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NEW ENGLAND ELECTRIC MARKETS: FREQUENTLY ASKED QUESTIONS

ELECTRIC MARKET RESTRUCTURING 101

What were the reasons driving electricity market restructuring?

The basic premise behind electric market restructuring was three fold – competitive markets would deliver the least costs, the highest level of investment, and a more efficient and reliable power system.

What part of the electricity business has been restructured?

There are three components to delivering electricity to customers – generation, transmission and distribution. Under restructuring, the non-monopoly generation side of this equation was open to competition and choice, while states continued to regulate the distribution function and the federal government continued to regulate the transmission function as monopolies.

What did the electric market look like prior to restructuring?

Prior to restructuring, most of power plants in New England were owned and operated by monopoly utility companies. These companies participated in integrated resource planning processes and if they identified a need for new capacity, the utility would build the new power plant, with a healthy rate of return. This created a strong incentive to build with captive ratepayers financing the investment – even if there were large cost over-runs. The utility earned guaranteed revenues under this model, regardless of the costs of generation or if the assets performed as they promised. This led to a model whereby the greater the capital cost of the generation assets, the greater the revenues collected from the captive ratepayers.

What does the electric market look like in today's restructured environment?

Today's merchant power plants are owned by companies that are subject to competitive market forces, with all the costs to operate and purchase the plants financed by private company shareholders, not by captive ratepayers. If there are cost overruns or necessary new investments in the plant such as for environmental compliance, the owner foots the bill, not ratepayers. This has led to a shift of risk from those who cannot control the risk (ratepayers) to those that can (shareholders). In this new market structure, utilities are not prohibited from building power plants. They are prohibited from using ratepayer money or "rate base" for financing of power plants.

NEW ENGLAND ELECTRIC MARKETS:
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HAS ELECTRIC RESTRUCTURING BEEN SUCCESSFUL?

Have competitive electric markets delivered innovation?

Yes. Competitive markets have become a breeding ground for technologically innovative energy products and services that respond directly to customer preferences. A beneficiary of this innovation has been the prevalence of new demand resources in the region. For example, starting June 2010, the region is meeting seven percent of its capacity needs through the use of new innovative demand resources and energy efficiency.

Have consumers realized lowest possible prices under competitive electric markets?

Yes. In most areas of the country, and especially in New England where natural gas is a primary fuel for many generators, rate increases are attributable to the cost of natural gas. As fuel prices have been falling over the past few years, these lower prices have been reflected in customer rates.

Have competitive electric markets delivered environmental benefits?

Yes. Since restructuring there has been a resultant $6 billion investment across New England in 10,000 MW of clean and efficient generating plants which have replaced many of the region's older inefficient plants. This had led to a region-wide decrease in environmental emission with regional carbon dioxide emissions falling 7.5 percent, nitrogen oxide emissions by 44 percent, and sulfur dioxide emissions by 65 percent since 1999.

Have competitive electric markets delivered greater power plant efficiencies?

Yes. Competitive electric markets have also led to innovation at traditional generating facilities with increased efficiency of power plants, greater availability and less down time for scheduled maintenance outages – all factors increasing the reliable delivery of power to consumers. Since electric restructuring, power plant availability has increased from 81 percent to 89 percent. This amount of increased efficiency is equal to the electricity required to power 1.9 million households.

THE LEGACY OF STRANDED COSTS

What are stranded costs?

Stranded costs are the monies spent by regulated utilities to build generating plants or enter into long-term contracts that turned out to be worth less than the cost.

What led to stranded costs?

Construction cost over-runs, technology choices that turned out to be poor decisions, and bad forecasts of fuel and other costs occurred in the years leading up to restructuring, leading to the staggering level of stranded costs in the late 1990's.

What was the level of stranded costs in New England at the time of restructuring?

At the time of restructuring in the late 1990's there was approximately $20 billion in stranded costs in New England. These charges caused electric rates to be higher than they needed to be and were a prime driver behind the region's move to restructured electric markets.

NEW ENGLAND ELECTRIC MARKETS: FREQUENTLY ASKED QUESTIONS

Are ratepayers in the region done paying back these stranded costs?

No. Customers in most New England states are still paying some form of stranded cost or transition charge – almost a decade after most states implemented electric industry restructuring.

Could stranded costs occur again?

Yes. If policy choices are made which allow utilities to recover above-market energy costs through the "wires" or some other form of "non-bypassable" charge on a customer's bill. Charges relating to the generation and purchase of energy by utilities must be recovered through the energy charge or the state may return to the legacy of recovering above-market energy-related costs through captive ratepayers – or a return to the legacy of stranded costs. Allowing utilities to build generation again, and recover it through the rate base, opens the door for a return to stranded costs.

SHOULD UTILITIES BE ALLOWED BACK IN THE POWER PLANT BUSINESS?

Should regulated utilities be allowed back in the generation business?

No. As our region's history illustrates, New England's regulated utilities made poor choices about what power plants to build, creating billions of dollars of stranded costs, and operating the plants less efficiently than competitive generators. With a near-guaranteed return on each dollar invested, regulated utilities have the incentive to invest more, rather than invest wisely. The history of being unable to control or predict costs was most recently illustrated by PSNH's inability to accurately forecast the cost of the scrubber at its Merrimack Station.

Is it possible for New Hampshire's "hybrid" model whereby both regulated utilities and merchant generators own generation to continue?

No. The hybrid model in New Hampshire cannot be expanded upon by allowing utilities to build new rate-based generation. No merchant generator is going to be able to compete with a regulated utility being allowed to add new generation and be guaranteed to recover the cost through their rates, shifting the risk from the investor to the captive ratepayer. Merchant generators must be able to cover full costs from the competitive markets, whereas regulated generation can simply pass through costs it incurs to its customers. Other New England states should not look at the hybrid model as a viable policy choice.

Aren't ratepayers protected if the PUC reviews the prudency of a utility's costs?

No. Prudency means the cost charged is the reasonable market price, however high that price may be. The issue of ratepayer protection is really a question of risk. Under PSNH's model, ratepayers pay for costs of fuel or environmental improvements, no matter how high as long the cost is prudent, or at the market or reasonable costs. In the merchant model, the cost of the same fuel increases or environmental improvements are borne by the private generators and their shareholders.

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Why did the region move to a "competitive model" whereby merchant generators, not utilities, owned power plants?

Lower consumer risks, lower costs and a desire for more reliability fueled the move from the utility ownership model to competitive ownership. The belief was that competitive forces would lead to the lowest prices, the risk of generation plant over-runs rightly should be borne on the backs of merchant owner shareholders, not captive ratepayers, and that this model would deliver the more efficient and reliable power system.

Has the merchant model decreased consumer risks?

Yes. The merchant model has lowered consumer risks. The $6 billion in new investment in 10,000 MW of clean generation in New England has been funded by private shareholders, not ratepayers. Moreover increases of capacity at existing plants throughout the region are happening this time with shareholder money, not captive ratepayer money.

Has the merchant model provided greater reliability and efficiency of existing power plants?

Yes. The average availability of a plant in New England has increased from 81% of the time to 88% of the time, enough to power an additional 1.96 million households with the same number of power plants. Power plants have reduced the number of days they need to complete regularly scheduled maintenance outages, with plants such as nuclear facilities taking an average of 30 days instead of the average 120 days under utility ownership to conduct regular planned refueling outages.

HOW ARE ELECTRIC PRICES DETERMINED?

How are spot prices determined for electricity?

Generators submit offers to the spot market, and the ISO New England schedules those generators in order of price, from least expensive to most expensive to meet demand. The spot price fluctuates throughout the day based on system conditions and the level of demand. Thus if demand is low, power costs are less and if demand is high, more expensive generators are needed.

Do most people pay spot prices?

No, end-use customers rarely pay spot prices. For customers electing to continue basic service procured through their utility, the utility enters into contracts on a regular basis with wholesale suppliers. For end use customers electing to choose their retail electric supplier, most customers enter into fixed price contracts for a defined period of time with a retail supplier.

What are the components of an electric bill?

An electric bill for a typical residential customer has five components:

1. competitive energy charge for the cost of the electricity commodity;
2. transmission charge to deliver the energy from the plant to the distribution system;
3. distribution charge to deliver the energy from the transmission system to the customer – usually consisting of a fixed customer charge and a variable charge;

4. stranded cost or transition charge to fund utility's past costs, investments and liabilities that are not recoverable in a competitive marketplace;
5. public benefits charges from the state to fund programs such as energy efficiency, low-income assistance, renewable, load conservation or other public policy goals.

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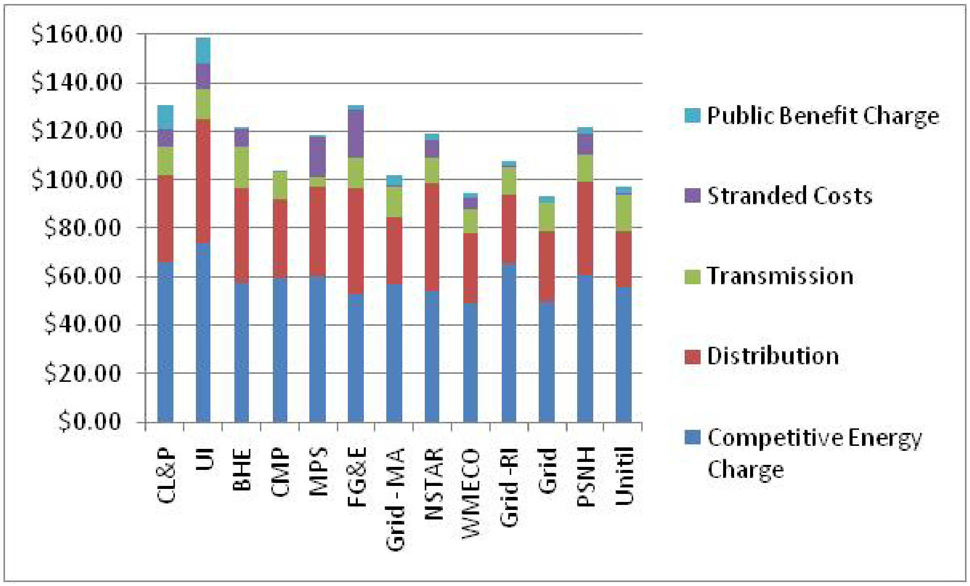
How do electric bills across New England compare? [1]

Comparison of a Typical 700 kwh per Month Residential Customer



[1] Based on rates current as of January 2011.