Docket No. 21-05-15

PURA INVESTIGATION INTO A PERFORMANCE-BASED REGULATION FRAMEWORK FOR THE ELECTRIC DISTRIBUTION COMPANIES

Authority Staff Concept Paper #2 | Assessing the Existing Regulatory Framework in Connecticut

Table of Contents

1. Executive Summary

On May 26, 2021, the Public Utilities Regulatory Authority (Authority or PURA) initiated Docket No. 21-05-15 to investigate, develop, and adopt a framework for implementing performance-based regulation (PBR) for the electric distribution companies (EDC) in Connecticut, The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) and The United Illuminating Company (UI).

PBR provides a set of tools to reform legacy regulatory structures to enable innovations within modern power systems. The legacy regulatory paradigm built to ensure safe and reliable electricity at reasonable prices from capital-intensive electricity monopolies is now adjusting to a new era of disruptive technological advances that impact the way EDCs earn revenues and what value customers expect from their own EDC. Indeed, PURA views PBR as a gateway to revisit the animating principles of utility regulation and to re-apply these core tenets in the context of an increasingly decarbonized, digitized, and distributed electricity system.

Authority Staff authored this concept paper to provide stakeholders with a common foundation and suggested approach for assessing a revised set of potential regulatory outcomes with respect to current regulatory mechanisms. Specifically, this paper: (a) reiterates the approach to Phase 1 of the proceeding; (b) reviews participant input on regulatory goals and outcomes, resulting in a revised set of potential outcomes to guide the PBR process; (c) offers a characterization of the existing regulatory framework to serve as a common reference for further deliberations; and (d) introduces an assessment

template as a recommended structure for evaluating regulatory outcomes and assessing regulatory mechanisms.

2. Introduction

The Authority has adopted a conceptual framework and two-phase approach to guide the docket process.[1] Phase 1 of the conceptual framework began by identifying priority goals and outcomes for EDC operations, products, and services—work that began in the first Staff Concept Paper titled "Performance-Based Regulation: Introduction, Goals, and Outcomes" (Concept Paper #1).[2,3] Discussion of potential regulatory goals and outcomes continued through the Stakeholder Workshop held in April 2022 (Stakeholder Workshop #1),[4,5] which was followed by the solicitation and receipt of participant comments in May 2022. Ultimately, the regulatory goals and outcomes established as part of Phase 1 will not only anchor and inform evaluation of the current regulatory model to determine which outcomes are not sufficiently supported in the current construct and where new or updated regulatory approaches may be warranted, but will also serve to reestablish the principles guiding utility regulation in Connecticut.

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[1] The conceptual framework for this docket, particularly details of Phase 1 which is planned to occur over approximately fourteen (14) months, were provided in the Authority's Notice Regarding Docket Timeline and Process issued on January 31, 2022. Available at: 21-05-15 Notice Regarding Docket Timeline and Process.
[2] Notice of Staff Concept Paper, dated March 17, 2022, and Staff Concept Paper. Available at: 21-05-15 Notice of Issuance of Staff Concept Paper and 21-05-15 Concept Paper, respectively.
[3] Additionally, Staff Concept Paper #1: (a) provided relevant background for this proceeding; (b) discussed the terms and concepts that form a PBR framework; and (c) explained the phased approach of the proceeding.
[4] Notice of Stakeholder Workshop, dated March 1, 2022. Available at: 21-05-15, Notice, Notice of Stakeholder Workshop and Agenda (state.ct.us)
[5] Stakeholder Workshop #1 was held on April 5, 2022, to: (a) review PBR efforts in other jurisdictions, including tools and processes used; (b) build a shared understanding of the potential for PBR in Connecticut, and planned approach for the PBR proceeding; and, (c) discuss potential regulatory goals and outcomes for PBR in Connecticut.

This concept paper provides a refined list of goals and priority outcomes based on participant comments in the aforementioned workshop and comments filed in May 2022. The concept paper also identifies, based on stakeholder comments, a new category called “foundational regulatory considerations” for fundamental concepts that the Authority will examine, as appropriate, in the development and application of the identified priority outcomes. Later in Phase 1, Authority Staff will work with stakeholders to identify appropriate metrics and possible changes or additions to regulatory structures based on the identified priority outcomes, and in consideration of the regulatory goals and considerations. During Phase 2 of the proceeding, new performance incentive mechanisms (PIMs) and other regulatory tools will be evaluated and implemented accordingly.

With an interim, revised set of priority outcomes, a shared understanding of existing regulatory structures will support a constructive dialogue among stakeholders and can serve as a common foundation for assessment of these structures. This report provides a characterization of the existing electricity regulatory framework in Connecticut: general rate cases, revenue and rate adjustment mechanisms, performance management incentives, and non-revenue regulatory provisions. The characterization describes the main mechanisms within these categories, each of which may be considered in assessing outcomes.

Authority Staff also offer a suggested structure for stakeholders to evaluate how well individual regulatory mechanisms drive achievement of the identified outcomes. The Assessment Template (Attachment A to this concept paper) is a simple tool that offers a

common methodology and approach to: capture observations about what is working or not working; collect more in-depth descriptions about how specific mechanisms may impact identified outcomes; highlight inter-dependencies and tradeoffs between outcomes and mechanisms; and, incorporate data as a reference point for discussion.

The Authority will hold a second Stakeholder Workshop on July 14, 2022 (Stakeholder Workshop #2), to continue discussion and solicit input from stakeholders on how well outcomes are supported by the current regulatory framework. Similar to Stakeholder Workshop #1, participants will engage in a facilitated dialogue to explore the existing framework and to evaluate its suitability to regulatory goals and outcomes. The workshop will also include participation from invited guests from the investor community, to support a deeper understanding of how regulatory structures are evaluated by investors. After Stakeholder Workshop #2, the Authority will issue a Notice requesting comments from docket participants addressing how well existing regulatory mechanisms drive achievement of the proposed priority outcomes.

The Authority will continue to hold collaborative stakeholder workshops, each followed by requests for focused comments, for the remainder of this proceeding to provide a robust, yet flexible process to focus objectives and deliberately advance the instant PBR proceeding.

3. Reaffirming Goals and Outcomes: Lens for Regulatory Assessment

3.1. Original Proposed Goals

Concept Paper #1 introduced four overarching goals, each linked to strategic priorities and objectives of the Authority, and a broad set of preliminary, associated outcomes intended to foster constructive dialogue among participants and help guide PBR evaluation. They were also introduced to orient activities toward an adopted set of regulatory goals and outcomes at the conclusion of Phase 1. The four goals introduced in Concept Paper #1 were: (1) enhance EDC performance; (2) advance decarbonization; (3) improve EDC customer engagement and satisfaction; and (4) ensure equitable and reasonable rates.

Enhance EDC Performance: *Improving EDC performance in terms of efficiency, reliability, resiliency, and supply*. Optimizing utility planning processes, investment choices, and system operations ensures that the EDCs make decisions necessary to provide exemplary service at the least cost to customers. As Connecticut's energy portfolio becomes increasingly renewable, distributed, and diverse, the EDCs will need to invest in a grid with greater capabilities. To protect customers from unnecessary rate increases and other costs resulting from these potentially large investments and new functions, utilities are expected to operate in an economically and strategically effective manner. Additionally, safety is always a primary concern of the Authority and the EDCs.

The safety performance of the EDCs should be maintained and strategically improved where necessary (e.g., excavation damage).

Advance Decarbonization: *Meeting state level greenhouse gas emissions, decarbonization, and distributed energy resources (DER) deployment targets*. Achieving the state's aggressive emissions reduction and decarbonization goals will require significant effort from the EDCs. PBR can help the EDCs be successful by better aligning utility revenue opportunities with public policy goals.

Improve Customer Engagement and Satisfaction: *Exceeding customer satisfaction targets and improving customer engagement*. Delivering affordable and reliable service to customers has always been a core EDC responsibility; however, needs and expectations are changing as customers transform from simple consumers of energy to active participants, or "prosumers", in the electric system. EDCs should be expected to facilitate additional choices and options for customers as they interact with third-party service providers to procure DER and other services and seek to manage their energy use and costs.

Ensure Reasonable and Equitable Rates: *Ensure customers across all classes receive reasonable rates and equitable access to the same products and services*. The evolution of distributed technologies, and increasingly available and granular information via communication systems both behind- and in front-of-the-meter, can create opportunities to pair traditional assessment of just and reasonable rates with a more tailored approach and more granular rates to satisfy changing customer demands and

engage DER to achieve system benefits. Potentially, and most importantly, this goal would ensure that the energy burden placed on any one customer is not unreasonable, ensuring relative affordability for all.

3.2. Participants' General Feedback on Concept Paper #1 and on the Proposed Goals

In reflecting first upon the general feedback provided by stakeholders, both during Stakeholder Workshop #1 and through the subsequently filed Goals-Outcomes comments, there appears to be general consensus on the importance of this docket and the value of a goals-outcome hierarchy to guide the development of a PBR framework. Further, there was general agreement regarding the four overarching regulatory goals proposed by Authority Staff. While some participants suggest minor modifications to the four proposed goals, no participant opposed the proposed goals. More specifically, Vote Solar recommended broadening the proposed goal, "Advance Decarbonization." Authority Staff agrees and has therefore re-named this goal to "Advance Public Policy," which includes advancing the goals of decarbonization, environmental protection, and equity, among other public policy objectives. In addition, there was discussion at Stakeholder Workshop #1 regarding the need to clarify the differences between "customer engagement" and "customer satisfaction." To provide additional clarity, Authority Staff recommends the re-titling of the goal to "Improve Customer Empowerment and Satisfaction," with an expanded-upon explanation in section 3.3. Last, to better align the goal to "Ensure Reasonable and Equitable Rates" with stakeholder comments, PURA's Equitable Modern Grid framework objective to "enhance…energy affordability,"

and other public documents in Equitable Modern Grid proceedings,[6] PURA Staff recommend re-titling the goal to "Ensure Reasonable, Equitable, and Affordable Rates."

3.2.1. Foundational Regulatory Considerations

In the following sections, Authority Staff proposes modifications to the originally proposed goals and outcomes of a PBR framework, which includes refining the proposed goals and refining and/or consolidating the proposed outcomes. In the process of refining the originally proposed goals and outcomes, Authority Staff identified a series of topics and core tenants of utility regulation that warrant greater emphasis as they represent crucial considerations and ideals factored into all Authority deliberations. Indeed, Authority Staff views each of the foundational regulatory considerations listed in this section as fundamental to the Authority's statutory functions and public policy objectives. However, these considerations are inherently cross-cutting by nature, and thus, potentially relevant to each goal and outcome. Also, while these considerations may also help drive strategic direction and customer outcomes, they do so within the construct of the regulatory goals and through individual and distinct outcomes. Thus, for some foundational regulatory considerations, Authority Staff does not believe that a specific outcome is necessary at this juncture of the proceeding. However, for other considerations, such as "Equity", Authority Staff feel strongly that treatment as both a

[6] See, e.g., Docket No. 17-12-03RE08, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Resilience and Reliability Standards and Programs, Straw Reliability and Resilience Program Frameworks, dated May 2, 2022. Available at: http://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/4a217f88f1660dd78525883600631d9e/$FILE/17-12-03RE08%20Reliability%20and%20Resilience%20Framework.pdf.

consideration and as an individual outcome is necessary to ensure a near-term, measurable improvement.

To be clear, the reorganization of previously proposed outcomes into foundational regulatory considerations should not be construed as reflecting lower relative importance to the state or its regulatory framework. On the contrary, treatment as a foundational regulatory consideration is an elevation; ultimately, these considerations are co-equal with the regulatory goals as they flow through each goal and outcome and will inform the development and application of the final outcomes.

For example, “Safety” is a core tenet of the provision of electric service and is deeply embedded in EDC operations. Further, the consideration of safety is firmly rooted as a first-order principle in PURA’s own statutory authority. As such, Authority Staff believe that ensuring, and improving if and where necessary, safety should be contemplated in the application of each proposed outcome, particular those related to the goal of enhancing EDC performance. Again, Authority Staff’s recommendation is not meant to minimize the importance of safety, but rather to underscore that it is foundational to the regulatory regime of the state.

“Equity” is similarly foundational to the state’s regulatory framework. While the EDCs raise concerns regarding the inclusion of equity in the four goals, many of the other commenting participants note the need to highlight and consider equity not just under the goal related to equitable rates, but within all of Authority Staff’s proposed goals and

outcomes.[7] Authority Staff recognizes the importance of equity in the development of a PBR framework and, indeed, in all of the work of the Authority and EDCs. Ensuring equity, in terms of rates, environmental protection, the provision of customer-facing programs, and many other areas is imperative to the development of a PBR framework and a just, fair, and equitable electric system for all Connecticut residents. Authority Staff agrees with the majority of commenting participants, and to that end, has recommended additional equity-related considerations under all goals and the elevation of equity to a foundational regulatory consideration. Authority Staff believe it is imperative to view the development of a PBR framework through a general lens of equity considerations throughout this proceeding. Additionally, Authority Staff also offers that this increasingly important focus area is also well-served by establishing an explicit outcome to bring sufficient attention to equity matters and to ensure the concept does not remain overly nebulous such that adequate results are difficult to achieve or measure.

In addition to these two foundational tenets of electricity regulation, Authority Staff also note the important nature of "Economic Opportunity" and "Risk Distribution," while also noting that economic opportunity is indeed an objective of the state and the Equitable Modern Grid framework and fundamental to PURA's role as an economic regulator. Thus, Authority Staff recommends the elevation of economic opportunity as a foundational regulatory consideration as it should be the result of several proposed outcomes and, therefore, is more appropriately treated as a cross-cutting consideration,

[7] See, Written Comments: Conservation Law Foundation (CLF), p. 4, Save the Sound, p. 6, and Vote Solar, p. 3, each dated May 6, 2022.

which will also serve to ensure that economic opportunity is considered across a broad spectrum of outcomes. Additionally, Authority Staff recommend elevating "Risk Distribution" to a foundational regulatory consideration. Ensuring an equitable balance of risk between the EDCs and customers is vital to achieving myriad of the proposed regulatory goals and outcomes, and an important lens through which one must view the existing regulatory mechanisms and any future mechanisms and outcomes in a PBR framework. Ultimately, it will be vital for the Authority to consider the question of whether, when taken together, the suite of regulatory mechanisms appropriately balances risks between EDCs and their customers.

Several participants also commented on the need for a PBR framework to result in enhanced transparency. Specifically, participants advocated for various, specific improvements in transparency, including but not limited to, greater transparency on customer bills, enhanced transparency as part of EDC customer communications during outages, transparency around energy assistance programs, the need for any metrics to be calculated utilizing transparent data, and ensuring transparent access to data.[8] Authority Staff agrees with the need to improve transparency across several outcomes as part of a PBR framework. As such, Authority Staff believe that transparency should

[8] See, Operation Fuel Written Comments, dated May 6, 2022, p.3; The Center for Children's Advocacy (CCA) Written Comments, dated May 6, 2022, p. 2; Eversource Written Comments, dated May 6, 2022, p. 15; and Acadia Center Written Comments, dated May 6, 2022, p. 2.

be included as a foundational regulatory consideration that should be weaved throughout all goals and outcomes across the proceeding.

Finally, The Jonah Center for Earth and Art (Jonah Center) notes the need to consider externalized costs in the form of pollution, human health, and climate disruption.[9] Vote Solar recommends establishing energy system impacts on human health as a new outcome.[10] Authority Staff agree that improved human health outcomes, particularly in Environmental Justice Communities,[11] are desirable and, indeed, is the primary objective of much of the state's energy public policy initiatives. As such, due to the broad nature of the human health implications related to the electric sector and due to the relevance of human health implications to a number of proposed outcomes, Authority Staff recommend inclusion of improved human health outcomes as a foundational regulatory consideration. Authority Staff does, however, note that improved human health outcomes can often be difficult to quantify and, thus, difficult to incorporate into metrics or scorecards; nonetheless, it is important enough to explicitly consider human health outcomes regardless of whether such benefits or impacts are fully quantifiable.

In summary, through the below table, Authority Staff reiterate the foundational regulatory considerations that are integral to the state's regulatory framework and that will flow through the Goals-Outcomes hierarchy of any PBR framework to inform the implementation and application of the established outcomes:

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[9] See, Jonah Center Written Comments, dated May 6, 2022, p. 3.
[10] See, Vote Solar Written Comments, dated May 6, 2022, p. 4.
[11] For a definition of Environmental Justice Communities, see, https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities.

Table 1: Foundational Regulatory Considerations in Connecticut

Foundational Regulatory Considerations	Supporting Rationale
Safety	The provision of safe, adequate, and reliable service is a core tenet to the Authority's regulation of the EDCs and is deeply embedded in state statutes as well as EDC operations.
Equity	Ensuring equity, in terms of rates, environmental protection, the provision of customer-facing programs, and several other areas is imperative to the development of a PBR framework. Given its importance to the Authority's Equitable Modern Grid framework, it is worth being called out as both a foundational regulatory consideration and an outcome in and of itself.
Economic Opportunity	Also an objective of the state's Equitable Modern Grid framework and a core tenant of the Authority's role as an economic regulator, economic opportunity should be an inherent result of several of the other proposed outcomes in the Goals-Outcomes hierarchy.
Risk Distribution	Risk distribution highlights the importance of equitably balancing risk between EDCs and customers. When taken together, the suite of regulatory mechanisms must achieve this balance to create a fully and properly functioning regulatory framework that ensures EDCs operate in a manner in line with necessary outcomes for customers.
Transparency	In today's environment of increased customer choice and empowerment, transparency is foundational to electric operations in the state more so now than ever. The Goals-Outcomes hierarchy must be considered through the lens of transparency to customers, regulators, and key stakeholders.
Human Health	The energy system impacts on human health, in the form of pollution, and climate disruption, must be considered to appropriately account for these negative externalities.

3.2.2. Incentive symmetry

Several entities, including UI, Eversource, and Jonah Center, all note the importance of developing symmetrical incentives that both reward excellent performance and penalize poor performance.[12] Similarly, CIEC notes that the EDCs should not receive additional incentives for business-as-usual activities.[13] At the outset, Authority Staff note that further discussion of metrics will occur during the next stage of this proceeding in Phase 1; Phase 2 of this effort will coincide with a much deeper dive into the development of performance mechanisms. That said, while Authority Staff understands that symmetrical incentives (i.e., exposure to both financial rewards and penalties across any incentive-based PIM), may be appropriate in certain circumstances, they are likely not optimal, or even practical, across many of the proposed outcomes. At this stage of the proceeding,[14] Authority Staff envision a portfolio approach to performance mechanisms to include a targeted collection of reported metrics, scorecards, and PIMs. Among the subset of performance mechanisms known as PIMs, incentives may be designed to include financial upside only, financial downside only, or a combination of both rewards and penalties. Specific PIM design will necessarily be informed by the underlying regulatory outcome and metric, including the availability of baseline historic data among numerous other factors. By way of one illustrative example, EDCs today are required to

[12] See, UI Written Comments, dated May 6, 2022, p. 4; Eversource Written Comments, dated May 6, 2022, p. 6; Jonah Center Written Comments, dated May 6, 2022, p. 4.
[13] See, CIEC Written Comments, dated May 6, 2022, p. 2.

[14] Authority Staff acknowledges that this view may change or evolve as stakeholders continue to provide input and the docket progresses.

achieve certain reliability standards, and Authority Staff do not believe it would be prudent to provide additional financial rewards to the EDCs for meeting these business-as-usual metrics. However, should an EDC's reliability fall below a certain threshold, a downside only reliability PIM could be appropriate. Again, Authority Staff underscores that detailed discussions of PIM design are premature at this stage of the proceeding and notes that all participants will have ample opportunity to inform the development of PBR elements as the proceeding progresses.

3.2.3. EDC Control of Outcomes

Several participants commented on the development of incentives or disincentives for outcomes that may be outside of direct EDC control.[15] Authority Staff note that when it comes to the Goals-Outcomes hierarchical framework, the focus is on priority regulatory outcomes for the electricity system overall – whether or not EDCs could be said to exert complete, direct control over achievement of said outcomes. Authority Staff understands the concerns raised by these participants and notes that the identification of metrics to measure achievement against a particular outcome will consider, among other factors, nexus of EDC control. Although this topic will be explored further as the docket progresses, as the entity that is ultimately responsible for the provision of electric service to Connecticut customers, for communicating with those customers, and for empowering those customers to be more actively involved in their energy management, Authority Staff

[15] See, UI Written Comments, dated May 6, 2022, p.9; Eversource Written Comments, dated May 6, 2022, p. 3; and CIEC Written Comments, dated May 6, 2022, p. 3.

posits that for the majority of proposed outcomes it is reasonable to consider them as "under EDC control."

3.3. Revised Goals

Reflecting on participant comments regarding the proposed Goals, Authority Staff provides a revised set of Goals for further consideration by stakeholders in the next steps of Phase 1. As noted in section 3.2 above, there are two material changes to the proposed goals: (1) "Advance Decarbonization" was expanded to become "Advance Public Policy"; and (2) "Improve Customer Engagement and Satisfaction" was refocused as "Improve Customer Empowerment and Satisfaction." Updated summaries of both regulatory goals are included below:

Advance Public Policy: *Meeting state level greenhouse gas emissions, decarbonization and DER deployment targets, and enhancing environmental protection and equity measures*. Achieving the state's aggressive emissions reductions and decarbonization goals will require significant effort from the EDCs. Authority Staff can help the EDCs be successful by better aligning utility revenue opportunities with public policy goals. Enhancing equity and environmental protection are inherent to the Authority's Equitable Modern Grid framework, and therefore warrant inclusion when considering how to advance public policy.

Improve Customer Empowerment and Satisfaction: *Beyond traditional customer satisfaction metrics, truly empowering EDC customers to participate in their active energy management through increased customer choice, leveraging behind-the-*

meter resources, and new rate designs that send price signals to incent appropriate behaviors. Customer satisfaction was the metric historically used in the electricity regulatory industry but is too narrow of a focus given the transformation of the broader energy system. Satisfaction speaks to how a customer experiences the EDC. However, needs and expectations are changing as customers transform from simple consumers of energy to active participants, or "prosumers," in the electric system. EDCs should be expected to facilitate additional choices and options for customers as they interact with third-party service providers to procure DER and other services and seek to manage their energy use and costs.

Additionally, the proposed regulatory goal to "Ensure Reasonable and Equitable Rates" was revised based on stakeholder comments and the Equitable Modern Grid framework to "Ensure Reasonable, Equitable, and Affordable Rates"; however, the summary of this goal, provided in section 3.1 above, was not impacted by the retitling. Last, both the summary and title of the regulatory goal to "Enhance EDC Performance" remain unchanged.

3.4. Original Proposed Outcomes to Guide PBR Development

In addition to the regulatory goals proposed by Authority Staff, Staff Concept Paper #1 introduced a broad set of preliminary, associated outcomes to seed discussion and help guide PBR evaluation and development. The outcomes proposed in Staff Concept Paper #1, along with the initial regulatory goals under which each outcome was listed, are provided in Table 2:

Table 2: Potential Regulatory Outcomes to Inform PBR in Connecticut

Goals	Outcomes	Possible Metrics
Enhance EDC Performance	Investment Efficiency	CapEx:OpEx ratio; amount of peak load met by demand reductions vs. generation; maximization of wholesale market value
	Grid Planning Effectiveness	Planning milestones achieved; stakeholder engagement efforts; DERs, EV, and beneficial electrification incorporation
	EDC Systems and Operations Efficiency	Comprehensive IT, billing, and data management systems plan; benchmarking costs; number of programs / uses for which a system is leveraged; EDC staff per program / role
	Resource/Grid Solutions Procurement Transparency	Stakeholder engagement efforts; MWs of grid solutions obtained in competitive procurements
	Shared Facility Management	Pole attachment applications processed per year; average application processing time
	Operational Efficiency	Load factor; system losses; usage per customer; reduction in peak load; utilization of DERs as grid assets

	Safety	Number of incidents per year, by severity of outcome and activity type
	Reliability	System Average Interruption Interruption Duration Index (SAIDI), System Average Frequency Index (SAIFI), Customer Average Interruption Duration Index (CAIDI), Momentary Average Interruption Frequency Index (MAIFI)[16]; Cost per SAIDI, SAIFI, CAIDI, MAIFI improvements
	Emergency Response	Time to resolve non-outage emergency events; time to resolve blocked roads; call center availability during events; inbound outage reporting availability; municipal training and percent follow protocols during storms
	Resilience	Cost effectiveness of resiliency solutions/benefits; quantity and capacity of microgrids; improvement in lowest ten percent performing circuits during major storms
Advance Decarbonization Policy	Risk Distribution	Percentage of cost that is hedged or fixed; how much of power supply is on fixed price contract or declining (in real terms) over time vs. how much is associated with escalators
	Energy Efficiency and Conservation	Partnerships with the Energy Efficiency Board (EEB), Department of Energy and Environmental Protection **(**DEEP), and other agencies, alignment with the Conservation Adjustment Mechanism (CAM), coordination of customer service activities; line losses; voltage optimization; auxiliary loads; facilitation of reporting

[16] SAIDI measures the average interruption time for all customers served during a given period. SAIFI measures the average number of interruptions experienced by all customers served during a given period. CAIDI measures the average interruption duration per customer interrupted during a given period of time. MAIFI measures the average frequency of known momentary interruptions per customer during a given period of time.

	Carbon Intensity	Tons CO2 per customer; system carbon emission rate (tons CO2 per MWh sold); in-state fossil fuel generation (percent fossil fuel [MWh] of total generation [MWh])
	Electrification of Transportation	Number of EVs added to the grid each year; percent of customers with EVs enrolled in DR programs; percent of customers with EVs on ConnectedSolutions or other, similar program; percent of EVs charging off-peak
	Beneficial Electrification	Percent of (grid-interactive) electric water heaters; percent of heat pumps
	Capital Formation (sector wide)	Annual total investment in electricity sector; annual non-utility investment in electricity sector; credit rating of utility
	Environmental Goals (visual, air, water pollution)	Tons of pollution per customer and per MWh; water consumption
	Access to System/Planning Data	Types of planning data electronically available
	Social Equity	Percent of Low-to-moderate (LMI) households participating in customer programs
	DER Asset Utilization	MWs participating in customer programs; number of DER interconnections; number of behind-the-meter batteries; MWs of DER; number of DER installations per year; MWs installed by program type; percent of DER controlled by aggregators; percent of DER participating in a demand response (DR) grid service tariff
	Innovation	Number of platform and/or value-added services available; research and development (R&D) budget; R&D partnerships

Improve Customer Engagement and Satisfaction	Service Quality	Number of complaints; number of disconnections, number of issues resolved on first call; percent of customers utilizing EDC websites, apps; click-through-rate on websites/apps
	Customer Satisfaction	Customer satisfaction surveys
	Interconnection Experience	Time in queue for DER connections; “Interconnector” survey
	Customer Engagement	Percent of customers participating in demand response and/or TOU rate programs; program administration and execution; program retention rate; access to data by third-party services; percent of customers with access to hourly or sub-hourly usage data; customer education
	Reliability	SAIDI, SAIFI, CAIDI, MAIFI
Ensure Reasonable and Equitable Rates	Affordability	Average total bill; average bill as percent of household income (i.e., energy burden); $/kWh rate
	Utility Bill Stability	Percent change in average customer bill; absolute change in average customer bill
	Cost Control	Capacity costs; total energy costs; fuel costs; customer costs; operation and maintenance (O&M) expense; O&M (transmission, distribution, generation) per customer
	Cost of Power Supply	Purchased fuel costs/purchased power costs

3.5. Participants' Focused Feedback on Proposed Outcomes

While there was largely stakeholder consensus around the proposed regulatory goals, many of the commenting participants recommended modifications to the proposed outcomes. In this section, Authority Staff summarize and address specific participant comments regarding the highlighted outcomes. While Authority Staff does not summarize or address every stakeholder comment, all comments were considered in the development of this concept paper and will continue to be considered through Phase 1 of this proceeding.

In considering how best to revise the initial set of proposed outcomes, Authority Staff generally used the following four-part test to determine which outcomes should remain and if and how to revise the remaining outcomes: (1) alignment with the proposed regulatory goals and foundational regulatory considerations; (2) relative importance of the outcome compared with other proposed outcomes; (3) near-to-medium term ability to deliver improved customer results; and (4) likely suitability within a PBR framework. Based on participant feedback and analysis by Authority Staff using the above test, a revised list of proposed regulatory outcomes is provided in Table 3 of section 3.6 below. This revised list will be critical in the next step of Phase 1 of this proceeding in which the stakeholders and the Authority will assess which outcomes are currently well-served by the regulatory framework and which require greater focus and examination. However, this also will not be the last opportunity for stakeholders to provide input on the appropriate outcomes for the Authority to consider in establishing a PBR framework.

3.5.1. Grid Planning Effectiveness and Procurement Transparency

Authority Staff proposes consolidating the previously-proposed outcomes of "Resource/Grid Solutions Procurement Transparency" and "Access to System/Planning Data" into the broader outcome of "Grid Planning Effectiveness and Procurement Transparency." In its comments, UI raises concerns regarding certain metrics tied to "Resource/Grid Solutions Procurement Transparency" being outside of EDC control because they are dictated by Standard Service and Last Resort Service requirements, which are conduct in accordance with the procurement plan approved by the Authority.[17] Authority Staff note that this proposed outcome is intended to address the transparency of the procurement process, as opposed to addressing the procurement process itself. Further, this proposed outcome was intended to incorporate both the Standard Service and Last Resort Service process as well as other procurement processes, including processes related to grid planning and distribution asset procurement. Increased transparency, whether related to procurement, communication, or otherwise, is also a key theme referenced by several commenting participants,[18] and is strongly supported by Authority Staff, as is evidenced by Authority Staff's elevation of transparency to a foundational regulatory consideration.

[17] See, UI Written Comments, dated May 6, 2022, p. 9.
[18] See, Operation Fuel Written Comments, dated May 6, 2022, p.3; CCA Written Comments, dated May 6, 2022, p. 2; and Acadia Center Written Comments, dated May 6, 2022, p. 2.

Additionally, in its comments, Eversource claims “Access to System/Planning Data” is not a “proper outcome” of a PBR framework because “certain system/planning data cannot be made available without significant confidentiality protections over the information.”[19] Authority Staff fully recognize the need to maintain certain data as confidential; however, the importance of provisioning data, in a manner that ensures confidentiality of critical information, is becoming increasingly important in today’s environment of enhanced customer choice and rapid DER deployment. The Authority discusses the need to ensure reasonable access to data in more detail in the Notice of Issuance of Data Access and Privacy Straw Proposal in Docket 17-12-03RE02[20] and Notice of Issuance of Proposed Non-Wires Alternatives Program Mechanics and Request for Written Comments issued in Docket 17-12-03RE07.[21] While Authority Staff supports consolidating this outcome into the broader outcome of "Grid Planning Effectiveness and Procurement Transparency,” individual metrics under this outcome related to data access may be established in Phase 2 of this docket. Finally, Authority Staff support comments from Conservation Law Foundation (CLF) that this outcome fits best under the goal to “Enhance EDC Performance.”[22]

[19] See, Eversource Written Comments, dated May 6, 2022, p. 13.
[20] See, Notice of Issuance of Data Access and Privacy Straw Proposal in Docket 17-12-03RE02, dated August 17, 2021. Available at: Notice (state.ct.us).
[21] See, Notice of Issuance of Proposed Non-Wires Alternatives Program Mechanics and Request for Written Comments in Docket 17-12-03RE07, dated May 13, 2022. Available at: http://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/2d750fa9373eef35852588410060697f?OpenDocument.
[22] See, CLF Written Comments, dated May 6, 2022, p. 4.

3.5.2. Distribution System Utilization

To help reduce confusion and avoid duplication, Authority Staff proposes modifications to more clearly differentiate the previous outcomes of “EDC Systems and Operations Efficiency” and “Operational Efficiency.” Authority Staff proposes to maintain “EDC Systems and Operations Efficiency” as is, and include elements previously related to “Operational Efficiency” under a new outcome titled “Distribution System Utilization,” which also includes the former outcome titled “DER Asset Utilization.” DERs should now be thought of as a tool in the broader EDC distribution planning toolkit, and therefore are part of properly and fully utilizing the distribution system; hence the re-titling of the outcome. Authority Staff also propose to shift this outcome from the goal of “Advancing Public Policy” to “Enhancing EDC Performance.”

3.5.3. Reliability and Resilience

In this revised list of outcomes, Authority Staff propose consolidating the two “Reliability” outcomes previously included (one under “Enhance EDC Performance” and one under the previous goal “Improve Customer Engagement and Satisfaction”) into one outcome that falls under “Enhance EDC Performance.” In addition, Authority Staff proposes to subsume the previous outcome of “Emergency Response” under the “Reliability” and “Resilience” outcomes, given that Emergency Response is a key element of both reliability and resilience and need not be a distinct outcome.

Authority Staff agree with comments from Vote Solar that "consideration of reliability should be expanded to include persistent locational reliability issues, and that information should be considered in the context of socio-economic characteristics of communities."[23] During the Phase 2 process to develop metrics, Authority Staff anticipates considering the final reliability and resilience frameworks adopted through Docket No. 17-12-03RE08[24] and taking a modernized view of reliability by evaluating the development of more locational-specific reliability incentives, which will better address themes of equity within the "reliability" domain. Historically, reliability has been measured through system-wide metrics; however, a system-wide approach does not reasonably reflect the end user experience – today, an EDC can achieve minimum-required reliability across the system while still having swaths of customers experiencing outages that greatly exceed the system-wide average. Measuring reliability at a locationally granular level can help to create visibility of situations where all customers may not be experiencing equitable levels of electric service.

[23] See, Vote Solar Written Comments, dated May 6, 2022, p. 4.
[24] See, e.g., Docket No. 17-12-03RE08, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Resilience and Reliability Standards and Programs, Straw Reliability and Resilience Program Frameworks, dated May 2, 2022. Available at: http://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/4a217f88f1660dd78525883600631d9e/$FILE/17-12-03RE08%20Reliability%20and%20Resilience%20Framework.pdf.

3.5.4. Energy Efficiency and Conservation

In their comments, Save the Sound and Connecticut Industrial Energy Customers (CIEC) note that the state already has established performance incentives related to energy efficiency programs.[25] Authority Staff clarifies that related metrics are under the purview of the DEEP; however, Authority Staff believe "Energy Efficiency and Conservation" to be significant enough that it warrants an explicit outcome at this stage of the proceeding. The Authority will not create duplicative incentives for objectives the EDCs are already required to achieve or are already incorporated into the state's Conservation and Load Management Plan. This outcome will instead be used to ensure that any incentives that are created are well aligned with the goals of a PBR framework, as well as existing incentives.

3.5.5. GHG Reduction

Authority Staff recommends re-titling the previous outcome from "Carbon Intensity" to "GHG Reduction" to improve clarity in terms of what this outcome aims to achieve. As mentioned in comments by Acadia Center, despite concerns raised by the EDCs during Stakeholder Workshop #1 regarding this outcome, "there are nevertheless actions that the EDCs can take to improve performance within each outcome area."[26] The importance of achieving this outcome, particularly in light of the state's climate goals, cannot be understated. Acadia Center notes that the EDCs can further support "energy efficiency

[25] See, Save the Sound Written Comments, dated May 6, 2022, p. 1 and CIEC Written Comments, dated May 6, 2022, p. 3.
[26] See, Eversource Written Comments, dated May 6, 2022, p. 2.

to reduce the fossil fuel generation required to serve each MWh." Through energy efficiency and other demand-side options available to customers, such as behind-the-meter DERs and more dynamic electricity pricing, the EDCs can help facilitate customer options that can contribute to GHG reductions. Indeed, the EDCs can proactively pursue supply options that are less carbon-intense, which when paired with more dynamic pricing, can create price signals for customers to consume energy at lower-emitting times. Further, the EDCs have multiple avenues to help achieve these goals such as the state's existing clean energy and energy efficiency programs, which the EDCs administer, and for proposing new approaches to better achieve these goals, including but not limited to the new Innovative Energy Solutions program.[27]

3.5.6. Electrification of Transportation and Decarbonization of Buildings

In order to further refine the proposed list of outcomes, Authority Staff propose to consolidate the previous outcomes of "Electrification of Transportation" and "Beneficial Electrification" into one new outcome titled "Electrification of Transportation and Decarbonization of Buildings." While UI raises concerns that electrifying transportation is beyond the company's reasonable control,[28] Authority Staff believe that the importance of this outcome to the state's decarbonization goals and the important role the EDCs can and are increasingly playing in this space warrants the inclusion of this outcome.[29]

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[27] See, Decision in Docket No. 17-12-03RE05, PURA Investigation into Distribution System Planning of the Electric Distribution Companies –Innovative Technology Applications and Programs (Innovation Pilots), dated March 30, 2022. Available at: Decision (state.ct.us).
[28] See, The United Illuminating Company Written Comments, dated May 6, 2022, p. 11.
[29] See, e.g., 2020 Integrated Resources Plan, dated Oct. 7, 2021, and the 2018 Comprehensive Energy Strategy, dated Feb. 8, 2018. Available at: Integrated Resource Planning (ct.gov) and Comprehensive Energy Strategy (ct.gov), respectively.

Further, Authority Staff note that appropriate metrics can be developed to focus on elements that are largely within the EDC's control. For example, Authority Staff anticipates that any incentive would not be tied directly to the number of electric vehicles (EV) on the road in Connecticut, but rather, could be tied to the methods through which the EDCs can help facilitate electric vehicle (EV) deployment, such as developing a variety of rate options for participating customers or improving interconnection processes related to EV charging stations.

3.5.7. Environmental Goals (visual, air, water pollution)

Authority Staff recommends maintaining this outcome due to its importance in achieving the state's climate goals. In its comments, Operation Fuel recommends "increased monitoring and reduction of air pollution, with more ambitious goals in Environmental Justice Communities."[30] Both Save the Sound and Jonah Center recommend providing greater weight to the goal to "Advance Public Policy" through an increased focus on environmental goals, including the EDCs internalizing the environmental impacts of electricity distribution.[31] Authority Staff recognizes the importance of considering environmental impacts when assessing all goals and outcomes under the proposed Goals-Outcomes hierarchy. Given its importance to achieving public policy goals, Authority Staff recommends maintaining "Environmental Goals" as a distinct outcome.

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[30] See, Operation Fuel Written Comments, dated May 6, 2022, p. 2.
[31] See, Save the Sound Written Comments, dated May 6, 2022, p. 2 and Jonah Center Written Comments, dated May 6, 2022, p. 2.

3.5.8. Social Equity

As discussed in section 3.2.1 above in more detail, Authority Staff strongly agrees that equity is a foundational piece of any regulatory framework and, indeed, does cut across all proposed goals, as mentioned by several commenting participants.[32] As such, and as discussed in section 3.2.1, Authority Staff recommend the elevation of equity to a foundational regulatory consideration. Further, Authority Staff continue to recommend that the outcome of "Social Equity" is also appropriate to include under the goal to "Advance Public Policy" in order to ensure tangible and measurable progress. Further, Authority Staff clarifies that it sees "Environmental Justice/Energy Justice" as an element of the "Social Equity" outcome.

Additionally, Operation Fuel provided helpful recommendations for consideration in the establishment of a social equity outcome and future, related metrics. Specifically, Operation Fuel advocates that "investment in customer programs for LMI ratepayers exceed, rather than equal, the percent of ratepayer investment from that income class" and "supports the Justice40 model that would require at least 40 percent of investments to benefit vulnerable residents."[33] Separately, Operation Fuel discusses the EDC's approach to meter reading, which they also claim to be inequitable, as the EDC benefits from efficiencies when reading several meters at once in multifamily dwellings compared to the time it takes to read one meter at a time for single family homes, but still charges

[32] See, Save the Sound Written Comments, dated May 6, 2022, p. 6; The Conservation Law Foundation Written Comments, dated May 6, 2022, p. 4; Vote Solar Written Comments, dated May 6, 2022, p. 3 and The Joint Commenters Written Comments, dated May 6, 2022, p. 2.
[33] See, Operation Fuel Written Comments, dated May 6, 2022, p.3.

flat meter reading fees across all customer classes, despite gains in efficiency.[34] The development of specific targets and metrics related to this outcome will be the focus of the later stages of this proceeding.

3.5.9. Service Quality

In order to further reduce the total number of outcomes, Authority Staff recommends subsuming the previous outcome of "Customer Satisfaction" into the broader outcome of "Service Quality," as customer satisfaction is an element of each EDC's quality of service.

Operation Fuel commented that customer satisfaction should be measured in a diverse and independent manner.[35] Eversource meanwhile commented that they "should not be subject to penalties in measuring performance based on customer satisfaction" because satisfaction is subjective and may be related to external factors outside of Eversource's control, many customers are inherently dissatisfied with paying electric bills, media coverage of other non-affiliated utilities may impact it, and because customer satisfaction can take a long time to adjust despite ongoing progress.[36] While Authority Staff agrees that customer satisfaction may have subjective components, Authority Staff disagree that an EDC should never be penalized (or rewarded) based on customer satisfaction. In Eversource's own comments, it states that financial penalties and incentives should "have an established baseline against which performance can be

[34] Id., p.3.
[35] See, Operation Fuel Written Comments, dated May 6, 2022, p.4.
[36] See, Eversource Written Comments, dated May 6, 2022, p. 11.

measured."[37] Authority Staff agree with this statement. A baseline related to service quality and customer satisfaction can be measured today and compared against in the future to assess how the company has improved their performance on customer satisfaction. For these reasons, Authority Staff maintain "Service Quality" as an outcome, which also reflects the satisfaction of EDC customers, and agree that it should be considered in a diverse and independent manner.

3.5.10. Interconnection Experience

In their comments, Eversource notes that "if not carefully designed, [metrics related to interconnection experience] may also not be a fair reflection of the Company's performance that should be subject to a performance penalty." They add that total number of customer interconnections is outside of their control. Authority Staff agrees that any metrics and related incentives will require careful design. The total number of interconnections may not always be under the EDC's control; however, the speed and accuracy with which the EDCs respond to customer interconnection requests certainly is within their control, as is the proper forecasting and planning for future interconnection requests so that the EDC may be appropriately staffed,[38] and it is in those areas, among others, where metrics and incentives may be most appropriate. Many other U.S. jurisdictions have recently enhanced processes related to interconnection, thereby improving the interconnection experience in those states. For example, in recent years,

[37] Id., p. 3.
[38] Clean and renewable energy programs overseen by the Authority and implemented in full or in part by the EDCs include annual and/or cyclical deployment targets that may assist with reasonable planning forecasts, in addition to historical data.

the California investor-owned utilities developed and began the use of grid interconnection online portals and pre-approved template single-line diagrams in the interconnection process to reduce errors and churn in the processing of interconnection applications. In that same vein, through Docket No. 17-12-13-RE06, PURA established standing Technical and Policy Interconnection Working Groups to investigate interconnection standards and practices to ensure that the state's processes are sufficiently flexible and proactively address potential future barriers.[39]

3.5.11. Affordability and Cost Control

Under the goal to "Ensure Reasonable, Equitable, and Affordable Rates," Authority Staff recommend reducing the total number of outcomes to two, by subsuming "Utility Bill Stability" under the outcome of "Affordability," and "Cost of Power Supply" under "Cost Control." Authority Staff recognize that these outcomes are not one in the same, and therefore may entail the development of several metrics that speak to each sub-element of the proposed revised outcomes. Authority Staff note that the development of relevant metrics under these outcomes should be aligned with PURA's investigation into new rate designs, such as a low-income discount rate, in Docket No. 17-12-03RE11. Specifically, the Authority may wish to incorporate the aspirational goal of capping customer energy burden at six percent.[40]

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[39] See, Decision in Docket No. Docket 17-12-03RE06, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Interconnection Standards and Practices, dated Nov. 25, 2020. Available here.

[40] See, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – New Rate Designs and Rates Review in Docket 17-12-03RE11, dated May 4, 2022. Available here.

Regarding “Affordability,” several participants recommend that incentives and metrics developed related to affordability focus on disadvantaged and low-income communities, such as re-considering current approaches to disconnections and payment arrearages, investigating “regressive” subsidies, income-discounted rates, and further discounts for populations without the ability to install energy efficiency measures.[41] Authority Staff supports the exploration of such alternatives in the metrics development phase of this docket.

Regarding “Cost Control,” Authority Staff incorporates OCC’s recommended addition of increased precision in cost attribution.[42]

3.5.12. Additional Proposed Outcomes

CLF comments that “In light of the expanded scope and types of threats posed by climate change, the EDCs should be required to evaluate the suitability of existing design and operation standards to evaluate whether they will withstand future conditions based on climate projections.”[43] Authority Staff agree and notes that this evolution is appropriate to assess under the outcome of “Reliability” under normal operating conditions (i.e., “blue-sky” conditions), and under “Resiliency” under abnormal operating conditions (i.e., “gray-sky” or “dark-sky” conditions).[44]

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[41] See, Operation Fuel Written Comments, dated May 6, 2022, p.4 and Vote Solar Written Comments, dated May 6, 2022, p.4.
[42] See, The Office of Consumer Council Written Comments, dated May 6, 2022, p.4.
[43] See, The Conservation Law Foundation Written Comments, dated May 6, 2022, p.4.
[44] “Blue-sky” means normal operating day or normal operating conditions and is an industry-standard term. Blue-sky conditions are contrasted with “gray-sky” or “dark-sky” conditions, which are time(s) during which the system experiences abnormal conditions such as emergency weather events that result in significant service disruptions.

OCC provided a series of additional recommended outcomes. Specifically, OCC proposes outcomes to improve customer education and program participation. Authority Staff agree with the intention of this outcome and has explicitly incorporated it into the "Customer Empowerment" outcome listed below.[45] Additionally, OCC proposes an outcome related to improved access to payment assistance,[46] which Authority Staff strongly supports and recommends be considered under the outcome of "Affordability" (or "Customer Empowerment").[47]

3.6. Revised Outcomes

Table 3, below, details the revised outcomes informed by stakeholder comments, as discussed above. Table 3 also includes the revised goals detailed in section 3.3. Last, it is important to note that Authority Staff recommend that the foundational regulatory considerations detailed in section 3.2.1 and listed in Table 1 inform the Authority's development and application of the outcomes listed below.

[45] Id., p. 4.
[46] Id., p. 4.
[47] Id., p. 4.

Table 3. Revised Regulatory Goals-Outcomes to Inform PBR in Connecticut

Goals	Outcomes	Possible Metrics
Enhance EDC Performance	Investment Efficiency	CapEx:OpEx ratio; amount of peak load met by demand reductions vs. generation; maximization of wholesale market value
	Grid Planning Effectiveness and Procurement Transparency	Planning milestones achieved; stakeholder engagement efforts; DERs, EV, and beneficial electrification incorporation
	EDC Systems and Operations Efficiency	Comprehensive IT, billing, and data management systems plan; benchmarking costs; number of programs / uses for which a system is leveraged; EDC staff per program / role
	Distribution System Utilization	Load factor; system losses; usage per customer; reduction in peak load; utilization of DERs as grid assets (MWs participating in customer programs; number of DER interconnections; number of behind-the-meter batteries; MWs of DER; number of DER installations per year; MWs installed by program type; percent of DER controlled by aggregators; percent of DER participating in a DR grid service tariff)
	Reliability	SAIDI, SAIFI, Customer Average Interruption Duration Index (CAIDI), Momentary Average Interruption Frequency Index (MAIFI)[48]; Cost per SAIDI, SAIFI, CAIDI, MAIFI improvements

[48] SAIDI measures the average interruption time for all customers served during a given period. SAIFI measures the average number of interruptions experienced by all customers served during a given period. CAIDI measures the average interruption duration per customer interrupted during a given period of time. MAIFI measures the average frequency of known momentary interruptions per customer during a given period of time.

	Resilience	Cost effectiveness of resiliency solutions/benefits; quantity and capacity of microgrids; improvement in lowest ten percent performing circuits during major storms; time to resolve non-outage emergency events; time to resolve blocked roads; call center availability during events; inbound outage reporting availability; municipal training and percent follow protocols during storms
Advance Public Policy	Energy Efficiency and Conservation	Partnerships with the EEB, DEEP, and other agencies, alignment with the CAM, coordination of customer service activities; line losses; voltage optimization; auxiliary loads; facilitation of reporting
	GHG Reduction	Tons CO2 per customer; system carbon emission rate (tons CO2 per MWh sold); in-state fossil fuel generation (percent fossil fuel [MWh] of total generation [MWh])
	Electrification of Transportation and Decarbonization of Buildings	Number of EVs added to the grid each year; percent of customers with EVs enrolled in DR programs; percent of customers with EVs on ConnectedSolutions or other, similar program; percent of EVs charging off-peak; percent of (grid-interactive) electric water heaters; percent of heat pumps
	Environmental Goals (visual, air, water pollution)	Tons of pollution per customer and per MWh; water consumption; increased monitoring and reduction of air pollution in Environmental Justice Communities
	Social Equity	Percent of LMI households participating in customer programs; application of Justice40 across programs and utility service costs and benefits; consideration of Environmental/Energy Justice
Improve Customer	Service Quality	Number of complaints; number of disconnections, number of issues resolved on first call; percent of customers utilizing EDC

Empowerment and Satisfaction		websites, apps; click-through-rate on websites/apps; customer satisfaction surveys
	Interconnection Experience	Time in queue for DER connections; "Interconnector" survey
	Customer Empowerment	Percent of customers participating in demand response and/or TOU rate programs; program administration and execution; program retention rate; access to data by third-party services; percent of customers with access to hourly or sub-hourly usage data; customer education
Ensure Reasonable, Equitable, and Affordable Rates	Affordability	Average total bill; average bill as percent of household income (i.e., energy burden); $/kWh rate; improved access to payment assistance
	Cost Control	Capacity costs; total energy costs; fuel costs; customer costs; operation and maintenance (O&M) expense; O&M (transmission, distribution, generation) per customer; increased precision in cost attribution

4. Characterization of Connecticut's Existing Regulatory Framework

To inform the role of a PBR framework in Connecticut, it is important to first understand the state's existing regulatory framework for the EDCs and to foster discussion around the efficacy of the existing framework in delivering the desired

regulatory goals and outcomes. This section provides a summary of current regulatory mechanisms and other relevant elements to inform that conversation.

Elements and mechanisms of the existing regulatory framework for Connecticut's EDCs are presented in four subsections:

- 4.1 – General Rate Cases
- 4.2 – Revenue and Rate Adjustment Mechanisms
- 4.3 – Performance Management Incentives
- 4.4 – Non-Revenue Regulatory Provisions

The general rate cases discussed in section 4.1 are the primary determinant of the utility's "revenue requirement" for its base distribution rates, which has been historically determined based on "cost of service" principles. The revenue and rate adjustment mechanisms described in section 4.2 are additional regulatory elements that guide the recovery of some elements related to the revenue requirement determined in the general rate case and some other rate and revenue reconciling mechanisms used to provide cost recovery outside of base distribution rates. Notably, various PBR frameworks established in other jurisdictions include components covered by the EDCs' existing rate adjustment mechanisms in Connecticut. The performance incentives described in section 4.3 include additional regulatory elements that are deliberately designed to affect utility performance. Section 4.4 identifies several additional existing non-revenue regulatory elements that, while not direct determinants of utility revenues, form essential parts of the overall regulatory fabric that guide EDC performance and outcomes.

4.1. General Rate Cases

Statutory Authority:

In Connecticut, PURA is the regulating entity responsible for overseeing the rates and services of the state's two investor-owned EDCs, Eversource and UI. Pursuant to Title 16 of the General Statutes of Connecticut (Conn. Gen. Stat.), PURA 's jurisdiction over and regulation of the EDCs is broad and includes, among other statutory authority, oversight of the following: distribution rates and other charges; wholesale procurement of electricity; renewable power contract administration; emergency performance and incident response procedures; installation, construction, maintenance, and location of utility poles; vegetation management practices; metering and billing accuracy; and customer education and outreach.[49]

Pursuant to Conn. Gen. Stat. § 16-19(a), PURA is statutorily charged with regulating the rates of Connecticut's public service companies. Once an EDCs submits a proposed amendment of its distribution rates to the Authority, the Authority "shall make such investigation of such proposed amendment of rates as is necessary to determine whether such rates conform to the principles and guidelines set forth in [Conn. Gen. Stat. §] 16-19e, or are unreasonably discriminatory or more or less than just, reasonable, and adequate or that the service furnished by such company is inadequate to or in excess of public necessity and convenience, . . ."[50] The Authority may also evaluate the

[49] See, generally, Conn. Gen. Stat. § 16-11.
[50] See, Conn. Gen. Stat. § 16-19(a).

reasonableness and adequacy of the performance or service of the public service company using any applicable metrics or standards adopted by the Authority pursuant to Conn. Gen. Stat. § 6-244aa, and determine the reasonableness of the allowed rate of return of the public service company based on such performance evaluation.[51]

Pursuant to Conn. Gen. Stat. § 16-19a(a), the Authority is required, at intervals of not more than four years from the last rate case, to conduct a complete review and investigation of the financial and operating records of each EDC to determine whether its rates "are unreasonably discriminatory or more or less than just, reasonable and adequate, or that the service furnished by such company is inadequate to or in excess of public necessity and convenience or that the rates do not conform to the principles and guidelines set forth in [Conn. Gen. Stat. §] 16-19e."[52] In making the determination, the Authority is required to consider the gross and net earnings of the EDC since its last previous general rate hearing, its retained earnings, its actual and proposed capital expenditures, its advertising expenses, the dividends paid to its stockholders, the rate of return paid on its preferred stock, bonds, debentures and other obligations, its credit rating, and such other financial and operating information as the Authority may deem pertinent.[53] Since pursuant to Conn. Gen. Stat. § 16-19a(a)(2) the Authority may conduct a rate case in accordance with Conn. Gen. Stat. §16-19, in lieu of the periodic review and investigation proceedings required under Conn. Gen. Stat. § 16-19a(a)(1), the EDCs

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[51] Id.
[52] See, Conn. Gen. Stat. § 16-19a(a)(1).
[53] Id.

often come in for a rate case less than four years after their last rate case to align with the expiration of a rate plan or to avoid the general investigation.

Rate Case Information:

An EDC is motivated to file a rate case when its current rates no longer cover its costs of service. In a rate case, the focus is largely on establishing the EDC's revenue requirement and includes a review of pro forma forecasts and historical data to ensure rates can be assessed among the different customer classes. In addition, a rate case also serves as the venue for the periodic review of other matters associated with determinations of rates and allowed revenue, including the review of the EDC's financial and accounting policies and practices, reasonableness of management efficiency, and the prudence and "used and useful" status of EDC plant included in rate base.

Pursuant to Conn. Gen. Stat. § 16-19(a), as amended by the Take Back Our Grid Act, the Authority is required to issue a decision on an EDC's rate case within three hundred and fifty (350) days from the proposed effective date thereof. As with most rate cases, some key factors include:

- Revenue Requirement: calculated based on the overall costs of service or, in other words, the amount of revenue collected from customers for utility services.[54]

[54] RAP, "Revenue regulation and Decoupling: A guide to Theory and Application," June 2011, p. 1. Available at: rap-revenueregulationanddecoupling-2011-04.pdf (raponline.org).

- Customer Class Revenue Allocation: the amount of revenue to be charged to each class of similar customers (i.e., how the overall revenue requirement is split among residential, small commercial, large commercial/industrial customers, etc.).
- Rate Design: the specific structure and magnitude of rates charged to each customer class (i.e., monthly customer charges, energy charges, demand charges, and other utility fees and charges on customer bills).

In a decision regarding an EDC's rates, the Authority typically approves a three-year Multi-Year Rate Plan (MRP). As a price mechanism, MRPs extend the revenue requirement for utilities beyond the need for annual rate case reviews by setting rates for multiple years using an index for residual expenses and compounds capital cost needs from one year to the next. In terms of a PBR framework, a MRP allows time to annually adjust incentive and metric structures, as needed.

The most recent decisions related to Eversource's, and UI's base distribution rates were made in 2018 and 2016, respectively.[55] The former decision approved a settlement in lieu of a full rate case.

4.2. Revenue and Rate Adjustment Mechanisms (RAM)

[55] See, April 18, 2018 Decision (Eversource 2018 Rate Decision) in Docket No. 17-10-46, Application of The Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules, (Eversource 2018 Rate Case Docket) and December 14, 2016 Decision in Docket No. 16-06-04, Application of The United Illuminating Company to Increase Its Rates and Charges. Available at: Decision (state.ct.us) and Decision (state.ct.us), respectively,

The Authority, pursuant to Conn. Gen. Stat. §§ 16-19b, 16-245g, and 16-245*l*, reviews the rate adjustment mechanisms for both EDCs. Specifically, Conn. Gen. Stat. § 16-19b provides a procedural framework for reconciling the rate adjustment clauses for the EDCs. In addition, Conn. Gen. Stat. § 16-19b(h) provides that the Authority shall continually monitor and oversee the application of the adjustment clauses, and at least annually undertake a proceeding to determine if charges or credits made to the adjustment clauses reflect actual prices or costs and are computed in accordance with the applicable clause.

Revenue Decoupling Mechanism:

Historically, the EDCs' rates and revenue were based on the projected sales volume. This created a disincentive for the EDCs to allow or promote measures that would reduce retail sales, such as energy efficiency, conservation, and distributed generation.[56] Accordingly, in 2007, the General Assembly enacted Conn. Gen. Stat. § 16-19tt, which directed the Authority to decouple distribution revenues from the volume of electricity sales through any of the following strategies, singly or in combination: (1) a mechanism that adjusts actual distribution revenues to allowed distribution revenues, (2) rate design changes that increase the amount of revenue recovered through fixed distribution charges, or (3) a sales adjustment clause, rate design changes that increase the amount of revenue recovered through fixed distribution charges, or both. Both EDCs

[56] OLR Research, "Decoupling Utility Sales and Earnings," dated Oct. 3, 2005. Available at: Decoupling Utility Sales and Earnings (ct.gov).

in Connecticut have full revenue decoupling with annual adjustments allowed through the revenue decoupling mechanism (RDM), which are based on the adjustment of *actual* distribution revenues to *allowed* distribution revenues based on the EDC's prior approved rate case.[57]

Earnings Sharing Mechanism:

The earnings sharing mechanism (ESM), another tool of ratemaking, provides for the distribution of a company's earnings above its authorized return on equity (ROE) between the company's customers and its shareholders. In Connecticut, an ESM has been in place since the late 1990s as an incentive to shareholders. Specifically, the use of an ESM allows shareholders to capture a portion of the overearnings.

Both Eversource and UI operate under an ESM. In Eversource's 2018 Rate Case, the Authority approved a settlement agreement (Settlement Agreement) between Eversource, the Office of Consumer Counsel, and the Prosecutorial Unit of the Public Utilities Regulatory Authority that included, *inter alia,* an ESM whereby earnings at the end of each calendar year that are in excess of Eversource's authorized ROE will be shared with customers and shareholders on a 50/50 basis.[58] Pursuant to the Settlement Agreement, Eversource will use the customer portion of the earnings in excess of its allowed ROE first to offset the environmental remediation deferral and, if there are no

[57] See., Conn. Gen. Stat. § 16-19tt.

[58] Decision in Docket No. 17-10-46, Application of the Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules, dated April 18, 2018, pp. 19-20. Available at: Decision (state.ct.us).

environmental remediation deferrals to offset at such time, then the customer portion of any excess earnings above Eversource 's authorized ROE will be used to offset the cost of catastrophic storms.[59] The Authority approved the ESM proposal contained in the Settlement Agreement, finding that paying down the costs of environmental remediation deferrals and the cost of catastrophic storms with the customer portion of the earnings in excess of Eversource's authorized ROE will benefit customers as both environmental remediation deferrals and the cost of catastrophic storms are regulatory assets held in rate base and carried at the weighted average cost of capital that are ultimately paid for by customers.[60] Similarly, in UI's last rate case proceeding, the Authority approved a 50/50 ESM for Company earnings above its approved ROE.[61]

Interim Rate Decrease:

Conn. Gen. Stat. §16-19(g) permits the Authority to implement an interim rate decrease if: (1) a company has, for the rolling twelve-month period ending with the two most recent consecutive financial quarters, earned an ROE which exceeds the return authorized by the Authority by at least one percentage point, (2) it finds that any change in municipal, state or federal tax law creates a significant increase in a company's rate of return, or (3) it finds that a company may be collecting rates which are more than just, reasonable and adequate, as determined by the Authority.[62] Pursuant to Conn. Gen.

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[59] Id.
[60] Id., p. 20.
[61] Decision in Docket No. 16-06-04, Application of The United Illuminating Company to Increase Its Rates and Charges, dated Dec. 16. 2016, p. 89. Available at: Decision (state.ct.us).
[62] See, Conn. Gen. Stat. § 16-19(g)(1).

Stat. § 16-19(g), the *company* is required to demonstrate to the satisfaction of the Authority that "earning such a [ROE] or collecting rates which are more than just, reasonable and adequate is directly beneficial to its customers."[63] If the Authority finds that such ROE or rates exceeds a reasonable rate of return or is more than just, reasonable, and adequate, it may order an interim rate decrease.[64]

Annual Rate Adjustment Mechanisms (RAM) Proceeding:

The Authority conducts an annual review of the RDM and the following RAM components detailed in the sections below: Conservation Adjustment Mechanism (CAM); Transmission Adjustment Clause (TAC); Non-Bypassable Federally Mandated Congestion Charge (NBFMCC); Systems Benefit Charge (SBC); Competitive Transition Assessment (CTA); and Electric System Improvements (ESI).

The Authority conducts this annual review for Eversource through Docket No. XX-01-03 and Docket No. XX-01-04 for UI, with "XX" representing the last two digits of the year in which the review is conducted. The purpose of the Authority's annual review is three-fold: (1) set rates to provide contemporaneous cost recovery for certain rate components;[65] (2) reconcile any under- or over-collections of each rate component from the previous calendar year; (3) perform a prudence review of costs associated with each rate component, as appropriate. Adjustments to the above rate components are made,

[63] See, Conn. Gen. Stat. § 16-19(g). (Emphasis added).
[64] Id.
[65] Notably, RDM and ESI are not designed to provide contemporaneous cost recovery.

as necessary. Generally, rate adjustments based on the first two factors, contemporaneous cost recovery and prior period reconciliation, are made on May 1st of each year. Similarly, rate adjustments based on the third factor, a prudency review, are typically made on September 1st of each year.

Conservation Adjustment Mechanism (CAM):

As directed in Conn. Gen. Stat. § 16-245m(d)(1), the EDCs, in coordination with the local gas distribution companies (LDCs), submit to the Energy Efficiency Board (or EEB)[66] a combined electric and gas Conservation and Load Management (C&LM) Plan to implement cost-effective energy conservation programs, demand management, and market transformation initiatives.[67] Once the EEB approves the C&LM Plan, it is passed on to the Commissioner of DEEP for approval. Once DEEP approves or modifies the C&LM Plan, the Authority is tasked with overseeing that the balance of revenues required to fund the C&LM Plan is provided through a fully reconciling rate component, CAM, of not more than six mills per kilowatt hour of electricity sold to the EDCs' end-use customers and not more than the equivalent of four and six-tenths cents per hundred cubic feet of gas sold to LDCs' end-use customers in the form of a charge on their monthly bill.[68] The

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[66] The EEB was created in 1998 under mandate in Public Acts 11-80, 13-298, and 21-139. The EEB evaluates, advises, and assists the state's utility companies in developing and implementing comprehensive, cost-effective energy conservation and market transformation plans to help Connecticut consumers reduce energy use in their homes and businesses and to help the state meet its changing and growing energy needs. In addition, the EEB offers technical expertise and prepares recommendations as needed to support DEEP in the fulfillment of its statutory mandates and policy objectives.

[67] See, Conn. Gen. Stat. §16-245m(d)(1).

[68] See, Decision in Docket No. 21-02-01, PURA Annual Reconciliation of the Conservation Adjustment Mechanisms filed by The Connecticut Light and Power Company, The United Illuminating Company, Connecticut Natural Gas Corporation, The Southern Connecticut Gas Company, and Yankee Gas Services Company, dated Sept. 22, 2021, Available at: PURA CAM (state.ct.us).

Authority reconciles actual revenues and expenses for the prior year and ensures sufficient funding of the current year's C&LM Plan budget, pursuant to Conn. Gen. Stat. § 16-245m(d).

Transmission Adjustment Clause (TAC):

Pursuant to Conn. Gen. Stat. §16-19b(d), the TAC is the rate mechanism by which retail customers pay for transmission costs that are regulated by the Federal Energy Regulatory Commission (FERC).[69] The TAC includes accounting for the recovery of all FERC-approved transmission costs, rates, tariffs, and charges and of other transmission costs borne by the EDCs.[70] Through the annual RAM proceedings, the Authority monitors the TAC and oversees its general application, while also ensuring charges or credits reflect the actual prices paid for the actual transmission costs.[71] If the Authority finds, through transmission revenue reconciliation, that there are charges or credits that do not reflect the actual prices paid or allocated accordingly, the reconciliation will recover or refund, with interest calculated applying the prime rate as determined by the federal funds rate, any under- or over-collection in accordance with the reconciliation schedule.[72]

Non-Bypassable Federally Mandated Congestion Charge (NBFMCC):

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[69] See, Conn. Gen. Stat. §16-19b.
[70] Id.
[71] See, e.g., Decision (2021 Eversource Ram Decision) in Docket No. 21-01-03, PURA Annual Review of the Rate Adjustment Mechanisms of The Connecticut Light and Power Company, dated Sept. 15, 2021, pp. 23-24. Available at: Decision (state.ct.us).
[72] Decision in Docket No. 06-06-01, DPUC Semi-Annual Review of The Connecticut Light and Power Company and The United Illuminating Company's Transmission Adjustment Clause, dated Oct. 18, 2006, p. 3. Available at: Decision (state.ct.us).

The NBFMCC[73] was originally designed to recover the cost associated with the wholesale market design of ISO-New England.[74] Over time, the scope of the NBFMCC has expanded to recover additional costs to support the state's energy policy and net expenses incurred from the implementation of various clean and renewable energy statutory directives, including, but not limited to: long-term power purchase agreements (PPAs) with the Millstone and Seabrook nuclear energy facilities and other clean energy generators; the Low and Zero Emission Renewable Energy Credit Program; Virtual Net Metering; the Non-Residential Renewable Energy Solutions Program; and other behind-the-meter renewable energy expenses, including the Residential Renewable Energy Solutions Program.[75] Ultimately, the charge is collected on customer's electricity bills.

Conn. Gen. Stat. § 16-19b(h) provides that the Authority shall continually monitor and oversee the application of the NBFMCC, as well as the other adjustment clauses, and at least annually undertake a proceeding to determine if charges or credits made to the adjustment clauses reflect actual prices or costs. Under this subsection, the Authority must recompute charges or credits and direct Eversource to take corrective action when the Authority finds such charges or credits do not reflect actual prices or costs. The reconciliation involves either a recovery or refund of any subsequent under- or over-

[73] Conn. Gen. Stat. § 16-1(35) defines "federally mandated congestion charges" to mean "any cost approved by [FERC] as part of New England Standard Market Design including, but not limited to, locational marginal pricing, locational installed capacity payments, any cost approved by the [Authority] to reduce federally mandated congestion charges … and reliability must run contracts."
[74] See, 2021 Eversource RAM Decision, pp. 17-18.
[75] Id., p. 18.

collection with interest calculated applying the prime rate as determined by the federal funds rate.[76]

Systems Benefit Charge (SBC):

Another RAM component, the SBC is a monthly charge that funds, *inter alia,* energy efficiency programs, as well as assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.[77] Through a contested case, PURA determines the amount of SBC in a general and equitable manner.[78] The EDCs are then required to collect the SBC from all end use customers of each EDC.

Other RAM Components:

In addition, PURA also oversees the Competitive Transition Assessment (CTA) and Electric System Improvements (ESI). The CTA, which the General Assembly established in Public Act 98-28, An Act Concerning Electric Restructuring (Electric Restructuring Act), i.e., the catalyst for the restructuring of the state's electricity market, is used to pay for stranded costs of the EDCs.[79] Most of the EDCs' stranded costs on the books before restructuring were recovered by 2011 for Eversource and 2013 for UI. The CTA remains for Eversource to update charges and credits each year associated with

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[76] See, Decision in Docket No. 20-01-01, Administrative Proceeding to Review The Connecticut Light and Power Company's Standard Service and Supplier of Last Resort Service 2020 Procurement Results and Rates, dated Dec. 2, 2020, p. 7. Available at: Decision (state.ct.us).
[77] See, Conn. Gen. Stat. § 16-245*l*(a).
[78] See, Conn. Gen. Stat. § 16-245.
[79] See, OLR Research Report, "Competitive Transition Assessment", Report No. 2002-R-0973, dated Dec. 5. 2002. Available at: COMPETITIVE TRANSITION ASSESSMENT (ct.gov)

long-term purchased power contracts that remain from cogeneration facilities that generate electricity and useful heat used in large industrial process plants and trash to energy facilities. Conn. Gen. Stat. § 16-245g(d) guides the Authority's implementation of the CTA, which is required to be imposed on all customers the EDC.[80]

The ESI was established in the Eversource 2018 Settlement and is used to recover certain investments associated with "core" capital and "resilience" capital programs.[81] The investments that are recovered through the ESI are (1) certain "core" program plant additions that are over and above a baseline level of capital plant additions allowed through rate base and that were contained in the approved Rate Plan,[82] and (2) all system resilience plant additions placed in service from 2018 through 2020 that were contained in the approved Rate Plan. The Authority adjusts this mechanism periodically and reconciles it annually where it determines there is an increased charge needed from customers or a refund to customers.[83]

4.3. Performance Management Mechanisms

The C&LM Plan is an energy efficiency and demand management investment plan that develops programs and initiatives to help Connecticut residents and businesses

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[80] See, Conn. Gen. Stat. § 16-245g(a).
[81] Section 3(a)(ii)(2) of the Settlement Agreement approved in the Eversource 2018 Rate Decision. The Settlement Agreement defined which of the Eversource capital projects were considered "core" capital programs and which were considered "resilience" capital programs. Id., pp. 3-4.
[82] Potential recovery of "core" capital plant additions through ESI is designed differently depending on the year of plant additions. During calendar years 2018-2020, Eversource is permitted an annual baseline recovery of $270 million of "core" plant additions in base distribution rates and is permitted to seek recovery each year of "reliability [core plant additions]…up to the amount in excess of $270 million" through ESI. Id., p. 3. After calendar year 2020, Eversource is permitted to seek annual recovery through ESI up to $300 million in "core" capital plant additions and there is no baseline recovery in base distribution rates for "core" capital plant additions. Id.
[83] Id.

become more energy efficient. The C&LM Plan is developed for a three-year time period with annual adjustments.[84] Programs developed within the C&LM Plan support the state's policy goals and desired public outcomes, including annual energy reduction targets established in Conn. Gen. Stat. § 16-245m(d)(1), directives included in the 2018 Comprehensive Energy Strategy, and the emissions reductions requirements of Public Act 18-82.[85] Pursuant to the Electric Restructuring Act, the C&LM Plan is funded by various sources, including a charge on customer energy bills (CAM), the Regional Greenhouse Gas Initiative (RGGI), and the proceeds from C&LM savings sold into the ISO New England Forward Capacity Market.

C&LM program performance is assessed annually, and the EDCs can earn performance management incentives (PMI)[86] for meeting pre-determined program goals that are developed by the EDCs, the EEB and their consultants, and DEEP.[87] The total performance incentive is paid out annually on a sliding scale to the EDCs.[88,89] For 2022, the total PMIs Eversource is eligible for is $7.8 million and $1.6 million for UI.[90]

Strategic Energy Management (SEM) Metric:

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[84] See, DEEP C&LM Plan 2019-2021, dated March 1, 2022, pp. 3-22. Available at: Final 2019 2021 Plan (11-19-18).docx (live.com).
[85] DEEP Response to Interrogatory CAE-1, p. 1
[86] PMIs are used by DEEP to describe the compensation for each of the EDCs' successful execution of the energy efficiency and demand management programs. PMIs are similar to the Authority's reference to PIMs, which relates to the EDCs' execution of specific regulatory mechanisms in a PBR framework.
[87] Id., p. 1
[88] The electric companies are Eversource and UI. The gas companies are the Connecticut Natural Gas Corporation (CNG), Southern Connecticut Gas (SCG), and Yankee Gas Service Company d/b/a Eversource. DEEP Response to Interrogatory CAE-1, p. 2, fn. 1.
[89] Id., pp. 2-3
[90] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 290-310, 342-362. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

One of the performance components overseen by DEEP is the SEM metric. This metric is guided by the Business and Energy Sustainability Challenge model, which establishes long-term relationships with energy users to target persistent energy savings.[91] This metric is a long-term approach to advancing energy efficiency that centers on setting goals, tracking progress, and reporting results as well as "targeting persistent low- and no-cost measures, as well as prioritizing capital project opportunities."[92] In terms of EDC performance, the objective is to promote SEM initiatives by engaging 10 companies (per EDC) that are part of a cohort, individually saving 10 annual megawatt-hour (MWh) at minimum, while also engaging with an additional 10 individual companies, individually saving 25 annual MWh at minimum, outside of the cohort.[93] The EDCs can earn this financial incentive by meeting or exceeding the set standards listed above. The actual amount earned from the SEM PMI is calculated on a sliding scale.[94] For 2022, the total incentive Eversource is eligible for is approximately $117,000 and $25,000 for UI.[95]

Small Business Energy Advantage (SBEA):

The SBEA program is targeted for small commercial and industrial (C&I) customers (less than 25 kW average monthly demand for UI customers and less than 100,000 kWh annually for Eversource customers).[96] Created as a cost-effective, turnkey

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[91] See, Id., p. 3, citing 2022-2024 Conservation and Load Management Plan (2022-2024 C&LM Plan), dated March 1, 2022, pp. 122-123. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf .
[92] Id.
[93] DEEP Response to Interrogatory CAE-1, p. 3.
[94] Id., p. 4.
[95] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 296, 348. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.
[96] DEEP Response to Interrogatory CAE-1, p. 4.

energy efficiency service for small C&I customers without access to financial resources, in-house expertise, or time necessary to analyze and reduce their energy consumption, the SBEA program targets C&I electric customers with less than 200 kW peak load.

The SBEA program offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment and processes identified through the EDC's market segmentation analysis, and participation through Connecticut's Lead by Example initiative utilizing the SBEA Master Agreement.[97] Additionally, the EDCs develop and implement projects that combine service bundles and energy management.

The SBEA PMI is based on a percentage of signed projects and is intended to encourage comprehensive projects, i.e., projects that serve more than one end use and consist of a tailored combination of measures and service bundles, and energy management.[98] The PMI requires the EDCs to improve the number of comprehensive projects as a percentage of total SBEA projects by 5 percent annually.[99] For 2022, the total incentive Eversource is eligible for is approximately $195,000 and $41,000 for UI.[100]*Energy Conscious Blueprint (ECB)*:

[97] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 123-125. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.
[98] Id.
[99] DEEP Response to Interrogatory CAE-1, p. 4
[100] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 295, 347. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

The ECB is a solution to drive energy efficiency in new construction, major renovations, and the new equipment marketplace and is targeted to meet energy efficiency goals and transform design and equipment specifications at a low cost.[101] In the event of construction of new commercial buildings or industrial facilities and expansion or renovation of existing buildings, the ECB provides incentives and services for energy efficiency measures, while supporting integrated design and whole-building energy modeling at the feasibility phase.[102]

There are four pathways (Four Pathways) in the ECB program, which are designed to cost-effectively exceed energy code requirements during design and construction and to achieve zero net energy:

1. Zero Net Energy (ZNE)/Deep Energy Savings: intended for customers ZNE or zero net energy ready building and who are also interested in maintaining focus on the Energy Use Intensity (EUI) reduction component of ZNE;
2. Whole Building Energy Use Intensity (EUI) Reduction: intended for customers with larger and/or fairly complex projects, who are interested in setting an EUI reduction target that represents at least a 10 percent improvement over a baseline building site;

[101] DEEP Response to Interrogatory CAE-1, p. 5
[102] See, 2022-2024 Conservation and Load Management Plan, dated March 1, 2022, pp. 113-116. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

3. Whole Building Streamlined: a comprehensive new construction offering for buildings more than 20,000 square feet that have engaged the EDCs, Southern Connecticut Natural Gas, Connecticut Natural Gas, and/or Yankee Gas early in the project's design process. This pathway is intended to reduce building electrical and thermal energy demand and consumption by implementing cost-effective design alternatives while these changes are still feasible; and
4. Systems: intended for simpler, smaller projects that incorporate energy efficient equipment and systems in their design.[103]

The PMI associated with the ECB framework includes assessing whether the number of new construction/major renovation projects are more efficient than the state Energy Code or exceed energy code requirements through the four allowable Pathways.[104] Additionally, energy code targets are: 30 percent > ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) 90.1-2013 or 2015 IECC (International Energy Conservation Code), or utilize Whole Building Performance, or Near Net Zero Energy Projects and at least one towards Net Zero Energy project, which shall include renewable energy technologies.[105] For 2022, the total incentive that Eversource is eligible for is approximately $156,000 and $33,000 for UI.[106]

[103] DEEP Response to Interrogatory CAE-1, p. 5.
[104] See, 2022-2024 C&LM Plan, p. 115.
[105] Id., pp. 75, 114
[106] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 295, 347. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

Demand-Side Management (DSM):

In the C&LM Plan, there are active demand response offerings for residential and C&I customers, which include the following:

1. Residential Portfolio: Incentivizes customers to curtail energy use during periods of peak demand by enrolling eligible technologies, including plug load control devices, smart thermostats, water heating equipment, and other smart, connected technologies in demand response programs. Per the C&LM Plan, customers earn the incentive by enrolling their eligible devices and receive additional incentives for participating in demand response events.
2. Commercial and Industrial: Active demand response offerings include targeted dispatch, daily dispatch, and winter dispatch strategies; smart thermostats for small businesses; and building management system and networked lighting control strategies.[107]

In 2022, new metrics for residential and C&I active demand response were added to the PMI structure and the metrics focused on monetized benefits and net benefits of residential and C&I active demand response offerings.[108] For 2022, the total incentive Eversource is eligible for is at least $244,000 and $51,000 for UI.[109]

Home Energy Solutions- Income Eligible Program (HES-IE):

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[107] DEEP Response to Interrogatory CAE-1, p. 6.
[108] Id.
[109] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 38, 39, 291, 294, 343, and 346. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

The HES-IE program provides income eligible customers with energy efficiency audits and core weatherization services.[110] As a whole home energy performance assessment, implementation efforts involve heating, ventilation, and air conditioning, domestic hot water system equipment testing, air sealing, and duct sealing aiming to increase the efficiency of building systems and optimize home energy performance. Per program guidelines, households earning 60 percent or less of the state median income are eligible for the program and receive core weatherization for no cost, and deeper energy-saving measures at little to no cost.[111]

There are three metrics associated with the HES-IE PMI, each of which have an incentive associated with them; they are:

1. Setting targets for one million British Thermal Units (MMBtu) savings related to core weatherization services (not including lighting) performed per single-family HES-IE project where ductwork is present and air sealing can be completed. EDC targets are based on prior year actuals, adjusted to the current-year Program Savings Document, plus 2 percent;
2. MMBtu savings to targets for core weatherization services (not including lighting) performed in single-family HES-IE projects without ductwork. MMBtu targets are based on prior year actuals, adjusted to the current-year Program Savings Document, plus 2 percent; and

[110] See, 2022-2024 C&LM Plan, p. 76
[111] DEEP Response to Interrogatory CAE-1, p. 7.

3. Increasing the number of HES-IE projects that receive insulation services. The metric is the number of HES-IE homes that receive insulation, calculated as a percentage of the total number of HES-IE assessments.[112]

For 2022, the total incentive Eversource is eligible for is approximately $234,000 and $50,000 for UI.[113]

Equitable Distribution:

In the 2022-2024 C&LM Plan, the utilities identify equity and equitable distribution of the benefits of energy efficiency as a priority.[114] Efforts made in pursuit of these priorities are influenced by DEEP's Equitable Energy Efficiency (E3) proceeding, which DEEP launched in September of 2020.[115] One of the outcomes of this proceeding was the development of a new equity PMI, which was first implemented through the 2021 Update to the 2019-2021 C&LM Plan.[116] During that time, the PMI required the companies to track participation in HES and HES-IE programs by customers enrolled in the Matching Payment Program and achieve an increase in that participation by the end of the year.[117]

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[112] Id.
[113] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 293, 345. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.
[114] See, 2022-2024, C&LM Plan, p. 15.
[115] DEEP, Notice of Equitable Energy Efficiency Proceeding and Request for Written Comments, dated Sep. 3, 2020. Available at: http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/12c36ce3c4b5a80c852585d80046845f/$FILE/Notice%20of%20Equitable%20EE%20Proceeding%20&%20Req%20for%20Written%20Comments.pdf
[116] See, 2021 Plan Update to the 2019-2021 Conservation & Load Management Plan Available at: 2021 Plan Update to the 2019-2021 Conservation & Load Management Plan (ct.gov).
[117] See, 2022-2024 C&LM Plan.

In the 2022-2024 C&LM Plan, the residential equitable distribution PMI was expanded to also include financial and medical hardship customers, and a new commercial & industrial equitable distribution PMI was added.[118] As a result, the 2022-2024 C&LM Plan now includes the following metrics for ensuring equitable participation in the energy efficiency programs across customer segments:

1. Track and meet a specified level of annual participation in the HES or HES-IE programs by residential customers that are coded as "hardship" and occupy 1-4 unit residential buildings; and
2. Tracking of and increase in the electric savings to specified amounts from customers in the Quartile 1 Healthcare sector, the Quartile 2 Financial, Real Estate, and Insurance sector, the Quartile 3 Healthcare sector, and the Quartile 4 Retail sector relative to baseline averages established using the previous 5 years' data. The quartiles were determined using previous participation rates, ratepayer funding contributions, energy consumption, and annual and lifetime kWh savings.[119]

For 2022, the total incentive for both metrics Eversource is eligible for is approximately $273,000 and $55,000 for UI.[120]

4.4. Non-Revenue Regulatory Provisions

[118] Id.
[119] Id. pp.104-105
[120] See, 2022-2024 C&LM Plan, dated March 1, 2022, pp. 293, 295, 345, and 347. Available at: https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf.

Renewable Portfolio Standards (RPS):

Established in 1998 and subsequently revised on multiple occasions, the Connecticut RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service (electric suppliers and EDCs) to obtain a minimum percentage of their energy from qualified renewable energy sources. Conn. Gen. Stat. § 16-245a(a) requires electric suppliers and EDCs to demonstrate a minimum RPS of 28 percent in 2022, which increases annually to 44 percent in 2030. An electric supplier or EDC may comply with the RPS requirement by directly contracting to buy renewable energy or purchasing renewable energy certificates (RECs) in the regional market. Pursuant to Conn. Gen. Stat. §§ 16-245(k) and 16-244c(h)(1), any EDC or any electric supplier that fails to meet the Class I or II RPS requirements is required to pay an alternative compliance payment (ACP) in accordance with those sections and, pursuant to Conn. Gen. Stat. § 16-243q(b), any electric supplier or EDC that fails to meet the Class III requirements is subject to an ACP in accordance with that section.

Separate portfolio standards are required for each of the three energy sources, which are Class I, Class II, and Class III sources. Class I, Class II, and Class III sources are defined in Table 4, below.

Table 4: RPS Renewable Energy Classifications

Class	Included Renewables

Class I	(1) Solar power; (2) wind power; (3) fuel cells; (4) geothermal; (5) landfill methane gas, anaerobic digestion or other biogas derived from biological sources; (6) thermal electric direct energy conversion; (7) ocean thermal power; (8) wave or tidal power; (9) low-emission advanced renewable energy conversion technologies; (10) run-of-the-river hydropower facilities not exceeding 30 megawatts (MW) in capacity; and (11) biomass facilities that use sustainable biomass fuel and meet certain emissions requirements.[121]
Class II	Trash-to-energy facilities that have obtained required permits.[122]
Class III	(1) Customer-sided combined heat and power systems, with a minimum operating efficiency of 50 percent, installed at commercial or industrial facilities in Connecticut on or after January 1, 2006; (2) systems that recover waste heat or pressure from commercial and industrial processes installed on or after April 1, 2007; and (3) electricity savings from conservation and load management programs that started on or after January 1, 2006.[123]

Equitable Modern Grid:

In October 2019, the Authority issued an Interim Decision in Docket No. 17-12-03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies, which outlined a framework to comprehensively address the role of the

[121] See, Conn. Gen. Stat. § 16-1(20).
[122] See, Conn. Gen. Stat. § 16-1(21).
[123] See, Conn. Gen. Stat. § 16-1(22).

electric sector in delivering a clean and prosperous Connecticut (Equitable Modern Grid Framework).[124] The Interim Decision focuses on system planning and includes an outline of the Authority's plans to ensure continued development of the electric grid in both the short- and long-term.

The objectives for an Equitable Modern Grid Framework include:

- Support (or remove barriers to) the growth of Connecticut's green economy;
- Enable a cost-effective, economy-wide transition to a decarbonized future;
- Enhance customers access to a more resilient, reliable, and secure commodity; and
- Advance the ongoing energy affordability dialogue in the state, particularly in underserved communities.[125]

In the Equitable Modern Grid Framework, the Authority outlined eleven near-term topics to be investigated, which include: Energy Affordability; Advanced Metering Infrastructure; Electric Storage; Zero Emission Vehicles; Innovative Technology Applications and Programs; Interconnection Standards and Practices; Non-Wires Alternatives (NWA); Resilience and Reliability Standards and Programs; Distributed Energy Resource Analysis and Program Reviews; Building Blocks of Resource Adequacy

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[124] Available at: http://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/0e5fc32986954bf78525875200798b44/$FILE/171203-100219%20InterimDecision.pdf. See also, https://portal.ct.gov/PURA/Electric/Grid-Modernization/Grid-Modernization.

[125] Equitable Modern Grid Framework, p. 25.

and Clean Electric Supply; and New Rate Design. Each topic presents an opportunity to improve grid and utility performance outcomes for ratepayers. When executed in concert, successful implementation of solutions to each topic will not only increase ratepayer value and affordability, but will also meet future distributed system needs and the state's clean energy, climate, and renewable goals.

Equitable Modern Grid Programs:

Energy Storage Solutions Program: Established in July 2021 as part of the Equitable Modern Grid Framework and launched in January 2022, the Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system. The program was authorized through Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies –Electric Storage, and was formalized in Docket No. 21-08-05, Annual Review of the Electric Storage Program – Year 1. The key aspect of the framework includes both upfront and annual performance-based incentive structures to reduce the cost of buying and installing a storage system for customers of Eversource and UI.[126]

EV Charging Program: The Authority established the EV Charging Program in July 2021 as part of the Equitable Modern Grid Framework through the decision in Docket

[126] See, https://energystoragect.com/. See also, https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/energy-storage-solutions-program.

No. 17-12-03RE04, PURA Investigation into Distribution System Planning of the Electric Distribution Companies –Zero Emission Vehicles. Among other objectives, the program is designed to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.[127]

The program framework consists of a combination of incentives for networked Level 2 electric vehicle supply equipment (EVSE) and direct current fast chargers (DCFC), as well as accompanying rate design offerings. Ultimately, the EDCs administer the program in their respective service territories, though the same program offerings will be made available to all EDC customers to ensure a streamlined, statewide approach to EV infrastructure investments and coordinated outreach. The EV Charging Program identifies five program areas, or market segments, to optimize EVSE deployment and associated distribution system infrastructure necessary to meet Connecticut's transportation electrification goals: (1) Residential Single-Family Level 2 Charging; (2) Residential Multi-Unit Dwellings (MUDs) Level 2 Charging; (3) DCFC; (4) Destination Level 2 Charging; and (5) Workplace & Light-Duty Fleet Level 2 Charging. The program was launched in January 2022.[128]

Innovative Energy Solutions (IES) Program: Pursuant to Conn. Gen. Stat. §§ 16-11 and 16-244i and in accordance with the Equitable Modern Grid Framework, the

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[127] See, Docket No. 17-12-03RE04, Decision dated July 14, 2021, pp. 4-5. Available at: http://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/eb6c28c81c508b208525875200799494/$FILE/171203RE04-071421.pdf.

[128] See, https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/electric-vehicle-charging-program.

Authority established the IES Program in its March 30, 2022 Decision in Docket No. 17-12-03RE05, PURA Investigation into Distribution System Planning of the Electric Distribution Companies—Innovative Technology Applications and Programs (IES Decision). The IES Program is the natural next step of the Electric Efficiency Partners (EEP) Program, which was established in 2008 to reduce electricity consumption based on the use of demand-side technologies.[129] The Authority established the framework in the IES Decision to expand on the successes of the EEP program and provide a procedural mechanism to accelerate the deployment and scalability of innovative pilots.[130] The Innovative Energy Solutions Program Design Document, an attachment to the IES Decision, outlines the program design, structure, and governance of the IES Program, and will serve as the program initiation manual.[131] The first IES Program cycle will begin in January 2023.

Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG): Through PURA's Equitable Modern Grid Framework, specifically Docket No. 17-12-03RE06, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Interconnection Standards and Practices, the DGTWG and DGPWG were established. The DGTWG focuses on technical aspects of the interconnection process, while the DGTWG focuses on non-technical, policy matters related to interconnection processes. The DGTWG and

[129] IES Decision, p. 5. Available at: Decision (state.ct.us).
[130] Id., pp. 5-6.
[131] Id., Attachment B.

DGPWG consist of representatives from 1) state agencies, 2) EDCs, 3) the distributed generation industry and renewable energy developers, and 4) customers, with Authority Staff assigned to the Office of Education, Outreach, and Enforcement (EOE) to serve as the facilitator(s) of both working groups.

The Authority formed these groups to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and economical interconnections. Through this transparent and informal public forum,[132] technical and policy stakeholders can openly share their experience, knowledge, and challenges, on common ground, in hopes of identifying solutions to ensure the sustained, orderly deployment of clean energy resources and development of the clean energy industry in Connecticut.

Clean and Renewable Energy Programs:

Residential Renewable Energy Solutions Program: As Connecticut works towards a zero-carbon electric grid by 2040 and pursuant to Conn. Gen. Stat. § 16-244z(b), the Authority directed the launch of a new program for residential renewable energy effective January 1, 2022. The Residential Renewable Energy Solutions program is a six-year program (2022-2027) to promote the deployment of renewable energy with residential customers. The program provides customers with a choice of compensation

[132] The DGTWG website can be found here:https://portal.ct.gov/PURA/Electric/Interconnection-Technical-Working-Group; and the DGPWG website can be found here: https://portal.ct.gov/PURA/Electric/Interconnection-Policy-Working-Group.

structures: either a fixed rate for all renewable generation for a twenty-year term (Buy-All tariff) or compensation based on your retail electric rates for the same term (Netting tariff). Importantly, part of the objectives guiding this program includes increased inclusivity and access for low-to-moderate income customers and for those living in environmental justice communities through targeted incentives, key benchmarking metrics, and innovative direct payment options, all of which are consistent with the Justice40 model.[133]

Non-Residential Solar Renewable Energy Solutions (NRES) Program: Authorized pursuant to Conn. Gen. Stat. § 16-244z(a), the NRES program is a six-year (2022-2027) successor program to the Low Emission Renewable Energy Credit and Zero Emission Renewable Energy Credit (LREC/ZREC) and Virtual Net Metering (VNM) programs. The program is intended to promote the deployment of Class I renewable energy sources with C&I customers. Additionally, the program is structured as a competitive solicitation, with project selection generally based on bid pricing.

There are five main objectives of the NRES program: 1) foster the sustained, orderly development of the state's Class I renewable energy industry, 2) deploy the full megawatt capacity allowable under statute, to the extent possible, 3) ensure least-cost outcomes through the annual solicitation process, 4) enable program accessibility for customers through simplified program and tariff designs, and 5) encourage increased

[133] See, https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/residential-renewable-energy-solutions-program.

inclusivity overall, as well as program participation by customers in underserved and environmental justice communities.[134]

Shared Clean Energy Facility (SCEF) Program: The SCEF Program, established in December 2019 and launched in 2020, is a six-year competitive procurement effort (2020-2025) focused on providing underserved customers with an opportunity to benefit from in-state clean energy projects, thus broadening participation in clean energy in Connecticut. The SCEF program provides savings to specific categories of customers, including but not limited to: low-to-moderate income customers; low-income services organizations; and customers who reside in environmental justice communities. Participating customers (or subscribers) receive clean energy savings in the form of a fixed monthly payment or bill credit at no cost.

5. Regulatory Assessment

5.1. Process Design Context

As previously discussed in this concept paper and in Concept Paper #1, Phase 1 of this proceeding is comprised of three key steps:

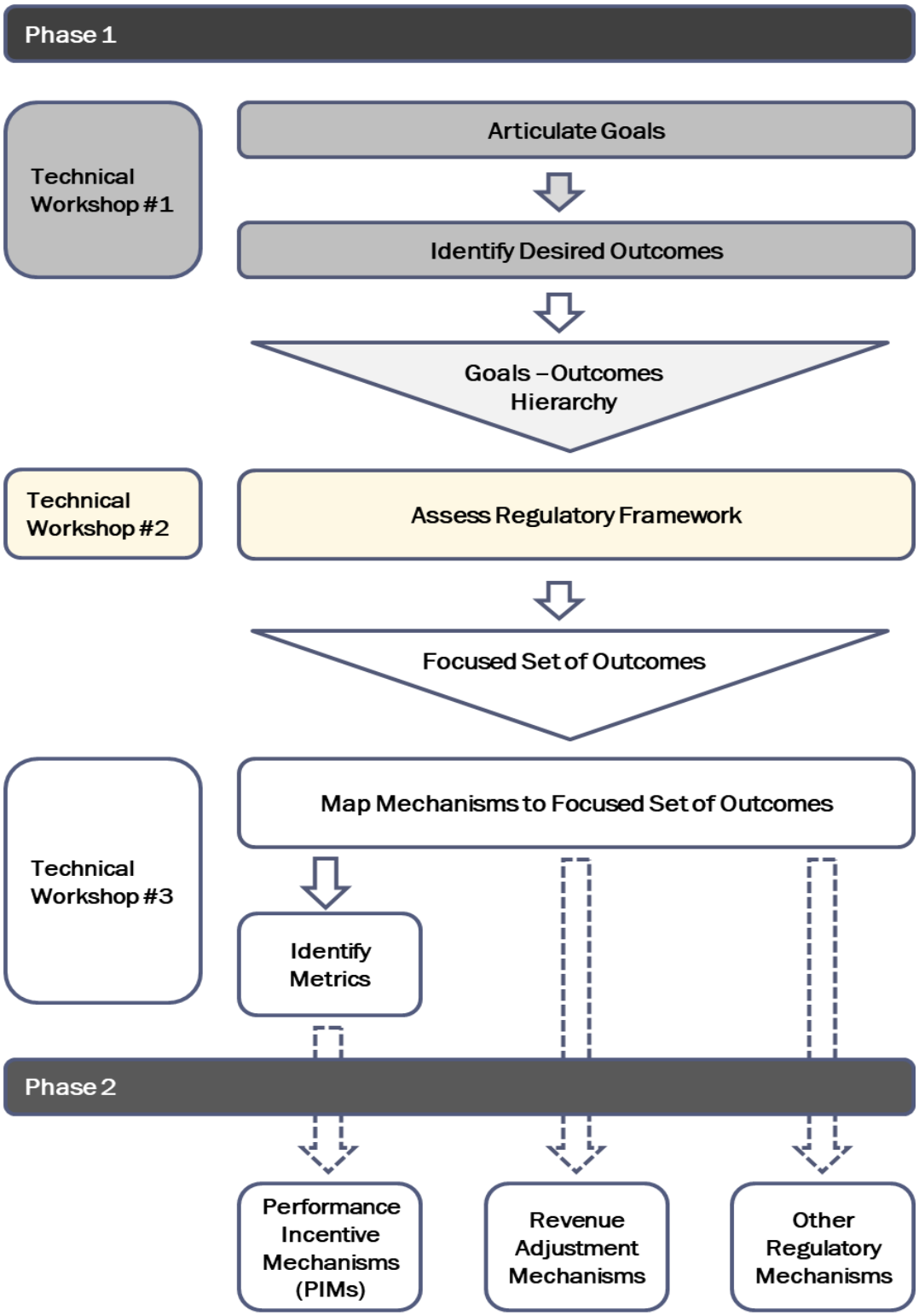
> *Step 1,* identified regulatory goals and outcomes to serve as guiding principles, as well as a lens by which to assess the existing regulatory framework.

[134] See, https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/non-residential-renewable-energy-solutions-program.

Step 2, the current stage, seeks to elicit insights about the effectiveness of the current regulatory framework, outlined in section 4 above, by examining how individual regulatory mechanisms help, hinder, or have no impact on the achievement of identified outcomes. Assessment of the current regulatory structure is an intermediary step to help inform areas for improvement of the current regulatory framework. The goal of this high-level assessment is to inform a selection of priority outcomes – a focused subset that will serve as inputs into Step 3.

Step 3, in turn, will map each of the prioritized outcomes to an appropriate category of regulatory mechanism for further evaluation, including revenue adjustment mechanisms, PIMs, or other regulatory tools. Outcomes will be matched to the appropriate set of regulatory tools that can most effectively support achievement of the outcome. In *Phase 2*, where appropriate (e.g., those outcomes identified as mapping to the PIM category), relevant metrics will be developed.

Figure 1: PBR Process Design Flow Chart



5.2. Explanation of the Assessment Approach

The primary aim of the present stage (Step 2 of Phase 1) is to conduct an outcome-oriented assessment of the current regulatory framework. The approach outlined in this section is intended to provide a high-level examination of which regulatory outcomes are currently well-served by the existing regulatory framework and which are not. The goal of this evaluation and assessment is to inform the development of a distilled and focused list of regulatory outcomes to be further addressed in the remainder of Phase 1 and throughout Phase 2.

In the written comments to be submitted after Stakeholder Workshop #2, participants are encouraged to perform an assessment for each of their top five priority outcomes. It is expected that these prioritized outcomes will correspond to those outcomes the participant believes warrant further focus in Phase 2 of this proceeding.

To aid the participants as they conduct their respective assessments, Authority Staff has developed a suggested structure to evaluate individual regulatory mechanisms and programs' efficacy in supporting the achievement of identified outcomes. The Assessment Template (Appendix A to this report) is a tool that offers a common methodology and approach to: capture observations about what is working or not working; describe how specific mechanisms and programs may impact identified outcomes; highlight inter-dependencies and tradeoffs between outcomes and mechanisms; and, incorporate data as a reference point for discussion.

Docket participants are strongly encouraged to rely on quantitative data and information as an evidentiary basis and foundation to support their qualitative conclusions. Participants may also highlight where more information or data is desired. The incorporation of data will provide a useful bridge to future stages of Phase 1 of this proceeding, which will focus on identifying key outcome metrics that should be targeted for improved tracking, measurement, and possible incorporation into new or revised regulatory mechanisms.

5.3. The Assessment Template

5.3.1. Step 1 – Select Outcome

The assessment structure begins with the selection of a particular regulatory outcome to be assessed. The selected outcome should be concisely described, and the attendant overarching regulatory goal should also be noted. For example, if the Authority-proposed outcome of "Affordability" were to be assessed, the Assessment Template might be populated as follows:

Goal: Ensure Reasonable, Equitable, and Affordable Rates	**Outcome:** Affordability
Description: Connecticut customers experience some of the highest electric retail rates in the nation. Changing customer preferences, declining retail sales, and investments needed to address aging infrastructure all emphasize the growing need to focus on affordability and to bring down the total cost of energy services.	

5.3.2. Step 2 – Evaluating Each Mechanism and Program's Effect on the Outcome

The Assessment Template, applied to one regulatory outcome at a time, is organized as a table with existing regulatory mechanisms and programs enumerated as rows down the left side of the matrix. For each regulatory mechanism or program, a *"Score"* determination is made as to whether:

- The mechanism or program incents achievement of this outcome (indicated by "+")
- The mechanism or program does not seem to impact achievement of this outcome (indicated by "0")
- The mechanism or program disincentivizes achievement of this outcome (indicated by "-")

Existing Regulatory Mechanism and Program	Description	Mechanism or Program's Effect on Outcome		Issues for Attention
		Score (+/0/-)	Discussion	
Multi-Year Rate Plan (MYRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases revisit revenue requirements (based on cost of service and a 'reasonable' return on investment)			

	and revenue collection from customers.			

Each row offers a *"Discussion"* area, which provides an opportunity to narratively explain the scoring of the mechanism or program. Additional *"Issues for Attention"* can be highlighted as well, which could include any interplay and/or tension between one regulatory mechanism and another.

5.3.3. Step 3 – Overall Assessment Conclusion

After each individual regulatory mechanism and program is evaluated against the outcome in question, an overarching, summary question is posed: "Overall, does the existing regulatory framework sufficiently support achievement of this outcome?" Responses in this field should provide an overall, qualitative statement for how well existing regulations drive achievement of the outcome, and should note any additional considerations that may not be captured by individual mechanism or program examinations.

Overall, does the existing regulatory framework support achievement of this outcome?		Discussion
+ **YES** Incents Achievement		
0 **NO IMPACT**		

- **NO** Disincentivizes Achievement		

Again, docket Participants are highly encouraged to provide or cite to quantitative analysis to support the qualitative conclusions provided in their regulatory assessment of each outcome.

The Authority will engage docket Participants in a facilitated dialogue to explore the existing framework and to evaluate its suitability to regulatory goals and outcomes during Stakeholder Workshop #2 on July 14, 2022. After Stakeholder Workshop #2, the Authority will issue a Notice requesting comments from docket participants addressing how well existing regulatory mechanisms and programs drive achievement of the proposed priority outcomes using the appended Regulatory Assessment Template.

The Authority looks forward to further collaborating with stakeholders in their assessment of regulatory outcomes, and to further refine the proposed outcomes as we move forward in Phase 1 and ultimately, Phase 2.

Appendix A. Regulatory Assessment Template

Do the existing regulatory mechanisms and programs sufficiently support the outcome?				
Key				
+	**Yes**	The mechanism or program **incents achievement** of this outcome.		
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.		
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.		
Existing Regulatory Mechanisms and Programs	**Description**	**Mechanism or Program's Effect on Outcome**		**Issues for Attention**
		Score (+/0/-)	**Discussion**	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and revenue collection from customers.			
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with annual adjustments allowed.			
Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than the return on equity approved in the most recent rate case.			

Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a monthly customer charge.			
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all transmission costs assessed by the EDCs.			
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design.			
Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.			
Performance Incentive Mechanisms[1]	***Strategic Energy Management (SEM) Metric*:** The SEM metric is a long-term approach to advance energy efficiency that centers on setting goals for business engagement and energy savings.			

	***Small Business Energy Advantage (SBEA)*:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified through the EDC's market segmentation analysis.			
	***Energy Conscious Blueprint (ECB)*:** The ECB encourages implementation of energy efficiency during construction, major renovations, and in the new equipment marketplace by providing incentives for the non-residential building sector.			
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes customers to curtail energy use during periods of peak demand by enrolling eligible technologies.			
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.			
Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or			

	supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at 28% in 2022, increasing annually to 44% in 2030.			
Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and long-term plans to ensure continued developments for Connecticut's electric grid.			
Equitable Modern Grid Programs	***Energy Storage Solutions Program*****:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system.			
	Electric Vehicle Charging Program**:** The EV Charging program is designed, through a series of incentives, to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.			

	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a procedural mechanism to accelerate the deployment and scalability of innovative pilots.			
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and economical interconnections.			
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.			

Overall, does the existing regulatory framework support achievement of this outcome?		Discussion
+ **YES** Incents Achievement		
0 **NO IMPACT**		
- **NO** Disincentivizes Achievement		