Massachusetts Joint Committee on Telecommunications, Utilities and Energy
Hearing on Clean Energy Procurement, Transmission and Financing

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Statement of
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on
SB 1965
An Act relative to energy sector compliance with
the Global Warming Solutions Act

Good morning, Chairman Golden and Chairman Downing, and members of the Joint Committee. I regret that a previous commitment has prevented me from appearing in person to testimony at the Joint Committee's hearing on clean energy procurement, transmission and financing. My statement focuses specifically on Senate Bill 1965, one of the many bills being discussed at today's hearing. I applaud the Joint Committee's interest in clean energy and welcome the public airing of these important issues.

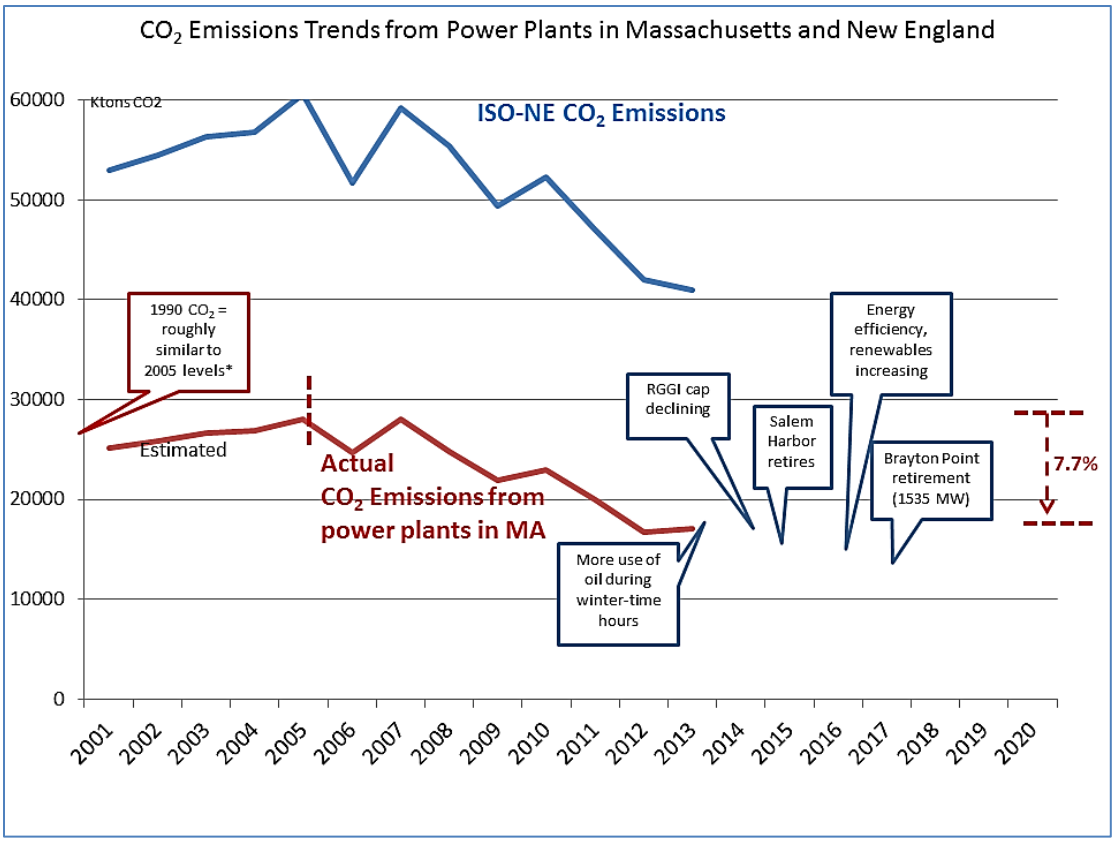
The current context: clean energy trends in Massachusetts

States around the country are abuzz about the U.S. Environmental Protection Agency's Clean Power Plan, which will reduce carbon emissions from existing power plants. States that produce most of their power from coal face significant emissions reductions over the next decade and beyond. Other states, like Massachusetts, are well positioned to comply with the new federal standards.

In our case, this is due in large part to a diverse set of policies adopted over the past two decades that have lowered the state's carbon footprint. These policies include strong support for renewable energy, economically smart investments in energy efficiency, early action to control carbon emissions through the Regional Greenhouse Gas Initiative (RGGI), strong leadership in enacting the Global Warming Solutions Act, and – last, but not least – reliance on competitive markets for both power supply and emissions reductions.

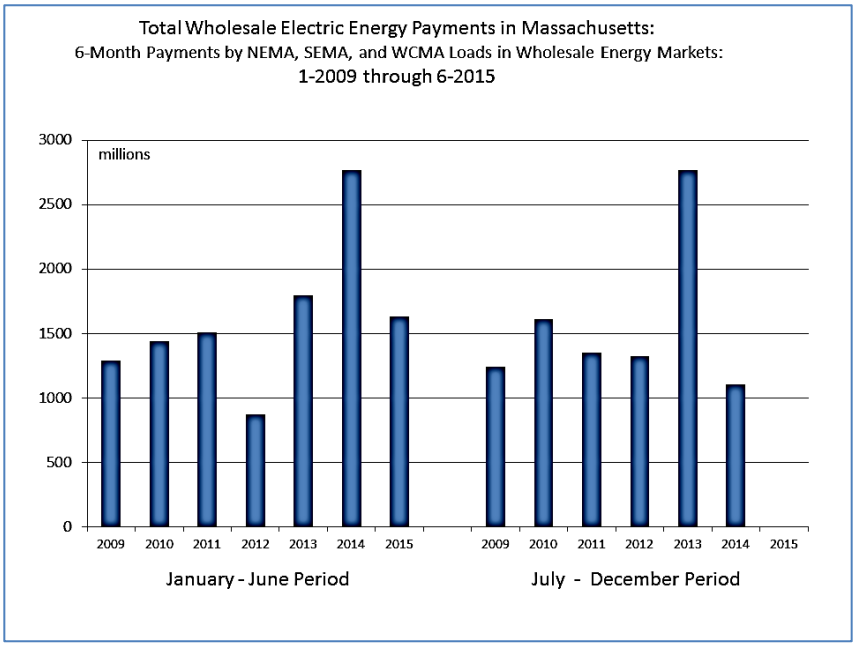
The good news is that this combination of policies has put Massachusetts' power sector on track to meet the state's emissions-reduction targets ahead of schedule. Although significant reductions in CO_2 emissions are still needed across Massachusetts' entire economy, power plant emissions are already set to accomplish the state's original goal that the power sector contribute one

fourth of total state reductions by 2020. There are things already in place that will lower emissions even further, as shown in the figure below.



In fact, this also highlights that beyond the 2020 target for power production, additional factors will lead to lower power production emissions than were even contemplated under the Clean Energy and Climate Action Plan. As noted in the Commonwealth's Five-Year Progress Report (January 2014) and elsewhere, the contributing factors include: the declining cap of emissions under the RGGI program; the continued investments in energy efficiency, which will continue to lower demand for electricity; the increased amount of renewables that is required under the Massachusetts Renewable Portfolio Standard; actions that will be required under the U.S. EPA's Clean Power Plan; and recent and upcoming retirements of fossil-fuel power plants in Massachusetts (and in other New England states). There may be some offsetting impacts associated with the additions of dual-fuel capacity at some existing peaking-power plants in the state, but there are also proposals for new and highly efficient power plants to come on line before 2020, as well.

Another piece of good news: In spite of the conventional wisdom on electricity prices, the total cost of wholesale generation and transmission costs to Massachusetts consumers amounted to $12.45 billion in 2014 (the year in which natural-gas prices spiked and raised costs in the power market in New England), compared to $14.95 billion in 2008. And the costs to Massachusetts consumers for electric energy have gone down relative to the spike that occurred in 2014, and do not suggest a crisis in electricity prices. The figure at the right shows prices from January 2009 through June 2015, with prices broken down into the first six months of each year versus the prices in the second six months of each year. (Data are from ISO-New England's monthly reports.) Prices in the second half of 2013 and the first half of 2014 were outliers.



Senate Bill 1965

In this context comes a bill that Governor Baker has said is needed so that Massachusetts can achieve its 2020 carbon-reduction targets. Senate Bill 1965 would direct the state's electric utilities to solicit and contract for significant quantities of new 'clean energy resources,' defined not only as traditional renewable resources (like wind and solar) but also power from large-scale hydroelectric facilities.

However appealing it might look on the surface and however much I like so many things the Governor is doing, this policy would inevitably trouble the waters in the region's power system by disrupting the balance of factors that has already helped Massachusetts steer toward a lower-carbon power sector. And it would do so at an enormous above-market cost borne by Massachusetts' businesses and households.

For one thing, Senate Bill 1965 calls for contracting for an amount of power equaling one third of Massachusetts' total electricity use each year for a 15-25 year period, even though that amount of power would literally flood New England's power market. These special contracts would lock in prices for some suppliers, while undermining the financial viability of other,

more cost-effective generating assets that are otherwise important for a low-carbon electricity supply. A classic case of picking winners and losers.

Secondly, such contracts are out of line with the way the power market works in Massachusetts. Normally, power plants have to compete with each other to win the right to provide supply for consumers. This approach has driven efficiencies into the system, reduced emissions, and lowered the overall cost of power since 2008 (even taking into account occasional and well-publicized spikes in electricity costs).

By contrast, these contracts would get a special deal, and consumers (rather than power suppliers) would underwrite investment risk. Although the bill would require competitive solicitations – which sounds market-based – it is clearly aimed at only a few Canadian provincially owned utilities and the big electric transmission projects that would carry their power (such as Northern Pass, a joint venture between Eversource and Hydro Quebec).

And there is no reason to expect that long-term contracts for huge quantities of power will be cheap, because building enough big new transmission lines into New England and expanding the system of large-scale hydroelectric generating dams in Canada require a lot of money.

If enacted and implemented, Senate Bill 1965 would send the signal to other investors that Massachusetts is willing to carve out special deals that fundamentally change the rules of the game that other power suppliers have had to live by. New power generators are also just now starting to make investments to meet future electricity needs at a competitively determined price, while also adding jobs and growing the tax base inside Massachusetts and the region.

The energy system in Massachusetts, like almost every other part of the U.S., depends heavily on private companies and private capital markets to provide the investment and other resources needed to keep electricity as affordable and reliable as possible while also becoming increasingly clean. A healthy and sustainable investment climate is an essential ingredient for achievement of our economic, environmental and other goals for the power system.

The most cost-effective way to meet continued goals for carbon reductions – even beyond the already-met 2020 goals – is through non-discriminatory policies that allow any qualified resource to compete. Why not hold the Canadian resources to the same standard?

There are opportunities in 2015 and 2016 for policy makers to support market-based policies that focus strategically on reducing carbon emissions from the power sector. These include: development of Massachusetts' State Plan to comply with the EPA's Clean Power Plan regulations; reviewing and revising RGGI to address post-2020 carbon-reduction goals; adopting a technology-neutral Clean Energy Standard; and allowing many of the reforms in

New England's wholesale market to have a chance to accomplish the reliability and cost-reduction outcomes they have been designed to induce. Notably, forward prices in New England's energy market are quite low and already reflecting the impact of such policies in the market.

Relying on market-based approaches – rather than out-of-market contracts that impose undue risk on electric consumers and undermine the systems that are delivering carbon reductions – is a practical and effective long-term model. This is the hallmark approach that has been used in virtually every successful emissions market in the world, including our own RGGI program. Massachusetts should build on these proven successes, rather than undermine them by enacting this bill.

As policy makers consider adding new policies that affect features and performance of the electric system, I respectfully urge you to ask whether the elements of the overall markets and public policy add up to a system capable of producing a sustainable outcome. To attract and sustain the interest of private investors in the region's electric system, we need to make sure that the dollars and cents add up, as we hope for a system that evolves with the needs of the 21st century. If the numbers don't add up and therefore prevent key actors from remaining financially viable, then we should work to design reforms that will keep the goal of maintaining a sustainable electricity market in mind.

Thank you.

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[i] I was asked by the New England Power Generators Association to analyze the impacts of Senate Bill 1965. That report, "Proposed Senate Bill No. 1965: An Act Relative to Energy Sector Compliance with the Global Warming Solutions Act. Potential costs and other implications for Massachusetts consumers and the state's and region's electric system," September 2015. http://nepga.org/wp-content/plugins/custom-post-type-attachment-pro/download.php?id=MTE0MA==&file=Mg== As background, I specialize on energy and environmental economics and policy issues in the U.S. electric and gas industries. Previously, I served as the Assistant Secretary for Policy at the U.S. Department of Energy, as Massachusetts' Secretary of Environmental Affairs, and as a commissioner at the Massachusetts Department of Public Utilities.. I am involved in numerous activities relating to clean energy, including serving as chair of the External Advisory Council of the National Renewable Energy Laboratory, the co-lead convening author of the Energy Supply and Use chapter of the National Climate Assessment, a director of World Resources Institute, a director of Resources for the Future, and am a member of the Department of Energy's Electricity Advisory Council. I also chair the board of the ClimateWorks Foundation, and serve on the board of the Energy Foundation. I previously co-chaired the Gas-Electric Harmonization Committee of the North American Energy Standards Board, was a member of the National Academy of Sciences committee on shale gas risk, chaired the Massachusetts Ocean Commission and was a member of the U.S. Secretary of Energy's Advisory Board. I have testified before the U.S. Congress, many state legislatures, federal and state regulatory agencies, and state and federal courts.