

Public Policy Components of Electric Bills

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Issue

This report describes the public policy components of electric bills. More specifically, it describes the Combined Public Benefits Charge and the Federally Mandated Congestion Charge on typical residential electric bills and the components of those charges that stem from public policy decisions.

Summary

When a typical residential customer in Connecticut pays his or her electric bill, the large majority of the bill covers the costs of making the electricity (the generation service charge) and delivering it to the customer (the transmission and distribution charges). A portion of the bill, however, stems from various state-level public policy decisions that require the electric distribution companies (EDCs) (i.e., Eversource and United Illuminating (UI)) to either (1) collect charges used to fund various state-mandated programs or (2) incur certain expenses, which they can subsequently recover from ratepayers. These public policy costs feature most prominently in the Combined Public Benefits Charge and Federally Mandated Congestion Charge (FMCC) components of a typical residential electric bill.

The Combined Public Benefits Charge consists of three separate charges: the Renewable Energy Investment Charge, the Conservation and Load Management (C&LM) Charge, and the Systems Benefit Charge (SBC). In 2020, the combined charge for Eversource's residential customers ([Rate 1](#)) was \$0.01621 per kilowatt-hour (kWh), which would cost \$11.35 on an average monthly bill (for 700 kWh usage). The charge for UI customers ([Residential Rate R](#)) was \$0.013942 per kWh and would cost \$9.76 on an average monthly bill.

The FMCC allows the EDCs to recover their expenses for numerous expenses, approximately 88% of which stem from state public policy decisions and laws that have generally required the EDCs to enter into various contracts with generators to help ease congestion on the transmission system or procure renewable or clean energy. In 2020, Eversource's FMCC for residential customers was \$0.01585 per kWh, which would cost \$11.10 on an average monthly bill. For UI's residential customers, the FMCC was \$0.019278 per kWh during the summer (which would cost \$13.49 on an average bill) and \$0.015422 per kWh during the rest of the year (which would cost \$10.80 on an average bill).

Together, the Combined Public Benefits Charge and the FMCC currently comprise 15.3% of the costs charged on an average Eversource bill and 11.7% of an average UI bill. Assuming that 88% of the FMCC stems from public policy decisions, Eversource customers currently pay approximately \$21.12 for public policy costs on an average monthly bill and UI customers pay \$19.26. The exact amount each customer pays for these charges varies and ultimately depends on his or her usage.

Beyond these rate components, other public policies, such as renewable portfolio standards or participation in the Regional Greenhouse Gas Initiative may indirectly impact a customer's bill. However, costs and revenues associated with these policies are not recovered through discrete rate components on electric bills and, in some cases, it is difficult to estimate energy prices that would occur in absence of a given policy. For these and other reasons, bill impacts resulting from these policies are outside the scope of this report.

By law, the customers of the state's municipal electric companies do not have to pay most of the public policy costs paid by EDC customers.

Combined Public Benefits Charge

The Combined Public Benefits Charge combines three separate charges, the: (1) Renewable Energy Investment Charge, (2) Conservation and Load Management (C&LM) Charge, and (3) Systems Benefit Charge (SBC). Overall, the combined charged currently makes up about 7.7% of an average Eversource bill and 5.6% of an average UI bill.

Renewable Energy Investment Charge

The renewable energy investment charge funds the Connecticut Clean Energy Fund, administered by the [Connecticut Green Bank](#). By law, the charge is at least \$0.001 per kWh for all EDC customers, which would cost \$0.70 on an average monthly bill ([CGS § 16-245n](#)).

The Green Bank is a quasi-public agency tasked with (1) developing programs to finance and support clean energy investment; (2) fostering the growth, development, and commercialization of clean energy sources and related enterprises; and (3) stimulating demand for clean energy and the

deployment of clean energy sources within the state. Among other things, the bank administers the [Residential Solar Investment Program](#), the [Smart-E loan program](#), and the [Commercial & Industrial Property Assessed Clean Energy](#) program.

Conservation & Load Management Charge

The C&LM charge helps fund the state's energy efficiency and load management programs for [homes](#) and [businesses](#). By law, the charge is up to \$0.006 per kWh for all EDC customers, which would cost \$4.20 on an average monthly bill ([CGS § 16-245m](#)). (Natural gas customers also pay a conservation charge as part of their rates.)

Every three years, the law requires the EDCs and gas companies to prepare a C&LM plan for implementing energy efficiency and demand management programs. Once the state's Energy Conservation Management [Board](#) and the Department of Energy and Environmental Protection review and approve the plan, the companies administer the programs under it using funds collected through the C&LM charge. Current programs include (1) the [Home Energy Solutions](#) program, which provides home energy audits and efficiency services for residential customers; (2) the [Energy Opportunities](#) program, which provides commercial, industrial, and municipal customers with financial incentives and technical assistance with energy efficient equipment upgrades; and (3) [rebates and incentives](#) for various energy efficient products.

Systems Benefit Charge

The SBC reimburses the EDCs for a variety of public policy mandates generally related to protecting customers having difficulty paying their bills ([CGS § 16-245l](#)). These include (1) hardship protection measures, (2) certain low-income conservation programs, (3) payments to [Operation Fuel](#), and (4) the matching payment program.

Unlike the other components of the Combined Public Benefits Charge, the SBC varies over time and by EDC, depending on the EDC's expenses for the covered costs. The Public Utilities Regulatory Authority (PURA) determines the amount of the charge twice each year by examining the companies' SBC expenses (or projected expenses) and setting a rate that will allow them to recover those costs.

Currently, the SBC for an Eversource residential customer is \$0.00921 per kWh, which would cost \$6.45 on an average monthly bill. The SBC for a UI customer is currently \$0.006942 per kWh, which would cost \$4.86 on an average monthly bill.

Federally Mandated Congestion Charge

The FMCC allows the EDCs to recover numerous different expenses. Some are charges imposed by the regional electric grid operator ([ISO-NE](#)), but the large majority stem from state-level public policy decisions that require the EDCs to enter into various contracts to (1) help ease congestion on the transmission system or (2) procure energy and related products (e.g., renewable energy certificates) from certain generation facilities (typically renewable or clean energy). Like the SBC, the FMCC varies over time and by EDC depending on the EDC's expenses. PURA determines the FMCC twice each year by examining the companies' eligible expenses (or projected expenses) and setting a rate that will allow them to recover those costs.

Eversource 2020 FMCC Components

In 2020, Eversource's FMCC for residential customers was \$0.01585, which would cost \$11.10 on an average monthly bill. Approximately 87.8% of the costs recovered stem from public policy-related expenses.

According to its December 16, 2019, [filing](#) in Docket [20-01-01](#) (see Exhibit 8), Eversource projected \$290.8 million in various expenses that would be recovered through its FMCC in 2020. The table below shows these expenses, which PURA allowed Eversource to recover through its 2020 FMCC.

Table 1: Projected Expenses Recovered in Eversource's 2020 FMCC

Category	Expense	Anticipated Cost (\$)
ISO-Imposed Charges \$16,533,000 total (5.7% of FMCC)	ISO Schedule 1	7,767,000
	ISO Schedule 2	251,000
	ISO Schedule 5	383,000
	OATT Schedule 2 - VAR	3,987,000
	OATT Schedule 16 - Black Start	4,148,000
	ISO Miscellaneous	(-3,000)
Public Policy Costs \$255,214,000 total (87.8% of FMCC)	PA 11-80 Section 107 (LREC/ZREC program)	33,604,000
	PA 11-80 Section 107 (LREC/ZREC administrative costs)	545,000
	PA 11-80 Section 127 (EDC ownership of renewable energy projects)	7,875,000
	PA 13-303 Section 6 (Class I renewable energy procurement)	1,001,000
	PA 13-303 Section 8 (Class I run-of-the-river hydropower, landfill methane gas, or biomass energy procurement)	(-2,122,000)

Table 1 (continued)

Category	Expense	Anticipated Cost (\$)
	PA 15-107 Section 1(b) (Renewable energy, passive demand response, and energy storage procurement)	14,496,000
	PA 15-194 Section 1 (Procurement of Solar Home Renewable Energy Certificates (SHRECs) under the Green Bank's Residential Solar Incentive Program)	7,097,000
	PA 15-194 Section 1 (SHREC administrative costs)	0
	PA 17-3 Section 1 & PA 18-50 Section 3 (Nuclear energy procurement and Class I biomass procurement)	74,762,000
	Project 150 (Class I renewable energy procurement)	12,215,000
	PA 05-01 Section 8 Energy Independence Act (Grants to customer-side distributed energy projects that reduce congestion)	6,349,000
	Contract for Differences – Capacity (PA 05-01 § 12)	44,859,000
	Contract for Differences – Peaking (PA 07-242 § 50)	17,890,000
	Non-Contract Qualifying Facilities (Predominantly related to net metering expenses)*	35,976,000
	Distributed Energy Resources Portal (PURA Docket No. 17-06-02)	662,000
	Distributed Energy Resources Map (PURA Docket No. 17-06-02)	5,000
Misc.	2020 Carrying Charges	423,000
\$19,053,000 total (6.6% of FMCC)	2019 FMCC Under Recovery	18,630,000

Source: PURA Docket [20-01-01](#), 12/16/19 [correspondence](#) from Eversource, Exhibit 8

*PURA will be reviewing Eversource's practice of collecting net metering expenses through the FMCC, see PURA [decision](#) in Docket 20-03-01.

UI's FMCC

For UI's residential customers, the FMCC also varies by season. During this past summer (Jun.-Sept.) it was \$0.019278, which would cost \$13.49 on an average bill. During the rest of the year it was \$0.015422, which would cost \$10.80 on an average bill. In 2019, almost 91% of UI's FMCC

charge stemmed from public policy related expenses (see PURA Docket No.: [20-03-02](#), for UI's [7/9/20 response](#), *BETP -001 UI Attachment*) however, 2020 projections for UI's FMCC expenses was not readily available at the time of writing.

Comparison of All Rate Components

The table below shows the various residential rate components and their average monthly costs for Eversource and UI for December 2020.

Table 2: Eversource and UI Residential Rate Components, December 2020

Rate Component	Eversource	Eversource Average Monthly Cost (700 kWh)	UI	UI Average Monthly Cost (700 kWh)
Generation Charge (Standard Service)	\$0.07375/kWh	\$51.63 (35.2% of total bill)	\$0.086672/kWh	\$60.67 (34.5% of total bill)
Transmission Charge	\$0.02601/kWh	\$18.21 (12.4%)	\$0.025386/kWh	\$17.77 (10.1%)
Customer Service Charge	\$9.62/Month	\$9.62 (6.6%)	\$12.84	\$12.84 (7.3%)
Electric System Improvements	\$0.00435/kWh	\$3.05 (2.1%)	N/A	N/A
Distribution Charge	\$0.06005/kWh	\$42.04 (28.6%)	\$0.091435/kWh	\$64.00 (36.4%)
Revenue Adjustment Mechanism	-\$0.00011/kWh	-\$0.08	N/A	N/A
CTA Charge	-\$0.00018/kWh	-\$0.13	N/A	N/A
FMCC	\$0.01585/kWh	\$11.10 (7.6%)	\$0.015422/kWh	\$10.80 (6.1%)
Combined Public Benefit Charge	\$0.01621/kWh	\$11.35 (7.7%)	\$0.013942/kWh	\$9.76 (5.6%)
Total		\$146.77		\$175.84

Municipal Electric Utilities

By law, separate requirements generally apply to municipal electric utilities. As a result, their customers generally do not have to pay most of the public policy costs that EDC customers pay. Of the three components of the combined public benefits charge, municipal electric customers must pay \$0.0025/kWh to support municipal energy conservation and load management programs, rather than the \$0.006/kWh C&LM charge paid by EDC customers ([CGS § 7-233y](#)). Municipal customers do not have to pay the \$0.001/kWh renewable energy investment charge that EDC customers must pay.

The law does not require municipal electric companies to charge the SBC to their customers or to implement most of the public policy mandates supported by it. However, neither EDCs nor municipal electric companies may terminate service to low-income and other “hardship” customers from November 1 to May 1, and both must offer certain payment programs to affected customers ([CGS § 16-262c](#)). EDCs recover their related costs through the SBC, but municipal electric companies presumably incorporate them into their general rates.

Municipal electric customers do not have to pay any of the public policy costs that the EDCs recover through the FMCC.

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