



Draft Straw Proposal for New Jersey's Energy Efficiency and Peak Demand Reduction Programs

Stakeholder Meeting

April 1, 2020





Welcome and Overview

- Thank you and Introduction
- Meeting Recorded; Recording Available on the website
- Chat Function/Questions
- Mute



Meeting Format

- Brief introduction
- CEA Requirements
- Summary of Proposal
- Opportunity for Public Comment

Public Comment Process

1. Raise hands to provide comment- One person per Org.
2. Mute and Unmute
3. Alphabetical Order
4. EEAG members
5. 3 Minute time limit-State Name and Organization for the record
6. Possible second round of 2 minutes



Timeline

- Comments: Due April 13th
- Comments inform Staff recommendations to Board
- Board Action anticipated May 2020
- Utilities File- Late summer/Early Fall
- Programs Commence July 2021



EE Transition Stakeholder Process

- **Sept. 25, 2019:** Program Administration
- **Oct. 30, 2019:** Programs, Market Needs & Barriers to Adoption
- **Oct. 31, 2019:** Cost Recovery Technical Meeting 1
- **Dec. 13, 2019:** Cost Recovery Technical Meeting 2
- **Dec. 18, 2019:** Evaluation, Measurement & Verification
- **Dec. 18, 2019:** Filing & Reporting
- **Dec. 20, 2019:** *Program Administration Straw Proposal Released for Comment*
- **Jan. 23, 2020:** *Cost Recovery (Proposal for Comment Released Ahead of Meeting)*
- **Feb. 4, 2020:** *Application of Utility Targets (Proposal for Comment Released Ahead of Meeting)*
- **March 20, 2020:** *Full EE Transition Straw Proposal Release for Comment*
- **April 1, 2020:** Draft Straw Proposal



Clean Energy Act

In 2018, Governor Murphy signed the Clean Energy Act, taking a significant step to establish New Jersey's leadership in the clean energy economy.

The Act requires BPU to:

1. Adopt an electric energy efficiency (EE) program and natural gas EE program in order to ensure investment in cost-effective EE measures, ensure universal access to EE measures, and serve the needs of low-income communities that shall require each electric public utility and gas public utility to implement EE measures that reduce electricity and natural gas usage in the state pursuant to N.J.S.A. 48:3-87.9. N.J.S.A. 48:3-87(g); N.J.S.A. 48:3-87(h).





Clean Energy Act

The Act requires BPU to (cont'd):

2. Require each electric and natural gas public utility to reduce the use of electricity and natural gas below what would have otherwise been used. N.J.S.A. 48:3-87.9(a)
 - A gas public utility shall reduce the use of natural gas for residential, commercial, and industrial uses but shall not be required to include a reduction in natural gas used for distributed energy resources (DER) such as combined heat and power.
 - Each electric public utility must achieve annual reductions of 2% of average annual electricity usage in the prior three years within five years of implementation of its program.
 - Each natural gas public utility must achieve annual reductions of 0.75% of average annual natural gas usage in the prior three years within five years of implementation of its program.





Clean Energy Act

The Act requires BPU to (cont'd):

3. Complete a study to determine the energy savings targets for full economic, cost-effective potential for electricity and natural gas usage reduction as well as potential for peak demand reduction. § 87.9(b).
4. Adopt quantitative performance indicators (QPIs) for each utility with reasonably achievable targets for energy usage and peak demand reductions (PDR). § 87.9(c).
 - In establishing QPIs, the Board shall use a methodology that ensures that the utility's incentives or penalties are based on performance and take into account the use of electric vehicles, microgrids, and DER.
 - In establishing QPIs, the Board shall also consider each utility's customer class mix and potential for adoption by each class of programs offered by the utility or that are otherwise available.
 - The Board shall review QPIs every 3 years.
 - A utility may apply all energy savings attributable to programs available to its customers, (including demand side management programs), other measures implemented by the utility, non-utility programs (including those available under EE programs in existence on May 23, 2018), building codes, and other efficiency standards in effect to achieve its targets.





Clean Energy Act

The Act requires BPU to (cont'd):

5. Establish a stakeholder process to evaluate the economically achievable EE and PDR requirements, rate adjustments, QPIs, and the process for evaluating, measuring, and verifying energy usage and peak demand reductions. § 87.9(f)(1).
 - Establish an independent advisory group to study the evaluation, measurement, and verification (EM&V) process for the programs and provide recommendations to the Board for improvements.
6. Determine, pursuant to N.J.S.A. 48:3-98.1, the appropriate level of reasonable and prudent costs for each program and the revenue impact of sales losses resulting from implementation of the programs. § 87.9(d)(3); § 87.9(e)(1).





Clean Energy Act

The Act requires each electric and gas public utility to:

1. Establish EE and PDR programs to be approved by the Board no later than 30 days (May 1) prior to the start of the energy year (June 1). § 87.9(d)(1).
2. Establish EE and PDR programs that have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, considering both economic and environmental factors. § 87.9(d)(2).
 - The methodology, assumptions, and data used to perform the benefit-to-cost analysis shall be based upon publicly available sources and subject to stakeholder review and comment.





Clean Energy Act

The Act requires each electric and gas public utility to (cont'd):

3. File with the BPU implementation and reporting plans, as well as EM&V strategies to determine the energy usage and peak demand reductions achieved by the programs. § 87.9(d)(3).
 - The filings shall include details of expenditures made by the utility and the resultant reduction in energy usage and peak demand.
4. File an annual petition with the BPU to demonstrate compliance with the programs, to demonstrate compliance with the targets established pursuant to the QPIs, and for cost recovery of the programs. § 87.9(e)(1).
 - Each utility shall file annually with the BPU a petition to recover on a full and current basis through a surcharge all reasonable and prudent costs incurred as a result of the program – including, but not limited to, recovery of and on capital investment – and the revenue impact of sales losses resulting from implementation of the programs.





Clean Energy Act

Electric and gas public utility requirements, cont'd:

- If a utility achieves its performance targets, it shall receive an incentive as determined by the Board pursuant to an accounting mechanism established pursuant to N.J.S.A. 48:3-98.1 for its EE and PDR measures for the following year. The incentive shall scale in a linear fashion to a maximum established by the Board that reflects the extra value of achieving greater savings. § 87.9(e)(2).
- If a utility fails to achieve the reductions in its performance targets, it shall be assessed a penalty as determined by the Board through an accounting mechanism established pursuant to N.J.S.A. 48:3-98.1 for its EE and PDR measures for the following year. The penalty shall scale in a linear fashion to a maximum established by the Board that reflects the extent of the failure to achieve the required savings. § 87.9(e)(3).
- The adjustments made pursuant to § 87.9(e) may be made through adjustments of the utility's return on equity related to the programs only or a specified dollar amount reflecting the incentive structure. The adjustments shall not be included in a revenue or cost in any base rate filing and shall be adopted by the Board pursuant to the Administrative Procedure Act. § 87.9(e)(4).





Clean Energy Act

The Act requires each electric and gas public utility to (cont'd):

5. Conduct a demographic analysis to determine if all of its customers are able to participate fully in implementing energy efficiency measures, identify market barriers that prevent such participation, and make recommendations for measures to overcome such barriers. N.J.S.A. 48:3-87.9(f)(2).





Principles for the EE Transition:

- Access to energy efficiency programs for all market segments and for all New Jersey residents and businesses, regardless of geographic location;
- Decreased energy burdens for all ratepayers, with a specific focus on lower income customers and environmental justice communities;
- Increased access to energy efficiency opportunities through promoting and expanding energy efficiency for customers and communities with low and moderate income levels;
- Increased accountability and reporting of spending and savings related to energy efficiency and peak demand reduction;
- Reduced costs for energy saved through reliable and consistent program delivery;
- Reduced administrative costs passed through to ratepayers; and
- Expanded job opportunities and increased economic benefits of energy efficiency for New Jersey.



Program Administration

- Programs Administration will be **hybrid**; with some programs administered by utilities, some by the State and some co-managed
- Utilities will be required to administer core programs **consistently** across the state, to ensure **equitable access**, but will have some **flexibility** in making utility-specific modifications



Individual Program Administration

Program Administrator

Core Programs

Additional Initiatives

State-Administered

Residential:

- Residential New Construction
- Retail Products

Commercial & Industrial:

- Pay for Performance- New Construction
- Combined Heat & Power/ Fuel Cells Program
- Multifamily- New

- Energy Codes and Standards Initiatives
- Research and Development
- Workforce Development
- Public Education Initiatives- Energy Efficiency Curriculum
- Community Energy Grants
- Peak Demand Reduction
- ESIP

Utility-Administered

Residential:

- Home Performance with ENERGY STAR
- WARMAdvantage
- COOLAdvantage

Commercial & Industrial:

- Pay for Performance- Existing Buildings
- Direct Install, SmartStart
- Customer-Tailored Energy Efficiency Pilot
- Large Energy Users Program
- Multifamily- Existing

- Behavioral Programs
- Strategic Energy Management Programs
- On-Bill Financing Options
- Other Pilot Programs
- Peak Demand Reduction

Co-Managed

- Low Income (Comfort Partners)
- Energy Efficiency Products Marketplace
- Appliance Recycling Program
- Marketing

- Utilities will coordinate program design and implementation of core programs, to ensure customers are receiving EE measures for both electric and gas, comprehensively
- **Co-managed** programs will be delivered by Utilities on a day-to-day basis, but implementation will involve collaboration with the State
- Utilities and the State may undertake optional **additional initiatives**
- Utilities and State will develop and implement Peak Demand reduction programs

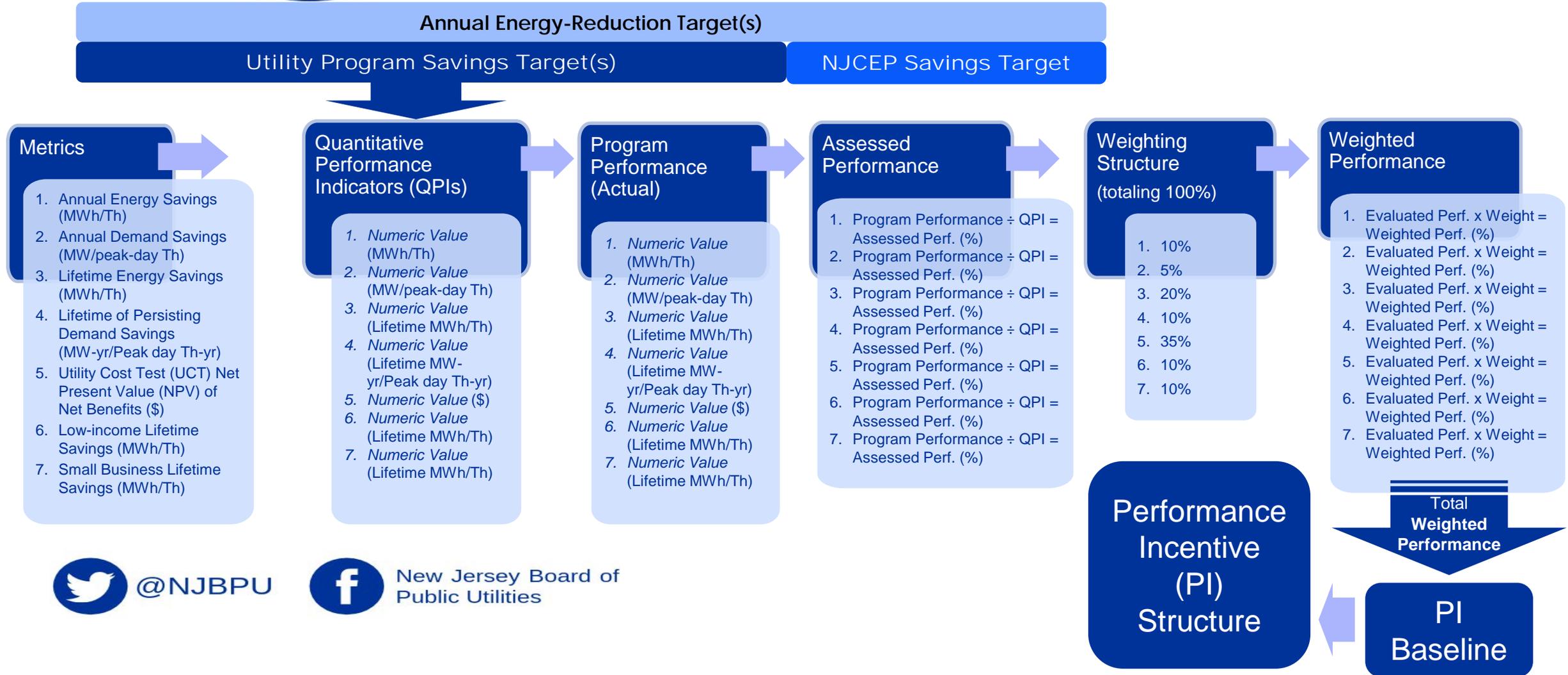


Marketing

- Marketing and Communications Working Group (MC WG) will direct marketing
 - › Consists of all utilities, the State, relevant marketing contractors
- Through this joint approach to marketing, both the State and utilities will be able to leverage each other's strengths
- Key features include:
 - › State-wide branding of “NJCEP” to increase program recognition
 - › State-run efforts to increase brand awareness and operate large-scale marketing
 - › Utility-run direct marketing to customers
 - › Co-branding with utility logos, etc.



Utility Performance Review Structure





Triennial Review

Every three years, in advance of filings for the applicable three-year program cycle, Staff will facilitate a stakeholder process (the triennial review) to discuss the following elements for **each** of the subsequent five years:

1. Overall Utility-Specific Annual Energy Use Reduction Targets (*for each utility and each energy source*)
 - › NJCEP Annual Energy Savings Targets (*for each utility and each energy source*)
 - › Utility Program Annual Energy Savings Targets (*for each utility and each energy source*)
2. Metrics (*consistent for all utilities*)
3. Weighting Structure (*consistent for all utilities*)
4. Cost Recovery Mechanism
5. Performance Penalty and Incentive Structure



Metrics

- 1. Annual Energy Savings** - Annual energy savings plays a key role, per the CEA, and is a common metric for jurisdictions seeking to encourage reductions in energy use to evaluate incremental savings.
- 2. Annual Demand Savings** - Annual demand savings determines the demand savings resulting from energy efficiency measures and/or codes and standards. Peak demand savings metrics are important for grid stability and reliability.
- 3. Lifetime Energy Savings** - Lifetime savings help determine the overall benefits of energy efficiency programs, and including this metric encourages long-term, persistent energy saving measures. They are also a better comparison to supply side options.
- 4. Lifetime of Persisting Demand Savings** - Similarly, it is important to consider the persistence of demand savings in the long term in order to encourage longer-lasting measures and better manage grid implications.



Metrics

- 5. Utility Cost Test (UCT) Net Present Value (NPV) of Net Benefits** - Considering UCT benefits, those that accrue to the utility, in the metrics is important to encourage cost-effectiveness, in addition to pure savings. With this metric, if a utility can achieve its goals with less funding than originally planned, it will achieve higher net benefits and attendant incentives.
- 6. Low-income Lifetime Savings** - Considering low-income lifetime savings encourages energy efficiency program designs that reward investment in deeper, comprehensive energy savings measures for income-eligible customers. It also promotes attention to energy efficiency for low-income customers, which is traditionally a more expensive sector to deliver programs to and ensures that harder to serve customers will not be overlooked in pursuit of cheaper savings.
- 7. Small Business Lifetime Savings** - Similarly, small business energy savings are typically more difficult to capture and realize; much like the low income lifetimes savings metric, the inclusion of this metric will discourage utilities from seeking only easy-to-reach customers.



Proposed Electric Targets

Electric Utility Territories

Program Year	Overall Utility-Specific Annual Energy Use Reduction Target <i>Net Savings (% of load)</i>	NJCEP Annual Energy Savings Target <i>Net Savings (% of load)</i>	Utility Program Annual Energy Savings Target <i>Net Savings (% of load)</i>
Year 1 (FY22)	0.75%	0.177%	0.573%
Year 2 (FY23)	1.10%	0.260%	0.840%
Year 3 (FY24)	1.45%	0.343%	1.107%
Year 4 (FY25) <i>preliminary</i>	1.80%	0.425%	1.375%
Year 5 (FY26) <i>preliminary</i>	2.15%	0.508%	1.642%



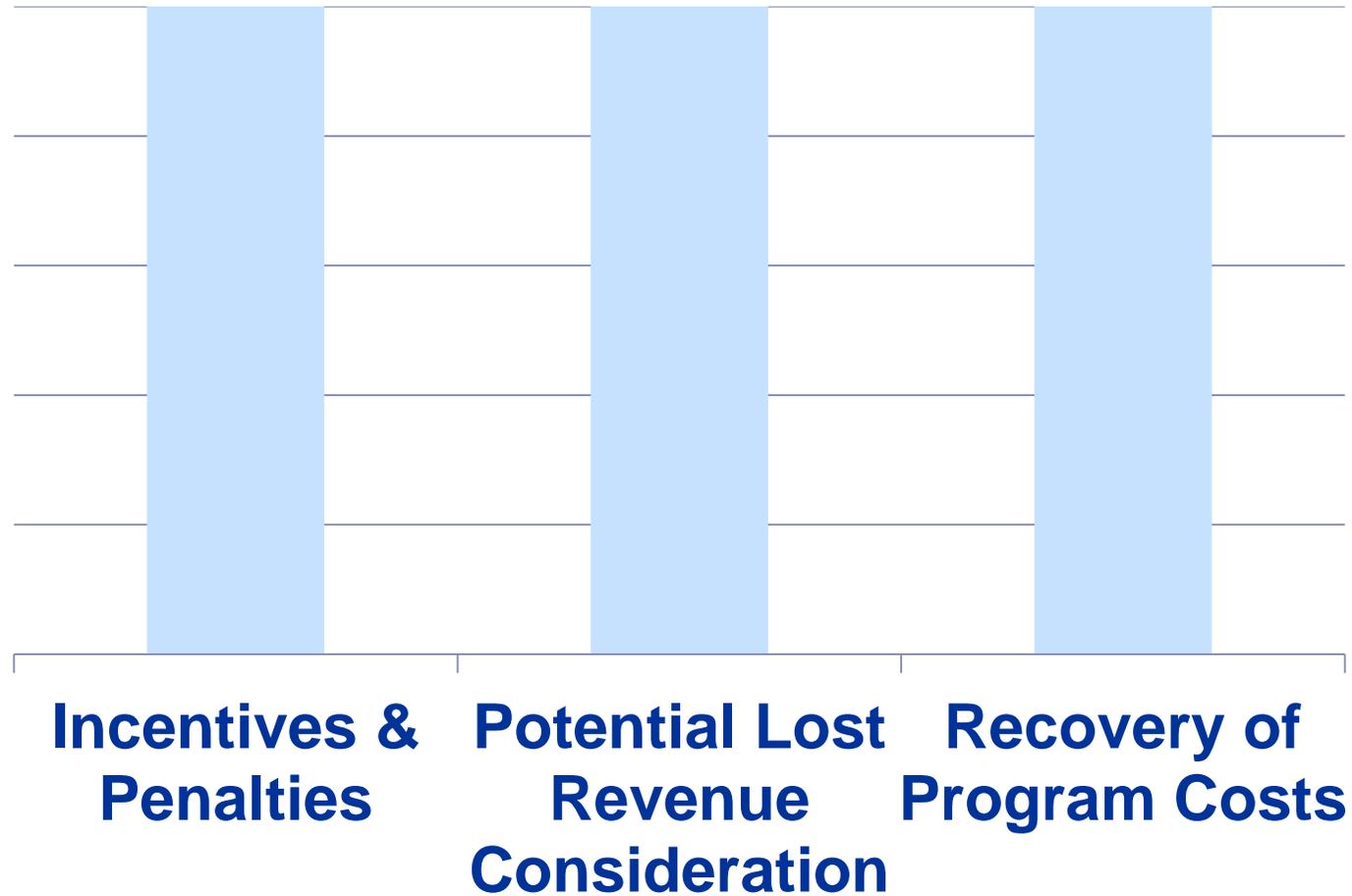
Proposed Gas Targets

Gas Utility Territories

Program Year	Overall Utility-Specific Annual Energy Use Reduction Target <i>Net Savings (% of load)</i>	NJCEP Annual Energy Savings Target <i>Net Savings (% of load)</i>	Utility Program Annual Energy Savings Target <i>Net Savings (% of load)</i>
Year 1 (FY22)	0.25%	0.0652%	0.1848%
Year 2 (FY23)	0.50%	0.1304%	0.3696%
Year 3 (FY24)	0.75%	0.1955%	0.5545%
Year 4 (FY25) <i>preliminary</i>	0.95%	0.2477%	0.7023%
Year 5 (FY26) <i>preliminary</i>	1.10%	0.2868%	0.8132%



Cost Recovery Pillars





Recovery of Program Costs

- **Program costs** associated with operations and maintenance (O&M) will be expensed and included in a utility's annual true-up filing
- **Program investments** will be amortized over a seven-year period. Based on the capital structure from utility's most recent base rate case, incorporating both (a) the cost of debt and (b) the return on equity ("ROE") less 100 basis points

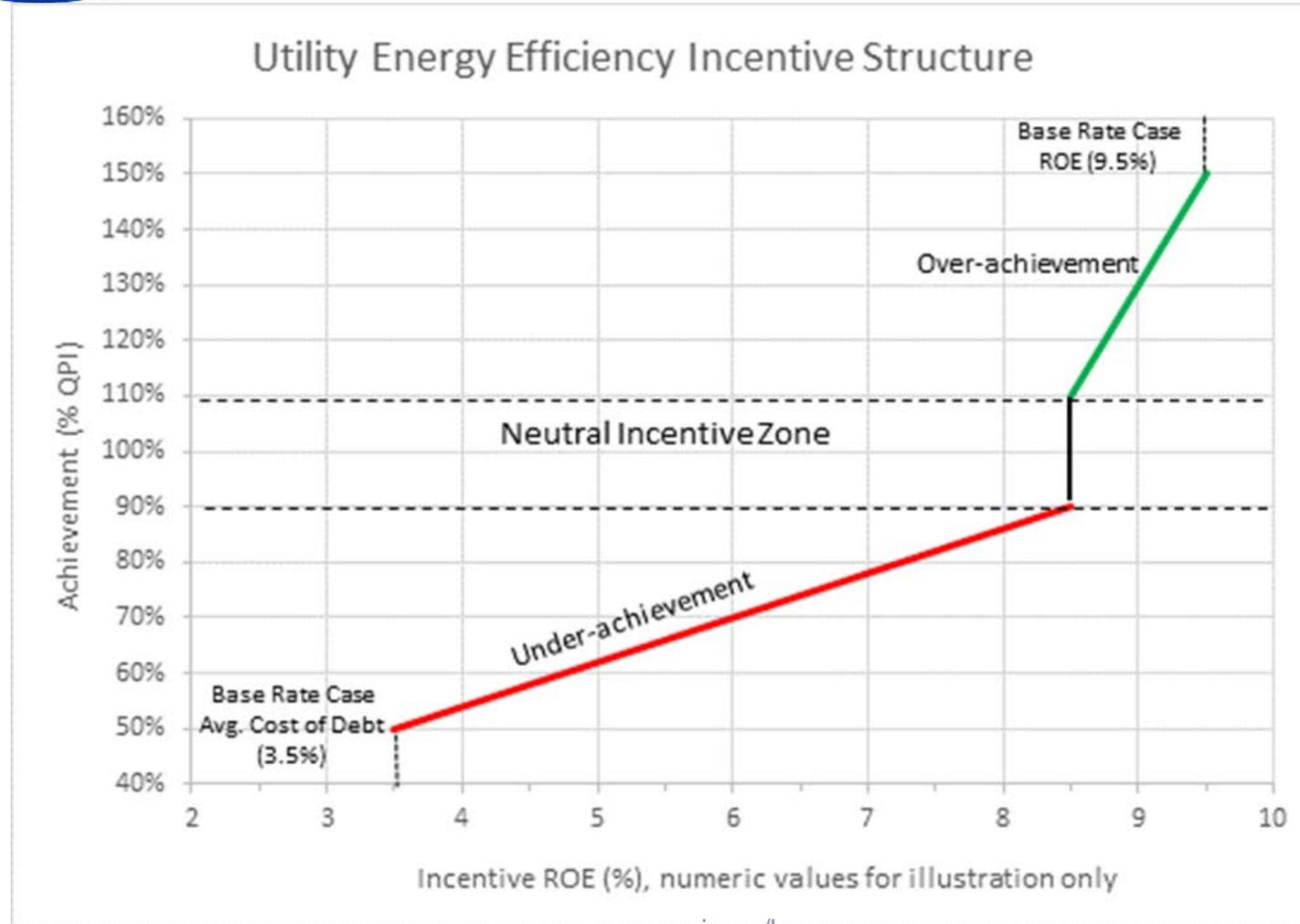


Potential Lost Revenue Considerations

- **Revenue loss** will be addressed by allowing utilities to recover lost revenues that they can demonstrate were attributable to their energy efficiency and peak demand reduction programs, through a lost revenue adjustment mechanism (LRAM). CIP and ECIP will be available.
- Lost revenues will be reviewed and recovered annually.
- Revenues must be associated with base rates, provable, utility must pass earnings test.
- Utilities can apply for full decoupling under a full rate case.
- Decision will be revisited in three years.



Penalty/Incentive Structure



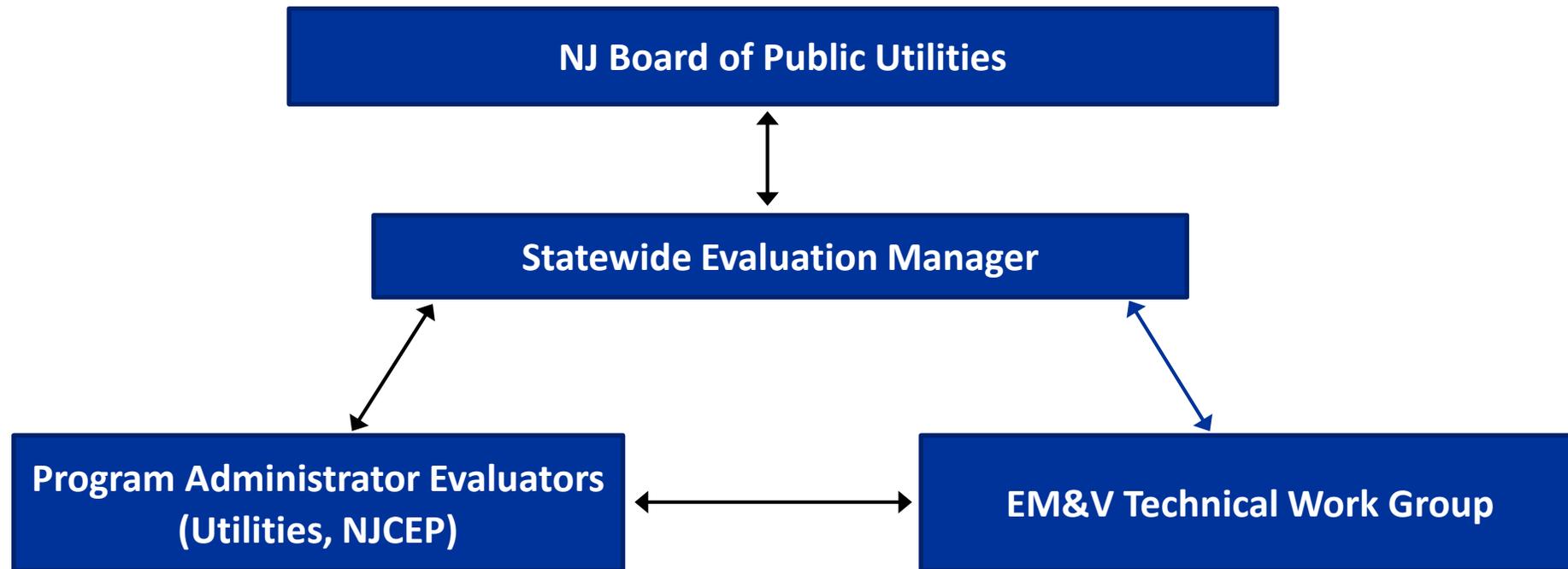


Penalty/Incentive Structure

- A utility will earn a **performance incentive** in the form of a higher modified ROE if they achieve (between 110%-150%) their established targets.
- A utility will receive a **performance penalty** in the form of a reduced modified ROE if they miss their targets (between 50%-90%).
- A **buffer zone** (between 90%-110%) of target achievement will be established where a utility will neither be awarded an incentive nor assessed a penalty but will receive a set return which has been modified (ROE minus 100 basis points weighted against the cost of debt) to recognize that risk is lower for these types of investments.
- If a utility fails to reach 50% of their targets, they will be deemed noncompliant and assessed a separate penalty that scales appropriately to the utility's size.



EM&V Administrative Framework





Current BCA Tests

- The DCE has traditionally based its BCA on the California Standard Practice Manual, which defines five main cost tests for the benefit-cost analysis to align with the various perspectives of key stakeholders.
 1. The **Participant Cost Test** measures the quantifiable benefits and costs to the customer attributed to participation in a program.
 2. The **Program Administrator Cost Test, or Utility Cost Test** indicates whether the benefits of an EE resource will exceed its costs from the perspective of the utility system only.
 3. The **Ratepayer Impact Measure Test (RIM)** measures the impact on customer bills or rates due to changes in revenues and operating costs of the program. It tests equity between participants and non-participants.
 4. The **Total Resource Cost Test** evaluates cost-effectiveness of energy efficiency investment as a resource and compares it with other demand-side and supply-side resources from the combined perspective of the utility system and participants.
 5. The **Societal Cost Test** attempts to quantify the change in the total resource costs to society as a whole. It is similar to the Total Resource Cost Test, but adds in additional costs and benefits incurred by society, including environmental costs, improved health outcomes, and economic development impacts.



Benefit Cost Analysis/Cost-Effectiveness Testing

- Throughout Spring – early Summer 2020 NJBPU Staff will engage with stakeholders to develop a Primary Test to be used by the State and all utility program administrators



CEA Filing & Reporting

- Each electric and gas public utility shall **file implementation and reporting plans**, as well as evaluation, measurement, and verification strategies, to determine the energy usage and peak demand reductions achieved by the programs. The filings shall include details of **expenditures** made by the utility and the resultant **reduction in energy usage and peak demand**. (N.J.S.A. 48:3-87.9(d)(3)) (emphasis added)
- Each electric and gas public utility shall file an annual petition to demonstrate **compliance with the energy efficiency and peak demand programs, compliance with the targets** established pursuant to the QPIs, and for cost recovery of the programs. (N.J.S.A. 48:3-87.9(e)(1)) (emphasis added)



Filing & Reporting Timeline

Fiscal Year (FY)	Program Year	Program Cycle	Annual Filings
July 1, 2019- June 30, 2020		May 2020: Board Order on new programs	Cost recovery and performance filings
2021		Fall 2020: Utilities submit program filings April 2021: Anticipated Board action on filings	Cost recovery and performance filings
2022	1	July 2021: New energy efficiency/peak demand reduction programs begin (new program cycle)	Cost recovery and performance filings
2023	2	Triennial review	Cost recovery and performance filings
2024	3	Utility program filings	Cost recovery and performance filings
2025	4	New program cycle begins	Cost recovery and performance filings
2026	5	Triennial review	Cost recovery and performance filings
2027	6	Utility program filings	Cost recovery and performance filings
2028	7	New program cycle begins	Cost recovery and performance filings
2029	8	Triennial review	Cost recovery and performance filings
2030	9	Utility program filings	Cost recovery and performance filings
2031	10	New program cycle begins	Cost recovery and performance filings
2032	11	Triennial review	Cost recovery and performance filings



Energy Efficiency Advisory Group Comments