



Fact Sheet No. 9

Meeting New England's Electricity Supply Needs: Regulated vs. Unregulated Generation

Who owns the existing generating plants in New England?

Today, nearly all generating plants in New England are *merchant* plants (i.e., owned by companies that are not regulated like traditional transmission and distribution utilities). These companies rely on market-based revenues rather than regulated rates to cover their costs of doing business. Many of these plants were purchased from the utilities when they restructured in the late 1990s, and some of them have been built on a merchant basis since then. Only about eleven percent of generation is still owned by utilities, principally in Vermont and New Hampshire.

Why did the utilities sell their generation in the first place?

The restructuring laws and policies enacted by most of the New England states in the 1990s required (or strongly encouraged) utilities to sell their generating plants.¹ While there were many objectives for restructuring, a basic premise was that competitive forces would lead to lower prices, lower risk of utility cost over-runs being imposed on consumers, and a more efficient and reliable power system.

Have these objectives been met?

Yes. For example, wholesale electricity prices in New England have declined by 16.5% from 2001-2004 when adjusted for fuel costs and inflation.² This decline is the result of \$6 billion in new, private investment in 10,000 megawatts³ of clean and efficient generating plants, which have replaced many of the region's older, inefficient plants. These new plants are cleaner as well as more efficient, so emissions of key pollutants have decreased even as electricity consumption has increased.⁴

Are merchant generators operating these plants efficiently?

Yes. Merchant generators only earn money when their plants are running, and running efficiently, while a regulated utility collects pretty much the same rate of return whether its plants run well or not. For example, since 1999 the average availability of New England power

¹ See NEPGA Fact Sheet No. 1, "Why Did New England Decide to Restructure its Electricity Markets?", at www.nepga.org

² ISO New England website, www.iso-ne.com. We have adjusted for inflation ISO New England's fuel-adjusted nominal value of 11 percent to yield a real decrease of 16.5 percent.

³ A megawatt is a measure of electrical power. A megawatt is enough to power about 1,000 households.

⁴ See, NEPGA Fact Sheet No. 6, "Why the New England States' Power Grids are Operated as a Single System"



plants has risen from 78% to 88%.⁵ The region's nuclear units have increased their availability from about 70% to 96%.⁶ Nuclear refueling outages that used to take 120 days are now finished in fewer than 30 days, while still observing the highest standards of safety.⁷ In addition, plant owners have also found economic ways to increase generators' capabilities without compromising reliability, adding several hundreds of megawatts of capacity at a fraction of the cost of adding that generation at new facilities.⁸

Why do consumers get a better deal when investments in generation are made by merchant generators?

Prior to restructuring, customers paid utilities for investments in generating plants based on what it cost them to build, regardless of whether the plant was really economical over time. These costs often ended up being higher than buying power in the wholesale market, and there was no incentive for the utility to find the most efficient way to do things. Merchant generators, on the other hand, compete with each other to sell the power they produce. They have no assurance that their plant will continue to be paid if it is not economic in the market. Merchant generators are constantly looking for ways to lower their costs, to become more attractive to buyers in the wholesale market.

What are stranded costs?

Stranded costs represent the money spent by regulated utilities to build generating plants or enter into long-term contracts that turned out to be worth less than the cost. Stranded costs occurred in the years leading up to restructuring in the 1990s because of construction cost overruns, technology choices that turned out to be poor decisions, and bad forecasts of fuel and other costs. Since the bad investments were made by regulated utilities, however, electric customers were obligated to pay off the investments. These charges caused electric rates to be higher than they needed to be and were a major reason that policy-makers adopted restructuring in the 1990s.

What was the level of stranded generation costs in New England?

Huge – \$20 billion was estimated by some to be the total level of stranded costs in New England.⁹ The sale of most of the utilities' plants to merchant companies recovered substantial amounts of these stranded costs, but the remainder of these uneconomic investments will eventually all be paid for by customers. For example, in Connecticut, residential customers are

⁵ See, ISO New England 2004 Annual Markets Report, Table 41, page 114.

⁶ See, ISO New England Categories of NERC Class Average EFORd, http://www.iso-ne.com/genrtion_resrcs/gads/class_average.xls

⁷ See, comments of ISO New England CEO Gordon van Welie, Platts Northeast Energy Forum, March 2006.

⁸ Ibid.

⁹ Estimate is based on filings at state utility commissions and contemporaneous news accounts.



paying roughly 8% extra for stranded cost recovery. The total amount of stranded investment in Connecticut is roughly \$4.6 billion. Connecticut is not alone in dealing with stranded cost. As an example in New Hampshire, approximately one-fifth of a typical household's electricity bill goes to pay off the utilities' \$2.6 billion in stranded costs.

After restructuring, who has invested in new generation in New England?

Since the mid-1990s, almost all new generation investment has come from a new breed of merchant companies, who must compete to sell their products in the wholesale market. Early expectations by investors for the value of the restructured New England electricity markets were very high, leading to substantially more investment than was necessary over the last eight years. As a result, many investors in new generating plants have struggled financially, but consumers have not been exposed to any new stranded costs.¹⁰

What will happen when investment in new generating plants is needed?

Although New England will likely need additional generation by 2008 or 2009, only a few small projects are currently planned or under construction, because investors do not yet see a stable climate for new investment. Recent developments in market design, however, are leading many private developers to invest in early-stage development, and merchant suppliers have expressed an interest in expanding their facilities once market prices can sustain the new investment.¹¹

Should regulated utilities be allowed to invest in new generation?

History has shown that New England's regulated utilities made poor choices about what power plants to build – creating billions of dollars of stranded costs – and operated these plants less efficiently than merchant companies. With a near-guaranteed return on each dollar invested, regulated utilities have the incentive to invest more, rather than invest wisely. Merchant generators have every incentive to keep costs low, through efficient operations and wise investments. When regulated utilities make investments, the risk of bad investments and cost overruns is on ratepayers. When plants are built and operated by merchants, consumers only pay what the market will allow, rather than the guaranteed full cost of the new plant.

Is it possible for regulated and unregulated generation assets to coexist in the New England markets?

The small amount of regulated generation that exists currently is not a major problem. However, no merchant generator will be willing to invest in new projects if regulated utilities are allowed

¹⁰ See, NEPGA Fact Sheet No. 5, "What it Costs to Produce Electricity in New England"

¹¹ See, NEPGA Fact Sheet No. 7, "What is the Capacity Settlement Agreement?"



to add new generation and be guaranteed to recover the cost through their rates, shifting the risk from the investor to the customer. Merchant generation must be able to cover its full costs from the competitive markets, while regulated generation can simply pass through costs it incurs to captive customers. These different needs do not coexist happily...if at all.

Is there a way that utilities could make investments in generating plants that would not harm the competitive markets?

Even if utilities were willing to invest in much the same way that merchant companies do – i.e., with no guaranteed recovery of their investment and subject to the discipline of the market – it would be difficult to build sufficient safeguards to ensure that their ratepayers would not be subsidizing the costs. Some utilities have set up subsidiaries, separate from their utility business, to build merchant generation; with strong rules to ensure that these subsidiaries cannot lean on the regulated utility's ratepayers, affiliates could be active competitors in the New England markets.