

Maine – The Forward Capacity Market & Role of Energy Efficiency

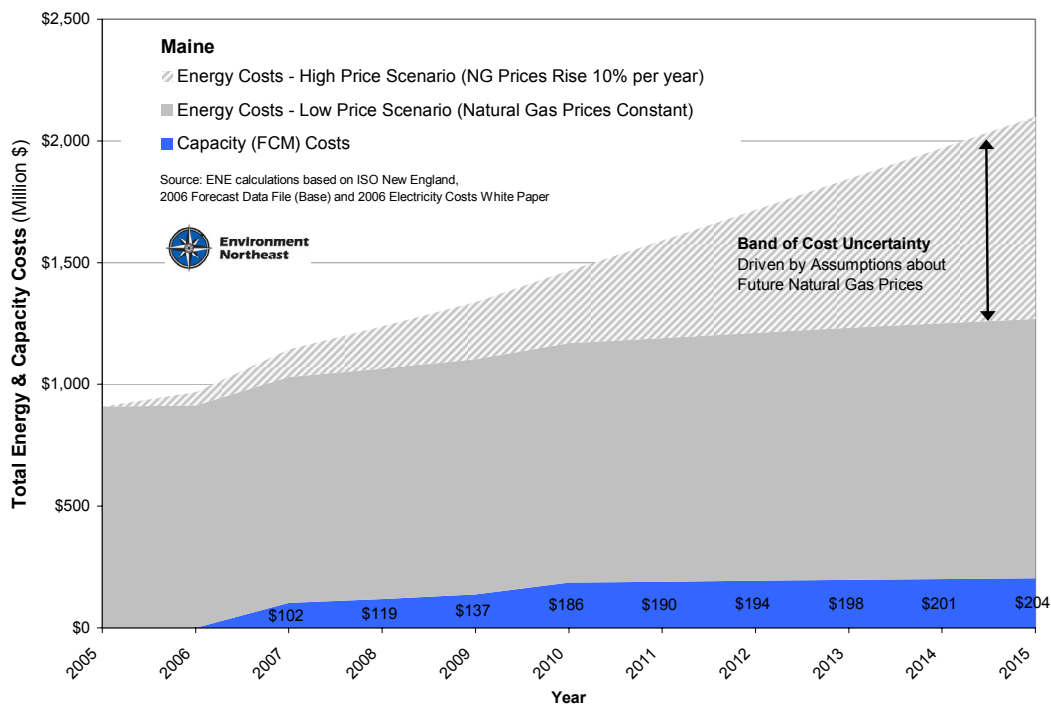


The Forward Capacity Market: ISO-New England is currently formulating rules for the new forward capacity market (FCM, previously known as LICAP) which is designed to ensure sufficient electric capacity during periods of peak demand. This market, expected to reach \$4-5 billion annually, will affect all electric ratepayers. Importantly, for the first time, lower cost demand side resources, particularly energy efficiency, will be allowed to compete for capacity payments. The more efficiency resources are allowed to compete, the more they will contribute to lower costs, keeping dollars in region and building jobs.

- The amount of capacity needed for reliability is determined by several factors including forecast peak demand, a reserve margin for unexpected generating facility outages and the size of the largest system component (generation or transmission) which might be unavailable.
- The most notable aspect of the settlement is that, for the first time, energy efficiency and other demand-side resources are treated as capacity on an equal basis with generating units. These resources will receive capacity payments during the Transition and can bid into the FCM auctions. Because this is a new approach, developing the rules that define the credit to be given to efficient lighting, air conditioning and other equipment so it is equivalent to the credit given to metered generating facilities will be critical and is ongoing at ISO.
- The ISO will hold FCM auctions three years in advance for capacity resources necessary to meet an Installed Capacity Requirement (ICR) which is forecast for that year. The first such auction will be in 2007 for resources needed in 2010. In the meantime, there will be a transition period during which all capacity resources meeting minimum requirements will receive payments at levels specified in the settlement (\$3 to \$4 per kW-month).
- This new mechanism has the potential to produce substantial new funding for energy efficiency, load management, demand response and distributed generation and to offset the need for new generation facilities. ***Assuming the money is reinvested in expanded efficiency programs, the state and utilities will be able to recapture a portion of the FCM costs through payments to efficiency programs that reduce consumer's bills.***
- Businesses and other consumers should aggressively support rules that will maximize the contribution of efficiency resources that reduce future demand growth and benefit consumers.

Projections of Future State Electric Energy & Capacity Costs

Capacity costs will be small in relation to energy costs, but could rise to well over \$100 million per year.



Projections of Capacity Payments to Existing Electric Energy Efficiency Programs

Existing efficiency programs should qualify for FCM payments for the measure life of the program. The table below presents estimates of the payments to the existing state efficiency programs. The high and low estimates assume different benefits in terms of demand reductions, with programs that are highly effective receiving FCM payments that cover 37% of their up-front costs and programs with a lower effectiveness receiving FCM payments that cover 22% of their cost (at a 9% discount rate). This analysis does not assume any reinvestment of the money in expanded programs or any expansion of the programs due to least-cost procurement, which would increase consumer savings and the size of FCM payments.

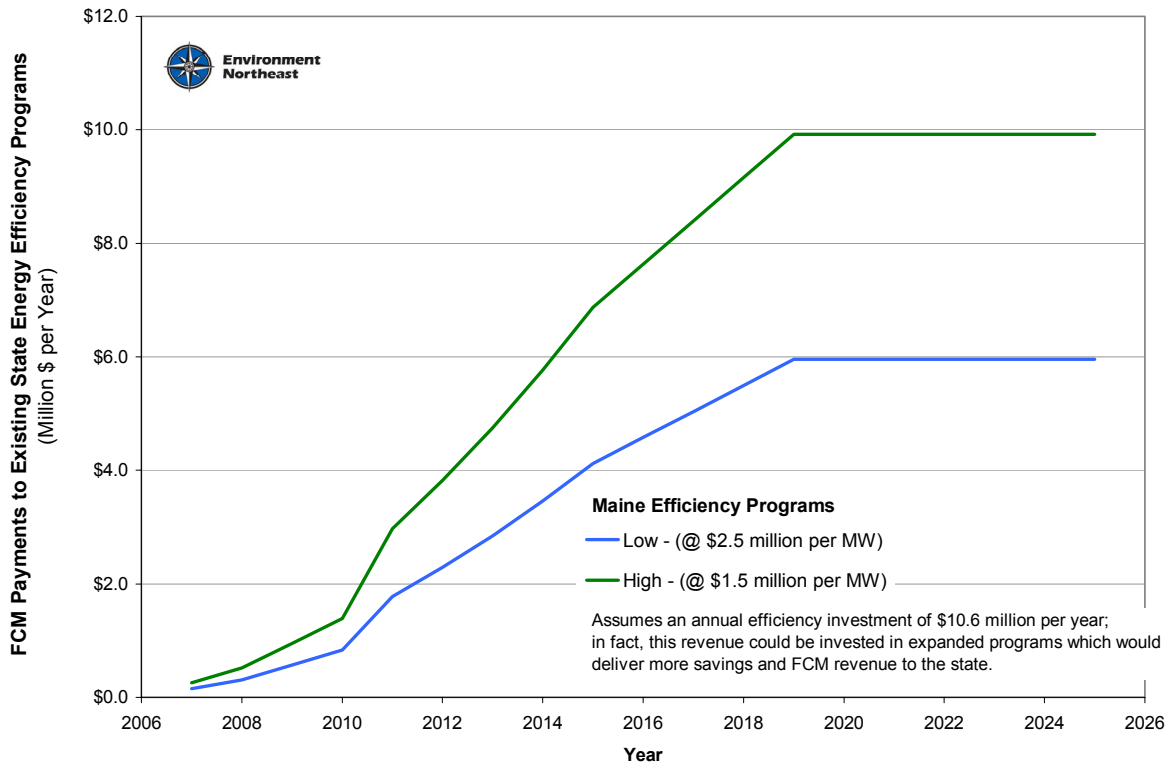
State	EE Funding Level (Mills/kWh)	Budget (Million \$ per Year)	Potential Demand Savings per Year (MW)	
			Low - (@ \$2.5 million per MW)	High - (@ \$1.5 million per MW)
Maine	1.5	10.6	4.2	7.1

Year	# Years of Savings	FCM Payment Type	FCM Payment (\$/kW-Month)	Flow of Payments (Million \$\$)			
				1 Year Investment		Cumulative Revenue	
				Low	High	Low	High
2007	1	TCP	\$3.05	\$0.2	\$0.3	\$0.2	\$0.3
2008	2	TCP	\$3.05	\$0.2	\$0.3	\$0.3	\$0.5
2009	3	TCP	\$3.75	\$0.2	\$0.3	\$0.6	\$1.0
2010	4	TCP	\$4.10	\$0.2	\$0.3	\$0.8	\$1.4
2011	5	FCM	\$7.00	\$0.4	\$0.6	\$1.8	\$3.0
2012	6	FCM	\$7.50	\$0.4	\$0.6	\$2.3	\$3.8
2013	7	FCM	\$8.00	\$0.4	\$0.7	\$2.8	\$4.7
2014	8	FCM	\$8.50	\$0.4	\$0.7	\$3.5	\$5.8
2015	9	FCM	\$9.00	\$0.5	\$0.8	\$4.1	\$6.9
2016	10	FCM	\$9.00	\$0.5	\$0.8	\$4.6	\$7.6
2017	11	FCM	\$9.00	\$0.5	\$0.8	\$5.0	\$8.4
2018	12	FCM	\$9.00	\$0.5	\$0.8	\$5.5	\$9.2
2019	13	FCM	\$9.00	\$0.5	\$0.8	\$6.0	\$9.9
2020	13	FCM	\$9.00			\$6.0	\$9.9
2021	13	FCM	\$9.00			\$6.0	\$9.9
2022	13	FCM	\$9.00			\$6.0	\$9.9
2023	13	FCM	\$9.00			\$6.0	\$9.9
2024	13	FCM	\$9.00			\$6.0	\$9.9
2025	13	FCM	\$9.00			\$6.0	\$9.9
Total Revenue - 1 Year of Program Activities (Million \$)				\$5	\$8		
NPV Revenue - 1 Year - 9% Discount Rate (Million \$)				\$2	\$4		
Percent of Total Program Cost (NPV Revenue/Cost)				22%	37%		



Projections of Capacity Payments to Existing Electric Energy Efficiency Programs

Existing energy efficiency programs represent an opportunity for the state to recover FCM payments that are paid for by ratepayers and reinvest them in expanded energy efficiency programs that reduce consumer costs, helping to lessen the impact of the new capacity market on the state.



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