

Status and Future of Energy Efficiency Funding Sources - *A Regional Regulatory Forecast*

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About ISO New England

Not-for-profit Corporation

- Created in 1997 to oversee New England's restructured electric power system; Regulated by Federal Energy Regulatory Commission

Regional Transmission Organization

- Independent of companies doing business in market; no financial interest in companies participating in the market

Major Responsibilities

- Reliable operation of the electric grid
- Administer wholesale electricity markets
- Plan for future system needs



New England's Electric Power Grid at a Glance

- 6.5 million households and businesses; population 14 million
- More than 300 generators
- Over 8,000 miles of high-voltage transmission lines
- 13 interconnections to electricity systems in New York and Canada
- Approx. 32,000 megawatts of total supply and 2,750 megawatts of demand resources
- All-time peak demand of 28,130 megawatts, set on August 2, 2006
- More than 450 participants in marketplace
- \$5-11 billion annual energy market value



Forward Capacity Market – Objectives

- Procure enough capacity to meet New England's forecasted demand and reserve requirements three years in the future
- Provide a long-term (up to 5 year) commitment to resources to encourage investment
- Select a portfolio of Supply and Demand Resources through a competitive ***Forward Capacity Auction (FCA)*** process
- The selected resources are paid the market-clearing price

Eligible Resources

- **Supply Resources**

- Traditional Generation (Oil, Coal, Natural Gas, etc)
- Intermittent Generation (Wind, Solar, etc.)
- Renewable Generation



- **Demand Resources**

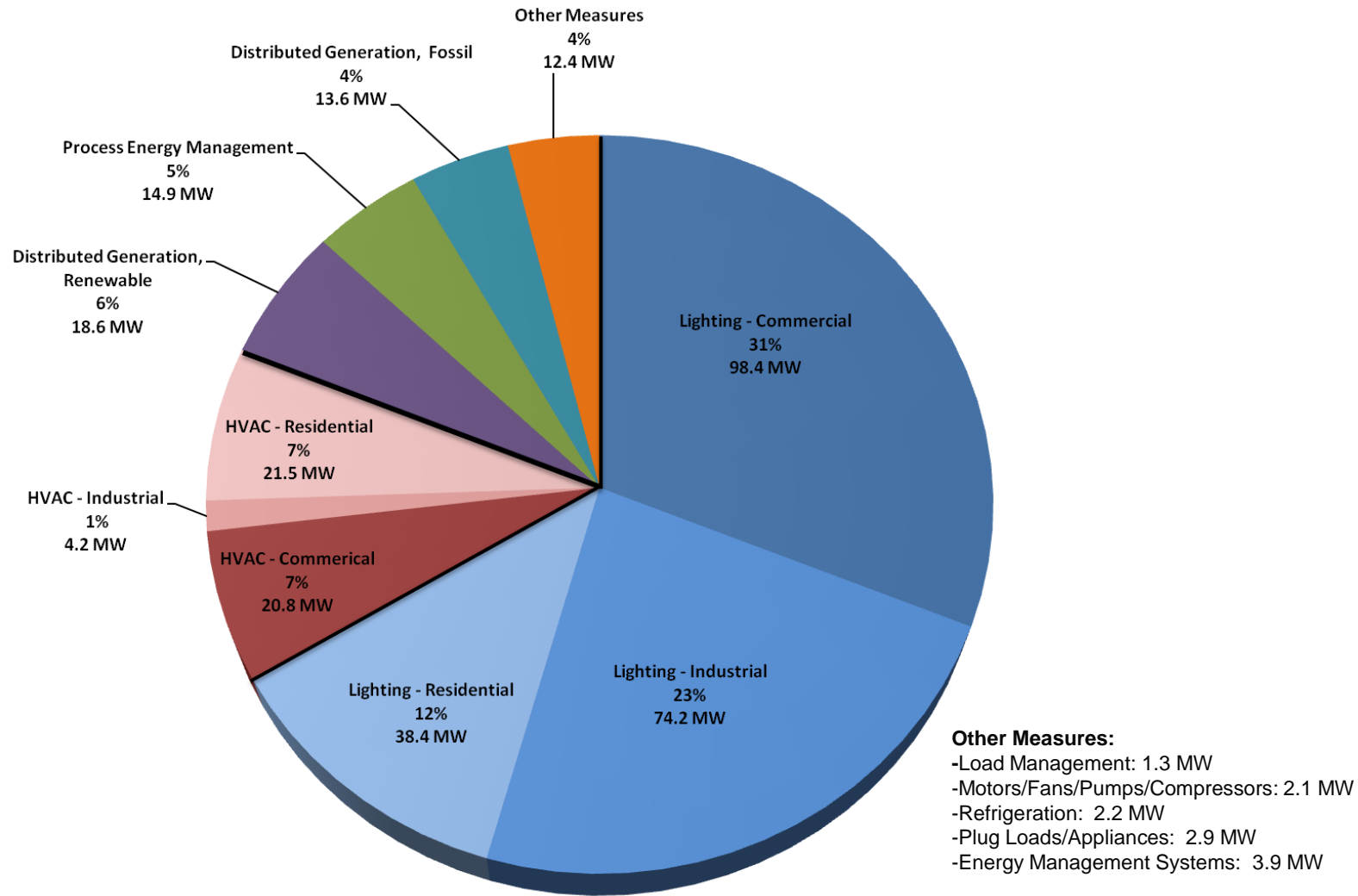
- Energy Efficiency
- Distributed Generation
- Load Management



Energy Efficiency in the Forward Capacity Market

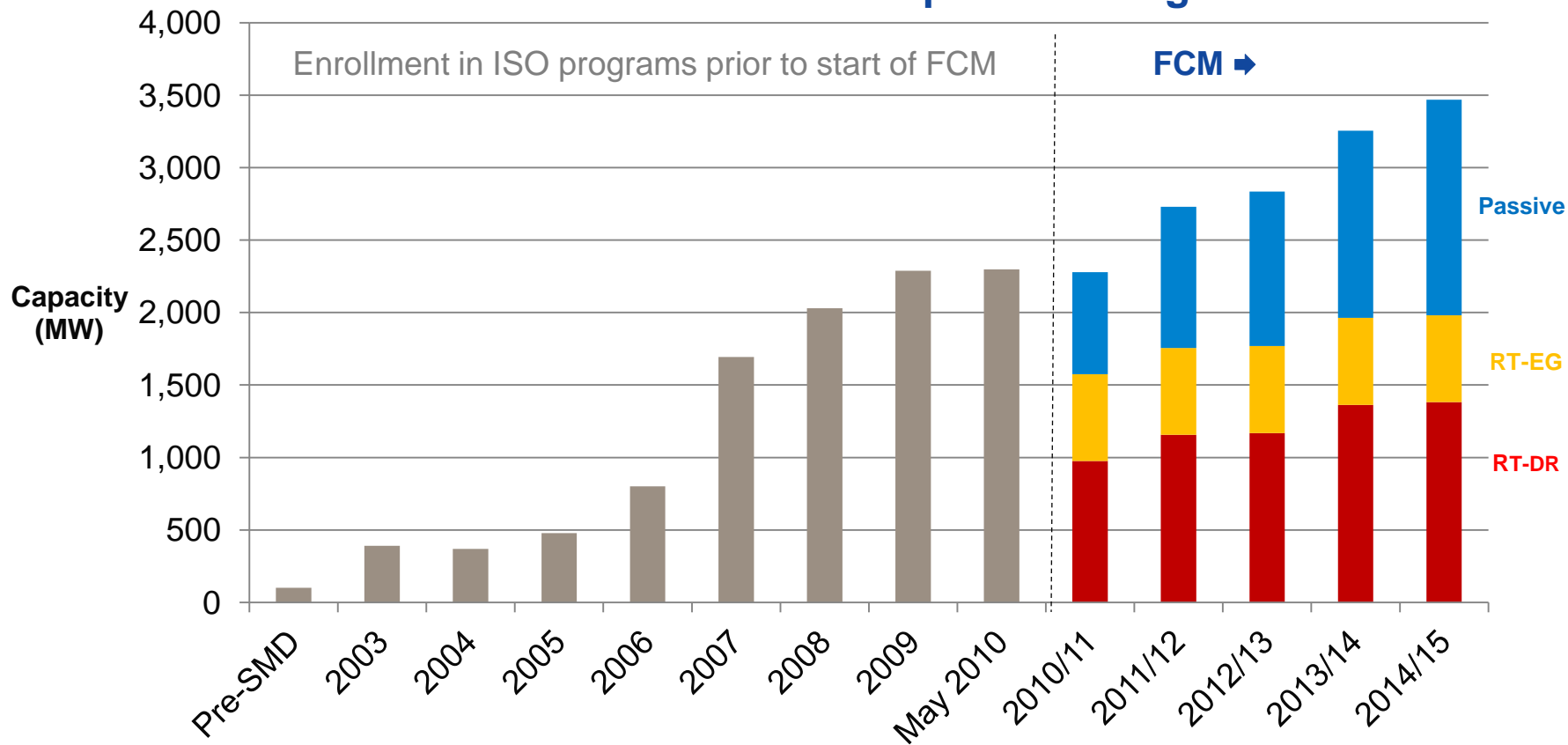
- Supply Resource used to support installed capacity requirement 3 years forward
- Same payment rate as all other supply resources
- Paid a Gross Up for avoided transmission & distribution
- Subject to penalties and termination
- Audited for each summer and winter season
- Required to submit M&V documentation quarterly/monthly
- Capacity payment only allowed for measures within useful measure life

On-Peak and Seasonal Peak Demand Resources Distribution of Measures CP 2014-15



Demand Resources Growing in New England

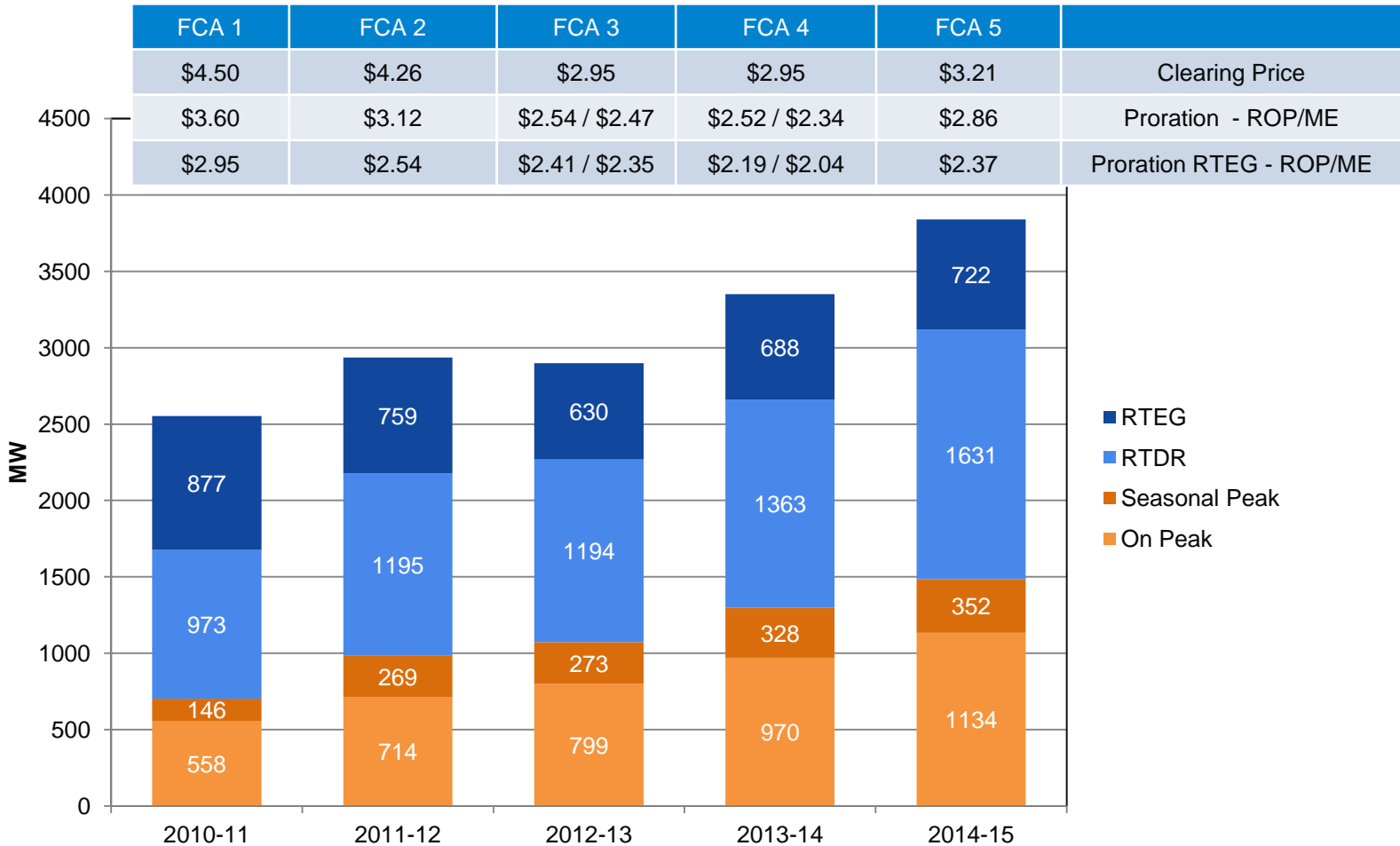
Demand Resource Participation in Region



2010/11–2014/15: Total DR cleared in FCAs 1–5 (New and Existing); Real-Time Emergency Generation capped at 600 MW.

Demand Resource

All Cleared Capacity by Type



ROP/ME = Rest of Pool/Maine Capacity Zones

Capacity Values include 8% T&D gross up.

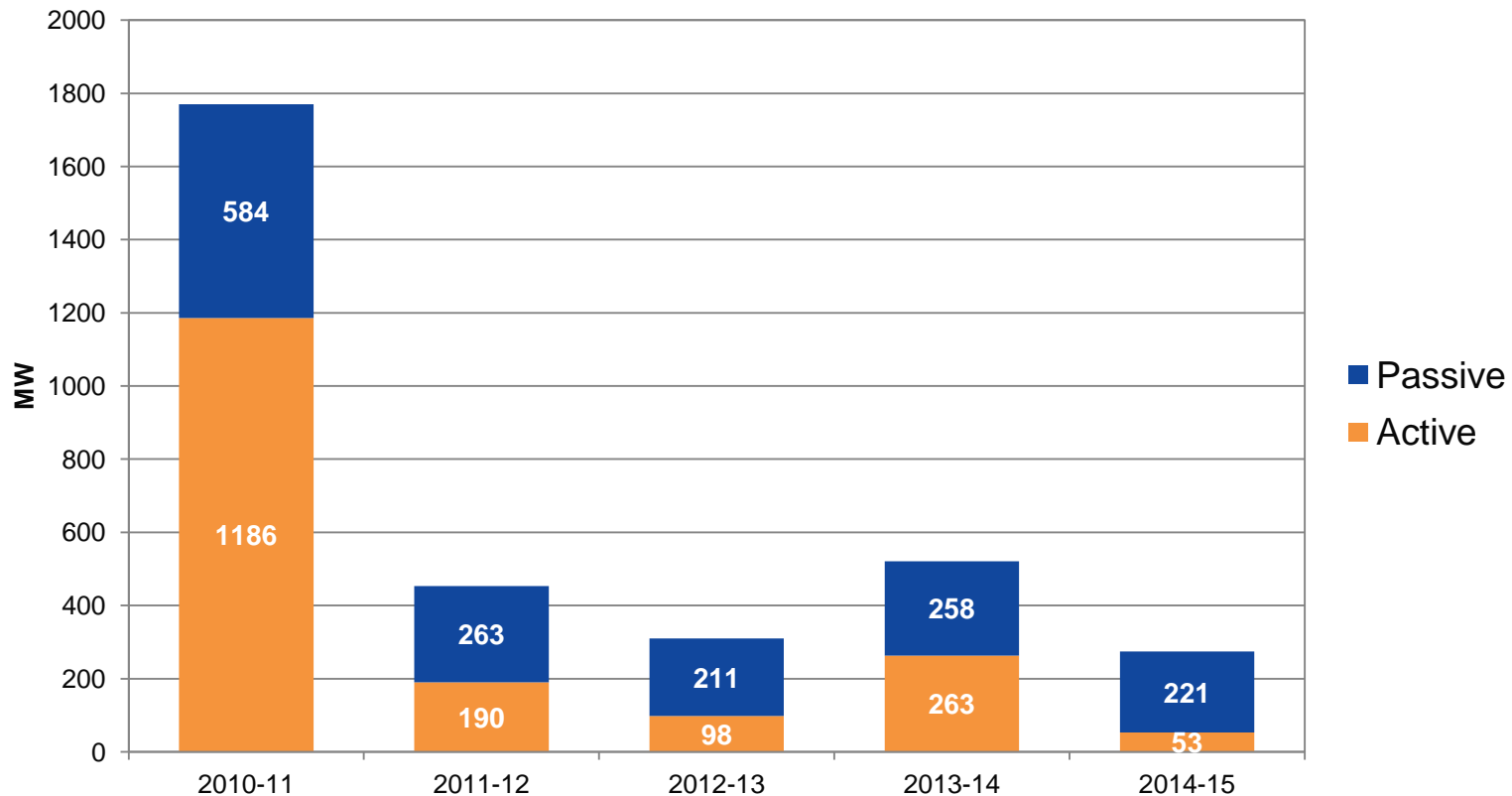
Forward Capacity Auction Value of Demand Resources (\$ Millions)

	Capacity Commitment Period					Grand Total
	2010-11	2011-12	2012-13	2013-14	2014-15	
Real-Time Emergency Generation Resource	\$30	\$22	\$18	\$17	\$20	\$106
Real-Time Demand Response Resource	\$48	\$44	\$37	\$42	\$48	\$218
Seasonal Peak Demand Resource	\$7	\$10	\$8	\$10	\$12	\$48
On-Peak Demand Resource	\$28	\$29	\$27	\$32	\$41	\$158
Grand Total	\$113	\$104	\$90	\$101	\$121	\$530

*Values include FCA applicable gross-up

**Values are valid as of auction filing CSOs and do not reflect in secondary auctions or bilateral contracts

Demand Resource New Cleared Capacity by Type



Passive DR: Energy Efficiency and Distributed Generation
Active DR: Demand Response and Emergency Generation

Capacity Values include 8% T&D gross up.

Future Opportunities and Changes

- FCA Qualification process is on-going (FCA7 2016-17 Show of Interest – January 2012)
- FCM reform (rule changes) for minimum offers are favorable for EE at \$0.00
- Expanding New England Market for EE by regulatory support for all cost effective demand side management (established in MA and RI, considering in CT)
- Sources of funding maintained or expanding

Contact Information

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