | 0.30 |
| | Online Marketplace | Core | 79 | 781 | 0.09 | 752 | 7,486 | 0.09 |
| | Appliance Rebates - Washers/Dryers | Core | 27 | 141 | 0.16 | 109 | 726 | 0.13 |
| | Total Efficient Products Participation | | 345 | 2,227 | 0.13 | 1,528 | 11,957 | 0.11 |
| Residential - Existing Homes | Home Performance with Energy Star | Core | 20 | 116 | 0.15 | 88 | 320 | 0.22 |
| | Quick Home Energy Check-Up | Additional | 23 | 215 | 0.10 | 75 | 869 | 0.08 |
| | Moderate-Income Weatherization | Additional | - | - | - | - | - | - |
| Home Energy Education & Management | Behavioral | Additional | 28,165 | 237,337 | 0.11 | 28,165 | 237,337 | 0.11 |
| Total Residential Participation | | | 28,553 | 239,895 | 0.11 | 29,856 | 250,483 | 0.11 |
| C&I Direct Install | Direct Install | Core | - | 2 | - | - | 2 | - |
| Energy Solutions for Business | Prescriptive/Custom | Core | - | - | - | 1 | 1 | 0.50 |
| | Energy Management | Additional | - | - | - | - | - | - |
| | Engineered Solutions | Additional | - | - | - | - | - | - |
| Total Business Participation | | | - | 2 | - | 1 | 3 | 0.25 |
| Multi-family | HPwES | Core | - | - | - | - | - | - |
| | Direct Install | Core | - | - | - | - | - | - |
| | Prescriptive/Custom | Core | - | - | - | - | - | - |
| | Engineered Solutions | Core | - | - | - | - | - | - |
| Total Multi-family Participation | | | - | - | - | - | - | - |
| Total Core Participation ⁶ | | | 365 | 2,345 | 0.13 | 1,617 | 12,280 | 0.12 |
| Total Additional Participation ⁶ | | | 28,188 | 237,552 | 0.11 | 28,240 | 238,206 | 0.11 |
| TOTAL PARTICIPATION ⁶ | | | 28,553 | 239,897 | 0.11 | 29,857 | 250,486 | 0.11 |

| Program | Sub-Program or Offering | Type of Sub-Program/Offering | Quarter Over-burdened ¹ | Quarter Non-Over-burdened | Quarter Ratio ² | YTD Over-burdened ¹ | YTD Non-Over-burdened | YTD Ratio ² |
|--|---|------------------------------|------------------------------------|---------------------------|----------------------------|--------------------------------|-----------------------|------------------------|
| Annual Energy Savings (Dth) | | | | | | | | |
| Residential - Efficient Products ⁵ | HVAC | Core | 1,160 | 16,587 | 0.07 | 1,966 | 35,035 | 0.05 |
| | Community Kits | Core | 2,761 | 6,492 | 0.30 | 2,814 | 6,605 | 0.30 |
| | Online Marketplace | Core | 317 | 2,925 | 0.10 | 2,683 | 26,090 | 0.09 |
| | Appliance Rebates - Washers/Dryers | Core | 18 | 87 | 0.17 | 78 | 452 | 0.15 |
| | Total Efficient Products Annual Energy Savings (Dth) | | 4,256 | 26,091 | 0.14 | 7,541 | 68,182 | 0.10 |
| Residential - Existing Homes | Home Performance with Energy Star | Core | 293 | 2,526 | 0.10 | 1,095 | 7,183 | 0.13 |
| | Quick Home Energy Check-Up | Additional | 31 | 373 | 0.08 | 54 | 778 | 0.06 |
| | Moderate-Income Weatherization | Additional | - | - | - | - | - | - |
| Home Energy Education & Management | Behavioral | Additional | 6,511 | 46,883 | 0.12 | 10,495 | 230,447 | 0.04 |
| Total Residential Annual Energy Savings (Dth) | | | 11,091 | 75,873 | 0.13 | 19,185 | 306,590 | 0.06 |
| C&I Direct Install | Direct Install | Core | - | 358 | - | - | 358 | - |
| Energy Solutions for Business | Prescriptive/Custom | Core | - | - | - | 39 | 15 | 0.72 |
| | Energy Management | Additional | - | - | - | - | - | - |
| | Engineered Solutions | Additional | - | - | - | - | - | - |
| Total Business Annual Energy Savings (Dth) | | | - | 358 | - | 39 | 373 | 0.09 |
| Multi-family | HPwES | Core | - | - | - | - | - | - |
| | Direct Install | Core | - | - | - | - | - | - |
| | Prescriptive/Custom | Core | - | - | - | - | - | - |
| | Engineered Solutions | Core | - | - | - | - | - | - |
| Total Multi-family Annual Energy Savings (Dth) | | | - | - | - | - | - | - |
| Total Core Annual Energy Savings ⁶ | | | 4,549 | 28,975 | 0.14 | 8,675 | 75,738 | 0.10 |
| Total Additional Annual Energy Savings ⁶ | | | 6,542 | 47,256 | 0.12 | 10,549 | 231,225 | 0.04 |
| TOTAL ANNUAL ENERGY SAVINGS ⁶ | | | 11,091 | 76,231 | 0.13 | 19,224 | 306,963 | 0.06 |

| Program | Sub-Program or Offering | Type of Sub-Program/Offering | Quarter Over-burdened ¹ | Quarter Non-Over-burdened | Quarter Ratio ² | YTD Over-burdened ¹ | YTD Non-Over-burdened | YTD Ratio ² |
|---|------------------------------------|------------------------------|------------------------------------|---------------------------|----------------------------|--------------------------------|-----------------------|------------------------|
| Lifetime Energy Savings (Dth) | | | | | | | | |
| Residential - Efficient Products ⁵ | HVAC | Core | 21,973 | 369,656 | 0.06 | 37,214 | 660,888 | 0.05 |
| | Community Kits | Core | 41,415 | 97,363 | 0.30 | 42,210 | 99,070 | 0.30 |
| | Online Marketplace | Core | 2,465 | 23,114 | 0.10 | 20,219 | 196,907 | 0.09 |
| | Appliance Rebates - Washers/Dryers | Core | 213 | 1,047 | 0.17 | 938 | 5,419 | 0.15 |
| Total Efficient Products Lifetime Energy Savings (Dth) | | | 66,066 | 491,180 | 0.12 | 100,581 | 962,284 | 0.09 |
| Residential - Existing Homes | Home Performance with Energy Star | Core | 4,383 | 37,890 | 0.10 | 16,418 | 107,606 | 0.13 |
| | Quick Home Energy Check-Up | Additional | 317 | 4,530 | 0.07 | 542 | 7,781 | 0.07 |
| | Moderate-Income Weatherization | Additional | - | - | - | - | - | - |
| Home Energy Education & Management | Behavioral | Additional | 13,673 | 98,453 | 0.12 | 25,625 | 480,352 | 0.05 |
| Total Residential Lifetime Energy Savings (Dth) | | | 84,439 | 632,053 | 0.12 | 143,166 | 1,558,023 | 0.08 |
| C&I Direct Install | Direct Install | Core | - | 5,981 | - | - | 5,981 | - |
| Energy Solutions for Business | Prescriptive/Custom | Core | - | - | - | 210 | 525 | 0.29 |
| | Energy Management | Additional | - | - | - | - | - | - |
| | Engineered Solutions | Additional | - | - | - | - | - | - |
| Total Business Lifetime Energy Savings (Dth) | | | - | 5,981 | - | 210 | 6,506 | 0.03 |
| Multi-family | HPwES | Core | - | - | - | - | - | - |
| | Direct Install | Core | - | - | - | - | - | - |
| | Prescriptive/Custom | Core | - | - | - | - | - | - |
| | Engineered Solutions | Core | - | - | - | - | - | - |
| Total Multi-family Lifetime Energy Savings (Dth) | | | - | - | - | - | - | - |
| Total Core Lifetime Energy Savings ⁶ | | | 70,449 | 535,051 | 0.12 | 117,209 | 1,076,396 | 0.10 |
| Total Additional Lifetime Energy Savings ⁶ | | | 13,990 | 102,983 | 0.12 | 26,167 | 488,133 | 0.05 |
| TOTAL LIFETIME ENERGY SAVINGS ⁶ | | | 84,439 | 638,034 | 0.12 | 143,376 | 1,564,529 | 0.08 |

¹ - Across all programs, participation/expenditures/savings are classified as either in an Environmental Justice Overburdened Community census block or not based on the program participant's address. Overburdened Community census blocks were developed and defined by the NJ Department of Environmental Protection (www.nj.gov/dep/ej/communities.html). The Overburdened Community (OBC) census blocks are defined with three criteria: at least 35% of households qualify as low-income, at least 40% of residents identify as minority, and at least 40% of households have limited English proficiency. If any of the three criteria is satisfied, the census block is defined as OBC. Staff directed to only include OBC census blocks where at least 35% of households qualify as low-income. For example, a census block that only satisfies the limited English proficiency criteria is not included.

² - The %OBC column shows the ratio of the overburdened metric over the total of overburdened plus non-overburdened. Comparing the territory-level benchmark %OBC (upper table) versus the program %OBC (lower table) shows how equitable the distribution of the program is between the overburdened and non-overburdened populations. If the program %OBC is greater than the benchmark %OBC, then the overburdened population is better represented in the program relative to the percentage of overburdened households or business in the utility territory.

³ - Estimation of accounts with overburdened designation determined to be active immediately preceding the current Plan Year.

⁴ - Estimation of usage with overburdened designation for the 12-month period immediately preceding the current Plan Year.

⁵ - Individual line items or totals as listed in the OBC table may differ slightly from those results in Appendix B table due to rounding.

Benefit-Cost Test Results

Table 8 - Benefit-Cost Test Results

As a result of the ramp up of the Commercial and Multi-family programs, NJNG incurred program costs but had very few closed projects during PY22 so limited energy savings were reported in this period. As a result, the Cost Benefit Analysis results will be affected results were negatively affected for PY22.

| | Initial | | | | | | Final | | | | | |
|------------------------------------|---------|-----|------|------|------|------|-------|------|-------|-------|-------|-------|
| | NJCT | PCT | PACT | RIMT | TRCT | SCT | NJCT | PCT | PACT | RIMT | TRCT | SCT |
| Residential | | | | | | | | | | | | |
| Efficient Products | 1.5 | 1.9 | 1.4 | 0.8 | 0.9 | 2.3 | 1.8 | 2.3 | 1.4 | 0.8 | 1.1 | 1.9 |
| Existing Homes | 1.0 | 1.7 | 0.6 | 0.5 | 0.6 | 2.2 | 0.8 | 1.5 | 0.6 | 0.5 | 0.5 | 0.9 |
| Home Energy Education & Management | 1.8 | 2.9 | 1.4 | 0.8 | 1.4 | 2.4 | 1.8 | 2.6 | 1.5 | 0.8 | 1.3 | 1.9 |
| Commercial | | | | | | | | | | | | |
| C&I Direct Install | 5.6 | 4.9 | 3.1 | 1.4 | 4.0 | 11.1 | 0.7 | 4.7 | 0.5 | 0.4 | 0.5 | 0.8 |
| Energy Solutions for Business | 4.5 | 8.5 | 1.3 | 0.9 | 2.8 | 9.3 | 0.004 | 14.8 | 0.003 | 0.003 | 0.003 | 0.005 |
| Multi-family | 2.0 | 2.3 | 1.5 | 1.0 | 1.2 | 4.3 | N/A | N/A | N/A | N/A | N/A | N/A |
| Portfolio | 2.0 | 2.4 | 1.6 | 1.0 | 1.4 | 4.0 | 1.2 | 2.1 | 1.1 | 0.7 | 0.8 | 1.5 |

Please contact the undersigned (via email at APeracchio@NJNG.com) should you have any questions or concerns regarding this report.

Respectfully submitted,

A handwritten signature in blue ink that reads "Anne-Marie Peracchio". The signature is written in a cursive, flowing style.

Anne-Marie Peracchio
Managing Director Marketing and Energy Efficiency

Cc:
Philip Chao
Brian Lipman
Maura Caroselli
Stacy Richardson

List of Appendices

The bolded appendices in this list also appear in the accompanying Annual Report Appendix Spreadsheet.

- **Appendix A - Participant Definitions**
- **Appendix B - Energy Efficiency and PDR Savings Summary**
- **Appendix C - Energy Efficiency and PDR Savings Summary, LMI Customers**
- **Appendix D - Energy Efficiency and PDR Savings Summary, Business Customers**
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- **Appendix G - Ex-Ante Energy Savings Held for Transfer**
- **Appendix H - Cost Effectiveness Test Details**
- **Appendix I - Program Changes**

Appendix A - Participant Definitions

| NJ Program/Pathway | | Participants (as lead utility) |
|------------------------------------|-----------------------------------|---|
| Efficient Products | HVAC | Sum of HVAC units (multiple units per customer, counts as multiple participants) |
| | Rebated Products | Quantity of units rebated (based on SKU) |
| | Online Marketplace | Quantity of units sold (based on SKU) - net of returns (negative in current period) |
| | EE Kits - Giveaway | Per kit delivered |
| Existing Homes | Home Performance with Energy Star | Count of completed HPwES projects |
| | Quick Home Energy Checkup | Count of completed visits |
| | Moderate Income Weatherization | Same as HPwES - (distinction would be paying for audit in this program) |
| Home Energy Education & Management | Behavioral | Count of treatment customers at end of reporting period |
| C&I Direct Install | Direct Install | Count based on number of applications/projects completed, not account number |
| Energy Solutions for Business | Prescriptive/Custom | Count based on number of applications/projects completed, not account number |
| | Energy Management | Count based on number of applications/projects completed, not account number |
| | Engineered Solutions | Count based on number of applications/projects completed, not account number |
| Multi-family | MF HPwES | Count of completed HPwES projects |
| | Direct Install | Count based on number of projects completed |
| | Prescriptive/Custom | Count based on number of applications/projects completed, not account number |
| | Engineered Solutions | Count based on number of applications/projects completed, not account number |

Appendix B - Energy Efficiency and PDR Savings Summary

| NJNG | | Participation | | | | Actual Expenditures | | | | Ex Ante Energy Savings | | | | | | |
|---|--|-----------------|--|-----------------------------------|------------------------------|-------------------------|---|------------------------------------|------------------------|--|---|--|--------------------------------|---|---|-----------------------------------|
| | | A | B | C | D = C / B | E | F | G | H = G / F | I | J | K | L = K / J | M | O | P |
| | | Current Quarter | Annual Forecasted Participation Number 1 | Reported Participation Number YTD | YTD % of Annual Participants | Current Quarter (\$000) | Forecasted Annual Program Costs (\$000) | Reported Program Costs YTD (\$000) | YTD % of Annual Budget | Current Quarter Annual Retail Energy Savings (Dth) | Annual Forecasted Retail Energy Savings (Dth) | Reported Retail Energy Savings YTD (Dth) | YTD % of Annual Energy Savings | Current Quarter Reported Wholesale Energy Savings (Dth) | Current Quarter Lifetime Retail Savings 2 (Dth) | YTD Lifetime Retail Savings (Dth) |
| Residential Programs | Sub-Program | | | | | | | | | | | | | | | |
| Efficient Products * | HVAC | 860 | 6,385 | 2,705 | 42.4% | \$ 4,330 | N/A | \$ 14,176 | N/A | 17,747 | 57,524 | 37,001 | 64.3% | 17,924 | 391,629 | 698,102 |
| | Community Kits | 684 | 10,000 | 1,707 | 17.1% | \$ 29 | N/A | \$ 91 | N/A | 9,253 | 11,200 | 9,419 | 84.1% | 9,346 | 138,778 | 141,280 |
| | Others (Online Marketplace & Washers/Dryers) | 1,028 | 18,160 | 9,073 | 50.0% | \$ 132 | N/A | \$ 685 | N/A | 3,347 | 53,187 | 29,303 | 55.1% | 3,380 | 26,839 | 223,483 |
| | Total Efficient Products | 2,572 | 34,545 | 13,485 | 39.0% | \$ 4,491 | \$ 17,795 | \$ 14,952 | 84.0% | 30,347 | 121,911 | 75,723 | 62.1% | 30,650 | 557,246 | 1,062,865 |
| Existing Homes | Home Performance with Energy Star * | 136 | 670 | 408 | 60.9% | \$ 1,686 | \$ 9,455 | \$ 5,341 | 56.5% | 2,819 | 20,694 | 8,278 | 40.0% | 2,847 | 42,273 | 124,024 |
| | Quick Home Energy Check-Up | 238 | 1,500 | 944 | 62.9% | \$ 226 | \$ 1,807 | \$ 963 | 53.3% | 404 | 1,964 | 832 | 42.4% | 408 | 4,847 | 8,323 |
| | Moderate-Income Weatherization | - | 100 | - | 0.0% | \$ 109 | \$ 2,283 | \$ 397 | 17.4% | - | 3,427 | - | 0.0% | - | - | - |
| Home Energy Education & Management | Behavioral ³ | 265,502 | 256,000 | 265,502 | 103.7% | \$ 443 | \$ 1,846 | \$ 1,652 | 89.5% | 53,394 | 108,383 | 240,942 | 222.3% | 53,928 | 112,127 | 505,978 |
| Total Residential | | 268,448 | 292,815 | 280,339 | 95.7% | \$ 6,955 | \$ 33,186 | \$ 23,305 | 70.2% | 86,964 | 256,378 | 325,775 | 127.1% | 87,834 | 716,493 | 1,701,190 |
| Business Programs | Sub-Program | | | | | | | | | | | | | | | |
| C&I Direct Install | Direct Install * | 2 | 225 | 2 | 0.9% | \$ 298 | \$ 15,219 | \$ 710 | 4.7% | 358 | 30,935 | 358 | 1.2% | 362 | 5,981 | 5,981 |
| Energy Solutions for Business | Prescriptive/Custom * | - | 981 | 2 | 0.2% | \$ 104 | \$ 6,983 | \$ 443 | 6.3% | - | 42,208 | 54 | 0.1% | - | - | 735 |
| | Energy Management | - | 10 | - | 0.0% | \$ 33 | \$ 1,032 | \$ 117 | 11.3% | - | 2,408 | - | 0.0% | - | - | - |
| | Engineered Solutions | - | 7 | - | 0.0% | \$ 111 | \$ 13,535 | \$ 425 | 3.1% | - | 30,609 | - | 0.0% | - | - | - |
| Total Business | | 2 | 1,223 | 4 | 0.3% | \$ 546 | \$ 36,769 | \$ 1,695 | 4.6% | 358 | 106,160 | 412 | 0.4% | 362 | 5,981 | 6,716 |
| Multi-family * | HPwES | - | 375 | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| | Direct Install | - | 750 | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| | Prescriptive/Custom * | - | 22 | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| | Engineered Solutions | - | 6 | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| Total Multi-family | | - | 1,153 | - | 0.0% | \$ 85 | \$ 7,399 | \$ 301 | 4.1% | - | 9,248 | - | 0.0% | - | - | - |
| Other Programs | | | | | | | | | | | | | | | | |
| Home Optimization & Peak Demand Reduction | | - | - | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| Total Other | | - | - | - | 0.0% | \$ - | \$ - | \$ - | 0.0% | - | - | - | 0.0% | - | - | - |
| Portfolio Total | | 268,450 | 295,191 | 280,343 | 95.0% | \$ 7,586 | \$ 77,354 | \$ 25,301 | 32.7% | 87,322 | 371,786 | 326,187 | 87.7% | 88,195 | 722,474 | 1,707,906 |
| Supportive Costs Outside Portfolio | | | | | | \$ 158 | \$ 1,413 | \$ 859 | 60.8% | | | | | | | |

* - Denotes a core EE program. Home Performance with Energy Star only includes non-LMI; the comparable program for LMI participants is Comfort Partners, which is jointly administered by the State and Utilities.

¹ - Annual Forecasted Program Costs reflect values anticipated in Board-approved Utility EE/PDR filings and may incorporate budget adjustments as provided for in the June 10, 2020 Board Order.

² - NJNG noted an oversight in the column labeled "Current Quarter Lifetime Savings" subsequent to the PY22Q3 submission. There was a formula which inadvertently pulled in an incorrect value for lifetime savings. The affected programs included Community Kits, Quick Home Energy Check-Up, and Moderate-Income Weatherization. NJNG has corrected the affected cells with the PY22Q4 submission.

³ - Behavioral lifetime retail savings (Dth) were calculated utilizing useful life of 2.1 years.

Note - On-going discussions within the Evaluation, Measurement and Verification (EM&V) Working Group have noted that there is no clearly defined protocol for calculating peak demand savings for natural gas measures. It is anticipated that this issue will be addressed by the EM&V Working Group within this Triennial. No Peak Demand Savings for natural gas measures will be reported until an agreed upon methodology has been determined.

Appendix C - Energy Efficiency and PDR Savings Summary, LMI Customers

| NJNG | | Participation | | Incentive Expenditures (Customer Rebates & Low/No-Cost Financing) | | Ex Ante Energy Savings | |
|---|---|--------------------------------------|--------------------------|--|--------------------------|--|--------------------------|
| | | A | B | C | D | E | F |
| | | Reported Participation Number YTD | | Reported Incentive Costs YTD (\$000) | | Reported Retail Energy Savings YTD (Dth) | |
| Residential Programs | Sub Program | LMI | Non-LMI or Unverified | LMI | Non-LMI or Unverified | LMI | Non-LMI or Unverified |
| Efficient Products | HVAC | 369 | 2,336 | \$ 2,461 | \$ 10,383 | 5,900 | 31,102 |
| | Community Kits | 1,707 | - | \$ 91 | \$ - | 9,419 | - |
| | Others (Online Marketplace - Washers/Dryers) | - | 9,073 | \$ - | \$ 686 | - | 29,303 |
| Existing Homes | Home Performance with Energy Star ¹ | - | 408 | \$ - | \$ 4,551 | - | 8,278 |
| | Quick Home Energy Check-Up | - | 944 | \$ - | \$ 40 | - | 832 |
| | Moderate Income Weatherization | - | - | \$ - | \$ - | - | - |
| Home Energy Education & Management | Behavioral ^{2 & 3} | 6,155 | 259,347 | \$ - | \$ 1,544 | 7,126 | 233,816 |
| Total Residential | | 8,231 | 272,108 | \$ 2,552 | \$ 17,204 | 22,445 | 303,331 |
| | | | | | | | |
| Multi-family | HPwES | - | - | \$ - | \$ - | - | - |
| | Direct Installation/MF QHEC | - | - | \$ - | \$ - | - | - |
| Total Multi-family | | - | - | \$ - | \$ - | - | - |
| | | | | | | | |
| Other Programs | | | | | | | |
| Home Optimization & Peak Demand Reduction | | - | - | \$ - | \$ - | - | - |
| Total Other | | - | - | \$ - | \$ - | - | - |
| | | | | | | | |
| Portfolio Total | | 8,231 | 272,108 | \$ 2,552 | \$ 17,204 | 22,445 | 303,331 |
| Supportive Costs Outside Portfolio | | | | \$ - | \$ - | | |

¹ - Income-qualified customers are directed to participate through the Comfort Partners or Moderate Income Weatherization programs.

² - NJNG began reporting Behavioral savings related to LMI in Q3.

³ - Wave of LMI treatment group participants.

Appendix D - Energy Efficiency and PDR Savings Summary, Business Customers

| NJNG | | Participation | | Incentive Expenditures (Customer Rebates and Low/no-cost Financing) | | Ex Ante Energy Savings | |
|--|----------------------|--------------------------------------|---------------------|--|---------------------|--|---------------------|
| | | A | B | C | D | E | F |
| | | Reported Participation Number YTD | | Reported Incentive Costs YTD (\$000) | | Reported Retail Energy Savings YTD (Dth) | |
| Business Programs | Sub-Program | Small Commercial ¹ | Large Commercial | Small Commercial ¹ | Large Commercial | Small Commercial ¹ | Large Commercial |
| C&I Direct Install | Direct Install | 2 | - | \$ 160 | \$ - | 5,981 | - |
| Energy Solutions for Business | Prescriptive/Custom | 2 | - | \$ 66 | \$ - | 54 | - |
| | Energy Management | - | - | \$ - | \$ - | - | - |
| | Engineered Solutions | - | - | \$ - | \$ - | - | - |
| Total Business | | 4 | - | \$ 226 | \$ - | 6,035 | - |
| Multi-family | HPwES | - | - | \$ - | \$ - | - | - |
| | Direct Install | - | - | \$ - | \$ - | - | - |
| | Prescriptive/Custom | - | - | \$ - | \$ - | - | - |
| | Engineered Solutions | - | - | \$ - | \$ - | - | - |
| Other Programs | | | | | | | |
| Home Optimization & Peak Demand Reduction | | - | - | \$ - | \$ - | - | - |
| Total Other | | - | - | \$ - | \$ - | - | - |
| Portfolio Total | | 4 | - | \$ 226 | \$ - | 6,035 | - |
| Supportive Costs Outside Portfolio | | | | \$ - | \$ - | | |
| ¹ - Customers with average annual peak demand less than 200 kW. | | | | | | | |

Appendix E - Annual Baseline Calculation

| Energy Efficiency Compliance Baselines and Benchmarks (therms) | | | | | | | | | | | | |
|--|-----------|------------------|----------------|-------------|-----------------------|----------------------------------|--|---|---|--|---|--|
| Gas Utility | Plan Year | Sales Period | Sales (therms) | Adjustments | Adjusted Retail Sales | Compliance Baseline ² | Overall Annual Energy Reduction Target (%) | Overall Annual Energy Reduction Target (therms) | State-Administered Annual Energy Reduction Target (%) | State-Administered Annual Energy Reduction Target (therms) | Utility-Administered Annual Energy Reduction Target (%) | Utility-Administered Annual Energy Reduction Target (therms) |
| | | | (A) | (B) | (C) = (A) - (B) | (D) = Average (C) | (E) ¹ | (F) = (E) * (D) | (G) ¹ | (H) = (G) * (D) | (I) ¹ | (J) = (I) * (D) |
| NJNG | 2019 | 7/1/18 - 6/30/19 | 706,996,325 | 5,085,681 | 701,910,644 | | | | | | | |
| | 2020 | 7/1/19 - 6/30/20 | 672,480,094 | 5,866,252 | 666,613,842 | | | | | | | |
| | 2021 * | 7/1/20 - 6/30/21 | 699,330,177 | 6,556,593 | 692,773,584 | | | | | | | |
| | 2022 | 7/1/21 - 6/30/22 | | | | 687,099,357 | 0.00% | - | 0.0% | 0.0% | 0.0% | 0.0% |
| | | | | | | 68,709,936 (Dth) | | | | | | |
| (A) Includes calendar sales for firm and interruptible service classifications. | | | | | | | | | | | | |
| (B) Includes adjustments to remove Distributed Generation volumes. | | | | | | | | | | | | |
| ¹ - (E,G,I) No formal targets established for PY22 in the June 2020 CEA Framework Order. | | | | | | | | | | | | |
| ² - Calculated as average annual gas usage in the prior three plan years (July - June) per N.J.S.A. 48:3-87.9(a). | | | | | | | | | | | | |
| * - Adjusted retail sales for 2021 to match actuals in this report, previous quarterly reports reflected an estimate. | | | | | | | | | | | | |

Appendix F - Energy Savings with 2022 TRM Addendum

For compliance purposes throughout the first triennium, the utilities calculate program savings (collectively, Primary Metrics) based on a mix of protocols from the FY20 NJCEP Protocols, FY21 NJCEP Protocols Addendum, and TRMs from other states when no applicable NJ-specific measure calculation is available. This mix of protocols is cataloged in the Joint Utility Coordinated Measures List. The EM&V Working Group created the 2022 TRM Addendum to address key non-NJ specific and dated assumptions in the Coordinated Measures List. Program Energy Savings Metrics calculated with the 2022 TRM Addendum are called the “Secondary Metrics.” The Secondary Metric values are informational for stakeholders to assess program performance under a more current and NJ-specific measure calculation approach and to inform future program design.

Table F-1 - Sector-Level Energy Savings: Primary Metrics from 2020/21 TRM

| Annual Energy Savings ¹ | Annual Retail (Dth) | Annual Target Retail Savings (Dth) ² | Percent of Annual Target |
|--|---------------------|---|--------------------------|
| Residential | 325,775 | 11,920 | 3.7% |
| Multi-family | - | - | 0% |
| C&I | 412 | 291 | 0.1% |
| Reported Totals for Utility Administered Programs | 326,187 | 12,211 | 3.7% |

Table F-2 - Sector-Level Energy Savings: Secondary Metrics from 2022 TRM Addendum

| Annual Energy Savings ¹ | Annual Retail (Dth) | Annual Target Retail Savings (Dth) ² | Percent of Annual Target |
|--|---------------------|---|--------------------------|
| Residential | 323,145 | 9,290 | 2.9% |
| Multi-family | - | - | 0% |
| C&I | 292 | 171 | 0.1% |
| Reported Totals for Utility Administered Programs | 323,437 | 9,461 | 2.9% |

¹ - Annual energy savings represent the total expected annual savings from all energy efficiency measures within each sector, and not only those measures affected by the FY2022 TRM Addendum.

² - Values in column labeled 'Annual Target Retail Savings' represent total savings for the affected measures by the FY 2022 addendum.

Appendix G - Ex-Ante Energy Savings Held for Transfer

The following data are presented to provide Board Staff visibility into the full picture of statewide annual ex-ante energy projects in progress, with these energy savings being excluded from data presented in the body of the report. These data are based upon coordinated program projects completed by a lead utility and awaiting transfer to a partner utility. The data presented are estimates and are subject to change during transfer to and verification by partner utilities. Transferred savings and associated costs will be included in partner utility results once allocated by the Statewide Coordinator platform.

| Estimated Annual Energy Savings Held by NJNG | |
|--|--------------------------|
| Program | MWh Held for Transfer |
| Efficient Products | 1,622.1889 |
| Existing Homes | 496.5713 |
| C&I Direct Install | 62.1863 |
| Energy Solutions for Business ¹ | - |
| Multi-family ¹ | - |
| ¹ - Program(s) did not have shared measures held for transferring electric savings and/or associated costs during PY22. | |

Appendix H - Cost Effectiveness Test Details

As a result of the ramp up of the Commercial and Multi-family programs, NJNG incurred program costs but had very few closed projects during PY22 so limited energy savings were reported in this period. As a result, the Cost Benefit Analysis results will be affected results were negatively affected for PY22.

| | Residential | Business | MF | Other | Total Portfolio |
|--|----------------------|-------------------|-------------|-------------|----------------------|
| Total Resource Cost Test (TRC) | | | | | |
| 1 Lifetime Avoided Electric Supply Costs | \$ 546,439 | \$ 31,560 | \$ - | \$ - | \$ 577,999 |
| 2 Lifetime Avoided Electric Capacity Costs | \$ 133,639 | \$ 31,638 | \$ - | \$ - | \$ 165,277 |
| 3 Lifetime Avoided Natural Gas Supply Costs | \$ 4,247,601 | \$ 13,694 | \$ - | \$ - | \$ 4,261,295 |
| 4 Lifetime Merit Order (DRIPE) Benefits | \$ 244,580 | \$ 41,853 | \$ - | \$ - | \$ 286,433 |
| 5 Lifetime REC Avoided Purchases | \$ 300,173 | \$ 16,169 | \$ - | \$ - | \$ 316,342 |
| 6 Lifetime Wholesale Volatility Value | \$ 492,768 | \$ 7,689 | \$ - | \$ - | \$ 500,457 |
| 7 Lifetime Avoided Replacement | \$ - | \$ - | \$ - | \$ - | \$ - |
| 8 Lifetime Avoided T&D Costs | \$ 7,250,020 | \$ 149,348 | \$ - | \$ - | \$ 7,399,368 |
| Total Benefit = 1+2+3+4+5+6+7+8 | \$ 13,215,220 | \$ 291,951 | \$ - | \$ - | \$ 13,507,171 |
| 9 Lifetime Participant Costs | \$ 5,681,571 | \$ 4,653 | \$ - | \$ - | \$ 5,686,224 |
| 10 Lifetime Administration Costs | \$ 3,470,255 | \$ 1,411,717 | \$ - | \$ - | \$ 4,881,972 |
| 11 Lifetime Program Investment Costs | \$ 5,823,352 | \$ 70,662 | \$ - | \$ - | \$ 5,894,014 |
| Total Costs (9+10+11) | \$ 14,975,178 | \$ 1,487,031 | \$ - | \$ - | \$ 16,462,209 |
| Benefit Cost Ratio = (1+2+3+4+5+6+7+8)/(9+10+11) | 0.9 | 0.2 | N/A | N/A | 0.8 |
| Participant Cost Test (PCT) | | | | | |
| 12 Lifetime Participant Benefits | \$ 21,802,698 | \$ 299,967 | \$ - | \$ - | \$ 22,102,665 |
| 13 Lifetime Repayment Benefits | \$ 2,442,464 | \$ 19,784 | \$ - | \$ - | \$ 2,462,248 |
| Benefit Cost Ratio = (11+12+13)/9 | 2.1 | 4.2 | N/A | N/A | 2.1 |
| Program Administrator Cost Test (PAC) | | | | | |
| Benefit Cost Ratio = (1+2+3+4+5+6+7+8)/(10+11+13) | 1.1 | 0.2 | N/A | N/A | 1.0 |
| Ratepayer Impact Measure Test (RIM) | | | | | |
| 14 Lifetime utility Revenue Gained | \$ 13,215,219 | \$ 291,951 | \$ - | \$ - | \$ 13,507,170 |
| 15 Lifetime Utility Cost | \$ 18,893,222 | \$ 1,624,796 | \$ - | \$ - | \$ 20,518,018 |
| Benefit Cost ratio = (1+2+3+4+5+6+7+8+14)/(10+11+13+15) | 0.9 | 0.2 | N/A | N/A | 0.8 |
| Societal Cost Test (SC) | | | | | |
| 16 Lifetime Avoided Electric Supply Costs | \$ 677,329 | \$ 40,950 | \$ - | \$ - | \$ 718,279 |
| 17 Lifetime Avoided Electric Capacity Costs | \$ 187,838 | \$ 44,292 | \$ - | \$ - | \$ 232,130 |
| 18 Lifetime Avoided Natural Gas Supply Costs | \$ 5,395,135 | \$ 17,598 | \$ - | \$ - | \$ 5,412,733 |
| 19 Lifetime Merit Order (DRIPE) Energy Benefits | \$ 347,831 | \$ 58,289 | \$ - | \$ - | \$ 406,120 |
| 20 Natural Gas Demand Reduction Induced Price Effects (DRIPE) | \$ 22,530 | \$ 270 | \$ - | \$ - | \$ 22,800 |
| 21 Avoided RPS REC Purchase Costs | \$ 366,116 | \$ 20,677 | \$ - | \$ - | \$ 386,793 |
| 22 Avoided Wholesale Volatility Costs | \$ 626,030 | \$ 10,284 | \$ - | \$ - | \$ 636,314 |
| 23 Lifetime Avoided Wholesale T&D Costs | \$ 9,050,313 | \$ 184,183 | \$ - | \$ - | \$ 9,234,496 |
| 24 Lifetime Emission Savings | \$ 5,130,476 | \$ 58,812 | \$ - | \$ - | \$ 5,189,288 |
| 25 Avoided SO ₂ + NO _x Emissions Damages | \$ 1,998,890 | \$ 52,631 | \$ - | \$ - | \$ 2,051,521 |
| 26 Job and Energy Savings Economic Value-Added Multiplier Benefits | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Benefit = (16+17+18+19+20+21+22+23+24+25+26) | \$ 23,802,488 | \$ 487,986 | N/A | N/A | \$ 24,290,474 |
| 27 Lifetime Participant Costs | \$ 11,725,184 | \$ 67,422 | \$ - | \$ - | \$ 11,792,606 |
| 28 Lifetime Administration Costs | \$ 3,544,908 | \$ 1,441,778 | \$ - | \$ - | \$ 4,986,686 |
| Total Costs = (27+28) | \$ 15,270,092 | \$ 1,509,200 | N/A | N/A | \$ 16,779,292 |
| Benefit Cost Ratio = (16+17+18+19+20+21+22+23+24+25+26)/(27+28) | 1.6 | 0.3 | N/A | N/A | 1.4 |
| New Jersey Cost Test (NJCT) | | | | | |
| 29 Lifetime Merit Order (DRIPE) Capacity Benefits | \$ 327,148 | \$ 58,019 | \$ - | \$ - | \$ 385,167 |
| 30 Lifetime Avoided Ancillary Services Costs ¹ | \$ - | \$ - | \$ - | \$ - | \$ - |
| 31 Lifetime Avoided Replacement | \$ - | \$ - | \$ - | \$ - | \$ - |
| 32 Lifetime Non Energy Benefits | \$ 781,888 | \$ 17,252 | \$ - | \$ - | \$ 799,140 |
| Total Benefit = 16+17+18+19+23+24+29+30+31+32 | \$ 21,897,958 | \$ 479,395 | N/A | N/A | \$ 22,377,353 |
| Benefit Cost Ratio = (16+17+18+19+23+24+29+30+31+32)/(27+28) | 1.4 | 0.3 | N/A | N/A | 1.3 |
| ¹ Lifetime Avoided Ancillary Services Costs are included with Lifetime Avoided Electric Supply Costs. | | | | | |

Appendix I - Program Changes

This table is a summary of the program changes that were already reported in the Q1, Q2, and Q3 quarterly reports plus any changes that occurred in Q4.

| Program | Summary of Program Changes |
|---|----------------------------|
| Efficient Products | N/A |
| Existing Homes | N/A |
| Home Energy Education & Management | N/A |
| C&I Direct Install | ¹ |
| Energy Solutions for Business | N/A |
| Multi-family | N/A |
| ¹ - During PY22, the Utilities considered feedback from customers and trade allies regarding the structure of the incentive calculations for the Direct Install Program and reached agreement on modifications to the screening tool for Direct Install projects that was implemented on July 1, 2022. | |
| N/A - No other major program changes were implemented during PY22. | |