



**Connecticut General Assembly  
Energy & Technology Committee**

**Testimony on LCO 3920, An Act Concerning Emergency Response by  
Electric Distribution Companies and Revising the Regulation of Other Public Utilities**

**September 9, 2020**

The New England Power Generators Association (NEPGA)<sup>1</sup> appreciates the opportunity to provide written testimony on LCO 3920, *An Act Concerning Emergency Response by Electric Distribution Companies and Revising the Regulation of Other Public Utilities*. NEPGA recognizes the concerns and frustrations raised by the Energy & Technology Committee, other elected and appointed officials, and Connecticut's ratepayers over a recent electric utility rate increase and the performance of the state's regulated electric utilities to prepare for and respond to tropical storm Isaias. For that reason, NEPGA recommends that the Committee focus its attention on the utility issues that gave rise to LCO 3920 and allow the Department of Energy and Environmental Protection (DEEP) to explore ways to better align New England's competitive wholesale electricity markets with state policy through its ongoing Integrated Resources Plan (IRP) process.

NEPGA is the trade association that represents competitive electric generating companies in New England. NEPGA's member companies account for approximately 25,000 MW – or nearly 90% of all generating capacity throughout New England – and roughly 8,529 MW in Connecticut. 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. NEPGA's mission is to support competitive wholesale electricity markets in New England. NEPGA believes that open markets guided by stable public policies are the best means to provide reliable and competitively priced electricity for consumers. A sensible, market-based approach furthers economic development, jobs, and balanced environmental policy for the region.

When discussing the reforms proposed under LCO 3920, it is important to put the role of generators in the larger regional electricity industry context. In the late 1990s, Connecticut and all other New England states (except Vermont) enacted legislation to restructure the electricity industry for the benefit of consumers. Prior to restructuring, the monopoly electric utilities that owned and operated power plants were largely insulated from competition and could rely on ratepayers to finance generation facilities through utility rates, effectively guaranteeing cost recovery and a rate of return. Utilities had little or no incentive to build and maintain efficient and cost-effective generation resources to reliably supply the region's electricity needs.

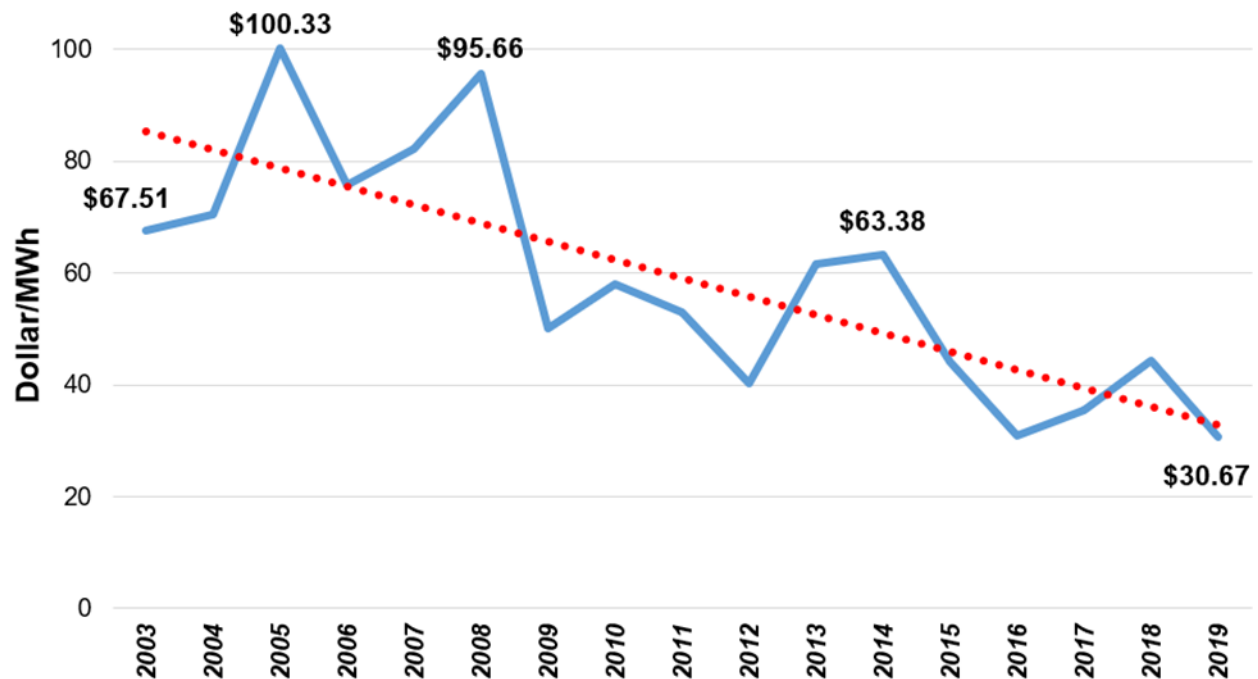
Once implemented, restructuring prompted utilities across most of the region to divest themselves of their generation assets to focus on transmission and distribution services, introduced competition between generators for more cost-effective and efficient outcomes, shifted risk from utility ratepayers to private investors, and allowed electric customers to choose products from competing retail electricity suppliers rather than only rely on their utility's default service. Restructuring – in conjunction with crucial federal wholesale electricity market reforms

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

– ushered in a new era of competition in Connecticut and the region, along with numerous consumer benefits that continue today. For example, wholesale energy prices in New England have declined by 51% since 2014 – a remarkable result attributable to a transparent and competitive marketplace. The average annual wholesale electricity price in 2019 was \$30.67/MWh – the lowest price since full implementation of the region’s competitive markets in 2003 (when calculated in 2019 dollars).<sup>2</sup> The first half of 2020 is showing that that low price record is likely to be broken this year.<sup>3</sup>

## New England wholesale energy prices have declined by 51% since 2014



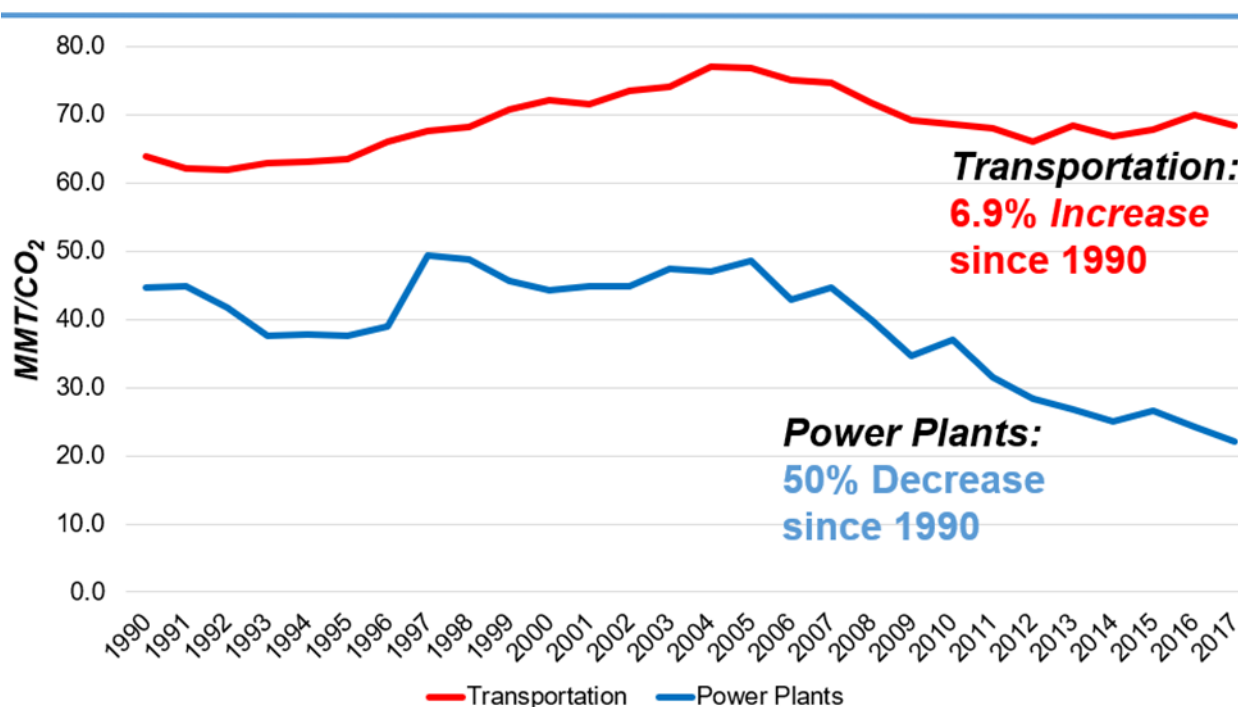
These competitive market forces, coupled with low-cost fuel and certain public policies, have also resulted in a cleaner, more efficient fleet of power plants in the region. Since 1990, power plants have decreased carbon dioxide (CO<sub>2</sub>) emissions by 50% – the most of any sector of the economy over the same period – according to recent data released by the U.S. Energy Information Agency.<sup>4</sup> 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 of power plants in New England improved by 22%. This equates to needing to use only four plants for the same amount of power that five plants provided.

<sup>2</sup> [https://www.iso-ne.com/static-assets/documents/2020/03/20200317\\_pr\\_2019-price-release.pdf](https://www.iso-ne.com/static-assets/documents/2020/03/20200317_pr_2019-price-release.pdf)

<sup>3</sup> <http://isonewswire.com/updates/2020/8/25/monthly-wholesale-electricity-prices-and-demand-in-new-engla.html>

<sup>4</sup> <https://www.eia.gov/environment/emissions/state/>

## New England transportation & power plant CO<sub>2</sub> emissions from 1990 to 2017



More than 20 years since Connecticut's restructuring act, the region's wholesale markets have performed as designed: sufficient generating capacity to ensure a reliable electricity supply; increased efficiency of plant operations driving lower wholesale electricity prices with lower emissions; and a shift of investment risk from consumers to private investors. At the same time, NEPGA recognizes that much more needs to be done to help Connecticut achieve its greenhouse gas (GHG) emissions reduction targets and other energy and environmental policy mandates. For this reason, NEPGA has been actively engaged in DEEP's 2018 Integrated Resources Plan process since October 2019.<sup>5 6</sup> Specifically, NEPGA has been participating in the IRP's Policy Analysis of Deregulation, DEEP's ongoing effort to "assess Connecticut's experience in pursuing its environmental goals, and the original aims of Connecticut's electric sector deregulation statute in the current deregulated wholesale energy market."

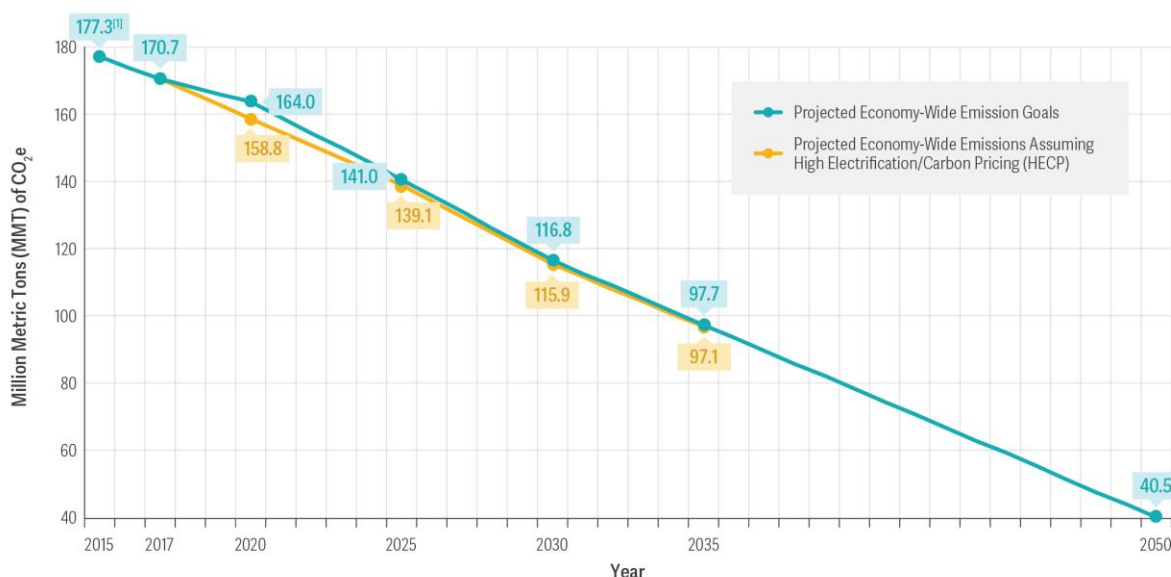
NEPGA has proposed that the best path forward for achieving these goals is to work within the regional competitive markets' framework and the development of a long-term, durable wholesale electricity market design, one that accounts for the value of carbon, which is currently absent from the markets. Such a market-based approach would support deep electrification and investment in new clean energy technologies, particularly in the transportation and building sectors, helping Connecticut achieve its GHG emissions reductions. An improved market design would appropriately value flexible existing generation resources that can ensure reliability as a greater number of intermittent, weather-dependent renewable resources are added to the region's power grid. This approach also maximizes the regional efficiencies of the New England

<sup>5</sup> <https://nepga.org/2019/10/comments-on-connecticut-integrate-resource-plan-scope/>

<sup>6</sup> <https://nepga.org/2020/02/comments-on-connecticut-irp-impacts-of-deregulation/>

electricity market and broader economy. This way, no single state must bear the cost burdens of individual facility development or retention – while still providing state direction on the emissions mandates.

A recent study released by NEPGA demonstrates that a multi-sector carbon price that supports increased electrification of the transportation and building sectors is the most effective market-based tool to meet the 2050 GHG emissions target.<sup>7</sup> A meaningful carbon price would not only reduce emissions (as shown in the figure below), it would also spur investment in clean technologies through transparent price signals. In addition to attracting new low and zero-carbon resources, a meaningful multi-sector carbon price would provide Connecticut with greater assurance of continued investment in electrification of the economy and in existing low- and zero-carbon resources that will be needed to support greater penetrations of wind and solar. It would also reduce the states' reliance on long-term contracting and other out-of-market mechanisms that saddle consumers with higher electricity costs and the risk that today's technologies will become outdated and more costly than other options in the future.



**Notes:**

[1] In 2015, total GHG emissions across New England were 177.3 MMT of CO<sub>2</sub>e (43.8 in CT, 76.1 in MA, 19.1 in ME, 17.0 in NH, 11.3 in RI, and 10.0 in VT).

[2] Economy-wide emission reduction goals are determined by aggregating each New England state's historical emissions and annual emission targets. If data is unavailable for a given year, the goal is estimated by interpolating results from years where it is available by state.

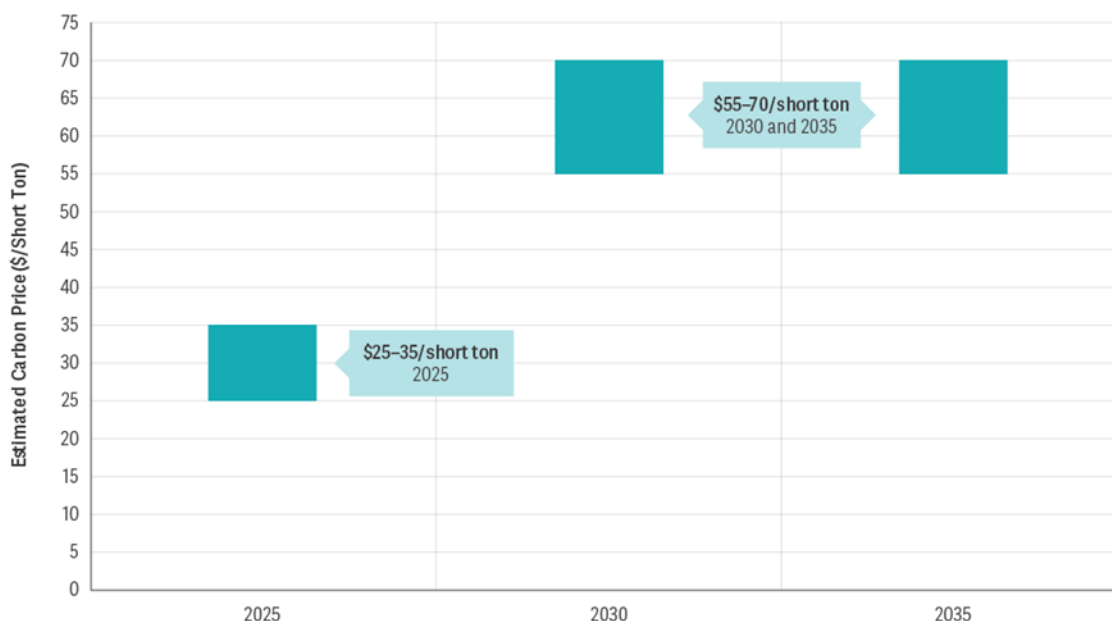
[3] Resource mixture adjustments include the retirement of fossil-fuel plants and the addition of renewable resources.

[4] The HECP scenario assumes 25% (2025), 50% (2030), and 75% (2035) of residential homes currently heating with gas, oil, or propane switch to electric heating and 25% (2025), 60% (2030), and 90% (2035) of consumers driving light-duty vehicles switch to electric vehicles. It also assumes additional energy efficiency (EE) at a 25% increase over assumed 2035 EE, and adds additional storage and zero-emission resources needed to accommodate increased electrification and maintain New England's progress towards meeting its carbon reduction standard. Finally, it adds a \$25/short ton price on carbon in 2025, \$65/short ton in 2030, and \$70/short ton in 2035.

This report, conducted by independent experts at the Analysis Group, is the first to identify a carbon price sufficient to support investment in renewable and zero-carbon electricity generation, zero emissions vehicles, and clean building heating systems to put Connecticut and the region on the pathway towards meeting its Global Warming Solutions Act targets. An initial price of \$25–35/short ton of CO<sub>2</sub> would allow for a transition from state-backed procurements of renewable energy under long-term contracts to a stable financing model based on the

<sup>7</sup> <https://nepga.org/2020/06/report-on-co2-pricing-to-meet-multi-sector-emissions-mandates/>

competitive market's price signals. This approach will produce consumer benefits of lower costs for energy, faster progress toward deep decarbonization, and no stranded cost risk from long-term energy contracts. Over the long-term, the carbon price should rise (as shown in the figure below) to support the additional large-scale renewables, like offshore wind, that will be needed to move to deeper levels of decarbonization.



Importantly, a multi-sector carbon price would support deep and widespread electrification of transportation and building heating systems that will be necessary to meet Connecticut's ambitious GHG reduction mandates. A carbon price across multiple sectors would facilitate the widespread adoption of electric vehicles, particularly light-duty passenger vehicles, as well as the deployment of charging infrastructure to support an increasingly electrified transportation sector. Carbon pricing would also incentivize the switch from fossil fuel heating systems to alternatives such as heat pumps. Coupling multi-sector carbon pricing with broad electrification would ensure that investors will have the price signals they need to make investments in innovative clean technologies while consumers have the incentive to switch to zero-carbon transportation and heating options. Given that electric load would increase to support greater electrification across the economy, policies that require reduced electricity consumption would actually harm the goal of reducing GHG emissions.

A multi-sector carbon price at this level would provide more efficient outcomes with less risk to Connecticut consumers. Handpicking specific resource types – like offshore wind – through long-term contracting and other out-of-market actions increases costs to consumers and commits ratepayers to funding technologies that could become inefficient or outdated over time. These contracts also fall well short of enabling the Connecticut to meet its environmental mandates because they rely solely on the electric power sector. Instead, the focus should shift to linking economic sectors with the combined goal of decarbonization – particularly through deep electrification in the transportation and heating sectors.

For the reasons stated above, NEPGA urges the Committee to omit from LCO 3920 Sections 16(b) and 16(k) as they duplicate or conflict with the IRP process currently underway at DEEP.

NEPGA recognizes the Committee's interest and obligation in pursuing strategies to ensure Connecticut achieves its energy and environmental policy mandates and goal. However, the best approach to better align the competitive markets with state policies is for stakeholders to continue on the path established by the 2018 IRP proceedings and its focus on market-based solutions. NEPGA remains committed to the IRP process and to providing information to the Committee now and in the future.

Respectfully,

A handwritten signature in black ink, appearing to read 'Dan', followed by a horizontal line.

Daniel Collins  
Director of Government Affairs