



New Jersey Board of Public Utilities

Energy Efficiency and Peak Demand Program Administration Straw Proposal

Draft for Public Comment

December 20, 2019

Table of Contents

EXECUTIVE SUMMARY	5
INTRODUCTION	6
OBJECTIVES	7
BACKGROUND	8
Stakeholder Process.....	8
Best Practice for Program Administration	10
PROGRAM ADMINISTRATION FRAMEWORKS	11
Core Programs vs. Additional Initiatives.....	13
PROGRAM RECOMMENDATIONS	14
Utility Administered Core Programs.....	14
Residential.....	14
Home Performance with Energy Star®	14
WARMAvantage and COOLAvantage	15
Commercial & Industrial Programs.....	15
Pay for Performance - Existing Buildings	16
Direct Install	16
Retrofit - SmartStart	16
Customer Tailored Energy Efficiency Pilot.....	17
Large Energy Users Program.....	17
State Administered Core Programs	17
Residential.....	18
Residential New Construction	18
Retail Products	18
Commercial & Industrial	19
Pay for Performance - New Construction.....	19
Combined Heat & Power - Fuel Cells Program	19
Local Government Energy Audit Program	20
Energy Savings Improvement Program	20
State Facilities	20

Additional Initiatives	21
Additional Utility-Led Initiatives	21
Behavioral Programs	21
Strategic Energy Management (SEM) Programs	21
On-Bill Financing Options.....	22
New Pilots	22
Other Pilot Programs	22
Peak Demand Reduction Programs	23
Electric Vehicle Related Programs and Initiatives	23
Other Direct Load Control Programs	23
Curtable Load Programs.....	24
Utility-Specific Peak Demand Reduction Programs	25
Additional State-Led Initiatives.....	25
Energy Codes & Standards Initiatives	25
Research and Development.....	25
Workforce Development	25
Public Education Initiatives - Energy Efficiency Curriculum	26
Other Statewide Energy Efficiency - Community Energy Grants.....	26
Co-Managed Programs	27
Low Income Program (Comfort Partners)	27
Energy Efficiency Products Marketplace	27
Appliance Recycling	28
Multifamily Program	28
PROCESS.....	28
Years 1 – 3.....	28
Years 4 – 5.....	29
Utility Coordination.....	29
Marketing.....	31
ENERGY SAVINGS	33
Savings	33
Anticipated Attributable Savings	33

METRICS	36
CONCLUSION.....	38

EXECUTIVE SUMMARY

New Jersey's Energy Efficiency and Peak Demand Program Administration Straw Proposal (Program Straw) outlines the various program administration structures for the delivery of energy efficiency (EE) and peak demand reduction programs and proposes recommendations for the implementation of programs under a new administrative framework.

Energy efficiency will play a critical role in meeting New Jersey's 100% clean energy by 2050 goal and is one of the most effective, easiest, and least expensive strategies in our effort to fight climate change. To this end, the Clean Energy Act (CEA), signed by Governor Murphy (P.L. 2018, c. 17) in May 2018, established ambitious energy efficiency and peak demand targets for the state while requiring that they be cost-effective.

This Program Straw is premised on the understanding that modifications to the current administration of programs will increase market penetration and energy savings for New Jersey residents. The Program Straw proposes to distribute the administration of the existing energy efficiency programs between the New Jersey Clean Energy Program (NJCEP) within the New Jersey Board of Public Utilities (BPU or Board) and New Jersey's electric public utilities and gas public utilities (collectively, the "utilities"). The Program Straw also makes recommendations for some programs to be co-managed or delivered collaboratively through the BPU and the utilities in order to realize increased benefits and equitable access. Additionally, the Program Straw suggests the process for implementing new pilot programs by the utilities. The Program Straw is intended to provide an opportunity for stakeholder feedback; instructions for providing that information can be found in the last section of this straw.

It is clear that today's energy efficiency programs, under any administrative model, will need to be enhanced in order to meet the CEA's energy efficiency and peak demand targets. This Program Straw suggests an approach to transition existing programs in a way which will enable them to evolve into more robust programs that achieve greater energy savings over time.

INTRODUCTION

New Jersey has reached a critical moment to maximize opportunities to reduce energy usage and increase peak demand savings. In May 2018, Governor Murphy signed into law the Clean Energy Act of 2018, which calls for a significant overhaul of New Jersey's energy system while growing the economy, building sustainable infrastructure, creating strong, local jobs, reducing carbon emissions, and improving public health through a cleaner environment and better air quality. The CEA plays a key role in achieving the state's goal of 100% clean energy by 2050 by establishing aggressive energy reduction requirements, among other clean energy strategies. The CEA emphasizes the importance of energy efficiency and calls upon New Jersey's public utilities to play an increased role in delivering energy efficiency and peak demand programs to customers.

Through the CEA, New Jersey's path to achieving energy savings has been established through an Energy Efficiency Resource Standard (EERS). The CEA requires that each electric public utility achieve annual energy use reductions of two percent (2%) or greater and that each gas public utility achieve annual energy use reductions of three-quarters of a percent (0.75%) or greater in the prior three years within five years of their respective program implementation in their service territories. The CEA also requires that each electric and gas public utility establish energy efficiency and peak demand reduction programs in order to reduce energy use in its service territory. The CEA further directs the BPU to establish quantitative performance indicators (QPIs) to evaluate each utility's achievement of the energy use reduction targets, as well as to apply performance incentives and penalties, which are tied to the achievement of each utility's specific targets.

To ensure that interested parties are fully engaged and can participate in the design of New Jersey's energy efficiency transition, the BPU's staff (Staff) has undertaken an ongoing stakeholder process to solicit input about all aspects of the state's next generation of energy efficiency and peak demand reduction programs. This stakeholder process includes topics such as program structure; administration and oversight; cost recovery; performance incentives and penalties; application of utility targets and utility specific QPIs; cost benefit analysis and evaluation, measurement, and verification; and filing and reporting requirements. This Program Straw is one of two straw proposals expected before the Board takes action in May 2020 calling for utilities to file program petitions. The second and final straw proposal will provide refinements to this Program Straw and address all remaining outstanding issues pertaining to the energy efficiency transition.

OBJECTIVES

As discussed above, energy efficiency will play a key part in meeting the state's goal of 100% clean energy by 2050. The 2019 draft Energy Master Plan (EMP), the roadmap to achieving this goal, calls for:

- An increase in New Jersey's overall energy efficiency;
- Greater management and reduction of peak demand loads;
- Strengthening building and energy codes and appliance standards;
- Transitioning new construction to net zero carbon building design; and
- Transitioning existing buildings to electric appliances, prioritizing the electrification of existing oil- and propane-fueled buildings.

In addition to setting New Jersey on a path to 100% clean energy by 2050 as laid out in the 2019 draft EMP, New Jersey must meet targets set forth in the CEA in a way that is consistent with the principles expressed in both documents and several Executive Orders. To this end, the energy efficiency transition and this Program Straw have been designed with the following primary proposed objectives:

- Achieve and enforce energy savings targets for public electric and gas utilities which reduce consumption by at least two percent (2%) and three-quarters of a percent (0.75%), respectively, within five years of implementation and all cost-effective energy savings over the long term;
- Provide equitable access to energy efficiency and peak demand opportunities to all of New Jersey's ratepayers, with a special focus on equity for low income residents;
- Implement energy efficiency programs that are simple and consistent statewide; and
- Establish energy efficiency programs that are cost-effective, and ensure that implementation of the energy efficiency transition is protective of the ratepayer.

BACKGROUND

Stakeholder Process

In December 2018, in order to fulfill the Clean Energy Act's requirements, the Board authorized the Division of Clean Energy (DCE) to enter into a contract with Optimal Energy, Inc. (Optimal) to complete a market potential study that would determine the energy savings potential in New Jersey and develop recommendations consistent with implementation of the law. In developing the study, Optimal solicited data inputs from the state's electric and gas public utilities. The State also hosted four stakeholder meetings to develop the draft "Energy Efficiency Potential in New Jersey" study, which was issued on May 9, 2019. The Board accepted public comments on the draft potential study through May 16, 2019. All public comments¹ and the final "Energy Efficiency Potential in New Jersey"² study are available on the New Jersey Clean Energy Program website.

The Board solicited input related to the implementation of the energy efficiency and peak demand program requirements outlined in the Clean Energy Act at a public meeting on February 1, 2019 and accepted written comments through February 15, 2019. The public notice invited stakeholders to respond to a series of questions related to New Jersey's energy efficiency and peak demand reduction programs.

On May 28, 2019, following both broad public input and feedback specific to the "Energy Efficiency Potential in New Jersey" study, the Board preliminarily adopted the energy savings targets for both electric and gas public utilities and the quantitative performance indicators (QPIs) provided in the study, pending a final Staff recommendation. The Board also established the Energy Efficiency Advisory Group (Advisory Group) as an advisor to Staff. The Board further directed Staff to initiate a stakeholder proceeding to receive comments and recommendations from interested parties related to the establishment of energy efficiency and peak demand reduction programs to meet the targets outlined in the CEA.

During the summer of 2019, BPU President Fiordaliso appointed members of the Advisory Group in order to provide additional guidance to Staff, with particular emphasis on ensuring that Staff heard concerns and received recommendations from representatives of the utilities, the New

¹ Energy Efficiency Public Comments: <https://www.njcleanenergy.com/main/njcep-policy-updates-request-comments/policy-updates-and-request-comments>

² Energy Efficiency Market Potential Study, May 24, 2019: <https://s3.amazonaws.com/CandI/NJ+EE+Potential+Report+-+FINAL+with+App+A-H+-+5.24.19.pdf>

Jersey Division of Rate Counsel (Rate Counsel), environmental advocates, and consumer organizations, including those representing both residential and commercial/industrial customers.

Following input from the Advisory Group, Staff initiated the next phase of stakeholder engagement, henceforth referred to as the energy efficiency transition, in order to engage the public broadly on critical topics related to the next generation of energy efficiency and peak demand reduction, pursuant to the CEA.

The first two stakeholder meetings in the energy efficiency transition focused on the subject of program administration and design. The public meeting on September 25, 2019 engaged stakeholders on the following key questions and included discussion among panelists representing various stakeholder perspectives:

- Which types of programs and market supporting activities are best delivered by which entities?
- Which programs and activities require statewide consistency, and for what (brand, pricing, etc.)?
- What elements of existing program delivery in New Jersey are important to maintain in this transition?
- Where do you see duplicative administration costs in programs now? Where are you concerned they might emerge in the transition?
- What program administration structures best support delivering equitable access and outcomes for all ratepayers?
- How should programs be delivered in order to maximize the energy efficiency opportunities and encourage deeper energy savings, while minimizing costs to consumers and ratepayers?

In addition to offering comments and asking questions in person, stakeholders were able to submit written comments on these topics through October 4, 2019.

The public meeting on October 30, 2019 continued the conversation regarding program administration, but focused on the programs themselves. Industry experts provided presentations on best practices and market barriers, and program service providers, including contractors delivering both state and utility administered programs, provided diverse perspectives on energy efficiency and peak demand program strengths and opportunities to improve programs and program access. Key questions for discussion at this meeting included the following:

- Which New Jersey programs are considered the most successful? How do you define “success”?
- What programs will achieve the most energy and/or cost savings?
- How do we balance consistency and flexibility in program requirements and incentives if multiple entities are running the same program? How important is consistency versus flexibility?
- What market barriers are prevalent in specific New Jersey programs?
- How do we ensure equitable access?

The Board also accepted written comments on these questions through November 6, 2019.

Through the energy efficiency transition stakeholder process, in addition to extensive research by Staff into best practices for program administration and most successful energy efficiency programs nationwide, Staff has solicited public input on a range of topics related to the future of energy efficiency and peak demand reduction in New Jersey. In particular, Staff has invited experts, as well as New Jersey program participants and service providers, to discuss how best to administer programs and what programs are critical to meeting New Jersey’s energy savings goals while satisfying the state’s policy objectives. These discussions have allowed Staff to better understand stakeholder priorities and perspectives in the context of energy efficiency and peak demand reduction best practices.

Stakeholder input over the three public meetings and gathered from the written comments has provided valuable input and helped to shape this Straw Proposal. Based on Staff’s review of recommendations from stakeholders and the Advisory Group, Staff herein proposes a framework for energy efficiency and peak demand program administration. While further discussion of the future of New Jersey’s energy efficiency and peak demand reduction programs – including on topics related to cost recovery, filing, reporting, evaluation, measurement, verification, and application of the CEA-mandated targets – will take place throughout the remainder of the energy efficiency transition, Staff has developed this proposed approach to program administration to aid in the progression of the transition.

Best Practices for Program Administration

Staff, receiving input from stakeholders on determining factors of administration, also assumed the following principles in its program administration recommendations for each energy efficiency program:

- Programs that have important structural elements that cross jurisdictions are best handled at the state level, either by the State, through joint and close coordination of the utilities, or co-managed between the State and the utilities.
- Programs that rely heavily on the use of contractors are generally best handled at the utility level where the utility can build stronger relationships and take on co-branded advertising and marketing efforts.
- Programs that rely on customer data or advance metering infrastructure (AMI) are best handled by utilities because of data access issues.
- Programs for which there are important equity considerations are best handled at the State level or co-managed so that differences in demographics among utilities do not impact equitable access to service.

PROGRAM ADMINISTRATION FRAMEWORKS

The choice of an administrative structure for energy efficiency and peak demand program delivery can play a critical role in achieving energy savings and maximizing myriad benefits. As Staff has engaged with stakeholders and experts regarding the most effective methods for administering energy efficiency programs, several key issues and priorities have emerged. Chief among these priorities to stakeholders is meeting the state's energy efficiency goals in a way that benefits all residents, current and future, in the most cost-effective manner. Equitable access to energy efficiency options for customers throughout the state, regardless of address, socio-economic status, or utility provider, is key to meeting this priority. Critical administration efficiencies must be achieved, and close and active collaboration between the State and utilities will be required in order for the state to reach its energy efficiency goals while minimizing costs for ratepayers. Programs must be designed to meet policy priorities in the most effective manner. These priorities, combined with the need for simplicity, consistency, and coordination, ultimately guided Staff's recommendations regarding the administration of programs. Simply stated, certain energy efficiency and peak demand programs are most successfully run by certain entities.

The various objectives of different energy efficiency and peak demand programs create opportunities for different program administrators (PAs) to leverage their strengths in order to maximize residents' access to each program's benefits. While the current suite of energy efficiency

programs offered through New Jersey's Clean Energy Program and the state's utilities is strong, there are additional opportunities to leverage the strengths of respective PAs in order to augment energy efficiency and peak demand offerings in New Jersey and to chart a course towards CEA-mandated program improvement.

Staff proposes that the following program administration framework be utilized in order to best serve the residents of New Jersey while considering the impact of energy efficiency programs on ratepayers, ensuring equitable access, and reducing energy usage:

- **Utility Administration:** Staff believes that the utilities are best suited to deliver certain energy efficiency and peak demand reduction programs. In particular, utilities are best suited to deliver programs that are based on existing customer relationships and that rely on utility data and systems. As discussed further below, certain utility administered programs are best delivered on a consistent statewide basis, whereas others may be still effective when modified for each specific utility territory.
- **State Administration:** As demonstrated by panelists at stakeholder meetings and through research into program best practices, the Division of Clean Energy, the state Administrator of energy efficiency programs (State), is well poised to provide programs delivered in coordination with other statewide or state policy-led efforts. The State is also ideally suited to deliver those programs serving certain customer categories, such as governmental entities, or including certain market transformation activities, such as new construction standards, which are best coordinated by a single entity with jurisdiction across New Jersey.
- **Co-managed Administration:** As demonstrated by the successful administration of the state's Comfort Partners program, Staff recommends that some programs be administered with close oversight and day-to-day collaboration between both the State and utilities, in order to leverage the strengths of both program administrators and ensure that all customers are served most effectively.
- **Statewide Consistency:** Staff agrees with many of the stakeholder comments that in most cases program delivery is most effective on a statewide basis in order to eliminate market barriers to participation, particularly informational barriers caused by customer or service provider confusion, and increased administrative burdens. Therefore, Staff seeks to emphasize that, regardless of administrator, core programs are recommended to be administered on a statewide, consistent basis in order to increase customer access and participation. A key consideration for statewide consistency will be effective branding of the portfolio instead of many individually branded programs. Effective branding has been key to success in other states.

Input from stakeholders, as well as recommendations based on nationwide energy efficiency program best practices, lead Staff to conclude that PAs are best suited to participate, according to their strengths, within certain energy efficiency or peak demand reduction program structures. Staff, therefore, recommends the following approach to program administration in order to leverage the respective strengths of various program administration frameworks.

Core Programs vs. Additional Initiatives

One of the Board staffs main priorities is ensuring equitable access to energy efficiency and peak demand reduction programs and opportunities for all New Jersey residents, businesses, and institutions. Maintaining statewide consistency of energy efficiency and peak demand reduction programs will help guarantee that ratepayers of all classes have the ability to participate in programs that address their needs regardless of where they are located in the state.

At the same time, Staff clearly heard from stakeholders that flexibility is required to ensure that New Jersey meets the CEA's ambitious energy savings targets. To that end, the utilities will have to significantly expand the scope of their respective energy efficiency and demand response portfolios. As each service territory varies by geography, demographics, savings potential, and a myriad of other factors, utility filings will not be identical. Additionally, while some utilities have more experience running energy efficiency programs in New Jersey than others and may be ready to implement a wide variety of programs, other utilities may require longer ramp-up periods to implement their offerings. Striking a balance between flexibility and consistency will be crucial to achieving the CEA's targets, reaching all customer segments, and limiting market confusion. The Demographic Analysis will aid in identifying territorial variances.

As such, the programs proposed in this document have been divided into Core Programs and Additional Initiatives. "Core Programs" refer to base programs which Staff believes will be critical to meeting the energy efficiency targets and which, in large part, currently comprise a majority of NJCEP offerings. Staff anticipates that, whether administered by the State or utilities, these will continue to be available to public utility customers throughout the state. "Additional Initiatives" refer to auxiliary programs and program features which will enhance the Core Programs' success and/or focus on policy goals not solely related to energy efficiency. These initiatives may also include utility-specific pilot programs which may not be appropriate or ripe for statewide implementation but could be viable in a specific service territory. The State and the utilities will garner important peak demand reduction from the energy efficiency programs. There will also be programs specifically focused on peak demand reduction and demand response; these are listed in a separate section. Each New Jersey investor-owned utility will be required to administer, at a

minimum, the existing core programs and may provide enhancements to the core programs where modifications can achieve greater savings.

PROGRAM RECOMMENDATIONS

The following sections describe the proposed distribution of energy efficiency programs in New Jersey according to which entity should be the primary program administrator, whether State-administered, utility-administered, or co-managed. In many cases, there are clear advantages to either a State- or utility-administered program, and the DCE has sought to allocate programs according to where they will be most effectively and successfully implemented in order to reach the state's energy efficiency and clean energy goals. Other co-managed programs seek to combine the strengths and resources of both the State and utilities in order to deliver the best programmatic offerings for customers. Therefore, the following programs are organized by their intended reach, either statewide or by service territory, and also by which entity could maximize the benefits of each program. There are also several programs which could benefit from co-management between the utilities and the State.

Utility Administered Core Programs

Utility administration works best for programs that can leverage utilities' knowledge of energy consumption, customer demographics, workforce infrastructure, and existing customer relationships within their service territories. Utility access and increased customer access to energy use data enables the design of more personalized services and programs, targeted outreach, and individualized solutions for customers. Utilities can offer flexible financing options, such as on-bill repayment. Customers may also have more "brand awareness" and direct communication with their utility, which can facilitate adoption of energy efficiency measures.

Residential

Home Performance with Energy Star®

Programs for existing residential buildings will be comprised of a comprehensive program administered by the utilities through which customers will receive energy efficiency rebates and incentives. Opportunities will be available to customers undertaking a full home energy audit and implementing identified measures. Utilities are well-suited to implement this program because of their access to customer data that can inform optimal energy efficiency measures, their existing

relationships with customers, their ability to use targeted marketing to identify potential program participants, and their ability to offer on-bill financing to program participants.

Home Performance with ENERGY STAR (HPwES) is a national home performance improvement program developed by the Environmental Protection Agency (EPA) and administered by the Department of Energy (DOE). The objective of the program is to offer a comprehensive or whole-house energy efficiency improvement package based on sound building science principles that produces predictable savings and that improves a home's energy efficiency, comfort, safety, and durability. The New Jersey HPwES program is built on two parallel delivery strategies: provide information, education, and incentives directly to customers to encourage them to undertake significant energy efficiency improvements to their homes; and encourage contractors to receive the proper training and Building Performance Institute (BPI) GoldStar Program qualifications to provide high quality home energy efficiency services. BPI certifications are based on national standards that ensure that home assessors have the skills required to identify and realize savings opportunities and that best practices are met. Stakeholders have clearly pointed to the need for consistent and robust training for contractors and home assessors, and this will be a critical function to maintain and improve these programs.

WARMAvantage and COOLAdvantage

The WARMAvantage and COOLAdvantage (HVAC) programs are designed to increase sales and the installation of high efficiency heating, water heating, and air conditioning or heat pump appliances in residential applications. Specifically, the programs cover HVAC purchases made by existing gas and electric customers of the seven investor-owned utilities in New Jersey (which together serve more than 98% of households in the state). As with the HPwES program, utilities are well-positioned to offer these programs due to their access to data, customer relationships, contractor relationships, ability to offer on-bill financing, etc. The programs are designed to reduce energy usage within the existing housing stock. Customers who are installing new or retrofitting furnace or boiler heating systems, water heating, air conditioning, or heat pump systems for their homes may be eligible for incentives if the units purchased and installed meet minimum efficiency and quality installation standards.

Commercial & Industrial Programs

Utilities are well suited to administer the following commercial and industrial programs, due to their direct relationships with commercial and industrial customers, their understanding of customer energy use data and energy savings opportunities, and their knowledge of this sector's energy needs and challenges. There is a significant energy saving potential among commercial and industrial customers, which presents an important opportunity for utilities to make progress

towards their energy savings targets. Designing and delivering programs to this sector will also provide utilities with opportunities to leverage their knowledge to increase energy savings beyond the savings targets.

Pay for Performance - Existing Buildings

The existing buildings program is currently designed for commercial and industrial buildings with peak electric demand in excess of 200 kW in any of the preceding twelve months. Given the advantages of understanding customer energy use patterns and leveraging data when administering existing building programs, utilities can utilize their strengths to more efficiently administer this program. Their access to customer data will streamline the enrollment process and may assist in identifying additional opportunities for savings. The program currently consists of a network of contractor partners who participate in the program after they have met eligible criteria. The partners provide technical services to program participants acting as their “energy expert.” Energy Reduction Plans (ERPs) are drafted for each project, including a whole building technical analysis, a financial plan for funding the energy efficiency improvements, and a construction schedule for installation. The ERP must show that the package of efficiency measures will achieve a target reduction of at least 15% of total building source energy consumption. After installation, these targets are verified by analyzing post-retrofit billing data tracked through the federal Environmental Protection Agency (EPA) ENERGY STAR® Portfolio Manager platform.

Direct Install

Through the current Direct Install program, small businesses whose peak electrical demand does not exceed 200 kW in any of the preceding twelve months can receive a free energy assessment of their building. The program designates a contractor to help install cost-effective energy efficiency equipment, such as lighting, HVAC, variable frequency drives, refrigeration, and motors. Utilities are well suited to run this program because their data and customer relationships will allow them to identify which customers are eligible for program participation and also which have particularly high energy use and peak loads based on their size and therefore the greatest needs and potential for energy savings.

Retrofit - SmartStart

The SmartStart Buildings program focuses on renovating and installing single measure (or multiple single measure) new equipment in existing buildings to increase energy efficiency. This program will similarly be streamlined and enhanced through utility administration because utility access to billing and energy use data will provide utility program administrators with an accurate and timely determination of customer needs and energy efficiency opportunities. These direct connections

and history of customer relationships, as well as their seasonal energy use trends and business needs, will allow utilities to complete projects in a more efficient manner.

Customer Tailored Energy Efficiency Pilot

This program offers a streamlined approach to developing and implementing energy efficiency projects and, in particular, offers customers opportunities to integrate custom energy efficiency measures, i.e., those without prescribed rebates, into their project. The program is designed for mid-sized to large customers and allows multiple prescriptive and custom measures to be bundled into one project. Custom programs are well administered in conjunction with prescriptive and whole building programs and should be included in the suite of incentive and rebate programs for customers with unique needs. Staff have heard from stakeholders that, because flexibility is critical to ensuring customers' special efficiency needs are met, utilities can effectively administer this program.

Large Energy Users Program

The Large Energy Users Program (LEUP)'s goal is to provide large commercial and industrial utility customers that have facilities in New Jersey with the opportunity to self-invest in energy efficiency. The program incentivizes building owners or users to upgrade or install energy conserving measures in existing buildings and offsets these capital costs, provided that projects meet the program's eligibility and program requirements. Efficiency upgrades are customized to meet the requirements of the customers' existing facilities, while advancing the state's energy efficiency and peak demand reduction goals. Utilities will be able to leverage customer data and relationships through dedicated customer account managers in order to take a comprehensive approach to managing and reducing large energy users' consumption and to help these customers make more informed decisions about their opportunities for savings. As expressed during the public stakeholder meetings, large energy users are one of the customer bases with the most significant potential for energy savings in New Jersey, and it is integral that utilities leverage their strengths as PAs in order to maximize energy savings in this sector.

State Administered Core Programs

The majority of current energy efficiency program offerings are provided by statewide programs funded by the Societal Benefits Charge (SBC) and administered by the NJCEP. State administration allows for programs to be implemented across utility service territories covering the entire state, which has a host of benefits and ensures more equitable access to program offerings. A well-designed State-run program can reduce costs to ratepayers by minimizing fixed costs, avoiding duplicative administrative costs, and creating economies of scale. State administered programs

can also minimize transaction costs for trade partners operating in multiple utility service territories. Similarly, consistent incentives and program requirements, as well as a single point of contact, will increase predictability in program implementation and reduce market confusion among both the contractors delivering the programs and the customers participating in them; this will result in greater program participation overall and a more positive customer experience. The State is also best poised to deliver programs that benefit from coordination with other state agencies, as NJCEP is best positioned to work with other New Jersey-wide agencies to encourage energy efficiency across the entire state.

For example, the State is best positioned to continue offering new construction programs in order to facilitate collaboration with and establish consistency in its program offerings to the new construction industry, which often works across utility service territories, and to continue to foster trade ally partnerships with such entities. Limiting the delivery of new construction programs by utility service territories can lead to confusion caused by multiple points of contact and inconsistent program opportunities. Importantly, the State is best able to align new construction programs with updated building codes and coordinate with other state agency-offered programs.

Residential

Residential New Construction

The Residential New Construction (RNC) program is designed to increase the energy efficiency and environmental performance of residential new construction buildings in New Jersey. The program's strategy is to establish standards for energy efficient new construction using national initiatives, including the EPA ENERGY STAR® Certified Homes program and the DOE Zero Energy Ready Home (ZERH) program. The RNC program offers technical support and incentives to builders of new single or multifamily residential structures or homes undergoing complete rehabilitation that comply with these standards. To participate in the RNC program, builders agree to work with independent third-party inspectors who inspect, measure, and test the home's performance during and after construction. Incentives are designed to partially offset the construction costs associated with building higher efficiency homes. The State will best be able to work with codes officials and other state agencies to support this program through advancements in codes and standards and is best positioned to work with trade allies across the state, such as large developers, who are rarely bounded by utility territories.

Retail Products

The Retail Products program provides financial incentives and support to retailers who sell energy efficient products in-store, such as lighting and power strips. The State should continue to

administer this program, as it is better positioned to negotiate for statewide deployment of products available to all customers. Customers may shop across utility territories, and it is important that offerings be consistent statewide. The State currently has numerous partnerships established and will continue to leverage these existing relationships to ensure increased savings. As federal lighting standards continue to improve, the potential savings from this program will decrease. Therefore, it will be more efficient for the State to leverage its existing partnerships to achieve as many savings as possible in the short-term.

Commercial & Industrial

Pay for Performance - New Construction

Similar to the Residential New Construction program, the State can enhance opportunities for energy savings by administering the new construction program for commercial and industrial customers. Since developers work across service territories and often across state lines, the State (NJCEP in cooperation with the New Jersey Department of Community Affairs) will be in a better position to coordinate program incentive opportunities with progressive improvements to building energy codes and other complementary opportunities. The Pay for Performance Program - New Construction program (P4P-NC) is designed to incentivize building owners, developers, or other applicants to take a comprehensive, long-term approach to incorporating energy efficiency in their buildings. Rather than providing incentives to replace existing equipment with higher efficiency equipment, the P4P-NC program seeks to transform the way in which contractors and design professionals consider energy use pre-construction. This is achieved by requiring the use of standardized energy simulation software to estimate full lifecycle costs rather than only initial costs and then encouraging building owners and their designated contractors to continue to measure and verify the facility's energy consumption and savings year after year. A portion of the incentive is based on this measurement and verification component. The P4P-NC program is designed for new commercial and industrial buildings with 50,000 square feet or more of planned space, as well as buildings undergoing substantial renovation.

Combined Heat & Power - Fuel Cells Program

NJCEP supports the statewide growth of Commercial and Industrial Combined Heat & Power and Fuel Cell (CHP-FC) technologies to enhance energy efficiency through on-site power generation and productive use of waste heat. The CHP-FC program should be administered by the State, as it is best positioned to establish access to and provide comprehensive planning and coordination for customers. These projects can be significant in terms of multi-year development timelines, cost, and payback period and should be administered by the State. In order to limit administrative costs, the same program should be offered by the State to other large customers.

Local Government Energy Audit Program

The Local Government Energy Audit (LGEA) program allows local government agencies, state contracting agencies, public agencies, state colleges and state universities, and 501(c)(3) non-profit agencies with the opportunity to have their facilities reviewed to identify how they currently use energy and what steps they could take to reduce that usage. The cost of this audit is covered, up to the current incentive cap of \$100,000 (\$300,000 for hospitals), through NJCEP. The audit requires no out-of-pocket expenses to the entity being audited, which is a critical component that encourages agencies to undergo these audits and ultimately often benefits the state's residents as a whole. The audit evaluates equipment on-site, reviews the utility bills, benchmarks the facility against other similar facilities, and considers the opportunities for both energy efficiency and alternative energy generation. The product of the audit is a road map showing suggested changes, estimated costs, energy savings, and estimated timing for the return on investment. The State is in the best position to effectively market this program due to its relationships with various public entities, universities, and non-profits. Moreover, local governments are typically risk adverse. Having a program that is run directly by the State and which carries with it the imprimatur of the State's backing, is an important selling point for the audit. Finally, the State's direct oversight and operation of the program enables it to target specific local governments while keeping in mind larger policy priorities, such as environmental justice or other valid governmental purposes, a balance which would be more difficult to reach under territory-focused programs.

Energy Savings Improvement Program

The Energy Savings Improvement Program (ESIP) was created to assist local governmental agencies in funding energy efficiency and energy reduction projects. Under the ESIP law, all governmental agencies – including state agencies, authorities, public institutions of higher education, county colleges, local boards of education, and county and municipal governments – can make energy-related improvements to their facilities and pay for the costs using the value of energy savings that result from the improvements of an ESIP project. The improvements are done via Energy Conservation Measures (ECMs) such as lighting, occupancy sensors, chillers, boilers, HVAC equipment, demand management controls, renewable energy, and Combined Heat & Power systems with a defined payback period. The ESIP Coordinator works with the DCE and applicants to maximize funding opportunities. Considering the nature of the work, the direct access to local governmental agencies, the natural growth of this program out of the local governmental audits, and the requirements of the law, the Board and the State Energy Office (SEO) should continue to manage this program.

State Facilities

The BPU's SEO works hand-in-hand with existing state agencies to improve energy systems in state government facilities. The SEO works in partnership with the New Jersey Division of Property Management and Construction (DPMC) and other Treasury agencies within the Energy Capital Committee (ECC) to identify facility projects within the state at governmental and/or quasi-governmental agencies and to implement energy reduction, energy savings, and energy efficiency projects.

Guided by administrative priorities, a state agency is best suited to "lead from within" to encourage energy efficiency actions for other state government agencies. For example, Executive Orders have directed state agencies to notify and subsequently work with the SEO on all energy related projects and programs. The SEO, in conjunction with the other state agencies, is in a unique position to provide technical support and, in some cases, funding for energy upgrades and efficiency projects at state facilities. The SEO's intimate knowledge of opportunities within state buildings and campuses, as well as knowledge of capital improvement planning and funding cycles, has aided in identifying the state sectors, facilities, and systems that would benefit most from projects. Thus, the SEO and state partners should retain oversight and execution of this program.

Additional Initiatives

In addition to the core programs, new initiatives will be developed and implemented in subsequent years of New Jersey's next generation energy efficiency and peak demand reduction programs.

Additional Utility-Led Initiatives

Behavioral Programs

There are many opportunities for utilities to leverage their access to customer usage data to develop programs that educate their customers regarding their energy use and offer resources to reduce usage. Stakeholders have been clear that these programs are effectively run by utilities. For example, these could include programs that break down a customer's use in a granular, easy to comprehend manner, comparing their use to those of similar buildings in the area and encouraging habits that reduce consumption. Once engaged with the customer about their usage, utilities will be better positioned to point customers inspired by this information to the specific program(s) that can best address their specific needs.

Strategic Energy Management (SEM) Programs

Utilities have the opportunity to provide holistic strategic energy management programs to commercial and industrial customers by using energy data to recommend energy management practices that are tailored to each customer. Understanding specific building and operational characteristics coupled with actual energy data gives utilities the ability to optimize the selection of appropriate energy efficiency measures and operational best practices, and to evaluate the efficacy of these measures toward continuous energy performance improvement.

On-Bill Financing Options

Utilities are able to offer flexible financing options, such as on-bill repayment and other types of bill credits. These financing options provide a more streamlined process for financing energy efficiency upgrades and allow for quicker incentive payments to consumers, which can increase energy efficiency adoption. On-bill financing can be particularly influential for residential and smaller commercial customers who may not have sufficient capital to expend on efficiency measures and who may be unable to wait long periods of time to receive a rebate or incentive. Having a streamlined financing process that is able to deliver quick payments to such consumers could increase participation in energy efficiency and peak demand programs and eliminate some of the financial barriers to energy efficiency.

New Pilots

Non-Wires Alternatives and Non-Pipes Solutions

To help achieve the goals in the draft 2019 Energy Master Plan to decarbonize the energy sector, utilities must plan, propose, and adopt non-wires and non-pipe solutions, particularly when addressing expansions or upgrades of the distribution and transmission system or generation resources. Upon direction from the Board, each utility should propose a new program or a plan of action for new non-wires and non-pipe solutions in its service territory. Non-wires and non-pipe solutions aim to defer utility infrastructure investment in load constrained areas through the implementation of distributed energy resources (DER) and other targeted demand side management strategies. These pilots will benefit from utility administration because utilities have better access to the necessary data for program design and are best able to determine where these programs will be most effective in their service territories.

Other Pilot Programs

As mentioned, each utility service territory has unique challenges and opportunities for energy efficiency and peak demand reduction programs. For this reason, utilities will be able to submit innovative territory-specific pilot programs that may be useful in one territory but not in another.

If the pilot is successful, utilities should collaborate on ways to modify the program to work in other territories in order to advance innovative program design and capture all possible energy savings.

Peak Demand Reduction Programs

New Jersey aims to manage and reduce peak demand for both electricity and natural gas by piloting programs and developing alternative rate designs in order to encourage customer-controlled demand flexibility, manage electric vehicle (EV) charging, and otherwise support demand response programs. In addition, based on the draft 2019 Energy Master Plan goals and objectives, the State will encourage electrification in buildings and transportation, including developing new construction and retrofits to be “EV Ready” and “Demand Response Ready,” with subsequent managed demand or demand shifting. New Jersey is also exploring the development of a Clean Peak Standard and is in the midst of a proceeding to evaluate opportunities to install advanced metering infrastructure (AMI) and make related infrastructure upgrades across the state in order to support enhanced energy efficiency programs. Energy efficiency and demand response programs should be leveraged together wherever possible to maximize savings, quickly respond to changing market and grid conditions, and inform future program design.

Utilities have access to information about where potential shortages may be developing, access to customer energy use data, and the existing relationships to pilot additional demand reduction programs.

Electric Vehicle Related Programs and Initiatives

- As the number of EVs on New Jersey’s roads continues to increase, utilities must prepare for how this large influx of electrical demand will impact the grid and the utilities’ ability to deliver service. Potential programs should address time-of-use (TOU) rates and EV charging demand response. TOU rates for EV owners would encourage them to charge their vehicles at off-peak hours through a less expensive TOU rate and greatly reduce the peak demand. Voluntary EV charging demand response programs could allow EV owners to give utilities access to their EV chargers during peak events to slow or delay their charging, which could have significant peak demand reduction potential. Customers could be compensated through various means and have the ability to opt out if they found the program intrusive or inconvenient.

Other Direct Load Control Programs

In addition to the voluntary EV charging program, several other technologies can reduce peak demand by offering control over customers' demand. Installing smart switches on air conditioners, smart thermostats, and other similar equipment can allow shifting or limiting loads during periods of peak demand. Programs should be developed that allow customers to provide access to particular high-demand equipment in order to reduce customer energy use, reduce costs, and eliminate supply constraints. These programs could compensate customers via bill credit, free provision of the technology, or other methods. Direct Load Control (DLC) programs are relatively easy to implement and can result in significant peak demand reductions. Pairing a DLC program with AMI will enable utilities to react quickly and accurately during peak demand events as well.

Curtable Load Programs

Curtable load programs which target medium (100-500 kW peak demand) to large customers can result in improvements to the reliability and functioning of the grid, if appropriately designed and implemented. In these programs, participants agree to reduce or turn off specific loads for a period of time when notified. Customers can switch off loads or adjust settings manually or automatically, depending on the agreement and availability of control technologies. Customers must be notified before a curtable load event occurs. As with direct-load-control programs, the utility must specify the maximum number of events and durations per year; these program characteristics will substantially impact available revenue opportunities. The range of incentive structures varies widely among curtable-load-response programs and can include a monthly capacity credit (\$/kW), monthly capacity credit plus a rate (\$/kWh) reduction, optional payment with variable strike price, or "per event" credit based on market pricing. Utilities may also choose to tier the monthly capacity credit based on the amount of advanced notification a customer signs up to receive, consistent with the revenue opportunities available under each scenario. Depending on the size of loads committed and the revenue opportunities pursued, severe penalties may be imposed for non-performance. Again, AMI can greatly bolster the effectiveness of these programs.

Utilities should propose peak demand reduction programs specific to their service territory. In addition to outlining expected program cost, utilities should explain the potential revenue opportunities available under the proposed curtable load program. Each utility should then determine the amount of additional incentive required, if any, to initiate the program and the desired structure of the incentive. These requests should be adequately supported, linked to program characteristics, and based on current market rules. Since service territories vary greatly in size, demographics, and other key factors, projected revenue opportunities (i.e., forecasted market prices) and other program aspects may vary statewide.

Utility-Specific Peak Demand Reduction Programs

Since utility territories vary greatly in size, geography, demographics, and other key factors, it is critical that utilities have the ability to develop and file for peak demand reduction programs specific to their service territories. While most of the programs detailed in this section have the potential to be implemented across the state, there are others that may be suitable or more easily adopted/implemented in one territory but not in another. To ensure that programs include all customer segments, capture and adopt new technology and/or service models as available, maximize peak demand reduction, and manage transmission upgrades, utilities should file pilot or full peak demand reduction programs.

Additional State-Led Initiatives

Energy Codes and Standards Initiatives

Setting energy codes and standards for the existing building and new construction market requires consistent attention and efforts from the State. In September 2019, the New Jersey Division of Community Affairs (DCA) adopted the 2018 International Code Council (ICC) building codes, which are the most current, into the state's Uniform Construction Code (UCC). As recommended in the Draft EMP, the State will continue to lead efforts to revise and implement codes to changing standards, code training, code compliance, and code enforcement. Additionally, the State will also be active in supporting increased appliance standards to ensure capture of additional savings which will help to meet the state's energy efficiency goals.

Research and Development

The State is best suited to administer research and development (R&D) programs in order to leverage opportunities across the entire state and take advantage of existing partnerships with universities and other educational institutions. There may be opportunities for each utility to propose more territory-specific pilot programs that have an R&D component (see Non-Wires Alternatives, Non-Pipe Solutions, and Peak Demand Response programs), but the majority of R&D should be done on a statewide basis, and benefits should accrue to all utilities and citizens across the state. Ratepayers should not directly subsidize speculative research and development by individual utilities whose results may not be shared as widely as is appropriate.

Workforce Development

State-administered training and workforce development programs provide New Jersey's workforce with opportunities to promote and grow a strong, homegrown talent pool that will help expand the state's economy while advancing New Jersey's environmental and energy reduction goals. Given the State's access to state labor and economic development agencies and connections to secondary, vocational and post-secondary educational institutions, the State is best positioned to leverage opportunities to develop and train an energy efficiency workforce. The State will coordinate with the utilities in order to provide program-specific contractor training. This will ensure consistent training programs across service territories, which stakeholders have cited as a key factor in market penetration and energy efficiency adoption.

Public Education Initiatives - Energy Efficiency Curriculum

As in workforce development, the State is best suited to develop and run energy efficiency curriculum programs and materials; the State will be particularly effective at this by collaborating with other state agencies, such as the New Jersey Department of Education. Statewide curricula are developed by the state Department of Education, and a curriculum free of company marketing and branding should be developed that helps students understand the importance of energy efficiency and conservation.

Other Statewide Energy Efficiency - Community Energy Planning Grants

The State should continue to administer community energy grants given the extensive statewide and cross-agency collaboration required to effectively and comprehensively deliver this program and the need for the grants to be available to communities statewide. Community Energy Planning Grants provide funding to communities to create Community Energy Plans. Community Energy Plans holistically consider and identify goals and strategies to incorporate a resilient and clean energy future, including such measures as increasing clean energy production, reducing energy use and harmful emissions, and encouraging redevelopment to promote multi-modal transportation and reduce reliance on personal vehicles. Community Energy Plans will support and enable local municipalities to align their own energy needs with the goals established in the 2019 EMP. A Community Energy Plan requires collaboration among many different state and local government entities and helps local governments identify funding sources throughout the state. State administration of the Community Energy Planning Grants will ensure collaboration among the DCA, New Jersey Department of Environmental Protection (DEP), New Jersey Department of Transportation (DOT), NJ TRANSIT, and the New Jersey Department of Health (DOH), among others, in order to encourage holistic approaches to success.

Co-Managed Programs

Low-Income Program (Comfort Partners)

Statewide administration of low-income programs increases accessibility for all qualified customers because outreach and program offerings are not limited by utility service territory, which results in greater program recognition and access. The current Comfort Partners program merges the best of both administrators – the public interest motivations of the State and the direct customer relationships held by utilities – in order to effectively serve low-income customers through a partnership among utilities and the State. The current model promotes best practices while ensuring customer access to consistent offerings and promotes investing in deeper savings in each home served by the program. The State should continue its role in setting program objectives, oversight, and participating in program management, while the utilities manage and support the program’s day-to-day operations and adherence to best practices. To complement these offerings, the State has the ability to leverage partnerships on behalf of all utilities with other government agencies and utilize state or federal weatherization funds to provide the best possible programs for low-income customers. This co-managed program has successfully leveraged the administrative strengths of both utilities and the State.

Energy Efficiency Products Marketplace

The State will adopt a single online platform for its energy efficiency products marketplace through a joint contractor selected in collaboration with utilities. A single, co-managed marketplace will be an asset to customers, as it will facilitate access and reduce market confusion, while ensuring that customers across all service territories have equal and adequate access to energy efficient products. A co-managed marketplace will allow the State to maintain a strong oversight role and support the availability of a single platform on the customer side, while also ensuring consistency in product offerings and leveraging the utilities’ strengths in marketing individual measures. The utilities will collaborate to make this platform accessible and make recommendations to encourage the adoption of new and emerging technologies. The utilities will support the State in ensuring that product offerings are sufficient to meet energy efficiency program goals and fulfill the needs of all service territories. Utility access to customer data will also enable targeted marketing to customers.

Appliance Recycling

The current State-administered appliance recycling program will transition to a co-managed approach. It will be administered through a single platform administered with oversight from the State, but with utilities managing the recycling needs and opportunities in their territories and encouraging customer participation by offering incentives to replace existing products with more efficient products. This program is best offered on a statewide basis to limit multiple contracts for provision of a single service. One contract will help gain economies of scale and reduce duplicative administration costs.

Multifamily Program

A co-managed approach to running the multifamily program takes advantage of both the statewide and cross-customer-class purview of State administration, as well as the customer relationships and data access benefits of utility program administration. The State would play a critical oversight role, while the utilities would work together to provide the day-to-day implementation of the program. A Multifamily Working Group (MWG) would be set up between the utilities and the State to take over program design modifications after the July 2021 utility launch and to ensure feedback from the on-the-ground programs for those modifications. The utilities would procure a joint program administrator to perform high-level program coordination, project and application review and management, technical support and training to program service providers, and other day-to-day program implementation activities on behalf of all of the utilities. In order to facilitate contractor engagement and access across the state, the State, in consultation with the utilities and the program administration contractor, would establish a “trade ally” list of pre-approved contractors to deliver services to customers.

PROCESS

Years 1 – 3

While additional details and modification to this Program Straw are expected as a result of continued stakeholder outreach on filing and reporting, at the outset, the utilities will be required to submit three-year filings which must include the specific programs and initiatives outlined in

the Program Recommendations section. The categories are listed below, and categories beyond “core programs” may be phased in over the three-year filing:

- Core Programs
- Additional Initiatives
- Pilot Programs
- Peak Demand Reduction and Demand Response Programs

Each three-year filing will also include an annual portfolio report. These evaluations/reports are expected to include quantitative and qualitative assessments of the portfolio’s performance and any significant changes the utilities would like to make for the next year. While more detailed filing and reporting requirements will be proposed after further stakeholder input, Staff suggests that a requirement for three-year filings and annual portfolio reports strikes a balance between giving the marketplace assurance of program continuity while also granting utilities and the DCE the flexibility to make changes as needed to maximize program uptake and success.

Years 4 – 5

Following the initial three-year filing, the utilities shall submit another filing that will run at least through the fifth year of the establishment of this new energy efficiency and peak demand response framework.

Utility Coordination

Consistency

As previously mentioned, maintaining statewide consistency of programs to ensure equitable access for all customers is of paramount importance, particularly for the Core Programs. In order to achieve this goal while still enabling utilities to meet their mandated savings targets, utilities must coordinate statewide wherever and whenever possible. Coordination should include the sharing of best practices, collaboration to develop enhanced program designs and pilot programs, implementation of programs in a similar manner where appropriate, joint procurement and contractor processes, development of consistent standards and forms, and more. This will be especially important in locations where gas and electric service territories overlap.

Additionally, utilities will coordinate with each other and with the Board to establish and implement a single database to report and store data. This will facilitate clarity and simplicity in

reporting, standardize data inputs across all utility territories and NJCEP programs, and enable more efficient and productive program evaluation, among a variety of other benefits.

Contracting Resources

Utilities must establish pathways for all interested parties to participate in their programs as developers, implementers, contractors, or other such roles as necessary. While it is important to maintain a competitive marketplace for these services, limiting market confusion is also a priority. By coordinating with other utilities and the Board, utility companies can strike a balance between these priorities through establishing statewide standards for contractors across service territories, coordinating trade ally support, and standardizing contractor training materials wherever possible.

Flexibility

Balancing flexibility and consistency is another critical component of successful energy efficiency programs administration. While programs need to be nimble in order to respond to market shifts without undergoing a full regulatory proceeding, strong oversight of programs must also be maintained. Allowing utilities to react quickly to changing market conditions, within reasonable limits, will ensure that programs remain effective and work toward achieving the aggressive savings goals set forth in the CEA. In order to provide the flexibility stakeholders have called for, Staff proposes that utilities be permitted to do the following without prior Board approval but with Board notification:

- Make minor modifications to program design;
- Shift budgets between programs up to 3% of approved program budgets without altering the utility's overall energy efficiency program budget and while remaining cost-effective; and
- Adjust incentives and rebates up to 15% of approved levels.

Utilities will be expected to collaborate on proposed changes and will be required to notify the Board and Rate Counsel of any intended program changes. The notification requirement serves to ensure that due diligence was exercised in developing the modifications and that Staff and Rate Counsel have an opportunity to raise concerns or questions. Prior Board approval will be required for program modifications that exceed the thresholds listed above. Filings must be updated to reflect the minor program modifications listed above at least during the next required filing. To implement more significant program, budget, or incentive changes, utilities will be required to submit mid-term adjustment filings to the Board for approval.

Reporting

All entities responsible for program delivery, including the DCE, will be required to report savings, costs, and evaluation data following a consistent set of requirements to ensure that all savings and expenditures are accurately tracked, accounted for, and attributed to the proper entity. While the time constraints, format, and specific metrics for reporting are still being developed and will be shaped by additional stakeholder engagement, accurate and timely reporting is crucial in ensuring that the savings targets are met and to evaluate program performance. As mentioned above, a coordinated database to track and store program data must be developed to make the reporting process easier and the evaluation process more timely and accurate. This will not only facilitate cost recovery but also ensure sufficient information for the State to regularly evaluate the effectiveness of the overall portfolio of programs and make appropriate modifications.

Baseline & Future Market Potential Studies

It is anticipated that the results from the pending baseline study designed to measure New Jersey's baseline energy consumption will be available in Year 1 of the new energy efficiency program administration framework. These findings will not only give program administrators a clearer picture of the state's savings potential, but will also inform an updated and enhanced market potential study. This second study will assist in quantifying more specific savings targets for each utility service territory and provide additional data that will further enable each utility to meet its savings goals.

Marketing

It is clear that effective marketing and education of energy efficiency and peak demand programs is necessary to increase both program participation and energy savings. In New Jersey, the lack of marketing over the last several years has had a serious impact on participation in energy efficiency programs. Past marketing campaigns of both brand awareness and direct marketing efforts have demonstrated the ability to increase customer engagement. Additionally, each sector or customer class requires differentiated marketing approaches in order to have the most successful outcome.

Staff recommends a collaborative approach between the State and the utilities to ensure that program offerings are marketed and communicated clearly, have maximum reach to all customers, and are implemented at the least cost to the ratepayer, as has been successfully implemented in other states. A coordinated marketing approach to include both the State and utility collaboration will foster consistent messaging and marketing efforts, provide cost savings, and provide a platform to share market barriers and best practices. One brand will also help

alleviate customer confusion and provide advantages through government rates and tax breaks to state entities.

As a state agency, the BPU can gain operational efficiencies through coordination with other state agencies, such as the Department of Labor, DEP, DCA, DoE, etc. Additionally, the State has the ability to maximize marketing impacts where media markets extend into multiple utility territories. Utility marketing efforts built on direct access to customer data and existing customer relationships yield unique advantages. Utilities can target specific customers with customized messaging, which results in less expensive participant acquisitions. Successful marketing and market penetration requires a coordinated effort between the State and the utilities. To this end, the State will hold an ongoing working group with the utilities to discuss marketing research, campaign plans, implementation, and results. The goals of the working group will be to:

- Collaborate on marketing and education ideas and plans;
- Create operational efficiencies between the utilities and the BPU;
- Promote cross-marketing efforts among utilities;
- Ensure consistent messaging;
- Reduce costs; and
- Inform best practices.

Overall brand awareness will be conducted at the state level. The State will work closely with the utilities to ensure that mass marketing efforts are conducted in each territory and promote “New Jersey’s Clean Energy Program.” Messaging and creatives will include the NJCEP logo and the utilities’ logo (when applicable). The BPU will also lead efforts on cross-marketing to ensure consistency and maximize marketing dollars. Each utility will be responsible for directly marketing its program offerings and incentives but will ensure brand awareness by incorporating the State where possible. Complete branding guidelines will be developed through discussion and collaboration of the working group.

Existing marketing efforts for overall branding and awareness of energy efficiency programs by the BPU will continue to promote the programs and the advantages of energy efficiency efforts. Any direct marketing efforts currently in place will transition to individual utilities for implementation.

ENERGY SAVINGS

Savings

The CEA states that “A public utility may apply all energy savings attributable to programs available to its customers, including demand side management programs, other measures implemented by the public utility, non-utility programs, including those available under energy efficiency programs in existence on the date of enactment of P.L.2018, c.17 (C.48:3-87.8 et al.), building codes, and other efficiency standards in effect, to achieve the targets established in this section.”

Staff anticipates that energy savings achieved through programs administered by the State will count towards utility savings and that the utilities will be able to count the savings achieved by the State, through State-led initiatives, in meeting the CEA’s overall goals. Savings anticipated to come from New Jersey’s Clean Energy Program will not be included in each utility’s quantitative performance indicators, and therefore the utilities will not receive performance incentives or penalties based on NJCEP’s savings. However, energy savings anticipated to be achieved through the co-managed programs will be included in each utility’s QPIs, and the utilities will be assessed incentives or penalties based on achievements in the co-managed programs.

Anticipated Attributable Savings

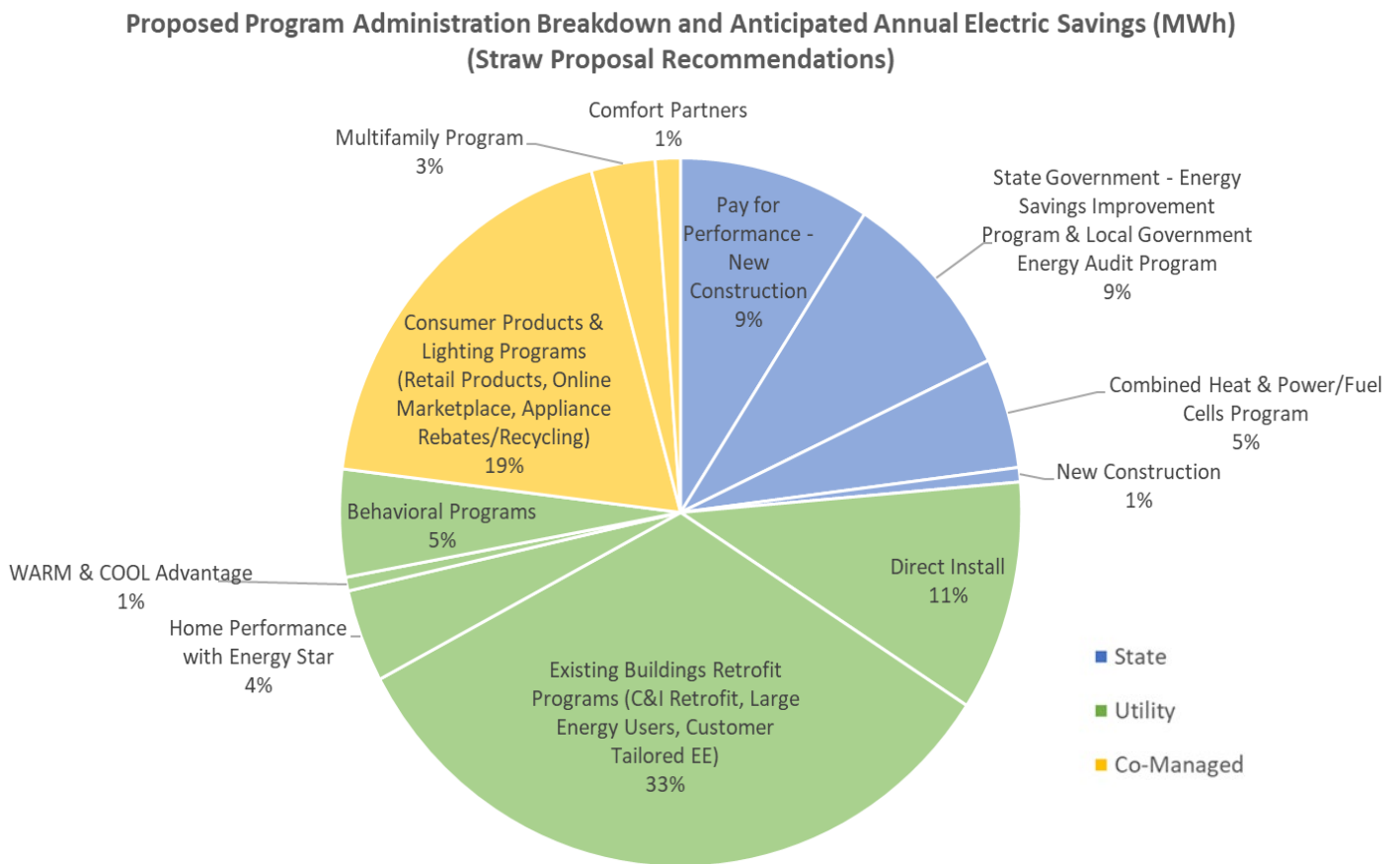
Staff anticipates that the above-described program administration structure will result in minimum savings of two percent (2%) of electric retail sales and three-quarters of a percent (.75%) of gas retail sales.

In the process of developing the preliminary recommendations regarding the program administration structure that are included within, Staff reviewed data regarding the sector-specific potential for energy efficiency described in the “Energy Efficiency Potential in New Jersey” study. In order to assist stakeholders in reviewing and providing comments related to the administration structure described within, Staff has included Figures 1 and 2 below, which represent preliminary anticipated 5 year savings based on sector-specific breakdowns of energy savings potential. The anticipated savings in Figures 1 and 2, which represent Staff’s recommendations in this Straw Proposal, are not binding and represent the potential energy savings on a sector and program basis. Figures 3 and 4 represent a high-level view of

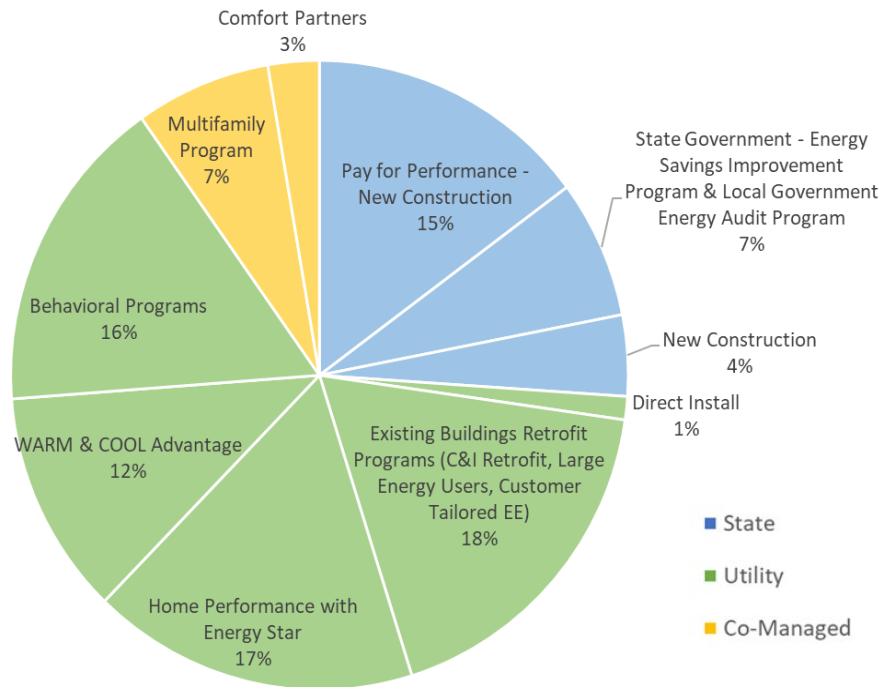
anticipated future program savings if the current program administration structure, with NJCEP administering most programs, were to continue into the future; this is referred to as “status quo” program administration. Please note that, due to variations among utility program offerings, these charts represent estimates of savings potential and are not reflective of each utility’s current energy efficiency programming.

The figures below are included for the purpose of illustrating a high-level breakdown of the potential savings to be achieved through programs administered by the State, utilities, and co-managed. Staff expects that the 2% savings in electric retail sales and .75% savings in gas retail sales could be achieved over the next 5 years, apportioned among various energy efficiency programs, as detailed in the figures below.

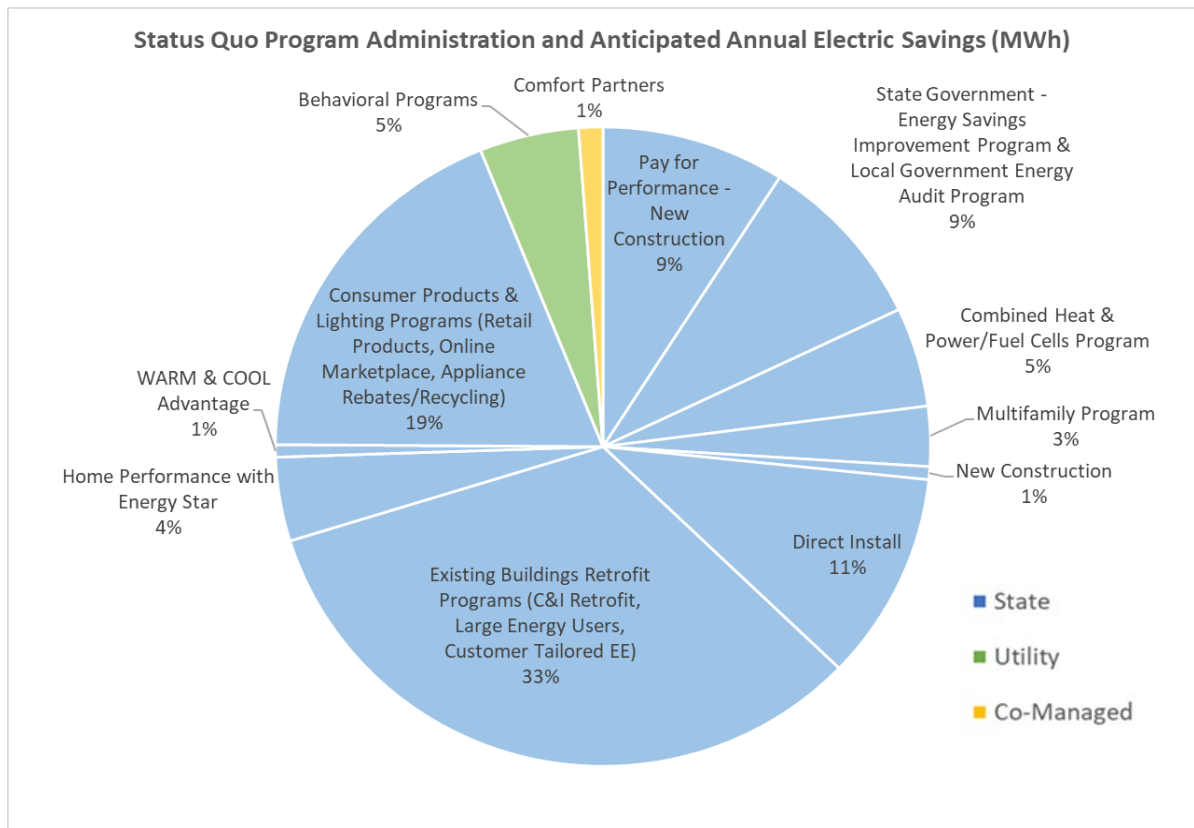
Figures 1 & 2. Proposed Program Administration Breakdown and Anticipated Savings (Straw Proposal recommendations) – Electric & Gas



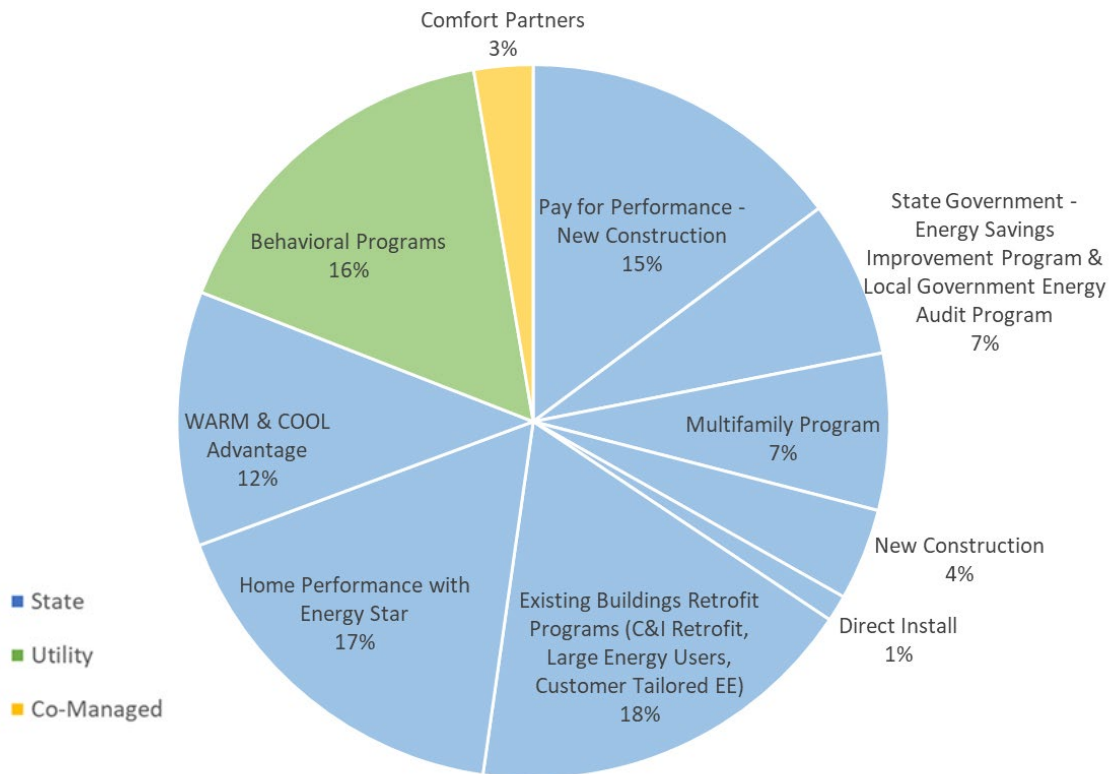
**Proposed Program Administration Breakdown and Anticipated Annual Gas Savings (Therms)
(Straw Proposal Recommendations)**



Figures 3 & 4. Status Quo Program Administration and Anticipated Savings – Electric and Gas



Status Quo Program Administration and Anticipated Annual Gas Savings (Therms)



METRICS

Based on recommendations in the “Energy Efficiency Potential in New Jersey” study and from stakeholders and industry experts, Staff recommends a multifactor approach, using the following metrics, in order to evaluate the utilities’ performance with regard to the CEA’s mandated energy efficiency and peak demand program filings and energy use reduction targets.

Metrics are a critical element of energy efficiency program design, as they define the ways in which utility program performance will be tracked, reviewed, and evaluated. Metrics allow the State to ensure that programs are delivered consistently to all customer segments and that the policies of the state are appropriately integrated into the delivery of energy efficiency. Under the proposed approach, each metric that is adopted will have an associated weight and a specific Quantitative Performance Indicator (QPI) associated with each metric will be established for each utility. The

Board will review the utilities' achievement of each metric's associated QPI and will subsequently measure the utility's overall performance based on the weighting structure, in order to ultimately apply performance incentives and penalties to each utility.

Staff currently envisions that the metrics below, as well as the associated weights, will be consistent among all utilities but that the QPIs associated with each metric would vary by each specific utility and be based on each utility's potential for energy efficiency and peak demand reduction. These metrics and the associated QPIs would be reviewed regularly, as required; the option for additional, key metrics would also be considered during these QPI reviews.

Metrics were shared with stakeholders during the spring 2019 release of the draft "Energy Efficiency Potential in New Jersey" study, and stakeholders had the opportunity to comment on them ahead of the release of the final study. The Board preliminarily adopted the metrics on May 28, 2019. Staff presented the metrics, along with their purpose, to stakeholders at the September 30, 2019 Energy Efficiency Transition Stakeholder meeting. Feedback on these metrics was accepted through subsequent written comments.

Staff believes that this multifactor approach to performance incentives will best position New Jersey to achieve its energy goals while simultaneously promoting other policy objectives, such as equitable access and reasonable rates. Given the CEA's emphasis on cost-effectiveness, as well as the need to achieve deeper, longer-term energy savings, metrics balanced by multiple factors will be the most effective approach to attaining high levels of energy efficiency in New Jersey without compromising other core priorities. It is particularly useful to have a diverse set of metrics in order to encourage utilities to avoid the pitfalls of only pursuing "low hanging fruit" and instead develop long-term portfolios that balance multiple priorities, including cost.

Staff proposes utilizing the following metrics in order to develop utility-specific QPIs and eventually to support the application of performance incentives and penalties. Staff includes these proposed metrics in this Straw Proposal so that they might be included as inputs to future discussions related to the development of the performance incentive/penalty structure and the development of QPIs. Staff intends to provide clear indication that the balancing of multiple priorities is important to successful implementation of the CEA's energy efficiency and peak demand reduction requirements.

Recommended Metrics:

- **Annual Energy Savings** - Annual energy savings plays a key role, per the CEA, and is a common metric for jurisdictions seeking to encourage reductions in energy use to evaluate incremental savings.

- **Annual Demand Savings** - Annual demand savings determines the demand savings resulting from energy efficiency measures and/or costs and standards. Peak demand savings metrics are important for grid stability and reliability.
- **Lifetime Energy Savings** - Lifetime savings help determine the overall benefits of energy efficiency programs, and including this metric encourages long-term, persistent energy saving measures. They are also a better comparison to supply side options.
- **Lifetime of Persisting Demand Savings** - Similarly, it is important to consider the persistence of demand savings in the long term in order to encourage longer-lasting measures and better manage grid implications.
- **Utility Cost Test (UCT) Net Present Value (NPV) of Net Benefits** - Considering UCT benefits, those that accrue to the utility, in the metrics is important to encourage cost-effectiveness, in addition to pure savings. With this metric, if a utility can achieve its goals with less funding than originally planned, it will achieve higher net benefits and attendant incentives.
- **Low-income Lifetime Savings** - Considering low-income lifetime savings encourages energy efficiency program designs that reward investment in deeper, comprehensive energy savings measures for income-eligible customers. It also promotes attention to energy efficiency for low-income customers, which is traditionally a more expensive sector to deliver programs to and ensures that harder to serve customers will not be overlooked in pursuit of cheaper savings.
- **Small Business Lifetime Savings** - Similarly, small business energy savings are typically more difficult to capture and realize; much like the low income lifetimes savings metric, the inclusion of this metric will discourage utilities from seeking only easy-to-reach customers.

These metrics, together, will encourage a well-rounded portfolio of energy efficiency and peak demand savings programs and align them with many of New Jersey’s ambitious climate and clean energy goals. Staff recommends adopting these metrics in order to encourage utilities to develop balanced portfolios with attention to cost efficiency, low-income customers, and deeper, long-term savings.

CONCLUSION

Energy efficiency plays a critical role in New Jersey’s efforts to combat climate change. Under the Clean Energy Act, utilities are charged with delivering energy efficiency to residents across the

state, which makes the State and utilities partners in working to achieve the goal of 100% clean energy by 2050. This goal must be achieved in a cost-effective manner and necessitates robust oversight of program development and delivery.

The program administration recommendations presented in this proposal aim to make use of both the State's and utilities' strengths in their respective abilities to reach residents across the state and serve them with the best energy efficiency programs that will help New Jersey achieve its clean energy goals. New Jersey is poised to provide a platform that will maximize energy efficiency benefits and manage and reduce peak demand loads. Through the recommendations provided herein, the State seeks to partner with utilities to achieve much needed energy efficiency gains while ensuring cost-effective implementation.

This Program Straw is offered for public consideration and comment and sets the stage for additional proposals aimed at enhancing New Jersey's energy efficiency and peak demand programs. Members of the public may file written comments with the Secretary of the Board of Public Utilities at 44 South Clinton Avenue, 9th floor, Post Office Box 350, Trenton, New Jersey 08625-0350 Attn: Aida Camacho-Welch, regardless of whether they have attended the public meetings. Written comments may also be submitted electronically to EnergyEfficiency@bpu.nj.gov in PDF or Word format. Please include a subject line of: **Draft Straw Proposal – Energy Efficiency and Peak Demand Reduction**. All comments must be received on or before 5 P.M. on **Friday, January 17, 2020**.