UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001

(not consolidated)

COMPLAINT AND MOTION TO CONSOLIDATE PROCEEDINGS OF THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

Pursuant to Section 206 of the Federal Power Act[1] ("FPA") and Rules 206, 207, and 212 of the Rules of Practice and Procedure[2] of the Federal Energy Regulatory Commission ("Commission"), the New England States Committee on Electricity ("NESCOE") hereby files this Complaint against ISO New England Inc. ("ISO-NE"). On December 3, 2012, ISO-NE filed proposed tariff revisions[3] to the ISO-NE Transmission, Markets and Services Tariff ("Tariff") in response to the Commission's March 30, 2012 Order on the Forward Capacity Market ("FCM").[4] This Complaint arises from unjust and unreasonable provisions of the proposed tariff revisions, specifically the implementation of buyer-side mitigation without an exemption for state-sponsored public policy resources. Because this Complaint concerns the subject matter of a

1 16 U.S.C. § 824e (2006).
2 18 C.F.R. §§ 385.206, 385.207, and 385.2012 (2012).
3 *ISO New England Inc.*, Compliance Filing, Docket No. ER12-953-001 (filed December 3, 2012) ("Compliance Filing").
4 *ISO New England Inc. and New England Power Pool Participants Committee*, 138 FERC ¶ 61,238 (2012) ("March 30, 2012 Order").

compliance filing with a requested effective date of February 12, 2013, NESCOE seeks leave to request Consolidation of the two above-referenced proceedings. NESCOE has filed a protest to the compliance filing, which is attached hereto as Attachment B.

ISO-NE's proposed tariff revisions will require electricity customers to purchase more capacity from the FCM than is necessary for resource adequacy. As detailed below, ISO-NE's proposed offer floor mitigation construct[5] will likely exclude from the FCM new renewable resources developed pursuant to state statutes and regulations. Accordingly, while these resources are providing capacity to the region, they will not likely be counted towards the region's resource adequacy requirement, resulting in electricity customers being forced to purchase more capacity than is necessary for resource adequacy. Courts have frequently held that the major purpose of the FPA "is to protect power consumers against excessive prices."[6] Section 205 of the FPA, in particular, requires that all rates, terms, and conditions of service be just and reasonable.[7] As this Complaint demonstrates, the buyer-side mitigation provisions of ISO-NE's proposed tariff revisions are contrary to the FPA and, therefore, unjust and unreasonable.

Further, as detailed below, overly broad application of the offer floor mitigation construct unreasonably undermines legitimate public policies that are unrelated to the price paid for capacity. Rather than reasonably accommodating legitimate state statutory requirements, ISO-NE's proposed buyer-side mitigation provisions disregard a more balanced approach utilized in other resource adequacy markets.

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5 *ISO New England Inc. and New England Power Pool Participants Committee*, 135 FERC ¶ 61,029 (2011) at P 165 ("April 13, 2011 Order"), *order on reh'g and clarification*, 138 FERC ¶ 61,027 (2012) at P 82 ("January 19, 2012 Order"). *See also PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 (2011) at P 6, citing *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006) at P 103.

6 *Pennsylvania Water & Power Co. v. FPC*, 343 U.S. 414, 418 (1952); *accord*, *Mun. Light Boards v. FPC*, 450 F.2d 1341, 1348 (D.C. Cir. 1971), *cert. denied*, 405 U.S. 989 (1972).

7 16 U.S.C. § 824d (2006).

To remedy the unjust and unreasonable capacity rates that would result from ISO-NE's proposal, NESCOE has developed a just and reasonable alternative – a proposed renewables exemption (the "Renewables Exemption Proposal"). As described below, and in greater detail in the attached testimony of Jeffrey W. Bentz (the "Bentz Testimony") (Attachment A), the Renewables Exemption Proposal will enable the capacity provided by certain renewable resources pursuant to legitimate public policies to be counted towards the region's resource adequacy goals while limiting any incidental price suppression effect. NESCOE's Renewables Exemption Proposal strikes the proper balance between the Commission's and the states' shared interest in promoting competitive outcomes in the wholesale electricity markets and supporting public policies[8] by (i) limiting application to certain classes of resources, (ii) annually capping the aggregate quantity eligible for the exemption, and (iii) only including resources receiving so-called out-of-market revenues. These features of the Renewables Exemption Proposal will establish a path for certain renewable resources to count towards the region's resource adequacy goals while limiting the impact on the FCM clearing price.

NESCOE respectfully requests that the Commission:[9] (1) initiate a proceeding pursuant to Section 206 under "paper hearing" procedures,[10] (2) find the buyer-side mitigation provisions of ISO-NE's proposed tariff revisions unjust and unreasonable, and (3) accept NESCOE's

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8 *See*, e.g., *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011) at P 203, *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132 (2012) at P 317; April 13, 2011 Order, *Concurring Opinion of Commissioner LaFleur and Chairman Wellinghoff* at 1-2.

9 The Connecticut Public Utilities Regulatory Authority joins as a party in support of this Complaint, and will separately notice its intervention in this proceeding.

10 The Commission routinely decides complex and controversial cases on the basis of the record in a paper hearing when such a process is sufficient to resolve all issues of material fact. Further, the Commission used paper hearings in the consolidated proceedings of Docket Nos. ER10-787-000, EL10-50-000, and EL10-57-000.

Renewables Exemption Proposal as a just and reasonable amendment to the offer floor mitigation rules proposed by ISO-NE.[11]

I. Service and Communications

Pursuant to Rules 203,[12] the persons to whom correspondence, pleadings, and other papers in regard to this proceeding should be addressed and whose names are to be placed on the Commission's official service list are designated as follows:

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II. Parties

NESCOE is the Regional State Committee for the New England region. NESCOE is governed by a board of managers appointed by the Governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont and is funded through a regional tariff administered by the ISO New England.[13] NESCOE's mission is to represent the interests of the citizens of New England by advancing policies that will provide electricity at the lowest reasonable cost over the long term, consistent with maintaining reliable service and

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11 NESCOE's Proposed Tariff Revisions to Implement the Renewables Exemption are attached as Exhibit NSC-2.

12 18 C.F.R. § 385.203 (2012).

13 *ISO New England Inc.*, 121 FERC ¶ 61,105 (2007).

environmental quality.[14]

ISO-NE is the private, non-profit entity that serves as the Regional Transmission Organization ("RTO") for New England. ISO-NE operates the New England bulk power system and administers New England's organized wholesale electricity market pursuant to the Tariff and the Transmission Operating Agreement with the New England Participating Transmission Owners. In its capacity as an RTO, ISO-NE has the responsibility to protect the short-term reliability of the New England Control Area and to operate the system according to reliability standards established by the Northeast Power Coordinating Council and the North American Electric Reliability Corporation.

III. Background

A. ISO-NE's Proposed Offer Floor Mitigation Construct

In its April 13, 2011 Order, the Commission "directed ISO-NE and its stakeholders to develop an offer floor mitigation construct in which asset-class-specific benchmark offer floors are applied to offers from new resources."[15] In response, the ISO-NE Internal Market Monitoring Unit ("IMM") developed a series of tariff revisions to implement buyer-side mitigation.[16] The mechanics of the proposed offer floor mitigation construct, commonly known as the Minimum Offer Price Rule ("MOPR"), are explained below and in the attached Bentz Testimony. On December 3, 2012, ISO-NE filed, in Docket No. ER13-953-001, proposed tariff revisions to the ISO-NE Transmission, Markets and Services Tariff in response to the

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[14] *See Joint Petition for Declaratory Order to Form a New England Regional State Committee*, The Governors of: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Docket No. EL04-112-000 (Jun. 25, 2004).

[15] January 19, 2012 Order, 138 FERC ¶ 61,027 at P 82, citing April 13, 2011 Order, 135 FERC ¶ 61,029.

[16] Compliance Filing, Transmittal at 8-28; *See also* Joint Testimony of Marc D. Montalvo and David H. Naughton, (the "Joint Montalvo / Naughton Testimony") and ISO-NE Tariff Section III.A.21.

Commission's March 30, 2012 Order on the FCM.[17] The MOPR applies to all new resources offering into the FCM, including renewable resources.

B. The New England States' Public Policies Promoting the Development of Renewable Resources

As described in NESCOE's attached Protest, the New England states have proactively advanced and provided significant financial support for the development of renewable resources for over a decade.[18] For example, five of the six New England states have enacted Renewable and Alternative Portfolio Standards ("RPS").[19] The other New England state, Vermont, requires its electric distribution companies to enter into long-term contracts with renewable resources for a certain portion of the companies' loads.[20] The laws and regulations governing RPS policies place a requirement on load-serving entities (both load-serving utilities and competitive suppliers) ("LSEs") to purchase Renewable Energy Certificates ("RECs") in proportion to a percentage of their load. These RPS programs have given rise to a secondary market in which qualifying renewable resources may sell the RECs created by their energy generation to LSEs and others. This market-based approach has been providing economic incentives to renewable resources for over a decade.[21] The aggregate value of these economic incentives for renewable

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17 March 30, 2012 Order, 138 FERC ¶ 61,238. More detailed background on the development of the MOPR and the stakeholder process are provided in the Protest.

18 Rhode Island enacted a public benefit fund in 1996. R.I. Gen. Laws § 39-2-1.2. Maine and Massachusetts enacted public benefit funds and renewable portfolio standards in 1997. 35-A M.R.S. § 3210. M.G.L. ch. 25 § 20 and ch. 25A § 11F. Connecticut enacted a public benefit fund and renewable portfolio standard in 1998. Conn. Gen. Stat. §§ 16-245a et seq. and 16-245n.

19 Conn. Gen. Stat. § 16-245a et seq.; 35-A Maine Revised Statutes §§ 3210, 3210-C; Mass. Gen. Laws ch. 25A, § 11F; New Hampshire Statutes, Chapter 362-F; Rhode Island Gen. Laws §§ 39-26 et seq., *See also* 30 V.S.A. § 8004(b).

20 30 V.S.A. § 8005(d).

21 Initial RPS compliance deadlines included: Maine (2000), Massachusetts (2003), and Connecticut (2004). Wiser, R. and Barbose, G., *Renewable Portfolio Standards in the United States: A Status Report with Data Through 2007*, Lawrence Berkeley National Laboratory (LBNL), at 12 (April 25, 2008).

resources is at least hundreds of millions of dollars.[22]

The New England states have also enacted complementary statutes and regulations to promote the development of renewable resources, including favorable tax and land use policies, and, increasingly, other economic incentives.[23] In response to difficult credit conditions for generation resources,[24] which are large, capital-intensive investments, some New England states have provided the revenue certainty of power-purchase agreements for anchor tenants to facilitate the financing of new renewable resources.[25] These state policies promote the development of new renewable resources irrespective of FCM rules and related price signals.

IV. Argument

In the January 2012 Order, the Commission affirmed that a complaint under Section 206 of the FPA is the appropriate statutory vehicle for demonstrating "that ISO-NE's offer floor

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22 "Unfortunately, the actual costs (and benefits) of state RPS policies have not been complied in a comprehensive fashion, in part because of the early status of policy implementation and in part because of methodological complexities and data availability constraints." Wiser, R. and Barbose, G., at 29. However, in addition to load-serving entity REC expenditures, the Massachusetts Renewable Energy Trust "awarded $281 million in grants, loans, and contracts to municipalities, public agencies, nonprofit organizations, private companies and individuals" from 1998-2008. *Renewable Energy Results for Massachusetts: A Report on the Renewable Energy Trust Fund 1998-2008*, Massachusetts Technology Collaborative, *available at* http://www.masstech.org/sites/mtc/files/documents/ 2008 Renewable Energy Trust Report_0.pdf. Similarly, the Connecticut Clean Energy Fund provided $151 million to support clean energy from 2000-2010. *Annual Report of Activities 2010*, Connecticut Clean Energy Fund, *available at* http://www.ctcleanenergy.com/AboutCEFIA/AnnualReport/tabid/136/Default.aspx.

23 State policies for renewable resources include: system benefit funds; rebates; loan funds; grants; municipal purchasing requirements; net metering; property assessment financing; fee waivers; tax deductions, exemptions, and credits; patent exemptions; expedited processes; emissions disclosure requirements; interconnection standards; building codes; and model ordinances. *See* the Database of State Incentives for Renewables and Efficiency (DSIRE) at http://www.dsireusa.org.

24 *See* Schwabe, P. et al., *Renewable Energy Project Financing: Impacts of the Financial Crisis and Federal Legislation*, National Renewable Energy Laboratory (NREL), at 2 (July 2009). *See*, also, Schwabe, P. et al., *Mobilizing Public Markets to Finance Renewable Energy Projects: Insights from Expert* Stakeholders, NREL, (June 2012) and Wiser, R. et al., *Renewable Portfolio Standards: A Factual Introduction to Experience from the United States*, LBNL, at 8 (April 2007). Notably, the Massachusetts Green Communities Act aims to "facilitate the financing of renewable energy generation." Mass. Session Laws, St. 2008, c. 169, § 83.

25 Conn. Gen. Stat. §§ 16-244c(j)(2), 16-244r, 16-244s, 16-244t, and 16-244v; 35-A Maine Revised Statutes § 3601 et seq.; Mass. Session Laws, St. 2008, c. 169, § 83; Mass. Session Laws, St. 2012, c. 209, §§ 35 and 36; Rhode Island Gen. Laws §§ 39-26.1 and 39.26.2 et seq.; 30 V.S.A. § 8005(d).

mitigation tariff rules are unjust and unreasonable as applied to a particular project or projects."[26] Section 206 imposes a dual burden on complainants. First, a Section 206 complainant must demonstrate that the rate, charge, or practice complained of is unjust and unreasonable.[27] Second, the complainant must present a just and reasonable alternative.[28] As set forth below, NESCOE has satisfied the two-stage burden imposed by Section 206.

ISO-NE's proposed tariff revisions to implement the MOPR are overly broad and cannot withstand scrutiny under Section 206. The MOPR, in its proposed form, is "unjust, unreasonable, unduly discriminatory or preferential."[29] As explained below in Part IV.A, and detailed in the Bentz Testimony, under ISO-NE's proposed offer floor mitigation rules, much of the capacity provided by new renewable resources developed pursuant to state statutes and regulations will not be counted towards the region's resource adequacy requirements.[30] Such state actions are not an exercise of buyer-side market power.[31] Rather, these actions are a legitimate means to implement comprehensive state public policies and statutory requirements for renewable resources. However, ISO-NE's proposed MOPR treats these renewable resources as uneconomic entry and, as a result, excludes their capacity from consideration towards meeting the Installed Capacity Requirement ("ICR") even though they will be commercially available

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26 January 19, 2012 Order,138 FERC ¶ 61,027 at P 89.

27 16 U.S.C. § 824e(b) (2006).

28 In the event the Commission finds that neither ISO-NE's buyer-side mitigation proposal nor NESCOE's alternative proposal is just and reasonable, the Commission should nonetheless establish an exemption from mitigation that assists states' efforts to satisfy their renewable portfolio standard obligations and other public policy goals. *Maryland Pub. Serv. Comm'n v. FERC*, 632 F.3d 1283, 1285, n.1 (D.C. Cir. 2011) ("'Once [FERC determines a rate is unjust], the *Commission* is required to reach a further determination: the just and reasonable rate to be fixed in place of either an unlawful proposed or existing rate.'). It is the Commission's job—not the petitioner's—to find a just and reasonable rate.") (emphasis in original) (citing *Tenn. Gas Pipeline Co. v. FERC*, 860 F.2d 446, 454 (D.C. Cir. 1988)).

29 16 U.S.C. § 824e(a) (2006).

30 Bentz Testimony Section IV, at 15-19.

31 "Entities with buyer-side market power can artificially lower the capacity price, sometimes substantially, by subsidizing new investment that is then offered into the market at prices below its full entry costs." April 13, 2011 Order, 135 FERC ¶ 61,029 at P 158.

and providing capacity value.[32]

To remedy this unjust and unreasonable result, NESCOE proposes a just and reasonable, narrowly tailored exemption from mitigation. As explained in Part IV.B below, and in the Bentz Testimony, NESCOE's Renewables Exemption Proposal would exempt from mitigation the capacity provided by new renewable resources developed pursuant to state statutes and regulations. NESCOE's Renewables Exemption Proposal should be adopted because it is a just and reasonable alternative and achieves the appropriate balance between the Commission's and the states' shared interest in promoting competitive outcomes in the wholesale electricity markets and supporting public policies.[33]

A. Absent an Appropriately Narrow Exemption for Renewable Resources, the Buyer-Side Mitigation Provisions of the Proposed Tariff Revisions are Unjust and Unreasonable

Implementation of the proposed MOPR will result in an over-procurement of capacity and will unreasonably undermine state laws supporting the development of renewable resources.[34] The effect of the MOPR is entirely foreseeable: it will exclude from the FCM new

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[32] Bentz Testimony Section IV, at 15-19.

[33] April 13, 2011 Order, 135 FERC ¶ 61,029, *Concurring Opinion of Commissioner LaFleur and Chairman Wellinghoff* at 1-2.

[34] *See, e.g.,* the following policy objectives reflected in the statutory codes of New England states: The Renewable Energy Investment Fund should "foster the growth, development and commercialization of renewable energy sources, related enterprises and stimulate demand for renewable energy and deployment of renewable energy sources that serve end use customers in this state and for the further purpose of supporting operational demonstration projects for advanced technologies that reduce energy use from traditional sources[.]" Conn. Gen. Stat. 16-245n(c); "[T]o encourage the use of renewable, efficient and indigenous resources, it is the policy of this State to encourage the generation of electricity from renewable and efficient sources and to diversify electricity production[.]" 35-A M.R.S. § 3210; ". . . (i) the development and increased use and affordability of renewable energy resources in the commonwealth and the New England region; (ii) the protection of the environment and the health of the citizens of the commonwealth through the prevention, mitigation and alleviation of the adverse pollution effects associated with certain electricity generation facilities; (iii) the maximization of benefits to consumers of the commonwealth resulting from increased fuel and supply diversity. . ." M.G.L. ch. 23J § 9(c); "Renewable energy generation technologies can provide fuel diversity to the state and New England generation supply through use of local renewable fuels and resources that serve to displace and thereby lower regional dependence on fossil fuels." N.H.S. 362-F:1; "[I]n order to protect public health and the

renewable resources needed to satisfy state statutory requirements. As described in the Bentz Testimony, the minimum offer floor prices of new resources are stratified by their asset-class-specific benchmarks.[35] The MOPR's resource-type cost stratification is relatively consistent with other analyses examining the levelized cost of energy from new electricity generation resources in showing that renewable resources tend to be priced higher than other traditional resources.[36] Because renewable resources are unlikely, in the short-term, to be a lower cost solution than gas-fired resources for meeting the region's resource adequacy targets, the MOPR will likely completely exclude many, if not all, new renewable resources from the FCM.[37]

This exclusion will result in the violation of a "bedrock" principle of the FCM: not to procure more capacity than is necessary for resource adequacy.[38] Codified state policies supporting new renewable resources were enacted to promote and facilitate their development without regard to the FCM clearing price and corresponding revenue (though, of course, at a higher price to customers without this revenue). Accordingly, new renewable resources—providing capacity for the region—will be placed in service irrespective of the MOPR's exclusion. This will lead to an over-procurement of capacity by the FCM. Additionally, the MOPR's overly broad exclusion will undermine legitimate state policy goals related to

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environment and to promote the general welfare, to establish a renewable energy standard program to increase levels of electric energy supplied in the state from renewable resources." R.I. Gen. Laws § 39-26-1(e); "Providing support and incentives to locate renewable energy plants of small and moderate size in a manner that is distributed across the state's electric grid, including locating such plants in areas that will provide benefit to the operation and management of that grid through such means as reducing line losses and addressing transmission and distribution constraints." 30 V.S.A. § 8001(a)(7).

35 Bentz Testimony Section III, at 16-17.

36 Bentz Testimony Section IV, at 17. See also *2012 Annual Energy Outlook: U.S. Average Levelized Costs for Plants Entering Service in 2017*, U.S. Department of Energy, Energy Information Administration, *available at* http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

37 Bentz Testimony Section IV, at 15-19.

38 April 13, 2011 Order, 135 FERC ¶ 61,029 at P 164.

renewable resource development.[39]

1. Electricity Customers Will Be Forced to Purchase More Capacity Than is Necessary for Resource Adequacy

A market design that results in procuring more capacity than is necessary to ensure resource adequacy is unjust and unreasonable. The proposed MOPR, however, ignores the foreseeable outcome that renewable resources will be built and become operational pursuant to state statutory requirements and programs to support them despite the clearing price in the FCM, leading to the purchase of more capacity than is needed to meet ICR.

a. Renewable Resources Excluded from the Forward Capacity Market Will Not Count Towards Resource Adequacy Requirements

Pursuant to Section III.12 of Market Rule 1 in ISO-NE's Tariff, in consultation with NEPOOL stakeholders and state regulatory representatives,[40] ISO-NE develops the region's resource adequacy target. The relevant rule provides that the ICR "is the minimum amount of resources needed to meet the New England control area reliability requirements of disconnecting non-interruptible customers (or, a lost of load expectation of) no more than once every ten years, typically expressed as 0.1 days per year."[41] The ICR is developed through the use of a network computer model that relies upon several inputs: "the load forecast, resource capacity ratings, unit availability, transmission security analysis, and tie benefits."[42] Once developed and approved by

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39 The Commission implicitly acknowledged the likely impact of offer floor mitigation on renewable resources when it recognized "that states and state agencies may conclude that the procurement of new capacity, even at times when the market-clearing price indicates entry of new capacity is not needed, will further specific legitimate policy goals[.]" April 13, 2011 Order, 135 FERC ¶ 61,029 at P 171.

40 ISO-NE Tariff, Section § III.12.3.

41 *ISO New England Inc.*, 134 FERC ¶ 61,174, at P 2 (2011), reh'g denied, 138 FERC ¶ 61,174 (2012).

42 *ISO New England Inc. and New England Power Pool*, 135 FERC ¶ 61,135, at P 4 (2011), citing ISO-NE Tariff § III.12.1 et seq.

the Commission, the ICR "specifies the quantity of resources to be procured in the FCM."[43] ISO-NE's process to develop the ICR and then use the FCM to procure the resources needed to meet forecasted load is the paradigm for resource adequacy in New England.

The corollary to this paradigm, however, is that resources that are not procured by the FCM are not counted towards the ICR. Pursuant to Section III.12.7.2 of the Tariff, the resources included in the calculation of the ICR (and local sourcing requirements for transmission constrained zones of the New England Control Area) include resources that are considered "existing" or that have cleared in the Forward Capacity Auction ("FCA").[44] There is no provision for including operational resources that have not cleared the FCA. The Tariff requires that the region's transmission ratepayers purchase 100% of the ICR through the FCM.[45] Thus, clearing in the FCM is the only means for a new resource to count toward resource adequacy targets.[46] As described in the Bentz Testimony, when new renewable resources developed in furtherance of state public policies begin commercial operation, the MOPR will most likely prevent them from receiving a capacity supply obligation in the FCM and their capacity will not be counted toward the ICR.[47] This is because the FCM does not include resources that fail to clear, even if they exist, are commercially operational, and are providing capacity value.[48]

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43 ISO New England Inc., 138 FERC ¶ 61,174 at P 2 (2012). *See* also ISO-NE Tariff § III.13.2.2.

44 *See* ISO-NE Tariff § III.13.2.

45 ISO-NE Tariff § III.13.2.2.

46 There is an exception written into the tariff for Hydro Quebec Interconnection Capability Credits. These import resources predate the creation of the FCM and their consideration towards the region's ICR is the product of a negotiated settlement. See *ISO New England Inc. and New England Power Pool Participants Committee*, 121 FERC ¶ 61,250 (2007) at 23, and ISO-NE Tariff §§ III.12.9.7 and III.13.2.2.

47 "If for any reason the resource does not clear in the [Forward Capacity Auction], it will never be recognized as available and existing capacity, and the FCM would seek to procure more new capacity than is actually required, given the physical existence of the resource in question." Joint Montalvo / Naughton Testimony at 16. *See also* Bentz Testimony Section IV, at 15-19.

48 ISO-NE's duration of mitigation provisions are similarly unavailing. *See* Compliance Filing, Transmittal Section III.A.5 at 20; Joint Montalvo / Naughton Testimony at 15-18. Assuming a resource from the "other renewables" category were allowed to offer at the auction starting price of $15/kW-month, the other ORTPs remain constant, and depreciating capital costs has a commensurate effect of reducing one's ORTP,

New England's transmission ratepayers receive the reliability benefits associated with the capacity provided by all commercially operational resources, regardless of whether those resources have cleared the FCM. New renewable resources developed in furtherance of legitimate public policies as codified in state laws provide capacity and should be counted towards the region's resource adequacy target. When the capacity provided by new renewable resources is not counted towards ICR and the FCM procures more capacity than is necessary for resource adequacy, the region's transmission ratepayers do not receive the full value of their investments in all capacity resources and pay more for capacity than is necessary. This is an unjust and unreasonable result.

b. Electricity Customers Should not be Required to Purchase More Capacity Than Necessary for Resource Adequacy

The objective of ISO-NE's capacity market is to identify the quantity of resources necessary to meet forecasted load and to use a market to establish the price.[49] A market structure that effectively will procure more capacity than is necessary to ensure resource adequacy violates what the Commission has found to be a core requirement: "limiting purchases to the ICR is a 'bedrock' principle of the FCM model."[50]

On April 13, 2011, the Commission rejected and deemed unjust and unreasonable ISO-NE's proposed market rules changes that would have permitted "state-sponsored" public policy resources to clear in the FCM and be counted towards the region's resource adequacy goals,

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under the proposed 30-year straight-line depreciation approach, only after ten years would the resource be competitive with combined cycle natural gas plants. On-shore wind could compete with combined cycles after 8 years. Off-shore wind, with a $61/kW-month ORTP, would only compete with combined cycles after 25 years of commercial operation.

[49] "The purpose of the Forward Market is only to locate the price at which market incentives will be sufficient to meet that [peak demand estimate]." Connecticut Dep't of Pub. Util. Control v FERC, 569 F.3d 477 (D.C. Cir. 2009), at 481.

[50] April 13, 2011 Order, 135 FERC ¶ 61,029 at P 164.

while at the same time employing an "alternative price rule" mechanism to address price suppression effects.[51] In rejecting ISO-NE's Alternative Price Rule, the Commission found the tradeoff of "requiring purchases in excess of the capacity target to permit *all* [out-of-market resources] to clear, to be unjust and unreasonable."[52] (emphasis added) The Alternative Price Rule ("APR") proposal would have allowed out-of-market resources to clear in the FCM. The Commission determined it was unjust and unreasonable because it would have counted out-of-market resources towards the ICR as well as procured the resources displaced by the out-of-market capacity. Because the FCM under the APR would always procure resources in excess of ICR whenever out-of-market resources cleared, the Commission rejected the APR. From the perspectives of both reliability and cost to customers, however, there is no difference between an FCM that *expressly* purchases more capacity than needed – which the Commission has prohibited – and an FCM that *effectively* purchases more than needed by excluding resources that do, in fact, provide capacity value because they are developed pursuant to state policies. But this is precisely the result of the MOPR.

The stated intent of the MOPR is to deter uneconomic entry intended to suppress price.[53] However, the blanket exclusion of *all* out-of-market resources ignores the need to integrate and respect federal and state policies, which the Commission itself recognized in its invitation for resources to seek a case-by-case exemption.[54] Effectively precluding renewable resources from clearing in the FCM and therefore contributing to resource adequacy economically harms transmission customers subject to the Commission's jurisdiction, which must also pay for

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51 April 13, 2011 Order, 135 FERC ¶ 61,029 at PP 61 and 157.

52 April 13, 2011 Order, 135 FERC ¶ 61,029 at P 164.

53 "[T]here would be no financial reward for subsidizing new resources for the purpose of exercising buyer-side market power." April 13, 2011 Order, 135 FERC ¶ 61,029 at P 166.

54 April 13, 2011 Order, 135 FERC ¶ 61,029 at P 171 and *Concurring Opinion of Commissioner LaFleur and Chairman Wellinghoff* at 1-2.

compliance with state laws.[55] Buyer-side mitigation rules that effectively prevent this capacity from being applied towards the ICR are unjust and unreasonable.

2. Overly Broad Application of the Minimum Offer Price Rule Disregards an Achievable Balance with Legitimate State Policy Goals

As described in NESCOE's Protest, the long-term contracts intended to support the continued development of renewable resources are not an intentional exercise of buyer-side market power. However, when the MOPR excludes new renewable resources from counting towards the region's resource adequacy targets, legitimate public policies supporting, *inter alia*, fuel diversity and emissions reduction through the development of renewable resources are unreasonably undermined.

a. Despite the Absence of an Intent to Suppress Capacity Prices, the Minimum Offer Price Rule Applies to All Resources

While the Commission has found that out-of-market "capacity suppresses prices regardless of intent,"[56] the *absence of intent* to suppress prices remains relevant to the scope of the remedy. The application of the MOPR to renewable resources is an unnecessarily broad approach to deterring intentional price suppression. Indeed, there is a virtually infinite variety of actions that can "suppress" price – from finding lower cost fuel supplies through exploration of shale fields to the simple act of turning off a reading light – where it would not occur to the Commission or anyone else to implement a rule to counter the suppression effect. The Commission should reject overly broad rules intended to address the intentional suppression of

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55 "Nothing in the ICR requirement prevents a state from requiring its [load-serving entities] to meet capacity requirements through demand response, or through contracts to purchase power, or through more environmentally friendly generation, or, generally speaking, through resources that meet state health or environmental or land-use planning goals." *ISO New England, Inc.*, 122 FERC 61,144 (Order on Remand) (Feb. 21, 2008) (Docket No. ER05-715-002) at P 16.

56 April 13, 2011 Order, 135 FERC ¶ 61,029 at P 170.

price in the FCM.[57] Rules intended to curb the exercise of monopsony market power through support for resources intended to suppress price should not also be permitted to impede legitimate state policies, including customer-supported long-term contracts, for supporting public policy objectives that are fundamentally unrelated to the price paid for capacity.

Indeed, as the Commission has noted, funding renewable resources would be an especially poor option and thoughtless way for state officials to intentionally suppress prices.[58] As the MOPR's Offer Review Trigger Prices and other levelized cost analyses make clear, renewable resources are decidedly not the least cost solution for procuring capacity—at least in the short-term. As a class, their capacity factor relative to their price renders them an expensive means for attempting to save consumers money by intentionally suppressing market prices. It would require a state official to make an illogical or reckless decision to spend ratepayer dollars to fund renewable resources in order to intentionally suppress market prices. The MOPR, as proposed by ISO-NE, is therefore too expansive a remedy for the intentional price suppression it is intended to prevent. A more limited approach to buyer-side mitigation—targeted only towards resource types that a rational person might use to suppress prices intentionally—would deter uneconomic entry without impeding legitimate state public policies.

b. The MOPR Disregards More Balanced Approaches in Other Resource Adequacy Markets

In contrast to ISO-NE's proposed MOPR, other regions have taken a more balanced and limited approach to buyer-side mitigation.[59] Wind and solar resources are exempt from the PJM

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57 *See* Richard B. Miller et al., *"Buyer-Side" Mitigation in Organized Capacity Markets: Time for a Change?*, 33 ENERGY L.J. 449, (2012), *available at* http://www.felj.org/docs/elj332/16-449-Miller[FINAL11.9].pdf.

58 *PJM Interconnection L.L.C.*, 135 FERC ¶ 61,022 (2011) at P 153.

59 *New York Indep. Sys. Operator, Inc.*, 131 FERC ¶ 61,170 (2010) at P 137.

Interconnection's ("PJM") MOPR.[60] Further, PJM and its stakeholders are currently revising their buyer-side mitigation approach to be even more limited than it is currently. Rather than expanding application of the MOPR to all resource types, PJM and its stakeholders are developing a proposal to mitigate *only* natural gas-fired resources.[61] Such a targeted approach to buyer-side mitigation achieves the necessary balance between competing policies.

B. Including an Exemption for Renewable Resources Renders the Proposed Tariff Revisions Just and Reasonable and Achieves the Proper Balance Between Promoting Competition and Advancing Public Policies

As demonstrated above, ISO-NE's proposed tariff revisions regarding buyer-side mitigation are, as filed, unjust and unreasonable. Therefore, the Commission is obligated to determine "the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed."[62] NESCOE respectfully submits that the Commission should find NESCOE's Renewables Exemption Proposal to be a just and reasonable alternative.

Whereas ISO-NE's buyer-side mitigation proposal is unjust and unreasonable because it is overly broad, NESCOE's Renewables Exemption Proposal is just and reasonable because it is narrowly tailored to achieve specific objectives. In particular, NESCOE's Renewables Exemption Proposal would permit certain statutorily-defined renewable resources to clear in the FCM. This would allow state-sponsored public policy resources to be counted towards the region's resource adequacy target. At the same time, the Renewables Exemption Proposal limits

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60 *PJM Interconnection L.L.C.*, 135 FERC ¶ 61,022 (2011) at P6 and at n. 16 (exempted resources include nuclear, coal, Integrated Gasification Combined Cycle facilities, hydroelectric facilities, and upgrades or additions to existing capacity resources) and at P 152 (adding wind and solar facilities to the list of exempted resources and removing upgrades and additions to existing capacity resources).

61 "Another change is to narrow the MOPR to apply only to gas-fired combustion turbine, combined cycle, or integrated gasification combined cycle generating technologies." *PJM Interconnection L.L.C.*, Revisions to the Minimum Offer Price Rule under the Reliability Pricing Model Filing, Transmittal at 15, Docket No. ER13-535-000 (December 7, 2012).

62 16 U.S.C. § 824e(a) (2006).

eligibility in several ways and would only allow enough resources to meet forecasted RPS program demand growth clear. The provisions of the Renewables Exemption Proposal complement one another in promoting the proper balance between legitimate state public policies and economically efficient outcomes in the FCM.

Any incidental price suppression would be limited under the exemption proposal.[63] As described in the Bentz Testimony, the aggregate annual amount of capacity estimated to be needed to satisfy state statutory requirements is the basis for the proposal's cap.[64] The proposed cap of 225 MWs places a limit on the quantity of resources eligible for the exemption in any given auction, thereby limiting any price suppression impact that could potentially occur.

To enable states to meet renewable resource requirements as cost-effectively as possible, resources eligible under the first element of the definition are limited in size only by the aggregate annual cap.[65] Resources such as on-shore wind, which have a significant presence in ISO-NE's queue, are scalable to achieve economies of scale under the exemption proposal. The proposal achieves balance, however, by limiting resource eligibility under the first element of the definition to only those resources that are currently eligible for RPS or comparable programs across all six New England states. This provision mitigates the risk of any state changing their RPS eligibility criteria to permit a large resource to qualify for the exemption. In sum, larger resources, above 10 MWs, must qualify for RPS or comparable program in all six states, but will still be limited in the aggregate by the annual cap.

To foster emerging technologies, resources eligible under the second element of the

63 Bentz Testimony Section V, at 19-26.
64 Bentz Testimony Section V, at 23-25.
65 Bentz Testimony Section V, at 20-22.

definition need only qualify for RPS or a comparable program in one state.[66] However, this class of resources is limited in size to a maximum of 10 MWs, in addition to the aggregate annual cap. This provision enables individual states to provide support for emerging resource types, such as fuel cells, while permitting the region's transmission ratepayers to benefit from the associated capacity.[67] The risk of a single state changing its RPS eligibility to enable a resource to benefit from the exemption is deterred by the size limitation on this class of resources.

The class of multi-fuel resources that may be only partially fueled by renewable resources also supports public policies for renewables.[68] However, only the portion of the resource fueled by a renewable resource may qualify for the proposed exemption.[69] This provision enables a portion of partially renewable, multi-fuel resources to be exempt from the MOPR also in a way that protects the integrity of, and the legitimate purpose of, the exemption.[70]

These limitations largely insulate from economic harm market participants that could be negatively impacted by unintentional price suppression associated with a resource-type exemption. The annual aggregate cap enables market participants to forecast the impact of the exemption and eliminates the uncertainty that could accompany a more open-ended proposal. Quantifying the potential impact may reduce financial risk and enable market participants to plan accordingly.

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66 Bentz Testimony Section V, at 20-22.

67 A categorical exemption for certain renewable resources eliminates the burden of seeking an exemption to the MOPR under Section 206 individually. Smaller resources may especially benefit from a categorical exemption, as the burden of pursuing an exemption could be perceived as a barrier to entry for emerging resource types.

68 For example, landfill gas and biomass are sometimes co-fired with non-renewable fuel sources.

69 Bentz Testimony Section V, at 20-21.

70 Should the Commission direct ISO-NE to include the proposed exemption in its market rules, NESCOE will work with ISO-NE and NEPOOL stakeholders to develop rules to ensure that a multi-fuel resource may benefit from the exemption only to the extent commensurate with the renewable portion of its energy.

V. Additional Requirements of Rule 206

The Commission's regulations specifying the contents of a complaint, Rule 206(b), are clear; a complaint must:

> ***(1) Clearly identify the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements;***

As described herein, ISO-NE's buyer side mitigation proposal is overly broad in that it would not count the capacity provided by new renewable resources developed pursuant to state statutes and regulations towards the region's resource adequacy requirement. Such result violates the Federal Power Act because it results in unjust and unreasonable rates resulting from capacity over-procurement. *ISO New England Inc.*, Compliance Filing, Docket No. ER12-953-001 (filed December 3, 2012), Transmittal at 8-28; Joint Testimony of Marc D. Montalvo and David H. Naughton; and ISO-NE Tariff Section III.A.21.

> ***(2) Explain how the action or inaction violates applicable statutory standards or regulatory requirements;***

ISO-NE's buyer-side mitigation proposal violates the just and reasonable standard of the Federal Power Act by requiring electricity customers in New England to procure in the FCM more capacity than is necessary for resource adequacy. As described above, ISO-NE's buyer-side mitigation proposal would result in resources developed to further legitimate state public policies being excluded from consideration towards the region's Installed Capacity Requirement. Such exclusion will result in the FCM procuring more capacity than is necessary for resource adequacy.

> ***(3) Set forth the business, commercial, economic or other issues presented by the action or inaction as such relate to or affect the complainant;***

NESCOE's mission is to represent the interests of the citizens of the New England region

by advancing policies that will provide electricity at the lowest reasonable cost over the long term, consistent with maintaining reliable service and environmental quality. ISO-NE's failure to include a buyer-side mitigation exemption for certain renewable resources adversely affects these policy, rate, and consumer interests.

(4) Make a good faith effort to quantify the financial impact or burden (if any) created for the complainant as a result of the action or inaction;

The exclusion of state-supported public policy resources from the FCM results in procuring more capacity than is necessary for resource adequacy. NESCOE derives an estimate of the financial impact of such over procurement by multiplying NESCOE's proposal for exempted capacity (225 MWs) times the anticipated clearing price for FCA 7 (corresponding to the capacity commitment period of 2016-2017) ($3.15/kW-Month), which equals $8.5 million/year. In years where the auction may clear close to the proposed dynamic de-list threshold ($1/kW-Month), the impact would be $2.7 million/year. Alternatively, in years where the auction may clear at the proposed offer review trigger price for a combined-cycle gas turbine ($11/kW-Month), the impact would be $29.7 million/year.

(5) Indicate the practical, operational, or other nonfinancial impacts imposed as a result of the action or inaction, including, where applicable, the environmental, safety or reliability impacts of the action or inaction;

The practical impact of excluding new state-supported resources from the FCM is the undermining of legitimate state public policies codified in state statutes.

(6) State whether the issues presented are pending in an existing Commission proceeding or a proceeding in any other forum in which the complainant is a party, and if so, provide an explanation why timely resolution cannot be achieved in that forum;

ISO-NE's buyer-side mitigation proposal is pending in Docket No. ER12-953-001.

Timely resolution cannot be provided in that forum, solely, because of the Commission's admonition that it would only allow "filings under section 206 of the FPA to request a mitigation exemption" of the type proposed by NESCOE in the instant filing. *ISO New England, Inc.*, 135 FERC ¶ 61,029 at P 20 (2011). As explained in more detail below, however, NESCOE moves the Commission to consolidate the instant complaint proceeding and Docket No. ER12-953-001 so that the competing proposals can be adjudicated at the same time.

(7) State the specific relief or remedy requested, including any request for stay or extension of time, and the basis for that relief;

Pursuant to Section 206 of the Federal Power Act, the Commission should reject ISO-NE's buyer-mitigation proposal as unjust and unreasonable as it subjects all new entrants to buyer-side mitigation. As a just and reasonable remedy, the Commission should adopt NESCOE's Renewables Exemption Proposal for public policy projects.

(8) Include all documents that support the facts in the complaint in possession of, or otherwise attainable by, the complainant, including, but not limited to, contracts and affidavits;

The instant Complaint, as well as the attached Prepared Affidavit of Jeffrey W. Bentz and the Exhibits appended thereto,[71] provide ample basis for granting the relief requested herein. In addition, NESCOE's concurrently-filed protest in the above-captioned dockets supports the facts in this Complaint.

[71] NESCOE's Proposed Tariff Revisions to Implement the Renewables Exemption are appended as Exhibit NSC-2.

(9) State:

(i) Whether the Enforcement Hotline, Dispute Resolution Service, tariff-based dispute resolution mechanisms, or other informal dispute resolution procedures were used, or why these procedures were not used;

In lieu of information dispute resolution procedures, the issue of buyer-side mitigation was addressed extensively by stakeholders in the NEPOOL Markets Committee and Participants Committee.

(ii) Whether the complainant believes that alternative dispute resolution (ADR) under the Commission's supervision could successfully resolve the complaint, (iii) What types of ADR procedures could be used; and

Given the extended efforts undertaken in the NEPOOL Markets Committee and Participants Committee, NESCOE does not believe that further information or alternative dispute resolution under the Commission's supervision could successfully resolve the complaint.

(iv) Any process that has been agreed on for resolving the complaint.

Although no process has been agreed to by the parties, the Commission's August 13, 2011 Order stated that parties could request a mitigation exemption in a Section 206 proceeding such as the instant proceeding initiated by NESCOE. *ISO New England, Inc.*, 135 FERC ¶ 61,029 (2011) at P 20.

(10) Include a form of notice of the complaint suitable for publication in the Federal Register in accordance with the specifications in §385.203(d) of this part. The form of notice shall be on electronic media as specified by the Secretary.

A form of notice in the electronic media specified by the Secretary is attached hereto.

(11) Explain with respect to requests for Fast Track processing pursuant to section 385.206(h), why the standard processes will not be adequate for expeditiously resolving the complaint.

NESCOE is not requesting Fast Track processing of its complaint pursuant to Rule 206(h). However, NESCOE is concerned that, to the extent action on the Complaint is not expedited such that the Commission acts concurrently on the Complaint and ISO-NE's proposal in Docket No. ER12-953-001, ISO-NE's Forward Capacity Auctions could by disrupted or plagued with uncertainty. ISO-NE requests an effective date of February 12, 2013 for its proposed tariff revisions to accommodate the New Capacity Show of Interest Submission Window for the eighth Forward Capacity Auction ("FCA"), which opens on February 14, 2013. Since the proposed tariff revisions include a removal of the price floor and implementation of buyer-side mitigation effective for the eighth FCA, NESCOE submits that the Commission should resolve the Complaint expeditiously and concurrent to ruling on the proposed tariff revisions. As explained in more detail below in the Motion to Consolidate Proceedings, consolidation of the Complaint and Docket No. ER12-953-001 is necessary to avoid disruption of the FCA schedule.

In addition, the Commission's regulations require that any person filing a complaint must serve a copy of the complaint on the respondent, affected regulatory agencies, and others the complainant reasonably knows may be expected to be affected by the complaint.[72] Given that all parties that may be expected to be affected by the complaint are parties to ISO-NE's compliance filing proceedings, Docket No. ER12-953-000, NESCOE is serving this complaint on all parties to that proceeding, and all corporate officials designated by ISO-NE to receive service of complaints.

[72] 18 C.F.R. § 385.206(c) (2012).

VI. Motion to Consolidate Proceedings

The Commission regularly consolidates dockets for purposes of hearing and decision when the dockets raise common issues of law and fact.[73] The Compliance Filing in Docket No. ER12-953-001 includes provisions to implement buyer-side mitigation in the capacity market. In order to implement buyer-side mitigation and a host of other capacity market redesign elements with minimal disruption to the qualification schedule, ISO-NE requests an effective date of February 12, 2013. The proposed buyer-side mitigation provisions form the basis of this Complaint, and NESCOE provides a just and reasonable alternative in the form of an exemption to buyer-side mitigation. Consideration of the buyer-side mitigation provisions of the Compliance Filing and the Complaint concurrently serves the public interest, as it would enable the Commission to remedy unjust and unreasonable buyer-side mitigation provisions within the requested time frame and result in minimal disruption to the qualification schedule. Consolidation of these two proceedings would not interfere with the Commission's consideration of the Compliance Filing's other elements: lowering the dynamic de-list bid threshold, eliminating the remaining uses of the Cost of New Entry, removal of the administrative price floor, and modeling capacity zones. Given the common issues raised by this complaint and the buyer-side mitigation issues in Docket No. ER12-953-001, NESCOE respectfully requests the Commission consolidate the two proceedings.

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[73] *See, e.g., Midwest Independent System Operator, Inc.*, 103 FERC ¶ 61,090 at P 29 (2003); *see also Central Illinois Light Co. v. Panhandle Eastern Pipe Line Co.*, 21 FERC ¶ 61,147 (1982) (ordering consolidation where there is "a commonality of issues that can and should be addressed in a single proceeding").

VII. Relief Sought

NESCOE Respectfully requests the Commission grant the following relief:

1. Initiate a proceeding pursuant to Section 206 of the FPA under "paper hearing" procedures;
2. Find the provisions regarding buyer-side mitigation of ISO-NE's proposed tariff revisions unjust and unreasonable;
3. Find NESCOE's proposed exemption for certain renewable resources just and reasonable;
4. Amend ISO-NE's proposed tariff revisions to incorporate NESCOE's renewables exemption proposal;
5. Grant NESCOE's Motion for Consolidation of the two proceedings; and
6. Any other relief the Commission deems appropriate to ensure just and reasonable rates for New England electricity customers.

VIII. Conclusion

For the reasons stated herein, NESCOE respectfully requests that the Commission grant the relief requested in its Complaint in this proceeding.

Respectfully submitted,

/s/ Benjamin S D'Antonio

Benjamin S D'Antonio, Esq.
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Date: December 28, 2012

CERTIFICATE OF SERVICE

In accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served by electronic mail a copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Longmeadow, Massachusetts this 28th day of December, 2012.

Respectfully submitted,

/s/ Benjamin S D'Antonio

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New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

ATTACHMENT A

PREPARED AFFIDAVIT OF JEFFREY W. BENTZ ON BEHALF OF THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

PREPARED AFFIDAVIT OF JEFFREY W. BENTZ ON BEHALF OF THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

I. INTRODUCTION AND BACKGROUND

Q. Please state your name and NESCOE's legal business address.

A. My name is Jeffrey W. Bentz and NESCOE's legal business address is 655 Longmeadow Street, Longmeadow, MA, 01106

Q. By whom, and in what capacity, are you employed?

A. I am employed by the New England States Committee on Electricity ("NESCOE") in the position of Director of Analysis. NESCOE is the Regional State committee for New England. NESCOE is governed by a board of managers appointed by the Governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont and is funded through a regional tariff administered by ISO New England ("ISO-NE"). NESCOE's mission is to represent the interests of the citizens of the New England region by advancing policies that will

provide electricity at the lowest reasonable cost over the long term, consistent with maintaining reliable service and environmental quality.

Q. Please summarize your educational background.

A. I have a Bachelor of Science in Accounting from Central Connecticut State University. I received my certificate as a Certified Public Accountant from the State of Connecticut Board of Accountancy on July 6, 1993.

Q. Please briefly summarize your related professional experience prior to joining NESCOE.

A. Before joining NESCOE in January 2010, I was employed by various entities providing administrative services to MASSPOWER, a Massachusetts Joint Venture that owned a 240 megawatt ("MW") combined-cycle generation facility located in Springfield, Massachusetts. Over the course of nearly 20 years, I served as Controller and General Manager of MASSPOWER. I managed day-to-day activities on behalf of the joint venture, including operations, finance, technology, risk management, maintenance, and regulatory compliance. I was responsible for setting the annual strategic and business planning process, including Strengths, Weaknesses, Opportunities, and Threats analysis, operating plans, budgets, and quarterly updates. In addition, I led merger and acquisition teams and participated in various corporate teams during my tenure with companies such as J. Makowski Co., U.S. Generating Co., Pacific Gas and Electric, Cogentrix, and BG Group. Prior to my tenure with MASSPOWER, I was a Senior Accountant with Arthur Andersen and Company, performing audit activities primarily in the utility and brokerage industries.

Q. Please describe your role at NESCOE and some of your recent experience with the NEPOOL stakeholder process.

A. I provide NESCOE Managers with analysis of and recommendations about proposals advanced by ISO-NE and market participants to the New England Power Pool ("NEPOOL") Markets Committee. In that capacity, I work closely with NESCOE's Managers and other personnel representing each of the six New England states. Over the past year, I served as chair of an informal working group of NEPOOL stakeholders who worked towards consensus on a host of short-term Forward Capacity Market- ("FCM") related issues. I also represented NESCOE in the discussions that led to the January 2012 FCM NEPOOL settlement agreement related to extending the current price floor and other mechanisms through Forward Capacity Auction 7 (capability year 2016/2017).

Q. On whose behalf are you filing this Prepared Affidavit?

A. I am filing this affidavit on behalf of NESCOE.

Q. What is the purpose of your Prepared Affidavit?

A. The purpose of my Prepared Affidavit is to provide: (1) background information on state public policies supporting renewable resources; (2) a description of ISO-NE's buyer-side mitigation approach proposed in Docket No. ER12-953-001; (3) an explanation of the impact ISO-NE's proposed buyer-side mitigation approach will have on the ability of new renewable resources to clear in the Forward Capacity Market; and (4) a description and explanation of NESCOE's proposal to include a limited exemption for renewable resources in ISO-NE's proposed buyer-side mitigation construct.

Q. What do you mean by the term "buyer-side mitigation?"

A. Buyer-side mitigation is a term typically used in wholesale energy markets to describe practices intended to curb the exercise of monopsony market power, or a buyer exerting undue influence on competitive market outcomes.[1] As a conceptual matter, buyer-side mitigation is imposed to deter the suppression of market prices by offering supply at less than a competitive level. For this reason, buyer-side mitigation is commonly associated with new entrants. Within the context of ISO-NE's FCM, buyer-side mitigation is proposed to be accomplished through the use of minimum offer floors, which restrict the ability of supply resources to offer their capacity below asset-class-specific benchmark prices. For the purposes of this testimony, the terms "offer floor mitigation," "buyer-side mitigation," and "Minimum Offer Price Rule" ("MOPR") are used interchangeably.[2]

Q. What information did you rely upon in developing your Prepared Affidavit?

A. I have reviewed ISO-NE's December 3, 2012 Compliance Filing in Docket No. ER12-953-001. I attended, and have reviewed, the ISO-NE Internal Market Monitoring Unit ("IMM") presentations regarding compliance with the April 13, 2011 Order on FCM Redesign to the NEPOOL Markets Committee on July 20, 2011; August 17, 2011; September 13, 2011; October 12, 2011; October 24, 2011; November 9, 2011; December 6, 2011; and the NEPOOL Participants Committee on November 2, 2012. I have also reviewed the Commission's Orders in Docket Nos. ER12-953-000, ER10-787-000, EL10-50-000, and EL10-57-000. All of the

[1] *ISO New England Inc. and New England Power Pool Participants Committee*, 135 FERC ¶ 61,029 (2011) at P 165 ("April 13, 2011 Order"), *order on reh'g and clarification*, 138 FERC ¶ 61,027 (2012) at P 82 ("January 19, 2012 Order").

[2] *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 (2011) at P 6, citing *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006) at P 103.

material I relied upon in developing my Prepared Affidavit is publicly available and/or appended hereto as an exhibit.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring the following Exhibits:

Exhibit Number	Description
NSC-2	NESCOE's Proposed Tariff Revisions to Implement the Renewables Exemption
NSC-3	ISO-NE IMM's NEPOOL Markets Committee Fifth Presentation (October 24, 2011)
NSC-4	NESCOE's NEPOOL Markets Committee Presentation (December 6, 2011)
NSC-5	NESCOE's NEPOOL Markets Committee Presentation (September 12, 2012)
NSC- 6	Table 7-7 of ISO-NE's 2012 Renewable System Plan, *Technologies Designated in Renewable Portfolio Standards in New England, as of April 1, 2012*
NSC-7	Figure 4-3 of ISO-NE's 2012 Renewable System Plan, *Resources in the ISO Generator Interconnection Queue, by state and fuel type, as of April 1, 2012 (MW and %)*
NSC-8	Figure 7-6 of ISO-NE's 2012 Renewable System Plan, *Proposed New England capacity from renewable resources in the ISO Generation Interconnection Queue, including non-FERC jurisdictional projects, as of April 1, 2012 (MW and %)*

Q. Please summarize your conclusions.

A. First, I conclude that ISO-NE's buyer-side mitigation proposal is overly broad because it will treat renewable resources as uneconomic entry and, as a result, likely exclude their capacity from consideration towards the region's resource adequacy target, the Installed Capacity Requirement ("ICR"). State statutes and regulations are expected to continue to support the development and financing of renewable resources, despite the price signal sent by the FCM. Given the aggressive clean energy policies that New England states have enacted, it is highly

likely that new renewable resources will become operational and provide capacity to the region, whether they are included in the FCM or not. Second, long-term contracts intended to support renewable energy policies, with ancillary effects on prices, are not the most logical choice for exertion of market power through price suppression. Compared to other resource types, with lower capital costs, higher capacity factors, and at greater scale, any price suppression effect is not the intent of the out-of-market revenue stream. Third, without an exemption to the offer floor mitigation rules for renewable resources, the FCM will procure more capacity than is necessary for resource adequacy. To address this outcome, NESCOE's proposed limited exemption to the proposed offer floor mitigation rules will enable the capacity provided by renewable resources to be counted towards the region's resource adequacy goals.

II. NEW ENGLAND STATE POLICIES SUPPORTING RENEWABLE RESOURCES

Q. Please give an overview of state policies supporting renewable resources.

A. Like many other states, the New England states have a long history of promoting the development of renewable resources. The development and financing of new renewable resources is achieved through myriad state statutory mechanisms. While they vary by state, they generally include the opportunity for Renewable Energy Certificate ("REC") revenues, favorable tax and land use policies, and, increasingly, economic incentives.[3] In response to increasingly difficult credit conditions for large, capital-intensive investments, some States have provided

[3] More specifically, state policies for renewable resources include: system benefit funds; rebates; loan funds; grants; municipal purchasing requirements; net metering; property assessment financing; fee waivers; tax deductions, exemptions, and credits; patent exemptions; expedited processes; emissions disclosure requirements; interconnection standards; building codes; and model ordinances. *See* the Database of State Incentives for Renewables and Efficiency (DSIRE) at http://www.dsireusa.org.

revenue certainty through power-purchase agreements for anchor tenants to help new renewable generators secure financing.[4]

A. RENEWABLE PORTFOLIO STANDARDS

Q. Have the New England states enacted Renewable Portfolio Standards?

A. Yes, five of the six New England states have enacted mandatory Renewable and Alternative Portfolio Standards (collectively, "RPS"). Conn. Gen. Stat. § 16-245a et seq.; 35-A Maine Revised Statutes §§ 3210, 3210-C; Mass. Gen. Laws ch. 25A, § 11F; New Hampshire Statutes, Chapter 362-F; Rhode Island Gen. Laws §§ 39-26 et seq. The other New England state, Vermont, requires its electric distribution companies to enter into long-term contracts with renewable resources for a certain portion of the companies' loads. 30 Vermont Stat. Ann. §§ 8004(b), 8005(d).

Q. How do RPS programs support renewable resources?

A. The laws and regulations governing RPS and comparable programs place a requirement on load-serving entities (both load-serving utilities and retail competitive suppliers) to purchase RECs in proportion to a percentage of their load.[5] These RPS programs have given rise to a secondary market in which qualifying renewable resources may sell the RECs created by their energy generation to electric distribution companies and others. This market-based approach has been providing economic incentives to renewable resources for at least eight years across New

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[4] *See* Schwabe, P. et al., *Renewable Energy Project Financing: Impacts of the Financial Crisis and Federal Legislation*, National Renewable Energy Laboratory (NREL), at 2 (July 2009). *See also* Wiser, R. et al., *Renewable Portfolio Standards: A Factual Introduction to Experience from the United States*, LBNL, at 8 (April 2007). Notably, the Massachusetts Green Communities Act aims to "facilitate the financing of renewable energy generation[.]" Mass. Session Laws, St. 2008, c. 169, § 83.

[5] The load-serving entities must pay an alternative compliance payment if they do not procure a sufficient number of RECs.

England.[6] The aggregate value of these economic incentives for renewable resources in New England is, conservatively, hundreds of millions of dollars.[7]

Q. What resource types are eligible for RPS programs in New England?

A. A chart excerpted from ISO-NE's 2012 Regional System Plan,[8] *Technologies Designated in Renewable Portfolio Standards in New England, as of April 1, 2012*, as Exhibit NSC-6, shows resource eligibility for the RPS and comparable programs in the New England states.

B. LONG-TERM CONTRACTS AND SIMILAR PROGRAMS:

Q. Have the New England states enacted rules or programs involving long-term contracting?

A. Yes, five of the six New England states have also enacted long-term contracting requirements for their distribution utilities. Conn. Gen. Stat. §§ 16-244c(j)(2), 16-244r, 16-244s, 16-244t, and 16-244v; 35-A Maine Revised Statutes § 3601 et seq.; Mass. Session Laws, St. 2008, c. 169, § 83; Mass. Session Laws, St. 2012, c. 209, §§ 35 and 36; Rhode Island Gen. Laws §§ 39-26.1 and 39.26.2 et seq.; 30 V.S.A. § 8005(d).

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6 Initial RPS compliance deadlines included: Maine (2000), Massachusetts (2003), and Connecticut (2004). Wiser, R. and Barbose, G., *Renewable Portfolio Standards in the United States: A Status Report with Data Through 2007*, Lawrence Berkeley National Laboratory (LBNL), at 12 (April 25, 2008).

7 In addition to load-serving entity REC expenditures, the Massachusetts Renewable Energy Trust "awarded $281 million in grants, loans, and contracts to municipalities, public agencies, nonprofit organizations, private companies and individuals" from 1998-2008. *Renewable Energy Results for Massachusetts: A Report on the Renewable Energy Trust Fund 1998-2008*, Massachusetts Technology Collaborative, *available at* http://www.masstech.org/sites/mtc/files/documents/2008 Renewable Energy Trust Report_0.pdf. Similarly, the Connecticut Clean Energy Fund provided $151 million to support clean energy from 2000-2010. *Annual Report of Activities 2010*, Connecticut Clean Energy Fund, *available at* http://www.ctcleanenergy.com/AboutCEFIA/AnnualReport/tabid/136/Default.aspx.

8 *2012 Regional System Plan (RSP)*, ISO-New England Inc. (November 2012) (2012 RSP), *available at* http://www.iso-ne.com/trans/rsp/2012/rsp_Final_110212.docx.

Q. Please describe the long-term contracting requirements for renewable resources in New England.

A. These measures differ across the New England states and generally range from contracts for small, behind-the-meter low- and zero-emission resources to community-based pilot programs to solicitations for long-term contracts for renewable energy, capacity, and RECs. The common element of these programs is the sustained support of contract-based revenue streams for a term of at least ten years. These programs are a relatively new addition to the panoply of State statutory provisions supporting renewable resources in New England.

C. COMPETITIVE, COORDINATED PROCUREMENT OF RENEWABLES

Q. Please identify other renewable resource development activities of the New England states.

A. Since 2009, the New England Governors and Eastern Canadian Premiers have "pledged to work cooperatively to enhance opportunities for the development of cost-effective renewable resources within the region."[9] Following the development of the Governors' *Renewable Energy Blueprint*,[10] ISO-NE and NESCOE have performed several analyses related to the region's renewable resource potential.[11] On June 30, 2012, the New England Governors resolved to

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[9] *Resolution Concerning Renewable Energy*, Resolution 33-2, 33rd Annual Conference of the New England Governors and Eastern Canadian Premiers (September 15, 2009), *available at* http://www.nescoe.com/uploads/Governors_and_Premiers_2009_Resolution.pdf.

[10] *Renewable Energy Blueprint*, New England Governors (September 15, 2009), *available at* http://www.nescoe.com/Blueprint.html.

[11] *Renewable Resource Supply Curve Report*, NESCOE (January 2012), *available at* http://www.nescoe.com/Renewable_Supply_Curve.html. *See*, also, ISO-NE studies performed pursuant to Tariff Attachment K: *2009 Economic Study* at http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2010/economicstudyreportfinal_022610.pdf, the *2010 Economic Study* at http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/mtrls/2011/mar162011/2010_economic_study.pdf, and the *2011 Economic Study* at http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/mtrls/2012/may172012/2011_eco_study.pdf.

implement NESCOE's work plan[12] for competitive, coordinated procurement of renewable resources with the goal of issuing a solicitation for procurement by the end of December 2013.[13]

III. ISO NEW ENGLAND'S BUYER-SIDE MITIGATION PROPOSAL

Q. Please provide background information on ISO-NE's buyer-side mitigation approach.

A. The Commission's April 13, 2011 Order "directed ISO-NE and its stakeholders to develop an offer floor mitigation construct in which asset-class-specific benchmark offer floors are applied to offers from new resources."[14] In response, the ISO-NE Internal Market Monitoring unit ("IMM") developed a series of tariff revisions to implement buyer-side mitigation.[15] The proposed offer floor mitigation construct is commonly known as the MOPR.[16] The foundation of the MOPR in New England is the asset-class-specific benchmark offer floors, which the IMM calls Offer Review Trigger Prices ("ORTP").[17]

Q. Please describe the mechanics of ISO-NE's buyer-side mitigation proposal.

A. The mechanics of ISO-NE's buyer-side mitigation approach are explained by the IMM's presentation to the NEPOOL Markets Committee:[18]

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12 *Coordinated Competitive Renewable Power Procurement Work Plan*, NESCOE (November 2012), *available at* http://www.nescoe.com/2013_Solicitation.html.

13 *A Resolution Directing the New England States Committee on Electricity (NESCOE) to Implement a Work Plan for the Competitive Coordinated Procurement of Regional Renewable Power*, New England Governors Conference, Inc. (July 30, 2012), *available at* http://www.nescoe.com/uploads/CP_Resolution_July_2012.pdf.

14 *ISO New England Inc. and New England Power Pool Participants Committee*, order on reh'g and clarification, 138 FERC ¶ 61,027 (2012), at P 82.

15 *ISO New England Inc.*, Compliance Filing, Docket No. ER12-953-001 (filed December 3, 2012) (Compliance Filing), at Transmittal Section III. *See also* Joint Testimony of Marc D. Montalvo and David H. Naughton, (the "Joint Montalvo / Naughton Testimony") and ISO-NE Tariff Section III.A.21.

16 *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 (2011) at P 6, citing *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006) at P 103.

17 Compliance Filing, Transmittal at 8.

18 Internal Market Monitoring Unit Presentation to NEPOOL Markets Committee, *Market Power Mitigation in the Forward Capacity Market, 5th Presentation* (October 24, 2011) (IMM Markets Committee Presentation), attached as Exhibit NSC-3.

- *IMM will establish Offer Review Trigger Prices for a menu of generation and demand resource types.*
- *Any offer at or above the relevant Offer Review Trigger Price is deemed competitive.*
- *All offers below the relevant Offer Review Trigger Price must be submitted to the IMM for evaluation by the new qualification deadline.*
- *IMM will evaluate the supporting information using data from independent sources and either accept or mitigate the offer.*
- *For generators, the Offer Review Trigger Price is calculated as a real levelized annuity that recovers all invested capital and an appropriate return assuming that the output of the project is under contract, no merchant risk.*
- *While all offers below the relevant Offer Review Trigger Price will be reviewed, the IMM will mitigate only those offers that are below the Offer Review Trigger Price due to the inclusion of out-of-market revenues or which are supported by a regulated rate, charge or other cost recovery mechanism.*
- *Out-of-market revenues are any form of support (direct or indirect) that is not broadly available through the market to any Market Participant developing a project of the same type.*

Before a new resource may offer its capacity into the FCM at a price lower than its ORTP, its sponsor must submit its offer to the IMM for a competitiveness evaluation.[19] The IMM will compare the new resource's offer to the relevant offer floor for that resource type. Offers at a price in excess of the relevant offer floor are automatically deemed competitive. Resources intending to offer capacity at a price below the relevant offer floor must justify their cost structure to the IMM.[20] Should a significant portion of the new resource's revenue stream arise from an out-of-market source, their offer will be mitigated up to as high as the ORTP. This achieves the intended effect of the MOPR: preventing out-of-market price suppression.

Q. What are the proposed minimum offer floors, or ORTPs?

A. The proposed offer price triggers are set forth below:

[19] Compliance Filing, Transmittal at 16, citing Tariff Section III.A.21.2

[20] Compliance Filing, Transmittal at 17, citing Tariff Section III.A.21.2(b)(iv).

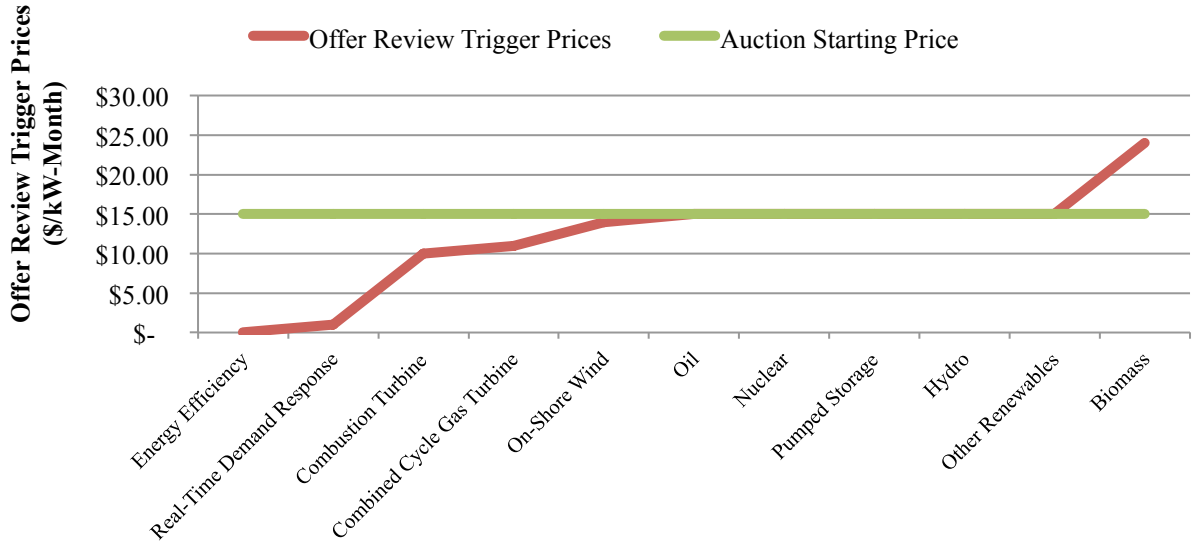
ISO-NE's Proposed Offer Review Trigger Prices[21]

Resource Type	Offer Review Trigger Price ($/kW-month)
Combustion Turbine	$10.00
Combined Cycle Gas Turbine	$11.00
Biomass	$24.00
On-Shore Wind	$14.00
Real-Time Demand Response	$1.00
Energy Efficiency	$0.00
All Other Resource Types	Forward Capacity Auction Starting Price

Q. Please describe the effect that offer floor mitigation has on the FCM offer prices from new resources.

A. As the FCM is designed to procure the least-cost resources, I have sorted the resource types in the queue by their ORTP. The chart in Figure 1 below shows graphically how the ORTP curve stacks the asset-class-specific benchmark offer floors based on price.

Fig. 1: Offer Floor Mitigation under ISO-NE's MOPR



[21] Compliance Filing, Transmittal at 10; Joint Montalvo / Naughton Testimony at 8; Tariff Section III.A.21.1.1.

Q. In addition to the resource types explicitly listed in ISO-NE's proposed tariff revisions, did the IMM evaluate offer floors for other resource types?

A. Yes, other resource types were evaluated by the IMM, but were not included in ISO-NE's tariff amendments to implement the MOPR. For example, off-shore wind would have been assigned a $61/kW-month ORTP.[22] Resources not explicitly assigned an ORTP were set at the auction starting price, currently $15/kW-month.[23]

Q. Would the ORTP automatically become a new resource's offer price?

A. No. As previously mentioned, resources seeking to offer their capacity below the relevant ORTP may consult with the IMM. If a new resource can justify its individual offer price to the IMM based on a reasonable forecast of expected revenues, the IMM may allow the resource to offer below the relevant ORTP. However, new resources receiving so-called out-of-market revenues would have those forecasted out-of-market income sources disqualified from consideration by the IMM.

Q. How does the IMM define out-of-market revenues?

A. The IMM defines out-of-market as "any revenues that are: (a) not tradable throughout the New England Control Area or that are restricted within a particular state or other geographic sub-region; or (b) not available to all resources of the same physical type within the New England Control Area, regardless of the resource owner."[24] An example of an out-of-market revenue source would be a distribution ratepayer-backed power purchase agreement approved by a State regulatory authority, whereby the benefits of the contract are only available to that specific

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22 IMM Markets Committee Presentation, Exhibit NSC-3, at 12. *See*, also, Offer Review Trigger Price Model, spreadsheet *available at* http://www.iso-ne.com/committees/comm_wkgrps/mrkts_comm/mrkts/mtrls/2011/oct12132011/a03c_offer_review_trigger_price_model_10_04_11.xlsx.

23 Compliance Filing, Transmittal at 10; Joint Montalvo / Naughton Testimony at 8; Tariff Section III.A.21.1.1.

24 Compliance Filing, Transmittal at 17; Joint Montalvo / Naughton Testimony, at 14; Tariff Section III.A.21.2(b)(i).

resource. On the other hand, revenues from the sale of RECs are considered to be in-market, because they are generally available to resources of the same physical type and are tradable.

Q. Would the revenues received by renewable resources under long-term contracts be considered out-of-market?

A. Yes.

Q. What effect would an out-of-market designation by the IMM have on a new resource?

A. By removing out-of-market revenue sources, without exception, from the consideration of an offer below the relevant ORTP, the new resource receiving out-of-market revenue will have its offer mitigated up to the asset-class-specific ORTP.[25]

Q. Please describe how the FCM selects resources to provide capacity in New England.

A. ISO-NE currently uses a descending clock auction for the FCM.[26] The auction begins with all existing and new resources included at the auction at the starting price.[27] Subsequent rounds of the auction reduce the bid price at which the region's ICR may be procured.[28] Existing resources that do not wish to provide capacity at that auction round's decreasing bid price leave the auction. New resources also leave the auction when their offer price exceeds a round's bid price. The descending clock stops when the amount of existing and new capacity remaining in

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[25] "If the project is supported by regulated rate, charge, or other regulated cost recovery mechanism, then that rate will be replaced with the IMM's estimate of energy revenues." Compliance Filing, Transmittal at 18, Joint Montalvo / Naughton Testimony, at 14; Tariff Section III.A.21.2(b)(i).

[26] The IMM recommends transitioning to a demand curve approach. *2011 Annual Markets Report*, ISO-NE (May 15, 2012) (2011 Annual Markets Report), at 3, *available at* http://www.iso-ne.com/markets/mkt_anlys_rpts/annl_mkt_rpts/2011/2011_amr_final_051512.pdf. While beyond the scope of this Affidavit, the MOPR would likely have a comparable stratification effect on the region's supply curve under a demand curve approach.

[27] *Devon Power LLC*, 115 FERC ¶ 61,340 (2006) (FCM Settlement Agreement Order), at P 150.

[28] *See*, also, *2011 Annual Markets Report*, ISO-NE (May 15, 2012), at 62, *available at* http://www.iso-ne.com/markets/mkt_anlys_rpts/annl_mkt_rpts/2011/2011_amr_final_051512.pdf.

the auction equal the region's ICR. The price at which this quantity is achieved is based on the supply curve of existing and new resources.[29]

Q. Please describe the effect of the minimum offer floors, or MOPR, on the selection of capacity resources.

A. In short, new resources that have been mitigated to the ORTP must also leave the auction when their ORTP exceeds a round's bid price. More generally, the auction's design to procure at the least cost combines with the offer floor values to establish a sorting order of the new resources interested in supplying capacity in the auction. As shown in Figure 1 above, the MOPR stacks the supply curve of new capacity resources offering into the FCM by the minimum offer floor values for each of the technologies. Those new resources with higher ORTPs must leave the descending clock auction first.

IV. THE EFFECT OF ISO NEW ENGLAND'S BUYER-SIDE MITIGATION PROPOSAL ON RENEWABLE RESOURCES

Q. Please describe the MOPR's impact on new renewable resources that offer to sell capacity in the FCM?

A. The MOPR largely forecloses renewable resources from clearing in the FCM. While the intent of the MOPR is to "deter the exercise of buyer-side market power and the resulting suppression of capacity market prices associated with uneconomic entry,"[30] its consequence is the exclusion of many new renewable resources from the FCM.

[29] FCM Settlement Agreement Order, 115 FERC ¶ 61,340 at PP 19, 20.
[30] April 13, 2011 Order, 135 FERC ¶ 61,029 at P 166.

Q. How does the MOPR exclude new renewable resources from the FCM?

A. To eliminate any potential "financial reward for subsidizing new resources,"[31] the MOPR stratifies the FCM supply curve by resource type. Since renewable resources generally have higher offer floors than gas-fired resources,[32] renewable resources, including those supported by State statutory programs, are unlikely to clear the auction for the foreseeable future. While this outcome may help achieve the goal of having the clearing price approximate the cost of new entry for when new entry is needed (or the net risk-adjusted going forward cost of existing units when new entry is not needed), it has the impact of ensuring that renewable resources constructed to effectuate legitimate state policies and in furtherance of State statutory requirements—and providing capacity—would not be counted towards the region's resource adequacy requirements even though they will be operating and providing capacity.

Q. Please describe the MOPR's resource-type stratification of the supply curve.

A. The MOPR screens all new resources intending to offer into the FCA in a manner designed to remove the impact of out-of-market revenue sources on the clearing price. To obviate the influence of out-of-market revenues, asset-class-specific benchmark prices are established. These benchmark prices, in effect, establish a resource-type stratification of the new resource supply curve. Combined with the MWs of capacity in ISO-NE's generation interconnection queue,[33] the impact of the MOPR on the supply curve can be observed, as shown

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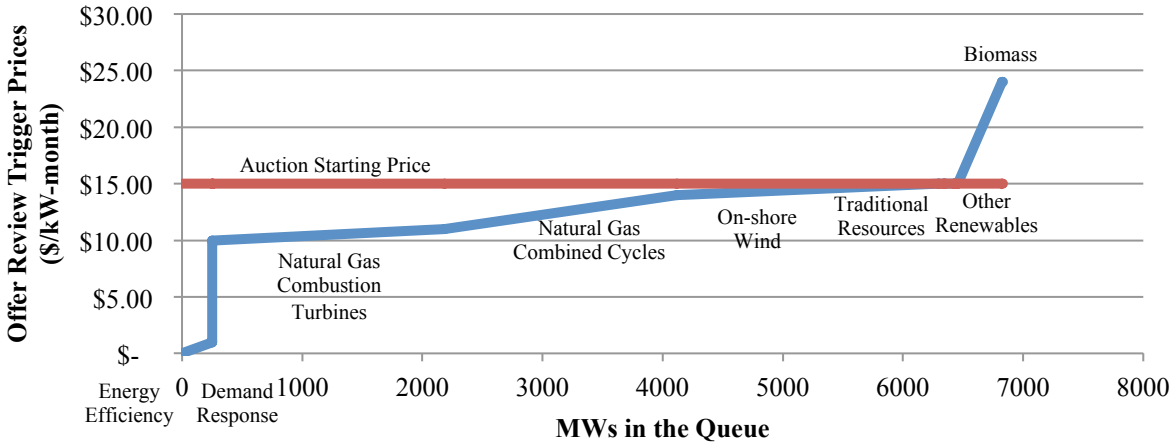
31 April 13, 2011 Order, 135 FERC ¶ 61,029 at P 166.

32 Compliance Filing, Transmittal at 10; Joint Montalvo / Naughton Testimony at 8; Tariff Section III.A.21.1.1.

33 2012 RSP, *Figure 4-3: Resources in the ISO Generator Interconnection Queue, by state and fuel type, as of April 1, 2012 (MW and %)*, at 60, and *Figure 7-6: Proposed New England capacity from renewable resources in the ISO Generation Interconnection Queue, including non-FERC jurisdictional projects, as of April 1, 2012 (MW and %)*, at 132.

in Figure 2 below.[34]

Fig. 2: ISO-NE's MOPR and Resources in the Queue



As shown in the chart above, and in the prices from ORTP table in Section III, renewable resources are expected to exhibit a higher cost of new entry than gas-fired resources. The MOPR's resource-type cost stratification is relatively consistent with other analyses examining the levelized cost of energy from new electricity generation resources.[35]

Q. Please describe the MOPR's impact on new renewable resources supported by long-term contracts.

A. While new resources are not precluded from offering below their relevant ORTP if they are able to justify unique resource-specific economics, the MOPR will remove any revenues derived from ratepayers to support a renewable project pursuant to state laws from new renewable resource offers. As a general matter, this reinforces the stratification effect on the

[34] Traditional Resources in the queue are: Oil, Nuclear, Pumped Storage, and Hydro. 2012 RSP Figure 4-3 does not differentiate between combustion turbines and combined-cycle technologies for the 3,866 MWs of Natural Gas-fired resources in the queue. For this chart, half are assumed to be combustion turbines and the other half combined-cycles.

[35] See *2012 Annual Energy Outlook: U.S. Average Levelized Costs for Plants Entering Service in 2017*, U.S. Department of Energy, Energy Information Administration, *available at* http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

supply curve. Since renewable resources are not likely to be a lower cost solution than more mature technologies for meeting the region's resource adequacy targets, the MOPR will likely exclude renewable resources from the FCM. This outcome is both logical and foreseeable; the MOPR is designed to deter so-called uneconomic entry.[36]

Q. Are there other ways in which renewable resources are effectively excluded from the auction?

A. Yes. The conduct of the descending clock auction also serves to exclude certain renewable resources. For example, biomass has an ORTP that exceeds the auction starting price. As a result, biomass resources will not ever be selected in the auction, unless they can justify resource-specific economics that support an offer below the auction starting price. Once the auction begins at a price of $15/kW-month, the $24/kW-month biomass offer floor has already been priced out of competition. After the first round, when the bid price decreases from $15/kW-month, other renewables, including solar, off-shore wind, landfill gas, small hydro, and tidal power, will be removed from the auction because their ORTP is set at the auction starting price. Once the FCA begins, the only renewable resource with a functional opportunity to participate is on-shore wind, with its $14/kW-month ORTP. However, once the first round of the auction ends, on-shore wind will also likely be eliminated from participation. Application of the MOPR to all new resources ensures that only if insufficient gas-fired resources come forward will renewable resources have a chance to clear the auction. Even then, only on-shore wind has a slight chance to count towards the region's resource adequacy target. In this manner, the MOPR's effects are not confined to deterring the exercise of buyer-side

[36] April 13, 2011 Order, 135 FERC ¶ 61,029 at P 166.

market power; those effects extend to excluding virtually all new renewable resources that are pursued relative to legitimate state policies and in furtherance of State statutory requirements.

V. NESCOE'S RENEWABLES EXEMPTION PROPOSAL

Q. In light of your conclusion that, as filed, ISO-NE's buyer side mitigation proposal is overly broad, what do you recommend?

A. I recommend that the Commission adopt a narrowly tailored exemption from mitigation for renewable energy resources that are developed pursuant to state policy. NESCOE's proposed exemption is referred to in the concurrently filed Complaint, and in my Prepared Affidavit, as the Renewables Exemption Proposal. Although I am not an attorney, I am regularly called upon to interpret the technical requirements of Commission orders. My understanding is that the NESCOE Renewables Exemption Proposal is consistent with the sentiment in Chairman Wellinghoff's and Commissioner LaFleur's concurrence with the April 13, 2011 Order. There, Chairman Wellinghoff and Commissioner LaFleur opined "that the ability to seek exemptions from mitigation may be a critical component of entities' efforts to satisfy their renewable portfolio standard obligations."[37]

Q. Please describe the basis for NESCOE's Renewables Exemption Proposal.

A. NESCOE proposes a categorical exemption to the MOPR based on the overarching principle that legitimate state statutory goals – including the means the States have determined to be reasonable to achieve them – can and must be integrated within a competitive market structure. Four factors underlie this principle and are reflected in the language of NESCOE's proposed renewable exemption. First, resources that all six New England states define as

[37] April 13, 2011 Order, 135 FERC ¶ 61,029 at *Concurring Opinion of Commissioner LaFleur and Chairman Wellinghoff* at 1-2.

renewable[38]—and codified in statute, regulation or a state policy goal—are unlikely to have been intended as a mechanism for deliberate price suppression. Second, resources that are small in size are less likely to have a significant individual impact on the market-clearing price. Third, a multi-fuel resource should only benefit from the exemption commensurate with the renewable portion of its energy generation.[39] Last, eligibility for the exemption is capped at an approximation of the annual amount needed to meet RPS goals.

Q. Please describe the eligibility requirements for NESCOE Renewables Exemption Proposal.

A. The definition of Renewable Technology Resource includes two principal elements. The first is those resource types eligible for RPS credit in five of the six states and supported by a comparable program in the sixth.[40] The second is those renewable resources types recognized by any one State's law, but with a 10 MW size limitation. Three eligibility limitations apply to both elements: (1) qualifying resources must be supported by an out-of-market revenue source supported by a state- or federally-regulated rate, charge, or other regulated cost recovery mechanism; (2) such resources must not collectively exceed an annual MW capacity limit; and (3) resources are subject to a multi-fuel provision that ensures that only resources that genuinely produce renewable power are exempt.

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[38] As shown in Exhibit NSC-6, the listed resource types in the exemption definition are eligible Class I RPS in the five New England states. Under the standard offer program in Vermont, "methane derived from a landfill; solar power; wind power . . .; hydroelectric power; and biomass power" are considered renewable. 30 V.S.A. § 8005a(c)(2).

[39] Should the Commission direct ISO-NE to include the proposed exemption in its market rules, NESCOE will work with ISO-NE and NEPOOL stakeholders to develop rules to ensure that a multi-fuel resource may benefit from the exemption only to the extent commensurate with the renewable portion of its energy.

[40] As mentioned previously, Vermont does not have an RPS but does require its electric distribution companies to enter into long-term contracts with renewable resources. 30 V.S.A. § 8005.

The proposed definition of Renewable Technology Resource is below:[41]

> *Renewable Technology Resource means a New Generating Capacity Resource that receives an out-of-market revenue source supported by a state- or federally-regulated rate, charge, or other regulated cost recovery mechanism pursuant to Section III.A.21.2(b)(i)[42] and:*
>
> *i. Whose energy is derived from wind power, solar power, methane gas from landfills, biomass facilities, hydro facilities with a generating capacity of no more than 30 megawatts, or ocean power, and is eligible as a renewable resource in the state in which it is located; or*
>
> *ii. Qualifies as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulations) renewable or alternative energy portfolio standards or other state renewable energy goals in states without a standard, so long as the resource's Forward Capacity Auction Qualified Capacity does not exceed 10 MW.*
>
> *For multi-fuel resources, only the percentage of the capacity that is produced from a renewable fuel source shall be considered a Renewable Technology Resource.*

Q. In addition to the eligibility requirement, does the NESCOE Renewables Exemption Proposal contain other features that would limit its applicability and therefore its market impact?

A. Yes, the proposal includes several additional limitations beyond threshold resource-type eligibility described above. As referenced above and described in detail further below, these limitations include:

- The aggregate class of resources offering into a given annual auction is limited to 225 MWs.[43]
- Only resources smaller than 10 MWs may qualify under the second, more expansive element of the definition.

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41 Exhibit NSC-2, NESCOE's Proposed Tariff Revisions to Implement the Renewables Exemption, at 1 (Amendment to Tariff Section I.2.2.).

42 ISO-NE Tariff Section III.A.21.2(b)(i).

43 Any excess in a given year would remain mitigated and be considered "new" for the purpose of conducting the auction. The excess capacity will be applied first to the subsequent auction's 225 MW cap. *See* Bentz Testimony, below, at 23-25.

- As State policies across the region generally apply to small hydroelectric facilities, only those facilities 30 MWs and below may qualify under the first element.

In addition to size limitations, the first element contains a geographical limitation. The resource must be eligible for the RPS or comparable program in the state in which it is located. Resources may not offer to export their capacity to another neighboring control area. If they do, they will not be eligible for the proposed exemption. With regard to trading out of a capacity supply obligation in the secondary market, only other resources that qualify under the terms of the proposed NESCOE Renewables Exemption proposal are eligible to trade with one another. Resources eligible for the exemption would still otherwise need to comply with the qualification and financial assurance requirements the other market participants face. Only renewable resources that receive out-of-market revenues from a regulated cost recovery mechanism are eligible for the proposed exemption.

Q. Please describe how the NESCOE Renewables Exemption Proposal mitigates the impact of public policies on FCM clearing prices.

A. The proposal includes two components designed to mitigate its potential impact. First, only resources that receive out-of-market revenue streams are eligible for the exemption. Second, the aggregate annual cap limits the impact on any given auction. These aspects of the exemption proposal are intended to mitigate any potential price suppression effect.

Q. Why is an out-of-market revenue stream required for eligibility?

A. The offers from some new, self-sufficient renewable resources would not be constrained by the MOPR, and they would be permitted to offer below their relevant ORTP. This class of resources, while furthering legitimate state policies, is not subject to the discriminatory aspect of the MOPR and as such should not be able to use the exemption to gain any preference in a given auction. In order to limit the renewables exemption proposal to only the new renewable

resources affected by the MOPR, a resource must receive financial support from an out-of-market revenue stream to be eligible.

Q. Please describe the purpose of placing a cap on eligibility for the exemption.

A. The aggregate annual cap is the other provision of the exemption proposal designed to limit the potential impact on the FCM clearing price and quantity. By limiting the overall quantity of resources eligible for the exemption in any given auction, the amount of potentially displaced resources and associated decrease in price are limited to only the estimated future need to meet state renewable policy and statutory requirements. NESCOE originally proposed this cap to assuage potential concerns from the NEPOOL Generator Sector: the cap is additional protection from any potential for a State to misuse the exemption for the purpose of suppressing prices. NESCOE retained the cap in order to strike a balance between the Commission's interest in deterring uneconomic entry and in the States' and Commission's shared interest in supporting State renewable energy policies and statutory requirements.

Q. Please describe how the cap level is set.

A. The 225 MW cap is a rounded estimate of the aggregate annual capacity needed to meet the New England States' statutory RPS and comparable program growth requirements.[44] This is based on an average growth rate in incremental State statutory RPS and comparable program energy demand for the four-year period 2016-2020, at a 90% availability factor. When NESCOE first developed the Renewables Exemption Proposal in the fall of 2011, NESCOE proposed that

[44] For reference, ISO-NE proposes an Installed Capacity Requirement value of 34,023 MWs for the 2016/2017 Capability Year (the seventh Forward Capacity Auction). *ISO New England Inc. and New England Power Pool Participants Committee*, Installed Capacity Requirement, Hydro-Quebec Interconnection Capability Credits and Related Values for the 2016/2017 Capability Year Filing, Docket No. ER13-334-000 (November 6, 2012).

the cap be 200 MWs. NESCOE added 25 MWs to accommodate the aggregate annual cap resulting from implementation one year later.

The cap is based on an analysis performed by ISO-NE that estimates demand for renewable energy pursuant to state RPS programs.[45] The analysis estimates the gigawatt hours ("GWh") of renewable energy needed to meet RPS requirements, based on forecasted load in the years 2016 and 2020. The difference between the GWhs needed in 2016 and 2020 is divided by four to yield an annual average. This annual average is converted to a capacity basis by dividing by the number of hours in the year and assuming a 90% availability factor. The resulting MWs are rounded for simplicity. The arithmetic in arriving at the previously proposed 200 MWs is shown below.

2020 estimated renewable energy demand = 14,437 MWhs
2016 estimated renewable energy demand = 8,372 MWhs
Difference between 2020 and 2016 (14,437 – 8,372) = 6,065 MWhs

Annual Average (6,065 / 4 years) = 1,516.25 MWhs

Capacity Conversion (1,516.25 / 8,760 hours) / 90% = approximately 192 MWs
Rounding for simplicity = 200 MWs

NESCOE presented the process for arriving at the annual cap amount to the NEPOOL Markets Committee on December 6, 2011.[46] NESCOE presented the revised estimate of 225 MWs to the NEPOOL Markets Committee on September 12, 2012.[47]

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[45] The ISO-NE analysis upon which the estimate is presented here: http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/mtrls/2011/jun292011/rps.pdf. More recent analysis of renewable resources in the queue and the RPS outlook are presented here: http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/mtrls/2012/may162012/renewables_and_rps_outlook.pdf based on upon data found here: http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/eag/usr_sprdshts/2012_rps_spreadsheet.xlsx.

[46] NESCOE Presentation to the NEPOOL Markets Committee, *New England States Collective Approach: ORTP Exemptions* (December 6, 2011), *available at* http://www.iso-ne.com/committees/comm_wkgrps/mrkts_comm/mrkts/mtrls/2011/dec672011/a07c_nescoe_presentation_12_06_11.pdf.

[47] NESCOE Presentation to the NEPOOL Markets Committee, *New England States Collective Approach: ORTP Exemptions* (September 12, 2012), *available at*: http://www.iso-ne.com/committees/comm_wkgrps/mrkts_comm/mrkts/mtrls/2012/sep11122012/a15b_nescoe_presentation_09_12_12.pdf.

Q. Please describe the mechanics of applying the cap over time.

A. Over the course of time, the aggregate amount of resources eligible for the exemption is limited to the cumulative cap level. If the quantity of resources seeking eligibility for a particular auction is greater than the cap level, the cap space is prorated equally among those resources so that the cap is not exceeded. For any qualifying renewable resource capacity that gets prorated, the remaining capacity gets priority in subsequent auctions. Should the aggregate amount of resources seeking to qualify for the exemption be less than the cap in a given auction, the unused cap space could be applied to the subsequent auction.

Q. Is NESCOE's Renewables Exemption Proposal directly correlated to state laws regarding renewable resources?

A. Yes, NESCOE's renewables exemption proposal is appropriately narrow because NESCOE designed it to clearly correspond to state laws and requirements associated with renewable resources. The impact of the exemption is no larger than necessary to promote the New England States' renewable energy statutory requirements and eligibility for the exemption explicitly references state laws and regulations. By transparently correlating the exemption to state laws, the proposal properly balances between competing interests.

As previously described, the size of the annual cap is targeted to approximate the growth rate of the New England States' RPS and comparable program statutory requirements. The class of resources eligible under the first element is based on the current commonality between the collective States' RPS and comparable program requirements. The class of resources eligible under the second element of the exemption's eligibility definition refers directly to individual state renewable resource laws. Only resources supported by a public policy-related out-of-market revenue stream are eligible under either element. These provisions unambiguously limit

the scope of the exemption proposal to only what is needed to effectuate legitimate public policies, as codified in state law.

Q. Are you aware of any other organized markets that have implemented exemptions to buyer-side mitigation protocols?

A. Yes, other regions have taken a more limited approach to buyer-side mitigation. Wind and solar resources are exempt from the PJM Interconnection's (PJM) MOPR.[48] Further, I understand that PJM and its stakeholders are currently revising their buyer-side mitigation approach to be even more limited than it currently is. Rather than expanding application of the MOPR to all resource types, PJM and its stakeholders are developing a proposal to mitigate only natural gas-fired resources.[49] Such a targeted approach to buyer-side mitigation is much more appropriate than ISO-NE's overly broad proposal.

VI. CONCLUSION

Q. What relief is NESCOE seeking from the Commission?

A. Based on the foregoing and the accompanying complaint, NESCOE respectfully requests that the Commission find and conclude that ISO-NE's buyer-side mitigation proposal is unjust and unreasonable because it would treat renewable resources required by State statutes as uneconomic entry and, as a result, exclude their capacity from consideration towards the Installed Capacity Requirement. Accordingly, NESCOE asks the Commission to adopt a narrowly-tailored exemption to the proposed offer floor mitigation rules that would enable the

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[48] *PJM Interconnection L.L.C.*, 135 FERC ¶ 61,022 (2011) at P6 and at fn. 16 (exempted resources include nuclear, coal, Integrated Gasification Combined Cycle facilities, hydroelectric facilities, and upgrades or additions to existing capacity resources) and at P 152 (adding wind and solar facilities to the list of exempted resources and removing upgrades and additions to existing capacity resources).

[49] "Another change is to narrow the MOPR to apply only to gas-fired combustion turbine, combined cycle, or integrated gasification combined cycle generating technologies." *PJM Interconnection L.L.C.*, Revisions to the Minimum Offer Price Rule under the Reliability Pricing Model Filing, Transmittal at 15, Docket No. ER13-535-000 (December 7, 2012), *available at* http://www.pjm.com/~/media/documents/ferc/2012-filings/20121207-er13-535-000.ashx.

capacity provided by resources furthering legitimate State public policies and statutory requirements to be counted towards the region's resource adequacy goals.

Q. Does this conclude your affidavit?

A. Yes.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

PREPARED AFFIDAVIT OF JEFFREY W. BENTZ ON BEHALF OF THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

I, Jeffrey W. Bentz, being duly sworn, depose and state that the contents of the foregoing Affidavit on behalf of the New England States Committee on Electricity are true, correct, accurate and complete to the best of my knowledge, information, and belief.

Jeffrey W. Bentz

Subscribed and sworn to before me this 26th day of December 2012.

Lori D. LaRusso
(Notary Public)

My commission expires: Lori D. LaRusso Notary Public-Connecticut My Commission Expires August 31, 2016

New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

ATTACHMENT B

MOTION TO INTERVENE AND PROTEST OF THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc.	)	Docket No. ER12-953-001
New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	

(**not consolidated**)

MOTION TO INTERVENE AND PROTEST OF
THE NEW ENGLAND STATES COMMITTEE ON ELECTRICITY

Pursuant to Rules 211, 212, and 214 of the Rules of Practice and Procedure[1] of the Federal Energy Regulatory Commission ("Commission"), the Commission's December 3, 2012 Combined Notice of Filings #1, and the Commission's December 19, 2012 Notice of Extension of Time,[2] the New England States Committee on Electricity ("NESCOE") hereby files this Motion to Intervene and Protest in Docket No. ER12-953-001. On December 3, 2012, ISO New England Inc. ("ISO-NE") filed proposed tariff revisions to the ISO-NE Transmission, Markets and Services Tariff ("Tariff") in response to the Commission's March 30, 2012 Order on the Forward Capacity Market ("FCM").[3] NESCOE's Protest arises from ISO-NE's proposed implementation of buyer-side mitigation without an exemption for state-sponsored public policy resources. ISO-NE's proposed revisions, if approved, will lead to an over-procurement of

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1 18 C.F.R. §§ 385.211, 385.212, and 385.214 (2012).
2 *ISO New England Inc.*, Notice of Extension of Time, Docket No. ER12-953-001 (December 19, 2012).
3 *ISO New England Inc. and New England Power Pool Participants Committee*, 138 FERC ¶ 61,238 (2012) ("March 30, 2012 Order").

capacity and unnecessarily undermine legitimate public policies, as codified in state laws. The Commission should reject the buyer-side mitigation provisions of ISO-NE's filing as unjust and unreasonable and ensure that any Tariff revisions properly balance these critical interests as set forth herein.

ISO-NE's filing was developed through a stakeholder process in which ISO-NE, the New England Power Pool ("NEPOOL"), NESCOE and other stakeholders were closely engaged. ISO-NE's ultimate filing—while intending in good faith to comply with the Commission's directives—applies an overly broad approach to offer floor mitigation that fails to consider states' valid policy interests and state statutory requirements and the likelihood that capacity will be over-procured.

In response to the Commission's direction to establish asset-class-specific benchmark prices as part of an offer floor mitigation regime, ISO-NE proposes to apply buyer-side mitigation to *all* new resources offering capacity in the FCM.[4] As detailed below, this approach, commonly known as a Minimum Offer Price Rule ("MOPR"), will result in excluding new renewable resources that are developed in furtherance of legitimate public policies embodied in state statutes from consideration when ISO-NE procures capacity for the region. Because states have determined that these resources are critically important to their energy and environmental objectives, these resources, which are developed pursuant to state law mandates, will be placed in-service *irrespective* of FCM capacity revenues. The effect of ISO-NE's proposal to apply buyer-side mitigation to all new FCM resources will result in ISO-NE procuring more capacity than is necessary for resource adequacy. This over-procurement of resources, and the knowing

[4] *ISO New England Inc.*, Compliance Filing, Docket No. ER12-953-001 (filed December 3, 2012) ("Compliance Filing").

blindness toward legitimate state public policies as codified in state laws, is unjust and unreasonable in contravention of the Federal Power Act ("FPA").[5]

In addition to this Protest, the New England states, through NESCOE, have filed on this date a complaint pursuant to Section 206 of the FPA that raises the same material issues as this Protest.[6] NESCOE makes this separate filing of a complaint both (i) to ensure that the proper procedural mechanism is in place for the Commission to grant NESCOE's requested relief,[7] and (ii) pursuant to the Commission's direction in the January 19, 2012 Order that the appropriate avenue for seeking an exemption to the offer floor mitigation regime is through such a Section 206 complaint.[8] For reference, the complaint is attached hereto as Appendix A. NESCOE also attaches to this Protest and the complaint its proposal for how to categorically exempt from buyer-side mitigation certain renewable resources developed pursuant to state statutory requirements and financial support approved by state authorities, which, if accepted by the Commission, would correct the fatal flaw in ISO-NE's filing, as Appendix C.

I. Communications

Pursuant to Rule 203,[9] the persons to whom correspondence, pleadings, and other papers in regard to this proceeding should be addressed and whose names are to be placed on the Commission's official service list are designated as follows:

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5 16 U.S.C. § 824e (2006).

6 The Connecticut Public Utilities Regulatory Authority, which separately noticed its intervention on this date, joins in support of this protest.

7 For example, NESCOE offers as an attachment to this Protest suggested language for remedying the deficiencies in ISO-NE's filing, which respondents may argue is beyond the scope of a protest.

8 *ISO New England Inc. and New England Power Pool Participants Committee*, 138 FERC ¶ 61,027 (2012) at P 89 ("January 19, 2012 Order").

9 18 C.F.R. § 385.203 (2012).

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II. Motion to Intervene

NESCOE is the Regional State Committee for the New England region. NESCOE is governed by a board of managers appointed by the Governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont and is funded through a regional tariff administered by the ISO New England.[10] NESCOE's mission is to represent the interests of the citizens of the New England region by advancing policies that will provide electricity at the lowest reasonable cost over the long term, consistent with maintaining reliable service and environmental quality.[11]

In this proceeding, ISO-NE proposes tariff revisions changing FCM rules, including provisions concerning market monitoring. These tariff revisions, if approved, will impact the prices at which new resources may offer their capacity into the wholesale electricity markets, thereby implicating the portfolio of resources selected to ensure resource adequacy for the region and the cost of resources that clear the market. The proposed tariff revisions, if approved, may also have an adverse impact on state public policies and statutory requirements promoting renewable resources and thus will have an impact on NESCOE.

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[10] *ISO New England Inc.*, 121 FERC ¶ 61,105 (2007).

[11] *See Joint Petition for Declaratory Order to Form a New England Regional State Committee*, The Governors of: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Docket No. EL04-112-000 (Jun. 25, 2004).

Based on the foregoing, NESCOE has a direct and substantial interest in this proceeding, which will not be adequately represented by any other party. In addition, NESCOE's participation in this proceeding as the representative of the New England Governors will serve the public interest. NESCOE respectfully requests leave to intervene in this matter.

III. Background

For the past several years, the region has been working to address issues associated with so-called out-of-market resources offering capacity allegedly below their cost, resulting in a suppressed FCM clearing price.[12] On April 13, 2011, the Commission rejected and deemed unjust and unreasonable ISO-NE's proposed market rules changes that would have permitted "state-sponsored" public policy resources to clear in the FCM and be counted towards the region's resource adequacy goals, while at the same time employing an "alternative price rule" mechanism to address price suppression effects.[13] Among other guidance provided in its April 2011 Order,[14] the Commission directed ISO-NE to establish asset-class-specific benchmark prices as part of an offer floor mitigation regime.[15] ISO-NE subsequently proposed through the NEPOOL stakeholder process a buyer-side mitigation regime—the MOPR—applicable to all

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12 ISO New England Inc. Market Monitoring Unit, *Internal Market Monitoring Unit Review of the Forward Capacity Market Auction Results and Design Elements* (June 5, 2009) at 43 ("Internal Market Monitor Report"), *available at* http://www.iso-ne.com/markets/mktmonmit/rpts/other/fcm_report_final.pdf.

13 *ISO New England Inc. and New England Power Pool Participants Committee*, 135 FERC ¶ 61,029 (2011) at PP 61 and 157 ("April 13, 2011 Order").

14 April 13, 2011 Order, 135 FERC ¶ 61,029 at PP 20, 171 (discussing fact-specific instances that may warrant exemptions from mitigation). In a concurring opinion to the April 13, 2011 Order, Chairman Wellinghoff and Commissioner LaFleur stated their belief "that the ability to seek exemptions from mitigation may be a critical component of entities' efforts to satisfy their renewable portfolio standard obligations, and that the Commission should be willing to consider such requests"). *Id*., at *Concurring Opinion of Commissioner LaFleur and Chairman Wellinghoff* at 1-2 (footnote omitted).

15 January 19, 2012 Order, 138 FERC ¶ 61,027 at P 82, citing April 13, 2011 Order, 135 FERC ¶ 61,029.

new resources offering capacity in the FCM.[16]

Following ISO-NE's proposal, NESCOE worked through the NEPOOL stakeholder process to develop a categorical exemption for certain renewable resources from ISO-NE's proposed offer floor mitigation rules (the "Renewables Exemption Proposal"). The NESCOE Renewables Exemption Proposal was discussed and, through stakeholder engagement, refined over the course of a year, culminating in a November 2012 vote at the NEPOOL Participants Committee.[17] The NESCOE Renewables Exemption Proposal was unanimously supported by the New England states, with many NEPOOL participants providing support as well.[18] Ultimately, 56.92% of the Participants Committee supported NESCOE's exemption in an amendment to the ISO-NE package of proposed compliance measures, falling short of the required 60% threshold to amend the main motion.[19]

The Massachusetts Attorney General ("Mass AG") proposed a more limited exemption to the MOPR, which received 66.76% in support and was successful in amending the ISO-NE main motion. However, neither the ISO-NE-supported main motion nor the version amended by the Mass AG exemption proposal passed, and therefore NEPOOL's Section 205 rights were not

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16 Compliance Filing, Transmittal at 8-28; *See*, also, Joint Testimony of Marc D. Montalvo and David H. Naughton, (the "Joint Montalvo / Naughton Testimony") and ISO-NE Tariff Section III.A.21.

17 Markets Committee stakeholders began vetting the Renewables Exemption Proposal during meetings in the fall of 2011 and throughout most of 2012. *See* NESCOE Presentation to the NEPOOL Markets Committee, *New England States Collective Approach: ORTP Exemptions* (December 6, 2011), *available at* http://www.iso-ne.com/committees/comm_wkgrps/mrkts_comm/mrkts/mtrls/2011/dec672011/a07c_nescoe_presentation_12_06_11.pdf; NESCOE Presentation to the NEPOOL Markets Committee, *New England States Collective Approach: ORTP Exemptions* (September 12, 2012), *available at* http://www.iso-ne.com/committees/comm_wkgrps/mrkts_comm/mrkts/mtrls/2012/sep11122012/a15b_nescoe_presentation_09_12_12.pdf; and New England Power Pool Participants Committee, Notice of Actions Taken at November 2, 2012 Meeting, *available at* http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/prtcpnts/actions/noa_npc_20121102.pdf.

18 See *ISO New England Inc.*, Comments of the New England Power Pool Participants Committee, Docket No. ER12-953-001 (filed December 21, 2012) at 9-10 (NEPOOL Comments). National Grid sponsored the amendment putting forward the Renewables Exemption Proposal.

19 Participants Agreement, Section 11.1.3; *See also* NEPOOL Comments at fns. 28-29 discussing the "jump ball" provision of the Participants Agreement, Section 11.1.5. Unlike some other regional state committees, NESCOE has no Section 205 rights.

triggered. Notably, the version of proposed tariff revisions including the Mass AG's exemption garnered more support from the NEPOOL stakeholders (28.72% in favor) than the ISO-NE version without an exemption (13.34% in favor).

IV. Protest

In its compliance filing, ISO-NE proposes to apply buyer-side mitigation to *all* new resources offering capacity in the FCM.[20] In considering this proposal, the Commission must determine whether ISO-NE's buyer side mitigation provisions comply with the FPA requirement that rates and practices be just and reasonable.[21] If ISO-NE's proposal is unjust and unreasonable, it must be rejected. As explained below, ISO-NE's buyer side mitigation proposal excludes new renewable resources that are developed in furtherance of legitimate public policies embodied in state statutes from consideration when ISO-NE procures capacity for the region's resource adequacy. Excluding these resources will have deleterious effects in the form of over-procuring capacity and impeding state energy policies and statutory requirements. Thus, ISO-NE's proposed offer floor mitigation rules are unjust and unreasonable and should be rejected

As detailed in the attached testimony of Jeffrey W. Bentz (the "Bentz Testimony"), under ISO-NE's proposed offer floor mitigation rules, the capacity provided by new renewable resources developed pursuant to state statutes and regulations is unlikely to be counted towards the region's resource adequacy requirements.[22] Such state actions are not an exercise of buyer-side market power. Such actions are a legitimate means to implement state public policies and

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20 Compliance Filing, Transmittal at 8-28; Joint Montalvo / Naughton Testimony; and ISO-NE Tariff Section III.A.21.

21 16 U.S.C. § 824d (2006).

22 The Bentz Testimony is marked as Attachment A to NESCOE's concurrently-filed Complaint. For the Commission's convenience, NESCOE has also attached the Bentz Testimony to the instant Protest as "Appendix B."

statutory requirements. However, ISO-NE's proposed MOPR treats these renewable resources as uneconomic entry and, as a result, excludes their capacity from consideration towards meeting the Installed Capacity Requirement ("ICR").[23]

Without an exemption from the offer floor mitigation rules for certain renewable resources, the FCM will: (i) procure more capacity than is necessary for resource adequacy,[24] and (ii) undermine legitimate state public policies. Requiring the region's transmission ratepayers to purchase capacity from a market that effectively will procure more capacity than is needed for resource adequacy is unjust and unreasonable. If the proposed Tariff revisions are approved, the FCM would also subvert legitimate state laws and regulations supporting the development of new renewable resources.

A. ISO-NE's Proposed Tariff Revisions Implementing Buyer-Side Mitigation are Unjust and Unreasonable Because They Will Exclude New Renewable Resources from the FCM and Result in Procuring More Capacity than is Needed

The only means for capacity to be counted towards the ICR is to clear in the FCM. While the most likely impact of the offer floor mitigation construct is entirely foreseeable—renewable resources developed pursuant to state law mandates will be mitigated to their asset-class-specific benchmark offer floor and not clear the auction—new renewable resources that fail to clear the auction will still be developed and placed in-service pursuant to state law requirements. States have long supported renewable resources[25] and are expected to continue to do so, despite the price signal sent by the FCM.

For example, statutes creating system benefit funds, first enacted during restructuring in

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23 Bentz Testimony Section IV, at 15-19.

24 This aspect of NESCOE's protest is described in greater detail in the attached and separately filed complaint.

25 Four of the five New England states' RPS programs predate the existence of the FCM. The fifth state, New Hampshire, enacted its RPS in May 2007, one year after the FCM Settlement Agreement Order, *Devon Power LLC*, 115 FERC ¶ 61,340 (2006). New Hampshire Statutes, Chapter 362-F.

the late 1990's, continue to provide support for renewable resources.[26] Statutes implementing renewable and alternative portfolio standards and other comparable programs have been in place for many years and have compliance requirements well into the next decade.[27] These laws and regulations, among many others, manifest that the New England states' will support renewable resources regardless of whether clearing prices in the FCM approximate the cost of new entry for a natural gas-fired power plant.[28]

Some New England states have also recently begun to require their utilities to facilitate financing of renewable energy projects. Rather than attempting to exert buyer-side market power in the FCM, states have found credit conditions so difficult for renewable resources that states have enacted statutes requiring the solicitation of long-term contracts for renewable energy.[29] Taking the additional step of providing support to renewable energy projects through long-term contracts demonstrates the states' strong interest in pursuing legitimate public policies and satisfying state statutory requirements.

Further, the New England Governors have resolved to pursue competitive, coordinated procurement of renewable resources. At the July 30, 2012 meeting of the New England Governors Conference, the New England Governors unanimously adopted a resolution directing

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[26] Rhode Island enacted a public benefit fund in 1996. R.I. Gen. Laws § 39-2-1.2. Maine and Massachusetts enacted public benefit funds and renewable portfolio standards in 1997. 35-A M.R.S. § 3210. M.G.L. ch. 25 § 20 and ch. 25A § 11F. Connecticut enacted a public benefit fund and renewable portfolio standard in 1998. Conn. Gen. Stat. §§ 16-245a et seq. and 16-245n.

[27] Conn. Gen. Stat. § 16-245a et seq.; 35-A Maine Revised Statutes §§ 3210, 3210-C; Mass. Gen. Laws ch. 25A, § 11F; New Hampshire Statutes, Chapter 362-F; Rhode Island Gen. Laws §§ 39-26 et seq., *See also* 30 V.S.A. § 8004(b).

[28] April 13, 2011 Order, 135 FERC ¶ 61,029 at P 344 (mentioning the theoretical merit of the proposition that the capacity market clearing price should reflect the cost of new entry for a peaking unit).

[29] *See* Schwabe, P. et al., *Renewable Energy Project Financing: Impacts of the Financial Crisis and Federal Legislation*, National Renewable Energy Laboratory (NREL), at 2 (July 2009). *See*, also, *See*, also, Schwabe, P et al., *Mobilizing Public Markets to Finance Renewable Energy Projects: Insights from Expert* Stakeholders, NREL, (June 2012) and Wiser, R. et al., *Renewable Portfolio Standards: A Factual Introduction to Experience from the United States*, LBNL, at 8 (April 2007). Notably, the Massachusetts Green Communities Act aims to "facilitate the financing of renewable energy generation." Mass. Session Laws, St. 2008, c. 169, § 83.

NESCOE to implement a work plan for the competitive coordinated procurement of regional renewable power.[30] The resolution includes a goal of issuing a solicitation to procure renewable power by the end of December 2013. This resolution follows other resolutions adopted in 2009[31] and 2011[32] directing NESCOE to investigate the potential for competitive, coordinated procurement of renewable power and several years of efforts in furtherance of that direction.[33] These sustained commitments to renewable resource development evince the region's commitment to achieving their state public policy goals.

As a larger but related point, the New England states have demonstrated their preference for market-based approaches for addressing the region's energy needs. From electricity restructuring in the 1990s to the creation of RPS programs establishing a market for renewable energy credits, the states have embraced the competitive marketplace as a means for achieving legitimate state policies.

Given that new renewable resources that fail to clear the auction will almost certainly still be developed, placed in-service and provide capacity to the region pursuant to state law requirements, ISO-NE's buyer side mitigation proposal penalizes the region's transmission ratepayers by effectively requiring them to purchase more capacity than is necessary for resource adequacy. NESCOE shares the Commission's interest in competitive markets, but ISO-NE's

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30 *A Resolution Directing the New England States Committee on Electricity (NESCOE) to Implement a Work Plan for the Competitive Coordinated Procurement of Regional Renewable Power*, New England Governors Conference, Inc. (July 30, 2012), *available at* http://www.nescoe.com/uploads/CP_Resolution_July_2012.pdf.

31 *Resolution Concerning Renewable Energy*, Resolution 33-2, 33rd Annual Conference of the New England Governors and Eastern Canadian Premiers (September 15, 2009), *available at* http://www.nescoe.com/uploads/Governors_and_Premiers_2009_Resolution.pdf.

32 *A Resolution Endorsing the Continued Investigation into the Potential for Coordinated Regional Renewable Power Procurement*, New England Governors Conference, Inc. (July 11, 2011), *available at* http://www.nescoe.com/uploads/NEGC_Coord_Procure_Res._.pdf.

33 *See*, generally, NESCOE's Coordinated Procurement efforts, *available at* http://www.nescoe.com/Coordinated_Procurement.html.

proposed tariff revisions to implement buyer-side mitigation go too far in entirely ignoring state policies. In fact, the Commission has itself signaled that procuring more capacity than is needed is an unjust and unreasonable outcome.

The Commission rejected ISO-NE's prior proposal including the Alternative Price Rule ("APR") under the theory that competing FCM objectives could not be simultaneously achieved. As described in the January 19, 2012 Order on Rehearing, "it is more important to ensure that purchases do not exceed the installed capacity requirement" than "to allow new [out-of-market] capacity to clear and obtain a capacity supply obligation."[34] However, if state-supported public policy resources are developed and provide capacity to the region, but offer floor mitigation excludes their capacity from consideration towards the ICR, the FCM is procuring more resources than necessary for resource adequacy. If it was unjust and unreasonable for the FCM to procure more than ICR under the APR, it is equally unjust and unreasonable for the FCM to procure more than is necessary for resource adequacy under the MOPR.

While the intended purpose of offer floor mitigation is to deter uneconomic entry,[35] the Commission implicitly acknowledged the impact that such mitigation will have on state policies, noting that "states and state agencies may conclude that the procurement of new capacity, even at times when the market-clearing price indicates entry of new capacity is not needed, will further specific legitimate policy goals[.]"[36] However, rather than recognize that legitimate state policy goals will assuredly result in new capacity, the proposed buyer-side mitigation approach ignores any impact this will have on the level of capacity that is (or should properly be) procured.

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34 January 19, 2012 Order, 138 FERC ¶ 61,027 at P 28.

35 "[T]he deterrence of uneconomic entry falls within the Commission's jurisdiction." April 13, 2011 Order, 135 FERC ¶ 61,029 at P 170.

36 April 2011 Order, 135 FERC ¶ 61,029 at P 171.

B. Overly Broad Buyer-Side Mitigation is Unjust and Unreasonable to the Extent It Undermines Public Policies that are Reflected in State Statutes and Regulations

Excluding new renewable resources from the FCM subverts state public policies promoting, *inter alia*, fuel diversity, clean energy, and new and innovative technologies.[37] For example, states have provided significant support for emerging technologies, especially ones with renewable fuel sources. The development life cycle of new technologies commonly includes an early stage where resources are considered uneconomic relative to more mature technologies. State policy support for emerging, renewable resources promotes expanding economies of scale to bring down costs and enable cost-saving innovations to occur. Ultimately, emerging renewable resource types are expected to provide benefits in the form of useful contributions to resource adequacy. The MOPR inhibits the ability of this class of resources to clear in the FCM, thus stifling competition from emerging technologies in the process.[38]

The MOPR also undermines states' efforts to provide economic incentives to renewable

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[37] *See, e.g.,* the following policy objectives reflected in the statutory codes of New England states: The Renewable Energy Investment Fund should "foster the growth, development and commercialization of renewable energy sources, related enterprises and stimulate demand for renewable energy and deployment of renewable energy sources that serve end use customers in this state and for the further purpose of supporting operational demonstration projects for advanced technologies that reduce energy use from traditional sources[.]" Conn. Gen. Stat. 16-245n(c); "[T]o encourage the use of renewable, efficient and indigenous resources, it is the policy of this State to encourage the generation of electricity from renewable and efficient sources and to diversify electricity production[.]" 35-A M.R.S. § 3210; ". . . (i) the development and increased use and affordability of renewable energy resources in the commonwealth and the New England region; (ii) the protection of the environment and the health of the citizens of the commonwealth through the prevention, mitigation and alleviation of the adverse pollution effects associated with certain electricity generation facilities; (iii) the maximization of benefits to consumers of the commonwealth resulting from increased fuel and supply diversity. . ." M.G.L. ch. 23J § 9(c); "Renewable energy generation technologies can provide fuel diversity to the state and New England generation supply through use of local renewable fuels and resources that serve to displace and thereby lower regional dependence on fossil fuels." N.H.S. 362-F:1; "[I]n order to protect public health and the environment and to promote the general welfare, to establish a renewable energy standard program to increase levels of electric energy supplied in the state from renewable resources." R.I. Gen. Laws § 39-26-1(e); "Providing support and incentives to locate renewable energy plants of small and moderate size in a manner that is distributed across the state's electric grid, including locating such plants in areas that will provide benefit to the operation and management of that grid through such means as reducing line losses and addressing transmission and distribution constraints." 30 V.S.A. § 8001(a)(7).

[38] Bentz Testimony Section IV, at 15-19.

resources through market-based mechanisms. The REC market is designed to provide the residual revenue necessary for renewable resources to remain viable, affording renewable resources with a market-based revenue stream.[39] By effectively preventing renewable resources from clearing in the FCM, the MOPR denies renewable resources developed pursuant to state law mandates an additional market-based revenue stream, compounding the challenge of supporting new resources that are still in the early stages of development.

Additionally, while the states have taken full advantage of market-based mechanisms such as RPS requirements to promote renewable resources, credit conditions have in many cases required a resource-specific approach.[40] Thus some states have, in recent years, enacted a variety of laws requiring or encouraging the use of power purchase agreements to facilitate the financing of renewable resources required to satisfy state statutory requirements.[41] Excluding from the FCM renewable resources that receive such out-of-market revenues, without any reasonable accommodation whatsoever, serves to increase the costs to consumers of the power purchase agreements that facilitate project financing. In this way, the MOPR increases the costs that ratepayers must bear to satisfy legitimate public policies as embodied in state laws.

Moreover, the MOPR will undermine legitimate state policies supporting fuel diversity. In addition to dominating the region's interconnection queue, natural gas-fired resources have a lower asset-class-specific benchmark price than all renewable resources. With the MOPR in place, the FCA will procure as much gas-fired capacity as can be developed before clearing any renewable resources that state laws require. The states have promoted fuel diversity as a matter

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39 Bentz Testimony Section II, at 7-8. Load-serving entities (electric distribution companies and retail competitive suppliers) must pay an alternative compliance payment if they do not purchase RECs in proportion to their load.

40 *See* n. 29, above.

41 Conn. Gen. Stat. §§ 16-244c(j)(2), 16-244r, 16-244s, 16-244t, and 16-244v; 35-A Maine Revised Statutes § 3601 et seq.; Mass. Session Laws, St. 2008, c. 169, § 83; Mass. Session Laws, St. 2012, c. 209, §§ 35 and 36; Rhode Island Gen. Laws §§ 39-26.1 and 39.26.2 et seq.; 30 V.S.A. § 8005(d).

of public policy, in part to address the region's increasing reliance on natural gas-fired resources. When the FCM over-procures capacity under the proposed MOPR, it will likely be natural gas-fired resources added to the region's supply mix.

Importantly, these public policies, including the use of long-term customer-supported contracts approved by state regulatory authorities to achieve those policies, are neither designed nor intended to suppress prices in the FCM. The design of the MOPR, however, treats such "out-of-market" resources as if they were so designed. In effect, the MOPR as proposed uses a remedy aimed at monopsony price suppression in a way that undermines the states' ability to achieve their incontestably legitimate public policy objectives. As described in the attached complaint and Bentz Testimony, the appropriately narrowly exemption sought here will permit the states to achieve those state policy objectives while at the same time limiting any incidental price impact on the FCM.

V. Conclusion

For the reasons stated herein, NESCOE respectfully requests that the Commission grant its Motion to Intervene and consider its Protest in this proceeding.

Respectfully submitted,

/s/ Benjamin S D'Antonio

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Date: December 28, 2012

CERTIFICATE OF SERVICE

In accordance with Rule and 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served by electronic mail a copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Longmeadow, Massachusetts this 28th day of December, 2012.

Respectfully submitted,

/s/ Benjamin S D'Antonio

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NESCOE EXHIBIT NSC-2

NESCOE's Proposed Tariff Revisions to Implement the Renewables Exemption

FCM Redesign: NESCOE Proposal
Redlined Market Rules

Intent of Effective Date:

NESCOE intends that such proposal be implemented for the eighth Forward Capacity Auction (for the Capacity Commitment Period beginning on June 1, 2017) or such time as the Offer Review Trigger Prices are accepted by the FERC.

Insert New Definition in Section I:

Renewable Technology Resource means a New Generating Capacity Resource that receives an out-of-market revenue source supported by a state- or federally-regulated rate, charge, or other regulated cost recovery mechanism pursuant to Section III.A.21.2(b)(i) and:

i) Whose energy is derived from wind power, solar power, methane gas from landfills, biomass facilities, hydro facilities with a generating capacity of no more than 30 megawatts, or ocean power, and is eligible as a renewable resource in the state in which it is located; or

ii) Qualifies as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulations) renewable or alternative energy portfolio standards or other state renewable energy goals in states without a standard, so long as the resource's Forward Capacity Auction Qualified Capacity does not exceed 10 MW.

For multi-fuel resources, only the percentage of the capacity that is produced from a renewable fuel source shall be considered a Renewable Technology Resource. A Renewable Technology Resource must be designated as such by its Project Sponsor as part of the New Capacity Qualification Package associated with the Capacity Commitment Period beginning on June 1, 2017 or any subsequent Capacity Commitment Period, which designation shall remain permanently with such resource upon acquiring a Capacity Supply Obligation and becoming an Existing Generating Capacity Resource. No Existing Generating Capacity Resource associated with the Capacity Commitment Period beginning on June 1, 2017 shall be designated as a Renewable Technology Resource.

Revisions to Market Rule 1, Appendix A

III.A.21.1.1 Offer Review Trigger Prices for the Eighth Forward Capacity Auction.

The Offer Review Trigger Prices for the eighth Forward Capacity Auction (for the Capacity Commitment Period beginning on June 1, 2017) shall be as follows:

Resource Type	Offer Review Trigger Price ($/kW-month)
Combustion Turbine	$10.00
Combined Cycle Gas Turbine	$11.00
Biomass	$24.00
Wind	$14.00
Real-Time Demand Response	$1.00
Energy Efficiency	$0.00

Notwithstanding the above, any New Generating Capacity Resource that meets the definition of a Renewable Technology Resource subject to section Section III.13.2.3.3 (g) shall have an Offer Review Trigger Price equal to $0.00.

III.A.21.1.2 Calculation of Offer Review Trigger Prices.

Insert new section (e):

Notwithstanding the provisions of this section, the IMM shall not review the Offer Review Trigger Prices for all New Generating Capacity Resources that are Renewable Technology Resources subject to section Section III.13.2.3.3(g) or increase the Offer Review Trigger Prices for these resources above $0.00.

Revisions to Section III.13

Insert New Section III.13.1.2.X:

Special Provisions for Renewable Technology Resources

Renewable Technology Resources that do not satisfy the criteria for participating in the Forward Capacity Auction as a New Generating Capacity Resource shall be treated in the same manner as Existing Generating Capacity Resources in the Forward Capacity Auction as described in Section III.13.2. Renewable Technology Resources may: (i) submit Static De-list Bids pursuant to Section III.13.1.2.3.1.1, (ii) submit Dynamic De-list Bids pursuant to Section III.13.2.3.2(d), or (iii) submit Permanent De-list Bids pursuant to Section III.13.1.2.3.1.2. Renewable Technology Resources may not submit an Export Bid pursuant to Section III.13.1.2.3.1.3 or an Administrative Export De-list Bid pursuant to Section III.13.1.2.3.1.4.. Such resources may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Renewable Technology Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Renewable Technology Resource. Such resources may not be Supplemental Capacity Resources. Renewable Technology Resources that are New Generating Capacity Resources as defined in Section III.13.1.1.1 shall be subject to the qualification and financial assurance requirements applicable to New Generating Capacity Resources.

Section III.13.2.3.3

Insert New Section (g):

Treatment of Renewable Technology Resources. In determining when the Forward Capacity Auction is concluded, a Renewable Technology Resources Cap shall limit the MW of capacity from Renewable Technology Resources that shall be counted towards meeting the Installed Capacity Requirement (net of HQICCs).

The Renewable Technology Resources Cap shall be calculated as such:

> For the Forward Capacity Auction associated with the June 1, 2017 Capacity Commitment Period , the Renewable Technology Resources Cap shall be 225 MW.
>
> For all subsequent Forward Capacity Auctions, the Renewable Technology Resource Cap shall be 225 MW plus the product of 225 MW and the number of auctions since the auction for the June 1, 2017 Capacity Commitment Period .

For Forward Capacity Auction associated with the June 1, 2017 Capacity Commitment Period, to the extent that the sum of renewable exemption requests exceeds the Renewable Technology Resources Cap, the exemption requests will be granted at the

prorated level and the remaining portion of the New Capacity Offer from a Renewable Technology Resource will be subject to the Offer Review Trigger Prices set in III.A.21.1.1 (as if none of the resource were exempted) until cleared as New Generating Capacity in a subsequent auction. Following the Forward Capacity Auction associated with the June 1, 2017 Capacity Commitment Period, to the extent that the sum of renewable exemption requests exceeds the Renewable Technology Resources Cap for that auction, the exemption requests will first be used as exemptions for the portion of the Renewable Technology Resources granted only a partial exemption in the prior auctions and the remainder will be granted to Renewable Technology Resources requesting their first exemption in the current auction, at the prorated level, if necessary, and the remaining portion of the New Capacity Offer from a Renewable Technology Resource will be subject to the Offer Review Trigger Prices set in III.A.21.1.1 (as if none of the resource were exempted) until cleared as New Generating Capacity in a subsequent auction.

The acceptance of a Renewable Technology Resource Static De-List Bid, Dynamic De-List Bid, or Permanent De-List Bid shall be based on the effective Capacity Clearing Price as described in Section III.13.2.7.

III.13.5.1. Capacity Supply Obligation Bilaterals.

A resource having a Capacity Supply Obligation seeking to shed that obligation ("Capacity Transferring Resource") may enter into a bilateral transaction to transfer its Capacity Supply Obligation, in whole or in part ("Capacity Supply Obligation Bilateral"), to a resource, or portion thereof, having Qualified Capacity for that Capacity Commitment Period that is not already obligated ("Capacity Acquiring Resource"), subject to the following limitations

….

(d) A Real-Time Emergency Generation Resource may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Real-Time Emergency Generation Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Real-Time Emergency Generation Resource.

(e) A Renewable Technology Resource may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Renewable Technology Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Renewable Technology Resource.~~[Reserved.]~~

III.13.7.2.1. Generating Capacity Resources.

III.13.7.2.1.1. Monthly Capacity Payments.

Each resource that has: (i) cleared in a Forward Capacity Auction, except for the portion of resources designated as Self-Supplied FCA Resources or for resources not commercial during an Obligation Month pursuant to Section III.13.7.1.1.3(h); (ii) cleared in a reconfiguration auction; or (iii) entered into a Capacity Supply Obligation Bilateral shall be entitled to a monthly payment (subject to the adjustments in Section III.13.7.2.7) or charge during the Capacity Commitment Period as follows:

…

Insert New Section (d):

(d) **Renewable Technology Resources**.

For Renewable Technology Resources, monthly payments shall be calculated in the same manner as for Generating Capacity Resources as described in Section III.13.7.2.1.1,

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ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

NESCOE EXHIBIT NSC-3

ISO-NE IMM's NEPOOL Markets Committee Fifth Presentation
(October 24, 2011)

Market Power Mitigation in the Forward Capacity Market, 5th Presentation

NEPOOL Markets Committee

Marc D. Montalvo
Internal Market Monitoring
October 24, 2011

ISO new england

Background

- On April 13, 2011 the Commission issued an order on the Forward Capacity Market redesign matters that it had set for paper hearing. Those matters included pricing, mitigation, and zones.
- To comply with this order, the Internal Market Monitor ("IMM") is drafting rules to address the following:
  - Evaluation of all Static and Permanent Delist bids above $1/kW-month
  - Calculation and application of Offer Review Trigger Prices by resource type for use in *Minimum Offer Price Mitigation*
  - Minimum duration of mitigation
  - Evaluation of offers from long-lead-time resources
  - Evaluation of offers for resource types for which a minimum offer benchmark has not been developed

Delist Bid Mitigation

- Per the FERC Order, the default assumption for de-list bid reviews will become that delisted resources will continue to participate in the energy and ancillary services markets during the capacity delivery year.
- The Lead Participant will indicate in its Qualification Package that it will not participate in the energy and ancillary services markets during the capacity delivery year. *There will be no affidavit*.
- The existing rules that allow the ISO to request energy from delisted resources under emergency conditions will apply without modification.
- The rules will allow delisted resources that have indicated they will not participate in the energy and ancillary services markets during the capacity delivery year to run to perform SCC audits and any other necessary audits or tests.

Delist Bid Evaluation

- Default (resource remains in the energy market) review assumptions are:
  - Infra-marginal Rent equals zero
  - Going Forward Costs exclude staffing, maintenance, other normal expenses and capital expenses that are deferred or avoided only if the resource is in an inactive state
  - Avoidable expenses strictly associated with the capacity obligation may be included
- For a resource that indicates that it will NOT participate in the energy and ancillary services markets during the capacity delivery year, the review assumptions are:
  - Infra-marginal Rent calculated according to formula in III.13.1.2.3.2.1.2
  - Going Forward Costs include staffing, maintenance and other normal expenses that are deferred by putting the resource in an inactive state (III.13.1.2.3.2.1.2).
  - Opportunity Costs (including capital expenses) as allowed for under (III. 13.1.2.3.2.1.2).

Offer Mitigation

- IMM will establish ***Offer Review Trigger Prices*** for a menu of generation and demand resource types.
- Any offer at or above the relevant Offer Review Trigger Price is deemed competitive.
- All offers below the relevant Offer Review Trigger Price must be submitted to IMM for evaluation by the new qualification deadline.
- IMM will evaluate the supporting information using data from independent sources and either accept or mitigate the offer.
- Per existing rules, the Market Participant may challenge a mitigation at FERC prior to the auction.

Offer Review Trigger Price (1)

- Offer Review Trigger Prices will be calculated for generation, energy efficiency and real-time demand resources.
- The Offer Review Trigger Price is a threshold price, offers below which are subject to review.
- The Offer Review Trigger Price is constructed so as to restrict IMM review to those offers below what plainly appears commercially plausible.
- For generators, the Offer Review Trigger Price is calculated as a real levelized annuity that recovers all invested capital and an appropriate return assuming that the output of the project is under contract, no merchant risk.
- For active demand response, the Offer Review Trigger Price is calculated as a composite of the incremental operating costs associated with the demand response business activities of the two industry pure plays.

Offer Review Trigger Price (2)

- While all offers below the relevant Offer Review Trigger Price will be reviewed, the IMM will mitigate only those offers that are below the Offer Review Trigger Price due to the inclusion of out-of-market revenues or which are supported by a regulated rate, charge or other cost recovery mechanism.
- Out-of-market revenues are any form of support (direct or indirect) that is not broadly available through the market to any Market Participant developing a project of the same type.

Generation Types and Cost Assumptions

Type	Fuel	Installed Capacity	Capital Cost [2]	Fixed O&M + A&G	Var O&M	Avg Heat Rate [3]
LMS 100	NG	100 MW	$1,150/kW	$30/kW-yr	$2.60/MWh	9,690 Btu/kWh
LM 6000	NG	50 MW	$1,300/kW	$29/kW-yr	$3.20/MWh	10,500 Btu/kWh
2x1 F CCGT	NG	560 MW	$1,380/kW	$18.25/kW-yr	$2.60/MWh	7,750 Btu/kWh
2x1 501G CCGT	NG	710 MW	$1,300/kW	$16.50/kW-yr	$2.75/MWh	7,260 Btu/kWh
Biomass		50 MW	$4,010/kW	$131/kW-yr	$6.50/MWh	15,000 Btu/kWh
Off-Shore Wind		300 MW	$5,130/kW	$66/kW-yr	n/a	n/a
On-Shore Wind		100 MW	$2,500/kW	$40.50/kW-yr	n/a	n/a

1. Source: Shaw Consultants 6/27/11
2. EPC + Owners Cost + Contingency + Interest During Construction
3. Full Load Average Heat Rate (HHV) adjusted to reflect typical operating cycle

Generation Financing Assumptions

(source: Shaw Consultants 6/27/11)

- Capital Asset Pricing Model used to estimate the cost of equity
- Equity Terms
  - Beta = 1.3
  - Risk free rate 3.5% (based on 10-15 year U.S. treasury)
  - Market risk premium 5.5%
  - Cost of Equity equals 3.5% + 1.3 x 5.5% = 10.65%
- Debt Terms
  - A 60% debt ratio
  - Cost of debt equals 5.5%
- Tax Rate equals 38%
- Financing assumptions assume output fully contracted without merchant exposure, solid contractors, and high quality sponsors.
- Assumptions based on conversations with four different project financers.

Real-Time Demand Response

- Data reported regarding annual customer totals (MW) and operating costs in the 2008, 2009, and 2010 Annual Reports of Comverge and EnerNOC.
- IMM has calculated for 2009 and 2010 the incremental
  - MW
  - Cost of Sales (principally incentive payments)
  - Allocated Marketing and Sales Expense
  - Allocated Administrative and General Expense
- Total Incremental Operating Costs divided by Incremental MW is an estimate of the incremental revenues required to just cover the cost of new customers.
- IMM proposes to set the RTDR Offer Review Trigger Price to the lower of the 2010 values rounded to the nearest whole dollar.

Energy Efficiency

- Analysis of regulatory submissions for energy efficiency projects in New England shows that, on average, residential and commercial EE projects do not need capacity market revenues to pass cost-benefit screens and justify deployment.
- At this time the IMM proposes an Offer Review Trigger Price of $0/kW-month.
- This value will be reevaluated along with all Offer Review Trigger Prices after three years (see slide 12)

Calculation of Offer Review Trigger Prices

PRELIMINARY OFFER REVIEW TRIGGER PRICES													
SUMMARY OF ASSUMPTIONS AND KEY CALCULATIONS													
			[1]	[2]			[1,3]		[4]	[1,5]	[6]		[2]
Resource Type	Installed Capacity (MW)	Qualified Capacity (MW)	Preliminary Offer Review Trigger Price ($/kW-month)	Installed Cost ($/kW-yr)	Discount Rate	Depreciation	Levelized Annual Carrying Cost ($/kW-year)	Annual Capacity Factor	Average Revenue ($/MWh)	1st Year Pre-Capacity Operating Margin (%)	Fuel Cost ($/MMBtu)	Var O&M ($/MWh)	Fixed O&M + A&G ($/kW-year)
LMS100 CT	100	100	$ 10.21	$ 1,154.0	6.31%	15 yr MACRS	$ 104.3	8%	$ 117.92	6.2%	$ 6.70	$ 2.60	$ 30.22
LM6000 CT	50	50	$ 11.90	$ 1,306.0	6.31%	15 yr MACRS	$ 117.9	8%	$ 117.92	2.7%	$ 6.70	$ 3.20	$ 28.60
2x1 F CCGT	560	560	$ 12.60	$ 1,375.7	6.31%	20 yr MACRS	$ 126.8	52%	$ 59.72	3.9%	$ 6.55	$ 2.60	$ 18.25
2x1 501 G CCGT	710	710	$ 10.93	$ 1,296.9	6.31%	20 yr MACRS	$ 120.1	60%	$ 58.19	7.3%	$ 6.62	$ 2.75	$ 16.49
Biomass	50	50	$ 23.71	$ 4,010.0	6.31%	20 yr MACRS	$ 365.1	90%	$ 88.25	34.6%	$ 2.40	$ 6.50	$ 131.10
Offshore Wind	300	120	$ 61.09	$ 5,133.3	6.31%	5/15 yr MACRS/SL	$ 1,149.3	40%	$ 88.25	78.7%	n/a	n/a	$ 65.83
Onshore Wind	100	33	$ 14.04	$ 2,495.0	6.31%	5/15 yr MACRS/SL	$ 677.5	33%	$ 88.25	84.1%	n/a	n/a	$ 40.50
			[7]										
Active Demand Response DR1			$ 1.43										
Active Demand Response DR2			$ 3.37										
			[8]										
Energy Efficiency	10	10	$ -										

[1] Values are per kW of Qualified Capacity
[2] Values are per kW of Installed Capacity
[3] After tax
[4] Total revenues from all sources divided by total production
[5] PreCapacity Operating Margins are levelized
[6] The natural gas price is the production weighted average price of the NE gas index for resources of comparable type operating in New England
[7] Value is the estimated incremental capacity acqusition for the two pure plays in 2010
[8] Values for Residential and Commercial/Industrial EE programs are less than zero

See the accompanying spreadsheet for detailed assumptions and calculations.

Proposed Offer Review Trigger Prices

Type	Offer Review Trigger Price ($/kW-month)
CT	**$10**
CCGT	**$11**
Biomass	**$24**
Wind	**$14**
Active Demand Response	**$1**
Energy Efficiency	**$0**

- For each technology type, we select the minimum price rounded to the nearest whole dollar as the Offer Review Trigger Price.

Modifying Offer Review Trigger Prices

- Base year Offer Review Trigger Prices with a specified effective date will be put into Appendix A of the ISO Tariff.
- The IMM proposes to escalate these values annually at a rate equal to the year over year percent change in the Producer Price Index: Electric Power Generation series calculated by the U.S. Bureau of Labor Statistics (http://data.bls.gov/timeseries/PCU221110221110). This escalator measures the annual change in the cost of delivering power generation at wholesale.

  E.g., Assume the base year (2009) Offer Review Trigger Price in the tariff is $10/kW-month; the 2009 to 2010 Producer Price Index: Electric Power Generation percent change is 4.2%. The 2010 Offer Review Trigger Price is set equal to $10.42/kW-month.

- Every *three* years, the IMM will review and revise the base year Offer Review Trigger Prices and file the new values with the FERC.

Application of Mitigation to Operational Resources

- For a New Resource that is already operational seeking to submit an offer below its Offer Review Trigger Price, the costs the IMM will accept as support for the offer will depend on when the resource became operational relative to the timing of the auction in which the resource seeks to participate.
- The IMM will adjust the depreciation cost basis entered into the capital budgeting model by an amount equal to the accumulated straight line depreciation of the initial investment calculated over the time between the original in-service year of the resource and the commitment period year.
- For the purpose of calculating the accumulated straight line depreciation, all generating resources are assumed to have an economic life of thirty years.
- The IMM will also make any other appropriate adjustments to the project cash flows.

Application of Mitigation to Operational Resources -- EXAMPLE

- Resource type – wind
  - Offer $6/kW-month
  - Offer is below the Offer Review Trigger Price for wind
- Calculation of Minimum Offer Price
  - Commitment year – 2016
  - Original in-service year – 2008
  - Initial Investment – $250 million
  - Accumulated depreciation – 8/30 * $250 million = $67 million
  - Adjusted depreciation cost basis – $250 million - $67 million = $183 million
  - Other Cash flow adjustments – 2 years residual federal production tax credit
  - Minimum Offer Price – $5/kW-month (rounded to the nearest whole dollar)
- Offer is above minimum offer price; no mitigation is applied

Application of Mitigation to Long Lead Time Resources

- The offers of long lead time resources, such as coal-fired or nuclear plants, are subject to the same review as other resources.
- A Market Participant seeking to offer a long lead time resource below the Forward Capacity Auction starting price will submit information supporting the offer.
- The IMM will consider all relevant costs in the estimate of its minimum offer price.

Application of Mitigation to Imports

- The IMM will review the offers of New Imports that are backed by a single new External Resource and/or that are associated with investment in transmission made for the purpose of supporting the import and that increases the import capability into New England.
- New Imports backed by a control area or multiple resources and that do not involve major transmission investment will have an Offer Review Trigger Price of $0.00/kW-month.

Evaluation of Offers without an Offer Review Trigger Price

- The default minimum offer for resources without an established Offer Review Trigger price is the Forward Capacity Auction starting price.
- For offers of resource types for which an Offer Review Trigger Price offer has not been established, a Market Participant seeking to offer below the Forward Capacity Auction starting price will submit information supporting the offer.
- The IMM will evaluate the supporting information using data from independent sources and either accept or mitigate the offer.
- Per existing rules, the Market Participant may challenge a mitigation at FERC prior to the auction.

QUESTIONS?

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ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

NESCOE EXHIBIT NSC-4

NESCOE's NEPOOL Markets Committee Presentation
(December 6, 2011)

New England States' Collective Approach
ORTP EXEMPTIONS

December 6, 2011
Markets Committee

In response to some concerns expressed by Markets Committee participants, NESCOE proposes changes to its exemption proposal

Concern One

The exemption as proposed is open ended & procuring more MW's than needed for RPS purposes could suppress capacity prices

Concern Two

Resource could get classified as a Renewable Technology Resource even if only a small portion of the "fuel" used is renewable

For example: a 500 MW gas plant that uses only 1% landfill gas and 99% natural gas gets an exemption & suppresses price

Two Proposed Changes

1. **Introduce a rolling annual MW Cap**

2. **Set fuel input at level that assures exempted resource is primarily renewable**

   - Both further states' intent to exempt resources built only to meet RPS
   - Protects market from overbuild of exempted resources
   - Ensures only true renewables are exempted

Concern one – CSO CAP

- **Treatment of Renewable Technology Resources.** In determining when the Forward Capacity Auction is concluded, a Renewable Technology Resources Cap shall limit the MW of capacity from Renewable Technology Resources that shall be counted towards meeting the Installed Capacity Requirement (net of HQICCs).
-
- The Renewable Technology Resources Cap shall be calculated as such:
-
- For the Forward Capacity Auction associated with the [ ] Capacity Commitment Period ("FCA-1"), the Renewable Technology Resources Cap shall be 200 MW.
-
- For all subsequent Forward Capacity Auctions, the Renewable Technology Resource Cap shall be 200 MW plus the product of 200 MW and the number of auctions since FCA-1.
- _
- If the sum of the Capacity Supply Obligations of all Renewable Technology Resources exceeds the Renewable Technology Resources Cap, the Capacity Clearing Price paid to all Renewable Technology Resources shall be adjusted by the ratio of the Renewable Technology Resources Cap divided by the total of the final Capacity Supply Obligations of Renewable Technology Resources. The acceptance of a Renewable Technology Resource Static De-List Bid, Dynamic De-List Bid, or Permanent De-List Bid shall be based on the effective Capacity Clearing Price as described in Section III.13.2.7.

Cap Overview

- **Similar to RTEG Cap**
- **Cap will allow all RTR's to obtain an CSO**
- **All RTR's price will be prorated in years the cap is exceeded**
- **During the auction only the cap amount will be counted towards meeting the Installed Capacity Requirement.**

Cap Level

- Cap Calculation is:
  - Avg GWh growth/hours in year/outage factor x 1,000 or
- 1,516/8,760/.90x1,000 = 192MW.
- Rounded to 200mw Cap
- See next slides

Cap Level – Avg GWh Growth Level

- ISO expected RPS need from 2016 to 2020 is 6,065 GWh divided by 4 is 1,516GWh/year
  - Source: June 29 PAC presentation or ISO-NE 2011 Renewable Portfolio Standards Spreadsheet
  - Assumes that the long-term state energy efficiency goals are not fully achieved.

		2016	2020
New RPS (GWh)	CT	4,469	6,605
	MA	5,973	8,500
	ME	1,079	1,239
	NH	925	1,514
	RI	829	1,272
Total New RPS		13,276	19,131
Incremental Growth above 2010 Value		7,307	13,161
Total VT Renewables Goal (GWh)		1,066	1,276
		8,372	14,437
Change 2016-2020			6,065

Cap Level – Outage Rate

- Outage rate of 90%
  - The overall ISO-NE average availability is 88% for 2010 per the Annual Markets Report
  - Two ISO-NE wind studies, including one in 2007, use the "Effect of 90 percent mechanical availability and distribution losses" and;
  - ISO-NE's NEWIS study in 2010 used "A normally distributed turbine availability with a mean of 94.8% and a standard deviation of 2.3%. Three percent electrical losses" to calculate availability.

Cap Example – Price Proration*

FCA	RTR CAP	New RTR CSO's	Total RTR	Amount Excess	Price Proration
N	200	100	100	0	0%
N+1	400	400	500	100	20%
N+2	600	140	640	40	6%
N+3	800	160	800	0	0%
N+4	1,000	200	1,000	0	0%

* Amounts are for example only

Auction Example*

FCA	Prior ICR	Load Growth	ICR Needed	ICR Offset	Other Cleared	RTR CAP	RTR's Built
N	30,000	200	30,200	100	100	200	100
N+1	30,200	250	30,450	300	-50	400	500
N+2	30,450	300	30,750	200	100	600	640
N+3	30,750	250	31,000	200	50	800	800
N+4	31,000	125	31,125	200	-75	1,000	1,000

* Amounts are for example only

FCA N+1 and N+4 new RTR's would create an overall surplus as RTR growth was greater then ICR growth.

Concern Two – "Fuel" mix

- Renewable Technology Resource means a resource whose energy is derived from wind power, solar power, methane gas from landfills, biomass facilities, hydro facilities provided such facility has a generating capacity of no more than five megawatts, and ocean power **where the renewable fuel input for such resource is comprised of at least 90 percent of the total energy input into the generating unit where applicable, and…**

Why 90 percent?

- *Based on a state's definition of Primary Fuel*
- *Reasonable level to allow some flexibility for other fuels in facility's start-up or emergency situation*
- *High enough to further the states' intent concerning exempted resource*

Other Minor Changes

- *RTR selection language added -*
  - … A Renewable Technology Resource must be designated as such by its Project Sponsor as part of the New Capacity Qualification Package associated with the Capacity Commitment Period beginning on June 1, 2016 or any subsequent Capacity Commitment Period, which designation shall remain permanently with such resource upon acquiring a Capacity Supply Obligation and becoming an Existing Generating Capacity Resource.

  - Clarifies what resources are included under the cap provision.
  - Once elected subject to cap proration for every auction.
  - Allows for resources to not be subject to the RTR cap provision and be subject to the ORTP mitigation.
  - Would exclude all prior resources from being an RTR.

Other Minor Changes

- *Removed explanatory language in definition and footnote.*
  - *Based on ISO recommendation to clarify and conform the language for implementation*
- *Conformed language in various sections similar to restrictions for RTEG's*
  - *Can not assume non RTR CSO's*
  - *Can not participate in ARA's*
  - *Can shed CSO to any participate*
  - *Price is considered $0.*

Thanks to the ISO and others for all their help in working though the details!

Questions?

New England States Committee on Electricity	)	Docket No. EL13-___-000
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ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

NESCOE EXHIBIT NSC-5

NESCOE's NEPOOL Markets Committee Presentation
(September 12, 2012)

New England States' Potential Approach
ORTP EXEMPTIONS

September 12, 2012
Markets Committee

Overview of proposed changes to previously discussed exemption language.

Basic structure remains the same with certain changes primarily to definition of a RTR

Seeking stakeholder suggestions on the revisions.

Draft Definition Language

Renewable Technology Resource means a New Generating Capacity Resource that receives an out-of-market revenue source pursuant to a state or federally mandated program and:

I. Whose energy is derived from wind power, solar power, methane gas from landfills, biomass facilities, hydro facilities with a generating capacity of no more than 30 megawatts, or ocean power, and is eligible as a renewable resource in the state in which it is located; or

II. Qualifies as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulations) renewable or alternative energy portfolio standards or other state renewable energy goals in states without a standard, so long as the resource's Forward Capacity Auction Qualified Capacity does not exceed 10 MW.

For multi-fuel resources, only the percentage of the capacity that is produced from a renewable fuel source shall be considered a Renewable Technology Resource. A Renewable Technology Resource must be designated as such by its Project Sponsor as part of the New Capacity Qualification Package associated with the Capacity Commitment Period beginning on June 1, 2017 or any subsequent Capacity Commitment Period, which designation shall remain permanently with such resource upon acquiring a Capacity Supply Obligation and becoming an Existing Generating Capacity Resource. No Existing Generating Capacity Resource associated with the Capacity Commitment Period beginning on June 1, 2017 shall be designated as a Renewable Technology Resource.

Change One - Addition

…that receives an out-of-market revenue source pursuant to a state or federal mandated program

- Ensures that the exemption is only used for projects related to public policy projects that are actually receiving an out of market revenue stream.

Change Two - Addition

Qualifies as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulations) renewable or alternative energy portfolio standards or other state renewable energy goals in states without a standard, so long as the resource's Forward Capacity Auction Qualified Capacity does not exceed 10 MW.

- Introduced so that small resources do not need to incur the cost of a FERC filing that could prove to be a barrier to entry for these public policy projects.

Change Three - Modification

For multi-fuel resources, only the percentage of the capacity that is produced from a renewable fuel source shall be considered a Renewable Technology Resource

- Revised the previous 90 percent language to further support the intent that the exemption is only for the portion that is renewable.

Other Changes

- Removed - **Renewable Technology Resources may not be import capacity resources pursuant to Section III. 13.1**
- **Changed Hydro limit to 30MW from 5MW**
- **Increased cap level to 225 MW.**
- **Modified cap mechanism so that capacity supply obligations are limited to the cap amount.**

Cap Example – Year One

- Excess in Year One

Year 1	New	MW **not** subject to ORTP	MW subject to ORTP
Unit A	100	75	25
Unit B	100	75	25
Unit C	100	75	25

Cap Level - Year 1	225
Prior + Carry Over	0
Year 1 Prorate	225
Year 1 RTR Requests	300
Percent Avaiable	75%

Cap Example – Year Two

- Excess in Year Two prorated to 50%

Year 2	New	MW **not** subject to ORTP	MW subject to ORTP
Unit A	25	25	0
Unit B	25	25	0
Unit C	25	25	0
Unit D	100	50	50
Unit E	100	50	50
Unit F	100	50	50

Cap Level - Year 2	450	
Prior + Carry Over	300	(Year 1 CSO 225+ Year 1 given priorty 75)
Year 2 Avail	150	
Year 2 RTR Requests	300	
Percent	50%	

Cap Example – Year Three

- Year Three no excess all MW clear

Year 3	New	MW **not** subject to ORTP	MW subject to ORTP
Unit D	50	50	0
Unit E	50	50	0
Unit F	50	50	0
Unit G	40	40	0
Unit H	35	35	0

Cap Level - Year 3	675	
Prior + Carry Over	600	(Year 1&2 CSO 450 + Year 2 given priorty 150)
Year 3 Avail	75	
Year 3 RTR Requests	75	
Percent	100%	

Cap Example – Year Two w/o excess

- No excess

Year 2	New	MW **not** subject to ORTP	MW subject to ORTP
Unit A	25	25	0
Unit B	25	25	0
Unit C	25	25	0
Unit D	0	0	0
Unit E	0	0	0
Unit F	0	0	0

Cap Level - Year 2	450
Prior + Carry Over	300
Year 2 Avail	150
Year 2 RTR Requests	0
Percent	#DIV/0!

Cap Example – Year Three w/o excess

- Cap Limit is 675mw with 375 Available
- Unit G&H not subject to ORTP

Year 3	New	MW **not** subject to ORTP
Unit G	300	300
Unit H	75	75
Cap Level	675	
Prior + Carry Over	300	
Year 2 Prorate	375	
Year 2 New	375	
Percent	100%	

Thanks to the ISO and others for all their help in working though the details!

Questions?

New England States Committee on Electricity	)	Docket No. EL13-___-000
v.	)	
ISO New England Inc.	)	
ISO New England Inc.	)	Docket No. ER12-953-001 **(not consolidated)**

NESCOE EXHIBIT NSC-6

Table 7-7 of ISO-NE's 2012 Renewable System Plan,
Technologies Designated in Renewable Portfolio Standards in New England, as of April 1, 2012

Table 7-7
Technologies Designated in Renewable Portfolio Standards in New England, as of April 1, 2012

Technology	CT Classes			MA Classes[a]			ME Classes		RI	NH Classes			
	I	II	III	I	IIa	IIb	I	II		I	II	III	IV
Solar thermal	✓			✓	✓		✓		✓	✓	✓		
Photovoltaic (PV)	✓			✓	✓		✓		✓	✓	✓		
Ocean thermal	✓			✓	✓				✓	✓			
Wave	✓			✓	✓				✓	✓			
Tidal	✓			✓	✓		✓		✓	✓			
Marine or hydrokinetic				✓	✓								
Hydro	<5 MW	<5 MW		<25 MW[a]	<5 MW[a]		✓[b]	✓	<30 MW	incremental			<5 MW
Wind	✓			✓	✓		✓		✓	✓			
Biomass, biofuels	Sustainable, advanced conversion, low NO_X emissions[c]	✓		Low-emission, advanced technology[d]	✓[d]		✓	✓[e]	✓ Includes cofiring with fossil fuels	Low NO_X, and PM emissions		<25 MW, low NO_X, and PM emissions	
Landfill gas	✓			✓	✓		✓		✓	✓[f]		✓[f]	
Anaerobic digester				✓	✓				✓	✓		✓	
Fuel cells[g]	✓			w/ renewable fuels	✓		✓		w/ renewable resources				
Geothermal				✓	✓		✓		✓	✓			
Municipal solid waste		✓				✓		✓w/ recycling					
Cogeneration, combined heat and power (CHP)			Customer sites, minimum 50% fuel efficiency	✓				✓[e]					
Energy efficiency			✓										

(a) The Massachusetts *Green Communities Act* (http://www.mass.gov/legis/laws/seslaw08/sl080169.htm) divides the state's RPS into Class I and Class II resources, each of which allows primarily the same renewable technologies. Resources that began operating after December 31, 1997, are Class 1 renewables, and those in operation on or before that date are Class II renewables. The act also provided for an Alternative Energy Portfolio Standard (APS) for which the currently active technologies are (1) natural gas and renewably fueled CHP located in state and (2) flywheel storage. Hydropower must be certified by the Low-Impact Hydropower Institute. APS-eligible technologies are not included in the ISO's RPS projections. On August 3, 2012, Massachusetts enacted legislation that increased the eligibility of individual hydroelectric power facilities for Class I from 25 MW to 30 MW, and for Class II facilities from 5 MW to 7.5 MW. See *An Act Relative to Competitively Priced Electricity in the Commonwealth*, http://www.malegislature.gov/Bills/187/Senate/S02395, **(b)** These resources can be pumped hydro units, and they must meet all federal and state fish-passage requirements. **(c)** These terms are explained in the state's RPS legislation and regulations: Gen. Stat. of Conn. Ch. 277, §16-1. (a) 45 (Revised January 1, 2011). NO_X refers to nitrogen oxides. **(d)** Renewable Energy Portfolio Standard-Class I, CMR, Ch. 225, Sec. 14.05.7 and 225 CMR 14.00. Massachusetts adopted more stringent eligibility requirements for new and existing woody biomass projects, including overall project efficiency and requirements to reduce GHGs (see Section 9.5.3), http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/biomass/renewable-portfolio-standard-biomass-policy.html. **(e)** These can be high-efficiency units built through December 31, 1997. **(f)** This category also includes biologically derived methane gas from sources such as biodiesel, yard waste, food waste, animal waste, sewage sludge, and septage. **(g)** Fuel cells are a relatively new "renewable" energy technology. These units emit negligible amounts of sulfur dioxide (SO_2), NO_X, and particulates such that Connecticut does not require fuel cell installations to obtain air permits. For Massachusetts, an RPS fuel cell using an "eligible biomass fuel" includes landfill or anaerobic digester methane gas, hydrogen derived from such fuels, or hydrogen derived using the electrical output of a qualified renewable generation unit. As shown in the table, RPS fuel cells in Rhode Island must use eligible renewable resources.

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NESCOE EXHIBIT NSC-7

Figure 4-3 of ISO-NE's 2012 Renewable System Plan,
Resources in the ISO Generator Interconnection Queue, by state and fuel type, as of April 1, 2012 (MW and %)

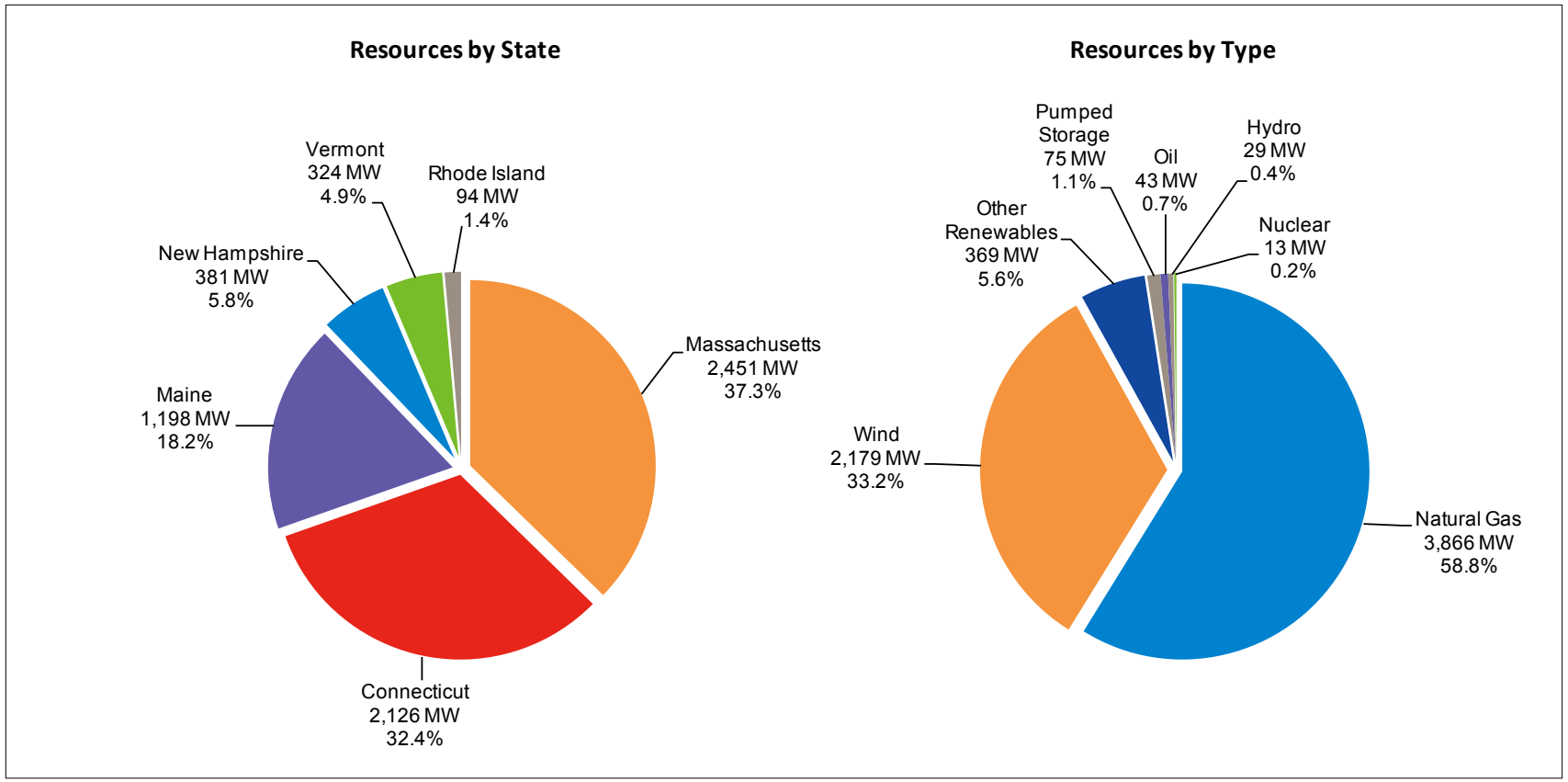

Figure 4-3: Resources in the ISO Generator Interconnection Queue, by state and fuel type, as of April 1, 2012 (MW and %).

Notes: The "other renewables" category includes wood, landfill gas (LFG), solar, and fuel cell capacity. The totals for all categories reflect all queue projects that would interconnect with the system and not all projects in New England.

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NESCOE EXHIBIT NSC-8

Figure 7-6 of ISO-NE's 2012 Renewable System Plan,
Proposed New England capacity from renewable resources in the ISO Generation Interconnection Queue, including non-FERC jurisdictional projects, as of April 1, 2012 (MW and %)

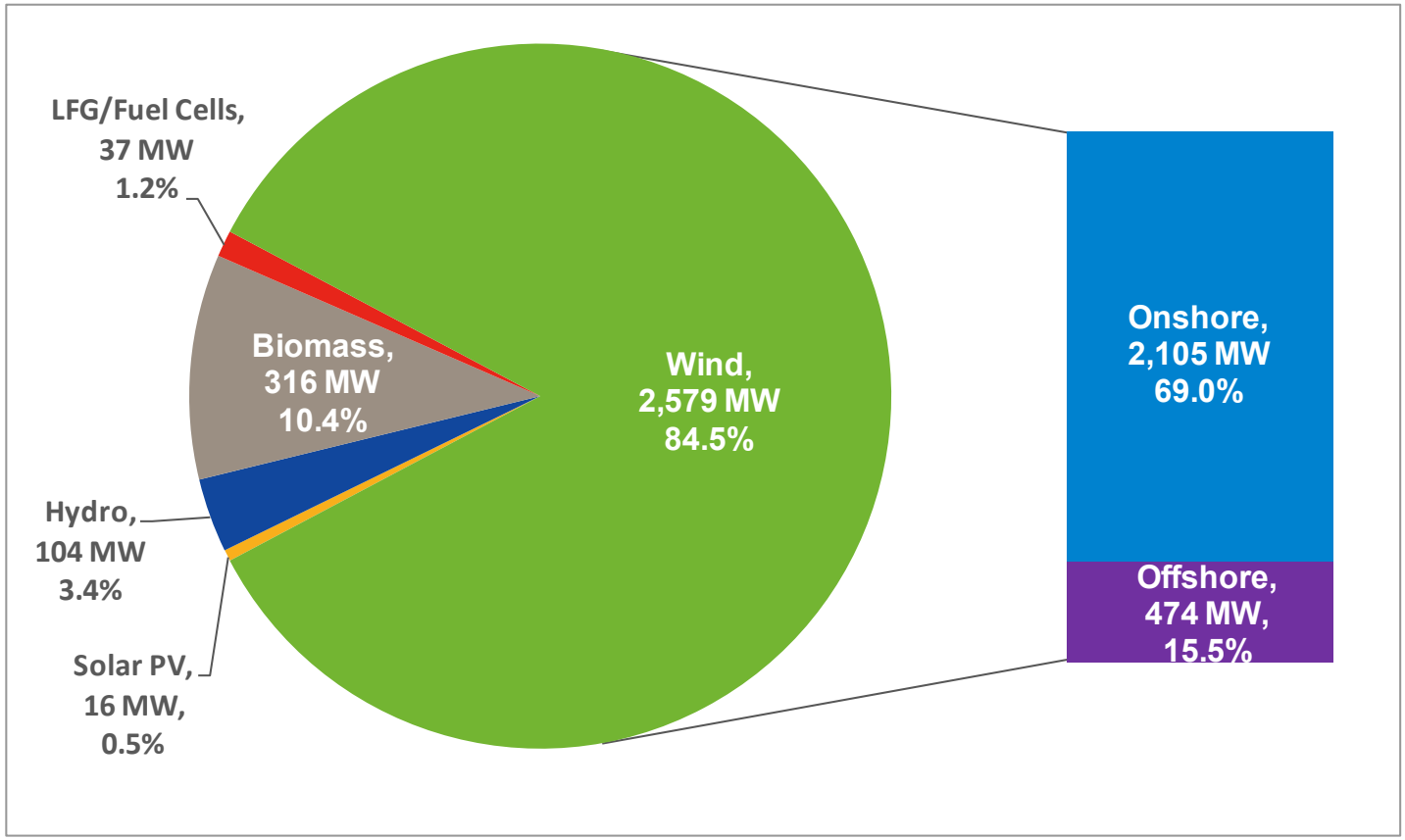

Figure 7-6: Proposed New England capacity from renewable resources in the ISO Generation Interconnection Queue, including non-FERC jurisdictional projects, as of April 1, 2012 (MW and %)

Note: Totals include all queue wind projects located in New England, including non-FERC-jurisdictional wind projects located outside the area administered by the ISO.