

MEMORANDUM

To: Chairperson Curran, Commissioner Gold

From: Commissioner Anthony

Date: March 5, 2019

Re: Principles for Performance Incentive Mechanisms

Over the past two years, the frequency, complexity, and policy aim of performance incentive proposals before the Commission have increased. We have unanimously rejected most of these proposals and provided our reasons, but I believe this process has not been efficient for providing stakeholders clear, complete, and consolidated guidance on the Commission's policy for the appropriate use and design of performance incentive mechanisms. Since November, I have been working with Commission staff Todd Bianco and John Harrington and a staff consultant, Michael O'Boyle of Energy Innovation, to review the Commission's existing standards for performance incentive mechanisms and to draft guiding principles that would support stakeholders' development of, and the Commission's review of, performance incentive mechanisms. Below, you will find the first output of our effort.

I have organized this document into four parts. First, I provide the purpose and background for the document. Second, I discuss how Docket 4600 relates to this document and provide some thoughts on the nature of risk in costs and benefits that I believe we consider but have not necessarily discussed. Third, I provide five draft principles for performance incentive mechanisms. Fourth, I present some next steps for this work.

You will notice the entire document is in question-and-answer format. The staff and I found this useful for testing whether the proposed principles in section III were designed as we intended. Having completed that section, we still found the format useful for providing our collective reasoning and invoking new questions, and I decided to extend the format to the other sections. I look forward to discussing this with you at an Open Meeting.

I. Introduction

Q. What is the purpose of this document?

The purpose of this document is to define principles to guide the development of performance incentive mechanisms (PIMs) that are consistent with key regulatory principles.¹ PIMs can be reasonable, possibly necessary, tools to improve a utility's performance in certain areas. A commission can use the principles in this document to determine whether a proposed PIM is a reasonable tool to motivate behavior aligned with the public interest and use these principles to clarify the regulatory standard for PIMs.

Q. Why is this document needed?

The Commission has developed, through Orders and the Least Cost Procurement and System Reliability Procurement Standards², guidance for the design of performance incentives. This guidance needs to be consolidated in a single place and presented as independent from any specific program to provide more clarity to stakeholders. Furthermore, in consolidating the PIMs policies, the policies need to be reviewed for comprehensiveness and redundancy. This document proposes draft principles that meet these needs.

Q. How do the Least Cost Procurement and System Reliability Procurement Standards inform this document?

The PIMs standards in the Least Cost Procurement and System Reliability Procurement Standards were the starting point for developing the principles proposed in this document. Throughout this document, the guidance from the Least Cost Procurement and System Reliability Procurement Standards (as well as the rationale for decisions made in Docket 4774) are referred to as "old standards."³

The new principles are not a one-for-one replacement of the old standards. The new principles are designed to be more concise; less redundant; clearer; more comprehensive; more flexible; and more universally applicable.

Q. How can regulators use this document?

PIMs can be a reasonable tool to improve a utility's performance in certain areas. Regulators can use this document to determine when it is appropriate to utilize PIMs. Principle 1 can be considered the beginning of a decision process that guides the regulator to determine whether she should even be considering a PIM. If the answer is "yes," the remaining principles will help her determine whether a specific proposal is consistent with regulatory standards.

¹ The principles are presented and discussed in section III and are listed without discussion in the Appendix.

² RI PUC Docket 4684, http://www.ripuc.org/eventsactions/docket/4684-LCP-Standards_7-27-17.pdf

³ See Appendix.

Regulators can also use this document to determine the policy areas that are likely the best fit for PIMs. Using similar logic, other commissions⁴ have identified a small number of areas in which cost of service regulation creates disincentives (or lacks incentives) for a utility to advance a policy area, and where there is known potential for the utility to play a significant role in creating benefits in these areas. Using these principles, regulators can identify policy areas for which well-designed PIMs may result in improvements to the status quo.

Q. How can the utility and other stakeholders use this document?

The utility and other stakeholders can use this document to determine whether a PIM is likely to be an appropriate tool to influence utility performance in a policy area. Following that determination, a utility and other stakeholders can use this document to develop PIM proposals that are more likely to be found consistent with regulatory standards by a commission.

II. Costs and Benefits

Q. The principles in this document reference costs and benefits. What costs and benefits are being considered?

References to costs and benefits in the principles (and throughout this document) are written in consideration of costs and benefits identified and described in the Rhode Island Benefit Cost Framework adopted in Docket 4600A.

Q. How does this document consider different types of benefits?

Regulators must be able to assess the risk that ratepayers (and counterparties) will not receive the intended allocation of costs and benefits associated with programs and PIMs. The ability to verify that a benefit was created (and by whom), what its value was, and that the intended beneficiary received that value, reduces risk for a commission, beneficiaries, and all parties. Risk increases as the ability to verify this information decreases. Regulators should be able to weigh the risk that ratepayers will receive the benefits associated with a PIM or suite of PIMs and determine whether ratepayers are getting a good deal.

In this sense, cash benefits, which take the form of real avoided and reduced costs, are the least risky. If a customer⁵ realizes a lower bill or receives a bill credit, that benefit is reliably accounted. If a PIM creates cash benefits, a commission can be reasonably confident that the customer will receive defined value, or that any variances will be transparent and accounted for. For example, consider a case in which a utility is awarded five percent of the net proceeds of a market transaction and ratepayers receive the remaining ninety-five

⁴ For example, the Public Utilities Commission of Hawaii Phase I Staff Report recommends four priority areas for PIMs: reliability, interconnection experience, customer engagement, and DER Asset Effectiveness. See https://puc.hawaii.gov/wp-content/uploads/2019/02/PBR-Staff-Proposal-3-page-Summary-Sheet_20190207.pdf, pg. 3.

⁵ This document uses ratepayer and customer interchangeably.

percent. After the transaction is completed, these net proceeds can be simply and reliably allocated.

Some benefits can be quantified, verified, and assigned a dollar value, but nobody can “cash out” that value. Because these benefits are more difficult to liquidate, there is additional risk that consumers won’t receive benefit commensurate with the estimate. For example, consider a scenario in which, through robust scientific and economic evidence, a commission finds support for a \$100 per ton value of carbon dioxide (CO₂) emissions reduction. Although supported by strong evidence, this estimate is still an estimate. In other words, there is some risk that the actual value of carbon dioxide emissions reduction is greater than or less than \$100 per ton of CO₂. If a commission were to allow a utility an incentive of five percent of this value and pay that value in cash to the utility, then the utility is shielded from the risk that the actual value of CO₂ reduction is less than or greater than the estimated value, whereas society is fully exposed to this risk. To put a fine point on it, if the utility avoids a single ton of CO₂, the utility can literally take that money—\$5—to the bank, whereas a ratepayer that supported the reductions through bill payments can only assume \$95 flowed to society. When considering how a PIM will pay out, a commission should consider who bears the added risk allocated through that payout.

Qualitative benefits present the highest risk. Qualitative benefits are not readily measured and have unknowable economic value to customers. Qualitative benefits will be the most difficult, or impossible, to verify and measure. Therefore, if a commission grants the utility cash rewards in exchange for creating qualitative benefits, there is an even greater risk that ratepayers will not receive benefits commensurate with the estimate (because there is no estimate to begin with). Continuing with the example from the paragraph above, there would be no scientific or economic evidence for the \$5 paid to the utility, and ratepayers will have no way to even estimate the value flowing to society. Therefore, a commission should disregard qualitative benefits when considering the payout to the utility.

This logic also requires that regulators should not consider qualitative benefits that accrue to the utility in exchange for delivering quantitative or cash benefits. For example, regulators should not expect the utility to accept “good will” in exchange for creating the cash savings associated with energy efficiency that accrue to customers.

This policy could create additional positive feedback in program design. When regulators do not pay the utility for creating qualitative benefits, the utility will be incentivized to increase the transparency, quantification, verification, and accountability of its programs and investments to reap rewards for performance.

Q. Are qualitative benefits treated differently in program review versus PIMs?

Yes, in program review, a commission may consider qualitative benefits as part of a business case or cost-effectiveness framework to determine whether a program has merit. In the case of PIMs, a commission should not specifically pay the utility to deliver benefits that have unknowable economic value to customers.

III. Principles for Performance Incentive Mechanisms⁶

PRINCIPLE 1

A performance incentive mechanism can be considered when the utility lacks an incentive (or has a disincentive) to better align utility performance with the public interest and there is evidence of underperformance or evidence that improved performance will deliver incremental benefits.

Q. Which old standards inform this principle?

- #1: Incentive should promote the realization of new consumer and societal benefits.
- #2: Incentive should incentivize behavior the utility would otherwise not take.
- #4: There should be a clear, stated reason why the incentive is needed to achieve each specific objective.
- #5: Incentive should be designed to promote superior utility performance and significantly advance the expected benefits as efficiently as possible.
- #11: There should not be multiple incentives for attaining the same objective.

Q. Why is this principle needed?

PIMs can be reasonable, possibly necessary, tools to improve a utility's performance in certain areas. But PIMs are not the only regulatory mechanism available to regulators to drive performance and might not be appropriate in every case. Regulators should use Principle 1 as a threshold, or the start of a decision process. If a PIM proposal meets these fundamental criteria, then regulators should proceed to evaluate its design via the rest of the principles in this document. If not, regulators may consider whether a different regulatory mechanism is better suited to advance the area of interest.

Q. How will a Commission know when the utility lacks an incentive or has a disincentive to better align utility performance with the public interest?

Performance incentive mechanisms should improve on the cost-of-service model by rewarding outcomes that are aligned with the public interest but are not aligned with utility shareholder interests, or penalizing outcomes that are not aligned with the public interest.

The evidentiary record must support a finding that the utility lacks an incentive, or has a disincentive, to better align utility performance with the public interest. The proponent⁷ of the PIM must also demonstrate that the utility is underperforming relative to performance aligned with the public interest (or show potential that improved performance will be aligned with the public interest). If a commission can make these findings based on the record, then a PIM is a fair solution to consider.

⁶ The principles are also listed without the accompanying questions and answers in the Appendix.

⁷ This document anticipates that proponents of PIM proposals may include utilities or non-utility stakeholders, though the principles are also applicable in cases where a commission is the proponent.

Later, Principle 4 will require evidence that the proposed PIM is actually the right solution to the problem. In that step, the proponent must provide evidence that the financial incentive is necessary (i.e. the right amount of money) to motivate the desired performance.

PRINCIPLE 2

Incentives should be designed to enable a comparison of the cost of achieving the target to the potential quantifiable and cash benefits.

Q. Which old standards inform this principle?

- #1: Incentive should promote the realization of new consumer and societal benefits.
- #9: Incentive should be designed to enable a comparison of the cost of achieving the metric to the potential benefits.

Q. Why is this principle needed?

To make just and reasonable decisions, a commission must be able to compare various categories of costs and benefits. If the utility proposes a PIM without providing this information, a commission lacks the necessary basis for approving it. The ability to compare costs to different types of benefits will allow a commission to understand how risky the PIM is, and how risk and rewards are allocated. Principle 2 requires transparency that enables regulators and the public to understand the total cost of achieving the target and evaluate the cost-effectiveness of the PIM from multiple perspectives.

Q. What exactly will be compared?

Principle 2 means that a commission should be able to compare: 1) cost of achieving the target to the quantifiable, verifiable benefits; and 2) cost of achieving the target to the cash benefits. These categories of benefits are not mutually exclusive, and in fact are likely nested.

PRINCIPLE 3

Incentives should be designed to maximize customers' share of total quantifiable, verifiable net benefits. Consideration will be given to the inherent risks and fairness of allocation of both cash and non-cash system, customer, and societal benefits.

Q. Which old standards inform this principle?

- #1: Incentive should promote the realization of new consumer and societal benefits.
- #3: There should be a clear nexus between the metric and the expected benefits.
- #5: Incentive should be designed to promote superior utility performance and significantly advance the expected benefits as efficiently as possible.
- #6: Incentive should be designed so that customers receive most of the benefit.

Q. Why is this principle needed?

Principle 3 is needed because regulators, consumer advocates, ratepayers, and other stakeholders must have confidence that customers are protected from unreasonable costs

and will benefit from the PIM. The focus of this principle is on the allocation of benefits and risk associated with a PIM.

Q. Why “maximize” instead of “most” or a “majority?”

An incentive should offer the utility no more than necessary to motivate performance. In some cases, the incentive payment may amount to a majority of the net benefits, and in others, consumers might accrue a majority of net benefits. “Maximize” is flexible and means that the regulator has discretion to strike a fair balance between adjusting utility returns to motivate performance with maximizing customer value. “Most” or “majority” are definitive and less flexible to changing conditions.

Q. Isn’t this stingy? Why shouldn’t the utility get to keep the value it creates?

As described above, Principle 3 contemplates that, in some cases, it may be necessary to pay the utility a large proportion of the net benefits to motivate improved performance. However, a commission should expect that over time, the proportion of the benefits paid to the utility decrease and the proportion that accrue to customers increase.

Consider the dynamics of competitive markets. An early entrant to a market can earn economic profits. If there are no barriers to entry, additional firms will enter the market, attracted by the economic profits. As new firms enter the market, supply increases and incumbents are forced to lower their prices. New firms will enter until prices equal the average cost of production and all economic profit disappears. As a substitute for competitive markets, regulators should ensure that the utility is paid no more than necessary to achieve the target, as described in Principle 4, and that economic profits for the same amount of productivity squeeze down over time, forcing the utility to innovate to achieve greater value for customers.

This does not mean that regulators should change the PIM target or incentive structure once the PIM has been approved (i.e. regulators should not “move the goal post” in the middle of a performance period). This does mean, however, that a PIM can be designed to allocate an increasing proportion of the benefits to customers over the course of the performance period.

Q. What is the importance of verifiable benefits?

The ability to verify the benefits allows a commission to hold the utility accountable for its performance and helps consumer advocates and ratepayers gain trust and confidence in the value of PIMs.

Q. Why should the PIM be designed to maximize total net benefits?

The PIM should align the utility’s motivation with maximizing total net benefits because such a design can provide reasonable confidence that efficiency is increased and unintended consequences (such as gaming opportunities or budget inflation) are decreased.

Taken together, these principles seek to guide the development of PIMs that pay the utility no more than necessary to achieve the target and maximize the remaining quantifiable, and cash benefits for customers. To this end, a commission will expect that ratepayers will receive an increasing share of the net benefits over time.

Q. Is this principle intended to be restrictive?

Taken in combination, Principles 2, 3, and 4 are intended to maintain flexibility to consider the relative risk of quantifiable, verifiable and cash benefits in a commission's determination of whether a PIM represents a good deal for ratepayers (i.e. allocates costs and benefits, and risk in a just and reasonable way).

PRINCIPLE 4

An incentive should offer the utility no more than necessary to align utility performance with the public interest.

Q. Which old standards inform this principle?

- #1: Incentive should promote the realization of new consumer and societal benefits.
- #2: Incentive should incentivize behavior the utility would otherwise not undertake.
- #4: There should be a clear, stated reason why the incentive is needed to achieve each specific objective.
- #7: Incentives may be designed to grant increasing levels of rewards to the utility for higher levels of performance.
- #8: The design and implementation of the incentive should be completely transparent and fully document and reveal inputs and methodologies to ensure no duplication of incentives across various ratepayer funded programs.
- #11: There should not be multiple incentives for attaining the same objective.

Q. Why is this principle needed?

In combination with Principle 3, Principle 4 seeks to define consumer protection against unreasonable or excessive incentive payments. To appropriately set a performance incentive, a commission should consider and weigh all the benefits that flow to the utility to determine the marginal incentive necessary to motivate the proposed performance. This is similar to how all expenses and revenues are considered in the context of a rate case.

Q. What does “align with the public interest” mean?

Targets should be set to represent the public interest. Achieving the target indicates performance aligned with the public interest.

Q. How will a PIM be designed fulfill this principle?

To fulfill Principle 4, the proponent will need to first rely on the evidence provided to support that the PIM proposal meets Principle 1: the proponent must demonstrate with evidence that an incentive is needed to overcome a disincentive (or lack of incentive) implicit in cost-of-service regulation and any other incentives in the current regulatory

framework. The proponent must also demonstrate that the utility is underperforming relative to performance aligned with the public interest (or show potential that improved performance will be aligned with the public interest).

To fulfill Principle 4, the proponent must demonstrate with evidence that the proposed PIM is incremental and the amount necessary to motivate the proposed performance. The key point here is that in evaluating proposals against Principle 4, a commission must find evidence that the incentive is no larger than necessary to achieve the target.

Q. What accuracy is implied by “no more than necessary”?

The accuracy in a PIMs proposal should be comparable to the accuracy of any other proposal. The PIM proposal should be supported by evidence, quantitative analysis, and expert testimony. For example, in a rate case the utility shows a commission its accounting, financial records, and projections to argue for its proposed return on equity. Counterparties provide evidence to argue that the utility is incorrect. Similar to any other proposal that comes before a commission, regulators will evaluate competing arguments and come to as accurate a finding as possible given the quality of the evidence. One of the purposes of all these principles is to establish the ability for proponents and counterparties to make a case.

PRINCIPLE 5

The utility should be offered the same incentive for the same benefit. No action should be rewarded more than an alternative action that produces the same benefit.

Q. Which old standards inform this principle?

- #1: Incentive should promote the realization of new consumer and societal benefits.
- #5: Incentive should be designed to promote superior utility performance and significantly advance the expected benefits as efficiently as possible.
- #7: Incentives may be designed to grant increasing levels of rewards to the utility for higher levels of performance.
- #8: The design and implementation of the incentive should be completely transparent and fully document and reveal inputs and methodologies to ensure no duplication of incentives across various ratepayer funded programs.
- #10: Incentives may be designed to promote objectives including comprehensiveness, customer equity, lifetime net benefits, increased customer access to capital, market transformation, resiliency, connectivity, and operability.
- #11: There should not be multiple incentives for attaining the same objective.

Q. Why is this principle needed?

PIMs should encourage the utility to innovate while providing flexibility in how the target is achieved. In other words, rather than prescribing actions, PIMs should be designed to incentivize the utility to seek the most cost-effective methods of achieving performance aligned with the public interest. By setting a consistent reward for the benefit across

programs and investments, the utility will be motivated to find the lowest cost and most cost-effective methods to earn the reward.

No action should be rewarded more than an alternative action that produces the same benefit (e.g., for an equivalent contribution to achieving a target). Setting different incentives for the same benefit will drive utility action toward the higher-incentivized activity, regardless of which is least-cost.

Q. How should PIMs be designed to fulfill this principle?

Targets and metrics should apply to multiple utility programs and activities, rather than promote a specific action. The key point is that the PIM should inspire the utility to focus on how to achieve the target in a manner that maximizes net total benefits. A commission lacks the information necessary to prescribe the best method to improve performance. A commission should avoid approving PIMs that focus the utility's attention on implementing an activity or tool without on-going exploration of lower cost or most cost-effective ways to achieve the target.

Q. What will the proponent be expected to show?

The proponent will be expected to demonstrate that the PIM rewards the utility consistently for the same benefit across programs and activities.

IV. Next Steps

Q. What is missing from this document?

Among other outstanding issues, this document does not address the technical challenges of developing metrics, targets, and baselines, nor does it provide guidance on administration of PIMs. Many of these issues require further exploration. For example, it does not address how a commission sets the appropriate length of the performance period, and what resources a commission has available to administer and monitor any PIMs that are adopted. This document also does not suggest policy areas for PIMs, although, as described above, it could be used to determine the areas that are the best fit for these principles. Finally, this document does not specifically address whether the Commission's policy favors a significant shift toward performance-based regulation in the long-term.

Q. How can we address this document together?

The objective of this work is to establish clear, complete, and consolidated guidance on the Commission's policy for the appropriate use and design of performance incentive mechanisms through the Commission's adoption of a Guidance Document. To move forward, I suggest several steps. First, the Commission should discuss this document at the March 18, 2019 Open Meeting. The document will be shared with stakeholders prior to the Open Meeting. Next, the Commission can consider ways to receive stakeholder feedback on the proposed principles including soliciting directed or open-ended written comments or holding a technical session. The Commission can also "test" the proposed principles via

old, current, or new PIMs proposals to experience the analytical process, identify gaps or limitations, and examine outcomes. The Commission would then develop a Guidance Document based on the proposed principles and feedback, solicit additional stakeholder feedback, revise, and finally, adopt. The procedural schedule should be informed by the Commission's current workload, anticipated filings, and scheduling constraints.

Appendix

Old Standards⁸

- 1) Incentive should promote the realization of new consumer and societal benefits. (Dkt. 4774)
- 2) Incentive should incentivize behavior the utility would otherwise not undertake. (Dkt. 4774)
- 3) There should be a clear nexus between the metric and the expected benefits. (Dkt. 4774)
- 4) There should be a clear, stated reason why the incentive is needed to achieve each specific objective. (SRP Standards)
- 5) Incentive should be designed to promote superior utility performance and significantly advance the expected benefits as efficiently as possible. (LCP/SRP Standards)
- 6) Incentive should be designed so that customers receive most of the benefit. (LCP/SRP Standards)
- 7) Incentives may be designed to grant increasing levels of rewards to the utility for higher levels of performance. (LCP/SRP Standards)
- 8) The design and implementation of the incentive should be completely transparent and fully document and reveal inputs and methodologies to ensure no duplication of incentives across various ratepayer funded programs. (LCP/SRP Standards)
- 9) Incentive should be designed to enable a comparison of the cost of achieving the metric to the potential benefits. (Dkt. 4774)
- 10) Incentives may be designed to promote objectives including comprehensiveness, customer equity, lifetime net benefits, increased customer access to capital, market transformation, resiliency, connectivity, and operability. (LCP/SRP Standards)
- 11) There should not be multiple incentives for attaining the same objective. (SRP Standards).

New Principles

PRINCIPLE 1: A performance incentive mechanism can be considered when the utility lacks an incentive (or has a disincentive) to better align utility performance with the public interest and there is evidence of underperformance or evidence that improved performance will deliver incremental benefits.

PRINCIPLE 2: Incentives should be designed to enable a comparison of the cost of achieving the target to the potential quantifiable and cash benefits.

PRINCIPLE 3: Incentives should be designed to maximize customers' share of total quantifiable, verifiable net benefits. Consideration will be given to the inherent risks and fairness of allocation of both cash and non-cash system, customer, and societal benefits.

PRINCIPLE 4: An incentive should offer the utility no more than necessary to align utility performance with the public interest.

PRINCIPLE 5: The utility should be offered the same incentive for the same benefit. No action should be rewarded more than an alternative action that produces the same benefit.

⁸ From the RIPUC's Least Cost Procurement (LCP) and System Reliability Standards (SRP), as well as guidance set in the Commission's decision in RIPUC Docket 4774.