

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

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<b>State Policies and Wholesale Markets</b>	)	
<b>Operated by ISO New England Inc.,</b>	)	<b>Docket No. AD17-11</b>
<b>New York Independent System Operator</b>	)	
<b>Inc., and PJM Interconnection, L.L.C.</b>	)	
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**POST-TECHNICAL CONFERENCE COMMENTS OF  
THE NEW ENGLAND POWER GENERATORS ASSOCIATION, INC.**

The Federal Energy Regulatory Commission (“FERC” or the “Commission”) issued a Notice Inviting Post-Technical Conference Comments (“Notice”) following a technical conference on May 1 and 2, 2017. That technical conference was set “to discuss certain matters affecting wholesale energy and capacity markets operated by the Eastern Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs).”<sup>1</sup> In particular, the Commission’s Notice of Technical Conference identified the key discussion point that “there is an open question of how the competitive wholesale markets, particularly in states or regions that restructured their retail electricity service, can select resources of interest to state policy makers while preserving the benefits of regional markets and economic resource selection.” The New England Power Generators Association, Inc. (“NEPGA”)<sup>2</sup> hereby respectfully offers these comments on the technical conference.

NEPGA is the trade association representing competitive power generators in New England. NEPGA’s member companies represent approximately 26,000 megawatts, or roughly 80% of the installed capacity in New England. NEPGA’s mission is to support competitive

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<sup>1</sup> Notice of Technical Conference, March 3, 2017, Docket No. AD17-11

<sup>2</sup> The comments expressed herein represent those of NEPGA as an organization, but not necessarily those of any particular member.

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.

Competitive markets have supported nearly \$15 billion in power generation investments in the region, while at the same time providing major efficiency, emissions and consumer risk benefits. As those markets have developed, states increasingly have enacted policies intended to support individual resource types and/or reduce carbon emissions in New England. These laudable goals must be balanced with the efficient and effective functioning of the wholesale markets. NEPGA generally supports a regional, economy-wide approach to value carbon dioxide (“CO2”) emissions, which will provide incentives for all market participants to find the most cost-effective means to reduce emission in furtherance of state goals. The competitive markets in New England can achieve state carbon reduction mandates through resource-neutral mechanisms. In advance of such mechanisms being put in place, NEPGA urges FERC to provide clear guidance on how RTOs should proceed to ensure that out-of-market actions do not inefficiently distort wholesale market prices. Where such distortions occur, the markets should provide mechanisms to maintain price formation consistent with competitive market operations.

Simply put, NEPGA believes that the wave of out-of-market resources beginning to crest in New England threatens the very viability of a competitive wholesale electricity market. All actions taken and policies promulgated must work within the FERC framework of a well-functioning wholesale electricity market. The need is urgent, with a necessary direct and swift response from FERC and the wholesale markets.

## **New England Competitive Electricity Market Benefits**

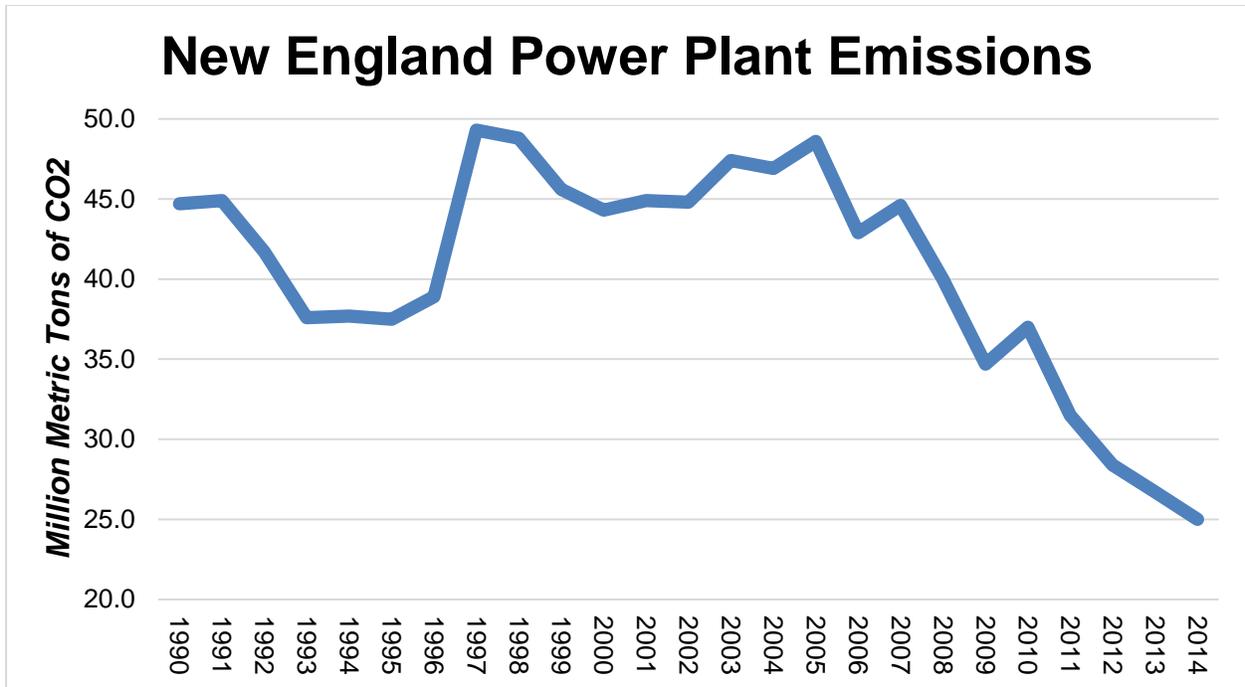
A number of New England states are this year celebrating their 20<sup>th</sup> anniversary of enacting restructuring statutes that helped lead to the formation of the competitive marketplace as we now know it. Fundamental to that restructuring was a separation of power generation from rate-base cost recovery and a transfer of plenary authority over resource adequacy to the ISO and FERC as well as a desire to drive competitive pricing for consumers. That structure has led to remarkable results. Since 1997, more than 14,000 MW of new power plants have been constructed in the region with nearly all of those financed without state-backed long-term contracts or rate-base cost recovery. In addition, the average heat-rate of the generating fleet over those 20 years has improved by 22%, meaning that today three power plants can generate virtually the same megawatt-hours that used to require four plants. That efficiency has resulted in the need for fewer power plants and significantly lower emissions.

### *Carbon Dioxide Emissions*

Three of New England's six states, representing more than 80% of the region's electricity demand, have state laws mandating roughly an 80% reduction in economy-wide CO<sub>2</sub> emissions by 2050 based on a 1990 baseline. The other three states also have non-binding goals for CO<sub>2</sub> emissions reductions. Since 1990, power plants in New England have reduced their CO<sub>2</sub> emissions by 44%.<sup>3</sup> These reductions represent the sharpest decrease of any sector of the economy. It should also be noted that emissions from power plants peaked in 1997 (49.3 Million Metric Tons), the very year in which the vast majority of the utility-owned rate-base plants began the divestiture process to fully participate in the competitive wholesale electricity markets.

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<sup>3</sup> From 44.7 Million Metric Tons to 25 Million Metric Tons - <https://www.eia.gov/environment/emissions/state/>



In 1990, power plants represented 26% of New England’s CO2 emissions. The latest information from the Energy Information Administration shows power plants now comprising 17% of regional emissions. In sharp contrast, the transportation sector, which since 1990 has always represented the largest source of CO2 emissions, is the only sector of the economy that has seen its emissions rise over that timeframe and now represents more than 45% of all regional economy-wide CO2 emissions.<sup>4</sup>

NEPGA recognizes that the New England wholesale electricity markets as designed today do not include CO2 emissions optimization and current policies do not reflect a price on CO2 sufficient to meet desired state emissions levels. We support the use of market-based mechanisms, including to address state requirements for environmental performance. NEPGA and its members stand ready to work with states and other stakeholders to achieve emissions mandates in a market-based, cost-effective and reliable manner.

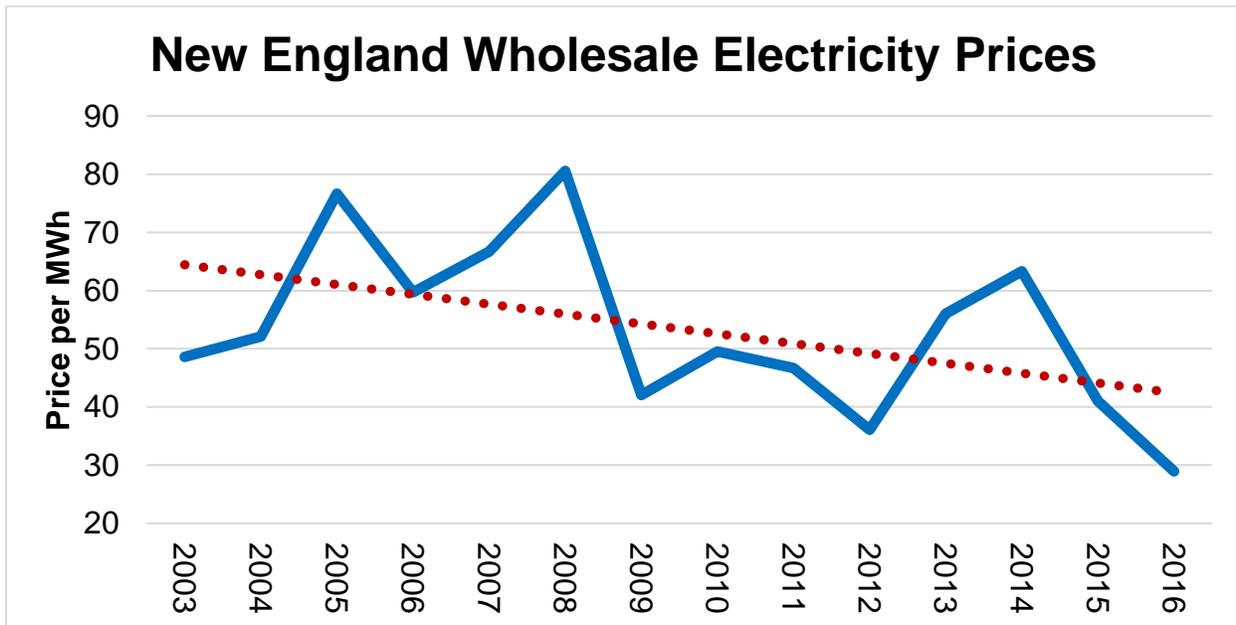
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<sup>4</sup> While outside of FERC’s jurisdiction and the scope of this proceeding, NEPGA has consistently highlighted this as part of our broader support for policies beyond just those on power plants to meet *economy-wide* emissions laws.

Wholesale Electricity Prices

ISO-NE often refers to 2003 as the year in which the full wholesale electricity markets began as we know them today with the adoption of Standard Market Design and development of the Forward Capacity Market (“FCM”), along with the real-time and day-ahead energy markets as well as the ancillary services markets. Over that time, the price of natural gas has consistently driven the marginal wholesale electricity price and therefore the average annual prices. Yet, despite concerns raised by some that New England has natural gas fuel delivery constraints that lead to uncompetitive prices and/or reliability concerns, the power generators that have the obligation to perform in the marketplace and procure the necessary fuel, continue to deliver.

With many older power plants retiring, the vast majority of them being non-gas resources, 2016 served as a particularly extraordinary year. Average wholesale electricity prices in 2016 were \$28.94/MWh – the lowest price since 2003.<sup>5</sup> Not only did this beat the previous record (\$36.09/MWh in 2012) but it was 20% below the prior record price.



<sup>5</sup> “New England’s Wholesale Electricity Prices in 2016 Were the Lowest Since 2003,” ISO-NE Press Release, February 27, 2017. [https://www.iso-ne.com/static-assets/documents/2017/02/20170227\\_pr\\_2016\\_price\\_release.pdf](https://www.iso-ne.com/static-assets/documents/2017/02/20170227_pr_2016_price_release.pdf)

Beyond the absolute figures, it is worth noting that PJM also saw its lowest wholesale electricity prices in 2016 (\$28.78/MWh).<sup>6</sup> With both New England and PJM hitting record low prices in the same year, there was only a \$.16/MWh difference. While there are structural, policy, economic and market-design differences between New England and PJM, which may explain price differences between the regions, the price convergence seen in 2016 is notable.

Annual wholesale electricity prices clearly vary. Year-to-year fluctuations in weather, fuel prices and other key inputs create price changes. Yet, with 14 years of data, trends emerge and the key trend line seen above is a downward trajectory in prices, providing enormous cost benefits for consumers from a highly competitive marketplace.

### *New Investments*

Since 2013, 4,120 MW of new generating capacity has cleared in the FCM, replacing nearly 4,200 MW of plants that have announced retirements to-date. As with the 14,000 MW that were built following restructuring almost 20 years ago, these new resources are being financed, developed and constructed without any out-of-market payments, long-term contracts or rate-recovery guarantees. Collectively, this new capacity represents 15% of ISO-NE's all-time peak demand day.<sup>7</sup> These resources are also entering the market at highly-competitive capacity prices. In the last two auctions (Forward Capacity Auctions 10 and 11) 1,723 MW of new generating capacity was selected at prices of \$7.03/kW-month and \$5.30/kW-month respectively.

To the extent additional retirements occur, just like with the 4,200 MW that have announced retirement, the competitive generation market is ready, willing and able to replace this installed capacity. Today, there are more than 13,000 MW of generation capacity in the ISO-

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<sup>6</sup> "2016 State of the Market Report for PJM," Monitoring Analytics, March 9, 2017.

[http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2016.shtml](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2016.shtml)

<sup>7</sup> 28,130 MW of demand on August 6, 2006. <https://iso-ne.com/about/key-stats/electricity-use>

NE generation interconnection queue. While not all of these plants will ultimately be built, this investor interest indicates a clear response from the marketplace to meet installed capacity requirements whenever they are needed. What the new generation capacity investments all share is a reliance on an open, non-discriminatory, competitive marketplace in which they will have an opportunity to compete subject to environmental regulations and the performance requirements of the ISO-NE market.

## **State Policy Initiatives**

The context laid out above is important to frame the wholesale electricity market backdrop. A number of states are now pushing for individual resource types, particularly in light of other sectors of the economy failing to meet their CO2 emissions reduction targets. This has principally taken the form of recent legislative initiatives to implement long-term contracts (up to 20 years in most instances) for “Clean Energy Resources,” which are often defined as Class I RPS-eligible facilities as well as provincially-owned large-scale Canadian hydropower, or nuclear. For example, an energy bill enacted last summer in Massachusetts requires the state’s Electric Distribution Companies to procure 1,200 MW of provincially-owned hydropower and/or Class I renewables as well as 1,600 MW of off-shore wind.<sup>8</sup> Collectively, this represents roughly 40% of Massachusetts’ annual electricity demand, which equals roughly 20% of New England-wide demand (Massachusetts represents approximately half the electricity load in the region). There was also proposed legislation in Connecticut the last two years that would have provided 5- to 20-year contracts for a number of “Clean Energy Resources” totaling 13,235,150 MWh – roughly 40% of Connecticut’s annual electricity demand.<sup>9</sup> In addition, all six states in New

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<sup>8</sup> *An Act Relative to Energy Diversity*, Massachusetts House Bill 4568

<sup>9</sup> *An Act Concerning Baseload Energy Supplies in the State and Achieving Connecticut’s Greenhouse Gas Emissions Mandated Levels*, Connecticut Senate Bill 106

England have Renewable Portfolio Standards (“RPS”), which together call for roughly 20% of the marketplace to be served by RPS resources by 2025.

Collectively, these policies have the very real potential of carving out the majority of the annual electricity consumed in New England for a small subset of resources and technologies and insulating them from the competition and economics of the energy, ancillary services and capacity markets.

These contracts are in addition to other state policies that have a material impact on the wholesale electricity market, particularly with respect to reducing overall demand and/or pushing supplies behind a retail meter. Such actions create questions as to resource performance without the comparable performance obligations required from supply resources in the FCM:

- Four out of the top five states in the U.S. on energy efficiency are in New England.<sup>10</sup>
- Massachusetts has an aggressive solar net metering policy with a goal of 1,600 MW of installed solar capacity by 2020, with a new target of an additional 1,600 MW.<sup>11</sup>
- State-specific emissions regulations, such as have been proposed in Massachusetts, would lead to increased regional energy prices and constrain efficient economic dispatch.<sup>12</sup>

Protections built into FCM, such as the Minimum Offer Price Rule (“MOPR”), are necessary to ensure appropriate price formation and just and reasonable outcomes. But additional market design changes may well be needed to ensure competitive pricing, investment incentives and appropriate resource adequacy in future years. ISO-NE’s recent Competitive Auctions for Subsidized Policy Resources (“CASPR”) capacity market proposal provides an intriguing

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<sup>10</sup> <http://aceee.org/state-policy/scorecard>

<sup>11</sup> Solar Massachusetts Renewable Target (SMART), Final Program Design, Massachusetts Department of Energy Resources, January 31, 2017. <http://www.mass.gov/eea/docs/doer/rps-aps/final-program-design-1-31-17.pdf>

<sup>12</sup> Reducing Greenhouse Gas Emissions from Electricity Generating Facilities, Massachusetts Department of Environmental Protection. <http://www.mass.gov/eea/agencies/massdep/climate-energy/climate/ghg/>

concept of protections for appropriate price formation for existing resources, such as the elimination of the MOPR exception. NEPGA has concerns, however, about certain aspects of the design which could undermine unsubsidized competitive new entry. The NEPOOL stakeholder process to consider CASPR's details is just beginning, so NEPGA offers these comments as only a preliminary reaction and looks forward to working with ISO-NE and stakeholders on CASPR.

In light of the number and extent of the policies described above, NEPGA believes that a holistic view of the energy, ancillary services and capacity markets is urgently needed. While NEPGA appreciates the ongoing stakeholder discussions around these issues in NEPOOL, some direction from FERC is necessary to ensure that the stakeholder process concludes in actionable recommendations that are generally in-line with FERC expectations of appropriate, market-based solutions. This broad-based view is necessary as a number of the resources contracted may choose not to participate in the FCM to avoid the stringent performance obligations with no excuse for non-performance and penalties for non-performance. Instead, they may choose to serve as energy-only resources that still receive bonus payments for performing during declared Scarcity Conditions while not having the performance risks associated with a capacity supply obligation. Even putting aside outside energy market revenue, the majority of the contracted resources also have low or zero marginal costs. The question, therefore, is whether the resulting market signals provide adequate compensation for the flexible generation resources needed to supply remaining load and backstop intermittent resources. NEPGA does not have the answer to this question, but we highlight it here as critical to the future of the FERC-regulated markets.

## **Moving Forward**

NEPGA applauds FERC and the leadership of Acting Chairman Cheryl LaFleur for convening this important technical conference. NEPGA believes that the technical conference

and this comment period provide a unique opportunity for the Commission to help the regions address these issues at this critical point in the development of the markets. The need is urgent with investment decisions being made today.

Although it will take several years for most of the new contracted resources to hit the market, the Commission knows all too well it can take years to develop, propose, review and implement major market changes. NEPGA therefore submits that now is the time to begin that process. Without action the current situation will continue to unfold with existing generators seeing dwindling revenues and ultimately forced to make retirement announcements, with the very real potential that retiring resources must be retained through out-of-market mechanisms to support reliability and maintain stability on the grid. At the same time, new investments will be predicated on state-backed contracts with consumers bearing the cost and risk consequences of these long-term investments. This approach is antithetical to the fundamental concepts of wholesale markets: competitive pricing and risk shifting from consumers to shareholders.

NEPGA stands ready to work with the Commission, state policymakers, ISO-NE and other stakeholders to develop practical solutions to best address this threat to the competitive wholesale markets. Initiatives like NEPOOL's Integrating Markets and Public Policy (IMAPP) have provided a helpful opportunity for stakeholders and policymakers to engage in dialogue, but participants have not yet reached any resolution, although some NEPGA members are still developing proposals. The competitive generator community has engaged fully in that process; offering well-developed proposals at each IMAPP meeting. NEPGA and its members are committed to continued engagement. However, direction with respect to principles or essential elements from FERC would better focus the regional discussion and provide the best chance at a successful outcome.

To be effective, solutions must address the intersection of state policies and the wholesale markets in a holistic manner. As it did in the context of Order No. 2000, the Commission should provide guidelines that enable stakeholders to reach solutions that work for individual regions and that also are consistent with the Federal Power Act.<sup>13</sup> Further, the Commission should respect solutions that regions, states and stakeholders are able to reach in the future to address these challenges, provided they fall within the guidelines the Commission has established as well as the framework of the Federal Power Act and general competitive market principles.

NEPGA believes that leadership from the Commission along these lines can make it possible for wholesale markets and state policies to work together in a way that enables both to achieve their goals. *We urge FERC to provide strong guidance to the RTOs to amend their rules to ensure that price formation is consistent with competitive market principles.*

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<sup>13</sup> *Regional Transmission Organizations*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (2000), *Order on Reh'g* Order No. 2000-A, 90 FERC Stats. & Regs. ¶ 61,201 (2000) (establishing minimum characteristics for an RTO).