SECTION 3: THE ELECTRIC SECTOR

1.5 M Customers | 22 2022 Dockets

The electric sector is the largest industry regulated by PURA with over $2.75 billion annually in distribution revenue under PURA's jurisdiction. The Authority is responsible for regulating the rates, services, and distribution infrastructure of Connecticut's two investor-owned electric distribution companies (EDCs), The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) and The United Illuminating Company (UI), in a manner that leads to just and reasonable rates. Together, Eversource and UI serve over 1.5 million customers (also called "ratepayers"), which represents over 90% of the state's electric customers.

The Authority's oversight of the EDCs, which is found in Conn. Gen. Stat. Title 16, covers a broad range of topics, including but not limited to:

- Electric distribution rates and other bill charges;
- The provision of safe, adequate, and reliable service;
- The wholesale procurement of electricity;
- The administration of renewable power contracts;
- Emergency performance and incident response procedures;
- The administration of utility poles;
- Vegetation management practices (i.e., tree trimming);
- Metering and billing accuracy;
- Customer service, education, and outreach; and
- The oversight of renewable energy tariff structures.

In addition to it's regulation of the EDCs, the Authority also has purview over other aspects of the electric sector regulation, including but not limited to:

- Third party electric supplier licensing;
- Registration of electric aggregators;[1] and
- Monitoring of the renewable portfolio standards.

When a docket concerning any of the above topics is brought

before the Authority, staff must follow the docket process to build a record of evidence that enables a well-founded decision that supports the agency's overall mission of just and reasonable rates. A detailed explanation of this process is included in Appendix 1 – Standard Docket Procedure Guide, attached to this report.

KEY ELECTRIC SECTOR TOPICS IN 2022

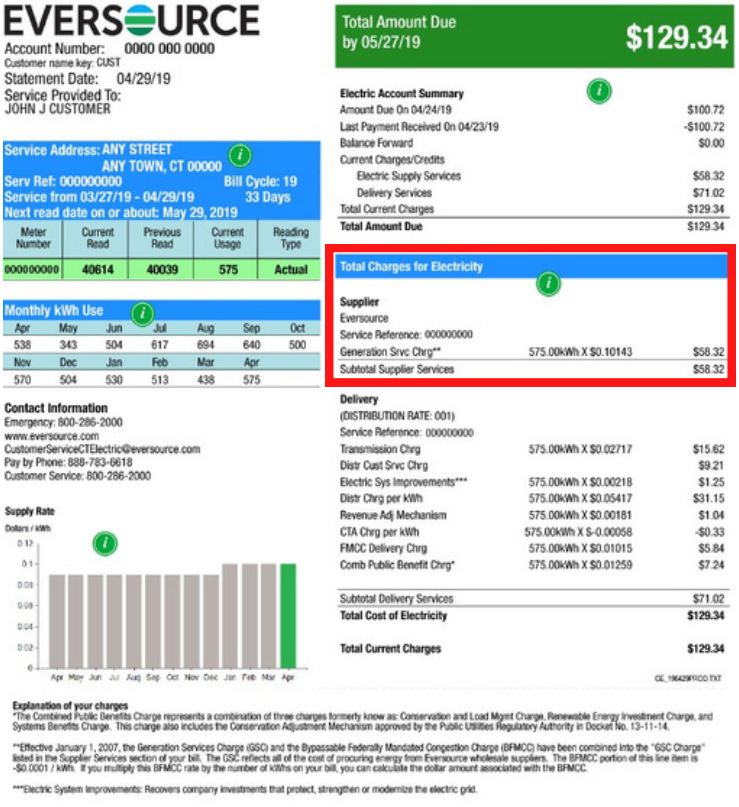
As stated above, PURA's regulation of the EDCs primarily focuses on ensuring reliability, resilience, and affordability of electric distribution service. In 2022, against the backdrop of increasing global electric supply costs, PURA continued to investigate the development of long-term performance-based utility regulation to ensure EDC operations align with the public interest and Connecticut's policy goals.Additionally, PURA took near-term action to streamline the annual Rate Adjustment Mechanism (RAM) reconciliation process it uses to review each EDC's actual revenues and expenses from the year before for certain types of expenditures, generally enacted at the direction of the legislature. PURA's efforts to streamline RAM will create a more efficient and transparent review process.

Additionally, PURA reviewed the emergency response plans of all public service companies operating in Connecticut to ensure that sufficient and appropriate measures are in place in advance of storms or other disasters. This process resulted in changes that will prioritize critical facilities during outage events. Further details on these key electric sector topics are below.

Electric Supply Costs

While many components of the Electric Sector are under PURA's jurisdiction, PURA does not regulate wholesale energy costs. When Connecticut deregulated its energy supply in 1998, the intent was to let market competition reduce both supply costs and risk to ratepayers, while PURA would oversee the safe, reliable, and affordable distribution of electricity throughout the state.[2] The cost of electricity supply is now dictated by the regional wholesale energy markets overseen by the

Figure 6: Eversource Sample Bill


EVERSOURCE

Account Number: 0000 000 0000
Customer name key: CUST
Statement Date: 04/29/19
Service Provided To:
JOHN J CUSTOMER

Total Amount Due by 05/27/19 $129.34

Service Address: ANY STREET
ANY TOWN, CT 00000
Serv Ref: 000000000 Bill Cycle: 19
Service from 03/27/19 - 04/29/19 33 Days
Next read date on or about: May 29, 2019

Meter Number	Current Read	Previous Read	Current Usage	Reading Type
000000000	40614	40039	575	Actual

Monthly kWh Use

Apr	May	Jun	Jul	Aug	Sep	Oct
538	343	504	617	694	640	500
Nov	Dec	Jan	Feb	Mar	Apr	
570	504	530	513	438	575	

Contact Information
Emergency: 800-286-2000
www.eversource.com
CustomerServiceCTElectric@eversource.com
Pay by Phone: 888-783-6618
Customer Service: 800-286-2000

Supply Rate
Dollars / kWh

Electric Account Summary

Amount Due On 04/24/19	$100.72
Last Payment Received On 04/23/19	-$100.72
Balance Forward	$0.00
Current Charges/Credits	
Electric Supply Services	$58.32
Delivery Services	$71.02
Total Current Charges	$129.34
Total Amount Due	$129.34

Total Charges for Electricity

Supplier
Eversource
Service Reference: 000000000

Generation Srvc Chrg**	575.00kWh X $0.10143	$58.32
Subtotal Supplier Services		$58.32

Delivery
(DISTRIBUTION RATE: 001)
Service Reference: 000000000

Transmission Chrg	575.00kWh X $0.02717	$15.62
Distr Cust Srvc Chrg		$9.21
Electric Sys Improvements***	575.00kWh X $0.00218	$1.25
Distr Chrg per kWh	575.00kWh X $0.05417	$31.15
Revenue Adj Mechanism	575.00kWh X $0.00181	$1.04
CTA Chrg per kWh	575.00kWh X $-0.00058	-$0.33
FMCC Delivery Chrg	575.00kWh X $0.01015	$5.84
Comb Public Benefit Chrg*	575.00kWh X $0.01259	$7.24
Subtotal Delivery Services		$71.02
Total Cost of Electricity		$129.34
Total Current Charges		$129.34

Explanation of your charges
*The Combined Public Benefits Charge represents a combination of three charges formerly know as: Conservation and Load Mgmt Charge, Renewable Energy Investment Charge, and Systems Benefits Charge. This charge also includes the Conservation Adjustment Mechanism approved by the Public Utilities Regulatory Authority in Docket No. 13-11-14.

**Effective January 1, 2007, the Generation Services Charge (GSC) and the Bypassable Federally Mandated Congestion Charge (BFMCC) have been combined into the "GSC Charge" listed in the Supplier Services section of your bill. The GSC reflects all of the cost of procuring energy from Eversource wholesale suppliers. The BFMCC portion of this line item is -$0.0001 / kWh. If you multiply this BFMCC rate by the number of kWhs on your bill, you can calculate the dollar amount associated with the BFMCC.

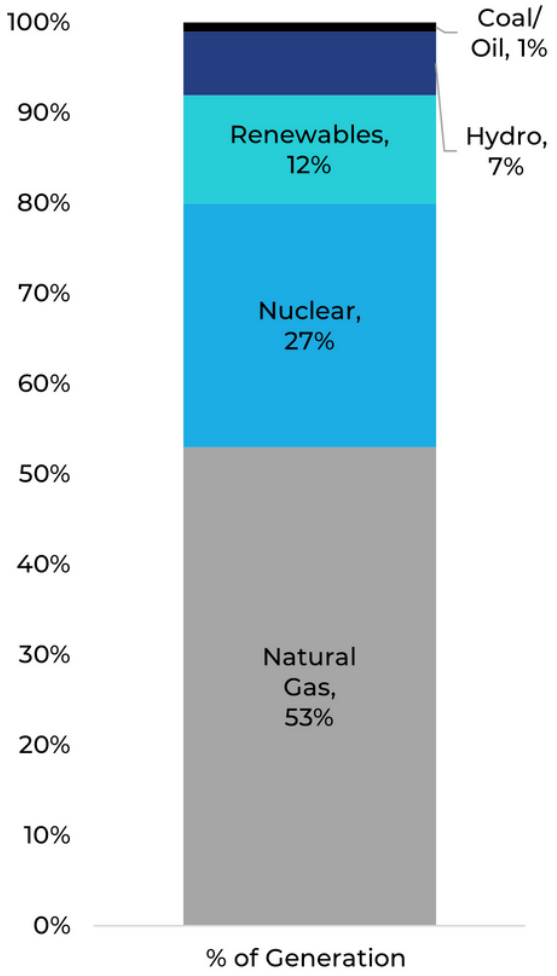
***Electric System Improvements: Recovers company investments that protect, strengthen or modernize the electric grid.

Source: Eversource Sample Electric Bill

Independent System Operator of New England (ISO-NE or ISO New England). Although ratepayers are authorized to shop for an alternate supplier, most ratepayers elect to remain on standard default service, whereby Eversource and United Illuminating purchase electricity through the wholesale energy markets and pass that cost directly through to ratepayers. The EDCs do not earn a return on the cost of electricity.
Ratepayers' supply rates are listed as a distinct line item on their monthly electric bill, as shown in Figure 6 above.

On January 1, 2023, the EDCs' procured supply rates effectively doubled, reflecting wholesale electricity prices that have increased due to a variety of factors, most significantly, the cost of natural gas. As shown by Figure 7, natural gas powers approximately 53% of New England's electricity generation. With ongoing global conflicts, high demand, and natural gas transmission constraints, the price for electricity generated at natural gas plants has increased dramatically. Since natural gas is the "marginal resource", or the resource responsible for setting the price in the wholesale energy markets in most hours, this means that electricity overall in New England is now more expensive.[3]

Figure 7: New England Regional Generation Mix



Source: ISO New England

Connecticut, and many other states in New England, have committed to decarbonizing their electric sectors and reducing their reliance on natural gas for electricity generation.[4] ISO New England has reported that it currently has over 30,000MW of new generating capacity proposals in its interconnection queue, the majority of which is wind. Over time, as the region shifts to renewable resources powered by low- or zero-cost energy inputs, wholesale electric supply costs should decline.

In the meantime, the Authority recognizes that in a state with already high utility rates, this increase is alarming, frustrating, and harmful for many ratepayers. Though the Authority unfortunately has no control over the price of wholesale electric supply, it has designed and implemented multiple affordability and shut-off protection programs, particularly for customers with past-due balances, and renewable energy tariffs that facilitate a ratepayer's decision to install, lease, or subscribe to solar facilities in the state

to gain some control over their electric supply costs.

Additionally, PURA has other tools to address distribution charges on customers' bills in the long term, including the annual Rate Adjustment Mechanism (RAM) dockets, rate cases, and performance-based regulation. The Authority made progress in implementing or refining all of these tools in 2022, which will continue to support sustainable, and impactful energy affordability efforts for Connecticut going forward.

Last, while the Authority does not have oversight over the regional wholesale energy markets, it does have the ability to review and modify, as necessary, the manner in which the EDCs procure electricity supply for their customers. On January 3, 2023, the Authority took the first step in reevaluating the EDCs' processes for procuring electricity supply through a Technical Meeting with Eversource in Docket No. 17-12-03RE10, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Building Blocks of Resource Adequacy and Clean Electric Supply. That Technical Meeting was held jointly with the Massachusetts Department of Public Utilities, at the request of Connecticut Senate Democrats, with the objective of learning from and potentially implementing best practices from other jurisdictions. The Authority will continue this investigation in 2023.

Electricity Supply Prices Related Resources

- 17-12-03RE11 Low Income Discount Rate Decision
- PURA Affordability Program Webpage
- ISO New England

Annual Rate Adjustment Mechanism (RAM) Dockets

In 2007, the General Assembly enacted Public Act 07-242, An Act Concerning Electricity and Energy Efficiency, which ordered Connecticut's electric and gas utilities to decouple their distribution revenues from the volume of sales. Essentially, this means that if a utility collects revenue higher than the amount previously established through a full rate case, it is returned in the next year's rates as a credit to customers, and if there is an under-collection, then the utility can recover that shortfall through an additional charge instead. Additionally, other costs for programs such as the EDCs' arrearage forgiveness programs and several clean energy project contracts entered into by the state of Connecticut are not included in base distribution rates. While distribution rates are set through a rate case, the other costs and revenues associated with clean energy programs, arrearage management programs, etc., are reconciled and charged to customers through separate rate components that are delineated as additional line items on the deliver side of a customer's monthly bill.

To ensure a fair and accurate accounting of all rate components charged to customers and to address any associated under- or over-collections, the Authority annually performs a full prudency review of actual revenues and approved expenses from the prior calendar year for all rates charged to retail electric customers.[5] Areas of review include, but are not limited to: the collection timeline of each rate component, including transmission; program costs (e.g., the Residential Renewable Energy Solutions program); state-led renewable energy procurements; resilience and reliability measures; and revenue decoupling. The Authority initially reviews these filings in March and April to allow for changes to be provisionally made to the reconciling components starting May 1 of each year. Subsequently, the Authority conducts a full prudency review of the underlying costs expended through the associated programs during the previous calendar year and approves the final rate adjustments associated with such prudency review; any differences between the May 1 rates and the findings of the Authority's prudency review go into effect September 1 of the current year.

In accordance with Conn. Gen. Stat. § 16-19e(a), PURA reviews these rate components to ensure that:

1. The level and structure of rates [are] sufficient, but no more than sufficient, to allow public service companies to cover their operating costs including, but not limited to, appropriate staffing levels, and capital costs, to attract needed capital and to maintain their financial integrity, and yet provide appropriate protection to the relevant public interests, both existing and foreseeable...; and
2. The level and structure of rates charged customers shall reflect prudent and efficient management of the franchise operation.

This process is known as the Annual Review of the Rate Adjustment Mechanisms, or RAM, and is conducted for both Eversource and UI. Like a rate case, this is an essential tool that PURA uses to regularly ensure that costs being recovered by ratepayers are only those that are prudent and necessary.

Every year on March 1, Eversource and UI each submit their RAM filings for the previous year, detailing the Company's calculated over- or under-recoveries for the period of January 1 through December 31 of the previous calendar year. A standardized docket numbering system is used for each company's annual RAM proceeding; XX-01-03 for Eversource and XX-01-04 for UI, with the "XX" representing the last two digits of the current calendar year. The Authority typically issues an interim decision in mid-April authorizing the provisional May 1 rates and a final decision in mid-August approving the final revenues and expenses and any rate adjustments for September 1.

Table 4 below provides an illustrative example from the Final Decision in Docket No. 22-01-03, PURA Annual Review of the Rate Adjustment Mechanisms of the Connecticut Light and Power Company, issued on on August 17, 2022, of PURA's determination of whether

Eversource under- or over-collected revenue for each rate component in 2021. Based on the below under- or over-collection, the Authority made appropriate adjustments to rates in 2022, while also taking into account the revenues and expenses Eversource was likely to incur through each rate component in 2022.

Table 4: 2022 Eversource RAM Determination by Rate Component

Rate Component	Determination	Amount
Generation Services Charge (GSC)	Under-Collection	($1,747,975)
Bypassable Federally Mandated Congestion Charges (BFMCC)	Over-Collection	$5,023,578
Non-bypassable Federally Mandated Congestion Charges (NBFMCC)	Over-Collection	$23,713,213
Transmission Adjustment Clause (TAC)	Under-Collection	($136,814,756)
Systems Benefit Charge (SBC)	Over-Collection	$21,120,958
Electric Systems Improvements (ESI)	Under-collection	($14,388,326)
Competitive Transition Assessment	Under-Collection	($1,094,731)
Revenue Decoupling Mechanism	Under-Collection	($17,238,734)

Source: PURA Decision, Docket No. 22-01-03, August 17, 2022

RAM Filing Standardization

In recent years, starting with the Decisions both dated December 2, 2020, in Docket Nos. 20-01-01 and 20-01-02, PURA has issued a variety of orders, directives, guidance, and clarifications applicable to the RAM proceedings. As demonstrated by multiple initiatives, including this Report, the Quarterly Newsletters, increased public engagement, and more, PURA has prioritized public transparency in recent years. This direction and procedural changes to the RAM process ordered in and since Docket Nos. 20-01-01 and 20-01-02 has been with public transparency and the need for greater scrutiny around electric rates in mind.

After the most recent RAM proceedings, the Authority determined that stakeholders would benefit from the consolidation, and clarification where necessary, of this guidance, particularly around the RAM prudency reviews. On October 3, 2022, PURA initiated Docket No. 22-09-08, PURA Proceeding to Consolidate Guidance on the Rate Adjustment Mechanism Docket Procedures and Filings, to consolidate the existing RAM Proceeding framework and to standardize the associated documentation and filing procedures. After issuing a Straw Proposal and receiving written comments from stakeholders, the Authority issued a Decision outlining the consolidated guidance on December 21, 2022. Specifically, the Decision included standardized required exhibits, naming conventions and formatting, consolidation of previous Decisions' related orders and compliance filings, eliminated orders that were no longer necessary, and new requirement to identify all rate impacts from each applicable RAM component, among other items.

This effort will improve the efficiency of PURA's review process and make it more transparent for stakeholders and members of the public. The EDCs will be required to utilize this consolidated RAM framework in all future RAM proceedings, beginning in 2023.

Annual Rate Adjustment Mechanism Related Resources

- 2022 Eversource RAM Decision
- 2022 United Illuminating RAM Decision
- RAM Filing Consolidation Decision

Docket No. 21-05-15: Performance Based Regulation Progress

At both the national and state levels, the scope of utility regulation has expanded beyond safety, reliability, and affordability to now also include the cost-effective achievement of certain public policy goals. States across the country are implementing policies and programs to reduce greenhouse gas emissions and to modernize electric distribution systems. In Connecticut, Public Act 08-98, An Act Concerning Connecticut Global Warming Solutions, set a goal to reduce economy-wide emissions to 80 percent below the 2001 level by 2050. Additionally, the State Legislature has directed PURA and the utilities to develop and implement multiple programs in pursuit of Connecticut's public policy goals that include renewable energy deployment, energy storage, electric vehicle charging, energy justice, resiliency, and more. More recently, PURA catalyzed Connecticut's grid modernization efforts through the 2019 establishment of the EMG Framework, deploying programs and regulatory procedures across a range of topics from reliability and resilience standards to zero emissions vehicles, as discussed in Section 2.

However, the legacy business model and operations of the EDCs are fundamentally at odds with such trends in public policy. The EDCs' ability to meet the core requirements of delivering safe, clean, reliable, and affordable electric service to customers is becoming increasingly complex and challenging in the midst of significant industry change and the present and future impacts of climate change. Technology advances and falling costs have accelerated the adoption of distributed energy resources (DERs), giving customers greater control over their ability to generate and consume electricity independently from the grid. Additionally, the proliferation of DERs requires a more distributed electric grid that can better accommodate and manage bidirectional flows of energy and is likely to require additional investment to upgrade systems and infrastructure to optimally integrate and utilize these resources. Further, these conditions are all occurring against a backdrop of increasingly severe and frequent weather events. With every aspect of the economy and customers' daily lives dependent on reliable access to electricity for power, heating and cooling, internet service, and so much more, it is essential that any electricity outage be minimized to the greatest extent possible. Such a necessarily high bar may be increasingly difficult to meet in the face of an electric grid in transition and the more extreme temperatures and more frequent or intense storms associated with climate change.

In 2020, the General Assembly enacted Public Act 20-5, An Act Concerning Emergency Response by Electric Distribution Companies, The Regulation of Other Public Utilities and Nexus Provisions for Certain Disaster-Related or Emergency-Related Work Performed in The State (Take Back our Grid Act). This landmark bipartisan legislation required PURA to, among other things, initiate a proceeding to research and consider financial, performance-based incentives, penalties, and metrics to use in regulating the EDCs. In other words, PURA is required to design a performance-based regulatory framework (PBR Framework) that cost-effectively incentivizes the EDCs to achieve all the outcomes desired from Connecticut's electric grid, including but not limited to: reliability, safety, affordability, emergency responsiveness, cost-efficiency, equity, customer satisfaction, municipal engagement, resilience, and the advancement of the state's environmental and climate policy goals. This PBR Framework will provide a set of tools to reform legacy regulatory structures to enable innovations within modern power systems.

On May 25, 2021, the Authority initiated Docket No. 21-05-15, PURA Investigation into a Performance-Based Regulation Framework for the Electric Distribution Companies, to investigate, develop, and adopt this PBR framework in Connecticut. To help ensure a successful outcome, the Authority established a two-phase process. Phase 1 will: (1) consider regulatory goals and (2) desired public outcomes to inform a PBR framework; (3) evaluate the current regulatory framework in Connecticut to examine which incentive mechanisms and regulatory components may not be functioning as intended or are no longer aligned with the public interest, and to identify specific areas of utility performance that should be targeted for improvement; (4) assess which regulatory mechanisms can best address the specific areas of interest; and (5) identify specific

performance metrics, where appropriate.

The PBR Framework is anticipated to significantly alter the way utilities are regulated in Connecticut. The legacy regulatory framework used to ensure safe and reliable electricity at reasonable prices from capital-intensive electricity monopolies is now adjusting to a wave of disruptive technological advances that impact the way utilities earn revenues and what value customers expect from their own EDC. Indeed, the Authority views PBR as a means to revisit the principles of utility regulation and to re-apply these core tenets in the context of an increasingly decarbonized, digitized, and distributed electricity system. The benefits of PBR converge around three main issues:

1. Better alignment between the EDCs' rate of return and the public interest

Tying EDC rate of return to performance metrics and outcomes in addition to the traditional cost of service model

2. Improve EDC performance on various financial and public policy metrics

Establishing transparent EDC performance metrics tied to financial and public policy outcomes such as GHG reductions and customer empowerment.

3. Establish a comprehensive, dynamic framework

Identifying regulatory goals, outcomes and metrics that can adapt to a changing energy, technology, utility, and social environment.

PBR Progress to Date

Throughout 2022, the Authority has made steady progress through Phase 1, holding four workshops and technical meetings, and publishing three concept papers that addressed the key components of a PBR Framework. The topics addressed by each meeting and paper are summarized by Table 5 below.

Table 5: 2022 PBR Milestones

Date	Event	Purpose
3/16/2022	Public Listening Session 1	Opportunity for public comment and an introduction to PBR
3/17/2022	Staff Concept Paper 1	Proposed an initial set of Goals & Outcomes

4/5/2022	Stakeholder Workshop 1	Discussion of a PBR framework and a goals and outcomes hierarchy, followed by request for written comment
6/23/2022	Staff Concept Paper 2	Proposed revised goals and outcomes and a regulatory assessment template to evaluate how well-served outcomes currently are
7/14/2022	Stakeholder Workshop 2	Reviewed the state's existing cost-of-service framework and revised goals and outcomes, followed by request for written comment
10/07/2022	Staff Concept Paper 3	Discussed the efficacy of existing regulatory mechanisms in achieving desired public outcomes and proposed principals for metric design
10/24/2022	Stakeholder Workshop 3	Focused on mapping mechanisms to outcomes and metric design, followed by request for written comment
12/19/2022	Public Listening Session 2	Provided a proceeding overview and update; summarized Goals & Outcomes and accepted public comment

Source: PURA Docket No. 21-05-15 External Calendar

This work has set PURA up to conclude Phase 1 and to advance Phase 2. On January 25, 2023, PURA released its Phase 1 Staff Straw Proposal, summarizing the key takeaways from Phase 1 and providing recommendations from PURA Staff on how best to organize Phase 2 to timely implement impactful PBR measures. Subsequently, the Authority will finalize its approach to PBR through a Decision, expected in April of 2023, which will also provide a detail procedural schedule for Phase 2 of the proceeding. The Phase 1 PBR Decision will quickly be followed by the formal commencement of Phase 2 through the issuance of a procedural schedule. Below is the current schedule of next steps in the PBR proceeding for Q1 and Q2 of 2023:

Table 6: 2023 PBR Planned Schedule

Date	Event	Purpose
1/25/2023	Phase 1 Straw Proposal Issued & Request for Written Comments	Staff proposals on recommendations for a PBR framework and adoption of a set of Goals & Outcomes
2/1/2023	Stakeholder Workshop 4	Discussion of PURA's Phase 1 Straw Proposal and stakeholder presentations
2/15/2023	Straw Proposal Written Comments due	Stakeholder comments on the Phase 1 Straw Proposal
3/15/2023*	Distribution of Draft Decision	Finalization of a PBR framework and set of Goals & Outcomes
3/23/23*	Written Exceptions Due	Opportunity for stakeholders to raise specific issues with Draft Decision
4/12/23*	Regular Meeting/ Phase 1 Final Decision	Adoption and finalization of PBR framework and set of Goals & Outcomes

Source: PURA Docket No. 21-05-15 External Calendar
*tentative

Performance Based Regulation Related Resources

- Staff Concept Paper 1
- Staff Concept Paper 2
- Staff Concept Paper 3
- Phase 1 Straw Proposal
- Public Act 20-5, "Take Back Our Grid Act

Storm and Emergency Event Planning

Emergency Response Planning

The major storms that have impacted Connecticut over the past decade, including those at the beginning of the 2010s and Tropical Storm Isaias, in addition to the increased frequency and severity of major storms that Connecticut has borne witness to in recent years, including the fire and heat waves in the Southwest U.S., Hurricane Ian in Florida,

and the flash flooding events across the Eastern U.S., demonstrate the importance of diligent and continuous emergency response planning. Connecticut law requires that the Authority review the emergency response plans (ERPs) of the public utilities, telecommunications companies, internet service providers, and municipal utilities on a biennial basis. On February 14, 2022, the Authority initiated Docket No. 22-02-10, 2022 PURA review of Connecticut Public Service Company Emergency Response Plans, to facilitate the submission, review, and report on the ERPs. In reviewing each ERP, PURA evaluates and considers:

- Communication and coordination with state officials, municipalities, and other public service companies and telecommunications companies during a major disaster;
- Participation in training exercises as directed by the DESPP Commissioner; and
- The response plans for service outages affecting more than ten percent, thirty percent, fifty percent, and seventy percent of such companies, providers, or municipal utility's customers.

Through Docket No. 22-02-10, PURA reviewed the ERPs for five of the seven municipal electric departments, SCG, CNG, Yankee Gas, and multiple telecommunications companies. Additionally, both Aquarion and Connecticut Water submitted water supply plans (WSPs) pursuant to Conn. Gen. Stat. § 25-32d in place of an ERP. PURA also evaluated Eversource and UI's ERPs through the lens of Docket No. 17-12-03RE08, discussed previously in Section 2, comprehensively assessing the electric utilities' reliability and resilience programmatic impacts on emergency response. All of the submitted ERPs and WSPs were found to sufficiently meet the statutory minimum requirements in the Authority's Decision, dated August 31, 2022. Redacted versions of the ERPs filed by UI, Eversource, CNG, SCG, Yankee, Aquarion, and Connecticut Water Company are available in PURA's docket database to provide transparency for state and local officials, as well as customers and residents.

A key benefit of this regular review is the opportunity it provides to incorporate lessons learned and best practices from recent storm experiences and emergency exercises. For example, through this proceeding, PURA identified a vulnerability for water companies and telecommunications providers' critical facilities based on the Authority's experience supporting the state's emergency operations center during Tropical Storm Isaias. The Authority found that most of these companies do not provide the EDCs with a list of critical facilities that require electric distribution service in advance of an emergency. More often, this is done during or after a major event. Furthermore, the Authority found that during Tropical Storm Isaias, given the large number of priority outages during the storm event, the EDCs were not prepared to coordinate with the water and telecommunications companies to ensure that vital services were restored power. While restoring power to customers, particularly those facilities identified by municipalities as

critical, is a top priority for the EDCs after a storm event, maintaining water treatment, sewer systems, and the state's telecommunication network is vital to maintaining the health and safety of the citizens of Connecticut.

Thus, PURA ordered the water and telecommunications companies to provide critical facility information to the EDCs so that they can provide more strategic outage restorations during an emergency event, to the benefit of both customers and the water companies and telecommunications providers. The Decision in Docket No. 22-02-10 also directed the water companies and telecommunications service providers to update their ERPs to better coordinate communications regarding critical facility restoration during future emergency events. The Decision in Docket No. 17-12-03RE08 similarly directed the EDCs to more actively coordinate with both the water and telecommunications companies.

Emergency Support Function 12 (ESF-12)

Following the severe storms that hit Connecticut in 2011, the Department of Emergency Services and Public Protection's Division of Emergency Management and Homeland Security was directed to establish an Emergency Planning and Preparedness Initiative to prepare the state's response in advance of future events. One component of this initiative was the creation of an Energy and Utilities Work Group that would prepare an "All-Hazards Energy and Utilities Annex" to the State Response Framework that established a process to coordinate with state and local emergency operations and to restore power and utility service to critical public facilities during disasters. This Annex is often referred to as Emergency Support Function 12, or ESF-12.[6] The official ESF-12 Annex was released in August of 2013 and continues to be maintained by Work Group members. The ESF-12 Annex defines the operational processes used to coordinate energy and utility-related emergency response actions. The annex covers all utility sectors (gas, water, electric) and defines the emergency preparedness, response, and recovery actions. PURA serves as the lead agency of the ESF-12 Work Group, which is responsible for conducting emergency preparedness activities. Emergency preparedness responsibilities include ensuring that operating procedures are in place in advance of emergencies, coordinating with utility and state and local emergency services to ensure emergency planning measures are in place, planning and participating in emergency exercises and training, identify critical facilities, and helping identify road clearing priorities.

The ESF-12 Work Group meets on a quarterly basis, but also meets as needed to address potential or active threats. Throughout 2022, PURA led meetings with a specific focus on addressing the potential for rolling blackouts throughout New England in future winters. This included a related Technical Meeting on January 6, 2022 in Docket No. 17-12-03RE08, where the EDCs and ISO New England presented on load shedding protocols, otherwise

known as controlled rolling outages or rolling blackouts, and an ESF-12 meeting on February 23, 2022 to discuss the same. Fortunately, rolling blackouts did not occur during the winter of 2022, but the activity of the ESF-12 Work Group demonstrates the state's coordinated and organized preparation for potential severe events that may affect the grid.

PURA organized and held subsequent ESF-12 Work Group meetings on September 15, 2022, and on December 20, 2022. Those meetings were used to continue to address planning for the potential for load shedding during winter energy emergencies. That work includes identifying operational and communication plans to implement during emergencies, and identifying solutions to address the underlying problems.

Also, following lessons-learned from the Tropical Storm Isaias investigation, the Authority identified that additional planning and coordination was needed between the electric sector and telecommunications and water/wastewater sectors. The Authority's investigation yielded the finding that better communication and coordination between these sectors is necessary to improve the restoration of key telecommunication and water/wastewater infrastructure. Consequently, the Authority established two subgroups, one to aid coordination between electric distribution companies and telecommunication providers to ensure that critical telecommunication infrastructure has been identified in advance of storms. The other subgroup is designed to aid coordination between the electric distribution companies and the water/wastewater providers to likewise ensure their critical facilities were identified prior to storms so that they can be properly prioritized for restoration during an event. Quarterly meetings in 2023 will continue this work, while also looking into developing addendums to ERPs that specifically address emergency response and restoration activities following a cybersecurity-related event. Future ESF-12 meetings are scheduled for March 31, 2023, June 14, 2023, September 23, 2023, and December 20, 2023.

Emergency Response Related Resources

- PURA Emergency Response Planning Decision
- 17-12-08RE03 Resilience and Reliability Standards Decision
- Connecticut ESF-12 Annex

[1] An electric aggregator is an entity that brings customers together to buy electricity in bulk in order to increase customers' buying power.

[2] Public Act 98-28, An Act Concerning Electric Restructuring.

[3] Throughout New England, wholesale electric prices are set by the sum of the cost of energy, a local congestion component, and a measurement of local loss component, together constituting the Locational Marginal Price (LMP). The Day-ahead LMP is set using scheduled energy bids for each hour in the next day. Because natural gas is the largest fuel source for the region, it therefore has a significant effect on wholesale electric prices by setting the cost of energy. For more information see ISO New England's 2021 Annual Markets Report, issued May 26, 2022, available at: https://www.iso-ne.com/static-assets/documents/2022/05/2021-annual-markets-report.pdf

[4] Public Act 22-5, An Act Concerning Climate Change Mitigation.

[5] This review is inclusive of all reconciling component rates, regardless of whether the Authority has jurisdiction over the underlying costs. For example, electric transmission is overseen by the Federal Energy Regulatory Commission; however, transmission costs are recovered from retail electric customers. Thus, the Authority has purview over the timing and manner in which the transmission costs are passed on to Eversource and UI ratepayers, but not the amount due.

[6] Connecticut Emergency Support Function 12 – All Hazards and Utilities Annex, August 2013, https://portal.ct.gov/-/media/DEMHS/_docs/Plans-and-Publications/EHSP0061-SRF-ESF12--EnergyandUtilitiesAnnex.pdf

2022 ELECTRIC SECTOR DECISIONS

Docket Number	Title	Decision Date
21-12-15	Petition For Approval Of Method And Manner Of Construction And Permission To Energize The 690 Line Rebuild Project	1/12/2022
08-01-01RE06	DPUC Review of Peaking Generation Projects – PSEG Change of Control	2/2/2022
21-12-08	2022 Report to the General Assembly Regarding the Connecticut Electric Efficiency Partners Program	2/9/2022
22-02-08	Petition for Approval of Method and Manner of Construction and Permission to Energize the 100 and 1410 Lines Montville to Horton Cove Rebuild Project	3/9/2022
21-11-01	Annual Report to the Legislature – The State of Electric Competition	3/23/2022
22-01-06	Application of Neighborhood Energy, LLC for an Electric Aggregator Certificate of Registration	3/23/2022
22-02-01	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	5/18/2022

Docket Number	Title	Decision Date
22-04-35	Petition For Approval Of Method And Manner Of Construction And Permission To Energize To Energize The 100, 400 And 1410 Lines As Part Of The Eastern Connecticut Reliability Project From Montville Junction To Ledyard Junction	6/1/2022
21-08-08	Petition to Establish a Docket Pertaining to Public Act 21-162, An Act Concerning the Solicitation of New Fuel Cell Electricity Generation Projects	6/22/2022
22-05-17	Application of Utiliz Services, LLC for an Electric Aggregator Certificate of Registration	7/6/2022
14-07-19RE06	PURA Investigation into Redesign of the Residential Electric Billing Format – Five-Year Review	7/27/2022
22-01-04	PURA Annual Review of the Rate Adjustment Mechanisms of The United Illuminating Company	4/13/2022 8/17/2022
22-01-03	PURA Annual Review of the Rate Adjustment Mechanisms of The Connecticut Light and Power Company	4/13/2022 8/17/2022
22-07-20	Application of The United Illuminating Company for the Approval of the Issuance of Debt	9/7/2022
22-07-23	Petition For Approval Of Method And Manner Of Construction And Permission: To Energize The 400/500 Lines, Rebuild Project As Part Of The Eastern Connecticut: Reliability Project: Ledyard Junction To Tunnel Substation	9/7/2022

Docket Number	Title	Decision Date
22-08-22	Petition For Approval Of Method And Manner Of Construction And Permission: To Energize The 1200 And 1300 Lines - As Part Of The 1200 And 1300 Line Structure Replacement Project	9/21/2022
07-04-24RE01	DPUC Review of Energy Independence Act Capacity Contracts – Waterside Change of Ownership	9/21/2022
22-06-03	GB II New Haven LLC Application to Establish 2023 Revenue Requirements	11/9/2022
22-08-33	Application Of The Connecticut Light And Power Company dba Eversource Energy For Approval Of The Issuance Of Long-Term Debt	11/30/2022
22-03-16	Petition of the Office of Consumer Counsel for an Investigation into the United Illuminating Company and Eversource Energy Regarding Collections Practices During the Covid-19 Moratorium	12/7/2022
22-08-16	2022 PURA Report to the General Assembly on Electric Distribution Company System Reliability	12/21/2022
22-09-08	PURA Proceeding to Consolidate Guidance on the Rate Adjustment Mechanism Docket Procedures and Filings	12/21/2022

A comprehensive list of PURA 2022 decisions is available in Appendix 2, attached to this Report.