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Rhode Island General Assembly
Senate Committee on Environment and Agriculture
Testimony on S 2404, An Act Relating to Public Utilities and Carriers – Renewable Energy Standard

The New England Power Generators Association (NEPGA)[1] appreciates the opportunity to provide testimony on S 2404, *An Act Relating to Public Utilities and Carriers – Renewable Energy Standard*. NEPGA agrees that addressing climate change requires continued reductions in greenhouse gas emissions (GHG). However, NEPGA believes that a meaningful, multi-sector carbon price would more effectively and efficiently help Rhode Island achieve its decarbonization goals, rather than increasing its reliance on the Renewable Energy Standard (RES), as proposed by S 2404.

NEPGA is the trade association representing competitive electric generating companies in New England. NEPGA's member companies represent approximately 25,000 MW – or approximately 90% of all generating capacity throughout New England - and roughly 1,919 MW of the generating capacity in Rhode Island. NEPGA companies also provide thousands of well-paying, highly skilled jobs to the state's workforce, pay millions of dollars in taxes to the state and its cities and towns and contribute millions of dollars in income taxes paid by employees.

Delivering Lower Costs and Cleaner Generation

Since electric restructuring in the late 1990s, generators participating in New England's competitive wholesale electricity markets have invested billions of dollars in facilities to produce a reliable, cost-effective supply of electricity without guaranteed cost recovery or a guaranteed rate of return. In fact, the average annual wholesale price of electricity in 2019 is anticipated to be $30.67/megawatt-hour, which, subject to adjustment, would be the second lowest price since the beginning of the competitive markets.[2]

The region's markets have also produced a cleaner, more efficient fleet of power plants. Since 1990, power plants in New England have decreased carbon dioxide (CO_2) emissions by 46%, more than any other sector of the economy over the same period according to recent data released by the U.S. Energy Information Agency (EIA). Much of these reductions can be attributed to the innovations and efficiencies driven by private investment in New England's power plants following the restructuring of the region's electricity industry. Since 1999, the efficiency (measured in heat rate) for power

[1] The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.
[2] https://iso-ne.com/static-assets/documents/2020/02/2020_reo.pdf

plants in New England improved by 22%. This means that the electricity output that used to take four plants to produce today takes only three. Moreover, the rapid decline of natural gas prices over the last 15 years has spurred major investments in new generating facilities and improvements at existing plants that have driven a dramatic shift from primarily burning coal and oil to using natural gas for electric generation. In 2000, 40% of the electricity produced in New England was generated from coal and oil resources. Today, coal and oil plants account for just 2% of the region's resource mix. Finally, Rhode Island and the region have benefitted from the electricity sector-specific, multi-state CO_2 reduction program, the Regional Greenhouse Gas Initiative (RGGI), which was put in place over 10 years ago to price the societal costs of CO_2 emissions into electricity. RGGI demonstrates that a market-based approach can be incorporated into the competitive wholesale electricity market and help states meet their environmental policy objectives.

Carbon Pricing to Help Rhode Island Achieve its Policy Goals

To help Rhode Island achieve the decarbonization goals envisioned by S 2404, a stronger price signal will be required – a price signal that crosses across multiple sectors of the economy. Accordingly, rather than continue with approaches to further subsidize individual electricity supply resources to meet CO_2 emissions mandates, Rhode Island should pursue a more efficient market-based mechanism, but with a broader and stronger price signal than the one available through RGGI. A sufficiently stringent CO_2 price would drive behavioral change in consumers across multiple sectors of the economy. These consumers will seek low and zero-carbon alternatives, while providing investors, entrepreneurs, and manufacturers with the financial incentive to develop clean energy technologies to meet consumer demand and Rhode Island's policy objectives. In competitive wholesale electricity markets, participants rely on transparent price signals to guide investment decisions to reliably supply electricity when and where it is demanded and needed. Setting the right CO_2 price would facilitate the dispatch of more efficient resources and give investors and developers the confidence to invest in the kinds of technologies that will be needed to meet the CO_2 emissions reductions goals sought by S 2404. Those new technologies would span the economy to include not only low and zero carbon electric power resources, but also electric vehicles (EVs), EV infrastructure, and heating use in buildings.

Addressing Multi-Sector Emissions

While remarkable improvements have been made in the electricity sector, it is clear that other sectors of the economy are lagging far behind. With the advent of electric vehicle technologies and home heating alternatives, the time is ripe to adopt CO_2 pricing as a way to efficiently and effectively reduce GHG emissions. Many of the reductions that would be expected from these other sectors would come from widespread electrification and NEPGA members stand ready to do their part.

For example, according to data from the Union of Concerned Scientists, an electric vehicle driven in New England would be the equivalent of a 102 miles per gallon

combustion engine vehicle – more than 25% better than the national average.[3] This comes because New England already has one of the cleanest electric grids in the country; a situation that would only improve with a price on CO_2 in the wholesale electricity market.

Certainly, a move to widescale electrification in different sectors of the economy would mean an increase in electricity demand. However, the markets are designed to respond in such a situation. The wholesale electricity markets in New England – and across much of the United States – were developed in part on a premise of a steady increase in demand; this has been the general rule for the first century of electrification. Over the last decade, that notion has been flipped with consistent annual decreases in demand due to the effects of the great recession and huge investments in energy efficiency in New England. Nevertheless, recent history shows the ability of the competitive wholesale electricity market to respond to increased demand with investments in upgrading existing facilities and the construction of new, efficient resources.

Since electric restructuring in the late 1990s, generators participating in New England's competitive wholesale electricity markets have invested billions of dollars in facilities to produce a reliable, cost-effective and efficient supply of electricity without guaranteed cost recovery or a guaranteed rate of return. This has resulted in the construction and development of roughly 14,000 MW of new power plants – equivalent to nearly 50% of the all-time peak demand in New England. More than 4,000 MW have been brought to market or have begun construction in just the last three years, all without state subsidies or market carve-outs. These facilities are some of the most efficient, clean and cost-effective in the country and helped drive the remarkable emissions reductions seen over the last 20 years. Open, competitive markets were key to this result and should continue to be what drives future investments.

It is that power of a competitive marketplace that Rhode Island and New England can help unleash by addressing climate change through a price on CO_2 emissions. This type of a price signal can incentivize investments in clean energy technologies by appropriately valuing their environmental attributes. A CO_2 price levels the playing field across technology and fuel sources and sets off a competitive environment that spurs innovation.

An Increase in the RES Could Disincentivize Decarbonization

S 2404 would require an annual increase to the RES so that 100% of obligated entities' electricity supply must come from RES-eligible renewable resources by 2030. However, policies like the RES puts the risk of betting on the "right" solution on the backs of consumers. There are countless examples of similar policies prejudging the answers to government-identified issues creating unintended consequences by being rigid and prescriptive in their solutions and burdening consumers with higher costs and risks than necessary.

[3] https://blog.ucsusa.org/dave-reichmuth/new-data-show-electric-vehicles-continue-to-get-cleaner

Beyond “picking wrong,” by focusing entirely on electricity supply, S 2404 on its own would disincentivize the needed electrification in transportation and buildings to help drive economy-wide emissions. This is because a RES implicitly includes a value on GHG emissions, which raises the price of electricity. However, without a similar GHG value placed in other sectors, the gap between switching to an EV or air-source heat pump only widens from today’s conventional technologies. That growing delta leads to a slowdown of needed consumer investments to drive technological change to support decarbonization.

Instead, NEPGA believes that a policy should be clearly articulated – such as lowering GHG emissions – and then implemented in a way that is flexible enough to adapt to the innovative solutions that may not be apparent today. In much the same way that most did not foresee the dramatic cost reductions in solar technologies, increased potential for onshore and offshore wind or the recently available abundance of domestic natural gas supplies, we do not know today what the best, most cost-effective electricity supply resources will be to help Rhode Island meet its energy and environmental goals in 2030 and beyond. It is for that reason that as Rhode Island considers the goals laid out in S 2404 today, it should ensure that implementation of those mandates be made in the most market-based and flexible way possible – through the integration of a resource-neutral, multi-sector price on CO_2 emissions.

Conclusion

NEPGA thanks the Committee for the opportunity to provide testimony on this important issue. We stand ready to work with Members on the best path toward attaining Rhode Island’s energy and environmental goals.

Respectfully submitted,

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