Docket No. 4943 – Guidance Document Regarding Principles to Guide the Development and Review of Performance Incentive Mechanisms

Discussion Document

December 19, 2019*
**Revised December 23, 2019*

I. Introduction

A. History of this docket

1. On March 5, 2019, Commissioner Anthony provided a memorandum (Memo) on principles for performance incentive mechanisms (PIMs) to Chairperson Curran and Commissioner Gold.
2. At an Open Meeting on March 18, 2019, the Public Utilities Commission (PUC) discussed the regulatory and economic concepts raised in the Memo, the PUC's experience with PIMs proposals, and the Draft Principles included in the Memo.
3. At the conclusion of the discussion, the PUC agreed to develop a Guidance Document on principles for PIMs using the Draft Principles as a starting point.
4. To begin the process, the PUC issued Commissioner Anthony's Memo for public comment. Eight Stakeholders provided formal written comments before the comment period ended on May 13, 2019.
5. After review and discussion, the PUC observes that commenters have much more agreement than disagreement with the Draft Principles. However, commenters raised issues regarding the precise intent and meaning of ideas in Commissioner Anthony's Memo.
6. As the next step in this process, the PUC offers this discussion document to address comments and questions and to provide more contextual information on PIMs and the draft principles

B. Purpose of the discussion document

1. This discussion document addresses common themes commenters raised in response to the Draft Principles in the Memo.
2. The PUC also provides direct responses to selected excerpts of stakeholders' comments to help identify areas of agreement and disagreement and more easily focus future input.
3. In addition, some comments are identified for further clarification and/or which lead to new questions.
4. The document also frames next steps for the development of PIMs guidance.

5. The information, responses, and questions raised in this document will be discussed at a technical session tentatively scheduled for Wednesday, January 22, 2020.[1]
6. The technical session will allow collection of additional information necessary to draft a Guidance Document.
7. The draft Guidance Document will be provided to the public for comment before final adoption by the PUC.
8. The Guidance Document will contain the principles that the PUC will apply in consideration of PIMs proposals. The document also will provide guidance regarding where PIMs may be applied and the type of information or evidence which might be necessary to support a PIM proposal.

C. Development of this document

1. This discussion document is the result of input from all Commissioners, PUC staff, and their consultant who worked with Commissioner Anthony on her Memo of March 5, 2019.
2. This discussion document reflects policy discussions. It does not in itself adopt or modify any existing PUC policies.
3. Similarly, this discussion document is not a modification or adoption of Commission Anthony's Memo or Draft Principles. It is a response to the comments the Memo elicited. It is intended to clarify the meaning and intent of the Draft Principles and of the regulatory concepts and local context that informed the Draft Principles.

II. Context for PUC policy on Performance Regulation

A. Economic Regulation

1. The PUC believes it is helpful to set out some concepts and conditions that are well-understood by stakeholders and that will lower the chance for misunderstanding when we proceed to other topics later in this document.
    a. First and foremost, in the context of regulating an investor-owned utility (IOU), cost-of-service regulation already creates incentives and implicitly applies performance standards.
    b. Second, the PUC assumes that an IOU is driven by profit motive and exercises its management prerogative to maximize profits within its market structure.
    c. Third the PUC is an economic regulator.
        i. The PUC exists, in part, to stand in the place of competition that would otherwise set prices for certain products and services.

[1] An official notice will follow this document. The PUC has also reserved Wednesday, January 29, 2020 as a backup or additional date.

ii. Because state law established utilities that are natural monopolies and grants these utilities monopoly franchises, they are free from the pressures of a competitive market structure. Public interest is best served by setting prices for these utility services through regulation, among other requirements.

d. The utility system and its operation should be aligned with public interest, including being adequate, efficient, economical; protecting and promoting the convenience, health, comfort, safety, accommodation, and welfare of the public; and preserve and enhance the environment and conserve natural resources; among other public interests.[2]

2. Revenue requirements should be just and reasonable to both the utility and to customers.

   a. Utility revenues are typically set to motivate efficient investment and operation of a utility system. Revenue requirements should simultaneously avoid underinvestment and overinvestment in the system.

   b. The traditional and dominant utility incentive in ratemaking is a return on prudent investment in the system, since such investment tends to increase returns for shareholders.

   c. The remainder of the revenue requirement (aside from the return *on* investment) is designed to provide a return *of* the initial prudent investment cost, plus all other prudent costs to operate and maintain the system and comply with applicable laws.

3. In terms of performance regulation, capital investment is a form of an action-based incentive mechanism.

   a. If a utility delivers capital projects, these projects may go into the utility's rate base and earn a return for the utility.

   b. Some metrics that are applied to whether a delivered capital project can go into rate base are whether the investment was prudent and if the investment is used and useful. Typically, there are no further metrics for outcomes associated with whether capital investment can enter rate base.

   c. Regulatory law requires that the size of the target return set by a utilities commission should be within a zone of reasonableness, reflect a reasonable opportunity of return compared to the risks of investment, allow the company to remain creditworthy, and allow the company to attract capital investors.[3]

4. The recovery of the revenue requirement through rates may be a form of an outcome-based incentive mechanism.

[2] R.I. Gen. Laws § 39-1-1.

[3] The United States Supreme Court has held that a utility's ROE should be comparable with returns on investments in other enterprises having corresponding risks and sufficient to maintain its credit and attract capital (FPC v. *Hope Natural Gas*, 320 U.S. 591, 603 (1944)).

a. Traditionally, if a company can drive actual costs below actual revenue, it may earn additional profit *between rate cases*.

b. A company may have many ways to earn this additional profit, like finding efficiencies in operations and maintenance costs or employing new tax strategies.

c. Utilities can also drive up consumption or create new business to increase profits, and utilities that do not have capital investment trackers outside of rate cases can drive up profit by finding efficiencies in capital delivery.

d. In the next rate case cycle, these efficiencies tend to flow to customers.

5. In order to ensure the utility is not driving down actual costs below actual revenue at the expense of delivering an overall system that is aligned with the public interest, utilities are often subject to performance metrics that fall somewhere between action-based and outcome-based metrics.

   a. For example, a utility may face a penalty if customers experience outage frequencies or durations above a certain threshold (e.g., system average interruption frequency index (SAIFI) or system average interruption duration index (SAIDI)).

   b. A utility's responsiveness to customer contact might also be a metric.

   c. A utility may also have to share additional profits above some threshold with customers.

6. The context the PUC is providing above is intended to relate that utilities commissions, including the PUC, are already conducting forms of incentive regulation.

   a. Achieving public interest with a monopoly market structure requires regulators to properly incentivize efficient delivery of quality services where competitive markets might otherwise incentivize this behavior.

   b. It is notable that in the normal course of its work, a commission must employ principles like prudent, just and reasonable, and used and useful, among others. Whether or not these principles apply to a utility is always questionable and beyond perfect accuracy, but whether they apply is also provable through evidence.

B. Regulation can evolve

1. The PUC recognizes new PIMs can be a lawful and useful regulatory tool for ensuring the delivery of a utility system and services aligned with the public interest.

   a. The PUC is not required to follow any specific formula to set just and reasonable rates.[4] (possible note: In Re Island Hi-Speed Ferry)

   b. The PUC has broad authority to set rates, including rates that account for performance.

[4] *In re: Island Hi-Speed Ferry, LLC,* 746 A.2d 1240, 1246 (R.I. 2000).

   c. PIMs can improve utility regulation by reforming the utility business model in a manner that mutually benefits all parties over the long-term.

   d. In exercising its authority, the PUC must consider all the tools it has to motivate efficient delivery of services aligned with public interest.

2. The public interest is always evolving. Today, this evolution is dramatic for gas and electric utilities.

   a. Here, the PUC will refer to all applicable public interest and state policy goals as regulatory goals.

   b. In some cases, expansion of the public interest is directly stated in law, such as the specific requirement for electric utilities to offer and manage net metering.

   c. In other cases, existing interests are expanding, such as the consideration of greenhouse gas emissions within the context of preservation of state resources and the environment and protection of the health and welfare of the state.

   d. In other cases, technologies change customer perceptions of quality service, impacting the utility business model that best serves the public interest. The proliferation of behind-the-meter resources is an example where such tension is emerging.

   e. New (and existing) goals for utility systems may be achievable through many means but maximizing interests for ratepayers entails achieving these goals with solutions that co-optimize lowest cost and lowest risk are best.

   f. The PUC tends to think of co-optimizing lowest cost and lowest risk as least-cost procurement.[5]

3. In some cases, advancing public interest at least cost is not done through increasing a utility's capital expenditures.

   a. Sometimes goals can be best achieved when then utility finds ways to avoid making capital expenditures.

   b. Some goals can be better achieved when the utility is not involved at all.

   c. Thus, a bias toward capital expenditures may cause less efficient achievement of public interest goals.

   d. This is an issue inherent to traditional regulation.

4. In Section II.A, the PUC noted its assumption that utilities are driven by profit motive. If a utility's only, or dominant, profit opportunity is through capital investment, then the PUC must acknowledge such a utility has a capital bias.

[5] Here the PUC is describing least-cost procurement generally for utilities and is not making a direct reference to Least Cost Procurement for gas and electric utilities as described in R.I. Gen. Laws § 39-1-27.7.

a. That is, the utility may attempt to achieve some public interest goals through rate-base-eligible investment and may neglect other public interest goals for which there is no rate-base-eligible investment.

b. Thus, a capital bias may hinder the achievement of some goals.

c. This is not a case of a utility acting malevolently. The utility would be acting within its own best interests, as the PUC assumes it will. It is the job of the regulator to supervise the utility in order to align the utility's interest with that of the public.

d. PIMs can help assure a utility's investments and actions are aligned with public interest goals.

e. PIMs also can reduce the risk and potential harm to the public that information asymmetry in a market presents. A utility will always know more about its system and business than regulators and stakeholders. PIMs can help motivate a utility to use that information to benefit public interest.

5. New PIMs should work with existing regulatory tools.

a. As described above, the PUC identifies new PIMs as one regulatory tool to achieve public interest goals.

b. Like existing regulatory tools, PIMs should motivate a utility to provide a utility system and service that reasonably serves the public's interests.

c. Before the PUC can broaden and deepen its use of PIMs, the PUC and stakeholders must understand and assure that PIMs are consistent with and will work in conjunction with other regulatory structures.

d. This means that PIMs *principles* must also allow for, be consistent with, and in harmony with other regulatory principles.

e. Within this context, the PUC currently does not intend to rapidly abandon cost-of-service regulation and shift away from traditional ratemaking to performance-based regulation.

f. Furthermore, the PUC's ratemaking authority is in part bound to some regulatory norms. (possible note: decoupling statute?)

g. Nor does the PUC intend to modify existing regulatory standards and guidance. Importantly, this process is not intended to modify the application of the Rhode Island Benefit-Cost Framework, goals for the future electric system, and rate design principles adopted as guidance for National Grid's electric business in Docket No. 4600A.[6]

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[6] Public Utilities Commission's Guidance on Goals, Principles and Values for Matters Involving The Narragansett Electric Company d/b/a National Grid issued in Docket No. 4600A. http://www.ripuc.org/eventsactions/docket/4600A-GuidanceDocument-Final-Clean.pdf.

h. The PUC is currently open to considering PIMs that are rewards, penalties, or both reward and penalty. The PUC is also currently open to considering PIMs that are integrated into the overall revenue requirement and has not determined that PIMs will stand as additional earnings on top of the revenue requirement.

i. Finally, PIMs guidance is intended to apply to all for-profit utilities.

6. The PUC expects that PIMs principles will improve regulation and the regulatory process.

   a. PIMs are intended to improve regulation. PIMs principles and guidance are intended to improve regulatory review and outcomes.

C. Important dynamics

1. There are important dynamics to highlight in this discussion document to provide additional context to PIMs as a tool of economic regulation.

2. Innovation

   a. Within the context of the Draft Principles, innovation is the creation of something new that shows significant promise to improve outcomes.

   b. In that context, the PUC applies two concepts to utility innovation.

      i. First, it is important to motivate utility innovation.

      ii. Second, utility innovation must be a process in which the utility makes business decisions rather than one in which decisions are made for the utility. The utility must be in control of delivering improved outcomes.

   c. These two concepts lead to a third.

      i. Regarding innovation, the primary question is whether a PIM limits innovation toward a goal, rather than whether a PIM fosters innovation toward a goal.

      ii. This somewhat nuanced framing helps explain the PUC's approach to PIMs: it is more important to avoid PIMs that limit innovation rather than create PIMs intended to foster innovation.

   d. Here the PUC recognizes that action-based PIMs may limit innovation in pursuit of beneficial outcomes.

      i. Utilities are motivated to earn a profit.

      ii. If profit is attached to a specific action, then a utility will focus on innovation to efficiently execute that action. The utility will not be directly concerned with how to efficiently deliver the intended outcome of the action.

      iii. Regulators are unlikely to have enough information to select which actions are the least-cost for delivering beneficial outcomes. These are business decisions that a utility is better positioned to make.

iv. For this reason, action-based PIMs, or narrow and specific PIMs, should be reserved for those outcomes or actions that are similarly narrow and specific, such as specific outcomes or actions required in statute.

e. Innovation must be more than just trying new ideas, rejecting the ones that fail and implementing the ones that succeed, with low or no risk to the utility.

i. This process is piloting.[7]

ii. Piloting in a tool of innovation and is allowed by the PUC. Customers should expect innovation and piloting to be part of a utility's business model.

iii. Customers and utilities should also have a reasonable expectation that innovation is carried out in a prudent manner that presents them with a reasonable opportunity to share in the benefits of innovation.

iv. It is also appropriate for utility shareholders to share in the risks of innovation if they are to share in the rewards.

v. When considering regulatory tools to promote innovation (and piloting) the PUC is mindful of its role as an economic regulator. Innovation has costs and risks so competitive markets do not allow for unbounded innovation. Nor should the PUC.

D. Forms of PIMs proposals

1. Regulation requires a case be filed with the PUC and evidence be provided that can be weighed to make a decision.

2. As a form of regulation, PIMs proposals are no exception. In order to approve PIMs, there must be some review at the PUC.

a. The evidence for a PIM must be reliable and sufficient. In many instances today, there is no exact definition of what is reliable and sufficient, and that may be the circumstance for PIMs proposals.

b. The PUC raises this assuming PIMs proposals will likely have one of three forms described below.

c. This is not a limit on proposal strategies, but rather to aid in a discussion.

d. Categorizing types of PIMs will facilitate discussion about innovation, metrics, and related topics as well as about the type of evidence, analysis, and other information required.

3. Preset Budget PIM

a. The first form of PIMs proposals the PUC expects to see are preset-budget PIMs.

[7] The PUC is describing the action of piloting. For National Grid's electric business and gas efficiency program, the PUC has provided the definition of a pilot. *See* http://www.ripuc.org/eventsactions/docket/4600A-GuidanceDocument-Final-Clean.pdf.

b. In this form, the proponent proposes a preset budget (or cost, or charge, etc.) to execute a range of activities that are proffered as cost-effective.
c. The preset budget may be specific and exact in presenting these activities, or it may leave room for flexibility and innovation. The proposal typically includes a preset list of eligible implementation options.
d. In this case, the utility is asking the PUC to assume the value of benefits associated with some metric and supports this assumption with evidence.
e. As part of the preset budget, the utility proposes to keep a share of achieved net benefits.
f. For the purpose of calculating the incentive, post hoc review may include consideration of the actual costs of the program, actual achievement of the metric, and whether implementation was within eligible options.
g. Some preset-budget PIMs already exist in Rhode Island. For example, National Grid's electric and gas efficiency programs include preset-budget PIMs.
h. Additionally, National Grid has electric programs that include PIMs and remuneration that are most like preset-budget PIMs. Long-term contracts for renewable energy have preset contract prices and preset (sometimes statutory) remuneration. The Renewable Energy Growth Program also has preset tariff prices with a preapproved remuneration (or incentive) share.

4. Preset Value PIM

a. The second form the PUC expects to see are preset-value PIMs.
b. In this form, the proponent proposes a preset value associated with some metric and asks the PUC to allow the utility a share of this preset value for achievement of the metric.
c. The proposal does not include a specific budget and may or may not include a request for cost recovery for the actual costs to deliver results. The proposal may include a preset list of eligible implementation options.
d. In this case, the PUC is asked to adopt the value associated with a metric and a method for measuring the metric.
e. For the purpose of calculating the incentive, post hoc review may include consideration of actual achievement of the metric and whether implementation was within eligible options. Since the net value is preset by the PUC, the incentive is not dependent on a comparison of actual costs and benefits.
f. For example, a utility could offer evidence that there is a $20/megawatt-hour net benefit associated with saving energy and ask that the PUC allow a $10 payment for every megawatt-hour the utility is able to prove it saved.

5. Achieved Value PIMs

a. The third form the PUC expects to see are achieved value PIMs.

b. In this form, a utility proffers evidence that the utility can achieve something of net value that it will share with ratepayers.
c. The net value may or may not be known precisely at the time of the proposal.
d. The proposal is not tied to a specific preapproved budget.
e. For the purpose of calculating the incentive, post hoc review typically includes a comparison of actual costs and actual benefits.
f. Some examples of payment-based PIMs include the Natural Gas Portfolio Management Plan and Gas Purchase Incentive Plan approved for National Grid's gas business. The Forward Capacity Market Incentive is an example effecting National Grid's electric business.

6. As stated above, these different forms of PIMs are provided to improve discussions over proposal review, innovation, metric design, and related topics. The PUC asks stakeholders to think about the following traits of these forms.
    a. All three forms require evidence that benefits will, or did, exceed costs. Whether the most rigorous benefit-costs analysis happens before or after implementation is, however, different between the forms.
    b. All three forms require evidence of a baseline against which to score a metric, and the baseline is set before implementation.
    c. All three forms allow for innovation, although some forms are more flexible than others.
    d. All three forms are susceptible to the risks of inaccurate information and information asymmetry. The information risks with some are lower than others.
    e. All three forms likely require commitment before the performance period to a metric, how the metric will be measured, what adjustments will be accounted for in review, and if there are certain things that will or will not count toward the metric.

E. Allocation of benefits and costs must consider allocation of risk.

1. Reward based on risk is a useful market framework in both competitive and regulated markets. As an economic regulator, the PUC must consider risk when considering reward.

2. A payment of cash to a utility allocates tangible benefits from customers to the utility. Customers should receive, or have a reasonable opportunity to receive, something of value in return for this payment.

3. To provide customers with a reasonable opportunity to receive value, a utility must be held accountable for delivering something of value to customers. In other words, the utility should not be paid, or rewarded, for something to which the utility is unaccountable.

4. This means that in establishing any incentive for the utility, the PUC will consider evidence that the utility is reasonably accountable for delivering a given result.

5. This concept is central to the PUC's consideration of payment for qualitative benefits, which the PUC has rejected in previous proposals.

6. This same logic does not extend to certain actions that might be approved based on a business case. Qualitative benefits may be useful for determining if a business case *is in the interest of customers* (or the utility). The PUC has previously found, however, that qualitative benefits are not useful in determining if a PIM proposal *is a fair deal for customers* (or the utility).

F. The PUC agrees with stakeholders that determining which public policies are best addressed with PIMs is necessary. The PUC has not yet determined that this is the next step, or by what process to use for that work. Some general guidance may exist now.

1. Goals for electric system were adopted in the 4600A Guidance Document, and public policy objectives for utilities are found in Title 39 of the General Laws of Rhode Island.
2. Additionally, policy-aligned costs and benefits for the electric system are defined in the RI Benefit Cost Framework while gas efficiency filings include a set of policy-aligned costs and benefits for the gas efficiency program.
3. Furthermore, any eventual PIMs principles the PUC adopts can guide stakeholders toward appropriate goals.
4. Principle 1 of the March 5, 2019 Commissioner Anthony Memo, or some future version of this principle, would be useful to determine if a PIM is the right regulatory tool for motivating beneficial utility behavior. The PUC expects PIMs will sometimes not be the right tool.
5. The PUC anticipates there will be a need for future work regarding technical challenges, particularly those related to metric setting and measurement.

III. Framework for the Technical Session

A. The PUC expects to conduct a technical session as the next step in this process.

B. The technical session will have several purposes. One is to discuss the responses to comments in this discussion document in order to identify and clarify areas of confusion. The PUC also expects to finalize this information-building phase of the process and explain the remaining process, which will focus on proposing and adopting guidance on PIMs.

C. The PUC also hopes the technical session will allow stakeholders the opportunity to highlight which, if any, of their comments were not responded to in this discussion document that they would like to discuss further.

D. The PUC expects stakeholders will be prepared to discuss any new questions or comments this document raises.

E. The PUC seeks additional understanding on at least three questions.

1. First, what current stakeholder processes are these Draft Principles and this process affecting and how?

2. Second, in what cases, and when, do stakeholders expect PIMs to be proposed? For example, do stakeholders expect PIMs proposals to occur in rate cases, a separate PIMs dockets, program reviews, or in some other docket?

3. Finally, related to National Grid specifically, do stakeholders expect gas and electric PIMs will move together, perhaps even having joint proposals, or separately?

IV. Example Incentive Structures

A. Before providing direct responses to stakeholders' comments in the next section, the PUC here provides a list of electric and gas PIMs and incentive structures. This list may aid in future conversations about PIMs principles, application, and design.

1. Currently active or implemented

   a. Energy Efficiency: Docket No. 4888 2019 Energy Efficiency Program Plan pp. 42-45 www.ripuc.org/eventsactions/docket/4888-NGrid-EEPP2019(10-15-18).pdf

   b. System Efficiency: Docket No. 4770 Amended Settlement Agreement Bates pp. 69-71 www.ripuc.org/eventsactions/docket/4770-4780-NGrid-ComplianceFiling-Book 1 through 7 - August 16, 2018.pdf

   c. Contracts/REG Forward Capacity Market Incentive: Docket No. 4676 Amended Proposal Compliance Filing www.ripuc.org/eventsactions/docket/4676-NGrid-Compliance(3-7-17).pdf

   d. Gas Purchase Incentive Plan: Docket No. 4872 Protano Testimony Attachment JMP-1 www.ripuc.org/eventsactions/docket/4872-NGrid-Book 2-2018-RI-GCR-Protano(8-31-18).pdf

   e. Natural Gas Portfolio Management Plan: Docket No. 4872 Protano Testimony Attachment JMP-3 www.ripuc.org/eventsactions/docket/4872-NGrid-Book 2-2018-RI-GCR-Protano(8-31-18).pdf

   f. Electric and Gas Return on Equity and Earnings Sharing Mechanism: Docket No. 4770 Amended Settlement Agreement Bates pp. 15, 30-32, 39-41 www.ripuc.org/eventsactions/docket/4770-4780-NGrid-ComplianceFiling-Book 1 through 7 - August 16, 2018.pdf

   g. Gas Business Enablement sharing of Type I (direct) and Type II (indirect) cost savings: Docket No. 4770 Amended Settlement Agreement Bates p. 43 www.ripuc.org/eventsactions/docket/4770-4780-NGrid-ComplianceFiling-Book 1 through 7 - August 16, 2018.pdf

   h. Electric Service Quality Plan: Docket No. 3628 Settlement Agreement Attachment 1 www.ripuc.org/eventsactions/docket/3628-NGrid-Electric-SQ-SettlementAgreement(1-8-16).pdf

i. Gas Service Quality Plan: Docket No. 3476 Fiscal Year 2019 Annual Report htwww.ripuc.org/eventsactions/docket/3476-NGrid-Q4-Annual-FY2019 Rept (8-6-19).pdf

j. Agera Energy, LLC Renewable Energy Standard penalty for non-compliance: Docket No. 4964 Order www.ripuc.org/eventsactions/docket/4964-AgeraEnergy-Ord23659 8-28-2019.pdf

2. Statutory incentives and remuneration

   a. Long-term Contracting: R.I. Gen. Laws § 39-26.1-4 webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.1/39-26.1-4.HTM

   b. DG Contracts: R.I. Gen. Laws § 39-26.2-9 webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.2/39-26.2-9.HTM

   c. Renewable Energy Growth: § 39-26.6-12(j) webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.6/39-26.6-12.HTM

   d. Interconnection Standards (timelines and actual damages): § 39-26.3-4.1(d) webserver.rilin.state.ri.us/Statutes/TITLE39/39-26.3/39-26.3-4.1.HTM

3. Pending review

   a. Capital Efficiency Mechanism: Docket 4857 www.ripuc.org/eventsactions/docket/4857page.html

4. Recently rejected

   a. Docket No. 4770/4780 Rate Case Settlement Agreement (rejected) pp. 67-79 www.ripuc.org/eventsactions/docket/4770-4780-NGrid-SettlementAgreement-Signed(6-6-18).pdf

      i. Install Energy Storage Capacity

      ii. CO_2: Electric Vehicles

      iii. Light Duty Government and Commercial Fleet Electrification

      iv. CO_2: Electric Heat

      v. Activated Apartment Building and Disadvantaged Community EVSE

      vi. Interconnection Time to ISA

   b. 2019 SRP: Docket No. 4889 System Reliability Procurement Report pp. 55-58 www.ripuc.org/eventsactions/docket/4889-2019-NGrid-SRPReport(10-15-18).pdf

      i. Action Based:

         (1) System Data Portal Identify non-EV Fleets

         (2) System Data Portal Identify potential Level 3 EV charging sites

         (3) NWA vendor milestone completion

ii. Savings based incentives (reduced system costs through SRP-influenced, customer-owned DERs)

c. REG Metrics: Docket No. 4774 Springsteel Testimony pp. 10-13 www.ripuc.org/eventsactions/docket/4774-NGrid-REGrowth-2018(11-15-17).pdf

V. Responses to Stakeholder Comments

A. Here the PUC directly addresses excerpts from the stakeholder comments. As described above, these excerpts are not the only ones the PUC gave attention to in its discussions. Rather, these are excerpts that the PUC felt should be addressed before further developing a draft Guidance Document so that stakeholders could best identify areas of agreement and disagreement and more easily focus future input. In some cases, the PUC also identifies comments that had unclear meaning, and comments that lead to new questions.

B. Please see the Section V. Attachment.

Section V. Attachment

Responses to Stakeholder Comments

1. Responses to Division of Public Utilities and Carriers Comments

Division Page 2, Paragraph 4
"PIM principles should be designed to complement these existing incentives, replacing some and reinforcing others."
- In Section II.B of this document, the PUC recognizes that PIMs should be consistent with and work in conjunction with other regulatory structures. In some cases PIMs will complement, replace, and reinforce certain existing regulatory structures.

Division Page 3, Paragraph 1
"An approach to PIMs design that requires an exact precision of consistency and demonstrated benefits may have the unintended result of reinforcing the current utility incentive structure."
- To be clear, the Draft Principles do not require a specific level or precision, nor does the PUC anticipate that any adopted principles will require or specify precision. As stated in Section II.D, evidence must be convincing and reliable for any case, including PIMs proposals. In many instances today, there is no exact definition of what is convincing and reliable, and that may be the circumstance for PIMs proposals. Any guidance the PUC adopts on PIMs principles will address this issue. - Additionally, the PUC's Guidance on Goals, Principles and Values for Matters Involving The Narragansett Electric Company d/b/a National Grid (4600 Guidance Document) provides the PUC's guidance for cost-benefit analysis based on the Benefit-Cost Framework adopted in Docket No. 4600A (for matters involving National Grid Electric). The Draft Principles do not amend, nor does the PUC anticipate amending, that 4600 Guidance Document through PIMs guidance, or any other standards for cost-benefits analyses the PUC relies on to regulate any other utility. - Finally, as stated in Section II.B, the Draft Principles are intended to provide guidance on the necessary information for the PUC to consider in a PIM proposal. The purpose of adopting PIMs principles is to guide proponents on how to provide information on two questions the PUC must answer in approving a PIM: 1. a PIM is the right tool to advance a particular objective, and 2. the specific PIM proposed is a fair deal for ratepayers. - The *specific information* individual Commissioners will consider to be convincing or dispositive in a future PIM proposal is beyond the scope of the Draft Principles.

Division Page 3, Paragraph 2
“The Division believes that the long-term regulatory policy objective for the design of PIMs is to transition from development of stand-alone individual PIMs to an integrated and coherent, if not entirely consistent, suite of incentive mechanisms.”
- As stated in Section II.A, in the context of regulation of an IOU, cost-of-service regulation already creates incentives and implicitly applies performance standards. All regulation is a form of performance regulation tied to a form of incentive. - Given this, the PUC states in Section II.B that PIMs should be consistent with and work in conjunction with other regulatory structures. - The PUC would consider PIMs that are integrated into the overall revenue requirement and has not determined that PIMs will stand as additional earnings on top of the revenue requirement, as noted in Section II.B.

Division Page 3, Paragraph 2
“Accordingly, the Division recommends that prior to the next general rate case the Commission establish on its own, or ask the Company and Division to work with stakeholders to develop, a blueprint for PIMs development.”
- The PUC is unsure what the Division is recommending. Please be prepared to discuss this idea, and what specifically is meant by “a blueprint for PIMs development” during an upcoming technical session.

Division Page 3, Paragraph 3
“One potential result of a broad suite of PIMs might be to affect how the Commission considers the acceptable range of the authorized base Return on Equity (ROE).
- The PUC agrees this is a potential result.

Division Page 3, Paragraph 4
“In designing the Commission’s PIM principles, it is also necessary to consider the important role that they have the potential to play in advancing Rhode Island energy policies and goals.”
- The PUC notes that the Draft Principles were intended to apply to all for-profit utilities, not just utilities that supply energy. In this context, the PUC does consider the important role PIMs can play in advancing Rhode Island’s public policies, which extend beyond energy policies and goals.

Division Page 3, Paragraph 5, continuing onto Page 4
"Recognize the Differences between Electricity and Gas Businesses. … Given the different nature of these two industries, especially the different carbon emissions profiles from gas versus electricity consumption, the PIM principles should allow for different performance areas and different incentives for electricity versus gas services, where such differences are warranted. In addition, the Commission should consider how these principles might apply to other regulated sectors, such as wastewater and water utilities."
- The Draft Principles allow for differences between performance areas and incentives for different utilities *when warranted*. Principles 1 and 4 can be applied to address when it is warranted to incentivize different performance areas for different utilities. Principles 4 and 5 can be applied to address when it is warranted to allow different incentives for different utilities.

Division Page 4, Paragraph 3
"First, utilities are already subject to a variety of financial and non-financial incentives that are blunt, imprecise, and not monetized, as noted above. The most obvious is the incentive for a utility to make capital investments to increase rate base. There also are many other, less obvious financial and nonfinancial incentives that influence utility decision-making but are not subject to a strict BCA where all costs and benefits must be monetized. Consequently, any exercise in modifying utility incentives will inherently be imprecise and will require some degree of uncertainty and regulatory judgment regarding existing incentives. Excluding non-monetized benefits from the analysis could create a different standard of review for the new incentives relative to the many existing incentives. This could lead to skewed results that tend towards maintaining current incentives and precluding new and improved incentives."
- As described above, the framework for cost-benefit analyses for National Grid Electric is provided in the PUC's 4600 Guidance Document and the PUC does not anticipate modifying that guidance, nor any other guidance on cost-benefit analyses, through PIMs guidance. - The 4600 Guidance Document does not exclude non-monetized benefits and costs from the costs-benefit framework, but rather specifically allows the inclusion of such benefits and costs. Furthermore, as stated above, no new standard of precision or accuracy of cost-benefit analyses is implied by the Draft Principles. - The PUC is unsure what the Division is conveying in the final sentence of the quoted excerpt. Please be prepared to explain this idea further in a future technical session if the PUC's response comments have not addressed the Division's concern.

Division Page 4, Paragraph 4

"Second, there are several benefits associated with power sector transformation that are very difficult to put into monetary terms, such as increased customer engagement, market transformation of technologies, increased access to competitive, third-party service providers. If the standard does not allow for consideration of these hard-to-monetize benefits it could make it difficult to incentivize the utility to achieve state energy policy and regulatory goals, many of which are based on benefits that are difficult to monetize."

- As described above, the PUC currently allows for the consideration of non-monetized benefits and costs in its decisions, and specifically in decisions regarding cost-benefits analyses. Any guidance on PIMs is not anticipated to change this PUC practice.
- The Draft Principles do not eliminate consideration of *any* benefits and costs, the Draft Principles merely intend that unquantified benefits and costs will not be paid out to the utility.

Division Page 4, Paragraph 5

"Third, PIMs are intended to allow the utility some latitude to experiment and innovate to achieve goals. If the standards require overly precise accounting of benefits prior to authorizing the PIM, it will naturally limit the potential for experimentation, creativity, and innovation by the utility."

- No overly precise accounting of benefits is required by the Draft Principles. As discussed in Section II.D, evidence for any case before the PUC must be sufficient and reliable. In many instances today, there is no exact definition of what is convincing and reliable, and that may be the circumstance for PIMs proposals.
- As described in Section II.D, the PUC has approved incentives in the past for programs that have, and have not, provided detailed benefit-cost analyses, and both forms have allowed for innovation.
- Experimentation and innovation cannot be funded without limits, but rather must be funded in balance with ratepayer interests. Incentives to utilities should provide a reasonable opportunity for experimentation and reasonable opportunity for ratepayers to share in net benefits. Whether a reasonable opportunity for ratepayers to share in net benefits exists can be confirmed through some level of cost-benefit analyses and comparison of net benefits to incentive levels.
- In the context of economic regulation, limits on the potential for experimentation, creativity, and innovation by a utility should be similar to pressures felt by unregulated companies in market competition. Market pressures on innovation and experimentation involve risk, opportunity cost, the balance of supply and demand, and the expectations of customers, among other factors.

Division Page 4, Paragraph 6

"Fourth, there are several existing PIMs in Rhode Island that are based on statutory requirements but are not based on a strict BCA that includes only monetized benefits. Precluding the use of non-monetized benefits for new PIMs would create an inconsistent standard across existing and new PIMs. Again, this would likely lead to an unintended bias towards maintaining current incentives and precluding new and improved incentives."

- Guidance on PIMs would not alter statute. Statutory incentive mechanisms will be harmonized and reconciled with any adopted PIMs principles only to the extent possible.

Division Page 4, Paragraph 7, continuing onto Page 5
"Fifth, an emphasis on monetization of benefits is inconsistent with the stakeholder input and the Commission's guidance on BCAs from Docket 4600. In the guidance document from that docket the Commission was clear that qualitative analysis of costs and benefits should be included in the BCA, and that the benefit-cost framework "will not be the exclusive measure of whether a specific proposal should
- Qualitative analysis will continue to be considered in cost-benefit analyses. - The 4600 Guidance Document will not be amended through PIMs principles. - The Draft Principles intend that unquantified benefits will not be paid out to the utility.

Division Page 5, Paragraph 2
"But the Division is concerned that this may be a distinction without a difference. From the perspective of the customers who are making the payments, either to support a program or pay for a utility incentive, there is no difference. Both payments are designed to result in net benefits to customers, and both payments involve uncertainties and unknowns. The fact that the payments might have different implications for the Company is not relevant to customers."
- Commissioner Anthony's discussion regarding unquantified benefits is focused on the allocation of risk and reward. In approving a program with consideration of unquantified benefits, the PUC is allocating unquantified risk to ratepayers. The Draft Principles propose that if ratepayers are exposed to such high risk, they should reap all the benefits of taking that risk. Per the Draft Principles it is impossible to identify whether customers have been given a fair deal under any other allocation plan for unquantified benefits. As described in Commissioner Anthony's memo, for ratepayers to reap all the benefits, the PUC must not apportion any unquantified benefits to the utility. - As stated above, the purpose of adopting PIMs principles is to guide proponents on how to provide information on two questions the PUC must answer in approving a PIM: 1. a PIM is the right tool to advance a particular objective, and 2. the specific PIM proposed is a fair deal for ratepayers. Commissioner Anthony's memo proposes that providing the utility with known and measurable profit for unknown and immeasurable benefits is never a fair deal for ratepayers. It also proposes the opposite is true: paying the utility in unmeasured benefits is not a fair deal for the utility.

Division Page 5, Paragraph 3
"For example, the "benefits" of increased customer engagement or increased access to third-party service providers can be monitored and demonstrated with quantitative metrics – even if those benefits are not put in monetary terms. This offers a reasonable degree of certainty of benefits without requiring the monetization of benefits that are very difficult to monetize."
- In part, the purpose of adopting PIMs principles would be to guide proponents on how to provide information regarding whether a PIM is a fair deal for ratepayers. - The PUC agrees that if one presumes something is of value, then increasing the amount of that thing increases total value. The PUC generally disagrees that this is enough information to determine to a reasonable degree of certainty whether a utility should be paid a portion of that increased, yet uncertain, value. - The PUC cautions that if 100% uncertainty is accepted as a reasonable degree of uncertainty upon which to allow a utility to profit, then everything will become reasonably certain.

Division Page 5, Paragraph 5
"Principle 1: As proposed, this principle requires that there be a history of performance in the relevant performance area, in order to demonstrate either underperformance or improved performance. The Division is concerned that for some performance areas there might be little or no history, and the utility's current incentives are not aligned with the public interest."
- Principle 1 does not specifically require a history as the only form of evidence, but the PUC understands this may be the effective outcome. Importantly, while Principle 1 might require a proponent to provide evidence of the history of some specific area, it does not require that the *utility itself* has previously operated in (and created a track record in) this area. - The PUC shares the Division's concern that opportunities to advance public interest might be missed while evidence and experience is gathered. Principle 1 requires this concern be balanced with the concern that a PIM may be the wrong tool to advance a specific public interest, and the concern that ratepayers would provide incremental profit to the utility without reasonable expectations of incremental benefits.

Division Page 6, Paragraph 1
"Principle 5: The Division supports the essence of this principle, but we note that existing utility incentives should be considered in applying this principle."
- Principles 4 and 5, as drafted, require consideration of existing utility incentives when examining new incentive proposals.

Division Page 6, Paragraph 2
"New Principle: The proposed set of principles does not explicitly encourage PIMs to be designed to maximize net benefits to customers. The Division recommends adding a new PIM to address this important goal."
- Because Principle 3 does require PIMs be designed to maximize customers' share of net benefits, the PUC believes that the Division's comment was aimed at highlighting that the Draft Principles do not explicitly encourage PIMs to be designed to maximize the expected net benefits of the desired outcome. - The concept of maximizing total net benefits is embedded in Principle 3, but that concept is modified and constrained by also requiring maximization of the net benefits to customers. The PUC understands the language may be confusing. - The underlying intent of this language in Principle 3 is to design PIMs that 1. maximize total net benefits; and 2. simultaneously maximize customers' share of total net benefits. Doing either one alone is not always the same as doing both simultaneously. The latter intent assures that PIMs are designed to affect areas and outcomes in which customers have stake and in which customers have an opportunity to share in net benefits.

Division Page 6, Paragraph 3
"New Principle: The Division recommends adding a new principle to encourage PIMs to be focused on desired outcomes, as opposed to specific inputs or processes."
- This is the effect of Principle 5.

Division Page 6, Paragraph 4
"New Principle: The proposed set of principles does not make any distinction between PIMs that apply to electricity services versus those that apply to gas services. The Division supports the application of the PIM principles to both electric and gas services but is concerned that there may be instances where the gas utility should have different financial incentives than the electric utility. The Division recommends adding a new principle to allow for this flexibility."
- The PUC anticipates that any guidance and PIMs will apply to all for-profit utilities, and that any such guidance will allow for flexibility *where warranted*.

Division Page 6, Paragraph 5
"The Commission Memo recommends maintaining both the 'old standards' as well as the new principles. The Division is concerned that this approach could be confusing and cumbersome to implement. The Division recommends combining the old standards and the new principles into one set of principles. Given the significant overlap between the standards and the principles, this will require only modest edits to the new principles."
- Commissioner Anthony did not intend to maintain the "old standards" and the new principles permanently. If new principles were adopted by the PUC, any existing standards that the PUC has the authority to bring into agreement with the adopted principles will eventually be amended. - The PUC anticipates that any new principles will not be a one-for-one replacement of the "old standards." For example, the Draft Principles eliminate and amend some of the "old standards".

Division Page 6, Paragraph 11
"5) Incentive should be designed to promote superior utility performance and significantly advance the expected benefits as efficiently as possible. This is not explicitly addressed in any of the proposed principles. We recommend adding a new principle on maximizing net benefits."
- This standard informed Principles 1, 3, and 5.

Division Page 7, Paragraph 1
"6) Incentive should be designed so that customers receive most of the benefit. This is addressed in Principle 3."
- This standard is intentionally eliminated in the Draft Principles. The Draft Principles allow customers to receive less than "most" of the benefits if such a design can result in a good deal for ratepayers.

Division Page 6, Paragraph 2
"7) Incentives may be designed to grant increasing levels of rewards to the utility for higher levels of performance. This is not explicitly addressed in any of the principles proposed by the Commission but would be addressed by the new principle on maximizing net benefits proposed by the Division."
- This standard informed Principles 4 and 5. - Principle 3 provides further direction and flexibility regarding how to design a PIM that appropriately shares incremental net benefits.

Division Page 6, Paragraph 3
"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. The transparency and documentation standard is addressed in Principles 1 and 2, but the "no duplication" standard is not addressed anywhere. We recommend modifying Principle 4 to prohibit duplicative incentives"
- This standard informed Principles 4 and 5, which taken together prevent duplication. - Principle 1 also requires PIMs proposals be limited to instances where a utility lacks an incentive to better align its performance with the public interest. Note that in a case in which a utility has a PIM, but a redesign is being proposed, Principles 4 and 5 would still prevent duplication.

Division Page 6, Paragraph 5
"11) There should not be multiple incentives for attaining the same objective. We recommend modifying Principle 4 to prohibit duplicative incentives"
- Please see the PUC's previous comment.

2. Responses to National Grid Comments

National Grid Page 1, Paragraph 5, continuing onto Page 2
"The Company further suggests that any principles adopted in Rhode Island reflect best practices and lessons learned as informed by both the literature and the experience of various jurisdictions regarding the development of performance metrics, targets and incentive mechanisms. The Company suggests a broader stakeholder process that allows for explicit consideration and incorporation of such lessons learned and best practices in the PUC's principles for designing effective performance incentive mechanisms."
- The public will be allowed further input before the PUC adopts any PIMs principles. At that time, stakeholders can provide any relevant information of the types National Grid is referring. Furthermore, in future cases, parties can also present any relevant information. - Commissioner Anthony's would like to be clear that her Draft Principles do reflect best practices and lessons learned as informed by literature, the experience of various jurisdictions, as well as reflecting experiences in other sectors, state law, principles of economic regulation, and the application of economic theory.

National Grid Page 2, Paragraph 4, continuing onto Page 2
"Achievement of the potential benefits of utility innovation to Rhode Island customers requires a broader view of performance incentive mechanisms than that expressed in the Memorandum, which takes a more limited view of performance incentives as a tool for "improving utility performance in certain areas."
- The PUC would like National Grid to be prepared to explain what it means by "broader view" in the excerpt.

National Grid Page 3, Paragraph 2
"The Company firmly believes that carefully designed performance incentives can help advance Rhode Island's energy policy goals and provide broad new benefits to customers. Specifically, the Company believes that incentives are most likely to be appropriate and effective where: (1) there is a demonstrated market failure or a unique strategic role that can be served by the utility; (2) there is an opportunity to produce significant benefits to customers and/or promote Rhode Island's energy policy goals; and (3) the distribution company plays a distinct and clear role in bringing about the desired outcome."
- The PUC feels National Grid's criteria are mostly consistent with Principle 1. - National Grid's second condition in the excerpt may differ from the Draft Principles in that the Draft Principles intend to direct incentives to outcomes in which customers have stake, which may be different from "an opportunity to produce significant benefits to… promote Rhode Island's energy policy goals." In other words, National Grid's criteria might be fully consistent with the Draft Principles if the word "or" were removed from the second condition. - The existence of Principle 1 would not eliminate the need for other principles, like Principles 2 through 5.

National Grid Page 3, Paragraph 3
"However, it is important to note that movement toward outcome-based performance incentives, where the utility is to achieve a specific objective with less regulatory oversight of how this is accomplished, runs counter to the use of a detailed benefit cost analysis to determine incentive levels."
- The PUC notes National Grid's best-in-class energy efficiency programs and would like further comment from the utility on the limitation on innovation in this well-vetted program. - The PUC believes that there must be a reasonable expectation that an outcome will produce net benefits and that customers will share in those net benefits in order to approve an incentive for that outcome. - As stated in Section II.D, the evidence for a PIM must be sufficient and reliable. In many instances today, there is no exact definition of what is convincing and reliable, and that may be the circumstance for PIMs proposals. - Cost-benefit analyses for any proposal need only be as detailed as necessary to be considered sufficient and reliable.

National Grid Page 3, Paragraph 4
"While the Company generally agrees that the emphasis in determining incentive value should be on quantitative, monetized benefits, qualitative benefits should still be considered in the evaluation of the overall Performance Incentive Mechanism, even if the qualitative benefits are not included in the calculation of the incentive payment."
- The PUC is highlighting this comment to note it appears entirely consistent with the Draft Principles.

National Grid Page 4, Paragraph 1
"Specifically, the Company should be permitted to use all quantifiable benefits contained in the Docket 4600 Benefit-Cost Framework to justify a performance incentive mechanism. If such benefits are tangible enough to direct the investment of customer dollars, they should be tangible enough to justify the overall need for a performance incentive and associated metric."
- The Draft Principles permit the use of all quantifiable benefits contained in the Framework to justify a PIM. - To be clear, the idea in the Draft Principles prohibits paying the company a share of unquantifiable benefits.

National Grid Page 4, Paragraph 2
"Finally, the Company disagrees with the suggestion in Commissioner Anthony's Memorandum that the utility is shielded from risk due to the potential error in estimated benefit values. …She goes on to state: '[i]f 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 **<u>the utility is shielded from the risk that the actual value of CO2 reduction is less than or greater than the estimated value</u>**, whereas society is fully exposed to this risk.' …When considering risk in developing principles for performance incentive mechanisms, a commission should acknowledge that risk can go both ways." [emphasis added]
- The PUC directs National Grid to the emphasized language, which recognizes that risk can go both ways, as National Grid recommends the PUC acknowledge. As Commissioner Anthony stated, and in agreement with National Grid's point in the excerpt, in the scenario described in the memo, National Grid would be shielded from both the **<u>upside *and downside*</u>** risk that actual benefits differ from estimated benefits, whereas customers would be exposed to both the upside and downside risk.

National Grid Page 5, Paragraph 2
"The Company strongly suggests expanding [Principle 1], as discussed in the general comments above, in order to recognize the important role that performance incentive mechanisms can play in fostering utility innovation and supporting utility activities beyond the utility's traditional obligation to provide safe, reliable and affordable service."
- The PUC notes that the Draft Principles require that customers have a clear stake in outcomes. If National Grid disagrees, the PUC would like National Grid to be prepared to explain why at an upcoming technical session. - The policy that underpins the essential obligations of economic regulation in this state are found in R.I. Gen. Laws § 39-1-1. The PUC agrees that new programs and policies have expanded National Grid's and other utilities' obligations beyond their traditional obligations. Given that, the PUC believes it understands National Grid's point above. But, in case there is a misunderstanding, it is most important to focus on PIMs that promote innovation within these new and traditional obligations before focusing on PIMs that promote innovation beyond the new and traditional obligations.

National Grid Page 5, Paragraph 5
"The Company agrees that performance incentive mechanism proposals should enable comparison of costs and benefits but would suggest that these principles and guidance recognize and reflect the limitations of benefit-cost analysis and not treat the numerical results of a benefit-cost analysis as dispositive of whether a certain performance incentive mechanism is worthwhile. The PUC recognized the limitations of the benefit-cost analysis in the Docket 4600 Guidance Document…"
- The PUC recognizes the limitations of a benefit cost analysis. Furthermore, the PUC does not anticipate amending policy or guidance on benefit-cost analyses through PIMs guidance. - The PUC also recognizes that in its decisions, the PUC is balancing a fair deal for customers (and a fair deal for the utility). All evidence relevant to that balance will continue to be considered. - The Draft Principles would require that PIMs proposals be supported by (at least) a comparison of reasonably known costs to reasonably quantifiable and cash benefits. If National Grid disagrees that this type of evidence should be required to support a PIM, the PUC would like National Grid to be prepared to explain why at an upcoming technical session. - The PUC does not anticipate defining the standard or what is reasonably sufficient evidence, but rather expects that will remain a standard internal to each individual Commissioner.

National Grid Page 6, Paragraph 2
"Further, the PUC's principles for performance incentive mechanisms must recognize that a shift toward outcome-based performance incentive mechanisms conflicts with the use of a detailed cost-benefit analysis to determine appropriate incentive levels. Costs, and thus net benefits, will be known with less certainty under an outcome-based approach. In a purely outcome-based approach where the metric and target are not tied to a single utility program, the costs of achieving this target become more difficult to estimate with certainty."
- Please see the previous comments above.

National Grid Page 6, Paragraph 4
"The Company has two related comments on the first part of [Principle 3]. First, the Company suggests that this principle be focused on maximizing the net benefits created by the performance incentive mechanism (as alluded to on page 7 of the Memorandum), rather than maximizing the share of total net benefits to customers."
- As stated above, the concept of maximizing total net benefits is embedded in Principle 3, but that concept is modified and constrained by also requiring maximization of the net benefits to customers. The PUC understands the language may be confusing. - The underlying intent of this language in Principle 3 is to design PIMs that 1. maximize total net benefits; and 2. simultaneously maximize customers' share of total net benefits. Doing either one alone is not always the same as doing both simultaneously. The latter intent assures that PIMs are designed to affect areas and outcomes in which customers have stake and in which customers have an opportunity to share in net benefits.

National Grid Page 7, Paragraph 1
"Second, the Company would suggest that [Principle 3], either as drafted, or modified to focus on maximizing total net benefits to customers, be qualified as aspirational in nature. Otherwise, the principle risks creating an impossible analytical standard that undermines the potential value to be gained from performance incentive mechanisms. It will not be possible to determine analytically whether the share of net benefits to customers, or total net benefits, has been truly maximized. For example, neither the utility nor stakeholders would not be able to evaluate with any certainty how a change in the utility incentive from 30 percent of net benefits to 20 percent in net benefits will impact the utility's performance, and thus the total net benefits provided to customers."
- The PUC's principles are propositions and beliefs upon which the PUC's reasoning will be based. In this context, principles are aspirational.

National Grid Page 7, Paragraph 2
"Instead, the Company suggests that [Principle 3] be rewritten as a balancing test, with a focus on sizing the incentive in a manner intended to ensure both a meaningful incentive for the Company and meaningful net benefits to customers."
- If the PUC understands National Grid's comment, Principles 3 and 4, taken together, create a balancing test similar, if not the same, as the one National Grid is recommending.

National Grid Page 7, Paragraph 3
"While the Company agrees with the PUC's desire to ensure that customers receive meaningful value for performance incentive mechanisms, incentives should be designed such that the rewards increase proportionally to performance."
- The PUC is unsure why National Grid believes the Draft Principles would prohibit an incentive that changes proportionally with performance. It is possible National Grid is confusing performance with effort. The PUC would like National Grid to be prepared to discuss this at an upcoming technical session.

National Grid Page 7, Paragraph 4
"The Company does not agree with the suggestion on page 7 of the Memorandum that, over time, the proportion of benefits paid to the utility decrease and the proportion that accrue to customers increase. Rather, how the proportion of benefits paid to the utility evolves over time should be situation specific."
- Commissioner Anthony's statement is intended to reflect that if a utility were to find efficiencies in a business area, the utility might, temporarily, enjoy extra profits driven by those efficiencies, but eventually those efficiencies should flow to ratepayers. - The PUC recognizes that other market forces, like changes in risk, may require greater or lesser incentives.

National Grid Page 7, Paragraph 4
"In general, the Company would expect to propose a set of targets for a given performance period that require an increasing level of effort to achieve each year."
- Such a design may appropriately flow efficiencies to ratepayers over time. - Effort, alone, is not necessarily indicative of a need for an increasing incentive.

National Grid Page 8, Paragraph 4
"Similar to Principle 3, above, Principle 4 also does not take into account the relationship between the size of the incentive and performance. Performance incentive mechanism principles should clearly recognize that in order to spur Company action, incentives must be sufficiently meaningful to attract management attention, particularly when they are intended to encourage Company activity outside of traditional business obligations in support of broader policy goals or would require the Company to expend shareholder resources.
- Principle 4 describes an incentive that is "no more than necessary." Frankly, necessary means necessary. This seems synonymous with National Grid's phrase "sufficiently meaningful." - As stated above, principles are aspirational. If National Grid believes there should be a principle, or aspiration, to allow the utility *a greater profit than is necessary*, in any circumstance, the PUC would like National Grid to be prepared to discuss this more at a future technical session.

National Grid Page 8, Paragraph 5
"In addition, page 9 of the Memorandum states "[t]he 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." Similar to Principle 3, this principle risks creating an impossible analytical standard, and is not consistent with the implementation of outcome-based incentives."
- Principle 4 creates no new analytical standard. - Principle 4 creates a question and analysis that might be analogous to the application the standard that rates be just and reasonable. In that context, utilities have been proposing, and PUCs have been analyzing, rates and returns against a zone of reasonableness for decades.

National Grid Page 9, Paragraph 2
"The discussion around Principle 5 seems to suggest a movement towards outcome-based incentives, which the Company generally supports. However, in the context of outcome-based incentives, the notion of rewarding a utility action becomes less relevant, since individual utility actions and their contributions to an overall target would receive less scrutiny because, as noted in the Memorandum "the utility will be motivated to find the lowest cost and most cost-effective methods to earn the reward." Generally, the Company agrees that the same outcome should not be rewarded differently, though in the near term, where proceeding-specific incentives are likely, differences in incentives could be warranted by differences in associated ancillary benefits. More clarity could be provided with respect to the second sentence of this principle, Multiple programs will likely come into play to varying degrees in pursuing targets of outcome-based metrics. The Company respectfully requests further explanation and guidance of how Principle 5 would be applied and how proponents of a performance incentive proposal should use the benefit-cost analysis to support outcome-based performance incentive mechanisms."
- Principle 5 is consistent with older standards that aimed to avoid paying different amounts for the same value. This concept was also central to the PUC's policy for opening and deciding Dockets 4600 and 4600A. In that sense, Principle 5 does not suggest a movement, but rather a simpler statement of existing policy. - Principle 5 means that when a PIM is identified as the right regulatory tool, part of making sure it is a fair deal is to reward the accrual of benefits rather than rewarding the completion of actions. - The PUC believes "benefits" is analogous to, or synonymous, with what National Grid describes as an "outcome," but if National Grid disagrees, National Grid should be prepared to discuss this further at an upcoming technical session. - While the PUC has not provided, and is not currently developing, guidance on policy or performance areas that are best targeted with utility incentives at this time, the PUC expects that relatively few policy or performance areas would be useful areas for applying PIMs. - Should the PUC adopt Principle 5, it may be necessary to consider how to harmonize program-based PIMs with incentive structures (including other PIMs) that treat programs and or resources in a neutral manner. Certainly, principles and guidance allow for flexibility and differences *where warranted*. The PUC expects National Grid to be prepared to discuss this issue more at a future technical session or in future comments to this process.

National Grid Page 9, Paragraph 3
"The Company believes that development of principles for performance incentive mechanisms for Rhode Island would benefit from a stakeholder process that would enable broader expert input and consideration of experiences in other jurisdictions, as well as identify policy areas and outcomes where performance incentive mechanisms might be best applied in Rhode Island."
- The PUC agrees there may be need for a future process that identifies policy or performance areas that might be best targeted with, or best suited for, PIMs.

3. Responses to Office of Energy Resources Comments

OER Page 1, Paragraph 4
"There seems to be a disconnect about the benefits we want to achieve with programs (i.e. all of them: cash quantifiable, non-cash quantifiable, non-quantifiable) and the benefits the Commission wants to incentivize through PIMs (i.e. only cash quantifiable). This asymmetry may lead to unintended consequences."
- Commissioner Anthony's memo does not aim to draw a distinction between benefits to achieve in programs and benefits that may be incentivized. - The Draft Principles intend that unquantified benefits and costs will not be paid out in cash profit to a utility. - Allowing the utility cash payment for unquantified benefits would, in a literal sense, allow the utility an incentive on something for which the utility is not accountable. Commissioner Anthony's Draft Principles are designed to guard against this consequence.

OER Page 1, Paragraph 5
"A future revision of the Guidance Document should clarify expectations for PIMs that may span across separate businesses within the utility."
- Future guidance may be required to provide the clarifications OER has suggested.

OER Page 1, Paragraph 6
"Excluding any type of qualitative benefit from analysis of a proposed PIM may unnecessarily neglect key benefits from utility performance."
- Commissioner Anthony's memo does not exclude qualitative benefits from the analysis of a PIM, but rather from the eligible pool of net benefits from which a utility may share. - The values of qualitative benefits are not known and measurable. The PUC believes this would make it difficult, if not impossible, to track in a meaningful way whether a utility has neglected the benefit or not. - Qualitative benefits cannot be accounted for, and thus a utility cannot be accountable for delivering qualitative benefits. If a utility is not accountable for delivery of something, the best path to additional profit may be to continue to neglect these benefits. - It may be necessary to clarify that qualitative benefits can be considered when determining if a PIM is necessary, and necessary to clarify that qualitative benefits may also be important for understanding if the outcome is important to public interest. The memo, however, recommends that qualitative benefits are not useful in determining if a PIM is a good deal for ratepayers. - Commissioner Anthony's memo recognizes that directly incentivizing a benefit or public interest goal with a PIM is not always the best tool to achieve the desired outcome. This does not mean the outcome will be neglected by regulators. The PUC believes there are other tools to bring about outcomes that are not achievable directly through PIMs.

OER Page 1, Paragraph 7
"In Principle 5, how is "same benefit" defined?"
- The RI Benefit Cost Framework provides the benefits and costs the PUC currently considers in its decisions regarding National Grid's electric business. These are the benefits considered in Principle 5. - This is a good starting point for other utilities, and the RI Test is applied to National Grid's gas efficiency program.

OER Page 1, Paragraph 8
"The Guidance Document focuses only on improving performance outcomes (e.g. customer service). It does not address building institutional capacity and processes for the utility to perform in new ways (e.g. implement NWAs, build out specific discrete tools)."
- The Draft Principles are focused on rewarding beneficial outcomes. Building institutional capacity and processes are actions a utility should take because it is motivated to profit when it efficiently supplies beneficial outcomes.

OER Page 2, Paragraph 2
"Attenuating incentives over time may lead to attenuating desired utility behavior."
- Commissioner Anthony's statement is intended to reflect that if a utility creates efficiency, it may enjoy extra profit from that efficiency initially, but eventually it should flow to customers, as would be the outcome in an efficient market. - The PUC recognizes that other market forces, like changes in risk, may require greater or lesser incentives. - In the comment above, OER may mean "utility behavior" in a very broad sense, but in case the PUC misunderstands that comment, it should be clear that Commissioner Anthony's Draft Principles focus on the delivery of outcomes, rather than utility behavior.

OER Page 2, Paragraph 4
"Which perspectives should be presented in a PIM analysis/justification?"
- The Draft Principles do not propose to modify the PUC's use of the regulator's point of view, as used in the RI Benefit Cost Framework that applies to National Grid's electric business, or other analysis methods used in regulating other utilities. - The Draft Principles also propose that PIMs proposals make clear how customers have stake in outcomes, and that incentivized outcomes are aligned with customers' interests.

OER Page 2, Paragraph 6
"What is the expectation for cost of the analysis needed to develop PIMs?"
- The PUC has no specific expectation. However, the PUC recognizes that proposals to provide additional profit opportunities to a utility may require significant time and resources.

4. Responses to Handy Law Comments

Handy Page 3, Paragraph 2
"Performance must not only be gravy; it must become the utility's main course."
- As stated in Section II.A, in the context of regulation of an IOU, cost-of-service regulation already creates incentives and implicitly applies performance standards. All regulation is a form of performance regulation tied to a form of incentive. - Given this, the PUC states in Section II.B that PIMs should be consistent with and work in conjunction with other regulatory structures. - The PUC would consider PIMs that are integrated into the overall revenue requirement and has not determined that PIMs will stand as additional earnings on top of the revenue requirement, as noted in Section II.B.

5. Responses to Conservation Law Foundation Comments

CLF Page 2, Paragraph 1
"However, CLF is concerned about the application of these principles to PIMs that incentivize GHG emissions reductions and other environmental benefits."
- Any PIMs guidance would apply equally to all cost and benefit categories. If CLF is suggesting that environmental attributes be treated differently, the PUC expects CLF will be prepared to discuss that at an upcoming technical session. - The PUC believes, however, that CLF's point above is addressing a concern that energy policy tends to underestimate environmental benefits (or costs). If that is the case, the PUC wants to be clear that it does not expect to modify existing cost-benefit frameworks through the adoption of PIMs guidance.

CLF Page 3, Paragraph 1
"While it is entirely reasonable and appropriate for the Commission to consider and protect ratepayers from the risks of such uncertainty, CLF urges that this risk be weighed as one factor when evaluating costs against quantitative and qualitative benefits, and not be treated as a reason not to consider such proposals. There are likely to be cases where some degree of uncertainly exists as to the value of a benefit, but there is still a high degree of certainty that that benefit is worth the cost to ratepayers. PIMs involving quantitative and qualitative benefits inherently contain some level of risk, but there are also risks to being overly risk-averse—namely the opportunity cost of rejecting beneficial transactions."
- The PUC believes every case includes uncertainty, and often that uncertainty is significant. Uncertainty is one factor, among many, in the PUC's decisions. - The PUC strives to give all factors the weight they deserve. Sometimes uncertainty is the most important factor; sometimes it is not. - In her memo, Commissioner Anthony raised the concept that any given benefit exists on a spectrum of uncertainty. She proposes that this uncertainty should be considered when divvying up the benefits between ratepayers, society, and a utility. This is not outside what would be normal for the PUC to consider in its deliberations. - The position of the benefit on this spectrum of uncertainty is, in part, controlled by how measurable and verifiable the benefit is. She propounds that cash benefits are the least risky for ratepayers and unquantifiable benefits are the riskiest. She has suggested that it is inappropriate to split qualitative benefits with a utility, because there would be no basis upon which to split the benefits. - Recent PUC decisions have included consideration of environmental benefits, including the benefits of avoiding greenhouse gas emissions. In these recent cases, the benefits from greenhouse gas reductions did not fall into the category of "unquantified" benefits. Rather, some portion of these benefits fell into, or very near, cash benefits (e.g., RGGI costs) and some other portion was quantified with both a volume of reductions and a societal value associated with that volume. If CLF believes this is not the recent case history, the PUC expects CLF will be prepared to discuss this more at an upcoming technical session.

CLF Page 3, Paragraph 2
"The 2017 Power Sector Transformation Report, co-authored by the Commission, recommends 'shifting the traditional utility business model away from a system that rewards the utility for investment without regard to outcomes towards one that relies more upon performance-based compensation.'"
- The 2017 Power Sector Transformation Report contains many important observations and useful recommendations. Many of these recommendations align with PUC policy and with the concepts raised in Commissioner Anthony's memo. It is important to note that while the Report had input from PUC staff, it is not coauthored by the PUC, and does not represent an official policy statement of the PUC.

6. Responses to R Street Institute Comments

R Street Institute Page 2, Paragraph 2
"For example, let us consider that the electrification of transportation may align with social welfare generally, and the goals of utility regulation specifically. Is the installation of electric-vehicle charging stations the benefit we have in mind—or is it the overall number of electric vehicles (EVs) adopted? If the latter, applying Principle #5 would mean that it would be inappropriate to simply count the number of charging stations installed and create a PIM on that basis, as opposed to the EV adoption they had likely induced. Defining the benefit in an outcome-driven way would suggest that the utility might consider an alternative means of achieving EV adoption, such as credits or rebates to customers who use their own capital to buy an EV or install a home- or office-based charging station. In short, if one were to choose dichotomously between "charging stations" versus "EVs," it would be reasonable to pick the latter because it better conforms to the principle of allowing multiple pathways to achieve the presumptive ultimate goal. Put another way, one does not install charging stations for their own sake; one installs them to accommodate EVs, and that is why the latter and not the former should be measured."
- The PUC agrees with the framing R Street provides. Incentives should allow a utility the most efficient set of solutions for meeting a goal. - The PUC should also be clear that there will be cases in which constraints are necessary. For example, a state law could require a certain technology be part of a solution, or it may be necessary to requiring diversity in a solution set to reduce risk. The PUC believes R Street's point is that unnecessary or unintended constraints will generally lead to inefficient outcomes.

R Street Institute Page 2, Paragraph 6 continuing onto Page 3
"We suggest that Principle #5 therefore incorporate guidance that any PIM must incorporate a metric associated with at least one of two things. Specifically, a PIM's underlying metric should measure cost reductions (by volume of energy distributed and by capacity), which would increase a utility's incentive to obtain savings over a multi-year period. 3 Or, alternatively or in addition, a metric should measure and reward for increased system utilization, (possibly measured by average load factor), which is accomplishable either by a system-peak reduction or by increasing throughput at certain times."
- Adoption of metric conditions may be beyond the scope of the PIMs guidance the PUC is considering at this time. The comment above, however, seems to fall between PIMs principles and metric design principles. The PUC is not sure it understands the full implication of these conditions and would like R Street to discuss these conditions in more detail at an upcoming technical session.

R Street Institute Page 3, Paragraph 2
"But it would be better if the Commission instead specified broad outcomes, rewarding or penalizing the utility for them, even if it cannot be clearly established whether the results are directly tied to the utility's behavior."
- The PUC expects that it must find a balance between incentivizing broad outcomes and ensuring that there is reasonable evidence that a utility is accountable to delivering those outcomes in exchange for incentive payments.

7. Responses to Sunrun Comments

Sunrun Page 1, Paragraph 2
"Integrating performance-based regulatory mechanisms into the regulatory paradigm is a critical element of aligning the utility business model with Rhode Island's clean energy goals, the goals of the Power Sector Transformation Initiative and the public interest more broadly."
- The PUC believes it is appropriate to also recognize the goals for National Grid's electric utility adopted in the 4600A Guidance Document, and the goals for all utilities regulated by the PUC.

Sunrun Page 8, Paragraph 4
"Sunrun encourages the Commission to also consider where asymmetrical vs. symmetrical PIM design is appropriate. In some instances it may be appropriate to design a PIM that allocates a certain number of basis points as an upside only (reward), while in other instances it may be appropriate to allocate a certain number of basis points as a downside only (penalty); in other instances, still, it may be appropriate to design the PIM symmetrically to include both upside and downside."
- As stated in Section II.B, the PUC is open to considering PIMs that include penalties.

8. Responses to Acadia Center Comments

Acadia Center Page 1, Paragraph 3
"…[O]ur perspective on three related concepts that may inform further development of the Commission's guidance surrounding PIMs: 1) the need to first set policy goals; 2) how PIMs must integrate with other business model reforms; and 3) whether penalties must accompany incentives."
- Policy goals for utilities currently exist. Further, for National Grid's electric business, the PUC adopted goals for the future electric system in the 4600A Guidance Document. - Stakeholders should understand that the PUC will not be a proponent of a specific PIM. That is the role of parties before the PUC. - The PUC agrees that harmonizing PIMs with existing regulatory structures is an important task. - As stated in Section II.B, the PUC is open to considering PIMs that include penalties.

Acadia Center Page 1, Paragraph 5, continuing onto Page 2
"Acadia Center supports use of [Principle 1] but cautions that it may be too narrowly worded. … Application of this principle must not confine use of PIMs to only novel undertakings for the utility."
- Principle 1 does not limit PIMs only to novel undertakings. It is intended to make sure that PIMs provide incremental benefits in either new or existing undertakings. - If ratepayers are asked to pay a utility additional profits on some undertaking, they should have a reasonable expectation that incremental benefits will be created relative to some baseline. The baseline can be in a new or existing undertaking. If this is not the case, then it would be inappropriate to pay additional profits.

Acadia Center Page 2, Paragraph 1
“The Commission must not penalize such early action by denying a PIM based on viewing the early innovation as evidence of apparent alignment of incentives.”
- The PUC expects that PIMs will reward incremental benefits.

Acadia Center Page 2, Paragraph 4
“Given that part of the role of PIMs is to provide a ‘carrot’ to focus the utility to innovate and try different tactics to solve and identified problem, the exact path to the solution, and thus both the costs and benefits, will likely be unknowable when the financial level of the PIMs is set. Acadia Center encourages the Commission to provide room in the comparison for qualitative and directional analysis when precise quantification is not possible”
- The PUC will continue to consider qualitative and directional analysis in its deliberations. Commissioner Anthony has proposed that qualitative or directional benefits will not be shared with a utility through cash payments to the utility.

Acadia Center Page 3, Paragraph 2
“Acadia Center support application of [Principle 3] but cautions that it assumes more advanced abilities to quantify and verify system, customer, and societal benefits than has been demonstrated in recent dockets. Acadia Center again calls for the full complement of benefits identified in Docket 4600 to be considered, and notes that this will likely require further guidance from the Commission.”
- The PUC does not expect to modify existing cost benefit frameworks through PIMs guidance, including the 4600A Benefit Cost Framework.

Acadia Center Page 3, Paragraph 3
“A PIM that achieves the nuanced balance needed to maximize both the customers’ share and the utility’s motivation to increase total net benefits would be ideal-but likely very difficult to hit precisely.
- The PUC is considering principles. Principles should be based on, and be a statement of, ideals.

Acadia Center Page 3, Paragraph 3
“It may be a more fruitful tactic to begin with allocating a higher share of benefits to the utility than optimal, to maximize its incentives to focus on increasing total net benefits, followed by adjustments in the proportions to favor customers over the course of the performance period.”
- The PUC believes it understands Acadia Center’s overall point that often the best outcome is achieved through a gambit. - The PUC notes, however, that there is not more fruitful tactic than whichever tactic is optimal. In the context of net benefits, the PUC understands these concepts to be the same.

Acadia Center Page 3, Paragraph 6
"However, the Commission may want to consider adding a degree of flexibility in what it considers "necessary."
- Commissioner Anthony has not suggested any precision or accuracy around what the PUC should consider "necessary." The memo proposes a concept similar to "just and reasonable" rates.

Acadia Center Page 4, Paragraph 3
"However, application of [Principle 5] should not foreclose a utility from layering incentives, if it can undertake one activity to accomplish multiple goals, as that will likely result in cost-savings for consumers as well."
- The memo does not specifically propose elimination of layered incentives. It proposes considering the preexisting incentives before replacing them with new ones, or adding new ones on top, with the overall target of paying no more than necessary to achieve an outcome. - Incentives in any sector should consider the potential of free-ridership. Layered incentives pose some potential for free ridership, which could result in paying the utility more than is necessary.

Acadia Center Page 4, Paragraph 5
"As such, Acadia Center believes that an important first step, before application of the Principles, is to identify and articulate the policy goals towards which the regulator wishes to move and match these preferred policy goals with areas in which there is known potential for the utility to play a significant role in creating benefits."
- Identifying areas best served with PIMs may be an important next step.

Acadia Center Page 4, Paragraph 6, continuing onto Page 7
"As Acadia Center stated in Utility Vision, PIMs can be used to ensure that utility management is promoting goals aligned with state policy and providing clear benefits to ratepayers. But PIMs must be used in conjunction with other reforms, and not merely to inflate utility profits. To achieve transformation of the utility business model and progress in addressing improper incentives, PIMs must replace other utility revenue. By increasing the portion of utility revenue requirements that is recovered through PIMs while reducing the portion recovered from the rate base, PIMs can help shift the financial incentive away from capital investments and towards achieving consumer-friendly outcomes. As utilities, state agencies, and stakeholders get more comfortable with increasing the emphasis on value of benefits to customers, such as savings and carbon reductions, it will create a positive feedback loop. Of course, even when fully effectuated, the incentive payment must not exceed the value of the resulting benefits."
- As stated in Section II.A, in the context of regulation of an IOU, cost-of-service regulation already creates incentives and implicitly applies performance standards. All regulation is a form of performance regulation tied to a form of incentive. - Given this, the PUC states in Section II.B that PIMs should be consistent with and work in conjunction with other regulatory structures. - The PUC would consider PIMs that are integrated into the overall revenue requirement and has not determined that PIMs will stand as additional earnings on top of the revenue requirement, as noted in Section II.B.

Acadia Center Page 4, Paragraph 6, continuing onto Page 7
"The Principles document seems to regard PIMs as an entirely upside mechanism—allowing a utility to earn addition rewards as it improves its performance along specific targeted goals. This may be appropriate for this early stage of utilizing PIMs primarily to motivate utility activity in new areas where it can generate customer, societal and environmental benefits."
- As stated in Section II.B, the PUC is open to considering PIMs that include penalties.