

New Hampshire Senate Environment and Natural Resources Committee Testimony on Senate Bill 128

The New England Power Generators Association (NEPGA)¹ appreciates the opportunity to provide testimony regarding Senate Bill 128. SB 128 represents a drastic change in New Hampshire's energy policy away from using competitive markets to meet consumer demand reliably and cost effectively. Instead, it replaces market forces with a return to utility-owned resources with the risks of cost over-runs, bad investments and guaranteed rates of return that New Hampshire has so steadfastly moved away from. Ironically, SB 128 is being put forward even before New Hampshire finally enters a fully competitive electricity market with the completion of restructuring expected to occur at the end of 2017, nearly 20 years after this move to competition first started.

NEPGA strenuously opposes these policies and we ask the committee to reject SB 128. NEPGA, however, recognizes the concerns that drove the interest in SB 128 and we hope to work with the Committee and the Administration in the development of a New Hampshire energy policy that will help address consumer energy costs. This bill is not that answer and will in fact have the opposite impact.

NEPGA is the largest regional trade association representing competitive electric generating companies in New England. NEPGA's member companies represent approximately 25,000 megawatts (MW) – or approximately 80% of all generating capacity throughout New England, and over 2,600 MW of generation in New Hampshire, representing approximately two-thirds of the electric generating capacity in the state. NEPGA's New Hampshire member companies include a fuel diverse set of generators totaling more than 2,450 MW. NEPGA's New Hampshire companies pay

¹ The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.

nearly \$46 million annually in state and local taxes, provide over 800 well-paying and skilled New Hampshire jobs, and contribute hundreds of thousands of dollars to charitable endeavors throughout the state.

Restructuring of the Electricity Market

In the late 1990s New Hampshire, along with all other New England states (with the exception of Vermont), moved to a competitive market structure to remove power plants from rate-base utility ownership. At the time, this utility ownership structure was plagued by cost over-runs, concerns of over-builds, construction delays and inefficiencies. By removing the ability of utilities to own and operate energy supplies within the rate base, the legislature's policy, developed over more than a year, was both to drive efficiencies through market forces while also ensuring that utilities had no vested interest in where the electricity supplies came from. And to be clear, the Legislature affirmatively made this fundamental movement toward a competitive model to shift any risks associated with bad investments away from consumers and would be borne instead solely by investors.

In the period immediately following the adoption of restructuring, more than 14,000 MW of new power plants were constructed through the marketplace without any guaranteed cost recovery or rates of return, meaning investors, and not customers, took all risks associated with that investment. More recently, in the last five years, more than 4,120 MW of new power generation capacity (or enough to power 15% of New England's peak electricity demand) has been selected in the Forward Capacity Market – the electric reliability marketplace in New England. These plants begin to come online as soon as this Spring, with the final increments coming on by June 1, 2020. These new generators replace all the older generating facilities that have announced retirement to-date. These collective investments represent more than \$15 billion into New England with all of the risk of plant operations, construction or bad investments shouldered by the individual companies and not by consumers.

At the same time, the fierce competition in the market has led to a dramatic increase in the efficiency of the power generation industry. Since 1997, power generation efficiency (as measured by the heat-rate of a plant, or how efficiently it converts fuel into electricity) has increased by more than 22%. In other words, 20 years

ago it took four plants to generate the same amount of power that today comes from three plants. That has meant the need for fewer facilities, lower emissions and increased price competition for consumers.

New Hampshire, however, is not quite all the way there yet. Eversource New Hampshire (also known as PSNH) is the last major utility in New England that still owns rate-base power plants with the consumer-backed cost recovery and guaranteed rate of return that goes along with it. Thanks to a negotiated settlement, PSNH in 2017 will finally divest itself of this generation and move its consumers, for the first time, to competitive electricity prices. One of the most important factors driving divestiture has been the experience at its Merrimack Power Station in Bow.

In 2006, PSNH urged the New Hampshire legislature to pass enabling legislation for it to invest in a scrubber on its coal-fired Merrimack Power Station to reduce sulfur dioxide emissions. At the time, PSNH told the legislature that it expected the environmental controls to cost \$250 million. As construction began those cost projections quickly proved to be dramatically wrong. The Merrimack scrubber was ultimately completed at a cost of \$420 million – a nearly 70% cost overrun. Merrimack has faced changing electricity market economics with a plant designed to operate as an around-the-clock resource today running as a rarely deployed backup resource during the past few years. But, because the owner of Merrimack is a regulated utility, it is PSNH customers, and not the plant's owners, that face the risk of both picking up the \$420 million tab, but also providing a 9.81% profit to PSNH on that poor investment decision.

The utility was ultimately 70% off its cost projections for the project, despite the fact that the projections were made just 5 years prior. The cost overruns associated with this project, along with the PSNH plants being undercut by competitive wholesale market pricing, now has the utility looking to sell its ratebase power plants.

A dramatic counterpoint to the Merrimack scrubber can be seen in Massachusetts. There, beginning in 2007, the competitively-owned, coal and oil-fueled Brayton Point Power Station faced the prospect of significant state and federal environmental emissions regulations. Located in Somerset, Massachusetts, this plant is the second largest power plant in all of New England. The plant's owner made the decision that to

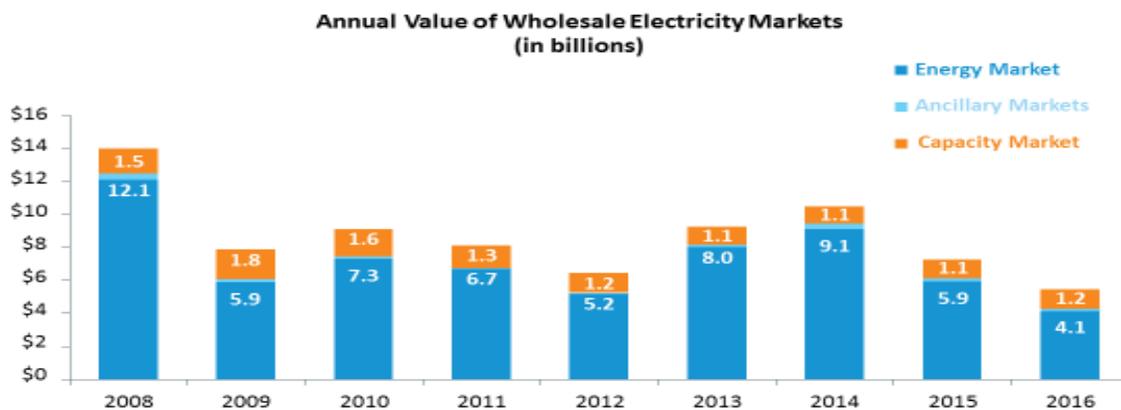
keep the plant operating, \$1 billion in environmental upgrades would be necessary. Between 2007 and 2013, the company installed significant environmental controls including, cooling towers, spray dry absorbers and baghouses, powder activated carbon injectors and equipment for catalytic reductions. Ultimately, falling natural gas prices left a plant designed to be operated nearly 24 hours a day, seven days a week, to not be competitive and to see its operation severely reduced. During 2014, Brayton Point produced only 19% of the energy it was capable of generating. Rather than being able to recover the environmental investments, let alone earn a profit on them, the nearly \$1 billion investment became a sunk cost and was written off by its owner. The plant is now slated to retire at the end of May. Consumers have not had to pick up a single dollar of the ill-fated refurbishment costs for Brayton Point.

Wholesale Electricity Prices & Consumer Bills

Consumers have also reaped the price benefits since the markets were restructured. Since 2005, wholesale electricity prices (the prices coming out of the power plants and delivered to a trading hub) have fallen over 50%. In fact, 2016 was the lowest wholesale electricity price year in the history of the New England competitive marketplace. This despite the fact that a substantial amount of new plants have retired and new facilities are being invested in.

2016: The Lowest Wholesale Prices Since 2003

Competitive markets produce low prices when fuel infrastructure is unconstrained, and transmission investments provide access to the lowest-cost resources



Source: 2015 Report of the Consumer Liaison Group; 2016 wholesale electricity market values are preliminary and subject to reconciliation

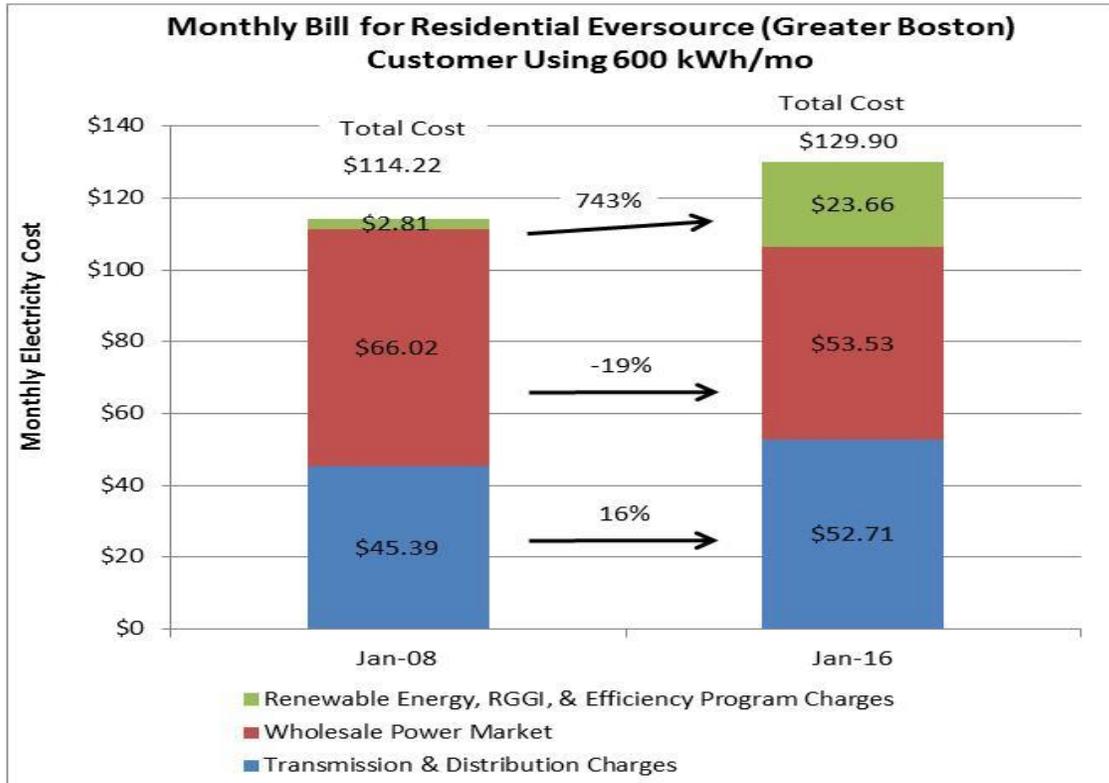


And yet, most consumers have seen their bills rise over this same timeframe leading to fundamental questions about electricity costs in New Hampshire and across New England. Why is this?

Before diving into New Hampshire's electricity rates, it is instructive to consider the rates in Massachusetts and Connecticut where Eversource is also the dominant utility. Unlike New Hampshire, Eversource's utilities in those states have fully divested themselves from power generation and so electricity supplies come entirely from the competitive wholesale electricity markets. It is also worth noting that there are three basic components to most electricity bills:

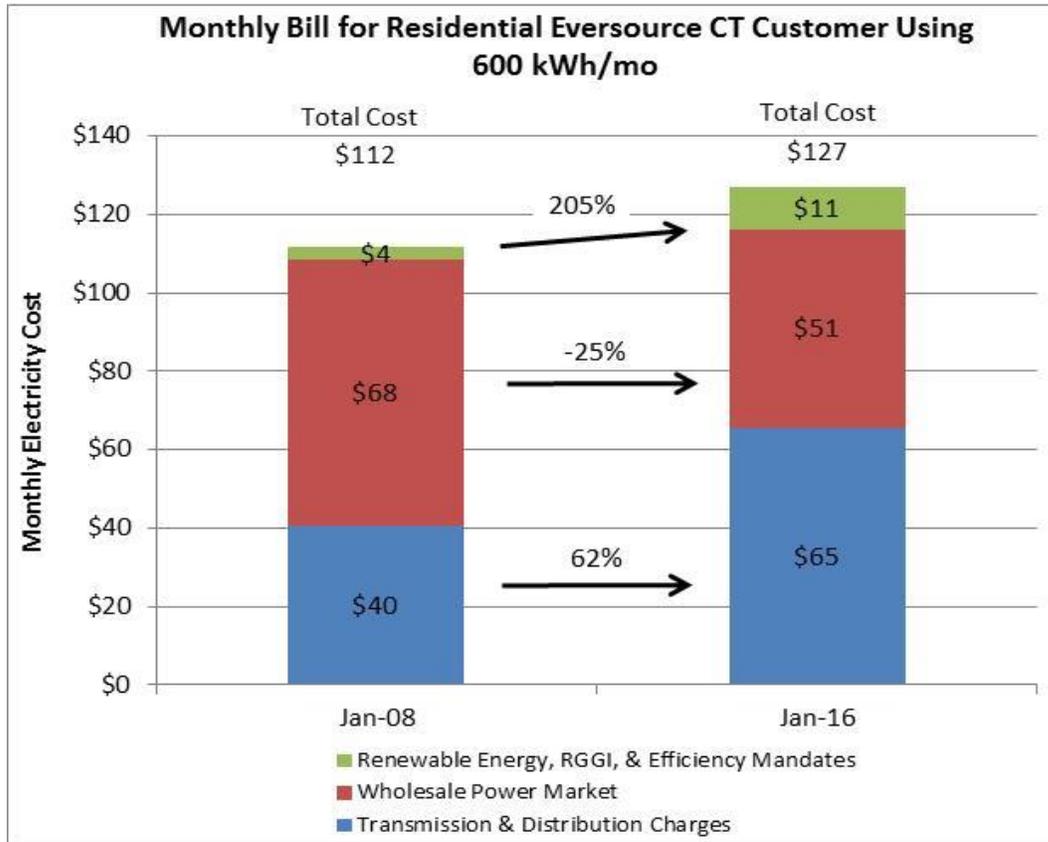
1. Transmission & Distribution – these are the costs to maintain the poles and wires that bring electricity to homes and businesses. These are the costs on which utilities are regulated entirely by the state Public Utility Commissions and the Federal Energy Regulatory Commission.
2. Energy Supply/Wholesale Power Market – the cost of the actual physical electricity that keeps the lights and heat on and machines humming. Embedded within this price is the risk of demand fluctuations (largely dependent on weather) as well as all the components that go into meeting consumer demand reliably (i.e., energy, capacity and ancillary services).
3. Public Policy – the cost of meeting state public policy mandates that are borne by consumers. In most states these are made up of spending on energy efficiency, renewable energy contracts and compliance with the Regional Greenhouse Gas Initiative (RGGI).

With that as background, here is a residential bill breakdown for Eversource's largest utility in Massachusetts:



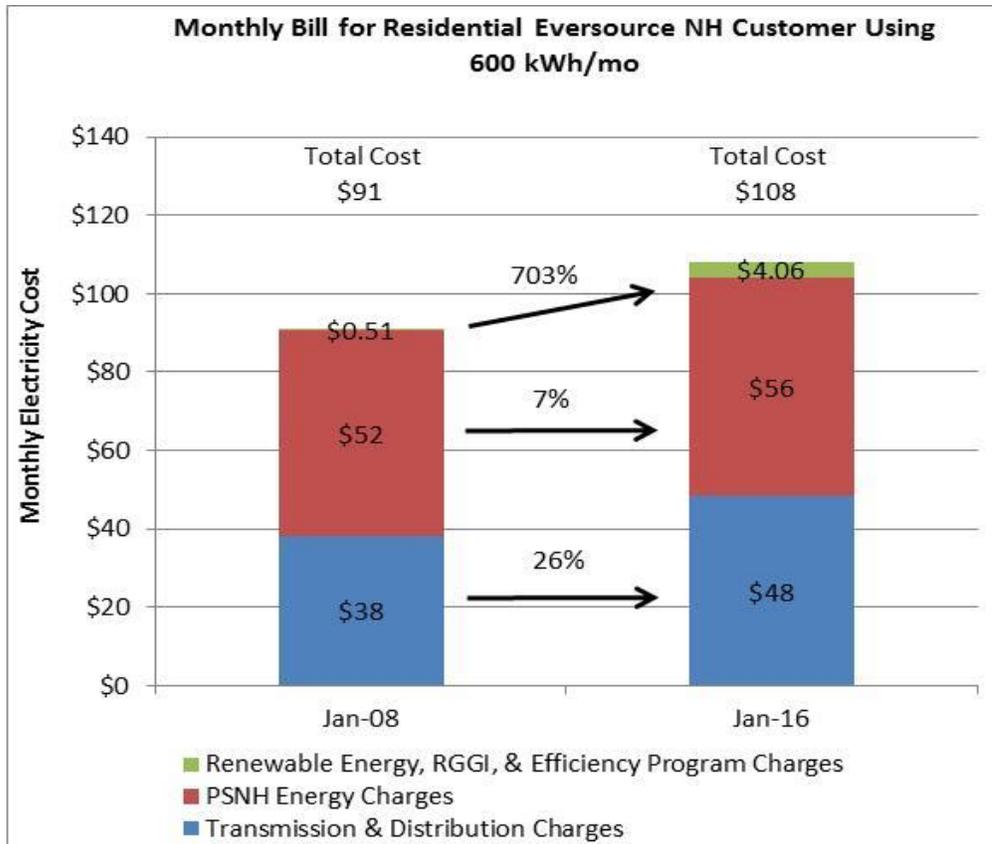
In just eight years, the consumer's bill went up 14% even though the wholesale power costs have gone down 19%. This is driven by wholesale power market costs going from making up 58% of the bill in 2008 to just 41% in 2016, with the Transmission & Distribution Charges increasing 16%.

A similar, but even more dramatic story can be seen in Connecticut:



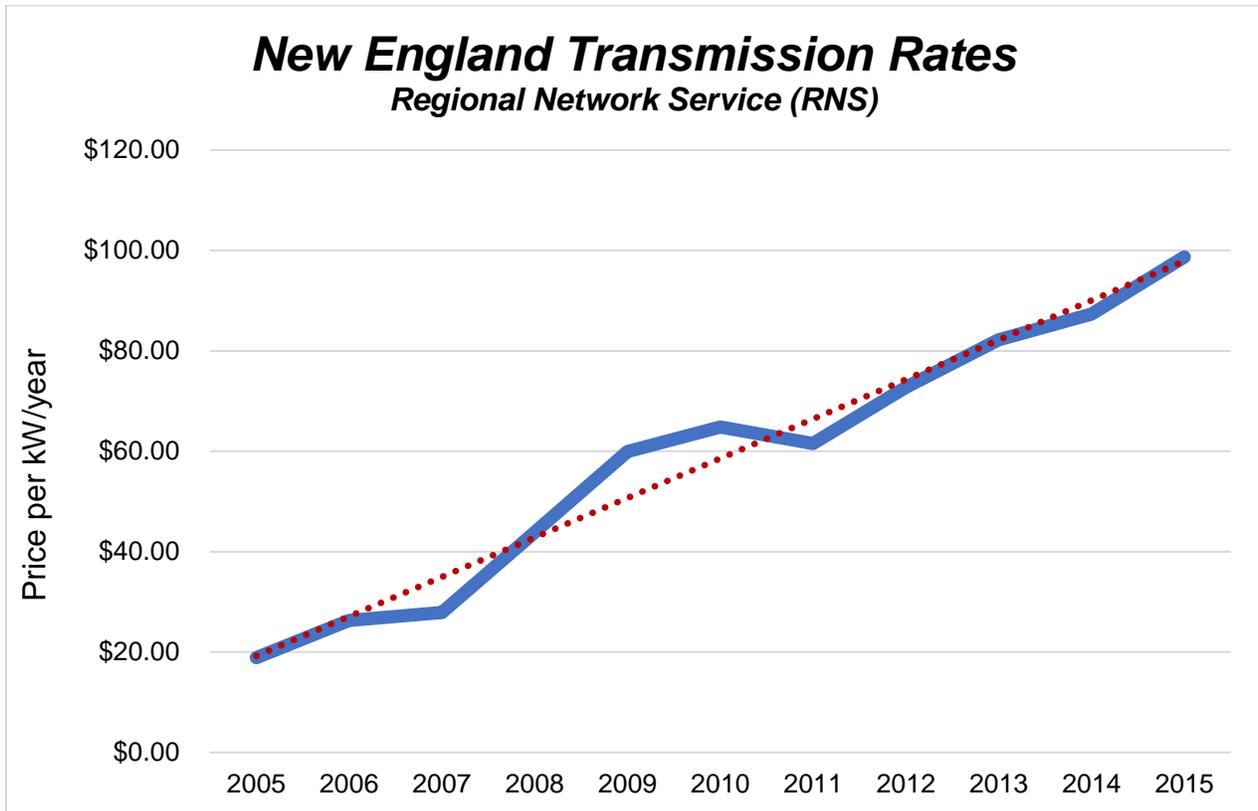
Here, the consumer's bill rose 22% over eight years, despite wholesale power costs dropping 25%. Similar to Massachusetts, wholesale power market costs have gone from making up 60% of the bill in 2008 to just 40% in 2016, with the Transmission & Distribution Charges increasing an astounding 62%.

New Hampshire, owing to its unfortunate distinction of being the last state with large-scale utility generation ownership, is in a different situation, but one that continues on the same arc to its neighbors in the region:



Even while still paying above-market rates for energy charges due to rate-base generation ownership, energy supply charge increases are the smallest on customer bills over the last eight years. While a customer's bill has gone up 19% over the last eight years, there has been only a 7% rise in the PSNH energy charges (a mix of the costs of maintaining the PSNH power plants with an approximately 9% rate of return and wholesale power market purchases). Yet PSNH's affiliates in Connecticut and Massachusetts, who rely on the competitive electricity markets instead of a regulated utility, have seen energy supply *declines* of 26% and 19% respectively over this same timeframe.

These experiences in retail bills are borne out by what is being seen in the wholesale electricity market as well. Since 2005, the wholesale transmission costs have increased more than five-fold from \$18.88/kilowatt-year to \$98.70/kilowatt-year:²



Simply put, consumers have benefited from dramatically lower wholesale electricity prices in the open competitive marketplace, but those savings have been masked by the other portions of the bill rising. Many of those cost increases may be well justified, whether for public policy purposes or making upgrades to the poles and wires that deliver the electricity. But as the legislature and New Hampshire consider approaches to help further increase the cost competitiveness of electricity rates relative to other states, NEPGA urges the state to recognize the dramatic benefits of the competitive marketplace and explore whether the other major cost drivers of consumer rates are operating as efficiently.

² Source: <https://www.iso-ne.com/static-assets/documents/2015/12/section2-rate-summary.xls>

SB 128 Is the Wrong Prescription

In the context of the history of restructuring, the successes of the wholesale competitive marketplace and the true cost drivers of consumer bills, NEPGA is gravely concerned with SB 128. This proposal would open the door for the state's utilities to make unilateral proposals in energy infrastructure for virtually any reason. By allowing for utilities to invest rate-payer dollars for "measures that are expected to mitigate the cost of electric service in the state, reduce the price volatility of that service and/or reduce the potential for disruptions in electricity supply due to inadequate wholes generating capacity," the legislature would be opening the door for consumers to once again bear the risks and costs of any investment. As noted above by way of a real world example, SB 128 moves the state away from the long-established and successful policies of competitive markets on a backward track to a subsidized approach that has proven prohibitively expensive to the state's electric consumers. There can be no doubt that this bill will result in benefits to projects chosen by utilities, likely projects the utilities themselves own, and there can also be no doubt that those benefits will come at the expense of New Hampshire consumers.

Divestiture

The timing of the consideration of SB 128 is ironic as New Hampshire is only now on the verge of ensuring full competitive electricity supply prices for consumers with the divestiture of the PSNH ratebase power plants. In the settlement agreement approved by the New Hampshire Public Utilities Commission, one of the main purposes it noted was to increase competition of electricity supplies and limit the amount of stranded costs that consumers would have to bear following the sale of the plants. SB 128 would make these issues worse.

In particular, NEPGA is concerned about the impact SB 128 would have on the bidding for the purchase of the ratebase plants. New England has been fortunate to be a liquid marketplace for plant sales with numerous transactions having occurred over the last several years covering all fuels and technologies. One of the hallmark reasons for this success has been the confidence in the well-established and well-understood competitive market. New Hampshire's policy for the last 20 years has been to support reliance on competition and markets to meet reliability and consumer pricing. SB 128,

however, both explicitly eliminates that and implicitly signals a clear departure from this policy.

In Section 2, the language that has been ingrained in the Restructuring Statute since its initial passage stating that one of the core principles of restructuring, reducing rates by “harnessing the power of competitive markets” has simply been eliminated. Perhaps even more disturbing is the elimination of language regarding the important policy goal to “develop a more efficient industry structure and while regulatory framework that results in a more productive economy by reducing costs to consumers while maintaining safe and reliable electric service.” At the same time, any company looking to make a major investment in New Hampshire through the purchase of the PSNH plants will have grave concerns of the newfound latitude that the state’s utilities would have to conduct virtually *any* energy supply investment that they would like with enormous deference to “measures that are expected to mitigate the cost of electric service in the state, reduce the price volatility of that service and/or reduce the potential for disruptions in electricity supply due to inadequate wholes generating capacity...” This would rightfully give any market-based investor pause as to whether they will have an opportunity to compete to provide electricity supply or is this a return to the days of vertically-integrated utilities putting a thumb on the scale to benefit their chosen projects versus those from third-party competitors.

The net effects of these concerns are likely to limit the amount of companies willing to participate in any auction for the PSNH plants and at the very least lower their bids to incorporate a material risk premium given this dramatic policy change and uncertainty. The only loser in that scenario is New Hampshire’s electricity consumers. They will have to pay the cost of any increase in stranded costs that come out of lower prices paid for plants that have now been well-established to be out of the money. Before restructuring is even complete, SB 128 would undermine the purposes of the deliberate approach taken in developing the original Restructuring Act and the most recent settlement agreement less than one year old.

Conclusion

NEPGA recognizes the concerns raised by many consumers and policymakers over electricity prices in New Hampshire. New England has been challenged for decades with cost differentials versus other regions of the country a function of geography, siting, policy mandates and others. What New Hampshire and the region should be proud of, however, is the intense competition that has been fostered in generating the electricity supplies that power our economy. Before developing any solution, NEPGA strongly urges the committee to perform a thorough and thoughtful analysis to determine the actual drivers of high electricity prices. Until that analysis is completed, the extreme departure in energy policy as reflected in SB 128 is at best premature and without a doubt, anti-business, anti-consumer and anti-free market. For these reasons, NEPGA strongly urges the committee to reject SB 128.