

Electric Rate-Setting Overview

Lee Hansen

Mary Fitzpatrick

Office of Legislative Research

January 21, 2015

Connecticut General Assembly



Today's Presenters

- From ISO-NE: Mary Louise “Weezie” Noura,
- From PURA: Commissioner Michael Caron, Vice-Chairman John Betkoski, Chairman Arthur House
- From PURA: Jeff Guadiosi, Standard Service Procurement Manager

Electric Rate Setting and Your Electric Bill



Generation

- About 55% of bill
- Regulated by FERC and ISO-NE



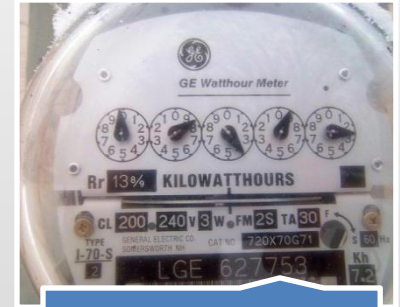
Transmission

- About 14% of bill
- Regulated by FERC



Distribution

- About 26% of bill
- Regulated by PURA



“Other”

- About 5% of bill
- Regulated by PURA
- Set by state policy

0000007


**Connecticut
Light & Power**

A Northeast Utilities Company

Contact Information

Emergency: 1-800-286-2000 (anytime)
 Web Site: www.cl-p.com
 Email: CLPCustomerService@cl-p.com

Residential customers:

Customer Service: 1-800-286-2000
 860-947-2000 Hartford/Meriden
 (M-F 7:00 am - 7:00 pm)

Simplify your life

Use eBill and ePay at www.cl-p.com
 Or Pay by Phone 1-888-783-6618

Electricity Supplier

Connecticut Light & Power
 P.O. Box 270
 Hartford, CT 06141-0270

Due Date Jan 16, 2015	Total Amount Due \$153.69
---------------------------------	-------------------------------------

Statement date: Dec 19, 2014
 Customer name key:

Account number:**Your account summary -- Ebill**

Amount due on Nov 19	\$142.41
Payment Dec 16	- \$142.41
Balance Forward	\$0.00
New Charges/Credits	
Electricity Supply Services	\$84.12
Delivery Services	\$69.57
Total new charges	\$153.69
Total amount due	\$153.69

The *Total amount due* must be received by Jan 16, 2015 to avoid a 1.00% late payment charge.

See Account Messages for important information.

Detail for Service at:

Service reference: Billing cycle: 13

Your meter reading for meter #

For billing period: Nov 18 - Dec 18 (30 days)	Next read date on or about: Jan 20, 2015
Actual reading on Dec 18, 2014	68641
Actual reading on Nov 18, 2014	- 67799
Billed usage	= 842

Electricity Supply Detail	STANDARD SERVICE	
Generation Svc Chrg**	842.00KWH x \$0.099900	\$84.12
Subtotal		\$84.12

(continued on next page)

Please make your check payable to CL&P. Consider adding \$1 for Operation Fuel. To add more, call 1-800-286-2000 or visit www.cl-p.com.


**Connecticut
Light & Power**

A Northeast Utilities Company

Account Number

Statement date

Total amount due

Amount Enclosed

Dec 19, 2014

\$153.69

The *Total amount due* must be received by Jan 16, 2015 to avoid a 1.00% late payment charge.

Generation

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.

Service reference:	Billing cycle: 13
Your meter reading for meter #	
For billing period: Nov 18 - Dec 18 (30 days)	Next read date on or about: Jan 20, 2015
Actual reading on Dec 18, 2014	68641
Actual reading on Nov 18, 2014	- 67799
Billed usage	= 842
Electricity Supply Detail	STANDARD SERVICE
Generation Svc Chrg**	842.00KWH x \$0.099900 \$84.12
Subtotal	\$84.12

Generation

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
- About 40% of residential customers and 90% of commercial & industrial customer have chosen 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
- Known as “Last Resort Service” for commercial & industrial customers

Generation

The Regional Wholesale Market

- Regulated by FERC (Federal Energy Regulatory Commission)
- Administered by ISO-NE (Independent System Operator – New England)
- Bilateral Contracts
- Day Ahead Market
- Capacity Markets

Generation

The Day Ahead Market & Market Rule 1

Estimated Load: 10,000 MWH

Bids to Supply 2000 MWH

- A: 2000 MWH for \$5
- B: 2000 MWH for \$6
- C: 2000 MWH for \$7
- D: 2000 MWH for \$8
- E: 2000 MWH for \$9
- F: 2000 MWH for \$10

Winning Bids

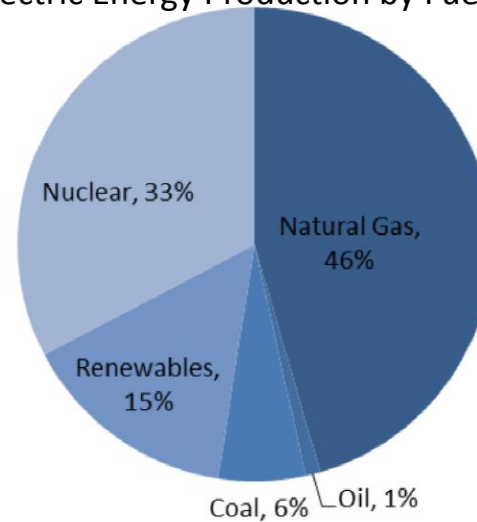
- A: 2000 MWH for \$5
- B: 2000 MWH for \$6
- C: 2000 MWH for \$7
- D: 2000 MWH for \$8
- E: 2000 MWH for \$9
- 10,000 MWH for \$9

Generation

Natural Gas and Recent Wholesale Rate Increases

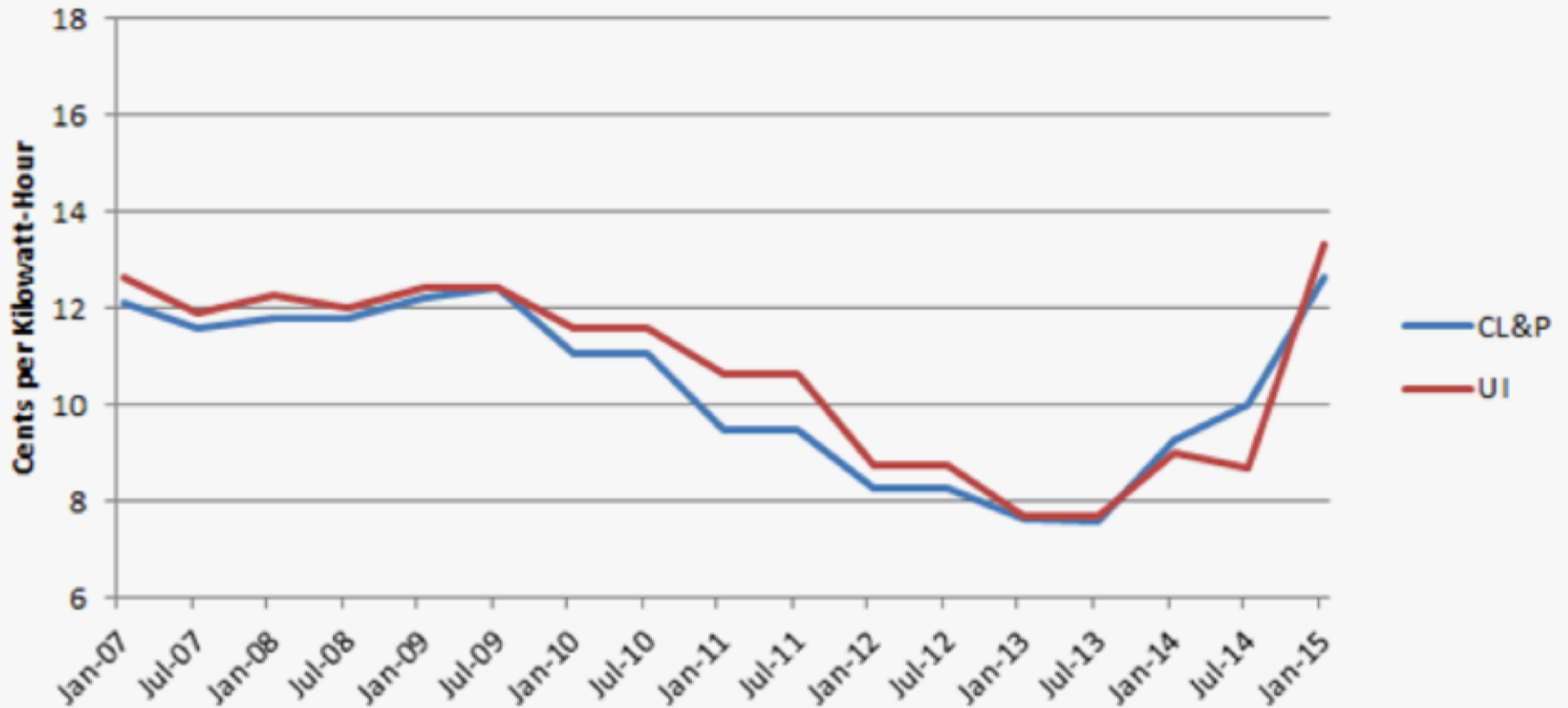
- Increased Demand
- Transmission Pipelines at full capacity during winter
- “Interruptible” vs. “Firm” gas contracts

Regional Electric Energy Production by Fuel Type (2013)



Generation

Standard Service Rates Since 2007



Electric Transmission Rates

- Covers the cost of shipping electricity from power plants to substations.
- Thick cables strung on high towers for long distances
- High voltage






How is it calculated?

- The Federal Energy Regulatory Commission (FERC) has primary jurisdiction.
- FERC sets these rates based on the cost of providing transmission services.
- State law requires PURA to modify retail transmission rates to reflect changes in the FERC-approved rates.

Figure 11
Category C — New Transmission Lines

Project Name	Location	Owner	RSP Project ID	Description	Projected In-Service Year	Status
NEEWS	CT/RI/MA	NU	802 810, 191 1085	Interstate Reliability Project	2015	Under Construction
Manchester – East Hartford	Central CT	NU	801	Build a new Manchester to East Hartford 115kV Line	TBD	Concept

	CL&P Delivery Services Detail	DISTRIBUTION RATE: 001		
	Transmission Chrg	842.00KWH	x \$0.019790	\$16.68
	Distr Cust Srvc Chrg			\$16.00
	Distr Chrg per KWH	842.00KWH	x \$0.027570	\$23.21
	CTA Chrg per KWH	842.00KWH	x \$0.000330	\$0.28
	FMCC Delivery Chrg	842.00KWH	x \$0.006180	\$5.20
	Comb Public Benefit Chrg*	842.00KWH	x \$0.009760	\$8.22
	Subtotal			\$69.57

CL&P Delivery Services Detail

DISTRIBUTION RATE: 001

Transmission Chrg	842.00KWH	x	\$0.019790	\$16.66
Distr Cust Srvc Chrg				\$16.00
Distr Chrg per KWH	842.00KWH	x	\$0.027570	\$23.21
CTA Chrg per KWH	842.00KWH	x	\$0.000330	\$0.28
FMCC Delivery Chrg	842.00KWH	x	\$0.006180	\$5.20
Comb Public Benefit Chrg*	842.00KWH	x	\$0.009760	\$8.22

Subtotal \$69.57



Distribution

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



Distribution

CL&P Delivery Services Detail

DISTRIBUTION RATE: 001

Transmission Chrg	842.00KWH	x	\$0.019790	\$16.66
Distr Cust Svc Chrg				\$16.00
Distr Chrg per KWH	842.00KWH	x	\$0.027570	\$23.21
CTA Chrg per KWH	842.00KWH	x	\$0.000330	\$0.28
FMCC Delivery Chrg	842.00KWH	x	\$0.006180	\$5.20
Comb Public Benefit Chrg*	842.00KWH	x	\$0.009760	\$8.22
<hr/>				
Subtotal				\$69.57

Distribution

Rate Cases

- Distribution rates set by PURA
- PURA must review rates every four years
- Office of Consumer Counsel (OCC) represents ratepayer interests
- Rate decoupling: making revenue less dependent on per kWh usage

Revenues to:

1. Recover prudent capital investments
2. Earn a reasonable rate of return on investments to maintain financial integrity
3. Pay operating costs

Distribution

Statutory Rate Making Principles

CGS § 16-19e requires rates to be made in accordance with the following principles:

- (1) That there is a clear public need for the service being proposed or provided;
- (2) that the public service company shall be fully competent to provide efficient and adequate service to the public in that such company is technically, financially and managerially expert and efficient;
- (3) that the authority and all public service companies shall perform all of their respective public responsibilities with economy, efficiency and care for public safety and energy security, and so as to promote economic development within the state with consideration for energy and water conservation, energy efficiency and the development and utilization of renewable sources of energy and for the prudent management of the natural environment;
- (4) that the level and structure of rates be 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 which shall include, but not be limited to, reasonable costs of security of assets, facilities and equipment that are incurred solely for the purpose of responding to security needs associated with the terrorist attacks of September 11, 2001, and the continuing war on terrorism;
- (5) that the level and structure of rates charged customers shall reflect prudent and efficient management of the franchise operation; and
- (6) that the rates, charges, conditions of service and categories of service of the companies not discriminate against customers which utilize renewable energy sources or cogeneration technology to meet a portion of their energy requirements.

Combined Public Benefits Charge

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



How is it calculated?

- PURA determines the systems benefit charge
- Statute sets the conservation and load management fund at .3 cents per kilowatt-hour (CGS § 16-245m)
- Statute sets the renewable energy investment charge at (at least) .1 cents per kilowatt-hour (CGS § 16-245n)

CL&P Delivery Services Detail

DISTRIBUTION RATE: 001

Transmission Chrg	842.00KWH	x	\$0.019790	\$16.68
Distr Cust Srvc Chrg				\$16.00
Distr Chrg per KWH	842.00KWH	x	\$0.027570	\$23.21
CTA Chrg per KWH	842.00KWH	x	\$0.000330	\$0.28
FMCC Delivery Chrg	842.00KWH	x	\$0.006180	\$5.20
Comb Public Benefit Chrg*	842.00KWH	x	\$0.009760	\$8.22



Subtotal **\$69.57**

Competitive Transition Assessment

- Allows the electric companies to recover certain stranded charges associated with deregulation.
- PA 98-28 (i.e., the “dereg” bill)
- Very minimal

CL&P Delivery Services Detail

DISTRIBUTION RATE: 001

Transmission Chrg	842.00KWH	x	\$0.019790	\$16.68
Distr Cust Srvc Chrg				\$16.00
Distr Chrg per KWH	842.00KWH	x	\$0.027570	\$23.21
CTA Chrg per KWH	842.00KWH	x	\$0.000330	\$0.28
FMCC Delivery Chrg	842.00KWH	x	\$0.006180	\$5.20
Comb Public Benefit Chrg*	842.00KWH	x	\$0.009760	\$8.22

Subtotal **\$69.57**



Images

Electric Distribution Rates: [Photo](#) by Dirk Ingo Franke / [CC by 3.0](#)

Electric Transmission Lines: [Photo](#) by Paul Moss / [CC BY-SA 2.5](#)

"Brayton Point Power Station" [Photo](#) by Wikimaster97commons / [CC BY-SA 3.0 via Wikimedia Commons](#)

"CFL Bulb" [Picture](#) by Sun Ladder / [CC BY-SA 3.0](#)

Electric Rate Setting and Your Electric Bill



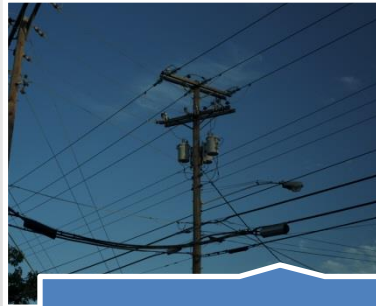
Generation

- About 55% of bill
- Regulated by FERC and ISO-NE



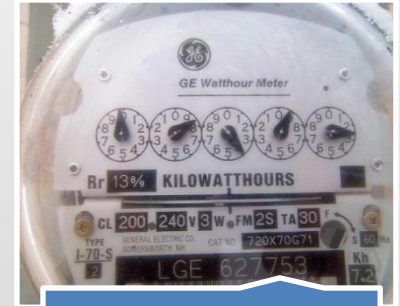
Transmission

- About 14% of bill
- Regulated by FERC



Distribution

- About 26% of bill
- Regulated by PURA



“Other”

- About 5% of bill
- Regulated by PURA
- Set by state policy