

Maine Joint Committee on Energy, Utilities, and Technology Testimony on LD 1895

The New England Power Generators Association (NEPGA)¹ appreciates the opportunity to provide written testimony on LD 1895, An Act Regarding the Procurement of Energy from Offshore Wind Resources. NEPGA appreciates Maine's objective of addressing climate change and achieving greenhouse gas (GHG) emissions reduction mandates. To meet these objectives, NEPGA supports competitive, market-driven mechanisms that best balance cost, reliability, and necessary investments to meet the climate challenge. Carve outs for individual technologies or resource types, however, undermine these goals and put at serious risk the cost-efficiency and reliability investments that must underlie energy and environmental policies.

For that reason, NEPGA cautions that long-term contracting and other state programs harm New England's competitive wholesale electricity markets and incentivize the premature retirement of generating capacity needed for reliability. Instead, to efficiently and cost-effectively meet its decarbonization mandates and grow its clean-energy economy, NEPGA urges Maine to build on collaborative efforts with other New England states to identify mechanisms that meaningfully price environmental attributes in the wholesale electricity markets. As numerous studies have indicated, including that by ISO New England, the best, most efficient way forward is putting a meaningful price on carbon dioxide (CO₂) emissions.

NEPGA is the trade association that represents competitive electric generating companies in New England. NEPGA's member companies account for over 90% of all generating capacity throughout New England – with approximately 3,500 MW in Maine – and own and operate over 7,500 MW of renewable and zero-carbon resources throughout the region. NEPGA companies provide well-paying, highly skilled jobs to the Maine workforce, pay millions of dollars in taxes to the state and its cities and towns, and provide millions of dollars more in income taxes paid by employees.

The Competitive Wholesale Electricity Markets

For more than 20 years, Maine has relied on competitive wholesale electricity markets to produce a reliable supply of electricity at least cost. Market forces drive innovation and efficiencies, providing not only considerable value to the State's consumers, but also critical support to Maine' economy. The competitive markets have also ensured sufficient electricity supplies to meet future demand needs with 9,627 MW of new generation capacity developed at historically low prices.² These investments are the result of market price signals that incentivize investment in facilities – both new and existing – where and when they are needed, ensuring the region will have firm, reliable energy in future years. The competitive markets accomplish this without exposing Maine's consumers to the risk of cost overruns or poor investment choices.

Market competition has also helped cut GHG emissions in Maine and in the other New England states, resulting in a cleaner, more efficient fleet of generating resources. Annual CO2 emissions from fossil fuel combustion in Maine's electric power sector have decreased by 91%

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

² https://www.iso-ne.com/about/key-stats/markets#fcaresults

since they peaked in 2002, largely by replacing high carbon fuels with lower carbon energy sources, primarily natural gas and renewable sources, according to state of Maine estimates.³

Aligning the Competitive Markets with Maine' Laws and Policies

Maine and the other New England states are poised to add unprecedented amounts of renewable resources through long-term contracting and other state programs over the next several years. Analysis conducted in 2018 found that state-supported resources are on track to comprise over 50% of the region's generation mix by 2027 – an amount that is clearly understated given recent legislation requiring more out-of-market procurements. These state-supported resources impact the region's competitive wholesale electricity markets in two ways.

First, the introduction of state-supported resources will displace existing merchant ones, including those that will be needed for their unique reliability aspects as well as those that are cost-effectively meeting the State's decarbonization goals today. Second, because state-supported resources receive revenue outside the market, they will likely bid into the Energy Market as price takers (i.e., at \$0/MWh), putting downward pressure on the Energy Market prices that merchant generators rely upon to continue operations and make capital investments in existing facilities. These resources operate in the market without revenue or cost guarantees and without consumer-backed long-term contracts, leaving them reliant on a fair and competitive market. Price suppression in the market has very real consequences for the viability of these facilities to continue to reliably supply Maine and the region with electricity and to enable a decarbonized future.

It is also important to appreciate that a contract for a particular resource does not guarantee that the resource will be built at the price agreed to. For example, two major offshore wind developers entered into two, 20-year, multi-billion dollar contracts with Massachusetts electric distribution companies in spring 2022 only to back out of them in the fall, saying the prices agreed to were not high enough.⁴ Given post-pandemic supply chain challenges and persistent inflation, this is likely the least appropriate time to lock consumers into multi-decade contracts.

Rather than continue on a path of subsidies, as LD 1895 proposes, the goal should be to design the next generation of the region's wholesale electricity market: A market that maintains the cost and reliability benefits of the competitive markets but meaningfully accounts for the carbon intensity of a given resource – an element that is currently missing from today's wholesale markets. This future market design must continue to prioritize reliability by recognizing the value of different fast, flexible resources that can address peak demand and balance the system, especially as more weather-dependent renewables, like wind and solar, enter the system.

Recent studies examining the changing energy landscape in New England confirm the need to preserve reliability services as the regional system evolves to include more weather-dependent resources. A report from Energy + Environmental Economics (E3) and Energy Futures Initiative (EFI), led by former U.S. Secretary of Energy Ernest Moniz, finds that current New England states' laws to decarbonize across the economy will require additional large amounts of wind, solar, and battery storage resources, "complemented by firm capacity to provide generation during extended periods of low wind and solar availability. Firm capacity includes natural gas power plants, nuclear, hydrogen generation, or other yet-to-be commercialized options such as long-duration storage."⁵

Given these complexities, Maine' energy and decarbonization objectives cannot and should not be met by a single-state, out-of-market solution. NEPGA and other stakeholders are now

³ https://www.maine.gov/dep/news/news.html?id=8474333

 ⁴ https://commonwealthmagazine.org/energy/mass-offshore-wind-developers-stalling-for-time/
⁵ https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/5fd2997d26324029a116f9b4/1607637387632/
<u>E3+EFI_Report+New+England+Reliability+Under+Deep+Decarbonization_Full+Report_November_2020.pdf</u>

actively working on developing a long-term solution to help Maine and the other New England states meet their energy and climate-related obligations, including the state-led New England Energy Vision process, which began in late 2020.⁶ These ongoing regional forums are focused on designing a wholesale market that can leverage the cost and reliability benefits of the competitive markets while also addressing the clean energy and decarbonization objectives underlying LD 1895. Working regionally to develop market-based mechanisms to achieve state environmental objectives can help continue the remarkable benefits of the wholesale electricity markets over the last 20 years, while addressing the critical decarbonization challenges that lie ahead.

To achieve substantial carbon emissions reductions, Maine must also take a holistic approach that links economic sectors and supports broad electrification of transportation and buildings, which make up the bulk of the state's emissions today. To meet this challenge in a harmonized manner, NEPGA has long advocated for a multi-sector carbon price, one that not only addresses power sector emissions, but also those from transportation and buildings. There may be other market-based solutions for meeting Maine's climate mandates, and NEPGA is committed to playing a constructive role in state and regional discussions for the one that best meets those needs. The alternative is continued reliance on single-state solutions that address only one source of the state's overall emissions and impose additional costs and risks on Maine' ratepayers. Mandates such as long-term contracting of renewables carve up the wholesale markets, displacing opportunities for competitive resources to help Maine meet its decarbonization goals reliably and at the least cost. Long-term contracting also exposes Maine consumers to the risk of paying for investments that may appear innovative and cost-effective today but could prove outdated, inefficient, and costly in the future. The path forward is a challenging one, but there is an opportunity to chart a course that maintains the benefits of the competitive markets coupled with the promise of future innovations and enhancements to Maine' clean energy economy.

Conclusion

As the Committee reviews these bills, NEPGA asks that it give current regional efforts an opportunity to develop a wholesale market design that can help Maine implement its clean energy and decarbonization mandates, rather than committing consumers to back costly long-term contracts and other programs. NEPGA remains committed to working with Maine and others to develop a solution that harnesses the competitive markets to attract investment in clean energy resources, further reduce CO2 emissions, and maintain system reliability, all at competitive market pricing. NEPGA is ready to provide the Committee with more information as needed. Thank you for the opportunity to provide this testimony.

May 18, 2023

⁶ <u>https://newenglandenergyvision.com/</u>