Andrew J. McNally
Assistant General Counsel

atlantic city electric
An Exelon Company

Mailing Address:
92DC42
PO Box 6066
Newark, DE 19714-6066

Overnight Delivery:
500 N. Wakefield Drive
Newark, DE 19702

609.909.7033 – Telephone
609.393.0243 – Facsimile
andrew.mcnally@exeloncorp.com

atlanticcityelectric.com

February 11, 2020

VIA ELECTRONIC MAIL
EnergyEfficiency@bpu.nj.gov

Aida Camacho-Welch
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, New Jersey 08625-0350

RE: Energy Efficiency Transition – Application of Utility Targets
Comments of Atlantic City Electric Company

Dear Secretary Camacho-Welch:

On behalf of Atlantic City Electric ("ACE" or the "Company"), please accept these comments in response to the Draft for Public Comment on the Application of Utility Targets (the "Draft") proposed by the New Jersey Board of Public Utilities (the "Board" or "BPU") on January 30, 2020, and discussed at a stakeholder forum on February 4, 2020.

Summary of ACE's Position

ACE recommends that the list of metrics that will form at least part of the basis for Quantitative Performance Indicators ("QPIs") be simplified to include just three: (1) energy savings, as required by the Clean Energy Act (the "Act"); (2) cost-effectiveness (also required by the Act); and (3) low-income customer access to energy efficiency ("EE") programs. ACE agrees that metrics should be weighted to reflect the State's policy goals, but believes that the proposed weighting scheme for Program Year 1 does not reflect the specifics of the Act.

ACE recommends that energy savings targets be established at the gross level, not at the net level as proposed in the Draft. Measuring savings at the net level will require utilities and the Board's Office of Clean Energy ("OCE") to achieve greater savings levels than at the gross level. Importantly, the Draft's proposed approach would impose additional costs on customers, and add additional performance risk to the utilities and OCE.

ACE also disagrees that metrics should be based on *ex post* evaluated energy savings, and instead recommends reliance on *ex ante* energy savings for this purpose. While the specifics of

how Evaluation, Measurement and Verification ("EM&V") results should be applied to utility and State-run programs should be arrived at through stakeholdering with the EM&V working group, the ultimate directive should be clear that EM&V results will not be applied to program savings retroactively. Retroactive adjustments would add significant risk to program performance, and could make achieving EE goals more costly (because this uncertainly would need to be factored into EE program design). In other words, if the Draft's approach in this regard were followed, the utilities would need to design their programs to achieve even greater EE savings in order to account for any savings reductions that result from the proposed EM&V process.

ACE further believes that QPIs should only be applied starting in Program Year 5, in keeping with the requirements of the Act. ACE's position in this regard is based upon the Company's experience implementing programs in Maryland and other jurisdictions, and is informed by the significant increase in savings, beyond what is currently realized by OCE's current programs, in order to reach the State' EE goals.

Quantitative Performance Indicators

ACE supports the proposal that utilities will propose QPIs in their program filings, following the guidance established through the stakeholder process. ACE recommends that the BPU simplify the process, both for the ease of evaluating performance and for the clear directional benefits it would provide to program management. QPIs are best developed in a collaborative fashion though a stakeholder process, and function best when they are clearly measurable and focus on outcomes that achieve particular goals – in this case, the goals of the Clean Energy Act.

ACE's overarching position on QPIs used for performance incentives is that they should be:

- Tied to policy goals and the enabling Clean Energy Act;
- Clearly defined;
- Able to be quantified from reasonably available data;
- Sufficiently objective and free from external influences;
- Easily interpreted; and
- Easily verified.

Metrics

As noted in ACE's January 17, 2020 comments on the Board's Straw Proposal regarding Program Administration, the Company proposes simplified metrics that align directly with the Act. Those metrics should be: (1) annual energy savings; (2) cost-effectiveness; and (3) low-income customer access to EE programs. These core metrics align with the Act's requirements concerning annual gross energy use reductions and annual peak demand reductions. Additionally, the three metrics proposed by ACE are easy to evaluate, and avoid the complexity and hard-to-measure nature of the metrics proposed in the Draft. Most importantly, these core metrics do not create new and costly program requirements that would go beyond the requirements of the Act.

ACE agrees with the logic presented for including annual energy savings as a key metric and supports its inclusion. ACE also agrees that cost-effectiveness is an important measure of a portfolio's success and it is a requirement of the Act.

The second recommended metric—cost-effectiveness—is an indication of how efficiently a utility is spending program budgets, and is one of many considerations when developing an EE program portfolio. As a best practice, any program portfolio should have a cost-effectiveness value greater than one. The Draft proposes that cost-effectiveness be measured by the Utility Cost Test ("UCT") for purposes of measuring performance and determining incentives. As mentioned in previously its filed comments, ACE instead proposes using the societal cost test ("SCT"), which is the test currently used to evaluate the programs administered by OCE. ACE believes that it is advisable and more consistent to use the same cost test for all decision-making, and to use a test that accounts for other hard-to-quantify non-energy benefits, which are important factors to achieving additional State goals as outlined in the Energy Master Plan. ACE also believes that all programs that target low-income customers be exempt from a cost-effectiveness test, because these programs are typically more expensive to administer, but are nonetheless an important part of an equitable program portfolio.

The Company agrees with the Draft that program portfolios should be evaluated for their ability to reach low-income customers, and that a portion of each utility's program portfolio budget should be allocated to these customers. ACE's service territory has a significant low-income population, with roughly 25 percent of ACE households earning less than $35,000 annually. EE can be particularly beneficial to low-income customers, because home energy costs are higher, as a proportion of income, for these households compared to other households. Indeed, the majority of the household income of low-income families goes toward rent, transportation, and energy (in that order), such that reducing consumption through EE can have a particular benefit for low-income families. Through the Board's Comfort Partners program, the Company provides EE participation opportunities to its low-income customers. Comfort Partners' annual spending target provides support for several hundred customers in ACE's service territory, and has been successful at achieving the program's EE targets.

The additional metrics proposed in the Draft, if implemented, would result in an unnecessarily complicated structure that has the potential to be contentious and slow down the regulatory process, as well as diffuse the utility's attention across several metrics. By asking utilities to focus on seven different metrics, utility decision-making will become clouded, in that when everything matters, nothing truly does. With many overlapping metrics, utilities will not have clear operational guidance when choosing where to direct limited resources. While the weighting would provide some indication of priority, the metrics proposed in Draft send mixed messages to the utility. Instead, ACE recommends that only the most important metrics, as set forth above, be used to evaluate utility performance.

Notably, lifetime energy savings and demand savings will generally be reflected in the cost-effectiveness metric, because the tests for cost-effectiveness consider the net present value of avoided energy and capacity costs. The EE measures that have longer lifetimes and contribute to greater capacity savings will also tend to be more cost-effective. Because lifetime energy and

demand savings correlate with cost-effectiveness, it would be superfluous to include lifetime energy and demand savings as separate metrics. If the Board is interested in separately measuring lifetime energy and demand savings, it could require that these measures be tracked as part of the utilities' annual reporting, and therefore, the Board need not include these measures as separate metrics.

Including lifetime energy savings, in particular, as a separate metric would also be problematic for several other reasons. First, such a metric assumes a consistent and steady performance over the full lifetime of an EE program, which in reality tends not to be the case due to factors such as customer relocation and changes in operating conditions. Second, the addition or removal of electric end-uses is a disproportionate driver of lifetime savings. Particularly given the recent enactment of electric vehicle legislation (P.L.2019, c.362), the State has a policy in furthering electrification, putting the lifetime energy savings metric and the State's policy goals at cross-purposes. Finally, a lifetime energy savings metric over-emphasizes performance in future years, while the EE goals of the Clean Energy Act are expressly focused on annual performance.

Weighting

ACE agrees that metrics should be weighted to reflect the State's EE policy goals. However, because such policies can shift over time, it is vital that evolving policy positions be clearly and correctly reflected within stakeholder meetings held to reexamine and determine the proper weightings over time, with sufficient lead time to adjust programs as necessary. The Company suggests that the Board and Staff continue to engage in such stakeholdering so that there are not competing views of the State's EE policy goals.

As mentioned, ACE believes that using seven different metrics to measure program performance is overly cumbersome. Particularly given their proposed weights, the impact of any individual QPI is diluted, and in some cases almost to the point of irrelevance. Assigning weights as low as 5% or 10% to certain metrics undermines how meaningful those metrics are, such that the administrative burden and complexity of so many QPIs outweighs their value.

Additionally, the proposed metric weighting for Program Years 1 and 2 is *already* out of step with the State's policy goals. Annual energy savings is the only metric specifically called out by the Clean Energy Act, and therefore, it would stand to reason that this metric would be given primary focus when evaluating utility performance. Within the Draft, however, annual energy savings trails behind lifetime energy savings (40% vs. 60%). ACE believes that the weighting scheme ultimately utilized should be a reflection of the Act to the greatest extent possible. Therefore, the Company recommends the following weighting structure: 60% for annual energy savings, 30% for cost effectiveness, and 10% for low-income programs.

In the Draft, the UCT Net Present Value of Net Benefits has the highest weighting of all the metrics in Program Years 3 and beyond. As mentioned, the Company recommends that the Board employ the SCT, and not the UCT. In any case, if a cost test is indeed the most important of the seven proposed metrics, as the Draft proposes, it would be incongruous to exclude a cost test as a metric during the first two years. Considering the relative standstill from which most utility programs will be starting, program investments are likely to be high in the early years, and be

without proportional savings returns in those years. If Staff's intention is to incorporate a cost test starting in Program Year 3 because the utilities' operations are not likely to be particularly cost-effective in the early years, then ACE agrees with the Draft's approach in this regard. However, it may be more prudent to ramp up to the metric's eventual weighting, rather than going from what is effectively a 0% weighting in Program Years 1 and 2, directly to 30% (or whatever percentage is ultimately settled upon). A more gradual introduction of a cost-effectiveness metric would give both the utilities and Staff a better chance to learn about what levels of performance to expect, and to adjust accordingly.

Savings Targets

The savings targets proposed in the Draft are informed directly by the "Energy Efficiency Potential in New Jersey" Study ("the Study") performed by Optimal Energy. As conveyed in previous filings, ACE does not believe that the Study adequately captured, assessed, and presented certain critical policy and technical considerations. The Study takes a one-size-fits-all approach to establishing targets, rather than the utility-specific goal setting contemplated by the Act. Consequently, the Company urges the Board to consider the Study as informational, and allow the utilities to set their own energy savings targets *en route* to the two percent goal in program year 5.

Measuring Savings: Net vs. Gross

ACE believes that energy savings targets should be established at the gross level, and not at the net level as the Draft proposes. The Act states that the Board shall adopt QPIs, which shall establish reasonably achievable targets for energy usage and peak demand reductions. While the Act is silent on whether targets should be measured at the gross or net level, but OCE notably reports on its program savings at the gross level. Likewise, nearby states with robust EE programs, such as Maryland, have established savings targets at the gross level.[1]

Measuring savings at the net level will also require utilities and OCE to achieve greater savings levels than at the gross level, which would come at an additional cost to customers and add additional performance risk to the utilities and OCE. According to a 2011 report of the State & Local Energy Efficiency Action Network ("SEE Action"), a net savings target can be viewed as a proxy for a more aggressive gross savings target: "If the compliance obligation is instead based on gross savings, the savings targets can generally be higher than if net savings were used."[2]

The extra costs involved in achieving net savings over gross savings are evident when one considers the average Net-to-Gross ("NTG") ratios observed across established utility EE programs. According to a 2015 report prepared for United States Environmental Protection Agency ("EPA"), "[a]verage NTG ratios range from 83 percent to 94 percent depending on the customer

[1] Maryland, which ranks seventh in the American Council for an Energy Efficient Economy's ("ACEEE") 2019 Scorecard on EE, established a 2 percent goal based on gross savings.

[2] SEE Action, Setting Energy Savings Targets for Utilities (Sep. 2011), at 11, *available at* https://www4.eere.energy.gov/seeaction/system/files/documents/ratepayer_efficiency_targets.pdf.

sector, with 87 percent being the average across all years and customer sectors."[3] To be sure, establishing new EE programs is a challenging endeavor in the first instance. Given the effective NTG ratios, pursuing net savings instead of gross savings would increase the difficulty level by approximately 13% or more. Considering the impact of diminishing returns, the costs that would be imposed on ratepayers to achieve an extra 13% in energy savings could be as much as $11.8 million in Program Year 5, or $39 million over the five-year program cycle, based on the current energy savings ramp rate. Notably, research by the Midwest Energy Efficiency Alliance ("MEEA") recognized this risk to utilities: "in a net savings approach, utilities may risk not meeting savings goals. This can force them to 'over-save' to cover any potential discount later applied with the net calculation."[4]

Additionally, according to 2010 research completed by NMR Group, Inc. for Northeast Energy Efficiency Partnerships, there are significant additional concerns raised by the use of net savings to measure energy savings for EE programs. First, a net savings approach focuses too heavily on narrowly-defined metrics of individual program success or failure—especially free ridership—while also deemphasizing other important impacts, such as non-energy benefits and behavioral effects, as well as portfolio- and policy-level impacts.[5] Second, relying on net savings creates the impression that net savings estimates accurately represent the savings attributable to the program when, in reality, the methods for calculating net savings are often unreliable and yield estimates that are biased or lack validity (such that the results may not accurately represent actual program-induced savings).[6] Third, a net savings approach requires expenditures of resources that are not in keeping with the importance of the estimates, and their reliability or validity, thereby diverting resources from other planning, evaluation, and implementation activities that could yield greater benefits.[7]

MEEA also noted concerns over the extra costs related to a net savings approach: "Concerns over cost, *i.e.* that a great deal of resources are typically spent on determining net savings, which may not always yield more accurate results than a less-costly gross savings approach."[8] Regarding the increased complexity involved in determining net savings, MEEA observed that "controversy none the less arises within the net savings approach when evaluating what savings are fairly

---

[3] Synapse Energy Economics, Inc., State Net-to-Gross Ratios, Research Results and Analysis for Average State Net-to-Gross Ratios Used in Energy Efficiency Savings Estimates (Jan. 23, 2015), at 1, http://www.synapse-energy.com/sites/default/files/NTG-Research-14-053.pdf

[4] MEEA, A Net or Gross Savings Approach (Apr. 2013), at 4, *available at* http://www.mwalliance.org/sites/default/files/media/Net_v_Gross_4_10_2013.pdf

[5] NMR Group Inc., Net Savings Scoping Paper, submitted to Northeast Energy Efficiency Partnerships (Nov. 2010), at VII, *available at* https://neep.org/sites/default/files/resources/FINAL_Net_Savings_Scoping_Paper_11-13-10_0.pdf

[6] Id.

[7] Id.

[8] A Net or Gross Savings Approach, *supra*, at 4, *available at* http://www.mwalliance.org/sites/default/files/media/Net_v_Gross_4_10_2013.pdf

attributable to the energy efficiency program itself. There is a range of influences on consumers' energy use, such as self-motivation or the effects of prior and/or other programs. As a result, attributing savings to one cause or another can be quite complex."[9]

Overall, NMR Group's research found that "[r]egardless of their state's regulatory treatment of gross savings and net savings, interviewees consistently expressed concerns that accurately estimating the net impacts of the programs is becoming increasingly difficult because of the number of policies and programs promoting energy efficiency and the emphasis on multi-year, multi-faceted energy-efficiency programs."[10] The complexity of the EE landscape in New Jersey (which will involve multi-year initiatives administered by a combination of utilities and OCE) makes the use of net savings all the more problematic.

Timing

The Clean Energy Act requires each electric public utility to achieve 2 percent annual reductions in electricity use within five years of implementation of its EE program. The Act does not require that each utility achieve any partial savings levels *en route* to that goal. Therefore, ACE believes that QPIs should only be applied starting in Program Year 5, and not during Program Years 1 through 4, in keeping with the requirements of the statute.

Besides representing stricter compliance with the stipulations of the Act, applying QPIs starting in Program Year 5 better reflects the realities of initiating new programs. The administrative transition underway in New Jersey is complex and multifaceted, and utility management should ideally be focused on building the best program infrastructure for delivering savings and supporting policy goals in the long term. Including savings targets during Program Years 1 through 4 would undermine this focus, by shifting attention to achieving short-term savings goals. Applying targets in the initial years could even result in overspending on measures and projects, as utilities, lacking robust pipelines that take years to develop, would be incentivized to achieve energy savings regardless of cost.

Ramp Rate

The Draft proposes that percentage target reductions will be based on the average load of the prior three years. However, ACE believes that, given year-to-year weather variability, the calculation should be based on a weather-normalized, three-year average load. Not including weather normalization could result in significant year-to-year fluctuations in targets, which would undermine the State's ability to establish a steady environment for promoting EE and a reliable market in which solution providers can invest.

---

[9] Id. at 1.

[10] NMR Group Inc., Regional Net Savings Research, Phase 2: Definitions and Treatment of Net and Gross Savings in Energy and Environmental Policy, submitted to Northeast Energy Efficiency Partnerships (Dec. 2012), at IV, *available at* http://www.mwalliance.org/sites/default/files/media/Net_v_Gross_4_10_2013.pdf

Should BPU choose to include annual savings targets prior to Program Year 5, ACE believes that the targets proposed in the Draft are not in line with current market and programmatic realities in New Jersey. In 2017, average incremental savings across all EE programs (including mature programs) in states with EE Resource Standards was 1.2% of retail electricity sales.[11] Therefore, targeting 0.75% (nearly two-thirds of the way to this average) in Program Year 1 is overly ambitious, and runs counter to the concept of gradually phasing in savings goals, especially since New Jersey programs are largely starting from a standstill. As can be seen below in *Table 1*, the first-year targets in several states (particularly, Ohio, Michigan, and Arkansas) are considerably lower than the proposed 0.75% in the Draft. Additionally, it is worth noting that the proposed 0.75% target for Program Year 1 is more than twice the level of savings that OCE – with mature programs in full operation – achieved this past year (0.35%). In sum, the Program Year 1 target is not in accord with historical performance in New Jersey, and is overly ambitious given that the contemplated utility programs will be new programmatic efforts.

Viewed another way, the proposed initial savings target of 0.75% is 37.5% of the eventual 2% electric savings goal set forth the Act. States such as Ohio (15%), Michigan (30%), and Arkansas (33.3%) require first-year savings that are smaller percentages of their eventual maximum annual targets. Should BPU nevertheless establish partial savings targets during the initial years, the Program Year 1 target should be a relatively small percentage of the ultimate 2% electric savings goal, given the transition underway and the investment needed to launch new programs. In short, the ramp rate set forth in the Draft is too high given these conditions.

Additionally, the year-over-year increases to the Draft's suggested targets – 0.35% each year after Program Year 1 – are considerably higher than what is typically seen in other states, as illustrated within *Table 1*, below.

[11] *See* ACEEE, Policy Brief: State Energy Efficiency Resource Standards (May 2019), at 1, *available at* https://www.aceee.org/sites/default/files/state-eers-0519.pdf

Table 1: Sample State Savings Targets

State	Initial Savings Target	Initial Savings as % of Maximum Annual Target	Incremental (Year-over-Year) Savings Increases	Notes
Arizona	1.25%	50%	0.25%	"Incremental savings targets began at 1.25% of sales in 2011, ramping up to 2.5% in 2016 through 2020 for cumulative electricity savings of 22% of retail sales, of which 2% may come from peak demand reductions."[12]
Arkansas	0.25%	33.3%	0.25%	"In December 2010, Arkansas PSC adopted an energy efficiency resource standard (see Docket No. 08-144-U). The targets set by the Public Service Commission were moderate, rising from a yearly reduction of 0.25% of total electric kilowatt hour (kWh) sales in 2011, to 0.5% in 2012, and 0.75% in 2013."[13]
Michigan	0.3%	30%	0.2% (Year 2); 0.25% (Years 3+)	"PA 295 required electric utilities to achieve 0.3% savings in 2009; 0.5% in 2010; 0.75% in 2011; and 1.0% in each year from 2012 to 2015."[14]
New Hampshire	0.8%	61.5%	0.2% (Year 2); 0.3% (Year 3)	In New Hampshire, the EERS requires "[i]ncremental electric savings of 0.8% in 2018, ramping up to 1.0% in 2019, and 1.3% in 2020."[15]
Ohio	0.3%	15%	0.14%	Before the passage of HB 6, Ohio's EERS required, "Beginning in 2009, incremental savings of 0.3% per year, ramping up to 1% in 2014 and 2% in 2021. Savings targets resumed in 2017 following a 'freeze' (S.B. 310) in 2015-2016 that allowed utilities that had achieved 4.2% cumulative savings to reduce or eliminate program offerings."[16]

ACEEE has found that, among the 26 states it studied in 2017, "incremental electric savings targets . . . fluctuate from 0.1% (Texas) to 2.6% (Massachusetts)."[17] Given the current state of EE programs in New Jersey, where the vast majority of utility programs will be new and will require

[12] ACEEE, Policy Brief: State Energy Efficiency Resource Standards (May 2019), at 3, *available at* https://www.aceee.org/sites/default/files/state-eers-0519.pdf

[13] ACEEE, Energy Efficiency Resource Standards, https://database.aceee.org/state/energy-efficiency-resource-standards

[14] Id.

[15] Id.

[16] Policy Brief: State Energy Efficiency Resource Standards, *supra*, at 7.

[17] New Hampshire Public Utility Commission, Energy Efficiency Resource Standard: A Straw Proposal for New Hampshire (Feb. 3, 2015), at 16, *available at* https://www.puc.nh.gov/Electric/EERS%20Straw%20Proposal.pdf

significant time and effort to initiate, ACE believes that the lower end of this scale is more appropriate in the initial years, should the Board require any incremental savings targets prior to the 2% required by the Act in Program Year 5.

Therefore, if the Board implements partial savings targets in Program Years 1 through 4, the Company asks that the Board consider savings target levels different from those proposed in the Draft. *Table 2*, below, includes one alternative, based on ACE's view of the market and the challenges associated with transitioning programs. In this example, the annual targets start low, to reflect the significant challenges of garnering savings from new programs. However, the year-over-year increases grow with each Program Year, peaking at 2% the end of the five-year period, consistent with the Act. ACE's proposed approach is also consistent with the anticipated gradual build-up of program infrastructure, and the parallel priming of the market by program marketing and branding efforts.

Table 2: Alternative Savings Target Levels

Program Year	Savings Target
Year 1	0.20%
Year 2	0.45%
Year 3	0.75%
Year 4	1.25%
Year 5	2.00%

Evaluating Savings: Ex Post vs. Ex Ante

ACE disagrees that metrics should be based on *ex post* evaluated energy savings, and instead recommends reliance on *ex ante* energy savings for this purpose. As stated in its previously filed comments, ACE recommends that EM&V findings should not be applied retroactively to program results. While ongoing EM&V is a critical component of a robust EE program, EM&V results should only be incorporated prospectively to programs during the design phase. This avoids a situation where savings and demand targets are moving throughout the approved plan period and allows for certainty in the planning and implantation processes. Here, the Board's proposed retroactive application of EM&V findings, via use of *ex post* evaluated energy savings, runs counter to accepted use of EM&V for prospective planning and changes to program design. According to EPA, "EM&V results may be used prospectively to support electricity forecasting and system planning."[18]

Avoiding the retroactive application of EM&V findings also aligns with practices in other states. For example, in Delaware, "[c]hanges in deemed energy savings or other deemed assumptions that result from program evaluation shall not be applied retrospectively, but shall be applied to the program and portfolio prospectively in the next program cycle."[19] Similarly,

[18] EPA, Appendix: Additional Detail on EM&V Approaches (Jan. 17, 2017), *available at* https://www.epa.gov/sites/production/files/2017-06/documents/emvframeworkpaper_2017-01-19.pdf

[19] 7 Del. Admin. Code § 2105.

PacifiCorp's *Evaluation, Measurement & Verification Framework for Washington* states: "While energy efficiency evaluations will be retrospective in nature, the information obtained will be used to inform future conservation potential assessments, conservation plans, forecasts and targets."[20]

Utility-Administered Programs and State-Administered Programs

ACE agrees that QPIs – and the resulting performance incentives or penalties – should only be based on metrics tied to the programs that utilities independently administer. To do otherwise would be to judge the utilities based on events and activities outside of their control. However, ACE has concerns about how overall annual energy reduction targets at the utility level will be established, and how projected net savings for programs administered by OCE will be determined. Methods for calculating OCE's projections may vary, and because the results materially affect the calculation of utility program annual energy savings targets, the utilities clearly have a stake in the outcome.

It is unclear whether the Draft intends for there to be utility input at the OCE-program projection stage. The language used in the Draft in this regard seems to be open to an interpretation that the stakeholder process applies to both utility targets and the OCE projections that are to be subtracted out. ACE recommends that this aspect of the Draft be clarified, and that utilities be offered an opportunity to provide input at this stage in the process.

In New York, "the [Public Service] Commission directed the utilities to work collaboratively with [the New York State Energy Research and Development Authority ("NYSERDA")] to file energy efficiency targets and budgets for 2021-2025."[21] The rationale for requiring interaction and input from both parties was driven by a belief that coordination and alignment can better inform planning. "The collaborative approach between the Utilities and NYSERDA was to clearly delineate roles, taking current operational functions into account, align mutual efforts with State goals, serve markets with comprehensive offerings including outreach and marketing, and inform NYSERDA's . . . planning as well as individual utility targets."[22]

Lessons learned from states such as New York support the notion that where both utilities and the government manage EE programs, all parties benefit from having a clear delineation of responsibilities and differing focuses. Utilities, given their existing relationships with end-use customers, as well as their responsibilities to their shareholders, are in the best position to implement proven EE program models. State government agencies, lack direct billing relationships with customers, cover multiple utility service territories, and pursue policy goals as a standard matter of course. For these reasons, government agencies are in the best position to focus on riskier,

---

[20] PacifiCorp, Evaluation, Measurement & Verification Framework for Washington (Oct. 12, 2012), at 9, *available at* https://www.utc.wa.gov/_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=12&year=2013&docketNumber=132047

[21] New York Public Service Commission, Case No. 18-M-0084, (Dec. 13, 2018), at 2-3.

[22] Id. at 7-8.

long-term market transformation efforts. If the programs administered by OCE fail to meet their goals, it will impact the State's ability to reach the broader goals of the Act. Allowing both groups – the utilities and the OCE – to play to their respective strengths will benefit all involved.

As the Company stated in its October, 4, 2019 comments regarding Program Administration, the best role for OCE to play is to provide program oversight, to lead and pilot market transforming EE programs, and administer EM&V. The states with the strongest performing EE programs place such responsibilities within the hands of the relevant State agencies, while requiring that the utilities manage most EE programs. ACE recommends that New Jersey follow a similar approach.

***

ACE appreciates the opportunity to comment on the Board's Draft pertaining to the application of utility targets. The Company looks forward to providing further input on this important topic.

Respectfully submitted,

Andrew J. McNally

Andrew J. McNally

American Council for an Energy-Efficient Economy
529 14th Street, N. W., Suite 600 Washington, D.C. 20045 202.507.4000 202.429.2248 www.aceee.org

Aida Camacho-Welch February 11, 2020

Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue, 9th Floor P.O. Box 350
Trenton, New Jersey 08625-0350

RE: Energy Efficiency Transition - application of utility energy use reduction targets

Dear Secretary Camacho-Welch:

The American Council for an Energy-Efficient Economy (ACEEE) welcomes this opportunity to provide comments in response to the "Energy Efficiency Transition Application of Utility Targets Proposed Target, Metric, and QPI Structure", issued by the New Jersey Board of Public Utilities' ("BPU" or the "Board") Office of Clean Energy ("OCE") on January 30, 2020.

ACEEE is a nonprofit research organization based in Washington, D.C. that conducts research and analysis on energy efficiency. ACEEE is one of the leading groups working on energy efficiency issues in the United States at the national, state, and local levels. We have been active on energy efficiency issues for more than three decades.

ACEEE is pleased to see the advancements that New Jersey is making with the Clean Energy Act of 2018, and the subsequent BPU proposals to implement an energy efficiency transition through the "Program Administration Straw Proposal", the "Cost Recovery Mechanism draft" and this draft proposal for the "Application of Utility Targets". Overall, we find that this proposal for utility targets provides a good framework for discussion. We offer comments on several areas where the proposal could be clarified or enhanced.

Our comments and recommendations below focus on five key areas:

1. Provide additional clarity on the NJ Clean Energy Program (CEP) target-setting process
2. Detail more clearly the treatment of net savings in the targets
3. Consider a quantitative performance indicator (QPI) to encourage utility support for the overall state goal/co-managed programs
4. Create a "tracking QPI" for greenhouse gas emissions or primary BTU savings
5. Shift the balance of QPIs in years 3-5 to de-emphasize utility cost test (UCT) net present value (NPV) relative to other listed QPIs

Provide additional clarity on New Jersey Clean Energy Program metrics, weighting, and performance review

The Draft for Public Comment notes that the proposed structure was "developed in order to establish a clear process for applying the mandated energy use reduction targets to each electric public utility and gas public utility." In order to ensure that decisions about program administration align with decisions about utility targets, the target setting process should also clearly establish how any non-utility targets (specifically for New Jersey's Clean Energy Program as contemplated in the Program Admin Straw) will be used. This is critical to ensure that non-utility efforts also "support the State's overall goal of achieving all cost-effective potential for energy usage reductions and peak demand reductions."

The draft explains that the savings from programs administered by New Jersey's Clean Energy Program will be included in the overall annual energy reduction targets for each utility, and that the overall net savings targets will then be divided into two parts – for public utilities and NJCEP – based on projections for energy use reductions by the planned programs. Staff recommends that the Board determine the projected net annual and net lifetime savings from programs administered by NJCEP, by utility territory, and that these as "NJCEP Annual Energy Savings Target(s)" be subtracted from the utility-specific overall energy savings targets in order to derive the "Utility Program Annual Energy Savings Target(s)." However, the draft is not specific about the process and timing by which the board would determine program by program projected savings, nor what sources of data would be used to set those estimates.

While the draft provides detail about the process by which targets will be used to set metrics and quantitative performance indicators for utility programs, and then how those will be used as tools for performance review, there is no such detail for the NJCEP programs. Other than translation of QPIs to performance incentives/penalties, the application of targets to management metrics and QPIs and to performance assessment for NJCEP programs should mirror the process set out for utility program administrators.

To support accountability and transparency in the use of ratepayer dollars and achievement of public policy goals by NJCEP, we recommend:

- Articulating a process for setting metrics and sharing initial proposed metrics for the 2022-2026 transition period for stakeholder comment. These would likely be multi-factor metrics to allow the Board to set metrics for NJCEP that match its role in meeting multiple policy objectives statewide.
- Determine a weighting structure aligned with the NJCEP's policy goals, with more emphasis on those metrics which best support State policies or that encourage investment in those programs that may not naturally rise to the top based on costs or savings.

- Creating a performance review structure that mirrors[1] the utilities in timing and structure, with filings of program budget and performance as well as evaluations of actual performance in comparison to each established QPI. While filings for cost recovery will not be necessary for NJCEP, the results should be published in the same timely fashion as utility programs, should be available for public scrutiny, and should be used to update targets, inform decisions about roles and responsibilities between program administrators, and redesign and update programs.

Such transparency is as critical for NJCEP as it is for utility programs; as a steward of public funds, NJCEP should have clear metrics for how they will achieve public policy goals using the unique contributions of a state agency.

A similar example of a hybrid state program administrator is NYSERDA, which files an annual Metrics and Financial Report compiling the performance across its portfolios of programs and offerings, including key financial and metrics information in relation to the minimum goals established in a commission order establishing their Clean Energy Fund framework.[2]

Detail more clearly the treatment of net savings in the targets

The draft proposal refers to the use of net savings without clearly defining how net savings will be determined. We recommend that the BPU clearly define how net and gross savings will be used. We also recommend that the BPU account for symmetry in its definition of net energy savings, i.e. that if net savings take into account free riders that it also takes into account spillover as well as consideration of market effects.[3]

A 2014 study by ACEEE examines details about state practices, precedents, and issues regarding net and gross savings, and can serve as a resource as the state clarifies its definition and scope for use cases of net and gross savings approaches.[4] Our study's interviews with state and national experts made it clear that both net and gross savings can be useful toward assessing the three objectives of evaluation. For example, estimates of net savings help programs improve as they work to minimize free-ridership. Utility system planners are generally most concerned with what overall changes are occurring in consumption levels (i.e. gross savings), and less concerned with parsing out what portion of the change would happen without programs or is attributable to different parties. On the other

[1] If the Board first determines projected savings from NJCEP and then holds utilities responsible for the remainder of the overall service territory targets, the process for NJCEP reporting may need to precede that for the utilities. However, filings and reporting for each should be on a coordinated scheduled to support parts of the process where one is an input to the other.

[2] NYSERDA. Annual Investment Plan and Performance Report through December 31, 2018. Final Report May 2019.

[3] For definitions and approaches, see DOE's Uniform Methods Project, 2015, https://www.energy.gov/sites/prod/files/2015/01/f19/UMPChapter17-Estimating-Net-Savings.pdf

[4] ACEEE. 2014. *Examining the Net Savings Issue: National Survey*. https://aceee.org/research-report/u1401

hand, there is a need to understand the net impacts attributable to programs, especially as a way to calculate cost-effectiveness and cost recovery and performance incentive policies in order to protect ratepayer interests. In addition, if the state develops efforts to support building code implementation to achieve incremental savings, it should develop net savings methodologies and conduct independent evaluation of such activities.[5]

Consider a QPI to encourage utility support for the overall state goal/co-managed programs

The proposed approach for energy savings targets is somewhat unique, in that targets would be set as "overall utility-specific energy use reduction targets", but would be comprised of two components: "NJCEP annual energy savings target"; and "utility program annual energy savings targets". This sets up a dynamic where each of the two entities (NJCEP and utilities) are motivated to meet their own goals, but not necessarily motivated to ensure that the other party achieves their goal, or that the "overall" goal is met. (In fact, there could be a potential for conflict between the two entities over who is able to capture particular savings opportunities.) In recognition of these concerns, ACEEE recommends that at least one QPI be focused on achieving the ***combined*** goal, so that the utilities and NJCEP have incentive to cooperate and support each other's success. That cooperation and coordination will be essential in order to avoid conflicts and make programs workable, and to enable the achievement of overall goals. In addition to QPIs, we also recommend the BPU establish a framework and requirement for coordination between the utilities and NJCEP.

Create a tracking QPI for greenhouse gas (GHG) emissions or primary BTU savings

ACEEE supports the Staff's proposal to track and report performance based on all metrics, but base incentives and penalties only on annual and lifetime energy savings in MWh and therms (th) in the near-term. Those energy savings goals align well with metrics specifically referenced in the CEA and are a good starting place as programs ramp up savings to meet CEA requirements.

However, increased urgency on climate change and more aggressive GHG reduction goals by states, cities, and companies require greater attention to the most promising GHG reduction opportunities. Energy efficiency can serve as a central strategy to meeting the state's climate goals. In addition, where electricity is increasingly produced from low-carbon sources, fully or partially shifting from technologies that use fossil fuels to those that use electricity will often reduce emissions, while also often reducing costs. Attention is required to maximize beneficial electrification while also supporting efficiency that does not require fuel switching.

[5] Both Massachusetts and California, for example, have developed approaches for estimating net savings from building energy code support.

Our research[6] finds that states that prioritize the greenhouse gas emissions reductions from their energy efficiency portfolios are increasingly tracking or utilizing fuel-neutral goals which may not specify the resources from which utilities must derive energy savings. It may be an energy goal, measured in British thermal units (Btu's), or it may be a GHG reduction goal, measured in carbon-dioxide equivalents. New York uses one overarching Btu goal, with subtargets for electricity savings; Massachusetts included GHG and source and site Btu goals alongside annual and lifetime energy savings targets measured in kWh and therms.

During New Jersey's initial energy efficiency transition period, ACEEE recommends tracking GHG or Btu savings, which builds capacity for using fuel-neutral metrics so that the state can more easily transition to such metrics for program administrators in future.

Shift the balance of QPIs in years 3-5 to de-emphasize UCT NPV of net benefits relative to other listed QPIs

ACEEE is supportive of having a multi-metric approach to QPIs for years 3-5, and generally supportive of the relative weighting proposed, with one exception. Having such a high proportion of incentive tied to a cost-effectiveness criterion (UCT net benefits in this case) can have unintended negative consequences. In particular, it can lead to an emphasis on "cream-skimming" in program design and delivery (i.e., emphasizing the cheapest measures with high savings to cost ratios and neglecting more comprehensive energy efficiency retrofits and measures). For that reason, we recommend putting relatively less weight on the UCT variable, and relatively more on lifetime energy savings and lifetime of persisting demand savings. Those are arguably the most important variables for energy efficiency being a successful utility system resource.

One related concern is that a motivation to maximize net present value UCT results will lead to a relative neglect of low-income energy efficiency programs, which due to their higher direct costs typically do not pass a UCT test. For this reason, the vast majority of states either exempt low-income programs from cost-effectiveness screening or modify their cost-effectiveness test to include other important non-energy benefits achieved by such programs.[7] We are pleased to see a specific QPI based on low-income lifetime savings. We also recommend exempting low-income programs from any UCT-based QPI or any UCT-based program screening for cost-effectiveness and/or that the state account for the non-energy benefits of low-income efficiency programs in its cost-effectiveness test through the use of an adder or study to monetize benefits in the state. If the state does not have its own study to monetize the benefits and determine a state-specific adder, we recommend an adder of at least 20% based on our review of other state practices.[8]

---

[6] Gold, Gilleo, and Berg. 2019. *Next Generation Energy Efficiency Resource Standards.*

[7] See Berg et al 2019. ACEEE. *The 2019 State Energy Efficiency Scorecard.* https://www.aceee.org/research-report/u1908

[8] See https://database.aceee.org/state/guidelines-low-income-programs

That concludes our specific comments at this time.

ACEEE welcomes this opportunity to provide comments and we look forward to continued engagement with the BPU on these issues.

Sincerely,

Rachel Gold
Senior Manager, Utilities Program
ACEEE
rgold@acee.org
202-507-4005

Marty Kushler
Senior Fellow, Utilities Program
ACEEE
mkushler@aceee.org
248-956-7290

Maggie Molina
Senior Director for Policy
ACEEE
mmolina@aceee.org
202-507-4004

aegis energy
EDF GROUP

Secretary of the Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350
Attn: Aida Camacho-Welch

State of New Jersey

APPLICATION OF UTILITY TARGETS
NEW JERSEY ENERGY TRANSITION

COMMENTS OF AEGIS ENERGY SERVICES, LLC.

Aegis Energy Services, LLC ("Aegis") hereby submits its comments to NJBPU in the above-captioned docket.

Aegis appreciates the State's comprehensive consideration of energy reduction and energy efficiency in its NJ Energy Transition.

We are manufacturers and installers of Combined Heat and Power systems and are writing in support of the state's continuing support of **Combined Heat and Power (CHP) technology** because of its proven high efficiency use of natural gas. Aegis Energy has been in business for 33+ years and has successfully installed 900+ CHP systems throughout the Northeast, Mid-Atlantic, and California. Combined Heat and Power (CHP) is the simultaneous on-site generation of BOTH Heat and Electricity from a single fuel source.

Combined Heat and Power (CHP) is recognized as a *clean energy* technology by US EPA[1] and enjoys widespread support from EPA, US DOE, 2012 Presidential Executive Order No. 13624 [2]and numerous states throughout the country. States such as MA, NY, NJ, and even California provide incentives for

[1] https://www.epa.gov/chp/what-chp

[2]https://obamawhitehouse.archives.gov/the-press-office/2012/08/30/executive-order-accelerating-investment-industrial-energy-efficiency

installing on-site Combined Heat and Power systems. The demonstrated public and utility support for CHP technology comes from its myriad benefits, which include:

1. Highly efficient use of natural gas 85% versus central power plant of 33%. (While natural gas is being used as a "bridge fuel" over the coming decades, CHP essentially uses 85% of each molecule of natural gas in its simultaneous production of electricity and thermal energy.) Such efficiency implies an overall reduction in the amount of gas used when compared to the SEPARATE generation of heat and electricity. Likewise, on site generation of electricity results in reduction of peak demand and thus overall electricity reduction.

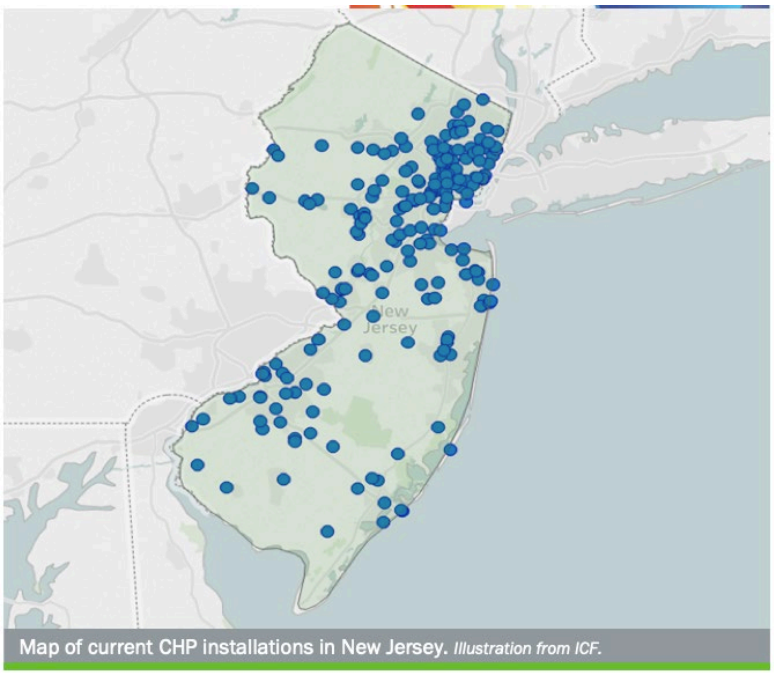
2. Reduced pollutant and CO2 emissions when compared with separate generation of heat and electricity.[3] (50% less)

3. Reduced energy costs
4. Reduced loads and peak loads on central power grid.
5. Resiliency in the wake of power outages. CHP technology can be configured such that it also provides standby power during a grid outage.
6. Reduces utility's need to invest in capital intensive generating capacity
7. Reduces utility's need to invest in distribution lines
8. Integrates well with micro-grids or other renewable energy sources.

In addition to the environmental, efficiency, and cost benefits noted above, a CHP installation has many benefits for the State of New Jersey, which we hope you will consider when evaluating these comments. CHP installations can help keep electric rates in check over the long run as utilities do not have to build additional capital-intensive generating capacity and distribution lines, the costs for which are passed down to commercial and residential customers, thus contributing to stable utility rates for a business-friendly environment. Likewise, these installations employ local skilled trades labor both for installations and on-going maintenance of these systems, which contributes to local employment. Supplies for the installations and maintenance are sourced from local businesses, as well.

Combined Heat and Power technology has already been widely adapted across New Jersey by non-profits , health care, municipalities, industry, and privately-owned multi-family buildings, thereby already making it a **relevant technology** in the state's portfolio. (See map below) [4]

[3] https://www.epa.gov/chp/chp-benefits
[4] https://betterbuildingssolutioncenter.energy.gov/sites/default/files/tools/New%20Jersey.pdf



Map of current CHP installations in New Jersey. *Illustration from ICF.*

CHP's benefits extend beyond bill savings to include reliability, resilience, and valuable grid services that align well with grid modernization objectives. In the future, flexible CHP systems will be leveraged to support grid modernization and provide maximum value to the grid".[5]

Diane Molokotos

Project Engineer

Dianem@aegisCHP.com

203-339-0077

[5] ITC, 2017, Supporting Grid Modernization with Flexible CHP Systems

advanced energy management alliance

PO Box 65491
Washington, DC 20035
p 202.580.8284
e info@aem-alliance.org
aem-alliance.org

February 7, 2020

Via Electronic Mail

Secretary of the Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, New Jersey 08625-0350
Attn: Aida Camacho-Welch

RE: AEMA Comments on BPU Staff's Draft Proposal on the Application of Utility Targets

I. Introduction

Advanced Energy Management Alliance ("AEMA") appreciates the opportunity to comment to the Board of Public Utilities ("BPU") on Staff's draft proposal related to the Energy Efficiency Transition and Application of Utility Targets ("Draft Proposal"). AEMA is a trade association under Section 501(c)(6) of the federal tax code whose members include distributed energy resource ("DER" or "DERs"), advanced energy management services and technology, energy efficiency projects, and demand response ("DR") providers. AEMA also includes some of the largest energy customers in the country, which leverage these services. AEMA members support the incorporation of distributed energy resources, including advanced energy management solutions, to achieve electricity cost savings for consumers, contribute to reliability and resilience, and provide sustainable solutions for a modern electric grid. These comments represent the collective consensus of AEMA as an organization, although they do not necessarily reflect the individual positions of the full diversity of AEMA member companies.

II. Executive Summary

AEMA supports the development of utility targets that will encourage and incentivize energy and demand savings throughout New Jersey, as required by the Clean Energy Act of 2018 ("CEA"). Quantitative Performance Indicators ("QPIs"), combined with appropriate utility incentives, are an essential and proven tool to help realize cost-effective energy reduction savings. Multiple states across the country, including Massachusetts, New York, and Missouri, combine QPIs with utility incentives to encourage the development of successful utility programs that both reduce annual energy usage and reduce annual peak demand. The CEA recognized the importance and value of energy use and peak demand reductions and required utilities to develop programs to accomplish cost-effective savings. This clear legislative intent of CEA, combined with the fact that the top 1% of hours typically account for 8-10% of a system's total electricity costs,[1] demonstrates that both energy and demand reductions should be a key focus of the BPU in developing the metrics against which utilities' performance will be measured.

Unfortunately, BPU Staff's Draft Proposal under-values and under-prioritizes the value of peak demand reductions to New Jersey and omits important sources of peak demand reduction, such as EV-related programs, direct load control programs, curtailable load programs, and other peak demand reduction programs recently proposed by the BPU.[2] Most importantly, its Draft Proposal, BPU Staff proposes to exclude savings from such active demand response programs from its metrics. In addition, Staff proposes to assign an inappropriately low weight and importance to metrics related to peak demand savings and to not consider any demand saving metric until at least three years after program implementation. However, programs targeting peak demand are proven to drive significant benefits to all consumers,[3] and states that

[1] The NY PSC found that flattening the top 100 hours of peak demand would create long-term capacity and energy savings of between $1.2B and $1.7B per year. *Order adopting regulatory policy framework and implementation plan.* New York Public Service Commission, Case 14-M-0101 – "Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision." February 26, 2015.

[2] "Energy Efficiency and Peak Demand Program Administration Straw Proposal." New Jersey Board of Public Utilities. December 20, 2019. Pages 23-25. https://www.njcleanenergy.com/files/file/Final%20Program%20Straw%20Proposal.pdf.

[3] For example, utility peak demand programs in Massachusetts are estimated to provide $3.40 in benefits for every $1.00 spent on the program. "Energy Storage: The New Efficiency. How states can use energy efficiency funds to support battery storage and flatten costly demand peaks." Clean Energy Group, April 2019. Pages 8-9. https://www.cleanegroup.org/wp-content/uploads/energy-storage-the-new-efficiency.pdf.

incentivize active DR programs see robust participation and consumer savings. Staff provides support for their proposed targets citing the "Energy Efficiency Potential in New Jersey" stating that, "[the] study demonstrated that, in the initial program years, there is sufficient potential for energy efficiency to achieve the below stated targets in all utility territories."[4] However, Staff should continue to adopt the position it took in its Energy Efficiency and Peak Demand Program Administration Straw Proposal that "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."[5] This should be done from the beginning of the program implementation and be fully reflected in utility performance metrics.

Staff should therefore amend its Draft Proposal to include savings from active DR programs in any metric related to demand savings. In addition, Staff should ensure that:

- Energy and demand savings metrics are given equal weight; and
- Demand savings metrics are implemented starting with the first year of the program cycles.

Together, these changes will better reflect the legislative intent of CEA and the program administration straw proposal while ensuring that utilities' performance metrics reflect all programs that contribute to peak demand reductions. We expand on these recommendations below, along with additional questions and recommendations for Staff's consideration.

III. The BPU should include savings from active DR programs in any metric related to demand savings, consistent with best practice from other states.

In the Draft Proposal, Staff proposes to define a metric related to "annual demand savings" as follows:

> *"*Annual demand savings are the ex post evaluated net annual incremental peak demand savings. During initial years, in metrics and in QPI results, demand savings will reflect

[4] "Energy Efficiency Transition Application of Utility Targets." New Jersey Board of Public Utilities. January 30, 2020. Page 11. https://www.nj.gov/bpu/pdf/Draft%20Utility%20Targets%20Pre-Mtg%20Proposal_1.30.pdf

[5] "Energy Efficiency and Peak Demand Program Administration Straw Proposal." New Jersey Board of Public Utilities. December 20, 2019. Pages 23. https://www.njcleanenergy.com/files/file/Final%20Program%20Straw%20Proposal.pdf.

only "passive" peak demand savings resulting from efficiency programs *and will not include active demand management / demand response savings*…" (emphasis added) [6]

AEMA is not aware of a single state with demand savings targets that excludes active demand programs from contributing towards the target. In fact, in other states that have performance incentive metrics tied to peak demand reductions, active DR programs are explicitly included and contribute towards the target (*see Table 1*). As a result, utilities in these states all offer robust active DR programs that are cost-effective and drive significant consumer savings. Many regulatory commissions in these states have recently approved utility applications to expand their existing active DR programs or develop new ones to capture additional savings.[7]

Table 1: State peak demand reduction metrics.[8]

State / Utility	Peak demand performance metric	Active DR included?
MA	Peak demand savings MW target determined by utilities and Energy Efficiency Advisory Council, with MA DPU approval.	Yes – aggregated demand reduction goal that includes both passive and active measures
NY	MW of system peak demand reductions	Yes - active DR measures are eligible to contribute to savings metric
RI	MW of annual peak capacity savings, defined as the annual peak hour of demand in ISO-NE	Yes – active DR measures are eligible to contribute to savings metric
MO	Annual demand savings – annual MW target determined by utilities in collaboration with stakeholders	Yes – utilities earn performance incentives if savings targets from active DR programs are met[9]
MI	Spending-based metric for programs that target peak electricity demand reductions	Yes – legislatively defined to include "measures or programs that target equipment or behavior to result in decreased peak electricity demand such as by shifting demand from a peak to an off-peak period"

[6] "Energy Efficiency Transition Application of Utility Targets." New Jersey Board of Public Utilities. January 30, 2020. Page 6. https://www.nj.gov/bpu/pdf/Draft%20Utility%20Targets%20Pre-Mtg%20Proposal_1.30.pdf

[7] See recent press releases from MA's Executive Office of Energy and Environmental Affairs (https://www.mass.gov/news/massachusetts-nation-leading-three-year-energy-efficiency-plan-approved-0), the MI Public Service Commission (https://www.michigan.gov/mpsc/0,9535,7-395-93307_93313_17280-498156--y_2017,00.html), and the MO Public Service Commission (https://psc.mo.gov/Electric/PSC_Approves_Ameren_Missouri_MEEIA_Cycle_3_Plan). See also NY DPS's Jan 2020 Order in ConEd's rate case, approving an electric peak reduction earnings mechanism (http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={7B06921C-6160-4FFD-B10F-1C1D03F16AEE}).

[8] "Performance Incentive Mechanisms for Strategic Demand Reduction." American Council for an Energy-Efficient Economy, February 2020. https://www.aceee.org/sites/default/files/publications/researchreports/u2003.pdf.

[9] Missouri Rules of Department of Economic Development. 4 CSR 240-20.092-094. https://s1.sos.mo.gov/cmsimages/adrules/csr/current/4csr/4c240-20.pdf

The BPU should therefore ensure that demand savings associated with active DR programs are fully captured in statewide performance metrics for utilities. This is consistent with practice in other states, as well as recent proposals by the BPU that would have utilities file for new peak demand reduction programs.[10] Incorporating the impact of active DR programs into demand savings metrics is technically feasible, as demonstrated by other states, and consistent with the intent of CEA to create a performance-based regulatory environment that prioritizes energy and demand savings.

IV. The BPU should prioritize establishing demand savings metrics for the first years of new programs.

Staff proposes a set of seven performance metrics in its Draft Proposal but suggests that only metrics related to annual and lifetime energy savings be evaluated in the first couple program years. AEMA generally supports Staff's "phase-in" approach that provides all stakeholders, including utilities, time to evaluate and refine definitions and inputs prior to the metric impacting utilities' performance. For precisely this reason, Staff should prioritize implementing demand savings metrics in the first program years as well, so that all stakeholders have time to refine them if needed prior to them taking effect. Otherwise, the development of QPIs could significantly lag behind the development of new programs, limiting utilities' opportunities to earn performance incentives and sending a perverse signal about the value of peak demand reduction programs in the initial years.

V. The BPU should ensure that QPIs related to energy reduction and demand reduction metrics are given equal weight.

As noted previously, reducing peak demand is a key focus of CEA and drives significant savings for consumers. The value of peak demand reductions should therefore be reflected in the

[10] "Energy Efficiency and Peak Demand Program Administration Straw Proposal." New Jersey BPU, December 20, 2019. https://www.njcleanenergy.com/files/file/Final%20Program%20Straw%20Proposal.pdf

weighting distribution of any final set of utility performance metrics. Currently, Staff proposes – only beginning in program year three – to value performance metrics related to demand savings at only 50% of the value of performance metrics related to energy savings. To properly incentivize energy and demand saving activities, Staff should ensure that both measures are given equal weights.

VI. Additional questions and comments on Staff's proposed metrics.

In addition to the material concerns noted above, AEMA would like to better understand Staff's rationale for metrics related to a) lifetime savings and b) Net Present Value ("NPV") of Net Benefits.

Specifically, AEMA has concerns that such metrics overlap with annual savings metrics, could double-count benefits, and could create a different cost-effectiveness standard not intended by the CEA legislation.

Regarding lifetime savings metrics, energy and demand savings measures that have a greater degree of persistence and higher lifetime savings will be inherently more valuable to utilities in the presence of annual savings metrics. Savings from measures implemented in Year 1 of a program will, if persistent, be counted in future years and contribute to the annual savings goals in those years. Given that the CEA does not contemplate a sunset date for performance metrics, there is no clear need for metrics associated with persistence. For example, benefits associated with a savings measure that has a 10-year effective life would be fully captured over 10 years of program evaluation, and a separate metric that measures lifetime savings would therefore double-count the associated savings. Persistence metrics could also inadvertently devalue programs such as active DR programs, that have demonstrated persistence but whose out-year savings may not be guaranteed due to limitations in the regulatory approval process that may limit program cycles to three- or five-year cycles.

Finally, the metric capturing the NPV of Net Benefits is already highly correlated with energy and demand savings, as Optimal Energy noted in its Energy Efficiency Potential Study,[11] and therefore may not be necessary. The NPV of Net Benefits from programs would be *entirely dependent* on the results of the energy and demand savings metrics, which determine the level of costs that are avoided by each program. By proposing a metric that would focus on maximizing net benefits, Staff also risks proposing a different standard than contemplated by CEA. While CEA's goal is to ensure investment in *all* cost-effective measures, a metric that focuses on *maximizing* net benefits could bias utilities against measures that have lower (but still positive) cost-effectiveness results.

While Staff's stated goal of this metric is to encourage cost-efficiency of operations,[12] the administrative costs of energy and demand reduction programs that can be reduced with improved efficiencies typically account for only a small percentage of overall program costs. If the BPU wants to encourage cost-efficiency, AEMA recommends there be a metric specifically focused on administrative costs, rather than a metric like NPV of Net Benefits that would neither isolate nor effectively measure utilities' efficiency. Finally, any such metric would have to be carefully defined to ensure that essential program attributes like customer incentives, necessary to attract customer participation and drive energy and demand savings within programs, are not considered a cost to be minimized.

VII. Conclusion

AEMA appreciates the opportunity to submit comments for consideration by the BPU and the BPU's on-going work and efforts to effectuate CEA and establish a regulatory framework that properly incentives energy and demand reductions by utilities. By ensuring that any final set of metrics and QPIs appropriately factors in the contributions of active DR programs to utilities' demand savings, the BPU will ensure that the intent of CEA and utilities' incentives are fully aligned. AEMA also raises additional issues and questions related to the

[11] "Energy Efficiency Potential in New Jersey." Prepared for New Jersey Board of Public Utilities by Optimal Energy. May 24, 2019. Page 98. https://s3.amazonaws.com/CandI/NJ+EE+Potential+Report+-+FINAL+with+App+A-H+-+5.24.19.pdf

[12] "Draft Proposal", page 6.

proposed set of metrics that we encourage Staff to address. AEMA looks forward to additional engagement in this process, and please do not hesitate to reach out should you have any questions regarding this filing.

Respectfully Submitted,

Katherine Hamilton
Executive Director
Advanced Energy Management Alliance
1701 Rhode Island Ave., NW
Washington, DC 20036
Telephone: 202-524-8832
E-mail: katherine@aem-alliance.org

To: **Aida Camacho-Welch, Secretary of the New Jersey Board of Public Utilities (EnergyEfficiency@bpu.nj.gov)**
From: **Kara Saul Rinaldi, Vice President of Government Affairs, Policy and Programs Building Performance Association**
Re: **Application of Utility Targets Comments**
Date: **February 11, 2020**

Thank you for the opportunity to engage with the New Jersey Board of Public Utilities ("NJBPU" or "Board") on the application of utility targets and the proposed target, metric, and QPI structure. As leaders in the residential energy efficiency industry, we appreciate your consideration of the following comments on the Draft Proposal for the Application of Utility Targets that the NJBPU shared on January 30. This response links to several studies and resources to assist the NJBPU staff.

The Building Performance Association (BPA) is a 501(c)6 industry association dedicated to advancing the home and building performance industry by ultimately delivering improved energy efficiency, health, safety, and environmental performance of buildings. BPA was created to combine the expertise and resources of the Home Performance Coalition, Efficiency First, and Home Energy Magazine.

Metrics: Utility Cost Test (UCT) Net Present Value (NPV) of Net Benefits

Cost-effectiveness is highlighted as a core policy objective in this Draft and one which the multifactor metrics are designed to promote. In previous comments submitted to the Board, we have recommended that the NJBPU follow the Resource Value Framework and the specific process outlined in the National Standard Practice Manual (NSPM) to develop a "New Jersey" cost-effectiveness test that is based on sound economic principles and best meets the needs and values of the state. We thank the Board for the consideration of these comments previously, and commend the NJBPU for including a presentation on the NSPM at the December 18, 2019 Energy Efficiency EM&V and Filing & Reporting Stakeholder Meeting on Evaluation, Measurement, and Verification. We appreciate the recognition within this Draft that "many additional benefits are provided by efficiency, beyond those in the UCT" (page 6).

While the benefits contained within the UCT may be more easily monetized, we respectfully request that the NJBPU commit to undertake the step-by-step process outlined in the NSPM to determine whether its current cost-effectiveness testing reflects New Jersey's energy goals and policies. The proposed multifactor metrics structure within this Draft was designed to "allow the Board and utilities to focus on the myriad impacts of utility programs to achieve a holistic

set of long-term program benefits" (page 5). It is important that New Jersey's cost-effectiveness test also account for those myriad impacts and give adequate consideration to all relevant costs and benefits for both the utility system and the non-utility system. As you know, the NSPM addresses the importance of treating energy efficiency as a resource and the range of associated utility system impacts that should be considered in any cost-effectiveness analysis. The NSPM further emphasizes the principle of symmetrical treatment of relevant costs and benefits and provides a range of approaches that can be used to account for applicable hard-to-monetize costs and benefits (such as non-energy impacts). See the appendix for a description of the broad principles set forth by the NSPM.

Since the release of the NSPM in May 2017, the National Efficiency Screening Project (NESP) has worked with numerous states to provide briefings, host webinars and conduct workshops to examine ways to incorporate the NSPM principles and related step-by-step planning process into existing state approaches towards cost-effectiveness testing. Rhode Island, New Hampshire, Arkansas, and Minnesota are examples of states that have applied the NSPM framework in their state planning and regulatory review processes on cost-effectiveness. In New Hampshire, a stakeholder working group applied the NSPM at the direction of the NH Public Utilities Commission, which resulted in a report including the recommendation to use a NH-specific Granite State Test. The Commission approved the recommendation in Order 26,322. This state experience shows how application of the NSPM framework, and the underlying principles, can lead to a state revising its existing test to better align with its applicable state policies and also ensure symmetry in the treatment of costs and benefits. See the NESP New Hampshire Case Study and other state case studies at https://nationalefficiencyscreening.org/resources/case-studies/.

As highlighted in this Draft, the Clean Energy Act requires the Board, in establishing quantitative performance indicators, to "take into account the growth in the use of electric vehicles, microgrids, and distributed energy resources" (page 3). To this point, is also important that the development of a primary cost test be forward-looking and support the integration of other distributed energy resources (DERs) going forward—including demand response, distributed generation, distributed storage, electric vehicles, and strategic electrification technologies. The core concepts of the NSPM can be applied to other types of resources as well. The cost-effectiveness principles described in Chapter 1, and the Resource Value Framework described in Chapter 2, can be used to assess the cost-effectiveness of supply-side resources or DERs. Additionally, the NSPM is actively being expanded to address benefit-cost analysis for a host of DERs and will be available in Summer 2020. For general information about this effort, see: https://nationalefficiencyscreening.org/the-national-standard-practice-manual-for-ders/.

The Building Performance Association and other members of the National Efficiency Screening Project would be pleased to brief the NJBPU or other state Agencies on how a "New Jersey" test could be developed to best meet the needs of the policymakers and ratepayers in New Jersey.

Establishing Data Standards to Enable Quantification

In order to quantify energy savings for each of the 7 metrics proposed in this Draft, data standards are crucial. To support consistent measuring methods for each of these metrics and to ease data sharing of home performance retrofits, BPA reiterates our recommendation from previous comments that NJ BPU support data standardization in the residential energy efficiency industry by requiring the use of the national open data standard, Home Performance Extensible Markup Language (HPXML), for all residential energy efficiency programs.

HPXML can significantly reduce administrative costs by incorporating automated data checks into its program software to validate for program eligibility, energy savings, quality assurance protocols, and more. For example, one year after implementing the standard, the Arizona Public Service reduced quality assurance administrative labor by 50 percent. Participating Arizona home performance contractors also reduced administrative labor by 31 percent per project, leading to a 50 percent increase in contractor satisfaction with the program.

HPXML includes a data dictionary that creates a common "vocabulary" for the residential energy efficiency industry and a data transfer protocol that provides the basis for communication between software systems. It can be used to exchange information across these different software systems and is currently used by 11 programs across five different states in the U.S., including New York, Arizona, and California. The Weatherization Assistance Program has also committed to adopting HPXML over the next two years as it upgrades its software system.

Low-Income Lifetime Savings – Energy Savings for All Income Levels

We are supportive of the inclusion of metric ***#6 Low-income Lifetime Savings.*** The role of equity in residential energy efficiency is a vital consideration in energy policy, and we appreciate the recognition in this draft that "a low-income metric is necessary to promote the equitable distribution of utility resources" (page 7).

To ensure equity, it is also important to consider low- and moderate-income families who might not be eligible for existing low-income programs, but struggle to afford the energy efficiency measures that create significant energy and cost savings. BPA released a report in 2017, Weatherization and Home Performance: Recommendations for Mutual Success and Collaboration, on how low-income weatherization programs can be expanded to help low- and moderate-income families reduce their utility bills. The report aimed to identify opportunities and barriers in creating a more unified set of cost-effective residential energy efficiency programs for all income levels and to discuss the untapped potential for residential energy efficiency. To ensure that low- and moderate-income ratepayers see savings as a result of utility energy efficiency programs, for equitable service and to harness the untapped potential for residential energy efficiency, we urge NJBPU to consider opportunities to account for low- and moderate-income lifetime savings.

Thank you for this opportunity to submit comments. Please do not hesitate to contact me with questions.

Sincerely,

Kara Saul Rinaldi
Vice President of Government Affairs, Policy, and Programs
Building Performance Association
kara.saul-rinaldi@building-performance.org; 202.276.1773
www.building-performance.org

Appendix A

National Standard Practice Manual Principles

Efficiency as a Resource	EE is one of many resources that can be deployed to meet customers' needs, and therefore should be compared with other energy resources (both supply-side and demand-side) in a consistent and comprehensive manner.
Policy Goals	A jurisdiction's primary cost-effectiveness test should account for its energy and other applicable policy goals and objectives. These goals and objectives may be articulated in legislation, commission orders, regulations, advisory board decisions, guidelines, etc., and are often dynamic and evolving.
Hard-to-Quantify Impacts	Cost-effectiveness practices should account for all relevant, substantive impacts (as identified based on policy goals,) even those that are difficult to quantify and monetize. Using best-available information, proxies, alternative thresholds, or qualitative considerations to approximate hard-to-monetize impacts is preferable to assuming those costs and benefits do not exist or have no value.
Symmetry	Cost-effectiveness practices should be symmetrical, where both costs and benefits are included for each relevant type of impact.
Forward-Looking Analysis	Analysis of the impacts of resource investments should be forward- looking, capturing the difference between costs and benefits that would occur over the life of the subject resources as compared to the costs and benefits that would occur absent the resource investments.
Transparency	Cost-effectiveness practices should be completely transparent, and should fully document all relevant inputs, assumptions, methodologies, and results.

February 11, 2020

Aida Camacho-Welch
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Re: Energy Efficiency Stakeholder Group, Application of Utility Targets: Proposed Target, Metric, and QPI Structure, January 30, 2020, Public Comment.

Introduction

The Energy Efficiency Alliance of New Jersey, Natural Resources Defense Council, and Environmental Defense Fund submit the following comment in response to the New Jersey Board of Public Utilities' ("BPU" or "Board") Application of Utility Targets: Proposed Target, Metric, and QPI Structure ("Proposal") under the Clean Energy Act ("CEA"). With these comments we hope to provide the BPU with the information required to create a thriving market for energy efficiency in New Jersey. Over the course of this proceeding, all the groups signed on to this comment have submitted various comments and incorporate them by reference herein.

Clean Energy Act and Utility Targets, Metrics, and QPI Structure

The Clean Energy Act mandates that New Jersey's electric and gas utilities reduce energy usage. Specifically, the CEA requires that each electric utility achieve a minimum 2% reduction in energy usage per year, while each natural gas utility must achieve a minimum .75% reduction per year.[1]

The Clean Energy Act mandates that within one year of enactment, the board will adopt quantitative performance indicators (QPIs) that:

> "are based upon performance, and **take into account the growth in the use of electric vehicles, microgrids, and distributed energy resources**. In establishing quantitative performance indicators, the board shall also consider each public **utility's customer class mix and potential for adoption** by each of those customer classes of energy efficiency programs offered by the public utility or that are otherwise available."[2]

For Evaluation, Measurement, and Verification purposes, the Clean Energy Act mandates:

> "The energy efficiency programs and peak demand reduction programs shall have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, **considering both economic and environmental factors**, and shall be **subject to review during the stakeholder process**."[3]

---

[1] The Clean Energy Act, N.J.S.A. §48:3-87.9(a).
[2] N.J.S.A. §48:3-87.9(c) (emphasis added).
[3] N.J.S.A. §48:3-87.9(d)(2) (emphasis added).

Utility Targets Proposal

I. Metrics

We applaud the BPU for incorporating multifactor performance incentive metrics as part of their review process. But we feel that the metrics identified will not best serve the state and suggest the following changes:

- **There should only be a maximum of four factors that will be weighted for performance.** We recommend these factors be: Annual Energy Savings, Lifetime Energy Savings, Utility Cost Test Net Present Value of Net Benefits, And Low-Income Lifetime Savings. More than four factors can make it difficult for utilities and program implementers to hit the targets as they need to balance multiple concerns. This does not mean that the BPU should not measure other metrics. In fact, the BPU can, and should, measure additional factors to monitor program implementation and ensure success, but only require that four be met for penalties and incentives purposes.

- **Lifetime and Annual metrics need to be more balanced.** The BPU's proposed metrics strongly favor longer lived energy efficiency measures, weighting only 15% to annual savings and 50% to lifetime savings.[4] While lifetime measures are important to energy efficiency portfolios, there should be a balance between incentives for shorter and longer measures to allow for flexibility in portfolio design.

- **The Utility Cost Test should be less than 35% as it is disproportionality higher than other factors.** While the Utility Cost Test is valuable to determine savings it only measures a narrow portion of benefits and therefore should not be weighted disproportionality higher than other factors.

- **Metrics should be adjustable to award for performance in achieving or exceeding other state goals and policies outside of pure energy reduction.** The BPU should allow for the performance metrics to change to accommodate for changing state policy goals. For example, New Jersey is on path to electrify the building and transportation sectors which can increase demand on the grid. This means that the current metrics of annual and lifetime savings may become obsolete. To avoid this, the state should incorporate metrics that measure reduced carbon or other policy goals that look do decrease fossil fuels. For guidance on how to achieve these measures the BPU can look to ACEEE, which just released a paper that examines different states policies on Performance Based Regulations for more forward policy goals.[5]

[4] Adding together different factors on page 10 of Utility Targets Proposal.
[5] American Council for an Energy Efficient Economy, Performance Incentive Mechanisms for Strategic Demand Reduction, February 4, 2020, available at http://www.aceee.org/research-report/u2003.

II. NJCEP Annual Energy Savings Targets and Utility Program Annual Energy Savings Targets.

We recommend the following concerning annual energy savings targets for utilities and NJCEP.

- **Utility Program Annual Energy Savings Targets need to be specific to the utility and service territory**, especially considering that some utilities are ready to meet higher targets. It is irrational and unreasonable to think that each utility will be able to meet uniform targets and increase electricity savings on the same schedule.

- **NJCEP Annual Energy Savings Targets, to the extent programs are run by the state, need to be better defined.** Because the NJCEP is not mandated by the CEA to achieve the energy savings targets in the law, the BPU must ensure that the programs can and will achieve these savings, as utilities may be on the hook if they fail. To do so, the BPU should clarify the process by which the it will determine the projected net annual and net lifetime savings from these programs and what accountability there will be.

III. Tri-Annual Review

We support and appreciate opportunity for public input process to review and discuss the metrics and weighting structure, each utility-specific target, and the performance and incentive penalty structure. But it was unclear in the Proposal how much input the stakeholder group will have on the metrics. We believe that in order for this stakeholder process to have meaningful input, it should be able to change the metrics as well as adjust the weights of the metrics.

Thank you for your time and consideration,

Erin Cosgrove, esq.
Policy Counsel
Energy Efficiency Alliance of New Jersey

Eric Miller, esq.
NJ Energy Policy Director
Climate and Clean Energy
Natural Resources Defense Counsel

Mary Barber
Director, Regulatory & Legislative Affairs
Environmental Defense Fund

February 11, 2020

Aida Camacho-Welch
Secretary of the Board
New Jersey Board of Public Utilities
44 S Clinton Avenue, 9th Floor
Trenton, New Jersey 08625

Comments of Gabel Associates on the Application of Utility Targets Proposed Target, Metric, and QPI Structure

Dear Secretary Camacho-Welch;

Gabel Associates, Inc. ("Gabel Associates" or "Gabel") appreciates the opportunity to provide comments regarding the proposed target, metric, and quantitative performance indicators ("QPI") structure for the Energy Efficiency ("EE") programs in the State. These comments are in response to the Energy Efficiency Stakeholder Meeting on the implementation of targets, metrics, QPIs, and utility targets, which took place on February 4, 2020, as well as the Energy Efficiency Transition Application of Utility Targets Proposed Target, Metric, and QPI Structure Draft released by the New Jersey Board of Public Utilities ("BPU") Staff ("Staff Proposal").

Executive Summary

The Staff Proposal on utility targets, metrics, and QPIs require adjustment to set aggressive yet achievable metrics that align customer interests and utility interests with New Jersey's mandated goal of achieving a national leadership position in energy efficiency. Additional analysis and rulemaking is needed to set final longer-term parameters and comply with the Administrative Procedures Act.

In the meantime, the targets, metrics, QPIs, and utility targets should be set as follows so that utilities and the New Jersey Clean Energy Program ("NJCEP") (as applicable) can expeditiously move to program filing and implementation:

1. Align the savings targets with the Clean Energy Act, which calls for 2.0% savings for electric and 0.75% savings for gas;

2. Evaluate energy savings targets based upon verified gross savings;

3. Reduce the ramp up scaling assumptions for years one through five to more reasonable levels;

4. Simplify the metrics and QPIs used to evaluate utility performance;

417 Denison Street, Highland Park, New Jersey 08904
Phone (732) 296-0770 Fax (732) 296-0799
www.gabelassociates.com

5. Include active demand savings and demand response in the quantification of savings; and

6. Develop and evaluate NJCEP programs in a manner similar to utilities, including a more robust filing process and evaluation against metrics and QPIs.

These recommendations will allow New Jersey to move aggressively to a national leadership position in a manner that is consistent with the Clean Energy Act and is grounded in realistic and rigorous analysis. These recommendations will unlock energy efficiency in all sectors, and, importantly, will set straightforward incentives that do not deter investment in the hard to reach low-income and small commercial sectors.

These comments review specific elements of the Staff Proposal and offer recommendations to provide a framework that promotes the achievement of reasonably aggressive savings targets. We elaborate on these recommendations and issues below.

Background on Gabel Associates

Gabel Associates is an energy, environmental and public utility consulting firm with its principal office located in Highland Park, New Jersey. We have spent decades working in and studying energy markets in New Jersey and have extensive experience in energy efficiency design and implementation and incentive ratemaking. This includes the specialized expertise of the firm's two principals, who both served as senior managers at the New Jersey BPU, and Brendon Baatz, Gabel Vice President, who formerly led the Utility Programs at the American Council for an Energy-Efficient Economy ("ACEEE").

Our work with all types of clients implementing energy efficiency projects provides a perspective that we hope will be informative to the BPU. For example, we provide extensive consulting services to utility customers including hundreds of school districts, counties, and businesses. We also assist electric and natural gas utility companies develop and design cost effective energy efficiency programs. Specifically, we have worked or are currently working on Energy Efficiency related activities with Atlantic City Electric Company ("ACE"), Public Service Electric and Gas Company ("PSE&G"), Elizabethtown Gas Company ("Etown"), New Jersey Natural Gas Company ("NJNG"), and South Jersey Gas Company ("SJG"). Because of the breadth of sectors where we provide our services, we have a deep and balanced sensitivity to the needs of all types of energy market participants.

Feedback on the Staff Cost Recovery Proposal

The current Staff Proposal on utility targets is ambitious, but its recommendations require adjustment because it uses the flawed *Energy Efficiency Potential in New Jersey* ("Potential Study"), released in May 2019.[1]

[1] https://s3.amazonaws.com/CandI/NJ+EE+Potential+Report+-+FINAL+with+App+A-H+-+5.24.19.pdf

The specific topics from the Staff Proposal that merit additional discussion and adjustment include:

- Potential Study assumptions;
- Net savings;
- Energy savings targets;
- Scaling of annual savings targets;
- Metrics and QPIs;
- Active demand response; and
- NJCEP annual energy savings targets.

Each of these issues is discussed in greater detail below.

a. Potential Study

Staff Proposal: The Staff Proposal leaned heavily on the findings of the Potential Study. This included items such as savings targets, scaling of savings targets, net vs gross assumptions, and other items.

Discussion: The Staff Proposal draws extensively from the Potential Study, including items such as implementing a net savings target, including seven metrics on which the QPIs will be evaluated, the weighting structure for the metrics and QPIs, and the utility specific targets which exceed the savings goals in the Clean Energy Act, among other concepts. Each of these items are vitally important to enable utilities to meet the State's goals. During and after the stakeholder process regarding the Potential Study in early to mid-2019, it became very clear (as reflected in the comments of almost of every stakeholder) that the Potential Study performed by Optimal and submitted to the Board was technically flawed, did not rely on any primary data in New Jersey, and was extremely limited in scope. Due to a variety of technical and due process limitations, it would be unreasonable to use it as basis for setting the targets and other metrics in this matter.

Some of the technical problems related to the Potential Study were provided in our earlier comments (included as an appendix), as well as the comments of many other stakeholders,[2] and are summarized as follows:

- Ramp rates are excessively high and should be lowered;
- Net-to-gross assumptions were not disclosed;
- Unreasonable reliance on certain measures such as heat pumps, furnaces, low-flow showerheads, and home energy reports;
- No limit on incentive payments to customers makes the potential savings values unrealistic;
- It did not account for demographic and firmographic diversity of service territories; and
- Inclusion of AMI for all customers to increase savings and demand reduction programs.

In addition, from a due process standpoint, the development of each of these items was done without adequate input and without providing sufficient data to stakeholders to understand or

[2] https://www.njcleanenergy.com/files/file/public_comments/FY19/CombinedCommentsRev2.pdf

challenge the inputs and assumptions developed to determine the conclusions in the Potential Study. Accordingly, in addition to the technical problems noted above, the Potential Study cannot be found to be reasonable since stakeholders have not been provided an opportunity to truly review the Study, its underlying assumptions, and associated data.

These limitations were well known when the Potential Study was moved to the Board's agenda on May 28, 2019, where the Commissioners themselves and Staff made clear that the Study was only accepted for the purpose of meeting the requirement of submitting it to the legislature and its findings were not accepted for use in setting goals, incentives, and other metrics:[3]

> *I just want to confirm that by our vote today we are simply acknowledging the completion of the report and officially receiving it but not necessarily endorsing all of the findings*
> -Commissioner Gordon

> *We're accepting the report and again, it's not an endorsement of what the findings are, it's just that we accept it basically is what it is. We've notified them that it is available*
> -President Fiordaliso

> *We are not accepting any findings from within the report; this agenda item is merely deeming that we have met the statutory obligation and the study is complete*
> -Sara Bluhm, Director, Division of Clean Energy

> *I think that we need to make it clear that as Commissioner Gordon did that these findings are preliminary. Hopefully the legislature will also recognize that just from the comments in the appendix that were attached to this report that there were concerns with this study in some of the recommendations in the way that they were made and that we are cognizant of those issues and will address them as we move forward and that this is not going to be the end of this process and I'm only making these comments to solidify the record so you know should we be revisited another time regarding this study that it's clear to any that reference it that this is only being accepted for purposes of having completed a task that was dictated to us*
> -Commissioner Solomon

In light of this background, it is surprising and unreasonable that the Staff Proposal now proposes that the Optimal Potential Study serve as the basis for the Board's setting of incentives, goals, and QPIs.

Recommendation: Gabel Associates recommends that the Potential Study not be utilized. Instead, the Board should establish reasonable targets and processes from which utilities will attempt to satisfy the State's goals. Accordingly, the BPU should establish reasonable goals, QPIs, and incentives for the initial utility transition programs; and continue the process of review and rulemaking to set targets and QPIs for subsequent programs.

[3] Transcribed from the webcast of the May 28, 2019 Board Meeting found at: https://www.youtube.com/watch?v=PsQ2fqS9pT4

b. Net Savings

Staff Proposal: Measure utility progress toward the annual energy savings goal based on ex post evaluated net incremental savings.

Discussion: Net savings are often a metric used to review energy efficiency program savings; however, the Clean Energy Act does not require for savings targets to be assessed on a net basis. In fact, the Clean Energy Act calls for the State to achieve savings on a gross basis, as explained in the following excerpts.

> *Take into account the public utility's energy efficiency measures and other non-utility energy efficiency measures including measures to support the development and implementation of building code changes, appliance efficiency standards, the Clean Energy Program, and other State-sponsored energy efficiency or peak demand reduction programs, and public utility energy efficiency programs that exist on the date of enactment*
> -N.J.S.A. 48:3-87.9(c).

> *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, building codes, and other efficiency standards in effect, to achieve the targets established in this section*
> -N.J.S.A. 48:3-87.9(c).

Calculating net savings can also be problematic, as many jurisdictions consider free-ridership, but not spillover and other positive effects of energy efficiency programs. The net-to-gross ratio, i.e. the relationship between gross savings and net savings accounting for free-ridership and spillover was not released in the Potential Study, and there have been few (if any) studies in New Jersey conducted to determine a reasonable net-to-gross ratio for these programs. It is unreasonable to set savings targets based upon a net-to-gross ratio that has not been released to, or evaluated by, any set of stakeholders.

Notwithstanding the above, there must be robust Evaluation, Measurement, and Verification ("EM&V") on all program administration and savings. This should evaluate factors such as free-ridership, spillover, effectiveness of marketing, evaluation of processes and procedures, and many other factors. All this information is invaluable to improve future program offerings.

Recommendation: Gabel Associates recommends that energy savings be reviewed on a verified gross basis, as provided for in the Clean Energy Act. Expected gross, verified gross, and net savings should be included in the EM&V evaluation as this information is vitally important to understand for program administration, delivery, and planning.

c. Energy Savings Targets

Staff Proposal: Electric utilities will be required to reach 2.15% of ex post evaluated net savings and gas utilities will be required to reach 1.1% of ex post evaluated net savings by year five of the programs. Interim savings goals will also be evaluated based upon ex post evaluated net savings.

Discussion: Use of ex post evaluated net savings is not a reasonable method to evaluate utility savings. Utilities will be developing and submitting programs using good-faith assumptions and inputs to attempt to build a program that will successfully help customers save energy and the State reach its mandated goals. These good-faith assumptions will be included in utility filings, reviewed by Board Staff, Rate Counsel, and other interveners, before ultimately being approved by the BPU as reasonable assumptions.

A more reasonable methodology would be to evaluate targets based upon verified savings. Verified, or claimed, savings are defined as the post-installation savings calculated based upon verification of participation and other factors. Verified savings use the approved measure-level savings assumptions and the actual installation and participation figures to determine savings from the energy efficiency programs. Verified savings differ from ex post evaluated savings because they do not change the good-faith assumptions approved by the BPU on measure-level savings assumptions. It is unreasonable to "move the goal posts" after a utility has already implemented a program.

The fifth-year savings targets in the Staff Proposal are also proposed to be higher than the targets set in the Clean Energy Act, which is unreasonable at this time. As discussed, the targets in the Staff Proposal were developed in the Potential Study, which did not have transparent assumptions, place an unrealistic reliance on certain technologies, and represent the maximum achievable savings. They are also based upon assumptions from a number of other states, with limited New Jersey specific assumptions. Lastly, they do not account for the diversity across utility service territories, which is why a "one-size fits all" approach is not appropriate for setting these goals.

Recommendation: Gabel Associates recommends that targets be evaluated based upon verified gross savings. The year five goals should be set at 2.0% for electric and 0.75% for natural gas, as established in the Clean Energy Act, until a comprehensive and reviewed utility-specific market potential study is conducted to determine the reasonably achievable savings for each utility.

d. Scaling of Annual Savings Targets

Staff Proposal: Electric utilities will have to scale at 0.35% each year and gas utilities will have to scale at 0.25% each year.

Discussion: The Staff Proposal includes the overly ambitious ramp rates contained in the Potential Study, which require electric utilities to achieve 0.75% savings in year one and 2.15% savings in year five, an increase of 0.35% saving each year. It requires gas utilities to achieve 0.25% in year one and 1.10% in year five, an increase of 0.25% in the early years and de-escalating to 0.15% in the final year.

For electric utilities, that means more than doubling the current savings achieved in the State in just the first year of program administration, than increasing again by 50% in year two. According to ACEEE data, natural gas savings are already achieving year one targets, but the Staff Proposal will require doubling the savings in year two, and year three will require a 50% jump in savings again. The following chart illustrates the growth rates for each year according to the schedule in the Staff Proposal:

Year	Electric Target	%Δ	Gas Target	%Δ
Current[4]	0.35%		0.29%	
1	0.75%	114%	0.25%	-14%
2	1.10%	47%	0.50%	100%
3	1.45%	32%	0.75%	50%
4	1.80%	24%	0.95%	27%
5	2.15%	19%	1.10%	16%

The Potential Study cites the ACEEE annual state scorecard as a source of ramp rates. However, this data source should not be relied on for several reasons. ACEEE has not used a consistent methodology in tracking savings achieved by utilities across past analyses, making a comparison of ramp rates from year to year unreasonable. Other research by ACEEE has shown that the average ramp rate of top performing program administrators was 0.19% per year.[5] Furthermore, the Potential Study is based on historic performance prior to the changes in residential lighting standards, which dominated portfolios during that time. New Jersey utilities will rely much less on 'low hanging fruit', such as residential lighting, and ramping up to higher savings levels will be more challenging than in previous years.

In addition, the proposed 0.35% ramp rate outlined in the Potential Study exceeds those cited in the literature review provided in Section 2 of the Potential Study and exceeds the ramp rates experienced in Massachusetts, a leading state in energy efficiency.

Recommendation: Gabel Associates recommends that the annual ramp rates be proposed by each utility in its program filing. This will allow utilities to tailor the expected program growth to the specific characteristics of their service territory. By allowing utilities to propose specific ramp rates, it also accounts for the fact that much of the easier to achieve savings from the 'low hanging fruit' in the efficiency space (such as lighting) has already been captured through existing programs, so future programs will need to rely on deeper savings that require infrastructure development, marketing, culture change, and a not-yet developed network of energy efficiency market vendors that will take time and investment to cultivate.

[4] According to ACEEE 2019 State Energy Efficiency Scorecard
[5] https://www.aceee.org/sites/default/files/publications/researchreports/u1601.pdf

e. Metrics and QPIs

Staff Proposal: The Staff Proposal includes seven distinct metrics including: 1) annual energy savings; 2) annual demand savings; 3) lifetime energy savings; 4) lifetime persisting demand savings; 5) utility cost test net present value ("NPV") of benefits; 6) low-income lifetime savings; and 7) small business lifetime savings. Each metric will be weighted, and actual performance will be evaluated against expected performance. Each utility has preliminarily been provided the exact same metric targets, weightings, and QPIs.

Discussion: The metrics and QPIs are overly complex, confusing, and do not send clear signals to utilities on how the State values different actions. Multiple targets with different weights create confusion. For example, it appears the Staff Proposal reflects a belief that reduced utility spending is 350% more important than savings for low income and small business customers. This is quantitatively deduced based upon the metric weights of 35% for the Utility Cost Test ("UCT") and only 10% for low-income and small business savings.

The weights on the UCT, low-income, and small business in the Staff Proposal do not work in concert with one another, as low-income and small business savings are typically more expensive and require larger incentives to achieve – directly in conflict with the UCT. The UCT, also known as the Program Administrator Cost ("PAC") test, is a cost-benefit test that analyzes program administrator spending against savings. A rational utility looking to negotiate the metrics and QPIs in order to maximize incentives and minimize penalties will naturally avoid spending in the low-income and small business sectors to reduce program costs – the exact opposite outcome of the Murphy Administration and the BPU. It is unreasonable for the Staff Proposal to ask for something expensive (savings from low-income and small business customers) and then penalize utilities for spending money to achieve these goals.

The Board will have insight and control over program costs through the utility filing process, and the Board, Rate Counsel, and intervenors will be given the opportunity to review, comment, and rebut all program costs. This process places the burden of proof on the utility and provides the Board with an understanding of the cost effectiveness of the programs through the provision of five cost-benefit tests rather than just one. Ultimately, the Board will approve a program plan with a specific authorized level of spending related to estimated savings and cost effectiveness results. Once approved, utilities are effectively capped at those authorized spending levels, meaning that programs can only be delivered at or below that cost that was deemed just and reasonable. Utilities are also required to file annual reports updating the Board on the progress of the energy efficiency programs. These annual compliance filings provide the Board with continuing oversight of the spending of utilities.

Another issue with the Potential Study, and the metrics and QPIs proposed in the Staff Proposal which used the Potential Study without adjustment, was the lack of individualized data; not just for specific utilities, but for the State of New Jersey in general. The generalized assumptions in the Potential Study from other states were applied without basis for New Jersey, and many of the assumptions create unfair expectations for utilities in New Jersey that are not like those in other states.

The BPU should also consider how the metrics and QPIs interact with the performance incentives and penalties being established through a separate process. These items are unquestionably linked and will have a direct impact on utility motivation and behavior. At present, there are potential perverse incentives, which could cause utilities to underestimate savings potential due to the severe penalty structure. The BPU should strive to incentivize utilities to maximize savings, not minimize risk.

Recommendation: Gabel Associates recommends using only the metrics and weights contained in the Staff Proposal for years 1-2 for the initial utility transition programs (potentially three years to match up with the first utility program filing). Those metrics and weights should be used for the entirety of a utility's initial transition filing. Subsequently, the BPU should hold a stakeholder process to determine which metrics are most valued by the State, and how those metrics should be weighted to create an environment which motivates the creates the desired behavior by utilities. This subsequent process should develop appropriate metrics and QPIs at least one year prior to any subsequent utility program filings to allow for those factors to be considered in the development of future utility program filings.

f. Active Demand Response

Staff Proposal: Demand savings will reflect only "passive" peak demand savings resulting from efficiency programs and will not include active demand management / demand response savings.

Discussion: It is unclear why "active" demand management and demand response savings were excluded from the metrics and QPIs of the Staff Proposal. All savings achieved by utilities should be counted if they can be verified, and the State should not ignore demand related savings.

Recommendation: Gabel Associates recommends active demand management / demand response savings be recognized and encourage utilities to implement active demand / demand response programs to increase savings for the customers of New Jersey.

g. NJCEP Annual Energy Savings Targets

Staff Proposal: Under the Staff Proposal, projected net annual and net lifetime savings from programs administered by NJCEP, by utility territory, will be subtracted from the utility-specific overall energy savings targets.

Discussion: Eliminating savings related to programs administered by the NJCEP is necessary as utilities should not be subject to evaluation, incentives, or penalties for programs they do not administer. This means that calculating the appropriate quantity of savings for NJCEP programs is vital. Because utility programs address separate customer markets than NJCEP programs, miscalculation of NJCEP program savings will result in savings to certain customers not being realized toward the Clean Energy Act goals and could subject utilities to penalties if they are not able to overproduce in other segments. Accountability and validity of NJCEP savings is vital to a well-managed, dual-administrative structure as proposed by BPU Staff.

In addition, NJCEP should also be subject to metrics and QPIs to evaluate and assure that those programs are being managed and implemented to benefit customers. All programs in the State should be subject to similar review metrics, QPIs, incentives, and penalties.

Recommendation: Gabel Associates proposes an open and transparent annual review of NJCEP programs, Annual Energy Savings Targets, and achievement of such targets. This would allow for intervenors and stakeholders to participate and be provided with information and data from NJCEP. This will help the State and utilities to develop programs, review results, improve marketing, and support other energy efficiency efforts in an open and fair manner to assist in making New Jersey a leader in energy efficiency.

Reasonableness of Targets in Staff Proposal

The Clean Energy Act states that:

> *the board shall adopt quantitative performance indicators pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) for each electric public utility and gas public utility, which shall establish* ***reasonably achievable targets for energy usage reductions and peak demand reductions***
>
> -emphasis added

The use of the Potential Study does not represent reasonably achievable targets for utilities. The Potential Study did not disclose many of the assumptions supporting the results, and those that were released were unrealistic, such as the ramp rates, the reliance on certain measures to carry program savings, the lack of demographic and firmographic diversity across utility service territories, and the assumption that there was no limit on incentive payments. This is unrealistic, especially when compared against the fact that the Staff Proposal placed the greatest weighting on reduced utility spending (through use of the UCT). This is also relevant for low-income programs that often have savings which cannot be realized due to health and safety concerns. In an unlimited incentive environment, all these savings can be realized; however, in New Jersey, there are strict limits on the value of incentives that can be contributed toward non-energy savings expenditures.

While New Jersey should strive for the most savings possible, and to be a national leader in energy efficiency, it is not reasonable to set the targets above those mandated in the Clean Energy Act until a comprehensive utility-specific comprehensive potential study and wide-ranging EM&V has been completed on existing programs. The savings targets should be set at reasonably achievable levels, as required in the Clean Energy Act.

Proposed Utility Targets Structure

A utility target structure that fosters an environment to achieve all cost-effective energy savings is vital for the State to achieve the ambitious goals set forth in the Clean Energy Act. The Board should consider the following elements in order to maximize the potential for the State to reach its goals:

Element	Target	Comments
Year Five Savings Targets	2.00% for electric 0.75% for natural gas	Should base goals on the Clean Energy Act until a comprehensive potential study is developed that evaluates potential on a utility-by-utility basis
Savings Target Assessment	Verified Gross Savings	Aligns with Clean Energy Act
Scaling of Savings Targets	Utilities proposed territory-specific targets based upon reasonably achievable goals	Should understand that some utilities are prepared to scale immediately while others are not
Metrics and QPIs	Use Staff Proposal for Metrics and Weights in years 1-2 for initial utility transition filing: 40% for Annual Energy Savings and 60% for Lifetime Energy Savings	Implement a stakeholder process to determine the most important factors for the State to incentivize through QPIs in subsequent rounds of utility filings

Each of these elements represents a prudent and reasonable interpretation of the Clean Energy Act and puts New Jersey on a path to be a national leader in energy efficiency and exceed the 2.0% and 0.75% goals of the Clean Energy Act.

Conclusion

Gabel Associates appreciates the opportunity to share these comments and provide the Board with insight into issues related to Energy Efficiency cost recovery.

We are happy to provide any supplementary information or answer any questions you may have regarding our comments. We look forward to continuing to participate in the open stakeholder process.

Sincerely,

Isaac Gabel-Frank
Vice President
Gabel Associates

Appendix A

Comments of
Gabel Associates Provided on May 16, 2019 Regarding
the Draft Study: Energy Efficiency Potential in New Jersey

Comments of Gabel Associates, Inc.
to the
DRAFT STUDY: ENERGY EFFICIENCY POTENTIAL IN NEW JERSEY

May 16, 2019

Pursuant to the Clean Energy Act (P.L. 2018, c. 17), and in response to the email distribution provided by the New Jersey Clean Energy Program on Thursday, May 9, 2019, containing the Draft Study: Energy Efficiency Potential in New Jersey ("Draft Study"), Gabel Associates welcomes the opportunity to provide comment and feedback to further the states' efforts in reviewing and finalizing the findings of the Draft Study. We appreciate the effort and considerable work that has gone into completing this Draft Study in such a short time frame. We also applaud the BPU for undertaking the implementation of one of the highest energy efficiency standards in the country.

Gabel Associates, Inc. is an energy, environmental and public utility consulting firm with its principal office in Highland Park, New Jersey. For over 25 years, Gabel Associates has provided highly focused energy consulting services and strategic insight to its clients. Gabel Associates provides consulting services to energy consumers in the State of New Jersey, including more than 400 school districts and over 200 municipalities, to make their operations more energy efficient; to several electric and gas utilities in New Jersey on energy efficiency program design, policy, and cost benefit analysis; and has undertaken studies of energy efficiency issues throughout the country. We have a deep understanding of customer needs as well as utility ratemaking and policy considerations. As such, the firm has an interest in the Draft Study results and subsequent BPU guidance resulting from the Draft Study and specific and unique experience in these issues.

The comments provided below describe various key concerns related to the Draft Study itself, the process undertaken to develop it, potential outcomes related to its implementation, and recommendations to the Board on how each issue may be addressed.

Issue 1: The reasonableness of the analysis and results cannot be determined because the underlying data was not provided

Discussion: None of the appendices were included in the Draft Study and many of the assumptions have not been disclosed. The lack of data and underlying assumptions makes it impossible for stakeholders to review the reasonableness and validity of the analysis presented in the Draft Study. For example, it is unclear what costs, savings, and measure penetration assumptions were made to arrive at the aggressive savings targets presented. The Draft Study

417 Denison Street, Highland Park, New Jersey 08904
Phone (732) 296-0770 Fax (732) 296-0799
www.gabelassociates.com

also does not discuss or disclose the net to gross assumptions used to arrive at the net savings presented. Stakeholders should be provided full information to allow a reasonable review of the underlying data to ensure the savings targets are realistic.

Recommendation: The full Draft Study, including all underlying assumptions and appendices, should be provided to all parties, who should then be given adequate time to review and respond. At this time, the Board should only recognize the Draft Study as a filed document, and it should not serve as the basis for (or be deemed as precedential value for) setting EE or QPI policy targets or guidance or for EE ratemaking.

Issue 2: Ramp rates are excessively high and should be lowered

Discussion: The Draft Study assumes ramp rates, i.e. the change in savings levels from one year to the next, of 0.35% per year for electric savings. The Draft Study cites the ACEEE annual state scorecard as a source of ramp rates. However, this data source should not be relied on for several reasons. First, ACEEE has not used a consistent methodology in tracking savings achieved by utilities across past analyses, making a comparison of ramp rates from year to year unreasonable. In addition, the proposed 0.35% ramp rate outlined in the Draft Study exceeds those cited in the literature review provided in Section 2 of the Draft Study and exceed the ramp rates experienced in Massachusetts, a leading state in energy efficiency.

In addition, because of the impending change to lighting standards, historical ramp rates are much less relevant when considering future ramp rates. This is because ramp rates in prior years are dominated by portfolios which relied on residential lighting to achieve savings targets, a low effort, low cost, high savings technology that will not be available moving forward because of the impending changes to lighting standards.

Recommendation: The BPU should reconsider the ramp rates recommended by the Draft Study in light of these factors. Finally, as discussed in Issue 1, stakeholders have not had the opportunity to review assumed market uptake assumptions, which underlie the target ramp rates. This data should be carefully reviewed and vetted with parties to realistically estimate how quickly the programs in New Jersey can grow.

Issue 3: The Draft Study results do not inform the QPIs

Discussion: According to the Clean Energy Act, the Market Potential Study should inform the QPIs. While the Draft Study does inform the QPIs for energy, demand, and lifetime savings, the other QPIs proposed in the Draft Study, including QPIs for low income energy savings, small business energy savings, and "to be determined", are not discussed or informed by the Draft Study.

In addition, the low income energy savings, small business energy savings, and other "to be determined" QPIs, are vague and undefined, and therefore will require a much deeper analysis

to understand how to define the characteristics of the goals, establish utility specific goals, and measure the results. This is typically achieved through a stakeholder process. The Draft Study provides no information on the number of low-income customers or number of small businesses in New Jersey or any other relevant data that would help define and inform these QPIs.

Recommendation: The BPU should not adopt a focused list of QPIs at this time and should develop metrics through a focused stakeholder process.

Issue 4: No cost information is presented for the demand response programs

Discussion: The demand response programs are presented in the Draft Study as cost-effective; however, no cost or benefit assumptions are presented on the cost benefit analysis of these programs. Therefore, the review of the reasonableness of this analysis cannot be determined without understanding how the costs and benefits were estimated for these programs. One program shows a cost benefit ratio of nearly 600, which requires additional review to substantiate.

Furthermore, it appears the Draft Study assumed New Jersey has AMI deployed to achieve demand savings beginning in 2020 for the residential CPP opt out with thermostat program. This is incorrect and an unreasonable assumption. In addition, it is unrealistic to believe wholesale rate design and a large-scale roll out of opt-out demand response programs can occur in such a short time frame.

Recommendation: BPU should open an investigation into the future of demand response programs in New Jersey, allowing an open, transparent stakeholder process to determine how these types of programs will be implemented and what their interaction should be with the energy efficiency programs. The demand response programs should also be limited to programs that are currently technically feasible in New Jersey, unless or until the Board implements comprehensive AMI which would greatly facilitate achievement of the EE goals.

Issue 5: The Draft Study is focused solely on net savings, but the Clean Energy Act is based on gross savings

Discussion: The analysis and recommendations presented in the Draft Study are heavily focused on net energy savings. However, the energy savings goals in the Clean Energy Act are based on gross savings. This is evident by the fact that the law allows the goal to be met with building code changes and appliance efficiency standards. While it is unclear what assumption underlie the Draft Study regarding net to gross ratios, the energy savings goals should be based on gross savings, not net savings.

Recommendation: The BPU should clearly state the net to gross assumptions used in the Draft Study and also adjust the savings targets to gross values, as called for the Clean Energy Act.

Issue 6: Performance incentive and penalty proposal is to complex and does not send a clear signal for utilities to follow

Discussion: The performance incentive and penalties proposal in the Draft Study is undefined, overly complex, and unfocused and should be refined in a subsequent stakeholder process. In order for the incentive structure to work it must provide clarity to utilities with respect to goals. There are numerous issues with the current proposal, including whether utilities can be penalized for a failure to meet savings targets if OCE is still administering programs. It is unfair to award or penalize a utility for exceeding or not meeting a goal when the ability to meet that goal is out of its hands.

The performance incentive structure also includes too many metrics. This makes it to complex which means it does not provide clear, defined signals for action and is not well defined. This also makes it an easy target for litigation as the targets can be interpreted in many different ways.

Recommendation: BPU should not make a decision on performance incentives, penalties, and QPIs until stakeholders have a full opportunity to be heard.

Issue 7: The QPIs recommended in the Draft Study cannot be adopted by the Board as the process did not adhere to the Administrative Procedures Act

Discussion: The QPI recommendations were not developed pursuant to the Administrative Procedures Act. The Clean Energy Act requires that adoption should be consistent with the APA as it clearly states that "the board shall adopt quantitative performance indicators pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) for each electric public utility and gas public utility, which shall establish reasonably achievable targets for energy usage reductions and peak demand reductions."

Recommendation: Adoption of QPIs should follow the Administrative Procedures Act.

Issue 8: The Draft Study does not recommend a reasonable cost recovery and performance incentive structure

The Draft Study (p. 81) notes that a lower return might be appropriate for energy efficiency investments than traditional supply side investments by stating that "efficiency programs carry much lower risks to shareholders than do most supply side investments."

However, this assertion misses a critical point of why utilities should be allowed the same return on investment for energy efficiency than other investments. Utilities have limited capital to invest. If one alternative has a higher return than another, utilities will make investments in the

opportunities with higher returns. The Board's ratemaking for utilities should be in alignment with and encourage utilities to achieve and surpass the Sate's EE goals. Certainly a result that leads to utilities experiencing reduced financial outcomes for achieving or surpassing New Jersey's goals should be avoided.

To encourage utility investment and ownership in energy efficiency programs, the utility ratemaking and business model should be updated. As with other investments, utilities should be permitted to earn a return on and of energy efficiency investments under a reasonable time period. Utilities should also be made whole in terms of lost revenues resulting from reduced sales driven by efficiency improvements. Instead of a mechanism that only allows recovery of calculated lost revenues, the BPU should approve full revenue decoupling for electric and gas utilities. Lost revenue adjustments outside of full revenue decoupling are administratively burdensome for utilities and difficult to review and verify for the BPU. Full revenue decoupling balances risk between utilities and customers and symmetrically adjusts revenues in a fair way for both. Finally, a simple performance incentive structure should be adopted to encourage utilities to go above and beyond energy efficiency targets.

Recommendation: As discussed above, the BPU should align utility ratemaking with its goal of growing energy efficiency.

Issue 9: Environmental benefits valuations should be transparent and should align with Governor Murphy's Environmental Justice and Energy Policies

Discussion: It is not clear from the Draft Study how environmental valuations were considered. Energy efficiency will provide a host of environmental benefits, including reductions in greenhouse gas emissions (including carbon dioxide); as well as nitrogen oxide (NO_x) and sulfur dioxide (SO_2), two pollutants that are of significant concern in New Jersey especially in urban areas and environmental justice communities, a key policy focus of the Murphy Administration. Accordingly, it is important that the BPU appropriately value the benefits of these emission reductions. If these benefits are not properly monetized, the BPU's EE policies will not live up to the vision of the Clean Energy Act and the state's goals. In fact, the Clean Energy Act requires these social benefits to be captured in the analysis.

It is recommended that the BPU use the following well recognized and thoroughly peer reviewed studies to value emissions benefits:

- CO_2 – Technical Support Document – Technical Update on the Social Cost of Carbon for Regulatory Impact Analysis. Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. August 2016. epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf.

- NO_X and SO_2 - Technical Support Document for Estimating Benefit per Ton of Reducing PM2.5 Precursors from 17 Sectors. United States Environmental Protection Agency.

February 2018. epa.gov/sites/production/files/2018-02/documents/sourceapportionmentbpttsd_2018.pdf.

Recommendation: Environmental benefits should be clearly valued in the BPU's Energy Efficiency goals and target setting and should use the studies cited above.

Gabel Associates appreciates the opportunity to provide comment on the Draft Study. We would be pleased to discuss these issues further and look forward to further participation with the Board and other stakeholders.

Jersey Central Power & Light
A FirstEnergy Company

300 Madison Avenue
Morristown, NJ 07962

Joshua R. Eckert, Esq.
(973) 401-8838
(330) 384-3875 (Fax)

February 11, 2020

VIA ELECTRONIC MAIL ONLY

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue
Trenton, New Jersey 08625
energyefficiency@bpu.nj.gov

Re: Application of Utility Targets

Dear Secretary Camacho-Welch:

On behalf of Jersey Central Power & Light Company ("JCP&L" or the "Company"), please accept this letter as JCP&L's comments in response to the proposal related to the development and implementation of utility energy use reduction targets, quantitative performance indicators ("QPIs"), and the review of utility performance related to energy efficiency ("EE") and peak demand reduction programs ("proposal") made available to stakeholders on January 30, 2020. JCP&L thanks the New Jersey Board of Public Utilities (the "Board") for the opportunity to provide these comments and hopes that they will be instructive as the Board reviews and evaluates the proposal.

I. COMMENTS

Energy Saving Targets Should Be Based On Gross Savings Not Net Savings

As noted in earlier comments within this proceeding, JCP&L and other utilities have expressed significant concerns about their ability to meet the legislative mandate of the Clean Energy Act ("CEA") for a number of reasons including, but not limited to, the sheer aggressiveness of the energy saving targets as well as the proposed increase and aggressive ramp up in the targets recommended within Optimal Energy's market potential study ("MPS") and adopted by Staff in its proposal. During the February 4, 2020, EE Transition Stakeholder Meeting regarding "Application of Utility Targets, Proposed Target, Metric, and QPI Structure," Staff clarified that target references to net savings in their proposal did not just mean net of the load growth that might occur from factors like electrification or electric vehicle adoption, but rather that it also meant net of actual energy savings achieved but estimated to have resulted from "free ridership". In providing its recommended savings goals for the utilities as part of the MPS, Optimal states that "[p]er the requirements of the Act, these goals are defined in terms of *annual incremental net energy savings*." (MPS at 86) (emphasis in original). In a footnote, Optimal further clarifies that "*[n]et savings* refers to the estimated additional savings resulting from the programs, beyond what otherwise would have happened." (*Id.* at fn. 73) (emphasis in original). Optimal also refers to its

recommended targets as "Net savings targets" and suggests that one of the performance indicators used to determine whether utilities receive incentives be "Ex-post evaluated net annual incremental savings for the plan period." (MPS at 96, Table 39 and MPS at 100 Table 42). Taken together and literally, these statements mean that utilities would not be able to count all of the actual energy savings achieved by the State as they would have to remove actual energy savings that an after-the-fact study suggests would have occurred without the program (typically referred to as "free ridership").

The use of net savings is inappropriate under the plain language of the Act, which clearly allows all energy savings to be applied by the utilities. N.J.S.A. 48:3-87.9(c) provides 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 the [Clean Energy Act], building codes and other efficiency standards in effect, to achieve the targets established in this section." In other words, the statute makes it unmistakably clear that the utilities can apply *all* savings that occur and not just a portion of those savings. As such, the use of net savings when setting recommended targets is improper. The Board should clarify that utilities may count all energy savings that occur (often referred to as "gross savings") when determining utilities' achievement toward their QPIs and statutory targets. In addition to the plain language of the Act requiring application of savings for QPIs and statutory targets on a gross basis, such a practice is common both in the industry and among the states having aggressive energy efficiency goals.

Energy Saving Compliance Should Be Based on Ex-Ante Savings Not Ex-Post Savings

Establishing performance indicators based on "Ex-post evaluated net annual incremental savings for the plan period" is inappropriate under the plain language of the Act, which requires that when "establishing quantitative performance indicators, the board shall use a methodology … …to ensure that the public utility's incentives or penalties determined pursuant to subsection e. of this section and section 13 of P.L. 2007, c. 340 (C.48:3-98.1) are based upon performance…". The best available ex-ante savings are the underpinning from which program plans are designed, contracted, and implemented, and thus, how they should be measured. Utilities do not have control over all factors that can impact ex-post savings. And, ex-post savings are not known until well after programs have been implemented. Further, ex-post savings may change significantly for various reasons from the ex-ante values embedded in the utilities' plans and approved by the Board. These reasons are often beyond the control of the utilities and include factors such as market transformation, economic conditions, evaluation timing and methodology, changing efficient conditions and baselines. Basing QPIs on ex-post savings may result in utilities being penalized if certain assumptions at the time of program approval and implementation do not come to fruition. As a result, a utility could implement a program plan as approved by the Board based on the best available ex-ante savings estimates at that time and later be unfairly penalized if the ex-post evaluated savings suggest lower than planned savings for the installed measures. The proper application of ex-post savings is to inform future plan-cycle assumptions and plan designs. Thus, in accordance with the structure and plain language of the Act, the Board should clarify that a utility shall make its filing to demonstrate compliance with its QPIs pursuant to N.J.S.A. 48:3-87.9(e)(1) and should establish QPIs on an ex-ante savings basis.

Savings Targets Should Initially be based on the 2% CEA Statutory Target

In assigning the estimated statewide potential to the individual utilities in the MPS that was adopted in Staff's recommendation, "[u]tility-specific sales forecasts were used as weights to assign individual utility shares of the estimated statewide potential for electric and gas efficiency." MPS at 28). This arbitrary assignment is fundamentally flawed and this simplification in the market potential study does not constitute the individualized assessment required under the CEA. Notably, the law requires that

> . . . the board shall adopt quantitative performance indicators pursuant to the "Administrative Procedure Act," P.L. 1968, c. 401 (C.52:14B-1 et seq) for each electric public utility and gas public utility, which shall establish reasonably achievable targets for energy usage reductions and peak demand reductions and take into account the public utility's energy efficiency measures and other non-utility energy efficiency measures...

Furthermore, N.J.S.A. 48:3-87.9(b) provides that:

> ...the board shall conduct and complete a study to determine the energy savings targets for full economic, cost effective potential for electricity usage reduction and natural gas usage reduction as well as the potential for peak demand reduction by the customers of each electric public utility and gas public utility . . . (emphasis added)

Simply allocating the statewide savings potential to each of the utilities based on sales forecasts does not satisfy the requirement to determine the potential for *each* public utility. This methodology also does not "establish reasonably achievable targets for energy usage reductions and peak demand reductions and take into account the public utility's energy efficiency measures and other non-utility energy efficiency measures..." Moreover, assigning the statewide savings potential in such a manner is flawed because it does not account for differences in customer demographics, avoided costs, market barriers, and other factors that can vary significantly amongst utilities.

The energy savings targets through the fifth year included in the proposal are a significant increase over the already-challenging targets mandated in the Clean Energy Act. The proposal targets 2.15% electric savings and 1.1% gas savings by year five, exceeding the requirements of the CEA. According to the ACEEE 2019 State Energy Efficiency Scorecard,[1] this level of savings was only achieved by three states on the electric side - Massachusetts, Rhode Island, and Vermont - while median savings across all states is just 0.67%. When setting the energy savings targets and QPIs, the Board should consider comparisons to other states' achievements. It should also consider the numerous issues the utilities have raised regarding the MPS, upon which the targets are based, including that it did not determine the potential for each public utility. As such, the

[1] https://www.aceee.org/research-report/u1908

initial savings targets and QPIs should be based on ramping up from current levels to achieve the 2 percent contemplated by the CEA. Additionally, the Board should seek to refine the results of the MPS based on utility-specific considerations and undertake a comprehensive baseline study of energy consumption in the state and a subsequent market potential study to inform future savings targets and QPIs.

The Board Should Adopt the Limited Set of QPIs for the Initial Three-years and Establish QPIs For After the Third Program Year Based on Actual Experience and Results

At the January 9, 2020 Energy Efficiency Advisory Group ("EEAG") meeting regarding the program administration straw proposal, Staff presented several topics including program administration, application of utility targets and filing and reporting. During the discussion of utility targets, Staff indicated to parties in attendance that the QPIs were preliminary. JCP&L appreciates Staff's consideration of the numerous comments regarding the complexity of the QPIs as demonstrated by its recommending a limited set of QPIs (i.e. annual and lifetime energy savings) for the initial program years.

Several stakeholders have expressed concerns about having a complex QPI structure. The joint comments filed by the Natural Resources Defense Council, Environmental Defense Fund, New Jersey Conservation Foundation, New Jersey League of Conservation Voters, and Sierra Club, noted: "*We are concerned that, as currently contemplated, the complexity of the QPI structure creates uncertainty and would lead to an emphasis on short-term savings rather than long-term measures that maximize savings. Such an approach may be well suited for other states attempting to achieve more modest goals or that are further along in their program development. However, New Jersey needs to quickly ramp up its efficiency program. Any source or uncertainty or bureaucratic confusion that could delay this acceleration should be avoided*". And, the written comments of DNV-GL's stated: "*Especially as the state market is building and evolving, few and simple QPIs may be best. We have experienced that multiple QPIs can create unintended consequences.*"

JCP&L and other parties have commented that it will take at least twelve to eighteen months to ramp-up operation of the EE programs. The Company continues to believe that program results and evaluations of actual program results will provide the most relevant insights to inform future QPIs. As such, the Company recommends that the initial set of QPIs apply for the entire initial three-year period and that QPIs after that point should be based on actual experience and results. Adopting QPIs at this point for years four and beyond would be premature and may result in unwarranted or inappropriate QPIs. In addition, annual energy savings is the sole metric included in the CEA. As such, the primary focus and majority weighting of the QPIs should be annual energy savings.

Co-Managed Programs Should Be Excluded from the QPIs

Under the CEA, utilities have the mandate to deliver savings. Therefore, it is critical that both the QPIs and the incentive/penalty structure relate to the development, implementation, and administration of energy efficiency programs that are under the utilities' control. It is also consistent with the Act's mandates that the Board "adopt quantitative performance indicators...

for each electric public utility and gas public utility, which shall establish reasonably achievable targets for energy usage reductions…" and to consider appropriate factors "to ensure that the public utility's incentives or penalties . . . are based on performance." *See* N.J.S.A. 48:3-87.9(c). The implementation of QPIs for Co-Managed programs is inconsistent with these mandates because it establishes targets and places the utilities at risk of incurring penalties based on factors that are outside their control. Additionally, the proposed Co-Managed structure has significant potential to impact program implementation and program performance. As such, the Co-Managed programs should be excluded from the QPIs for the initial three-year period. QPIs can be reassessed in the future, including considering whether the QPIs should include Co-Managed programs, after programs are established and experiences and performances to date can be considered.

Need for Future Market Potential Study

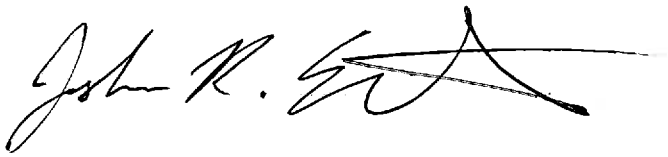
The proposal at page 11 states: "In future years, following a comprehensive baseline study of energy consumption in the state and a subsequent market potential study, the targets will be adjusted appropriately in keeping with the CEA's requirements." JCP&L supports this recommendation and urges the Board to undertake baseline studies of energy consumption for both the residential and commercial/industrial customer sectors. The completed baseline studies should be the first step toward undertaking a comprehensive market potential study. In keeping with the requirements of the Act, the baseline study and subsequent market potential study should be specific to each utility service territory, recognizing the unique characteristics of each electric public utility and gas public utility's service territory and customer base.

The Company's experience with recent market potential studies in Maryland and Pennsylvania suggests that a more reasonable timeframe (twelve months or more) is required to complete meaningful and reasonably accurate baseline and market potential studies. As such, the Company recommends that the Board allow at least twelve months for the studies to be completed. These studies can then be used to inform discussions regarding future energy savings targets and QPIs that will best support the efforts of all parties to achieve the State's aggressive targets and goals of the Energy Master Plan and CEA.

II. CONCLUSION

JCP&L thanks the Board for the opportunity to provide these comments on the proposal, as the Board works to finalize energy use reduction targets, QPIs, and the framework for review of utility performance. The Company looks forward to the opportunity to continue working with the Board and other interested parties as further necessary steps are taken to implement the energy efficiency provisions of the Clean Energy Act. Please do not hesitate to contact me should you have any questions about any of JCP&L's above comments.

Very truly yours,



Joshua R. Eckert

State of New Jersey
DIVISION OF RATE COUNSEL
140 EAST FRONT STREET, 4TH FL
P.O. BOX 003
TRENTON, NEW JERSEY 08625

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

STEFANIE A. BRAND
Director

February 11, 2020

VIA ELECTRONIC MAIL (EnergyEfficiency@bpu.nj.gov)
AND HAND-DELIVERY
Honorable Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, New Jersey 08625-0350

Re: Clean Energy Act New Jersey Energy Efficiency Transition Stakeholder Process – Application of Utility Targets Comments
BPU Docket No.: Undocketed Matter

Dear Secretary Camacho-Welch:

Please accept for filing the enclosed original and ten copies of the comments being submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in response to the Draft Application of Utility Targets - Proposed Target, Metric and QPI Structure which was circulated by the Staff of the Board of Public Utilities with a notice dated January 30, 2020. The comment period was then extended by a second notice on February 7, 2020. Rate Counsel reserves its right to supplement these comments as the technical process continues. In accordance with the Notice, an electronic copy will be emailed to EnergyEfficiency@bpu.nj.gov.

We have also enclosed one additional copy of the materials transmitted. **Please stamp and date the copy as "filed" and return to our courier.**

Thank you for your consideration and attention to this matter.

Respectfully submitted,

STEFANIE A. BRAND
Director, Division of Rate Counsel

By: Maura Caroselli

Maura Caroselli, Esq.
Assistant Deputy Rate Counsel

c: energyefficiency@bpu.nj.gov
Paul E. Flanagan, Executive Director, BPU
Sara Bluhm, BPU
Kelly Mooij, BPU
Sherri Jones, BPU
Stacy Peterson, BPU
Paul Lupo, BPU
Abe Silverman, Esq., BPU
Rachel Boylan, Esq., BPU
Stacy Richardson, Esq., BPU
Pamela Owen, DAG

Clean Energy Act
New Jersey Energy Efficiency Transition
Stakeholder Process
Energy Efficiency Stakeholder Meeting – Application of Utility Targets

BPU Docket No.: Undocketed Matter

Comments of the Division of Rate Counsel

February 11, 2020

Introduction

As part of the process to implement the Clean Energy Act[1], the Staff ("Staff") of the Board of Public Utilities ("Board", "BPU") convened a Stakeholder Meeting on February 4, 2020 and invited stakeholders to comment on the utility targets for energy savings and demand reductions in New Jersey.[2] The within comments are being submitted by the New Jersey Division of Rate Counsel ("Rate Counsel") pursuant to the Notice dated January 27, 2020 ("Notice") in this matter and Staff's "Energy Efficiency Transition - Application of Utility Targets" draft, dated January 30, 2020 ("Draft Proposal").

A. Background

The CEA established aggressive energy reduction requirements, requiring that each electric public utility achieve energy use reductions of two percent or greater and that each gas public utility achieve energy use reduction of three-quarters of a percent within five years of implementation of their respective energy efficiency ("EE") program.[3] In addition, the CEA

[1] P.L. 2018, c. 16 (C.48:3-87.3-87.7) ("Clean Energy Act" or "CEA").
[2] Technical working group meetings addressing cost recovery were also held on October 31, 2019 and December 13, 2019, for which Rate Counsel subsequently submitted comments on November 14, 2019 and January 3, 2020, respectively.
[3] N.J.S.A. 48:3-87.9(a).

directs the Board to establish quantitative performance indicators ("QPIs") to evaluate each utility's achievement of the reduction targets and to apply performance incentives and penalties tied to the achievement of reduction targets.[4] Furthermore, the CEA provides for incentives for utilities who achieve the performance targets, as well as penalties for utilities who fail to achieve the performance targets.[5]

To fulfill the CEA's requirements, the Board authorized its Office of Clean Energy ("OCE") to retain consultant Optimal Energy, Inc. ("Optimal") to complete a market potential study ("Optimal Study") to help determine the energy savings potential in New Jersey and to develop recommendations consistent with the CEA. The Optimal Study was issued in May 2019 and the Board accepted public comments for a two-week period. After receiving feedback, the Board preliminarily adopted the energy savings targets for electric and gas utilities as well as the QPIs identified in the Optimal Study.[6]

Staff subsequently released the Draft Proposal on January 30, 2020 which embodied QPIs, metrics, weights, and targets from the Optimal Study. A stakeholder meeting was convened on February 4, 2020 to address utility targets, and Staff invited comments on the Draft Proposal. The within comments address the Draft Proposal. General comments on the components of the Draft Proposal are presented first, followed by comments specific to electric and gas utilities.

---

[4] N.J.S.A. 48:3-87.9(c).

[5] N.J.S.A. 48:3-87.9(e)(2), (3). The incentive and penalty structure and mechanism is addressed in the Cost Recovery stakeholder process.

[6] See I/M/O Implementation of P.L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs & Energy Usage Reduction Targets and Quantitative Performance Indicators, BPU Dkt. Nos. QO19010040 & QO19050536, Order (May 28, 2019).

B. Comments on Components of the Utility Targets

1. Overall Utility-Specific Energy Use Reduction Targets

As noted above, the CEA requires utilities to achieve certain reductions in energy use and peak demand.[7] Rate Counsel generally concurs with the approach used by the Draft Proposal to divide the net overall annual savings targets into two parts: annual savings targets from programs administered by public utilities and annual savings targets from programs administered by New Jersey's Clean Energy Program ("CEP"), based on projections for energy use reductions by the planned programs.

2. Metrics - Calculation

On pages 6 and 7, the Draft Proposal sets forth 7 metrics for measuring energy efficiency performance: (1) annual energy savings; (2) annual demand savings; (3) lifetime energy savings;, (4) lifetime of persisting demand savings; (5) Utility Cost Test ("UCT") net present value of net benefits; (6) low-income lifetime savings; and (7) small business lifetime savings. The metrics proposed by Staff appear to be a good starting point, however, much more work is needed to establish metrics that align with the policy goals set forth in the CEA and New Jersey's Energy Master Plan. The metrics and their respective weights must be subject to periodic formal reviews by the Board, with opportunity for comment by interested stakeholders. For example, metrics could be added to gauge the relative effort to extend EE measures to low income and small businesses. Such metrics could include the percentages of lifetime savings attributable to low income and small businesses. In turn, the pertinent QPIs would be adjusted as well. Finally, if adopted, the entire metrics process for establishing QPIs may need be evaluated by the Board in the future to assess its effectiveness in advancing the State's energy policy goals.

---

[7] N.J.S.A. 48:3-87.9(c)

The proposed metrics also present some practical issues. All of the proposed metrics are based on "*ex post*" evaluated savings or benefits.[8] However, important details are lacking. In particular, the Draft Proposal does not provide a clear description of the process for determining actual results for assessing performance. The Draft Proposal only provides that the metrics will be established ahead of utility programs and will be consistent among all utilities.[9]

In addition, the Draft Proposal does not indicate whether performance for these metrics is to be based on results that are adjusted only for verified installations or determined after detailed measurement and verification ("M&V") studies have been completed. Further, the Draft Proposal does not discuss how and, to what extent, free ridership, spill-over, and net to gross ratios will be incorporated into the calculations. In sum, more detailed information is needed. Finally, the Draft Proposal should clearly define the term "*ex post,*" particularly in the context of the derivation of the information needed to compute the metrics.

3. Metrics, Weights and Targets

The Draft Proposal provides that each metric have an associated weight, as follows. 1) annual energy savings (10%); (2) annual demand savings (5%); (3) lifetime energy savings (20%); (4) lifetime of persisting demand savings(10%); (5) Utility Cost Test ("UCT") net present value of net benefits (35%); (6) low-income lifetime savings (10%); and (7) small business lifetime savings (10%). The Draft Proposal states that the weights will be "intentionally designed to provide more emphasis to those metrics which best support State policies or that encourage investment in those programs that might not naturally rise to the top based on costs or savings."[10] According to the Draft Proposal, the weights of the metrics will add up to 100 percent and will

[8] Rate Counsel assumes "*ex post*" refers to *ex post facto*, an after the fact calculations.
[9] Draft Proposal, p. 7.
[10] Draft Proposal, p. 7.

be developed and established for each program year along with the metrics framework.[11] Ultimately, the Draft Proposal provides that the metrics will form the basis for developing utility-specific QPIs. The QPIs are the numeric values associated with each metric. [12]

a. Metrics - Components

The proposed set of metrics and their roll out (as discussed in the following section) appear to represent a reasonable starting point, as they are likely to provide signals to the utilities to address key policy considerations. More specifically, the proposed metrics encourage the utilities to (1) develop a cost-effective and comprehensive suite of energy efficiency programs, (2) avoid excessive focus on low-cost, cream skimming measures, (3) pursue long-term energy retrofits by establishing lifetime savings, and (4) achieve equitable distribution of energy savings by setting savings targets specific to low-income and small business customers, that typically face higher costs and higher barriers to implementing energy efficiency and retrofits than other types of customers. The Draft Proposal also provides incentives to reduce system peak load, thereby freeing up capacity on the grid during high demand and likely producing reliability benefits. Finally, the addition of a benefit cost analysis ("BCA") metric, such as UCT, will help to ensure that the utility programs are cost-effective from the ratepayers' perspective. However, the BCA metric should be expanded to include other BCA tests, such as those found in the California Practice Manual.

Rate and bill impacts are of particular concern for Rate Counsel. Rate Counsel believes these impacts should be investigated, outside of the QPI scheme. The QPI process is not conducive to an assessment of the reasonableness of rate and bill impacts. Thus, there should be

[11] Draft Proposal, p. 7.
[12] Draft Proposal, p. 7.

a separate process to examine the rate and bill impacts of energy efficiency programs implemented under the CEA.

If possible, the low-income lifetime savings metric should be expanded to include all low- income participants across all programs and not just those designed for low-income participants since, depending on the structure of the programs (appliance specific, etc.), there could be low-income participants across the programs. This would require the utilities to track either the income or income census tract data of all participants in the programs. However, this added burden would need to be balanced with the benefits from such information. This information can also be useful to the utilities' customer outreach efforts to continue to identify more customers who are eligible for payment assistance.

While the initial set is of metrics proposed by Staff appears to be appropriate for now, the Board should revisit the metrics as part of the required triennial review of utility targets.[13] A review of the metrics at that time would provide the Board and stakeholders with the opportunity to assess how the incentive framework is working and to address any unintended consequences.

As noted in Rate Counsel's previous comments, there are many overlaps between the proposed metrics (e.g., between "annual energy savings" and "lifetime energy savings"). These overlaps might operate to provide excessive incentives for a specific program activity, to the detriment of the EE portfolio as a whole. Time and experience will make evident whether the incentive framework provides too much or too little emphasis on critical policy goals. While the metrics provide a good starting point, the metrics should be reviewed in the future and, if necessary, modified, expanded or dispensed with.

[13] N.J.S.A. 48:3-87.9(b)

b. Savings Timeframe

The proposal to focus on Annual Energy Savings (metric number 1) and Lifetime Energy Savings (metric number 3) for the first two years appears appropriate as these are standard metrics that have been tracked in the current programs by CEP and the utilities. The Draft Proposal would provide Annual Energy Savings (number 1) with a 40% weight, and Lifetime Energy Savings with a 60% weight. However, Rate Counsel recommends that low income energy savings should also be emphasized throughout the entire length of the program. Therefore, the metric for low income lifetime savings (metric number 6), or a similar metric, should be added to the initial metrics for the early years as well. For other metrics, it would take some time to collect data and establish appropriate targets. Thus, it is appropriate to incorporate those other metrics in later years as proposed.

The CEA provides for a triennial review of the energy savings targets for each utility.[14] The QPIs, metrics, and weights should be reviewed at that time as well. Rate Counsel also concurs with the Draft Proposal which provides that these factors will be subject to review for each program year in the 3-year program filing cycle going forward.

c. Actual Targets - Quantitative Performance Indicators

As noted above, the Draft Proposal suggests weights for each metric. However, weights do not have any meaning until the actual targets, derived from QPIs, are determined for each metric. At this point, the Draft Proposal includes only annual savings targets that align with the statutory final savings targets in Program Year 5.[15] For the rest of the metrics, the Draft Proposal requires each utility to propose annual targets/QPIs in response to the annual energy usage

[14] Ibid.
[15] Draft Proposal, pp. 11-14.

targets as well as in response to the established metrics and weighting.[16] Staff further proposes to "establish, in coordination with stakeholders, guidance (including appropriate algorithms) for the utilities to develop acceptable QPIs."[17] Rate Counsel believes that this is a crucial step to establish QPIs for each utility.

The Draft Proposal notes that QPIs are based on equations that include established factors such as loads, demographic characteristics, the mix of measures, and other factors that are based on each utility's proposed suite of programs.[18] Another critical piece of information that should be considered in the determination of QPIs is energy savings potential by utility service area. The recent energy efficiency potential study for New Jersey prepared by Optimal is one such data source. Using this potential study along with other data inputs, the utilities can establish QPIs for each metric specific to each utility jurisdiction. For example, this process will determine different levels of lifetime energy savings for low-income and small business customers because potential energy savings for these customers differ by jurisdiction. Further, as required by the CEA, the QPIs should reflect the potential for adoption by each customer class of EE programs offered by the utility.[19]

Finally, the Draft Proposal did not provide a detailed explanation of the methodology for computing the QPIs. Staff should circulate a sample QPI calculation, showing the relationship between the metrics, weights, and utility savings targets, as well as sample calculations of penalties and incentives.

---

[16] Draft Proposal, p. 7.
[17] Draft Proposal, p. 8.
[18] Draft Proposal, p. 8.
[19] N.J.S.A. 48:3-97.9(c)

C. Utility-Specific Targets

1. Electric savings targets

The proposed trajectories of annual electric savings targets by utility appear to be reasonable. The proposed annual savings targets, which include utility savings and CEP savings, start at 0.75 percent in FY2022 and increase to 2.15 percent in FY2026, with an annual savings ramp rate of 0.35 percent.[20] The current statewide electric savings is about 0.35 percent per year according to the most recent ACEEE State Energy Efficiency Scorecard report.[21] This means that the utilities and CEP would have 1 ½ years to increase annual savings (by 0.4 percent) to reach the initial savings target of 0.75 percent for FY2022. The ACEEE data represents a statewide average.[22] Rate Counsel acknowledges that some individual utilities may have less experience with administering energy efficiency programs than others. Therefore, the trajectory for their savings targets should be adjusted to reflect their starting points. In all, a gradual approach for ramping up savings targets is reasonable.

The Draft Proposal's final target is 2.15 percent for FY2026, while the minimum savings target required under the CEA is 2 percent. The Optimal Study concluded that the maximum achievable, cost-effective electric savings potential is 2.9 percent for 2026. Rate Counsel recommends that the 5-year target remain at 2.0 percent, per the CEA.[23] Rate Counsel is concerned about potential rate impacts. Without an assessment of rate impacts, the savings targets should be more modest to comport with the CEA's requirements.

---

[20] Draft Proposal, pp. 11-14.
[21] ACEEE 2019. The 2019 State Energy Efficiency Scorecard, Table 7, p. 29.
[22] Ibid.
[23] Optimal Study, p. 18.

2. Gas savings targets

The gas savings targets for the utilities and CEP combined start at 0.25 percent in FY2022 and increases to 1.1 percent in FY2026.[24] The annual ramp rates are 0.25 percent through FY2025 and 0.15 percent for FY2026. The initial target appears too low given that the current savings level for the entire state is approximately 0.3 percent according to the ACEEE's State Energy Efficiency Scorecard report, and that all of the gas utilities have experience administering energy efficiency programs.[25] Rate Counsel recommends considering a higher initial target such as 0.35 percent for FY2022 and slower annual ramp rates through 2025. Although the Optimal Study concluded that the maximum achievable, cost-effective electric savings potential is 1.6 percent for 2026, Rate Counsel recommends that the 5-year target remain at 0.75 percent, per the CEA.[26] Similar to the treatment recommended by Rate Counsel for electric savings targets, in the absence of any rate impact analysis the savings targets for gas should be more modest, to comport with the CEA's requirements.

[24] Draft Proposal, pp. 11-14.
[25] ACEEE 2019. Table 9, p. 32.
[26] Optimal Study, p. 18.

Energy Efficiency Transition: Utility Targets Draft Proposal

Comments of the New Jersey Large Energy Users Coalition

February 7, 2020

The New Jersey Large Energy Users Coalition ("NJLEUC") appreciates the opportunity to provide these comments regarding Staff's Draft Utility Targets Draft Proposal.

NJLEUC's comments will address a single general point that is not directly addressed by the Draft Proposal but is one that we suggest should be taken into account in assessing the effectiveness of the programs pursued under the Clean Energy Act ("CEA") and how they are valued.

The CEA establishes electric and natural gas usage reduction goals for the State's utilities that are viewed as aggressive but achievable. This stakeholder group will establish the reduction targets for each of the utilities and the metrics and quantitative performance indicators that will evaluate the utilities' performance in achieving these targets. It is fair to state that the programs implemented under the authority of the CEA must be well-conceived and implemented in a manner that will achieve maximum levels of energy efficiency at the customer level and produce the strongest utility-wide results.

The Staff Proposal refers to the adoption of "multifactor metrics" that will enable the Board and utilities to focus on the myriad impacts of utility programs to achieve a "holistic" set of long-term program benefits. While the reference to "holistic" benefits appears to be a reference to a macro analysis of the utility programs, we consider it important that the concept of "holistic" benefits also be adopted at the customer level, to serve as a guide regarding the best approaches to be taken with regard to the quality and depth of the energy efficiency projects pursued by individual customers of all rate classes.

The CEA establishes "challenging" energy reduction goals and a system that will reward or penalize utilities based on the extent to which they achieve these goals. Given the proposed system of penalties and rewards, it is foreseeable that at least initially the utilities will concentrate on projects that represent the "low hanging fruit"—e.g. the projects that are easiest to implement and provide the most bang for the buck. Lighting projects fall within this category as they are easy to accomplish, significantly reduce usage and provide a quick payback of the capital invested. For larger customers, equipment such as chillers would also fall within this category.

While understandable, this approach is problematic because it fails to address other measures that should be upgraded or replaced as part of the more comprehensive, holistic approach envisioned by the CEA to maximize energy and cost savings. The problem with a lighting-only approach is that once the lighting fixtures are replaced, it becomes much more difficult, from a cost-benefit/payback perspective, to later "go deeper" with a second, more complete round of energy efficiency measures that would include other equipment such as HVAC systems, building automation systems, motors and the like. This equipment is more expensive and has significantly longer payback periods than lighting and could be perceived as unattractive investments if pursued on a standalone basis. Therefore, it is a far better approach to bundle these more complicated measures into a single project with lighting fixtures and chillers, as together they would represent

a viable project having a reasonable payback period that would pass cost-benefit analysis and maximize customer savings. This is the type of approach that must be encouraged if the CEA's goals are to be achieved, and achieved in a meaningful manner. The "low hanging fruit" only approach would clearly leave a significant amount of potential energy savings on the table, likely permanently.

As part of the stakeholder process, the Board should encourage this type of holistic approach to energy usage reduction at the customer level and appropriately reward utilities that practice it. The Board should consider how utilities could be afforded additional credit for "going deep" and not simply pursuing the easy measures for a quick payback. This could be accomplished through the weighting system that is described in the Staff Proposal. We agree with Staff's concept of emphasizing metrics that best support State policies and encourage investment in programs that produce the best overall results and add true value for customers and the State.

The Energy Resilience Bank hospital projects provide a good example of how this approach has been successfully utilized. The ERB's project scoring methodology relies on numerical values that are assigned to multiple project evaluation criteria and associated multipliers (that reflect the weight assigned to each criterion). The evaluation criteria include price, comprehensiveness of proposal, project understanding, overall value, creativity, demonstrated qualification to pursue the project and similar factors. While price is a heavily weighted factor (a HUD/EDA requirement), a low bid can be outweighed by strong satisfaction of the other criteria, which are designed to assure that significant value is assigned to proposals that offer well-conceived, holistic solutions by highly qualified vendors. This system has worked well and has encouraged the development of comprehensive energy solutions for participating hospitals, rather than merely awarding contracts based on lowest bid.

The same type of approach could readily be applied to the utilities' energy efficiency and conservation programs and projects under the CEA. Minimal values could be assigned to lighting-only type projects. Higher values with appropriate multipliers could be assigned to more comprehensive projects based on their potential to achieve maximum energy and cost savings and efficiencies. The utilities have touted their access to customer data, customer relationships and expertise in identifying and directing customer energy efficiency projects as a reason to entrust them with these programs. It should therefore be viewed as fair and appropriate to evaluate their performance in this manner.

We encourage the Board to adopt this approach to customer energy efficiency and conservation projects as we believe it will maximize the results achieved on a least cost basis. Thank you for the opportunity to present these comments.

Respectfully submitted,

Steven S. Goldenberg
Giordano, Halleran & Ciesla, P.C.
125 Half Mile Road, Suite 300
Red Bank, New Jersey 07701
Telephone: 732-741-3900
Email: sgoldenberg@ghclaw.com

Paul F. Forshay
Eversheds Sutherland (US) LLP
700 Sixth Street, N.W., Suite 700
Washington, D.C. 20001-3980
Telephone: 202-383-0708
Email: paulforshay@eversheds-sutherland.com

Attorneys for the New Jersey
Large Energy Users Coalition

February 7, 2020

Docs #4203568-v1

New Jersey Natural Gas

February 11, 2020

VIA ELECTRONIC MAIL (energyefficiency@bpu.nj.gov)

Honorable Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, NJ 08625-0350

Re: IN THE MATTER OF THE IMPLEMENTATION OF P.L. 2018, c. 17 REGARDING THE ESTABLISHMENT OF ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS BPU DOCKET No. QO19010040

Dear Secretary Camacho-Welch:

New Jersey Natural Gas Company ("NJNG") looks forward to working with the Board of Public Utilities' ("BPU") on the implementation of P.L. 2018, c. 17 regarding the establishment of energy efficiency and peak demand reduction programs ("Clean Energy Act"). NJNG participated in the Public Stakeholder meeting on February 4, 2020. Through this submission, we are responding to the BPU's January 30, 2020 Application of Utility Targets Draft Proposal ("Draft").

NJNG supports the comments filed today by the New Jersey Utilities Association. In the interest of streamlining the public record, NJNG will not readdress the content covered within that letter. NJNG believes that the Board will be in a better position to establish appropriate Quantitative Performance Indicators ("QPIs") after the decisions on the program administration have been completed and there is relevant performance data available on utility run programs to help establish what the appropriate value for the QPIs should be.

NJNG appreciates the opportunity to provide comments on these topics. We look forward to working with the Board and other stakeholders as the State considers how to restructure the approach to energy efficiency as to enable the utilities to reach the aggressive clean energy goals established by Governor Murphy's administration. Please feel free to contact me if you need any additional information regarding these issues.

Respectfully submitted,

Anne-Marie Peracchio

Anne-Marie Peracchio
Director- Conservation and Clean Energy

NJUA
NEW JERSEY UTILITIES ASSOCIATION

154 West State Street • 1st Floor • Trenton, NJ 08608
609-392-1000 • Fax 609-396-4231 • www.njua.com

February 11, 2020

VIA ELECTRONIC MAIL
Aida Camacho-Welch
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625
energyefficiency@bpu.nj.gov

The New Jersey Utilities Association ("NJUA") represents investor-owned utilities that provide electric, natural gas, telecommunications, water and wastewater services to residential and business customers throughout the State. I am writing on behalf of the electric and natural gas companies ("the utilities") that are members of the NJUA in response to the Energy Efficiency ("EE") Transition Application of Utility Targets ("Draft") that was released on January 30, 2020 and reviewed at a public stakeholder meeting on February 4, 2020. These comments represent the consensus views of NJUA energy member companies in response to the Draft and each member company reserves the right to submit comments on an individual basis.

Net Savings Not Appropriate; Gross Savings Should Be Used For CEA Compliance

The Draft repeatedly frames the targets as "net savings" and the utilities strongly believe that this is inconsistent with the Clean Energy Act ("CEA"). Net savings is inappropriate under the plain language of the CEA, which clearly allows all energy savings to be applied by the utilities. N.J.S.A. 48:3-87.9(c) 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 the [CEA], building codes and other efficiency standards in effect, to achieve the targets established in this section." In other words, the CEA makes it unmistakably clear that the utilities can count all savings that occur and not just a portion of those savings. Our multi-state utilities also confirm that New York, Maryland, Pennsylvania and Ohio all rely upon gross savings for their targets. Additionally, all publicly stated energy savings for New Jersey's Clean Energy Program ("NJCEP") are stated on a gross basis, so the State would not be able to provide reliable estimates of their planned contribution toward the CEA targets for the programs they retain. There is no clear or compelling rationale to make the shift to net savings at this time, nor should the State not take credit for its full progress toward its efficiency goals.

Beyond just the clear legislative intent, gross savings are more appropriate because they measure the ***actual energy and demand savings*** that were realized by the State. Gross savings reflect what program administrators are in a better position to control (*i.e.,* the participation in their programs driven by their efforts). In contrast, net savings attempts to adjust savings measurements for things like "free ridership"

and "free drivers" introduce ambiguity and the potential for survey bias into the determination of estimated savings achieved by the programs. Moreover, as net savings determinations require potentially extensive, and lengthy research, net savings results are often not known until well after a program year is complete (years afterwards, in some jurisdictions). Further, measuring savings on a net basis would minimize the impact of codes and standards on achievement of goals, which may cause these valuable tools and key strategies within the 2019 Energy Master Plan to be deprioritized, and become a missed opportunity for savings. Several stakeholders have noted that the initial Market Potential Study ("MPS") did not provide any supporting information regarding the net-to-gross assumptions or values so it is not possible consider their reasonableness. To the extent the Board requires information about net savings to be determined, they should only be used for program planning purposes, and never applied in a retroactive fashion.

Proposed Metric Structure

Through stakeholder meeting and publicly filed comments on the Market Potential Study ("MPS") and the broader Energy Efficiency Transition proceeding, the utilities and numerous other stakeholders have repeatedly expressed concern that the proposed Quantitative Performance Indicators ("QPIs") are too complicated.

The utilities believe that the Board should instead focus on three primary metrics: annual savings, cost effectiveness (which includes environmental costs and benefits), and equity. The utilities also recommend that for the first triennial period there be no performance penalties or incentives applied, this period should be used to ensure a smooth transition of programs, establish baseline performance, and perform New Jersey-specific research from which future utility territory-specific targets can be established.

The utilities also believe that the cost effectiveness metric should be the Societal Cost Test ("SCT"). The SCT is the only cost effectiveness test that is consistent with the clear language of the CEA, which states "[t]he energy efficiency programs and peak demand reduction programs shall have a benefit to cost ratio greater than or equal to 1.0 at the portfolio level, considering both economic and environmental factors." The Board currently has all the information it needs to implement this test, utilizing the information from is Energy Efficiency Cost-Benefit Analysis Avoided Cost Assumptions memo.

Regarding measurement toward the proposed metrics, the utilities object to the Draft's reliance on "Ex-post evaluated" savings for the QPIs. This is not required by the Act. Utilities do not have control over ex-post savings and, accordingly, may end up being penalized if certain measure assumptions do not come to fruition. As an example, a utility could implement a program plan as approved by the Board based on the best available ex-ante savings estimates and later be improperly penalized if the ex-post evaluated savings suggest lower than planned savings for the installed measures. Similarly, using ex-post evaluated savings would contradict assumptions used to develop the MPS, savings targets and QPIs. It is unreasonable to adopt one set of assumptions for the potential study, develop targets and QPIs based on the results of that study, and then require that utilities' attainment of those targets and QPIs be measured on an ex-post evaluated net savings basis. Such a process would completely ignore the assumptions that informed the potential study and targets, which could result in potentially penalizing the utilities for factors beyond their control. Instead, the assumptions used to develop the potential study, as well as the utility savings targets and QPIs, should be consistent with utility program planning assumptions and the methodology used to determine a utility's compliance. In accordance with the structure of the CEA, the

Board should establish the utilities' QPIs utilizing a gross savings basis and clarify that a utility may make its filing pursuant to N.J.S.A. 48:3-87.9(e)(l) relying on ex-ante gross savings.

Regarding the calculation itself, the Draft proposes that the percentage target reduction will be based upon the average load of the prior three years. Given the significant variability of weather on an annual basis, the utilities believe the calculation should be based upon a three-year average of weather-normalized load rather than a three-year average of actual load. This approach is consistent with the CEA's requirement that, "[i]n establishing [QPIs], the board shall use a methodology that incorporates weather" among other things. Some of the utilities have analyzed the two approaches using recent data and found that using an average of actual usage could result in year-over-year variation of more than 5% for the annual target reduction. Having the energy savings target vary significantly from year-to-year simply due to weather is in conflict with efforts to build a stable environment for advancing energy efficiency.

Utility Specific Targets

The utilities appreciate that the Draft clearly states that Board will determine the metrics from the programs administered by NJCEP by each utility territory. The utilities recognize that this will be a new planning practice for NJCEP but need to gain insight on such contributions as soon as possible to inform their planning process. However, the Draft does not reference a process for capturing energy savings from the other efforts, including codes and standards, which are clearly intended to be considered as part of the CEA as noted earlier. It is critical to understand the anticipated contributions from these other sources as well from co-managed programs.

It is critical to consider that the CEA targets were developed among many stakeholders and with significant deliberation that included numerous legislative hearings. The utilities recognize that the proposed net annual savings targets for each utility are taken directly from the MPS. However, there continues to be significant stakeholder concerns about the lack of primary research from New Jersey customers and no substantive stakeholder input in the process that developed the MPS. Important questions remain about the conclusions and recommendations from that study. In fact, the Board appropriately noted in its Order dated May 28, 2019: "The Board acknowledges that that there is still a lot of work ahead and that there are many details not fully contemplated in the law or addressed in the EE study which require further analysis and recommendations." The Board adopted the MPS as preliminary and directed a stakeholder process to support its further determinations. The utilities recognize that Board staff and all stakeholders have invested considerable resources in stakeholder proceedings over the past six months but none of those efforts were focused on refining the MPS. As such, it is most prudent to first determine the feasibility and impact of meeting the CEA targets in the statutorily established timeframe[1] before establishing new targets. The utilities recognize that the targets for Program Years 4 and 5 are preliminary but it is not appropriate to prejudge that the utilities can reasonably achieve energy savings at those levels when only a handful of states in the country have historically achieved such savings levels and they may have considerably different weather profiles, market baselines and potential, rate structures and more robust trade ally networks. It will also be important to consider the range of costs to achieve higher targets.

[1] See subsection a. of section 3 of the CEA (N.J.S.A.48:87.9) providing, in pertinent part, that annual energy reduction goals must be met "within five years of implementation" of the utilities' respective energy efficiency programs.

While the utilities appreciate the Draft's intention to ramp into the energy savings target, the proposed ramping up is incredibly ambitious, and once again reflects the recommendation of the MPS. They are very aggressive in relation to current reported NJCEP performance and on the surface (*e.g.*, the natural gas savings target doubles between Year 1 and Year 2). The utilities recommend that the first-year targets begin with targets that are consistent with current performance, then ramp up toward the CEA targets rather than the MPS fifth year targets.

There are numerous factors to consider in making this determination, including, but not limited to: weather, economic factors, customer growth, increased reliance on electronic devices, deployment of emerging technologies, customers' behavioral anomalies, and the potential impact of the State's policy to accelerate distributed energy resources and drive mass electrification in the building and transportation sectors. It is notable that the CEA requires the consideration of many of these factors "and any other appropriate factors"[2] in adopting quantitative performance indicators that establish "reasonably achievable" targets for energy usage reductions and peak demand reductions.

Thank you for the opportunity to comment on this very important matter.

Sincerely,

Thomas R. Churchelow
President

[2] Id.

Oracle Corporation 500 Oracle Parkway Redwood Shores California 94065
phone +1.650.506.7000 fax +1.650.506.7200 oracle.com

February 11, 2020

New Jersey Board of Public Utilities
Attn: Aida Camacho-Welch
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Submitted via email: EnergyEfficiency@bpu.nj.gov

Re: Application of Utility Targets Comments

Oracle Utilities Opower ("Oracle") delivers behavioral energy efficiency (EE), behavioral demand response, and customer engagement services to over one hundred electric and natural gas utilities across thirty-six states and eight countries. To date, these programs have saved over 24 terawatt-hours of energy. Oracle delivers personalized energy usage insights through paper mail, email, websites, smart phones, and text messages. This information empowers customers to make better-informed decisions about how to manage their energy use and results in significant and verifiable energy and demand savings. In New Jersey, Oracle partners with Atlantic City Electric and Elizabethtown Gas to deliver Home Energy Reports ("HERs") to utility customers, including customers of low and moderate income. The Oracle HER programs consistently deliver significant, equitable, and cost-effective energy savings to New Jersey customers.

Oracle appreciates the work of the BPU to propose Utility Targets, Metrics and QPI structure for New Jersey's energy efficiency transition. We applaud the efforts to design a system that will achieve the Clean Energy Act (CEA) goals and provide energy efficiency savings to all customers. Given how ambitious the CEA goals are, New Jersey utilities will need to employ the full range of all cost-effective energy efficiency programs to meet them while also designing portfolios that meet their customers' needs and expectations. Oracle encourages the BPU to ensure that utilities have the flexibility necessary to achieve these objectives, being mindful of controlling costs, and are not limited by metrics and incentives that favor certain energy efficiency resources over others. A more balanced approach to the metrics and QPIs will allow for greater flexibility in portfolio design.

As proposed, the metrics focus heavily on lifetime energy and demand savings as opposed to annual savings. While annual energy savings and annual demand savings are included in the seven proposed metrics, the remaining five metrics all favor lifetime savings. Oracle recognizes the importance of lifetime measures and works to help utilities increase participation in longer lived EE measures. However, assigning weighted values in this way leaves savings on the table that can be achieved through shorter-life measures like behavioral, especially in the near term when they are needed most. Programs that drive annual savings, such as behavioral, are critical aspects of a utility's EE portfolio needed to meet both energy savings and climate goals set by the state.

Specifically, Oracle has seen behavioral energy efficiency leveraged by states and utilities to drive savings in the following ways:

Energy Savings

- **Capturing benefits from shorter measures like behavioral in terms of scale and ability to see savings quickly** – Behavioral programs are unique among energy efficiency programs in that they operate on an opt-out basis, meaning they can operate at a scale far beyond any other energy efficiency program. In Pennsylvania and Illinois, we provide Opower Home Energy Reports to approximately 2 million customers in each state. In Delaware, we recently launched a 120,000 household program at Delmarva. At a large investor owned utility in Maryland, our program reaches about 1 million customers, but even at a small electric cooperative in the mid-atlantic we serve 82,000 households, approximately 50% of their residential customer base. Customers are always allowed to opt-out, but Oracle typically sees a less than 1% opt out rate for its programs. The opt-out program design removes participation risk from program delivery and achieving savings, setting it apart from all other energy efficiency programs that rely on customers to opt-in to the program offering. As customers are automatically enrolled in Home Energy Reports, behavioral energy efficiency programs can be deployed quickly relative to other EE programs.

- **Using shorter measures like behavioral to boost participation in deeper, longer lived measures** – Undervaluing annual measures ignores the benefits these measures have for encouraging deeper measures. Behavioral programs can be used to promote other utility programs through targeted education and messaging, driving increased participation in those programs. If utilities are not properly incentivized to include annual measures in their EE portfolio, they will miss out on this opportunity to boost the adoption rate of longer-life measures. Recipients of a HER are (on average) 15% more likely to participate in other DSM programs, and (on average) 32% more likely when a specific program is promoted. In one New York promotion, we saw a 61% increase in adoption of smart thermostats.

- **Flexibility in portfolio design** – Utilities need flexibility in portfolio design to meet ambitious state goals, but also to meet the needs of their customers. As customers differ across utility jurisdictions, and will continue to evolve, flexibility to be able to select from the full range of energy efficiency options is the only way to ensure the utilities meet customer expectations and their legislated goals.

Demand Response

- **Seeing value in event driven demand response** – Managing demand on peak days or during peak usage events is critical to a utility's ability to manage demand on the grid. On particularly hot or particularly cold weather days, behavioral demand response can engage a high number of customers and achieve meaningful savings. Behavioral demand response (BDR) has a proven peak load reduction potential of 1.8-2.4%. Baltimore Gas and Electric's Smart Energy Rewards program has resulted in 309 MW of peak savings. Even as overall demand is reduced through lifetime savings, behavioral demand response can mitigate the peaks that will still constrain the system as extreme weather events become more frequent.

Conclusion

Energy efficiency programs that employ shorter measures are critical pieces of a strong EE portfolio and any metrics and incentives employed by the BPU should reflect that. This includes an appropriate

balance between incentives for shorter and longer life measures. Given the meaningful and scalable energy and demand savings available through shorter measures like behavioral programs, utilities will need these programs as part of a balanced portfolio that will ensure the ambitious Clean Energy Act goals are met.

Oracle Utilities appreciates the opportunity to comment on the proposed Utility Targets, Metrics and QPI Structure and looks forward to continuing to engage in the Energy Efficiency Transition stakeholder process.

Sincerely,

Carolyn Sloan
Senior Analyst, Regulatory Affairs and Market Development
Oracle Utilities Opower

Joseph F. Accardo Jr.
Vice President Regulatory &
Deputy General Counsel

Law Department
PSEG Services Corporation
80 Park Plaza – T5, Newark, New Jersey 07102-4194
tel : 973-430-5811
email: joseph.accardojr@pseg.com

February 11, 2020

Aida Camacho-Welch, Secretary of the Board
Board of Public Utilities
44 S. Clinton Ave., 9th Floor
P.O. Box 350
Trenton, NJ 08625-0350

Re: Application of Utility Targets – Proposed Target, Metric and QPI Structure

Dear Secretary Camacho-Welch:

Please accept these comments on behalf of Public Service Electric and Gas Company ("PSE&G" or the "Company") in connection with the above-referenced matter.

PSE&G applauds the New Jersey Board of Public Utilities' ("BPU" or the "Board") and its Staff's initiation of an extensive stakeholder process on the energy efficiency transition, and the Company appreciates the opportunity to submit the comments on the application of utility targets. PSE&G also thanks the Board for its consideration of stakeholder feedback, which is reflected in the comprehensive proposal the BPU has released.

To a great extent, our comments herein are consistent with the comments the Company submitted on May 16, 2019 in response to the Energy Efficiency ("EE") Market Potential study, which the Board authorized for release in May 2019.

As an initial matter, while the Company continues to believe that the utilities should operate all of the EE programs, we concur with the recommendation that any programs administered by the Office of Clean Energy (OCE) should not be included in goals and QPIs by which utilities will be measured. And while the OCE does not have incentives or penalties associated with its performance, it should be required to establish targets and measure results for the same metrics as the utilities, to provide the public with consistent and transparent information regarding the performance of all EE programs in the state. Additionally, the Company would like to repeat its recommendation that the program cycle should be five years instead of three in order to gain efficiencies of scale over time.

The Company also agrees with the recommendation that the actual numeric goals for each utility be established during the early phase of the program cycle, with sufficient time built into the cycle to allow for discussion between the utilities and Board Staff.

However, the Company continues to have concerns with several aspects of the proposal, which largely follow the recommendations submitted by the authors of the EE market potential study. The Company believes that that these issues, if implemented as is, would have a detrimental effect on the State's ability to achieve its EE goals.

Target Setting -- The Targets In The Proposal Follow Those Stated In The Market Potential Study; For The Reasons PSE&G Has Previously Explained – None Of Which Have Been Addressed – Those Targets Should Be Revised

As PSE&G has pointed out previously, the annual savings targets recommended in the EE potential study are based on incomplete or inaccurate information and should not be used to establish annual savings targets. PSE&G highlighted its concerns with the suggested energy savings targets in the EE potential study in our previous comments, which have not been addressed. These concerns include the following:

- Due to time constraints, the consultant did not perform any New Jersey-specific primary research to inform their results, which is a best practice for EE potential studies. This problem is more pronounced in New Jersey as the State has no recent State-specific benchmarking data from which the consultant could establish baseline data on measure penetration or any other parameters that typically inform a potential study. This creates a very high level of uncertainty regarding the applicability of the results. In fact, the proposal acknowledges that a more robust potential study be performed over the initial program cycle.

- In determining the initial year targets and the annual ramp rates of energy savings, the consultant did not take into account any constraints that may exist from a supply standpoint, meaning the consultant did not research the availability of in-state suppliers to deliver programs to customers. Given the low level of performance over the past several years, and based on input PSE&G has received from EE vendors, there is a limited qualified workforce to deliver on an expanded portfolio of EE programs. Skill sets such as auditing homes or installing high efficiency equipment such as condensing heating systems or air source heat pumps will be in high demand and short supply. It is also not clear if the consultant has taken into account the level of workforce development and training spending needed to scale up to the workforce needed to deliver energy savings on the scale envisioned in the study. Without accounting for these constraints, the early year targets are likely too aggressive to be achieved. In its Clean Energy Future – Energy Efficiency ("CEF-EE") filing, the Company has considered these factors and implementation is proposed to ramp up over the initial years of the program.

- It also appears that the consultant did not consider program transition inefficiencies during the first year or two of the program. The current proposal calls for many programs

currently operated by the NJOCE to be transitioned to the utilities. While questions remain regarding which programs and what the program design will be, there will certainly be a transition period. New Jersey's prior experience with this about 15 years ago indicates that there will be a drop in program performance while this transition takes place. Yet the first year targets represents a significant jump in performance over recent historic performance in New Jersey. The Company believes the early year targets should account for this transition, and right now they do not.

- It is also unclear if the consultant considered the need for IT investments needed to deliver the 21st century customer experience envisioned. This omission would also impact the near term targets and add to the near term program costs. This will be an essential element of the transition, but it is unlikely that all utilities will have their full IT solution in place on day one.

In addition, since PSE&G submitted its initial comments on the market potential study, we have found evidence giving rise to additional concern about the validity of the results. As Staff is aware, the study was not done in consultation with the utilities, and the utilities were not given the opportunity to fully vet the inputs, analysis or results of work. The appendices were not made available for review until after the study was completed, and the utilities have never seen the spreadsheets that support the results. Typically, these studies are done in coordination with the utilities to share insights and help ensure the validity of the results.

As an example, PSE&G questions the large contribution of Heat Pump Water Heaters ("HPWH"), which the study indicates are the single largest source of savings, accounting for about 33% of all residential electric savings. However this technology, while very efficient, is not a viable solution in many homes due to various physical and operational constraints. While reviewing the study results, PSE&G discovered that the study is likely using the incorrect value for baseline water heater electric consumption. Specifically, Appendix C, table C1 provides the results of electric consumption disaggregation by end use type for the year 2020. The table indicates that the amount of electricity used for residential water heating is exactly the same value as that for air conditioning. The fact that the two numbers are identical (3,176,184 kWh for single family, about 17% of total consumption) is a strong indication that one of the values is wrong. This error is repeated in the other three residential subsectors shown in the table.

Further, PSE&G believes the water heating value is incorrect, and by a meaningful amount. This view is based on PSE&G's own end use disaggregation study, which we shared with the consultant early in the study data collection phase. Data provided by PSE&G indicated that water heating comprises about 11% of electric consumption in single-family homes, while air conditioning comprises about 20%. If the values in Appendix C, table C1 were used as the base water heater consumption from which savings were derived, it could mean that the savings from HPWH may be overstated by upwards of 50%; since this is the single largest source of residential electric

savings, it may have a substantial impact on the overall results. This is just one example of why studies such as these need to be thoroughly vetted prior to final publication and why, without that vetting, the market potential study is not an appropriate basis for policy making.

Given these serious concerns, the Company recommends that the fifth year targets reflect the targets specifically called for in the Clean Energy Act (CEA), not the targets from the EE potential study, and that the five year path should start with targets that more closely align with the current level of performance, given the uncertainties in program transition and supply constraints.

Co-Managed Programs, Like OCE-Managed Programs, Should Not Be Included In The Goals And QPIs By Which Utilities Will Be Measured

Despite the dialog that has occurred regarding the administration of programs, great uncertainty remains on the strategic and operational direction of the co-managed programs. PSE&G believes that unless the utility has responsibility and ownership of the program design, implementation strategy, and marketing strategy, the Board should not include co-managed program targets or results within the utility's goals. With Comfort Partners as the only example, we would argue that the Board controls the program rules, eligibility requirements, marketing strategy and spending, and therefore the Company cannot be responsible for program results, despite the fact that the utilities collectively implement the program. If Comfort Partners is the model for co-managed programs, the Company would not be willing to take ownership of the targets or the results.

Measurement of Savings – Consistent With The Clean Energy Act, Savings Performance Should Be Based On Gross Savings

PSE&G does not agree that the savings should be "net" savings, meaning they have been adjusted to account for other factors. The proper measurement should be based on gross savings, (prior to adjustment) which we believe is consistent with the legislation.

The language of the CEA is clear that for target setting, all sources of energy savings should be included in the QPI, and there is no basis to "net out" an arbitrary amount; the goal is to reduce energy usage, and *that* – gross savings -- is what should be measured and incented. Under the CEA, the Board must set "reasonably achievable targets for energy usage reductions and peak demand reductions," and must "take into account the public utility's energy efficiency measures and other non-utility energy efficiency measures *including* measures to support . . . building code changes, appliance efficiency standards, the Clean Energy program, any other State-sponsored energy efficiency or peak reduction programs, and public utility energy efficiency programs . . . ." This language provides no support for any netting; to the contrary, the statutory language is consistent with the generally accepted definition of gross savings: "The change in energy

consumption and/or demand that results directly from program-related actions taken by participants in a DSM program, regardless of why they participated."[1]

The use of gross savings has more than the statutory language on its side. Reliance on net savings would create many unanswered questions that will take significant time and resources to answer. For example, what corrections should be included in the adjustment? There is no New Jersey specific research on the topic, and there is no generally accepted standard for this adjustment. Corrections for free ridership, spillover from program participants, spillover from non-participants, market effects[2], and market transformation effects can all be part of the adjustment from gross to net savings. The recently completed EE potential study shed no light on this issue. The authors claimed the results reflected net savings, but the report was silent on what the New Jersey specific correction included or how it was applied. They did not even indicate what the portfolio level correction value was. Therefore, before determining the value for each of the EE programs, stakeholders would need to come to consensus not only on the specific corrections to include, but the methodologies to estimate those corrections as well. With no accepted standards on elements and methodologies, the result of this estimation will be flawed in some manner, and will constantly be changed as the market evolves over time.

Given this uncertainty and risk, the use of gross savings for developing targets and measuring performance will be far more straightforward and less contentious. It will also give a more complete picture of savings and emission reductions. Emission and energy savings will occur regardless of net effects, and as the overarching goal is to reduce consumption and lower harmful air emissions, gross savings should be the metric.

Focus of the metrics/ QPIs

PSE&G believes that the number of metrics measured for performance incentives/penalties should be lower, particularly in the early years, in order to adequately focus on those metrics that are most important to the State, as reflected in the CEA and the Energy Mater Plan.

Therefore, the Company recommends that the Board focus on three primary metrics that should be used for establishing performance incentives and penalties:

- Annual energy savings
- Cost effectiveness, which includes environmental benefits
- Program access to the low income community

[1] California Energy Efficiency Evaluation Protocols: Technical, Methodological, and Reporting Requirements for Evaluation Professionals, April 2006, page 227

[2] Definition of market effects is "a change in the structure of a market or the behavior of participants in a market that is reflective of an increase (or decrease) in the adoption of energy efficient products, services, or practices and is causally related to market interventions (e.g., programs). Examples of market effects include increased levels of awareness of energy efficient technologies among customers and suppliers, increased availability of energy efficient technologies through retail channels, reduced prices for energy efficient models, build out of energy efficient model lines, and—the end goal—increased market share for energy efficient goods, services, and design practices." (SEE Action 2012, p. A-10)

These three are the most important metrics. They directly reflect the mandates of the Clean Energy Act and are consistent with the strategic direction of the Energy Master Plan, which puts a primary focus on ensuring that low income and environmental justice communities can fully participate in the clean energy transition. We would also suggest that these metrics not be used to provide incentives or impose penalties for the first three years of the program, after which the greatest weight be applied to the annual savings, followed by cost effectiveness, and then the low income metric.

The other metrics can be used for tracking in this first program cycle, with the ability to revisit their importance afterwards.

With regard to cost effectiveness, the metric should be based on the Societal Cost Test (SCT), not the Utility Cost Test (UCT), as suggested in the proposal. The rationale for this change is simple - the CEA clearly states that "[t]he energy efficiency programs and peak demand reduction programs shall have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, *considering both economic and environmental factors.*"[3] The SCT is the only test that takes environmental benefits and costs into account. To use any test that does not include environmental benefits would not be consistent with the clear language of the law.

The proposal argues that using the UCT will "avoid unnecessary contention", but PSE&G disagrees. Rather, the Board's own cost benefit technical memo, prior decisions by the Board, and PSE&G's experience in its CEF-EE filing indicate that there is common ground on the method to value avoided greenhouse gas (GHG) emissions, the primary environmental benefit of reduced energy consumption, as well as other pollutants. The OCE's "Energy Efficiency Cost-Benefit Analysis Avoided Cost Assumptions" document (May 2019 update) calls for the use of the "Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866" produced by the U.S. government's Interagency Working Group on Social Cost of Greenhouse Gases. The same document also contains damage estimates to be used for SO_2, nitrogen oxide and particulate matter. This source for pricing avoided GHG emissions was accepted in the Board's recent ZEC proceeding. This source was also used in the CEF-EE filing, which was supported by environmental stakeholders and was unchallenged by the Board and Rate Counsel during the CEF-EE proceeding. With the broad acceptance of this source in the measurement of avoided GHG emissions, the SCT becomes just as easy to measure as the UCT.

Beyond these technical arguments, the SCT must be the metric used for performance to comply with the mandate of the CEA. If the UCT becomes the metric by which the utilities' performance is measured, there will be no value in measuring another cost effectiveness metric for planning or screening purposes, and utilities will always implement a more limited portfolio in order to reach their UCT based financial targets. Therefore, the UCT undervalues energy efficiency and will

[3] The Clean Energy Act, P.L. 2018, c.17.

limit the amount of deep, cost-effective savings measures that can be installed when all of the benefits of energy efficiency are included. PSE&G suggests the UTC be used only as a tracking metric, with performance to be a signal to the utilities or OCE to investigate ways to improve program design, marketing strategy or implementation costs in future program years, balancing that against savings achieved.

With regard to the low income target, PSE&G suggests the Board implement a "spending level" QPI for the low income program rather than a lifetime savings metric. This will ensure that a dedicated amount of money is targeted to this sector. Utilities may be allowed to adjust spending between other programs to manage budgets and savings, but the budgeted amount for any programs targeted to low income customers would not be allowed to be lowered without penalty. If a utility underspends the budgeted amount, they would underperform, and it they spend above the budgeted amount, they will overperform. In the alternative, the Staff could consider a minimum level of targeted savings for low- and moderate-income customers, with a lower cost-effectiveness level than that used for other customer segments.

Additional Comments

PSE&G also has the following concerns with the other metrics, should the Board chose to implement any of the others into utility performance or otherwise use them for tracking.

- The lifetime persistence of demand savings (LPDS) should not be a separate metric, in addition to lifetime energy savings, since that would result in measuring the average economic life of the measures twice, improperly double-counting its impact. For example, if the average life of all measures is 10 years, then the lifetime energy savings will be 10 times that annual savings, and the LPDS will be 10 times the annual demand savings. To measure the performance of LPDS and lifetime energy savings is essentially measuring the economic life of the measures twice, thus double counting its impact.

- Small business lifetime savings is an ill-defined metric that will lead to confusion between utilities generally and between gas and electric utilities specifically. For example, the current Direct Install program (which is focused on small business customers) has an eligibility cap of 200 kW, but gas utilities cannot use that to target eligible customers since they do not have electric data. For gas utilities to efficiently target eligible customers, there must be a maximum gas usage or demand. But even if the Board were to establish such a cap it would still create confusion, since that cap will not always align with the electric cap. Customers that fall within the gas cap may exceed the electric cap, and visa versa. Further, it is not clear what policy goal this metric seeks to achieve.

- Demand savings for electricity and gas should not be included as a performance metric until the utilities and the Board come to consensus on the Demand Response programs to be implemented.

Additionally, should the Board ultimately implement net savings as targets, the net to gross ratios should be established for all measures and programs within the portfolio during the planning phase of the program cycle so that the utilities know in advance what the adjustments will be. Only in this way can the utilities establish targets that are consistent with the annual goals and have the best information on their performance against the targets. If subsequent EM&V reports indicate changes to established net to gross ratios be made, those net values should only be applied on a prospective basis. Results for a program year should not be retroactively changed based on EM&V results after the program year is complete.

Other Recommendations

PSE&G concurs with the suggestion that further research be undertaken over the initial three year cycle to obtain New Jersey specific information on the baseline of energy efficient measures installed in the State and the long term achievable EE potential. We also strongly recommend that these research studies be collectively led by the utilities as part of a statewide EM&V research plan, so that all parties can have confidence in the results. This data can then be used together with the actual performance results achieved over the initial program cycle to establish goals for future program cycles with a higher degree of confidence that those goals truly represent the reasonably achievable targets, as the CEA calls for.

While the scope of this proposal is limited to the topics of savings, metrics and QPIs, PSE&G also suggests that the Board work with other state agencies and interested constituents to move aggressively to implement job training programs so that the utilities have sufficient qualified implementation resources to achieve the level of savings mandated by the CEA.

Respectfully submitted,

Joseph F. Accardo Jr.

NJBPU Staff Energy Efficiency Transition
Application of Utility Targets
Rockland Electric Company Comments
February 11, 2020

Executive Summary

By Notice dated January 30, 2020, the New Jersey Board of Public Utilities ("NJBPU") requested that interested stakeholders provide Comments on NJBPU Staff's Energy Efficiency Transition; Application of Utility Targets Proposal ("Proposal") dated January 30, 2020. Rockland Electric Company ("RECO" or the "Company") submits these Comments in response to that Notice. These Comments supplement the Company's January 17, 2020 Comments on the NJBPU's December 20, 2019 Straw Proposal on Program Administration ("Program Administration Straw Proposal").

At the outset, and as explained more fully below, the Company notes that the Proposal contains conflicting statements about the calculation of energy reduction targets. For example, the Proposal contains charts with annual energy reduction targets for each utility from 2022 through 2026,[1] and yet there are statements in the Proposal that energy reduction targets will be two percent at the end of year four,[2] and that targets will be "utility-specific."[3] The Company also notes that the Proposal suggests, contrary to the CEA,[4] that target MWh reductions will change each year.[5] For example, the Proposal states that reductions will be based on "the three most recent complete years of data."[6] As the Company explains below, the plain language of the CEA[7] does not authorize the NJBPU to establish rolling energy reduction targets based on the most recent three years of data.

In addition to appropriate targets, New Jersey's energy efficiency ("EE") program should include the following essential cost recovery mechanisms: the amortization of utility EE costs using the utility's current capital structure; the opportunity to earn meaningful incentives;[8] and, a robust revenue decoupling mechanism to recover lost utility revenues. As the Company

[1] Proposal at pp. 11-13
[2] *Id.* at p. 4.
[3] *Id.*
[4] P.L. 2018, Chapter 17. The EE portion of the CEA is codified at *N.J.S.A.* 48:3-87.9.
[5] Proposal at pp. 4-5.
[6] *Id.* at pp. 4-5.
[7] *N.J.S.A.* 48:3-87.9(a).
[8] As the Company and NJUA have explained, to provide meaningful incentives, the current NJBPU proposal needs to be amended to allow a utility to begin earning incentives once it achieves 80 percent of its QPIs with incentives scaled upward. Incentives would be scaled upward from this 80 percent achievement threshold.

explained in prior comments, these cost recovery mechanisms are necessary for New Jersey to achieve the energy reduction targets required by the Clean Energy Act ("CEA").[9]

RECO's Specific Comments

Overall Utility-Specific Energy Use Reduction Targets

As noted in the Executive Summary, the Proposal contains conflicting statements about the calculation of energy reduction targets. For example, the Proposal states

> Over the first four (4) years of program filings, the targets will ramp up to targets that fulfill, at a minimum, the year five (5) benchmarks of 2% annual electric saving….[10]

However, the charts at pages eleven through thirteen, show the electric utilities' required energy reductions are 1.8 percent at the end of year four and 2.15 percent at the end of year five[11]. Further, the Proposal states that targets will be "utility specific"[12]:

> In advance of each energy efficiency and peak demand reduction program filing cycle and following a stakeholder process, the Board will *establish utility- specific annual energy reduction targets for each program year*, based on the potential for electricity and natural gas usage reductions in each utility territory.[13] (emphasis added)

The Proposal also states that the overall annual energy reduction targets for each utility will be set at "reasonable levels…"[14] Yet, the charts set forth at pages eleven through thirteen, have pre-determined, specific targets for each utility.

Together, the statements above are not clear whether each utility's energy reduction targets will be the targets set forth in the charts, whether the targets are 2 percent at the end of year four, whether "utility-specific" or "reasonable" targets are different from the targets set forth in the charts, or whether the NJBPU will establish other targets.

The Proposal also states that energy targets will be rolling targets based on energy usage over the most recent last three years and states:

---

[9] P.L. 2018, Chapter 17. The EE portion of the CEA is codified at N.J.S.A. 48:3-87.9.
[10] Proposal at p. 4.
[11] Proposal at pp. 11-13.
[12] Proposal at p. 4.
[13] Proposal p. 4.
[14] *Id.*

> *In any given year in which a target is set, the percentage target reduction is based on the average load of the prior three years*. If the required annual energy use reduction for a utility is 2% in 2026, the applicable load to apply the percentage would be the average of years 2023– 2025. In this way, the percentages are set ahead of time, and the load is applied when the MWh and therms are calculated. *If the target setting timeframe predates the calculation of year end load, the formula will use the three most recent complete years of data*.[15] (emphasis added)

However, the CEA does not authorize the NJBPU to change targets each year based on the most recent three years of data. The CEA only authorizes the use of the prior three-year average to establish the energy reduction at the end of the fifth year of the EE programs. The CEA states:

> Each electric public utility shall be required to achieve annual reductions in the use of electricity of two percent *of the average annual usage in the prior three years within five years of implementation of its electric energy efficiency program.*[16] (emphasis added)

As noted above, the Proposal provides that in advance of each energy efficiency and peak demand reduction program filing cycle "the NJBPU will *establish utility-specific* annual energy reduction targets for each program year,"[17] and these "*utility-specific* targets will be based on the potential for electricity and natural gas usage reductions in each utility territory."[18] The Proposal does not discuss the mechanics by which the NJBPU will establish these "utility specific" annual energy reduction targets. At a minimum, the NJBPU should employ the results of the ongoing Demographic Study, currently being conducted by DNV-GL, to establish individual utility savings targets. Use of the results of this Study will allow the targets to reflect the unique characteristics, economic conditions and other service territory variables. Mandating a uniform energy reduction percentage for all utilities throughout the State is unrealistic and will not produce the results required to meet the CEA's goals.

As noted above, the Proposal provides that the overall annual energy reduction targets for each utility will be set at "reasonable" levels that reflect achievable net annual energy usage reductions in each utility territory.[19] The Company proposes that the use of gross annual energy usage reduction is appropriate, as this reflects the aggregate impact that the programs will have on the grid. In addition, it removes any uncertainty that net measurement introduces as net measurement is always subject to a data point in time, is costly to measure, and the results of the

[15] Proposal at p. 5.
[16] CEA at section "a."
[17] Proposal at p. 4.
[18] *Id.* (emphasis added)
[19] *Id.*

measurement are inherently ambiguous.[20] For example, a determination of free-ridership only applies to a program at the time of measurement and does not reflect future impacts. Moreover, the use of gross savings allows for the calculation of savings on a consistent basis. Budgets should be established on a $/MWH metric based on expected gross savings so that the State achieves the full potential of the energy savings target. Pursuant to the CEA's requirements, they will include savings anticipated to result from programs administered by utilities, co-managed programs, and programs administered by New Jersey's Clean Energy Program ("NJCEP").

As noted in the Company's comments on the Program Administration Straw Proposal, RECO does not support the co-managed program approach, as it often leads to customer confusion and frustration. The Company does support a co-managed approach among utilities, but does not support a co-managed approach with the Office of Clean Energy ("OCE"). This co-managed utility approach has proven successful in the Company's Direct Install Low Income Audit and Install Program where the Company works in collaboration with its vendor and the corresponding gas utilities that serve RECO's electric customers. This approach improves the customer experience as it results in a streamlined solution that addresses both the customer's electric and gas energy needs at the time of survey and installation. In New York State's early implementation experience, the New York State Energy Research and Development Authority's ("NYSERDA") participation in the commercial and residential lighting arena resulted in significant customer confusion; ultimately NYSERDA discontinued all its commercial and residential lighting efforts. Customers raised concerns regarding program participation and expressed displeasure with the complexity of the program. After NYSERDA's departure, the utilities became the administrator of lighting programs and program achievement increased significantly. The Straw Proposal recognizes the success of the State's Comfort Partners Program. RECO would note, however, that the Comfort Partners Program did not meet the needs of RECO's low income customers because the Program's focus was on urban customers. RECO does not have urban areas. In contrast, RECO's Low Income Audit and Direct Install Program has reached more customers and has proven more cost-effective than the Comfort Partners Program.[21] RECO's program operates at a lower $/MWh, a higher MWh reduction per participant, resulting in a higher benefit cost ratio, and has served the majority of its USF customer population.[22]

As noted above, the Proposal also provides that over the first four years of program

[20] For example, after participating in EE programs, customers often respond in customer surveys that they would have installed energy efficient measures without a rebate because "it was the right thing to do." Such ambiguous responses do not accurately attribute energy savings to the EE program. If net savings are used to measure energy savings, these types of ambiguous responses will not accurately attribute energy savings to the energy efficient measure that was installed.

[21] *See* "Rockland Electric Low Income Energy Efficiency Program Cost-Benefit Analysis," pages 3-4, Rutgers Center for Energy, Economic & Environmental Policy ("CEEE") (January 17, 2017).

[22] *Id.*

filings, the energy reduction targets will ramp up to a level that fulfills, at a minimum, the year five benchmarks of 2% annual electric savings and 0.75% natural gas savings mandated in Section 87.9(a) of the CEA.[23] Thereafter, according to the Proposal, the energy reduction targets will be adjusted on a utility-specific basis to promote the achievement of all cost-effective energy efficiency potential in each utility territory.[24] Furthermore, the Proposal provides that the overall net savings targets will be divided into two parts: annual savings targets from programs administered by public utilities (including co-managed programs) and annual savings targets from programs administered by the NJCEP.[25] This calculation will be based on projections for energy use reductions by the planned programs.[26]

The Company agrees with the Proposal's recommendation that the targets ramp up to a level that fulfills at a minimum, the year five benchmark of 2% annual electric savings, as mandated by the CEA. The Company also agrees that overall net savings targets should be divided between the annual targets for utility administered programs (including co-managed programs) and the programs administered by NJCEP.

Utility Program Annual Energy Savings Targets

The Proposal states that Utility Program Annual Energy Savings Target(s) are an important basis in the development of utility-specific quantitative performance indicators ("QPIs").[27] Performance incentives or performance penalties will ultimately be applied based on a utility's performance evaluated through the QPIs. QPIs are to be based only on the Utility Program Annual Energy Savings Targets in order that utilities receive incentives or penalties based only on the performance of programs that they administer.[28] Therefore, the Company disagrees with the co-managed approach because the Company is not in control of programs that are directly tied to its saving targets and performance.[29]

The Company agrees with the Proposal's recommendation that QPIs be based only on the Utility Program Annual Energy Savings Targets so that utilities receive incentives and penalties

[23] Proposal at p. 4.
[24] *Id.*
[25] Proposal at p. 5.
[26] *Id.*
[27] *Id.*
[28] *Id.*
[29] The NJBPU Straw Proposal on Program Administration expressly states that for each of the Co-Managed Programs, the State will be setting goals while the utilities will have only a "day to day" management function. For example, regarding the Comfort Partners Co-Managed Program, the NJBPU Straw Proposal on Program Administration (at p. 27) states, "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." Plainly, the utilities will not be "administering" the Co-Managed Programs, and therefore Co-Managed Programs should not be included in the evaluation of the utility's performance.

only on the performance of programs that they administer.

Metrics

The Proposal recommends the implementation of a multifactor metric framework that will allow the NJBPU and utilities to focus on the myriad impacts of utility programs to achieve a holistic set of long-term program benefits.[30] Multifactor metrics, according to the Proposal, will also best position New Jersey to achieve its energy goals while simultaneously promoting other core policy objectives, such as cost-effectiveness, equitable access for all customers, reasonable rates, and the need to achieve comprehensive and long-lasting energy savings.[31]

NJBPU Staff proposes a suite of seven metrics to be phased in over the first five years of New Jersey's next phase of energy efficiency and peak demand reduction programs.

The Proposal fails to explain the need and benefit for such an expansive (and burdensome) suite of metrics to evaluate utility performance. The effort required to capture all seven of the proposed metrics, particularly the implementation of IT infrastructure necessary to track and maintain these metrics, will be costly. The Company recommends that program savings be tracked at the total portfolio level, further broken down for each program type including, residential, small commercial, large commercial and low income. Annual energy savings, annual demand savings and the utility cost test are necessary components for tracking and monitoring program achievement. To determine the lifetime savings benefit of the proposed programs, an Effective Useful Life ("EUL") component could be added for the portfolio to encourage the appropriate balance of program cost as compared to measure life. The tracking and maintenance of seven separate QPIs dilutes the effectiveness of each and certainly diminishes the focus on the annual energy savings target which is ultimately what the State is trying to achieve. For example, in New York's early implementation of energy efficiency programs, annual MWh savings was the metric that determined program performance and the level of utility incentives was based on that achievement. As programs matured, an additional lifetime savings metric was introduced. In addition, because the metrics are all reliant on the achievement of annual energy savings, the higher the energy savings, the higher the demand savings, the higher the lifetime savings and so on. The additional metrics do not provide enough additional value to support the tracking and maintenance needed to determine performance.

Weighting Structure

The Proposal provides that each metric will have an associated "weight," which will

[30] Proposal at pp. 5-7.
[31] *Id.*

represent the percentage related to each metric and respective QPI within the utility's portfolio. Weightings are designed to provide more emphasis to those metrics which best support State policies or that encourage investment in those programs that may not naturally rise to the top based on costs or savings. The weights of all metrics will total 100 percent.[32]

The Company is not opposed to such a weighting protocol, as certain individual QPIs do add more overall value to achieving the State's energy objectives. However, as noted above much more emphasis needs to be placed on annual energy savings as this is the primary objective of the CEA. In addition, the Company agrees that program performance should be tracked independently. However, achievement should be evaluated at the portfolio level to allow for flexibility in reacting to the changing markets, the economy, and customer preference.

Quantitative Performance Indicators (QPIs)

As noted above, QPIs are the numeric values associated with each metric and will represent the necessary annual achievements for each utility. NJBPU Staff proposes that each utility be required to propose QPIs in response to the established annual energy use reduction target(s), as well as in response to the established metrics and weighting.[33] In advance of program filings, NJBPU Staff will establish, in coordination with stakeholders, guidance (including appropriate algorithms) for utilities to develop acceptable QPIs.[34] While much of the development of the QPIs will be objective and based on equations that include established factors such as loads, demographic characteristics, the mix of measures and other factors that are based on each utility's proposed suite of programs will also be necessary inputs in the establishment of QPIs.[35] As a result, the QPIs must be established with input from the utilities and as part of program filings; the QPIs cannot be finalized ahead of utility filings.

The use of QPIs introduces an additional administrative burden and adds unnecessary costs to operating energy efficiency programs. Programs should be developed to minimize costs and maximize savings, and not be administratively overly burdensome. QPIs should be established based on level of program contribution and limited in amount. NJBPU Staff should further evaluate alternatives to QPIs and consider a more holistic approach to evaluating utility program performance. The Company recommends following the approach used in New York, which employs annual energy targets for each utility to achieve the State's energy efficiency goals. Performance targets are set for achieving minimum, mid-point and maximum energy savings targets and utility incentives are earned based on the level of savings achieved.

[32] Proposal at pp. 7-8.
[33] Proposal pp. 7-9.
[34] *Id.*
[35] *Id.*

Based on the Company's experience in New York, the focus should be on achieving annual energy savings and tracking the peak demand impact and lifetime savings metrics during the first five years of program ramp up. After the initial five-year period, additional metrics may be added to address any program components that fell short of expectations. The Company would note that the Small Business Direct Install Program in New York has comprised a significant portion of the commercial and industrial portfolio since program inception and continues to be an offering in the Company's current portfolio. However, if the small business sector is not participating as expected, funding may be shifted to other sectors, (*e.g.*, low income) where performance is higher than expected.

Utility Performance Review

The Proposal provides that, for each metric, assessed performance will be multiplied by the associated weight, resulting in the "weighted performance."[36] The weighted performances related to each metric/QPI will be summed (separately for each utility and each energy type) and will represent the "total weighted performance," where complete achievement of all QPIs results in a total weighted performance of 100%.[37] The total weighted performance will be used to determine the appropriate incentive or penalty, based on the performance incentive and penalty structure.[38]

As stated above, the Company strongly recommends that QPIs be limited in number and weighted based on the level contribution provided to meet the overall program goal.

Metrics and Weights: Years 1-2

In the initial program years, NJBPU Staff proposes that the metrics will be phased in to allow time for NJBPU Staff and stakeholders to collect and report additional data, and to refine appropriate definitions and inputs to calculating the QPIs associated with each metric.[39] Utilities will be required to track and report on all seven metrics in all years, but performance will only be evaluated according to the phase-in schedule.[40] In years 1 and 2, utilities will be required to track and report performance based on all seven metrics, but incentives and penalties will only be applied based on metrics one and three, with an adjusted weighting structure.[41] These metrics and the associated weighting structure will be consistent for both electric and gas targets.[42]

[36] Proposal at pp. 9-10.
[37] *Id.*
[38] *Id.*
[39] *Id.*
[40] *Id.*
[41] *Id.*
[42] *Id.*

The Company agrees with the Proposal's recommendation of tracking and reporting on the approved metrics in all years and incentives and penalties should only be assessed based on metrics one and 3.

Metrics & Weights: Years 3+

In years 3 and beyond, utilities will be required to track and report performance based on all seven metrics. Incentives and penalties will also be applied based on each of the seven metrics and the associated weighting structure, which will be consistent for both electric and gas targets.[43]

As stated above, the Company believes that the utility should track the seven metrics. However, only metrics one and three should be used to measure incentives and penalties. At the end of the initial five-year period, a program review should be conducted and evaluated by a third party to determine whether additional metrics are necessary to achieve the overall State's energy goals.

Utility Specific Targets

The Proposal recommends that the intended targets identified for each utility between years 1-5, reflect the overall energy use reduction targets for each utility service territory. These targets also include savings anticipated to come from programs administered by the NJCEP.[44]

The Company disagrees with the recommended targets. While an Energy Efficiency Potential Study was conducted during 2019, this Study was completed in a short period of time and may not include all of the necessary factors to estimate accurately potential savings in each utility service area. In addition, the results of the demographic study, which recently commenced, has not been considered in establishing utility energy savings targets. The Company has no reason to believe that the NJCEP will contribute to the achievement of the Company's energy target. Historically, the NJCEP has served few customers within the Company's service area, as demonstrated by RECO's experience with the Comfort Partners Program. The Company's achievement of its energy target cannot be dependent upon the performance of OCE programs that the Company has no control over and have historically underperformed in RECO's service territory. To avoid being held accountable for any future underperformance by OCE, RECO needs to manage all programs that contribute to its performance and that determine its incentives and penalties.

[43] *Id.*
[44] Proposal at pp. 11-13.

Conclusion

For the above reasons, RECO requests that the NJBPU adopt utility targets related to energy efficiency and peak demand reduction programs consistent with the principles discussed in these Comments.

sunrun

February 7, 2020

Aida Camacho-Welch
Secretary
New Jersey Board of Public Utilities
44 S. Clinton Avenue
Trenton, NJ 08625
EnergyEfficiency@bpu.nj.gov

Re: New Jersey Energy Efficiency Transition - Sunrun Comments on Application of Utility Targets

Dear Ms. Camacho-Welch:

Pursuant to the New Jersey Board of Public Utilities' ("BPU" or "Board") January 27 Staff Stakeholder Notice ("Stakeholder Notice") regarding the New Jersey's Energy Efficiency Transition Meeting on Utility Targets, Sunrun, Inc. ("Sunrun") respectfully submits these comments on the BPU's Application of Utility Targets: Proposed Targets, Metrics and QPI Structure – Draft for Public Comment (the "Proposal"), published on January 30, 2020. The Stakeholder Notice requests input on the development and implementation of utility energy use reduction targets, quantitative performance indicators (QPIs), and the review of utility performance related to energy efficiency and peak demand reduction programs in furtherance of the energy efficiency mandates established by the Clean Energy Act of 2018. Sunrun generally supports the proposed framework and structure for applying utility targets to institute a process for applying the energy use reduction targets to each electric and gas utility in the state of New Jersey. The central area of concern is the proposed cost effectiveness test described in the Proposal which is discussed further below.

Notwithstanding the concern about the cost-effectiveness test, the overall proposed structure appears reasonable to allow for ongoing evaluation of utility progress on achieving cost-effective energy usage reductions and peak demand reductions. For example, Sunrun agrees with inclusion of low-income savings as a pivotal metric for measuring the effectiveness of energy efficiency and peak demand reduction programs. While the Proposal is focused on development of targets, Sunrun would submit that program design will directly impact whether utilities will be able to meet their obligations under the Clean Energy Act. Indeed, the proposal notes that, "[t]he overall annual energy reduction targets for each utility will be set at reasonable levels that reflect achievable net annual energy usage reductions in each utility territory. Per the CEA's requirements, *they will include savings anticipated to come from programs* administered by utilities, co-managed programs, and programs administered by New Jersey's Clean Energy Program."[1] (emphasis added) Facilitating low-risk, simple energy efficiency programs will be essential to achievement of the utility targets. In neighboring jurisdictions, policymakers and

[1] New Jersey Board of Public Utilities, Energy Efficiency Transition – Application of Utility Targets: Proposed Targets, Metrics and QPI Structure – Draft for Public Comment, (the "Proposal"), at 4, Jan. 30, 2020.

utilities have begun implementing a battery storage program – "Bring Your Own Device" (BYOD) - that provides meaningful peak demand reduction and savings to ratepayers and utilities.

BYOD – The Right Program to Achieve Targets

The BYOD program is a $/kw month payment for load reduction and injection by residential batteries, generally developed and enrolled by aggregators in partnership with customers. Load reduction and injection can be calibrated according to the value that an aggregator is contracted to provide to a utility, such as capacity market peak. A base value for load reduction can be established for the service territory, with potential for additional values layered on for location-specific performance, such as a non-wires alternative ("NWA") project. This is a straightforward way to utilize storage for energy efficiency purposes across a utility territory without getting into the complexity of rate design issues.

BYOD programs are also beneficial in that they do not rely upon rate-based assets and therefore, avoid the risk of utility-owned stranded assets. BYOD programs support the development of a competitive and self-sustaining storage market due to their open and transparent nature. These programs encourage firms to enter new markets and make diverse financing options available to customers. The upfront or performance payments can substantially reduce the cost of batteries, expanding access to clean and resilient power further down the income spectrum. Given New Jersey's firm commitment to equity and energy efficiency benefits for low-income customers, BYOD could play a critical, low-cost role in expanding access to storage to low- and moderate-income residents.

Participation in a BYOD program is simple and generally proceeds as follows. New Jersey customers would install a battery system of their choice, compatible with their utility's system. Once the battery is installed, they would follow enrollment instructions individually or through an aggregator. The enrollment would include a verification process that confirms the device can be utilized in the program platform. Once integration into the platform is confirmed, the participating customer or a designated aggregator would begin receiving participation payments in exchange for dispatching the device, which generates value for all customers. For customers not participating through an aggregator, the participation payment could be provided as a bill credit. For customers that enroll with an aggregator, the participation payment would remit as a direct payment to the aggregator who would manage the customers' batteries and the customer value proposition. The utility would collaborate with aggregators to explore options for customers to participate on different levels and "pay-for-performance" when they provide services benefiting the utility system and ratepayers.

The following are a few examples of residential BYOD programs:

Green Mountain Power's Residential Storage Program

Green Mountain Power (GMP) has a BYOD program in which customers who adopt residential storage can opt to provide GMP with dispatch rights for monthly peak shaving. Customers can select upfront compensation ($850 per kW pledged for performance) or ongoing payments.

The program is open to customers across the GMP service territory. This enables GMP to access battery capacity and bring a battery offering to its customers in partnership with solar/storage providers, without taking on the responsibility to manage the deployment of the resources. Solar/storage providers are able to customize offers to suit customer preferences and can enroll customers as part of an aggregation.

PSEG Long Island's Behind-the-Meter Energy Storage with Solar Program

Through its Utility 2.0 Long Range Plan, PSEG Long Island enhanced its system-wide Super Savers program with the introduction of a Standard Offer $/kW-year payment for qualified capacity savings. PSEG Long Island offers a payment to third party aggregators, selected via a qualification process that allows PSEG Long Island to remotely control customers' energy storage systems to reduce load during called events. PSEG Long Island compensates the third-party aggregator on a pay-for-performance basis for load reduction, with the expectation that customers will also receive a rebate or cost savings, either through a portion of the rebate from PSEG Long Island transferred to them, and/or an upfront discount from the aggregator for the battery installation. This structure provides space for the storage market to innovate and implement solutions that will achieve maximum program participation.

While this BYOD is system-wide, it is also innovative in that it incorporates local adders for transmission and distribution congestion and further allows the ability to stack with Non-Wire Alternatives. The BYOD structure is an ideal method to address distribution level issues by engaging an enrolled fleet on the grid and also addressing localized issues as the need arises.

The program includes co-marketing with PSEG Long Island encouraging battery sales to complement solar installations. This reduces customer acquisition and consumer prices. PSEG Long Island partners with equipment manufacturers and contractors on collateral material to support and drive participation, including targeted direct mail outreach to energy storage prospects, driving interest and contractor leads.

Massachusetts's Statewide BYOD Program

The Massachusetts Department of Public Utilities incorporated energy storage into the state's 2019-2021 energy efficiency plan and approved a statewide BYOD program for peak reduction, finding that the BYOD program passed important benefit-cost analyses. The state's energy efficiency budget will provide funding for payments to participating aggregators and customers. The new program follows an evolution in thinking away from annual kWh reductions toward ways to reduce system peaks, given that peak hours represent the costliest and dirtiest generation periods on the grid. BYOD programs are uniquely structured to help lower peak demand during these critical hours.

Selecting the Most Useful Cost Effectiveness Test

The Proposal includes the Utility Cost Test (UCT) in the proposed multi-factor set of metrics that would assess the effectiveness of New Jersey's energy efficiency programs. The Proposal states that the UCT,

> "is a useful and relatively easy metric to measure utility-specific costs and benefits of efficiency programs. While many additional benefits are provided by efficiency, beyond those in the UCT, there can be serious disagreement about the calculation of those benefits. The relatively shorter and more easily monetized benefits contained in the UCT avoid unnecessary contention while helping to maintain a focus on achieving efficiency at reasonable costs."[2]

Sunrun cautions against selecting what might appear to be an easier, quicker cost-benefit analysis mechanism for utilities because doing so could result in substantial under-valuing of New Jersey's energy efficiency programs. This would be an unjustifiable detriment to New Jersey ratepayers and undermine the goals of the Clean Energy Act of 2018.

While the UCT is undoubtedly an easier route for the utilities, other approaches should be given strong consideration, particularly given that several neighboring jurisdictions successfully utilize these tests. Indeed, if New Jersey were to incorporate the UCT to measure energy efficiency effectiveness, such a selection would be a *significant* departure from the tests used throughout the East Coast. For example, the Total Resource Cost test (TRC) is used in Massachusetts, Maryland, Delaware, New Hampshire and Pennsylvania.[3] The TRC assesses the costs and benefits to the utility system and impacts – including health benefits – on program participants. The Societal Cost Test (SCT) is used in Maryland, New York and the District of Columbia. The SCT incorporates the TRC in addition to analysis of impacts on society. The energy efficiency provisions of the Clean Energy Act of 2018 championed by New Jersey residents were not passed as an exclusive mechanism for utility-centric metrics. They were passed to provide savings to New Jersey residents and reduce the environmental impacts of peak energy demand. These priorities should be reflected in the multi-factor metrics and cost effectiveness analysis selected for New Jersey's energy efficiency programs.

Thank you for considering Sunrun's comments herein.

Sincerely,

Nicole W. Sitaraman
Senior Manager, Public Policy
Sunrun, Inc.
Email: nicole.sitaraman@sunrun.com

---

[2] The Proposal, at 6.

[3] *See generally*, ACEEE Topic Brief: Cost-Effectiveness Test – Overview of State Approaches to Account for Health and Environmental Benefits of Energy Efficiency, Dec. 2018, available at: https://aceee.org/sites/default/files/he-ce-tests-121318.pdf.; Pennsylvania Public Utilities Commission, M-2019-3006868, Final Order on 2021 Total Resource Cost (TRC) Test (Dec. 19, 2019).

February 7, 2020

Secretary of the Board of Public Utilities
Attn: Aida Camacho-Welch
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350

Re: Response Comments to NJ BPU Staff Proposal on Utility Targets, Metrics, and QPI Structure, Dated January 30, 2020.

Uplight is a nationwide software-as-a-service ("SaaS") company that helps utilities engage their residential and business customers in a decarbonized energy future that is efficient, equitable, and resilient. Our 400 employees serve our 93 energy provider clients, including PSE&G, Exelon, First Energy, Orange & Rockland, New Jersey Natural Gas, and South Jersey Gas / Elizabethtown Gas, to provide connected customer journeys to over 100 million energy customers in North America and Europe. As a certified B-Corp, we share the NJ BPU's commitment to providing energy consumer savings while reducing energy and associated greenhouse gas emissions to build a more sustainable future.

We appreciate the opportunity to share our perspective and expertise with the New Jersey Board of Public Utilities ("BPU") on demand side management ("DSM") program targets and metrics for implementation of the Clean Energy Act ("CEA") through both in-person participation and follow up through these written comments. Herein we share our perspective and insights on recommendations on the structure and make up of the Quantitative Performance Indicators ("QPIs") of the as a supplement to those of our trade association, the Energy Efficiency Alliance of New Jersey ("EEA-NJ.")

Additional Metrics:
While the metrics list is fairly comprehensive, two critical elements are missing. First, given the importance the State places on addressing climate change, it is surprising that greenhouse gas emissions ("GHG") is not one of the QPIs proposed. In fact, jurisdictions are increasingly examining moving on from kWh saved, and instead measuring GHG impacts; the Sacramento

Municipal Utility District officially made the switch recently to account for the anticipated impacts from beneficial electrification (including transportation electrification[1]).

A second important metric is to measure efficiency program customer experience. Positive customer experiences will result in more participation, both by existing customers in additional programs, and with more customers participating as word of the programs spreads, resulting in "virality." Modern consumer products and services are typically measured by the Net Promoter Score ("NPS"), which is widely accepted as the best predictor of customer engagement.[2]

QPI Structure:

We appreciate the BPU staff's desire to be comprehensive in measuring a broad set of metrics, reflecting the many important objectives of modern energy system design. At the same time, it is important to recognize the difficulty of managing performance against multiple metrics, and the dual dangers of diluting the importance of key metrics, while potentially double counting where metric overlap exists.

In order to accommodate these challenges, we recommend that the BPU consider a two-part QPI structure. First, a limited subset of three or four metrics should be used to set incentives and penalties. Second, the BPU should establish a broader set of tracking metrics to inform utilities, the regulator, and stakeholders to provide a fuller set of program performance, and to stimulate discussions on how to modify programs to optimize for all objectives. If an issue is identified but not addressed, the BPU can consider corrective actions, including disallowing cost recovery, modifying authorized ROE, or changing the QPIs.

An example of this structure might be a follows:

Primary Incentive/Penalty QPIs:

1. Annual Energy Savings (25%)
2. Annual Peak Demand Savings (25%)
3. Cost Effectiveness (as measured by UCT) (25%)
4. Low Income Annual Energy Savings (25%)

Tracking Metrics:

1. GHG reductions
2. Average program NPS
3. Small Business Annual Energy Savings
4. Lifetime Energy Savings

[1] https://www.linkedin.com/feed/update/urn:li:activity:6623651144512217088/
[2] https://www.medallia.com/net-promoter-score/

5. Lifetime Demand Savings
6. Low Income Lifetime Savings

From a reporting perspective these tracking metrics may be treated the same as the incentive-determining QPIs so all parties and stakeholders can have full transparency on performance and if future changes might be necessary to ensure alignment between the State's goals and actual performance.

In the longer term, the BPU should consider moving to a more sophisticated evaluation approach using the National Standard Practice Manual ("NSPM") Resource Value Test ("RVT").[3] The BPU should task the stakeholder group to propose a design structure for an RVT to meet all the State's objectives beyond energy efficiency, integrating all relevant energy resources, such as distributed energy resources ("DER") into a single evaluation algorithm.

Thank you once again for the opportunity to share our insights and perspectives.We look forward to continuing these conversations as part of the BPU's continued efforts to develop a sustainable and cost-effective energy system for the people and businesses of New Jersey.

Sincerely,
Tanuj Deora
Vice President, Market Development and Regulatory Affairs
tanuj.deora@uplight.com
720-839-2264

[3] https://nationalefficiencyscreening.org/about-resource-value-framework/