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June 29, 2010

VIA ELECTRONIC ATTACHMENT

Mr. David Meyer
U.S Department of Energy
Office of Electricity Delivery and Energy Reliability
100 Independence Avenue, SW
Washington, D.C. 20585

RE: Massachusetts Department of Public Utilities Comments on the 2009 National Electric Transmission Congestion Study

Dear Mr. Meyer:

The Massachusetts Department of Public Utilities ("Mass DPU") welcomes this opportunity to comment on the 2009 National Electric Transmission Congestion Study (the "Study" or the "2009 Study"). The Mass DPU supports the Department's conclusions regarding New England and offers comments on several areas detailed in the Study.

I. Findings on Congestion in New England

The Study recognizes that New England's multi-faceted approach to regional system planning has resolved most of the serious transmission constraints identified in the first Congestion Study in 2006.[1] The Study highlights the new transmission lines put into service over the last five years and our region's generally steady locational marginal pricing ("LMP") levels across all of New England's zones, which indicate little congestion.[2] Accordingly, the 2009 Study removes the designation of New England as a Congestion Area of Concern.[3] Significantly, the Study finds that New England "has shown that it can permit, site, finance, cost-allocate and build new generation and transmission, while encouraging demand-side resources as well."[4]

These findings illustrate that our region's system of transmission planning, siting and cost allocation leads to positive tangible results. We look forward to continuing to work in partnership with ISO New England Inc. ("ISO-NE"), NEPOOL, our fellow states, and other stakeholders to ensure that our region continues to address additional transmission constraints, allocate transmission costs fairly, attract new resources to market, and promote policy objectives around renewable resources and energy efficiency.

II. Offshore Wind Potential in New England

The American Recovery and Reinvestment Act ("ARRA") expanded the scope of the Study to include information related to development of renewable energy generation and

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1 2009 National Electric Transmission Congestion Study at 54. *See also* 2006 National Electric Transmission Congestion Study (designating New England as a Congestion Area of Concern).

2 2009 National Electric Transmission Congestion Study at 54-55.

3 *Id.*

4 *Id.* at 54.

transmission availability.[5] The Study identifies "Conditional Congestion Areas." These are locations with potential for development of renewable resources but that may lack sufficient transmission to deliver that energy economically.[6] The 2009 Study identifies offshore wind as giving rise to one type of Conditional Congestion Area.[7] This offshore wind is located in several areas across the United States, including along New England's coastline.[8]

We appreciate the challenges attendant to developing renewable resources such as wind power. However, a study conducted last year by ISO-NE, commissioned by New England's governors, found that "[a]pproximately 12,000 MW of potential wind resources in New England could be added to the system with appropriate transmission expansion."[9] That is over one-third of our region's current required capacity.[10] Indeed, the aggressive development of these wind resources "would allow New England to export renewable power to neighboring regions."[11]

For Massachusetts, our water depths and wind speeds provide our state with "by far the best and most accessible offshore wind resource potential in New England" and help to rank our potential for wind power higher than other areas in the U.S. with strong wind capacity.[12]

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5 *Id.* at viii; American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 409, 123 Stat. 115, 146 (2009).

6 *See* 2009 National Electric Transmission Congestion Study at 17.

7 *Id.* at 23.

8 *Id.*

9 ISO New England, *New England 2030 Power System Study: Report to the New England Governors,* Feb. 2010, at 3, *available at* http://www.nescoe.com/uploads/2009_Economic_Study_Final_Report.pdf.

10 *See* ISO New England, *2010-2019 Forecast Report of Capacity, Energy, Loads, and Transmission (2010), available at* http://www.iso-ne.com/trans/celt/report/index.html.

11 2009 New England Governors' Renewable Energy Blueprint, at 11, *available at* http://www.nescoe.com/uploads/September_Blueprint_9,14.09_for_release.pdf.

12 Susan F. Tierney, Ph.D., *Strategic Options for Investment in Transmission in Support of Offshore Wind Development in Massachusetts*, Summary Report (Dec. 2009), at 2-3 ("Tierney Report"), available at

In 2008, Massachusetts Governor Deval Patrick signed into law four bills related to renewable energy development—the Oceans Act[13], the Green Communities Act[14], the Green Jobs Act[15], and the Global Warming Solutions Act[16]—that will further help to foster our offshore wind potential as well as other renewables.[17] The DOE has also recognized Massachusetts as a hub of wind development, designating the Commonwealth in 2009 as one of only two "Wind Technology Testing Centers" in the nation and awarding an ARRA grant of $25 million for a wind turbine testing facility in Boston.[18]

We support the most cost-effective means to delivering renewable power to our region. The New England markets ensure that delivered prices to ratepayers are driven to their lowest possible levels by competition. These charges are based on the price of power at the point of consumption, including development and transmission costs. Any option for delivering renewable power to New England must similarly internalize costs to ensure that, while balancing renewable energy goals, electricity prices are driven to their lowest achievable levels. We are committed to working with the DOE and our federal partners in the Executive and Legislative branches to realize the full potential of New England's renewable resources and to ensure that Massachusetts ratepayers benefit from the most cost-effective delivery of renewable energy.

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http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Strategic_Options_Offshore_Wind_12-01-09.pdf.

13 An Act Relative to Oceans, MASS. STAT. 2008, c. 114 (allows wind development, at appropriate scale, to be included in a plan for state waters, balancing environmental preservation with use of ocean resources).

14 Act Relative to Green Communities, MASS. STAT. 2008, c. 169 (establishes goal of 20 percent of electricity coming from renewable sources by 2020 and requires utilities to solicit long-term contracts for renewable energy).

15 An Act Relative to Green Jobs in the Commonwealth, MASS. STAT. 2008, c. 307 (provides for strategic investments in local clean energy sector).

16 Global Warming Solutions Act, MASS. STAT. 2008, c. 298 (mandates reduction in greenhouse gas emissions by 25 percent of 1990 levels in 2020 and by 80 percent in 2050).

17 Tierney Report at 6.

18 *See* Tierney Report at 7.

III. Transmitting Carbon Based Resources

In its summary of Conditional Congestion Areas for renewables, DOE concludes by stating that:

> Much of the Type I Conditional Constraint Area [i.e., onshore wind, solar and geothermal located in the West, Southwest and Midwest] also has potential for development of additional non-renewable generation as well as renewables—[f]or [*sic*] instance, there are extensive coal and gas reserves in Montana and Wyoming near the wind resources, and natural gas lines can deliver fuel to power plants in most locations in the lower 48 states. ***A transmission project developed to open up new renewable resource areas could also be used to transmit non-renewable generation. A transmission line developed primarily to serve power from one source or area will probably carry electricity generated by various sources.*** One of the major benefits of a robust transmission network is that it enables grid operators to adjust the generation mix they are using in response to the intermittent nature of renewable electricity generation, as well as to other unanticipated events or conditions.[19] (emphasis added).

There has long been concern in the Northeast that a large-scale build-out of high voltage transmission lines from the Midwest to the Eastern states would result in significant increases in coal-fired generation in addition to renewables. Here, DOE recognizes that electricity generated by non-renewable fuel (e.g., coal) will likely be delivered over transmission lines that span multiple regions.

The likelihood that substantial amounts of coal-fired generation would be carried over transmission lines spanning multiple states to the west of New England is an issue of great concern to Massachusetts and our region. Areas in the Midwest that demonstrate the ability to deliver significant quantities of wind resources also generate large amounts of coal-fired power and have significant additional installed coal capacity.[20] Wires built to transmit renewable

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19 2009 National Electric Transmission Congestion Study at 24.

20 *See* U.S. Energy Information Administration ("EIA"), Electric Generating Capacity 2008, *available at*

energy could, as the 2009 Study highlights, also be used to deliver coal-powered electricity. This would negate the very carbon reduction goals that provide the impetus for construction of inter-regional transmission lines in the first place. Any transmission build-out scenarios contemplating the delivery of substantial amounts of renewable resources must be cognizant of the potential for "coal-by-wire" as well as the impact on local development of renewable energy.

The potential for a significant transmission project to facilitate coal-by-wire warrants further investigation and discussion. We appreciate the Study's observation that "regional and interconnection level transmission analysis and planning . . . [needs to analyze] . . . the merits of developing high-potential renewables in remote areas vs. the merits of developing other renewable resources closer to load centers."[21] This issue requires timely attention by DOE and policymakers, particularly in light of the work that will be commenced in the coming months by the Eastern Interconnection Planning Collaborative (EIPC) and the Eastern Interconnection States' Planning Council (EISPC), two related DOE funded inter-regional transmission planning initiatives.

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http://www.eia.doe.gov/cneaf/electricity/page/capacity/capacity.html; EIA, 1990 - 2008 Net Generation by State by Type of Producer by Energy Source (EIA-906), *available at* http://www.eia.doe.gov/cneaf/electricity/epa/epa_sprdshts.html. Additional installed capacity calculated from the EIA data in the above sources: (2008 Total Net Generation) / (2008 Total Nameplate Generating Capacity x 8760 hours).

[21] 2009 National Electric Transmission Congestion Study at 101-102.

IV. Conclusion

We appreciate the opportunity to provide comments on the 2009 Study. The Study helps to identify transmission planning practices that have worked and those areas where action must be taken to alleviate system constraints. We look forward to continuing to work with DOE on the EIPC, EISPC and other initiatives that will improve the reliability of the grid and help us meet our public policy objectives.

Sincerely,

Ann G. Berwick
Chair