

Office of the Public Advocate

Briefing to the Joint Standing Committee on Energy, Utilities and
Technology Committee: Electricity

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Overview

- The Office of the Public Advocate intervenes on behalf of consumers in most cases involving electric utilities before the PUC.
- This presentation:
 - Reference
 - Competitive Electricity Providers
 - Renewable Energy Bill Impacts
 - Low Income Programs
 - Regional Cost Drivers

I. Reference

Customer Classes

Class	Examples	Average Monthly Usage (kWh)	Annual Usage (kWh)
Residential	Single family home or separately metered apartment	540	6,480
Small Commercial & Industrial	Small restaurant or café, manufacturer of polyurethane products	850	10,200
Medium Commercial & Industrial	Bank or drug store branch, supermarket, precision manufacturer	13,000	156,000
Large Commercial & Industrial	Large hospital or college, lumber/forest product company	500,000	6,000,000

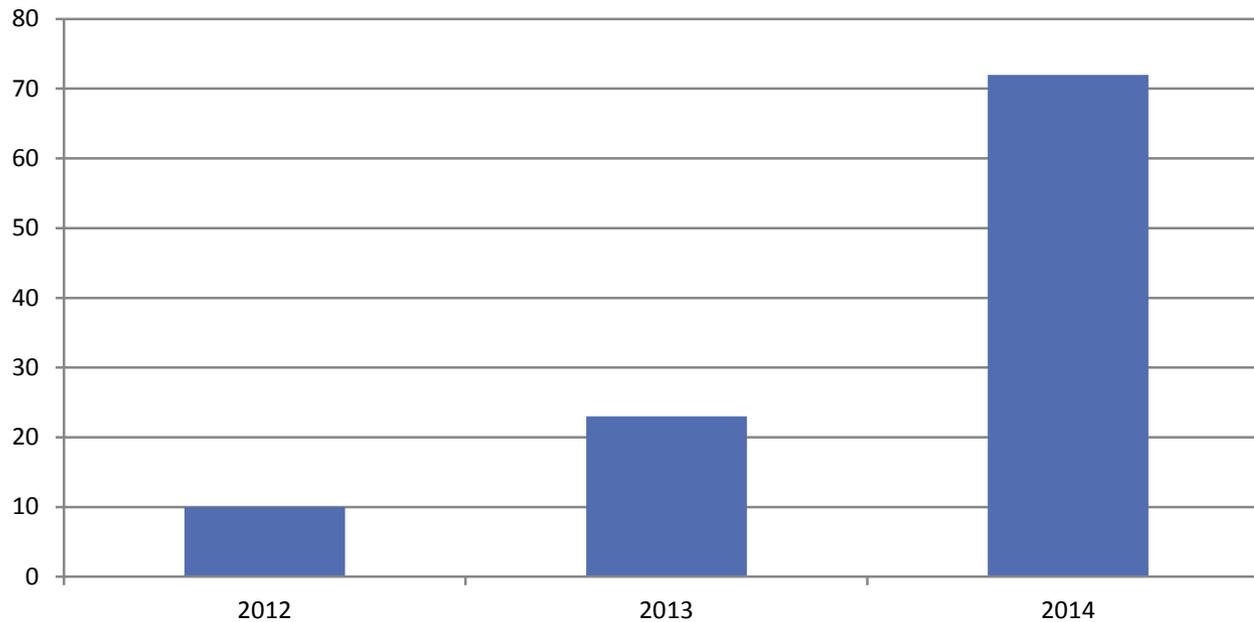
Rate Impact Rules of Thumb

- A 1 ¢/kWh increase in electricity prices will increase the average residential bill by \$5.40 a month, or \$65 a year.
- That same increase will cost the average large commercial or industrial customer \$5,000 a month, or \$60,000 a year.
- \$120 million per year, spread across all Maine ratepayers on a per kWh basis, will increase rates by ~1 ¢/kWh
 - Total Maine retail electricity sales 2012 = 11.56 million MWh (EIA)
- But rate impact is rarely this simple . . .

II. Competitive Electricity Providers (CEPs)

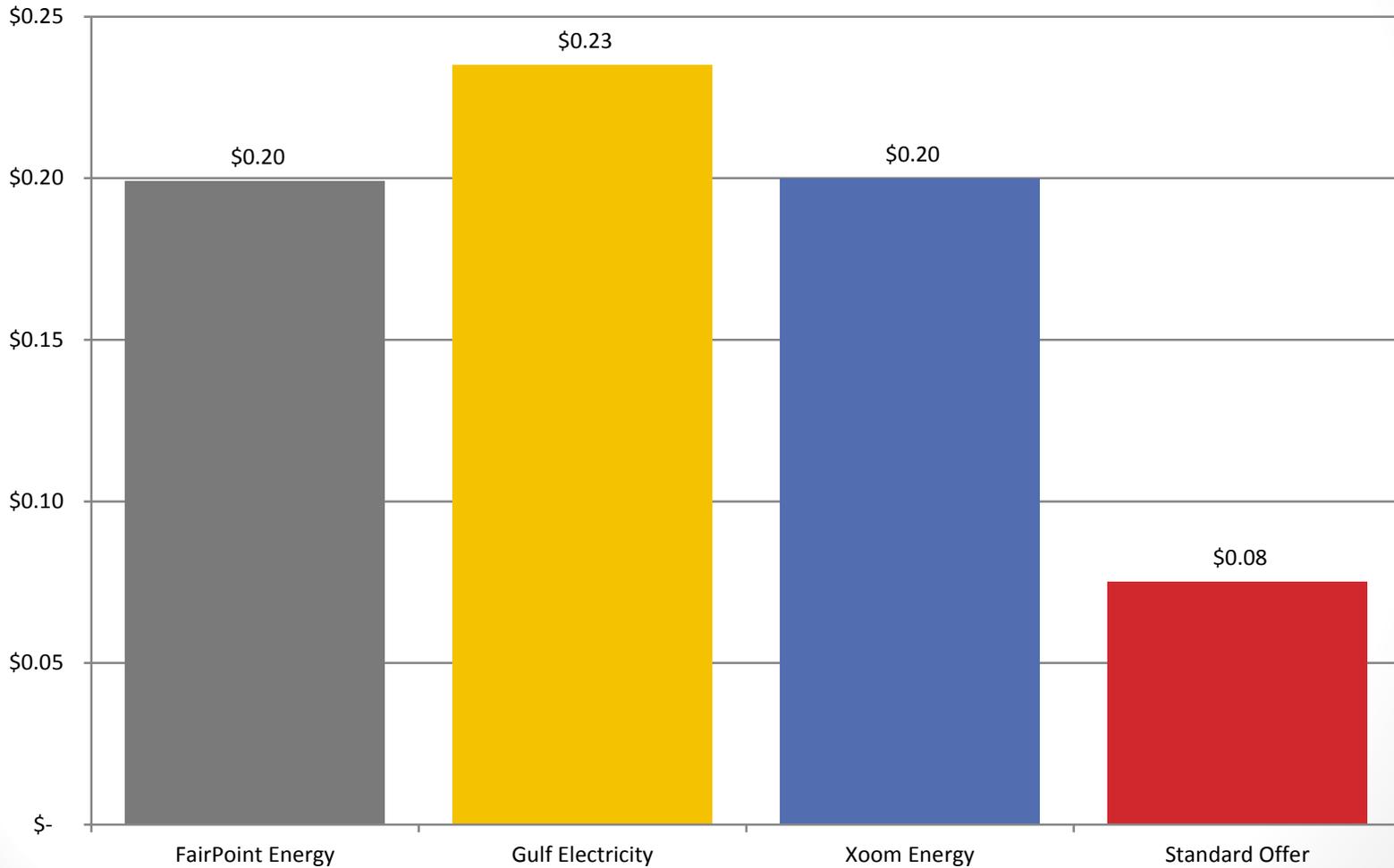
Competitive Electricity Providers (CEPs)

**Consumer Assistance Division
CEP Complaints**



- 74 % of all electricity-related calls from customers at OPA

Variable Rates, Winter 2013-14



New Commission Rules for CEPs

- Terms of Service must be provided to customers within 7 days and available on website
- Customers must affirmatively consent to changes in terms of service
- Renewal notices:
 - Two clearly defined notifications prior to end of contract
 - Max renewal of 18 months or term of first contract
- Customer requests for cancellation must take place within 2 days
- Fixed rate contracts that renew at a variable rate must be month-to-month
- New definitions, requirements for variable rates
- Effective January 26, 2015.

CEP Information

<http://www.maine.gov/meopa/utilities/electric/supply.html>

This table lists CEP offerings as of February 11, 2015. **Prices can change without notice, so we strongly urge you to go to the website or call the CEPs to confirm before signing up.**

Competitive Electricity Provider	Rate for CMP Customers (¢/kWh)	Rate for Emera Maine (Bangor Hydro) Customers (¢/kWh)	Term	Early Termination Fee	Telephone
Standard Offer (PUC)	7.56	7.58	Until 3/1/15	n/a	n/a
	6.54	6.50	3/1/15- 12/31/15		
Electricity Maine	9.994	9.994	20 Months Fixed	\$100	866-573-2674
FairPoint Energy	7.56	7.58	6 Months Fixed	\$50 for Fixed Customers	866-842-1084
	17.99	16.99	Variable		
Gulf Electricity	7.5	7.5	Through Nov. 2015	\$75	855-485-3353
C.N. Brown Electricity	8.79	8.79	11/15 Fixed	\$100	800-296-2721

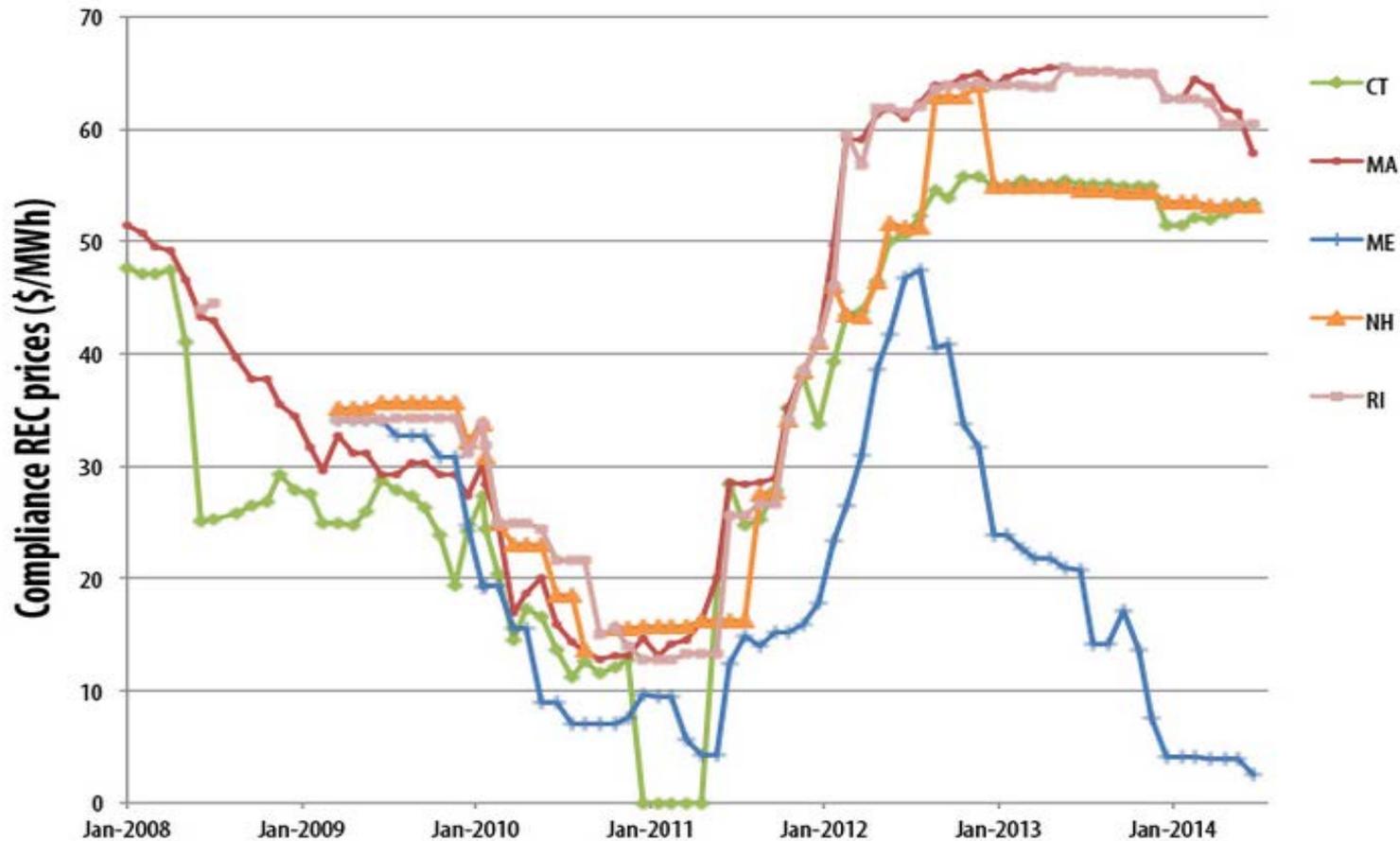
III. Renewable Energy Rate Impacts

Maine Renewable Energy Incentives

- Renewable Portfolio Standard
- Net Energy Billing
- Community Based Renewable Energy
- Long Term Contracts
 - 3210-C
 - Ocean Energy

Renewable Energy Credits

Compliance market (primary tier) REC prices, January 2008 to July 2014
Source: [Marex Spectron](#) (2014).



Source: US Department of Energy, <http://apps3.eere.energy.gov/greenpower/markets/certificates.shtml?page=5>

Renewable Portfolio Standard

Monthly Cost per Customer Class, Class I RECs

	2012	2013 (projected)
Residential	\$0.86	\$0.30
Small C&I	\$1.36	\$0.47
Medium C&I	\$20.80	\$7.22
Large C&I	\$800.00	\$277.67

- Total Cost:
 - 2012: \$18,429,710
 - 2013: \$5,592,450 (projected)
- 2012 values from Maine PUC Annual Report on Renewable Resource Portfolio Requirement, Mar. 31, 2014
- 2013 projections assume \$10/Mwh Class I REC price

Net Energy Billing

Summary of CMP Net Energy Billing Reports, 2012-2014

	NEB Customers	Total Capacity (kW)	Total Electricity Generated (kWh)	Estimated revenue loss
2012	1,007	5,425.26	6,738,258	\$425,062
2013	1,302	7,587.56	9,357,606	\$630,478
2014	1,604	10,744.92	12,833,620	\$860,302

Net Energy Billing

Monthly Cost per Customer Class

	CMP	Emera Maine (BHE)	Emera Maine (MPS)
Residential	\$0.05	\$0.04	\$0.06
Small C&I	\$0.09	\$0.06	\$0.09
Medium C&I	\$1.32	\$0.86	\$1.44
Large C&I	\$50.83	\$33.22	\$55.21

- Total Net Cost:
 - CMP: \$860,302
 - Emera Maine: \$157,610
- Emera values are based on 2013, CMP on 2014
- Costs recovered through utility rate setting process, not per-kWh charge
- **Source:** estimated revenue losses in annual net energy billing filings by T&D utilities (estimated generation x T&D rate for customer)

Community Based Renewable Energy

Monthly Cost per Customer Class

CMP	Current	Projected
Residential	\$0.00	\$0.17
Small C&I	\$0.00	\$0.30
Medium C&I	\$0.00	\$4.60
Large C&I	\$0.00	\$180.83

Emera Maine (BHE)	Current	Projected
Residential	\$0.15	\$0.92
Small C&I	\$0.24	\$1.45
Medium C&I	\$3.61	\$22.16
Large C&I	\$138.72	\$852.35

- Total Net Cost:
 - CMP: \$66,000
 - Emera Maine: \$422,150
- Projections of above market costs based on contract price, average wholesale price, and representative capacity factors for contracts authorized to date by the MPUC
- Emera Maine (MPS) projected to be about halfway between CMP and BHE

Long Term Contracts

Monthly Cost per Customer Class

CMP	Current
Residential	\$0.23
Small C&I	\$0.36
Medium C&I	\$5.58
Large C&I	\$214.50

Emera Maine (BHE)	Current
Residential	\$0.15
Small C&I	\$0.23
Medium C&I	\$3.55
Large C&I	\$136.48

- Total Net Cost:
 - CMP: \$3,629,885
 - Emera Maine: \$415,341
- Included contracts:
 - Rollins Mountain Wind
 - Verso RECs
- No contracts currently allocated to Emera Maine, Northern Division
- Source: CMP (2014 projections) and Emera Maine (2014 actual)

Long Term Contracts

Contracts for Energy Approved by the Maine PUC
Pursuant to 35-A M.R.S. § 3210-C But Not Yet Operational

	Nameplate Capacity (MW)	Estimated Annual Production (MWh)	Contract Term
Maine Aqua Ventus I	12	43,099	20 years
ORPC Cobscook Bay	5	11,307	20 years
Downeast Wind	90	280,000	20 years
Highland Wind	44	183,957	20 years
Weaver Wind	73	192,701	25 years

According to PUC estimates, assuming that all generation currently under Commission-approved long term contracts is developed, the annual production of these facilities will equal 10% of Maine's annual load.

Summary - Residential

Total Monthly Bill Impact, Average Residential Customer

	CMP	Emera Maine (BHE)
Renewable Portfolio Standard (Class I)	\$0.30	\$0.30
Net Energy Billing	\$0.05	\$0.04
Community Based Renewable Energy	\$0.00	\$0.15
Long Term Contracts	\$0.23	\$0.15
Total	\$0.58	\$0.64

Summary – Large Commercial & Industrial

Total Monthly Bill Impact, Average Large Commercial & Industrial Customer

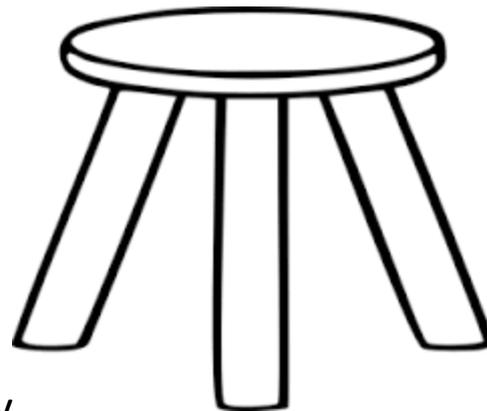
	CMP	Emera Maine (BHE)
Renewable Portfolio Standard (Class I)	\$277.67	\$277.67
Net Energy Billing	\$50.38	\$33.22
Community Based Renewable Energy	\$0.00	\$138.72
Long Term Contracts	\$214.50	\$136.48
Total	\$542.99	\$586.10

IV. Low Income Assistance

Low Income Assistance

- 35-A M.R.S. § 1702-A
 - “Priority. When the interests of consumers differ, the Public Advocate shall give priority to representing the interests of consumers in the following order:
A. Low-income consumers; B. Residential consumers . . .”

Make electricity bills affordable
for low income customers



Energy
Efficiency

Low Income
Assistance
Program

Arrearage
Management

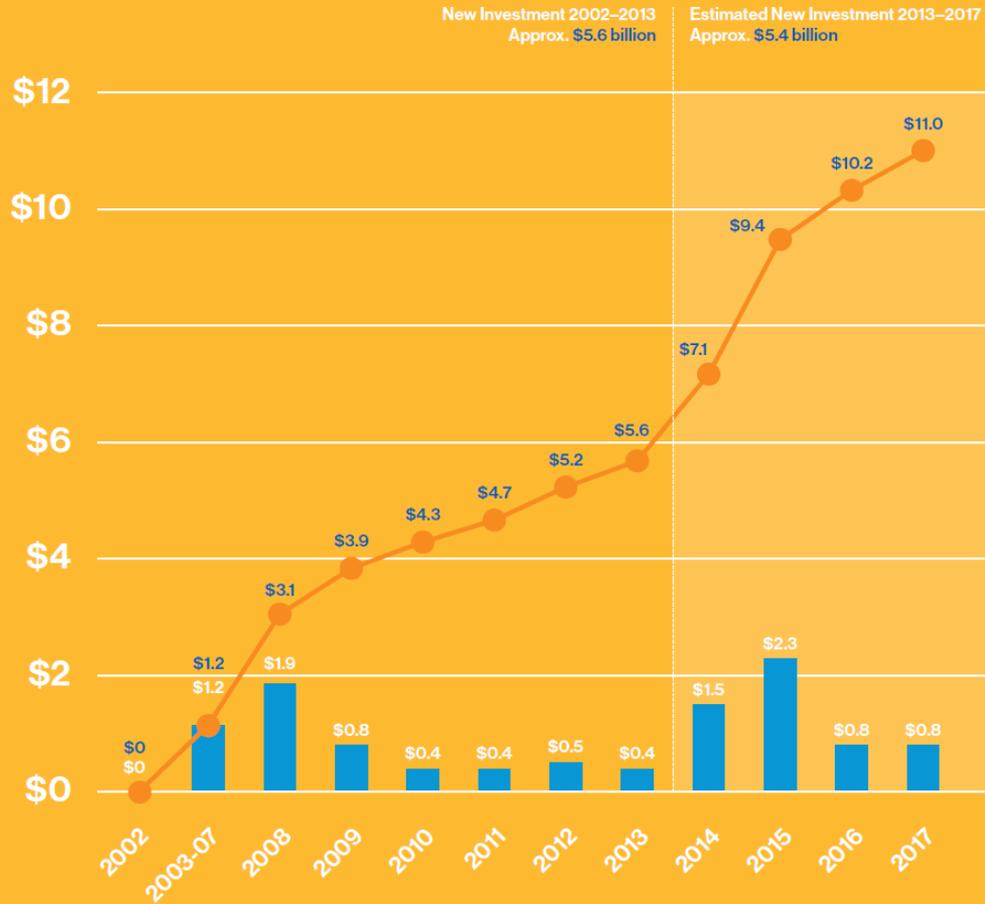
Arrearage Management Programs

- Enacted by the 126th Legislature (P.L. 2014, Ch. 556)
- Provides opportunity for low income customers to reduce or eliminate arrearages with on-time payments of current bills.
- Participants must complete an energy usage assessment, and EMT will develop a complementary energy efficiency program.
- Commission issued draft rule on February 4th.
- Utilities must implement programs by October 1st.

IV. Regional Cost Drivers

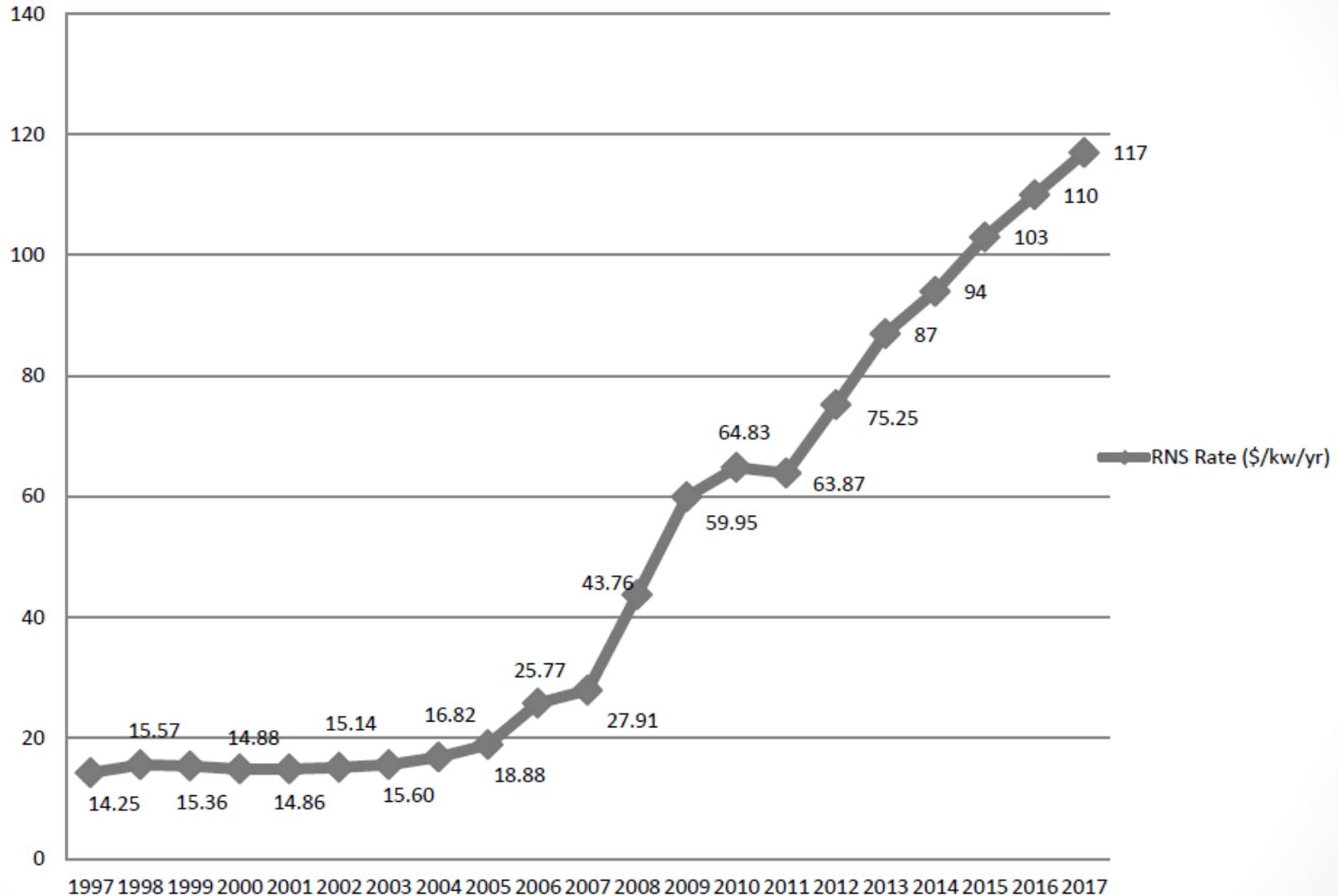
New transmission investment in New England (in billions)

■ New Investment by Year
● Cumulative Investment



Note: Numbers rounded; includes in-service, under-construction, planned, and proposed projects
Source: ISO New England Transmission Project List, October 2013

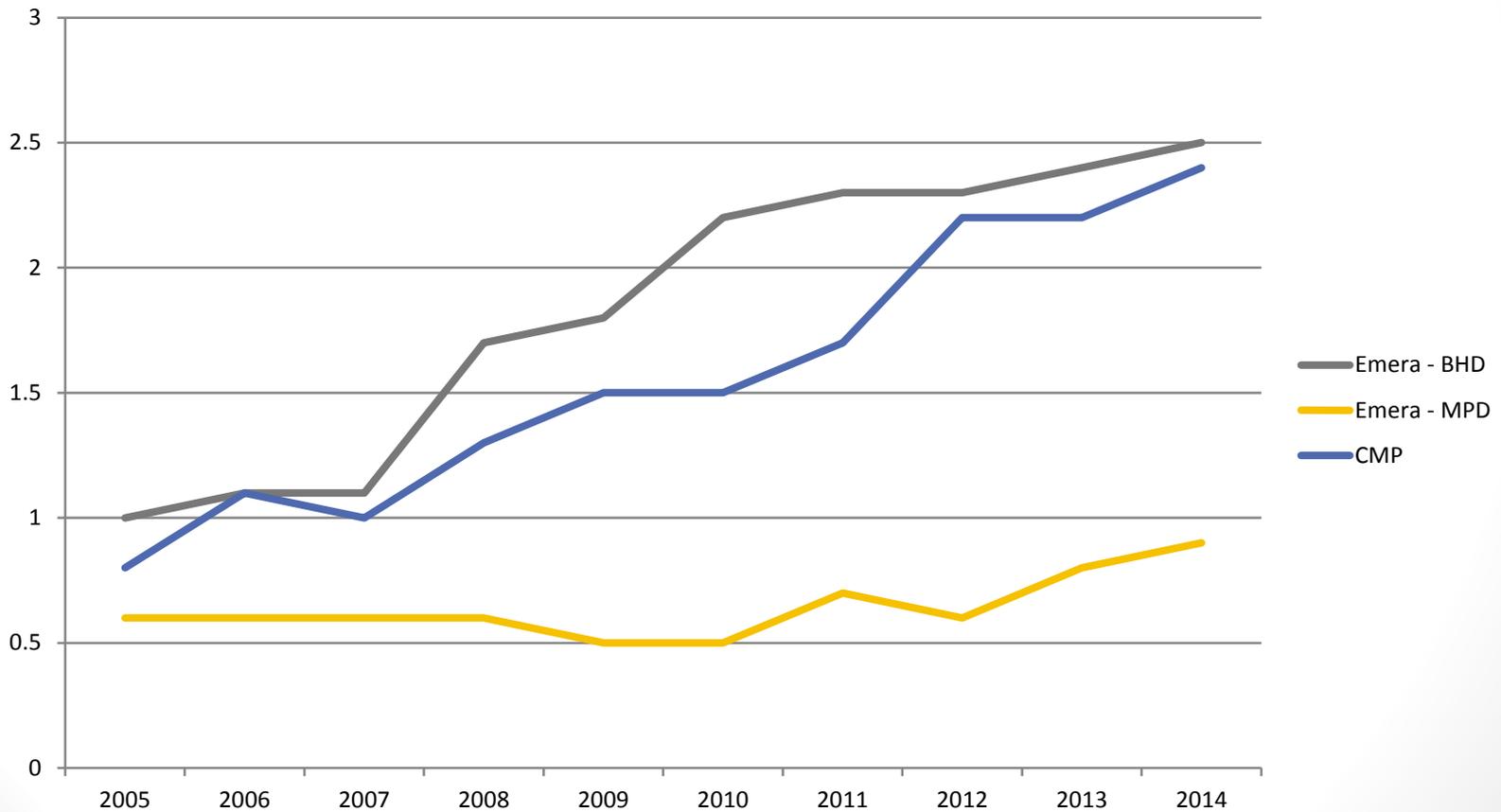
ISO New England RNS Rate (\$/kw/yr)



Source: ISO New England 2013 Regional System Plan

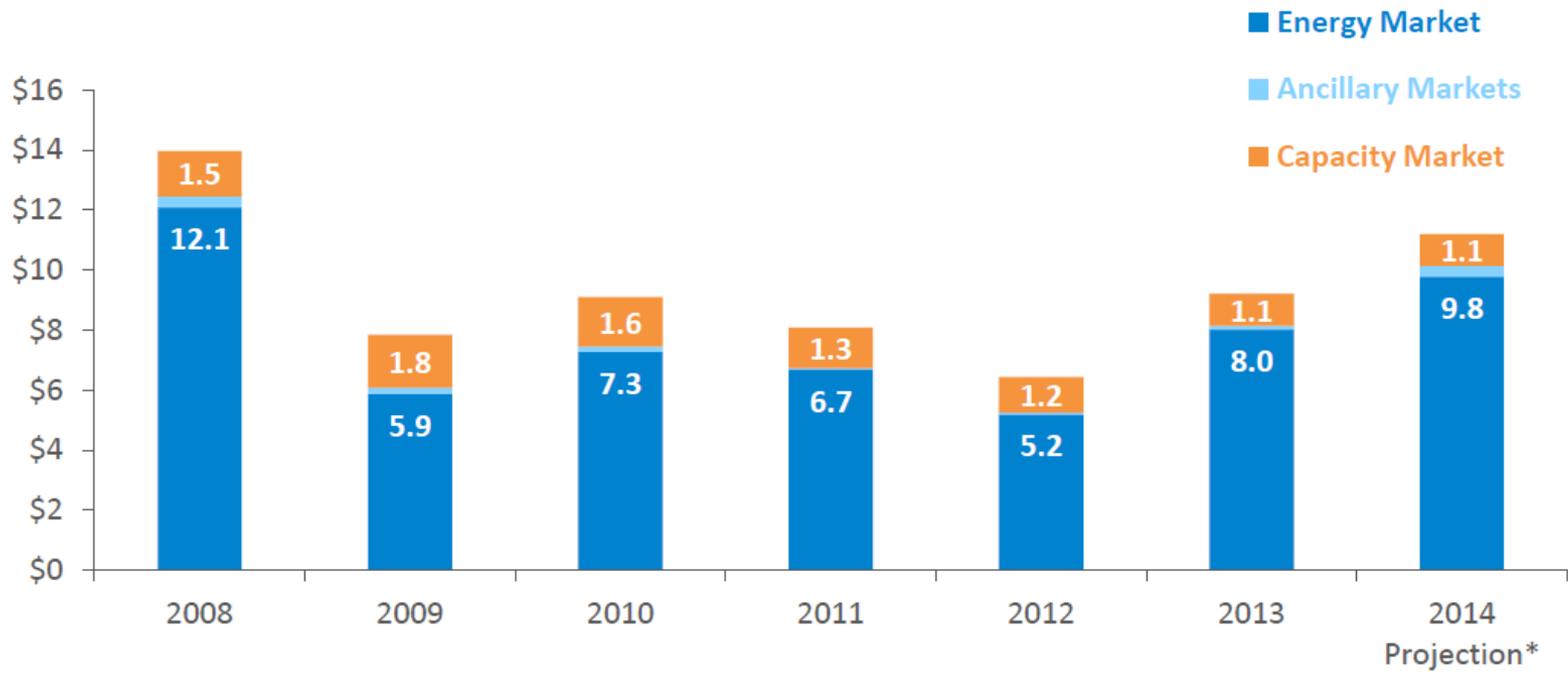
Transmission Rates

Average Transmission Rates (¢/kWh)

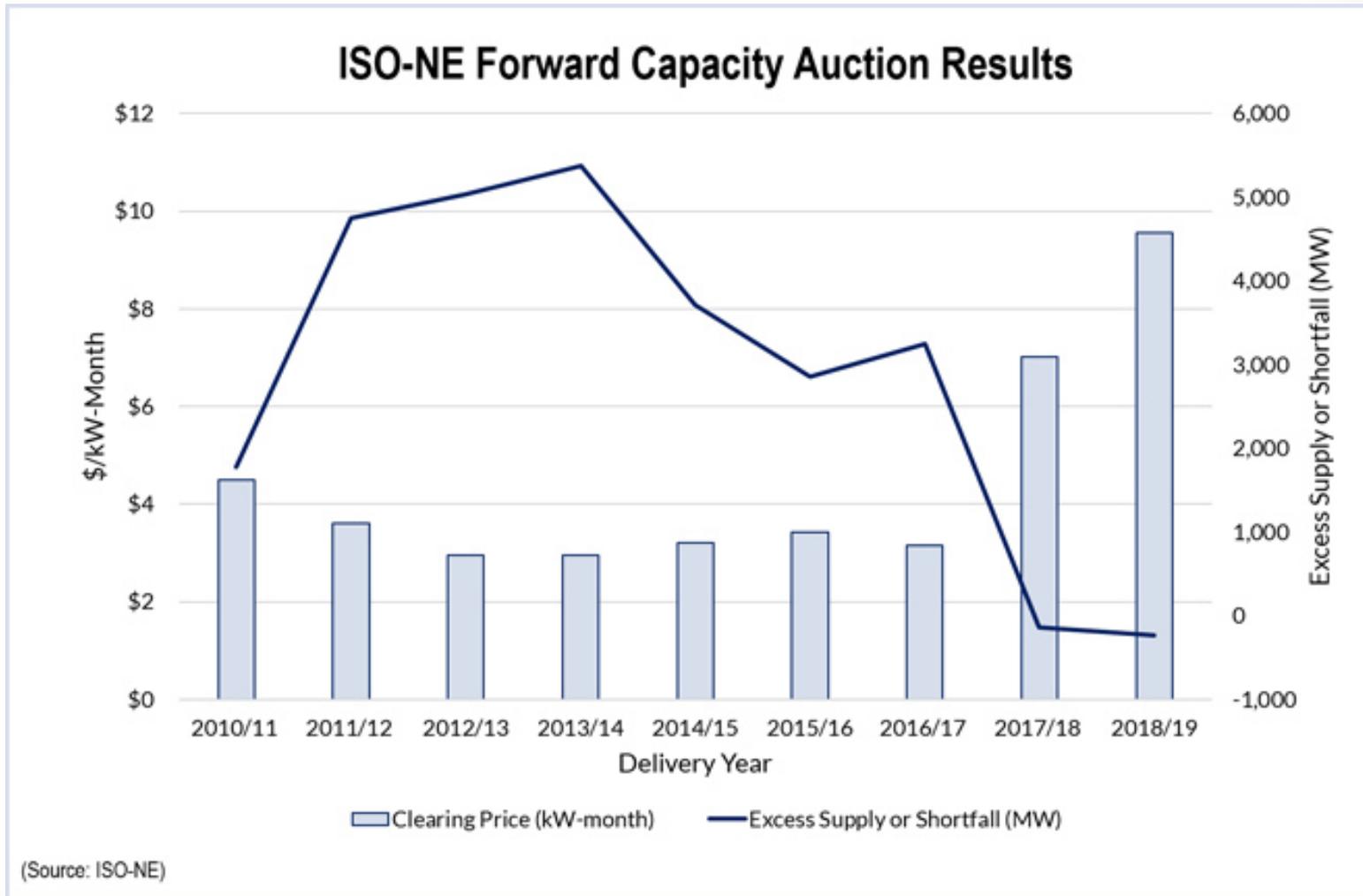


Capacity Markets

Annual Value of Wholesale Electricity Markets
(in billions)



Capacity Markets



Acronyms

- CEP – Competitive Electricity Provider including marketers, brokers and aggregators. All of these entities have applied for and received a license from the MPUC to sell electricity. The PUC does monitor CEPs for adherence to license conditions and to other applicable state laws, but CEPs are not regulated the way CMP and BHE and other utilities are.
- COUs – Consumer owned utilities – Kennebunk Light and Power, Fox Island Electric and Madison Electric Works, for example.
- CPCN – Certificate of Public Convenience and Necessity. Used in reference to transmission construction cases before the PUC.
- Distribution – the component of the utility's system running from the substation to the ultimate consumer. Regulated by MPUC.
- IOUs – Investor owned utilities – CMP in southern Maine, is owned by Iberdrola, S.A. and Emera Maine in northern Maine, owned by Emera, Inc
- ISO-NE – Independent System Operator, New England. Independent, non-profit regional transmission organization. Oversees bulk power system and transmission lines for New England, excluding Northern Maine
- kW – kilowatt. A measure of power. Things that generate power include turbines, boilers and generators. Things that use power include appliances, light bulbs, etc.
- kWh – kilowatt hour. A measure of energy. This is the unit used on electricity bills as it measures usage over time.
- Transmission – high voltage grid down to the substation. Regulated by FERC
- T&D – Transmission and Distribution. Owned and operated by regulated utilities.