

## Fact Sheet No. 7

### What is the Capacity Settlement Agreement?

#### *What is the capacity market?*

Because the economic consequences of running out of electric generating capacity are severe, it is necessary to have enough capacity to meet the highest expected peak demand, even if much of this “reserve” capacity only runs once or twice a year. In addition, regulatory controls in New England limit electricity prices when supplies are tight, so these stand-by plants can’t possibly recover their full costs from the energy market alone. As a result, market rules were put in place in New England (like in many other regions) to create a market for generating capacity. This market helps the grid operator ensure that sufficient generating capacity will be available to meet high peak loads, because power cannot be stored. (See NEPGA Fact Sheet No. 3, *Why Have a Capacity Market?*)

#### *How does the settlement agreement change New England’s capacity markets?*

There is near universal agreement that the current capacity market design is flawed, for two reasons. First, the capacity market price is near zero when there is surplus capacity (as there has been for the past few years), but creates very high capacity prices once there is not enough capacity in the region — a situation that is likely by 2008 or 2009. This all-or-nothing design exposes consumers and suppliers to highly volatile prices, provides no price signals to develop new capacity until it is too late, and under surplus conditions prevents generators and other capacity providers, such as demand response customers, from earning enough to cover their costs. Second, the capacity price is the same region-wide, so that an area with a capacity shortage will see the same near-zero price as areas with a surplus. Thus, there is no incentive to locate new generation (or keep existing generation available) where it is most needed.

Now, under the terms of the Capacity Settlement Agreement, this all-or-nothing design is replaced by a Forward Capacity Auction (FCA).<sup>1</sup> The settlement addresses critics’ arguments that the earlier LICAP proposal would cost too much and that it wouldn’t ensure new development. In fact, the FCA is the structure that was recommended by officials of all six New England states. The auction will create binding financial commitments to bring new capacity into the region and to keep existing capacity available.

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<sup>1</sup> For more detail on the workings of the auction, see NEPGA Fact Sheet No. 8, *The Forward Capacity Auction*.



### ***When will the new market be in place?***

It will take some time to implement this new market — the first auction won't be held until late in 2007 or early in 2008, to purchase capacity for the twelve months starting June 1, 2010. The settlement agreement sets up a transition mechanism that replaces the current flawed capacity market. Starting in December 2006, capacity suppliers will receive capacity payments under a fixed schedule of payments, subject to penalties for poor performance during peak demand periods.

### ***What value will consumers get from the FCA?***

When a generating plant or other resource wins the auction, it will take on substantial obligations to provide reliable power to New England:

**On-time completion of new projects.** New plants that fail to begin commercial operation during the planning period will be subject to substantial penalties and receive no capacity payments until they begin operations.

**Obligation to offer energy output.** Capacity resource owners must offer their output into the energy market whenever they are available. Offer prices will be subject to strict market monitoring, as they are today.

**Performance obligations.** An owner of a generating unit that is not available during periods of system stress will lose a substantial portion of its capacity payment. For example, if a large nuclear unit were unavailable during a single day when capacity was scarce (perhaps because the unit was unavailable), the owner could lose over \$10 million for that one day alone. Missing a critical week (e.g., during summer peak loads) could cost a unit owner nearly half of the annual capacity payment, even if the unit were available every other day of the year.

Capacity resource owners will also rebate to consumers any energy payments they receive above a price that a high-cost peaking unit would set. This mechanism allows the energy price to go high during the few hours when supplies are tightest, attracting imports, demand response, and other available resources to sell into New England, but substantially shields consumers from the cost impacts.

### ***How does the new transition mechanism compare to ISO New England's LICAP proposal?***

The settlement agreement completely discards the LICAP market design proposed by ISO New England. While LICAP had been accused of being a “pay and pray” market, the FCA will create binding financial commitments to bring new capacity into the region and to keep existing capacity available. Unlike LICAP, the FCA only pays the capacity that is needed to provide reliable electricity. If there is surplus capacity in New England, competition will drive FCA prices down so that consumers are only buying the quantity needed.



Unlike LICAP, the interim capacity payments don't depend on the relative surplus or shortage of capacity in the market. The payment levels are scheduled to increase after May 2008, however, to reflect an expected tightening in the region's supply. And, unlike LICAP, which would have resulted in higher capacity prices in Connecticut and northeastern Massachusetts, the transition mechanism does not charge consumers in one part of New England more than others, although these regions will continue to see additional costs under contracts for plants needed for local reliability ("RMR" contracts) through the transition period.

The level of these payments is also well below the expected cost of the LICAP, as shown in the following tables. Based on the latest information provided by ISO New England, LICAP during the interim period (through May 2010) would have cost the average New England consumer over 1.8 cents per kilowatt-hour, over \$9 per household per month.<sup>2</sup> Under the settlement, the average monthly cost is reduced to under \$5, reducing costs to consumers by \$4.3 billion over the interim period.<sup>3</sup>

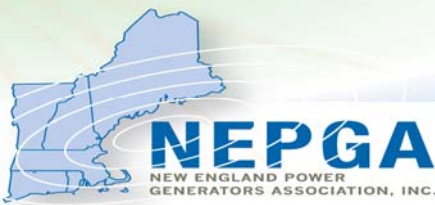
Period	Capacity Price (\$/kW-month)		Installed Capacity (MW)	Capacity (\$million)		Payments		LICAP - Settlement = Savings
	LICAP	Settlement		LICAP	Settlement			
Oct 06 - Nov 06	\$4.13	\$0.13	33,501	277	8		269	
Dec 06 - May 07	\$4.13	\$3.05	33,501	830	599		231	
June 07 - May 08	\$5.14	\$3.05	33,585	2,072	1,201		870	
June 08 - May 09	\$6.39	\$3.75	33,585	2,575	1,477		1,099	
June 09 - May 10	\$8.53	\$4.10	33,339	3,414	1,603		1,811	
<b>Average<sup>4</sup></b>	<b>\$6.22</b>	<b>\$3.39</b>						
<b>Total</b>				<b>9,167</b>	<b>4,888</b>		<b>4,280</b>	

Period	Average Payments and Savings, cents/kWh			Average Payments and Savings per Household, \$/month		
	LICAP	Settlement	Savings	LICAP	Settlement	Savings
Oct 06 - Nov 06	1.27	0.04	1.23	\$6.34	0.19	6.15
Dec 06 - May 07	1.25	0.90	0.35	\$6.23	4.50	1.74
June 07 - May 08	1.54	0.89	0.65	\$7.69	4.46	3.23
June 08 - May 09	1.87	1.07	0.80	\$9.37	5.37	4.00
June 09 - May 10	2.44	1.14	1.29	\$12.18	5.72	6.46
<b>Average<sup>4</sup></b>	<b>1.82</b>	<b>0.97</b>	<b>0.85</b>	<b>\$9.11</b>	<b>\$4.86</b>	<b>\$4.25</b>

<sup>2</sup> Assuming average usage of 500 kWh per New England household per month.

<sup>3</sup> These figures assume costs per kWh are borne equally across all rate classes. They do not include changed costs associated with Reliability Must-Run ("RMR") contracts that cover costs of particular generators needed for system reliability. Average costs and savings per household may vary from state to state.

<sup>4</sup> Weighted by number of months in period.



### ***Why are there transition payments?***

Although New England has enjoyed a substantial surplus of generation in the past several years, ISO New England's latest forecasts show conditions tightening rapidly, especially if power that we have historically imported from Canada and New York is unavailable due to tightening conditions there. Although the transition payments are well below the level needed to bring new generation into the market, they serve three critical roles in preserving the existing system security until the Forward Capacity Auctions come into effect:

**Defer retirement of needed plants.** Older generating plants have high fixed costs but earn relatively little in the energy markets, because they operate less than new more efficient plants. Certain other plants have high costs because — due to their physical limitations or to ensure local reliability — they are required to operate in off-peak hours when market prices are lower than their operating costs. Absent supplemental payments over the next four years, many of these plants — some of which are needed to ensure local reliability — may seek to retire. If that were to happen, the resulting shortage condition would impose the cost of building new generation on the market sooner than without the retirements. The transition payments of the settlement agreement will avoid premature retirements of needed plants, and are less costly than the RMR contracts that are necessary to keep them afloat under the current regime.

**Attract imports.** As generating capacity becomes scarcer through the Northeast, New England needs to be competitive with other power markets to attract capacity outside the region to serve our energy needs. Were we to continue along the current path, capacity prices in neighboring regions would likely be higher than those in New England, thus reducing needed imports and leading to potential reliability problems for our region.

**Promote investment in energy efficiency, demand response, and renewable energy.** New England lags behind other markets in developing ways for consumers to reduce their energy costs through demand response resources — load controls and energy efficiency measures. This is true in part because the contribution of such measures to system reliability has been undervalued by the current electricity market. By placing a visible value on the reliability services provided by all sources of capacity, the transition payments can help justify the costs of undertaking these environmentally friendly alternatives to building new generation. Likewise, renewable energy suppliers will see greater returns under the settlement agreement, thus helping New England states to meet their Renewable Portfolio Requirements and provide a cleaner environment.