Massachusetts Energy Efficiency Performance Incentive Mechanism in the 2019-2021 Plan

Jointly presented by PAs and Council Consultants

June 29, 2020

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Agenda

Introduction	Why performance incentives
	Regulatory guidance on incentive mechanism
	Focus on achieving goals
Current MA Performance Incentive Mechanism	Design of mechanism
	Example of 2019-2021 mechanism
	2016-2018 PI results

Introduction:
Why Performance Incentives?

- Performance incentives can be very effective in supporting achievement of goals and objectives
- Such incentives have been effective in encouraging energy efficiency in MA for decades
- Performance incentives are an extremely important part of the Plans; design of the mechanism, the level of the incentive, and achieving an effective balance are crucial

Regulatory Guidance on Performance Incentive Design

The DPU, in its order in DPU 08-50-A, states that in reviewing the performance incentive mechanism included in an energy efficiency plan, the Department will rely on the following principles:

- Performance incentive mechanisms should be designed to encourage distribution companies to pursue all available cost-effective energy efficiency.
- The amount of funds available for performance incentive mechanisms should be kept as low as possible, in consideration of the other principles adopted herein, in order to minimize the costs to electricity and gas customers.
- Performance incentive mechanisms should be designed in such a way as to encourage energy efficiency program designs that will best achieve the Commonwealth's energy goals, particularly with regard to the goals stated in the Green Communities Act.
- Performance incentives should be based on clearly-defined goals and activities that can be sufficiently monitored, quantified and verified after the fact.
- Performance incentives should be available only for activities where the distribution company plays a distinct and clear role in bringing about the desired outcome.
- Performance incentive mechanisms should be as consistent as possible across all electric and gas distribution companies. Any deviations across distribution companies should be clearly justified.
- Performance incentive mechanisms should be created in such a way to avoid any perverse incentives.
- Any modifications to a previously approved performance incentive mechanism should be fully justified at the time they are proposed to the Department.

Performance incentives focused on achieving goals

- Performance incentives in MA have focused primarily on achieving two main goals:
  1. Achieving higher savings and benefits ($), in line with achieving all cost-effective energy efficiency
     - Electric energy, capacity, natural gas, oil, propane, water, non-energy impacts – all rolled up into statewide benefits in $
  2. Achieving the savings and benefits *cost-efficiently*, to maximize value
     - Net benefits (benefits minus the cost to achieve the benefits)
- Performance incentives are planned and earned at the portfolio level to achieve overall goals
- As a municipal aggregator, Cape Light Compact does not earn a performance incentive

The MA Performance Incentive: Three Components

EE & Passive Demand Savings Component	Goal: Maximize savings and benefits from EE & passive demand (total EE & passive demand benefits in $)
	Rewards PAs for acquiring additional lifetime energy and demand savings and project-associated other energy and non-energy benefits
	ELEC PAs: 58.7% of design level performance incentive GAS PAs: 61.5% of design level performance incentive
Active Demand Savings Component	Goal: Maximize savings and benefits from active demand reduction (total active demand reduction benefits in $)
	Rewards PAs for acquiring additional demand savings through active demand reduction benefits
	ELEC PAs: 4.5% of design level performance GAS PAs: 0%
Value Component	Goal: Maximize value and net benefits (total benefits minus total costs)
	Rewards PAs for seeking additional cost-effective savings and non-energy benefits, and doing so cost-efficiently
	ELEC PAs: 36.8% of design level performance incentive GAS PAs: 38.5% of design level performance incentive

The MA Performance Incentive: Design of the Mechanism

PI Pool

- The statewide design level PI pool is determined during the planning process
- 2016-2018: PI was 6.5% and 2.9% of total electric & gas PA costs, respectively
- These amounts are pre-tax

PA allocation

- The pool is divided by planned statewide 1) EE and passive demand benefits, 2) active demand benefits (elec only) and 3) net benefits to calculate payout rates
- PI allocated to each individual PA based on its proportion of planned benefits and net benefits

Potential PI

- Earned at the portfolio level
- Threshold – Minimum amount of benefits/net benefits needed to earn PI for each component (75% of design)
- Design – Equal to the PI pool at 100% of Plan, included in each PA's budget
- Exemplary – Maximum amount of PI, set as percentage of design (125%)

The MA Performance Incentive Example: 2019-2021 Electric PI

PI Pool for electric PAs set at $112 million: $107m base pool and additional $5m for active demand savings component

58.7% pool allocated to EE & passive demand savings component ($65.8 million)

4.5% allocated to active demand savings component

36.8% allocated to value component ($41.2 million)

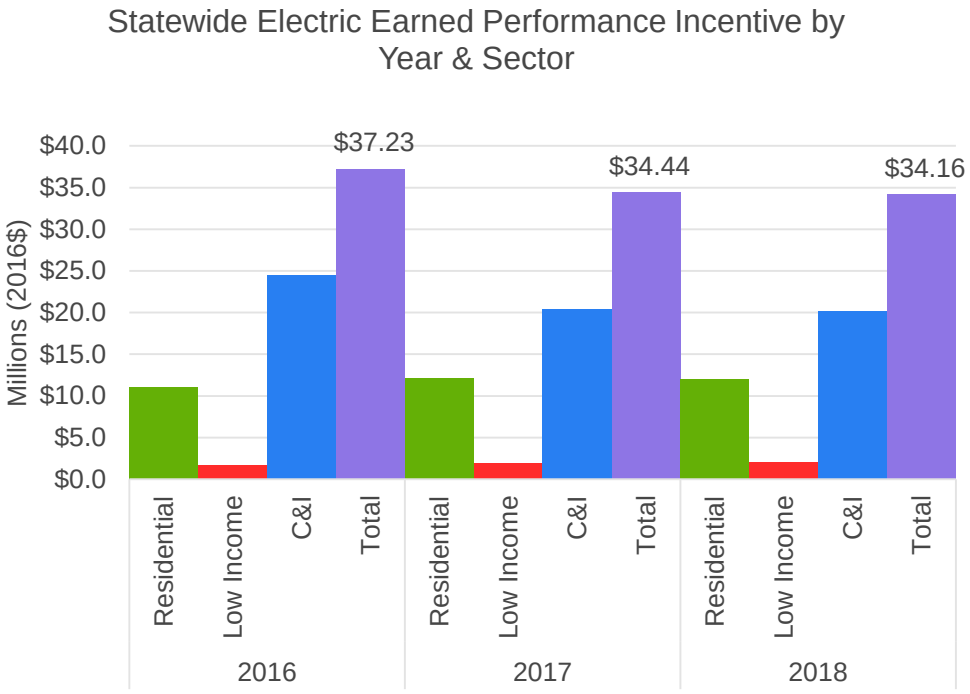
Payout rate = $65.8m / total planned EE & passive demand benefits

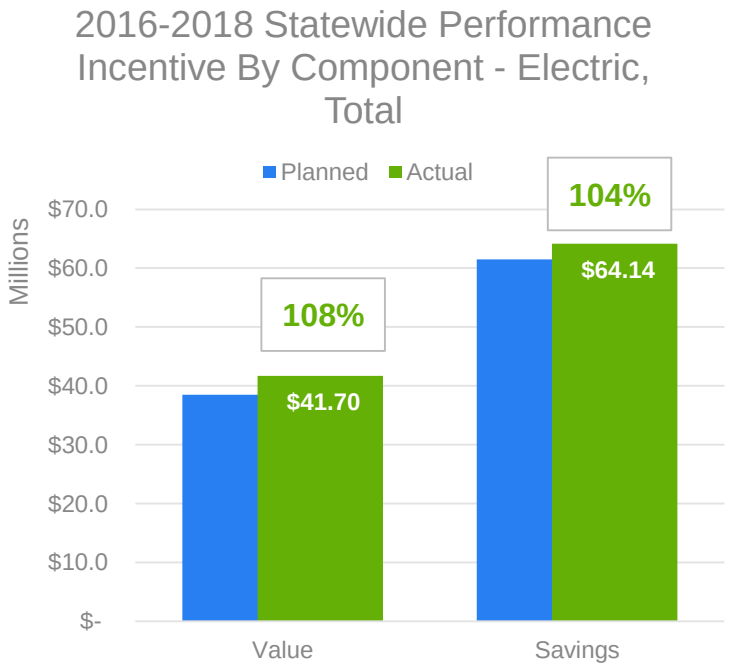
Payout rate = $5m / total planned active demand benefits

Payout rate = $30.7m / total planned net benefits

2019-2021 Energy Efficiency Performance Incentives Derivation of Electric Targets 2019-2021				
	Residential	**Low Income**	**C&I**	**Total**
Statewide Electric EE & Passive Demand Benefits	$ 1,556,545,808	$ 454,978,035	$ 4,303,321,352	$ 6,314,845,195
Electric EE & Passive Demand Benefits Payout Rate 2019-2021	$ 0.0104	$ 0.0104	$ 0.0104	$ 0.0104
Forecasted Electric EE & Passive Demand Savings Incentives	$ 16,220,270	$ 4,741,182	$ 44,843,548	**$ 65,805,000**
Statewide Electric Active Demand Reduction Benefits	$ 15,188,881	$ -	$ 164,848,148	$ 180,037,029
Electric Active Demand Reduction Payout Rates 2019-2021	$ 0.0278	$ 0.0278	$ 0.0278	$ 0.0278
Forecasted Electric Active Demand Reduction Savings Incentives	$ 421,827	$ -	$ 4,578,173	**$ 5,000,000**
Total Forecasted Savings Incentives	**$ 16,642,097**	**$ 4,741,182**	**$ 49,421,721**	**$ 70,805,000**
Forecasted Net Benefits	$ 899,495,649.00	$ 261,573,172.00	$ 3,567,154,000.00	$ 4,728,222,821.00
Value Payout Rate 2019-2021	$ 0.0087	$ 0.0087	$ 0.0087	$ 0.0087
Forecasted Value Incentives	**$ 7,836,924**	**$ 2,278,976**	**$ 31,079,100**	**$ 41,195,000**
Statewide Electric Standard Savings and Portfolio Value Component	$ 24,057,195	$ 7,020,158	$ 75,922,648	$ 107,000,000
Statewide Electric Active Demand Reduction Savings Component	$ 421,827	$ -	$ 4,578,173	$ 5,000,000
Statewide Design Level Performance Incentives	**$ 24,479,021**	**$ 7,020,158**	**$ 80,500,821**	**$ 112,000,000**

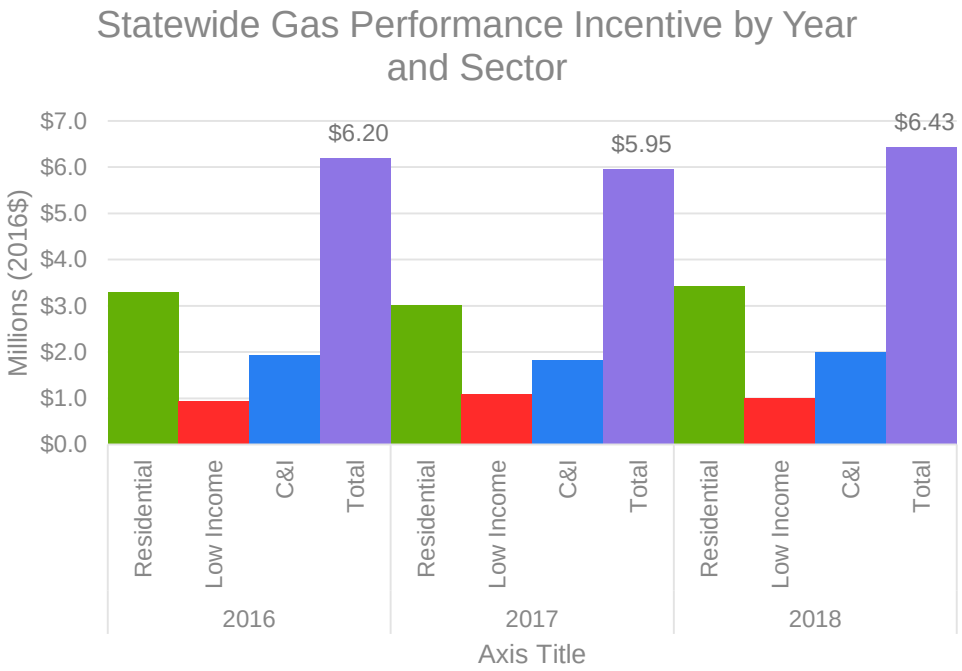
2016-2018 Achieved PI - Electric

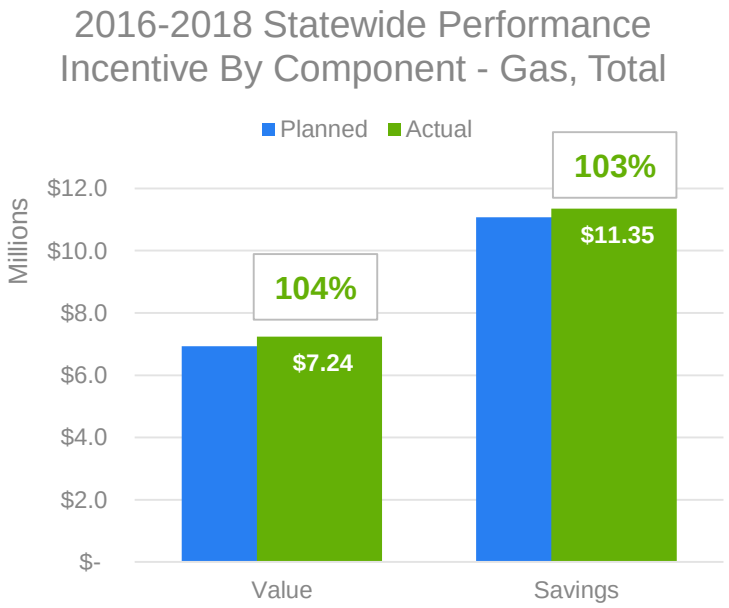




- Statewide, electric PAs earned 106% of planned performance incentive
- C&I achievements yielded 61.41% of total PI, Residential yielded 33.32% and Low Income yielded 5.28%

2016-2018 Achieved PI - Gas





- Statewide, gas PAs earned 103% of planned performance incentive
- Residential achievements yielded 52.5% of total PI, C&I yielded 31.1% and Low Income yielded 16.4%

Comparison of 2016-2018 and 2019-2021 PI Mechanisms

- The underlying mechanism is largely the same
  - Savings & Value as two main components
  - One statewide savings payout rate, one statewide value payout rate for each fuel, consistent across PAs
  - Threshold, Design, and Exemplary levels of achievement
- What changed?
  - The values of the payout rates changed since they are dependent on PI pool, planned benefits & net benefits
  - Additional savings component for active demand added for electric PAs
  - Use of total expenditures instead of total resource cost to calculate total net benefits for value component

Performance Incentives Proposed in the 2019-2021 Plan

Electric Performance Incentive Totals		
Value Component (Energy Efficiency, Passive Demand, and Active Demand)	$41.195 million	$107 million (38.5% Value and 61.5% Savings)
Savings Component (Energy Efficiency and Passive Demand)	$65.805 million	
Savings Component (Active Demand)	$5 million	
Renter Component	$2 million	
Total	$114 million	

Gas Performance Incentive Totals		
Value Component	$8.47 million	$22 million (38.5% Value and 61.5% Savings)
Savings Component	$13.53 million	
Renter Component	$1 million	
Total	$23 million	

DPU Review of Performance Incentives in the 2019-2021 Plan

- DPU approved the PI proposed in the Plan except for:
  - New renter component to provide PAs with additional encouragement *to successfully serve* all residential renters and *to track* the number of renters served.
- Summary of DPU Order not approving the renter component:
  - "The proposed renter component would provide performance incentive payments to the PAs to undertake activities that they are already obligated by GCA to undertake."
  - "…the PAs have already undertaken activities in an effort to serve renters more successfully."
  - "…a performance incentive is not necessary to ensure that renter participation will be appropriately tracked."
  - DPU directed PAs to track and report renters by dwelling unit.
- DPU also changed the costs used in the Value (net benefits) component from TRC costs to program implementation costs, consistent with the PA proposal in the Plan.

Specific PI Metrics in Prior Versions of PI Mechanism in Earlier Plans

- Earlier versions of the PI mechanism in MA included specific PI metrics as a third component in addition to Savings and Value components (e.g., 2010-2012 Plan)
- Reasoning was that some priority objectives were not necessarily adequately represented in the overall portfolio benefits (Savings component) or net benefits (Value component) and needed specific focus
- Some examples:
  - Deeper savings (% of customers who install major measures)
  - Strategic targeting (marketing to increase participation in gateway cities and “hard-to-reach” communities)
  - Deeper savings for C&I (increase in % savings compared to prior period)

DPU Order on Specific PI Metrics

- In Dec. 2012, the PAs filed seven specific PI metrics for 2013 (2 Res, 2 Low Income, and 3 C&I metrics)
- The DPU (in DPU 13-67) did not approve the specific performance incentive metrics for 2013, stating:
  - The PAs are already obligated to undertake activities such as those targeted by the proposed PI metrics to satisfy the mandates of the Green Communities Act.
  - The investment of time and resources solely for the purpose of verifying metric performance is out of proportion with the potential benefit of the specific PI metrics.
  - Verifying performance of the metrics would divert PA and stakeholders focus from successful implementation.
  - There now exists infrastructure through which stakeholders can participate in program design and implementation.

Context: Comparison to Performance Incentives in Other States

- Performance incentives are common in other states, and are used in all leading-EE states
- PI focus in most states is on savings or benefits
  - "Shared savings" mechanisms in some states
- Less common to see value component
  - MA focuses on both achieving benefits and doing so cost-efficiently through the value component
- Specific PI metrics are used in some states
- MA PI provides good value – #1 EE state yet PI is on the low end of spectrum as % of program cost

Thank you

Appendix

Statutory Guidance

- The Green Communities Act, in its directives on the three year statewide plans, states in Section 21 (b)(2):

  "A plan shall include…(v) a proposed mechanism which provides performance incentives to the companies based on their success in meeting or exceeding the goals in the plan;…"