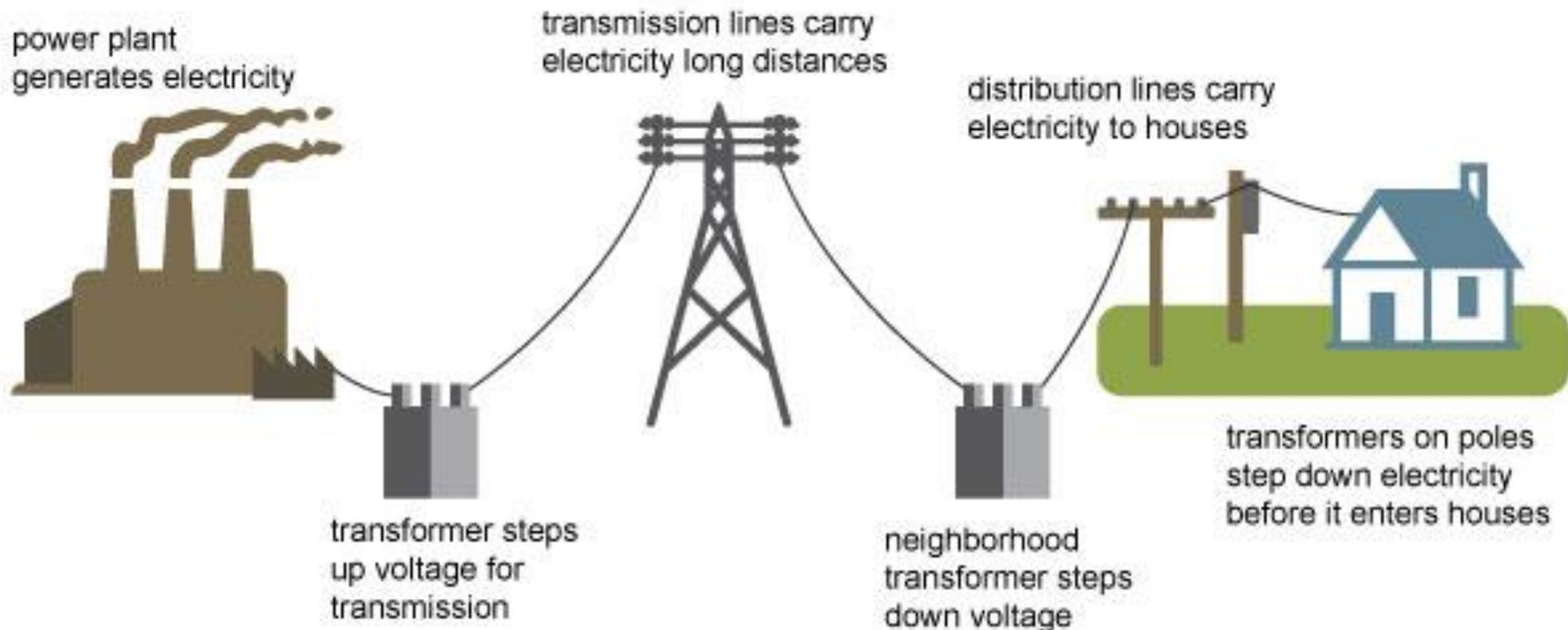


# **Electric Rate Setting** **Understanding** **What's on your Electric Bill** **and How It Got There**

2020 Issues Conference  
Office of Legislative Research



# Electricity generation, transmission, and distribution



Source: Adapted from National Energy Education Development Project (public domain)

# Electric Rate Setting and Your Electric Bill



## Generation

About 35% of bill

Regulated by FERC and ISO-NE



## Transmission

About 12% of bill

Regulated by FERC

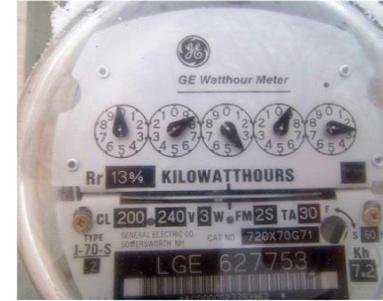
Pass-through charge approved by PURA



## Distribution

About 37% of bill

Regulated by PURA



## Other

About 15% of bill

Regulated by PURA

Many aspects set by state policy

# Volumetric Billing

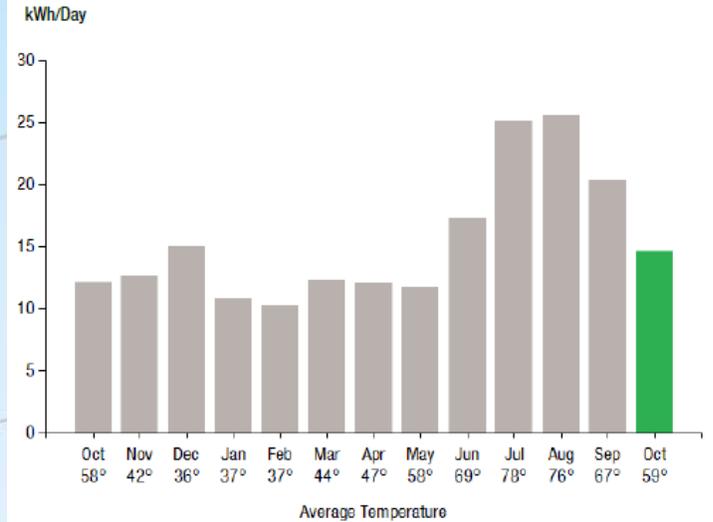
Service from 09/18/20 - 10/21/20 33 Days  
 Next read date on or about: Nov 18, 2020

Meter Number	Current Read	Previous Read	Current Usage	Reading Type
865981072	34927	34143	784	Actual

## Monthly kWh Use

Oct	Nov	Dec	Jan	Feb	Mar	Apr
678	650	779	892	732	685	752
May	Jun	Jul	Aug	Sep	Oct	
720	1186	1594	1528	1284	784	

## Electric Usage History - Kilowatt Hours (kWh)



## Electric Usage Summary

This month your average daily electric use was **15.0 kWh**

This month you used **25.0% more** than at the same time last year



# Generation



## Total Charges for Electricity

### Supplier

Service Reference

Generation Srvc Chrg\*\*  469.00kWh X \$0.08288 \$38.87

Subtotal Supplier Services \$38.87

### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

Transmission Chrg 469.00kWh X \$0.02601 \$12.20

Distr Cust Srvc Chrg \$9.62

Electric Sys Improvements\*\*\* 469.00kWh X \$0.00435 \$2.04

Distr Chrg per kWh 469.00kWh X \$0.06005 \$28.16

Revenue Adj Mechanism 469.00kWh X \$-0.00011 -\$0.05

CTA Chrg per kWh 469.00kWh X \$-0.00018 -\$0.08

FMCC Delivery Chrg 469.00kWh X \$0.01585 \$7.43

Comb Public Benefit Chrg\* 469.00kWh X \$0.01621 \$7.60

Subtotal Delivery Services \$66.92

**Total Cost of Electricity \$105.79**

**Total Current Charges \$105.79**

## Generation Service Charge

- Covers the price of buying power on the electric market (the actual electricity or kilowatt hours used).
- Covers electric companies' and suppliers' costs in procuring power, as well as certain generation-related costs.

## Retail Suppliers

- Suppliers buy power on the wholesale market
- Resell it to retail customers through variable and fixed-rate plans
- Licensed by PURA
- Offers listed on the “Rate Board” on EnergizeCT.com
- In 2019, about 24% of residential customers received their electricity through retail suppliers

## Standard Service Offer

- Default generation for customers who don’t choose a retail supplier
- Electric company buys power on the wholesale market
- Overseen by PURA Procurement Manager and approved by PURA
- Costs passed through to standard offer customers
- Adjusted every six months



### Supplier

Service Reference

Generation Svc Chrg\*\*

469.00kWh X \$0.08288

\$38.87

---

Subtotal Supplier Services

\$38.87

# The Regional Wholesale Market

- Regulated by FERC
- Administered by ISO-NE

- Bilateral Contracts
- Day Ahead Market
- Real-Time Energy Market

Forward Capacity Market

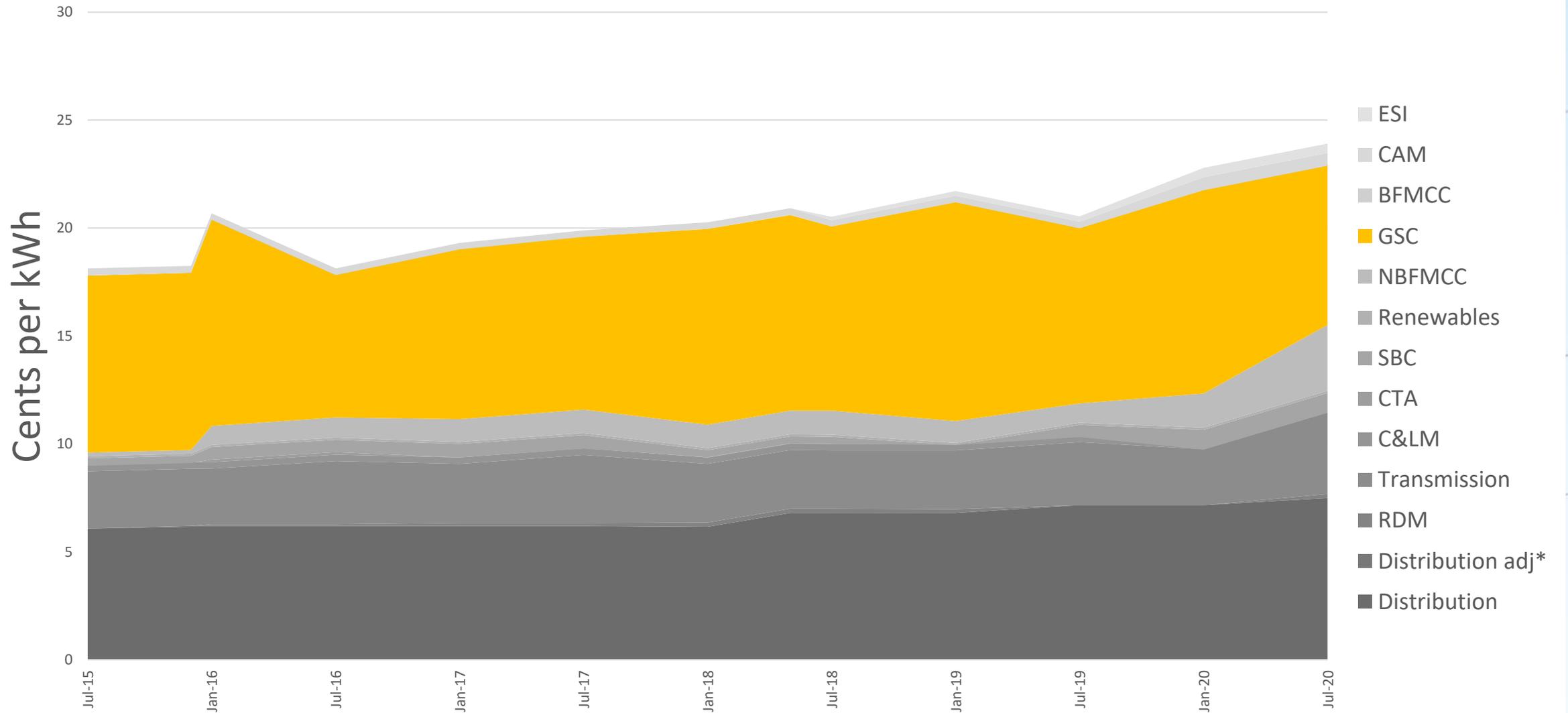


# DEEP Study of ISO-NE Policies

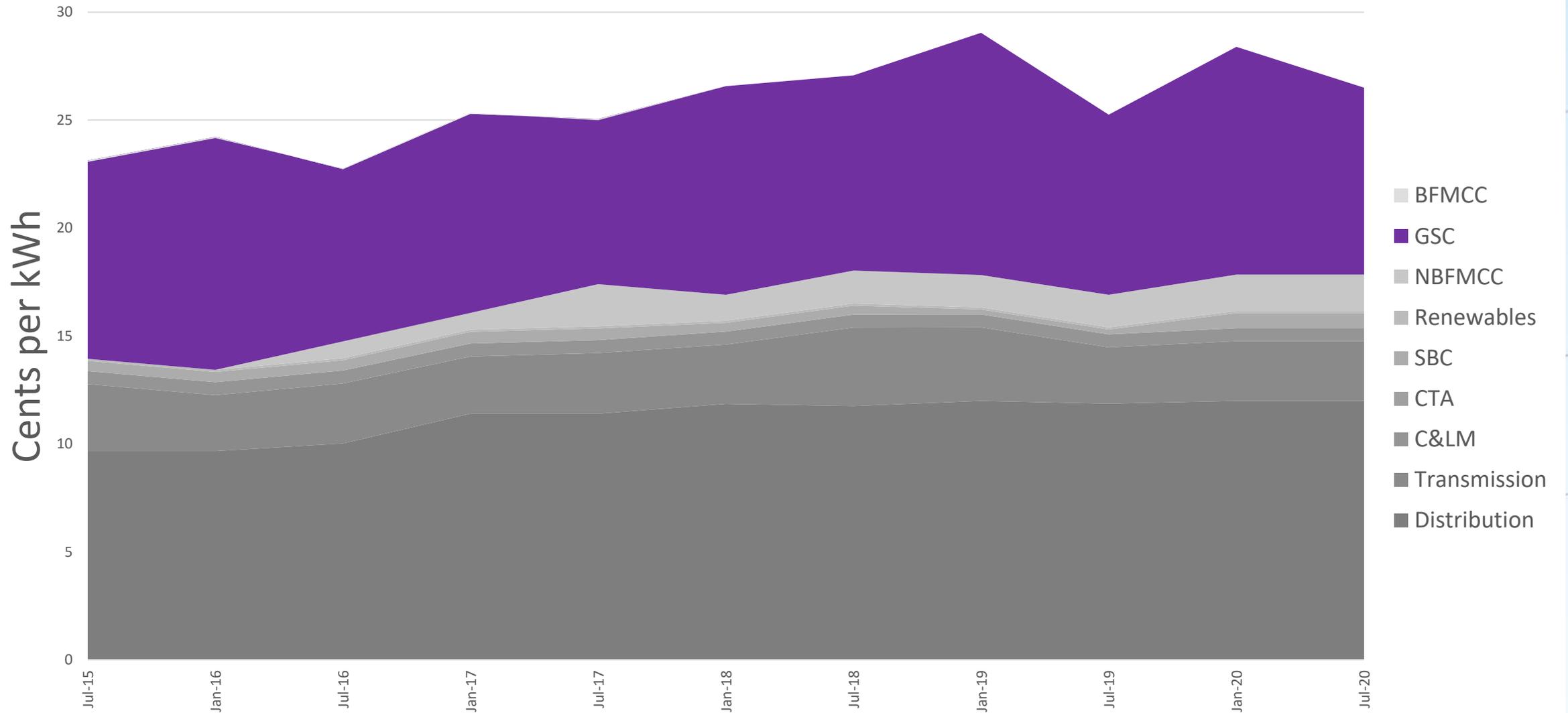


- Evaluate whether the state's reliance on wholesale energy markets administered by ISO-NE benefits the state's ratepayers
- Recommend alternative approaches to better meet the state's need for clean, reliable, and affordable energy, and its greenhouse gas reduction goals
- Due to Energy & Technology Committee by January 15, 2021

# Eversource Residential Rate Components 2015-2020



# United Illuminating Bill Components 2015-2020



# Transmission

## Total Charges for Electricity

### Supplier

Service Reference

Generation Srvc Chrg\*\* 469.00kWh X \$0.08288 \$38.87

Subtotal Supplier Services \$38.87

### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

Transmission Chrg 469.00kWh X \$0.02601 \$12.20

Distr Cust Srvc Chrg \$9.62

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Subtotal Delivery Services \$66.92

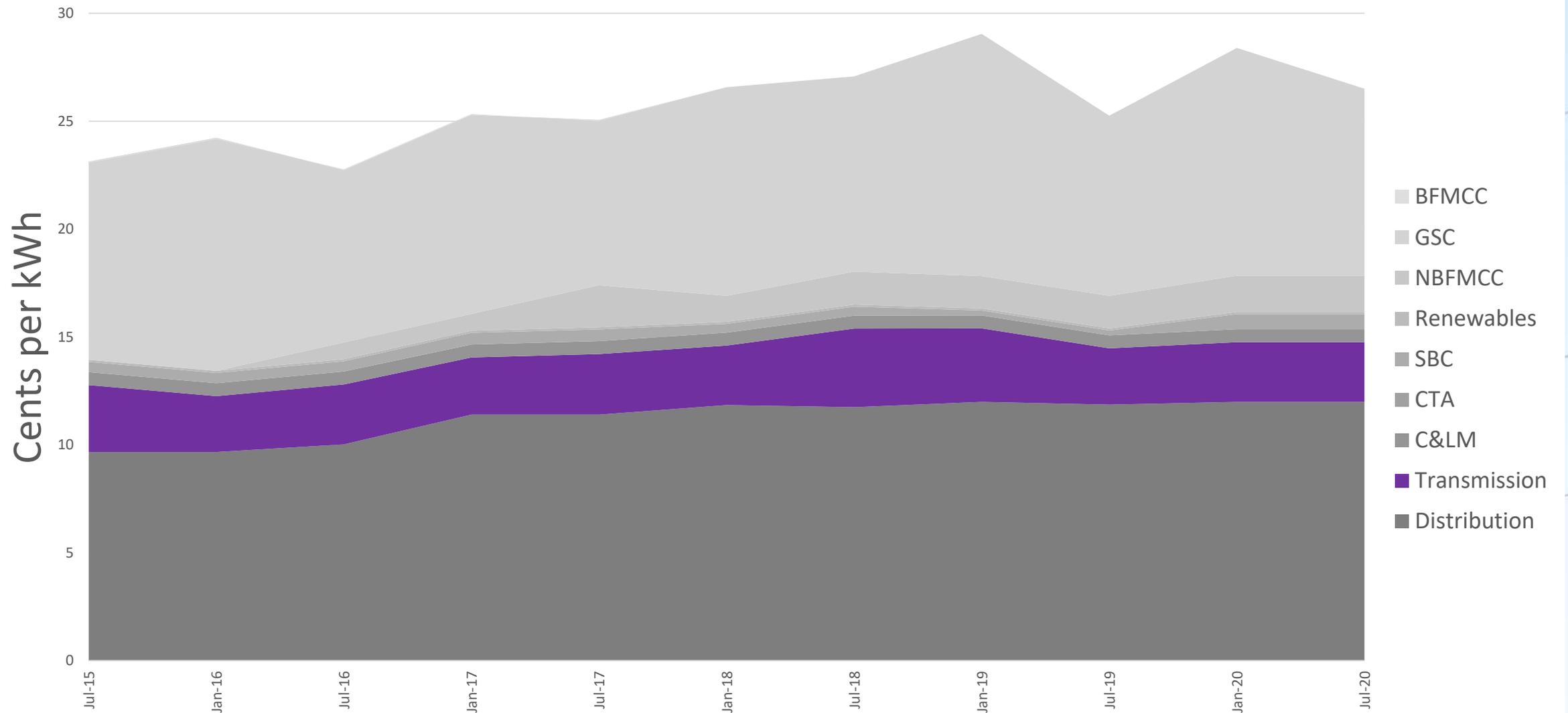
**Total Cost of Electricity \$105.79**

**Total Current Charges \$105.79**

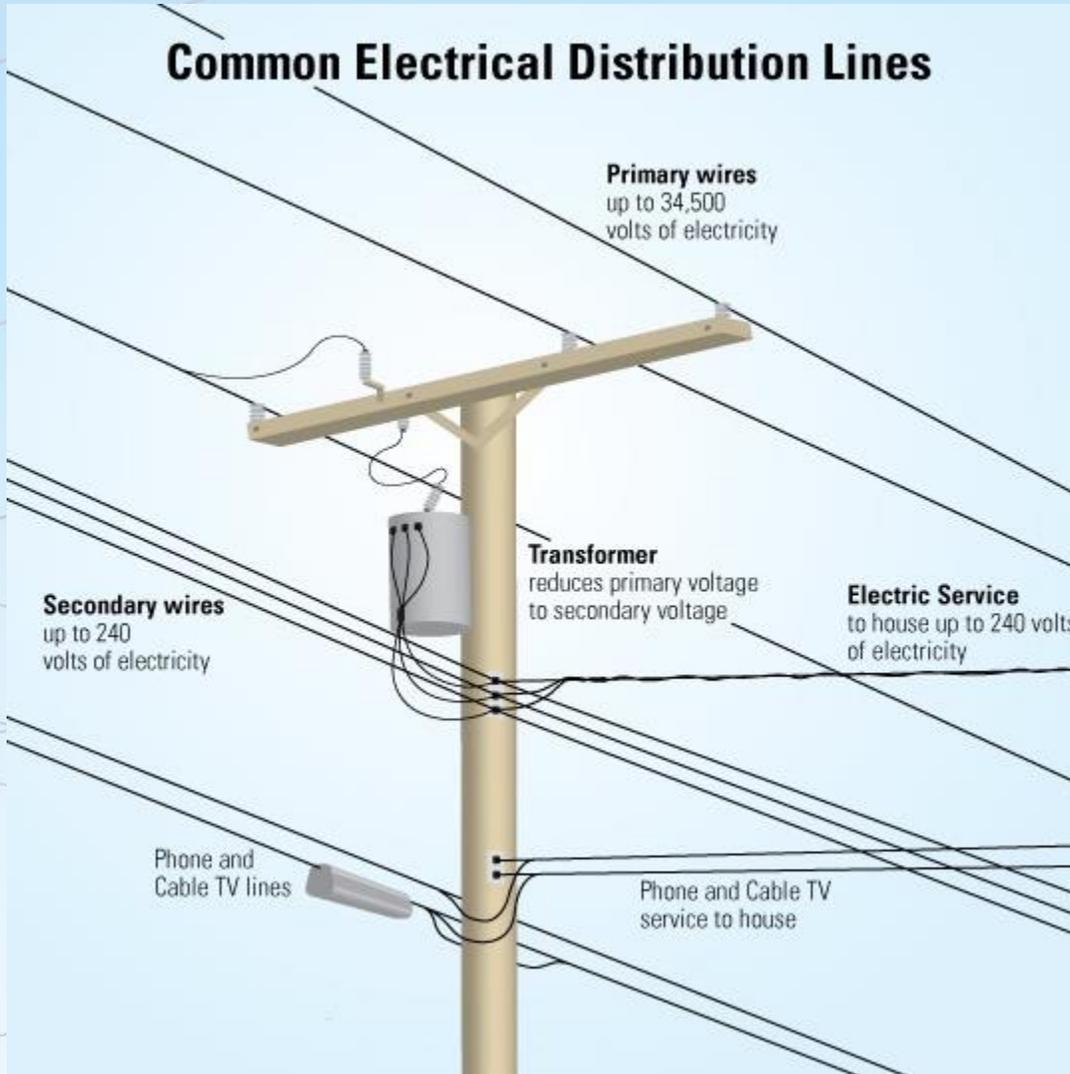




# United Illuminating Residential Rate Components 2015-2020



# Distribution



- Narrower power lines on street-level utility poles or underground
- Lower voltage
- Covers the cost of shipping power from substations to individual customers

# Distribution Rates

## Customer Service Charge

- Flat Rate (not volumetric)
- Recovers fixed costs and operation and maintenance expenses directly related to metering, billing, service connections, and providing customer service

## Distribution Charge

## Total Charges for Electricity

### Supplier

Service Reference

Generation Srvc Chrg**	469.00kWh X \$0.08288	\$38.87
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Subtotal Supplier Services		\$38.87
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### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

Transmission Chrg	469.00kWh X \$0.02601	\$12.20
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Distr Cust Srvc Chrg		\$9.62
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Comb Public Benefit Chrg*	469.00kWh X \$0.01621	\$7.60
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Subtotal Delivery Services		\$66.92
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<b>Total Cost of Electricity</b>		<b>\$105.79</b>
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<b>Total Current Charges</b>		<b>\$105.79</b>
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# Distribution Rate Cases



- Distribution rates set by PURA
- PURA must review rates every four years
- Office of Consumer Counsel (OCC) represents ratepayer interests
- Ratemaking principles in CGS § 16-19e

## Allow Revenues to:

- Cover operating costs
- Recover prudent capital investments
- Earn a reasonable rate of return on investments to maintain financial integrity



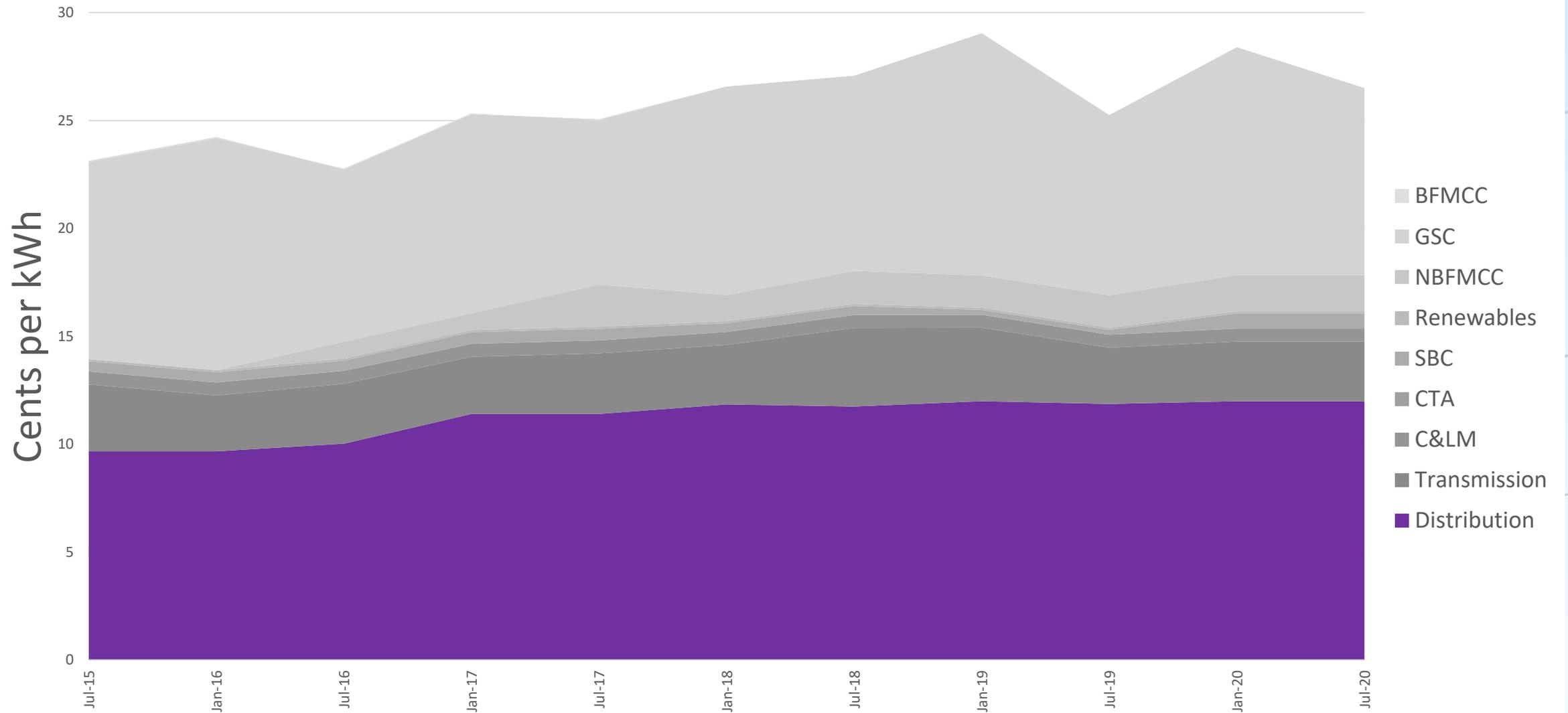
# Performance Based Rates

## PA 20-5

- Standards and metrics for EDC performance in meeting certain objectives
- Determine whether allowed rate of return is reasonable based on evaluation of performance



# United Illuminating Residential Components 2015-2020



# Revenue Adjustment Mechanism

## Total Charges for Electricity

### Supplier

Service Reference		
Generation Srvc Chrg**	469.00kWh X \$0.08288	\$38.87
Subtotal Supplier Services		\$38.87

### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

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Comb Public Benefit Chrg*	469.00kWh X \$0.01621	\$7.60
Subtotal Delivery Services		\$66.92
<b>Total Cost of Electricity</b>		<b>\$105.79</b>

**Total Current Charges** **\$105.79**

- Allows companies to reconcile actual revenues and expenses between rate proceedings
- PURA decision recently announced changes to this process

# Electric System Improvements

## Total Charges for Electricity

### Supplier

Service Reference		
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Subtotal Supplier Services		\$38.87

### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

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Distr Cust Srvc Chrg		\$9.62
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Comb Public Benefit Chrg*	469.00kWh X \$0.01621	\$7.60
Subtotal Delivery Services		\$66.92

**Total Cost of Electricity** **\$105.79**

**Total Current Charges** **\$105.79**

- Established for Eversource in a 2017 rate case settlement
- Meant to improve transparency and allow for more frequent adjustments
- Generally compensates company for expenses related to capital expenses for system reliability projects

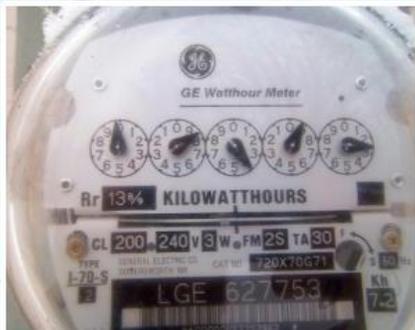


# Other Charges

Competitive Transition  
Assessment  
(CTA)

Federally Mandated  
Congestion Charge (FMCC)

Combined Public Benefit  
Charge



## Total Charges for Electricity

### Supplier

Service Reference

Generation Srvc Chrg\*\* 469.00kWh X \$0.08288 \$38.87

Subtotal Supplier Services \$38.87

### Delivery

(DISTRIBUTION RATE: 001)

Service Reference:

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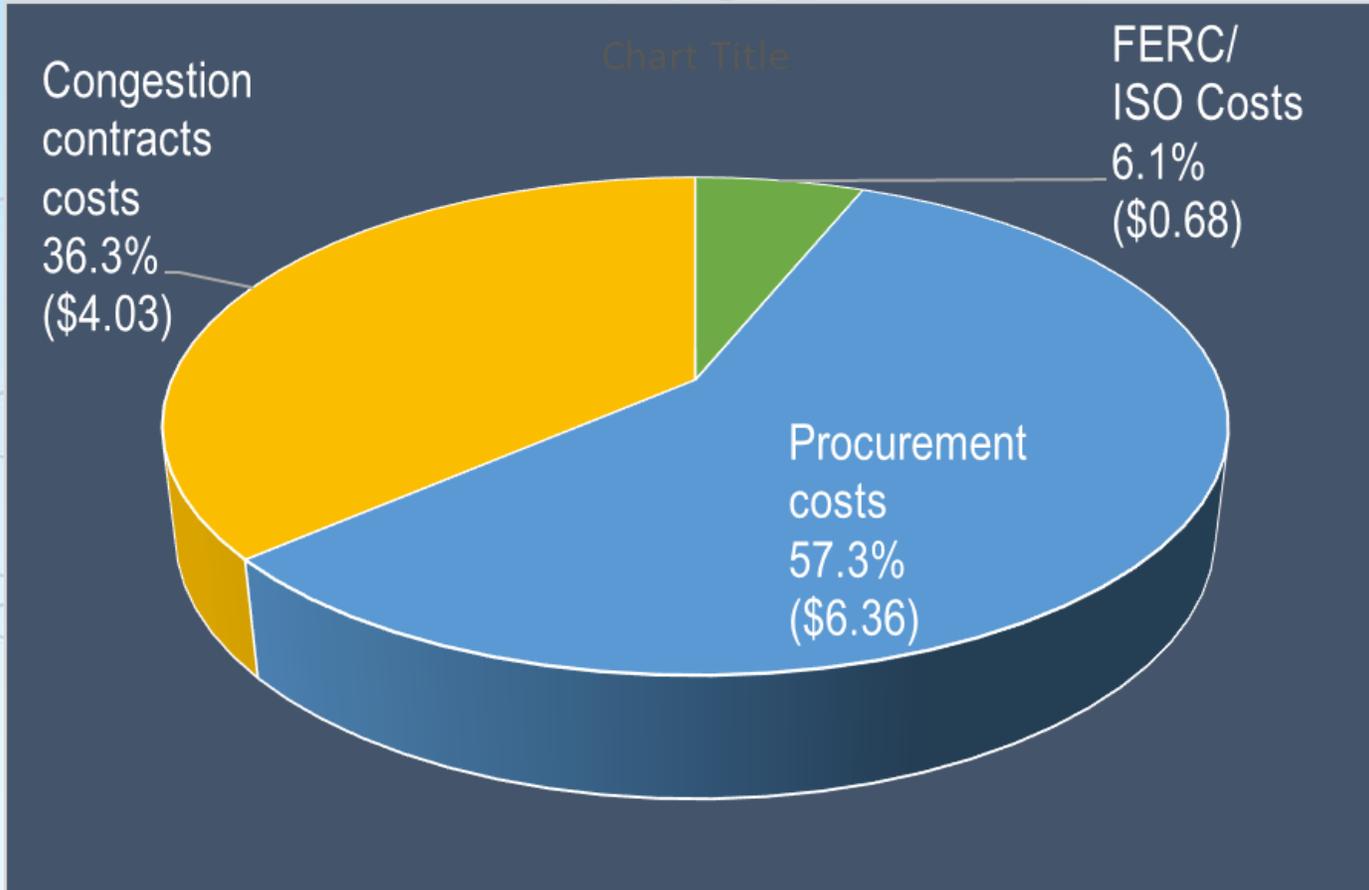
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Subtotal Delivery Services \$66.92

**Total Cost of Electricity \$105.79**

**Total Current Charges \$105.79**

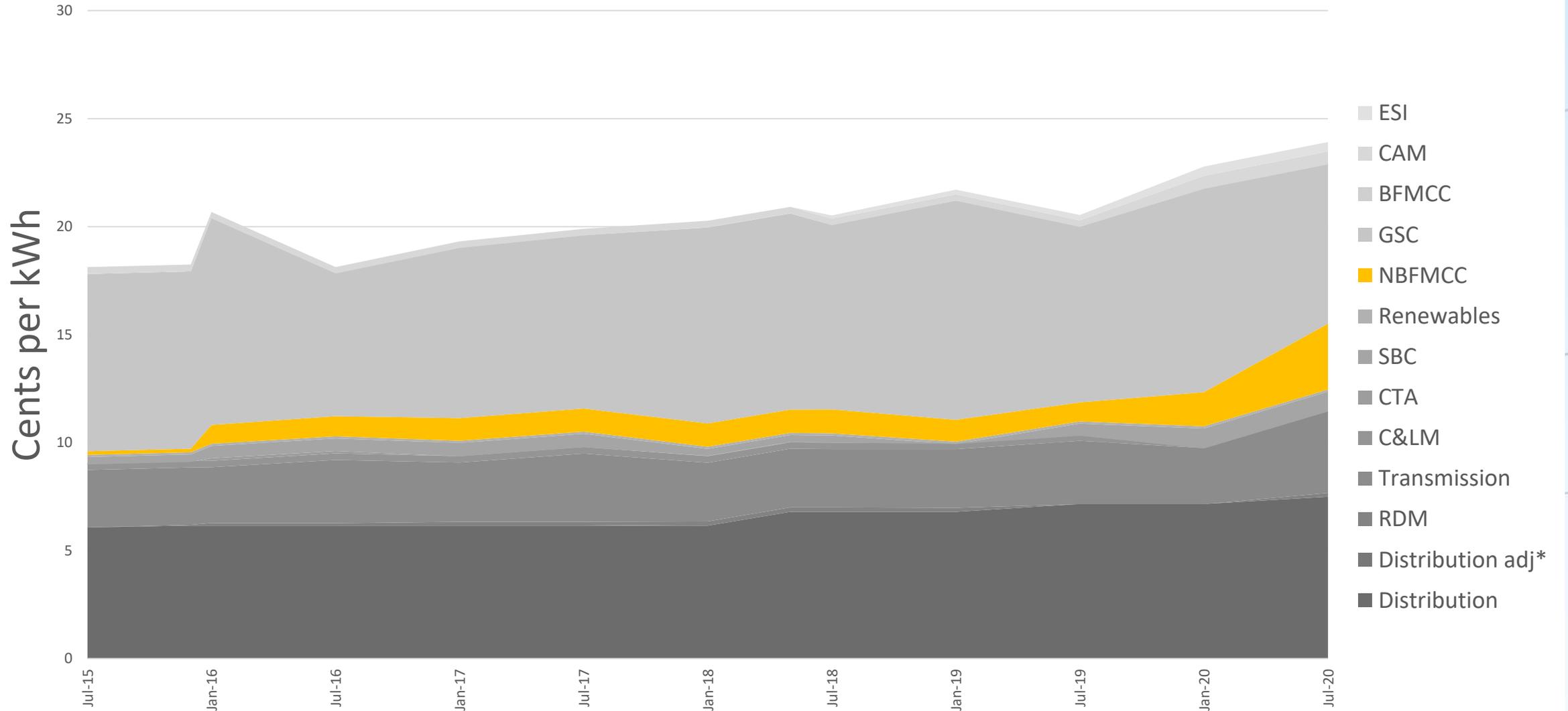
# FMCC



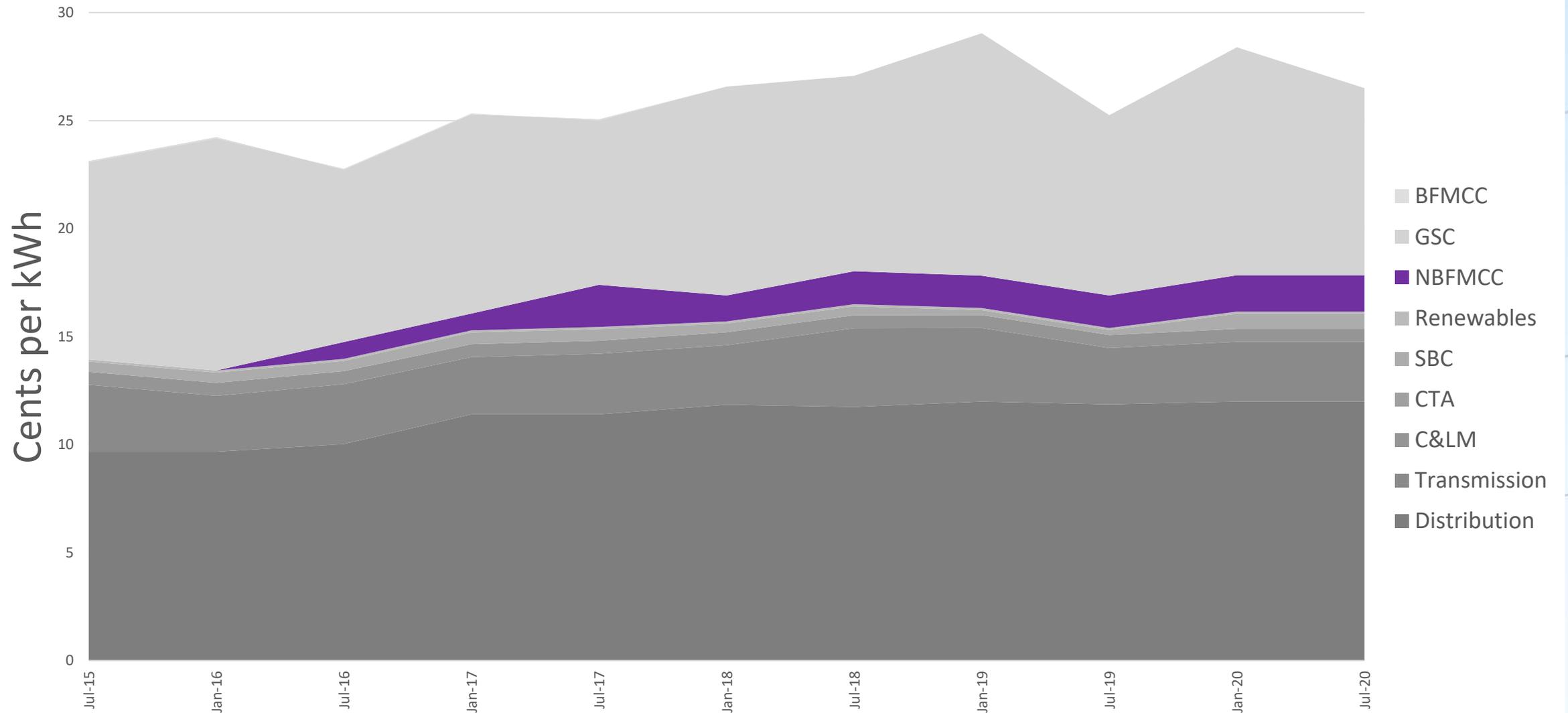
## Procurement Costs

- PA 05-01 § 8
- PA 11-80 § 107 (LREC/ ZREC)
- PA 11-80 § 127
- PA 13-303 § 6
- PA 13-303 § 8
- PA 15-107 § 1(b)
- PA 15-194 § 1 (SHRECs)
- PA 17-3 § 1 & PA 18-50 § 3 (Millstone)
- Project 150 EPAs

# Eversource Residential Rate Components 2015-2020



# United Illuminating Residential Rate Components 2015-2020

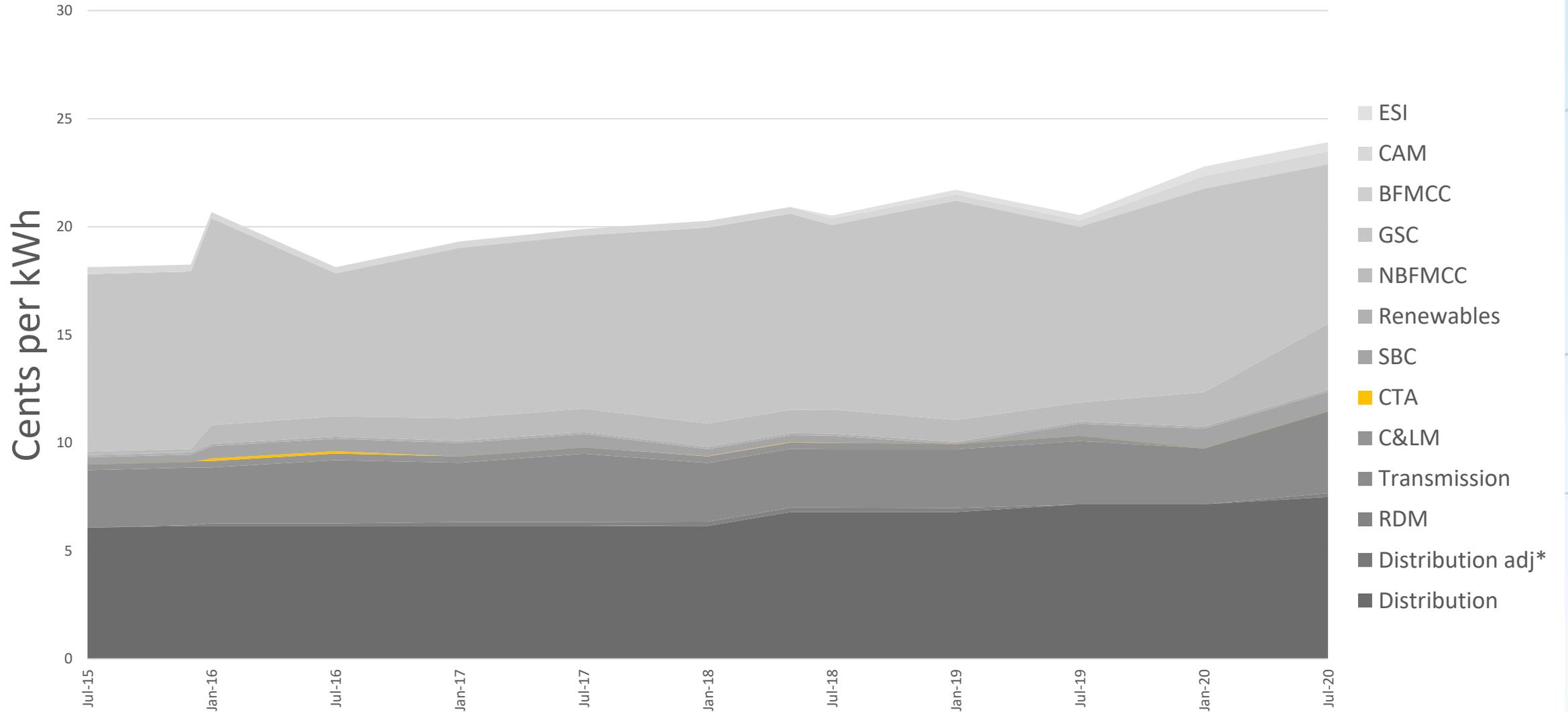


# Competitive Transition Assessment (CTA)

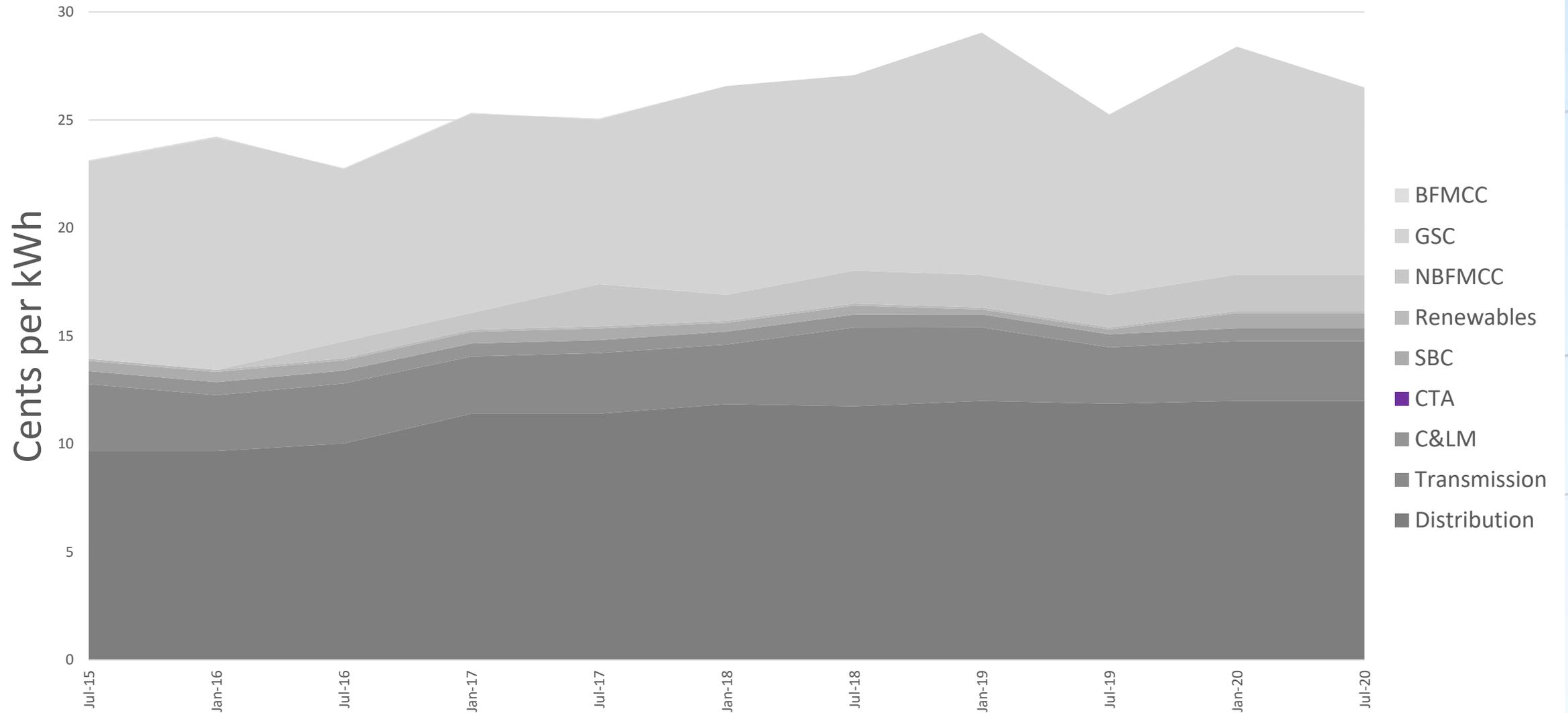
Total Charges for Electricity		
<b>Supplier</b>		
Service Reference		
Generation Srv Chrg**	469.00kWh X \$0.08288	\$38.87
Subtotal Supplier Services		\$38.87
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Comb Public Benefit Chrg*	469.00kWh X \$0.01621	\$7.60
Subtotal Delivery Services		\$66.92
<b>Total Cost of Electricity</b>		<b>\$105.79</b>
<b>Total Current Charges</b>		<b>\$105.79</b>

- Allows EDCs to recover stranded costs related generations assets owned before deregulation
- In 1998, legislation restructured electric power industry, creating EDCs and requiring them to sell off generation assets

# Eversource Residential Rate Components 2015-2020



# United Illuminating Residential Rate Components 2015-2020



# Combined Public Benefits

## Total Charges for Electricity

### Supplier

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Subtotal Supplier Services		\$38.87

### Delivery

(DISTRIBUTION RATE: 001)

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Transmission Chrg	469.00kWh X \$0.02601	\$12.20
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Electric Sys Improvements***	469.00kWh X \$0.00435	\$2.04
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Comb Public Benefit Chrg*	469.00kWh X \$0.01621	\$7.60
Subtotal Delivery Services		\$66.92

**Total Cost of Electricity** **\$105.79**

**Total Current Charges** **\$105.79**

- Systems Benefit Charge
- Renewable Energy Investment Charge
- Conservation and Load Management

# Systems Benefit Charge (SBC)

- Reimburses Eversource and UI for various costs
  - Hardship protection
  - Low-income conservation programs
  - Payments to Operation Fuel
  - Matching Payment Programs (MPP)(CGS § 16-245m)
- Amount determined through PURA contested case proceeding

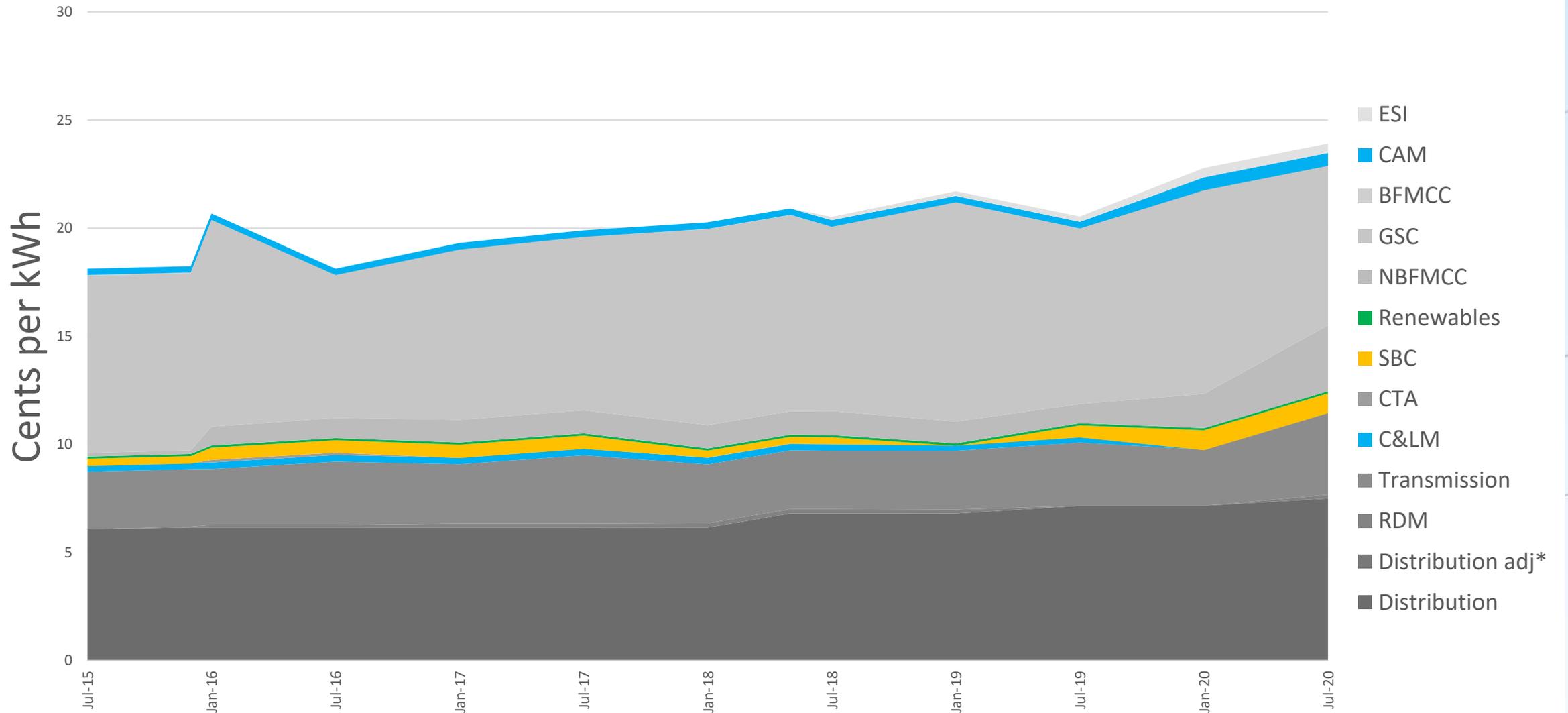
# Renewable Energy Investment Charge

- 1 mill per kilowatt-hour (CGS § 16-245n)
- Funds the Green Bank
- Financing for renewable energy projects

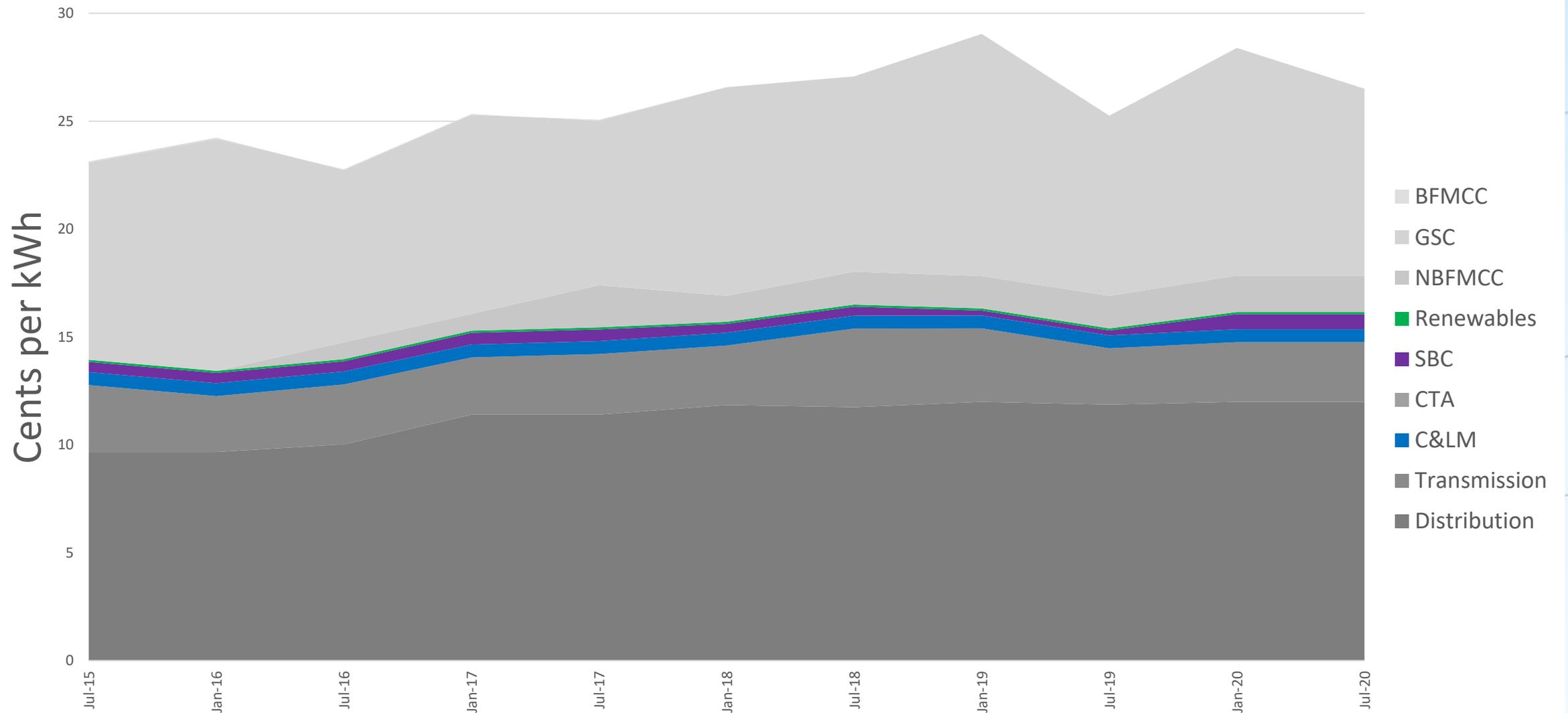
# Conservation and Load Management

- 6 mills per kilowatt-hour (CGS § 16-245m)
- Funds energy efficiency projects
- [EnergizeCT.com](http://EnergizeCT.com)

# Eversource Residential Rate Components 2015-2020



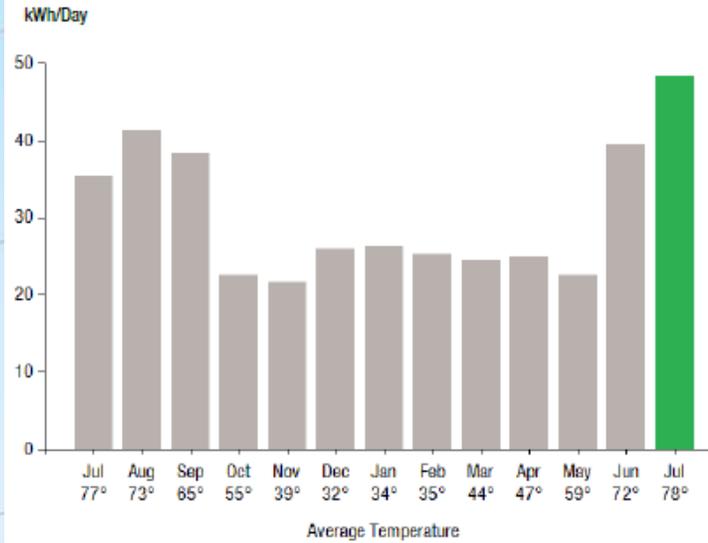
# United Illuminating Residential Rate Components 2015-2020



# July 2020 Rate Increase

Transmission:	\$0.02601 to \$0.03785	(45.5%) (\$18.21 to \$26.50)
FMCC:	\$0.01585 to \$0.03048	(92.3%) (\$11.10 to \$21.34)

## Electric Usage History - Kilowatt Hours (kWh)



## Electric Usage Summary

This month your average daily electric use was **48.0 kWh**

This month you used **37.1% more** than at the same time last year



## PURA Docket 20-01-01

- Reverts to June 2020 rates until May 2021
- Changes administrative rate adjustment framework – will annually require full prudence review of actual revenues and approved expenses with associated rate adjustments each May 1 and Sept. 1
- Bill Design

# Questions? Contact OLR

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Principal Analyst, Office of Legislative Research

**Mary Fitzpatrick**

Associate Analyst, Office of Legislative Research