

# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 11-05

August 19, 2011

Petition of NSTAR Electric Company for approval by the Department of Public Utilities of: (1) a long-term contract to purchase wind power and renewable energy certificates, pursuant to St. 2008, c. 169, § 83, and 220 C.M.R. § 17.00 <u>et seq.</u>; and (2) a long-term renewable energy contract adjustment mechanism tariff, M.D.P.U. No. 164.

## D.P.U. 11-06

Petition of NSTAR Electric Company for approval by the Department of Public Utilities of: (1) a long-term contract to purchase wind power and renewable energy certificates, pursuant to St. 2008, c. 169, § 83, and 220 C.M.R. § 17.00 <u>et seq.</u>; and (2) a long-term renewable energy contract adjustment mechanism tariff, M.D.P.U. No. 164.

D.P.U. 11-07

Petition of NSTAR Electric Company for approval by the Department of Public Utilities of: (1) a long-term contract to purchase wind power, renewable energy certificates, and capacity, pursuant to St. 2008, c. 169, § 83, and 220 C.M.R. § 17.00 <u>et seq.</u>; and (2) a long-term renewable energy contract adjustment mechanism tariff, M.D.P.U. No. 164.

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#### I. INTRODUCTION AND PROCEDURAL HISTORY

On February 18, 2011, NSTAR Electric Company ("NSTAR Electric" or "Company") filed petitions with the Department of Public Utilities ("Department") seeking approval of three long-term contracts for renewable energy pursuant to An Act Relative to Green Communities ("Green Communities Act"), St. 2008, c. 169, § 83 ("Section 83") and 220 C.M.R. § 17.00 <u>et seq.</u> Under the first proposed contract, the Company will purchase wind power and renewable energy certificates ("RECs") from Groton Wind, LLC for a ten-year term. Under the second proposed contract, the Company will purchase wind power and RECs from New England Wind, LLC for a ten-year term. Finally, under the third proposed contract, the Company will purchase wind power, RECs, and capacity from Blue Sky East, LLC for a 15-year term. The Department docketed these petitions as D.P.U. 11-05, D.P.U. 11-06, and D.P.U. 11-07, respectively.

The Department held a public hearing for all three petitions on April 21, 2011.<sup>1</sup> The Attorney General of the Commonwealth ("Attorney General") intervened in the proceedings pursuant to G.L. c. 12, § 11E. On April 28, 2011, the Department granted the petitions to intervene filed in each proceeding by Associated Industries of Massachusetts ("AIM"), the Cape Light Compact ("Compact"), the Commonwealth of Massachusetts Department of Energy Resources ("DOER"), as well as the petition to intervene of Blue Sky East, LLC in D.P.U. 11-07. On the same date, the Department granted Iberdrola Renewables, Inc.

<sup>&</sup>lt;sup>1</sup> Although the three dockets are not consolidated, in the interest of administrative efficiency, the Department held a joint public hearing and joint evidentiary hearings.

("Iberdrola")<sup>2</sup> limited participant status in D.P.U. 11-05 and D.P.U. 11-06, and Cape Wind Associates, LLC limited participant status in D.P.U. 11-05, D.P.U. 11-06, and D.P.U. 11-07.

On February 22, 2011, pursuant to G.L. c. 12, § 11E (b), the Attorney General filed a Notice of Retention of Experts and Consultants in D.P.U. 11-05, D.P.U. 11-06, and

D.P.U. 11-07. On April 21, 2011, the Department approved the Attorney General's retention of experts and consultants.<sup>3</sup>

NSTAR Electric sponsored the testimony of: (1) James G. Daly, director of electric and gas energy supply for NSTAR Electric and NSTAR Gas Company; and (2) Henry C. LaMontagne, director of regulatory policy and rates for NSTAR Electric and NSTAR Gas Company. The Attorney General sponsored the testimony of the following principals of the Brattle Group: (1) Jürgen Weiss, Ph.D.; and (2) Judy W. Chang. The Compact sponsored the testimony of Jonathan F. Wallach, vice-president of Resource Insight, Inc.

The Department held evidentiary hearings on June 14, 2011 and June 15, 2011. On June 30, 2011, the following parties filed initial briefs in all three dockets: NSTAR Electric; the Attorney General; AIM; Blue Sky East, LLC;<sup>4</sup> the Compact; and DOER. On

<sup>&</sup>lt;sup>2</sup> Iberdrola is the parent company of Groton Wind, LLC and New England Wind, LLC (D.P.U. 11-05, D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 17, 26-27).

<sup>&</sup>lt;sup>3</sup> The Department approved the retention of experts and consultants in an amount not to exceed a total cost of \$150,000 for all three proceedings. <u>NSTAR Electric Company</u>, D.P.U. 11-05, <u>NSTAR Electric Company</u>, D.P.U. 11-06, <u>NSTAR Electric Company</u>, D.P.U. 11-07, Approval of Attorney General's Notice of Retention of Experts and Consultants (April 21, 2011).

<sup>&</sup>lt;sup>4</sup> Blue Sky East, LLC filed an initial brief in D.P.U. 11-07 only.

July 8, 2011, the following parties filed reply briefs in all three dockets: NSTAR Electric; the Attorney General; AIM; the Compact; and DOER. The evidentiary record for the three dockets contains 615 exhibits and one response to a record request.

#### II. DESCRIPTION OF THE WIND FACILITIES

#### A. <u>Groton Wind</u>

The proposed contract in D.P.U. 11-05 is for the output of Groton Wind, LLC's wind energy generating facility to be located in Groton, New Hampshire ("Groton Wind") (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 18). Groton Wind will consist of 24 wind turbine generators, each with a capacity of two megawatts ("MW"), for a total project capacity of 48 MW (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 18). The expected commercial operation date of the facility is December 31, 2012 (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 19). Groton Wind will interconnect to the regional electricity grid operated by the Independent System Operator-New England ("ISO-NE") in New Hampshire (D.P.U. 11-05: Exh. NSTAR-JGD-2 (2d rev.) at 46, Exh. A).

#### B. Hoosac Wind

The proposed contract in D.P.U. 11-06 is for the output of New England Wind, LLC's wind energy generating facility to be located in the towns of Monroe and Florida,

Massachusetts ("Hoosac Wind") (D.P.U. 11-06: Exh. NSTAR-JGD-1, at 18). Hoosac Wind will consist of 19 wind turbine generators, each with a capacity of 1.5 MW, for a total project capacity of 28.5 MW (D.P.U. 11-06: Exh. NSTAR-JGD-1, at 18). The expected commercial operation date of the facility is July 1, 2012 (D.P.U. 11-06: Exh. NSTAR-JGD-1, at 19).

Hoosac Wind will interconnect to the electricity grid in Massachusetts (D.P.U. 11-06: Exhs. NSTAR-JGD-2 (2d rev.) at 46, Exh. A).

#### C. Bull Hill

The proposed contract in D.P.U. 11-07 is for the output of Blue Sky East, LLC's wind energy generating facility to be located in Eastbrook, Maine ("Bull Hill") (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 18). Bull Hill will consist of 18 wind turbine generators, each with a capacity of 1.8 MW, for a total project capacity of 32.4 MW (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 18). The expected commercial operation date of the facility is May 2012 (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 19). Bull Hill will interconnect to the electricity grid near Eastbrook, Maine (D.P.U. 11-06: Exh. NSTAR-JGD-2 (rev.) at 45,

Exh. A).

#### III. DESCRIPTION OF THE PROPOSED CONTRACTS

#### A. Products and Pricing Structure

Under the proposed contracts with Groton Wind, LLC and New England Wind, LLC, NSTAR Electric will purchase, for a term of ten years, two products associated with the output of the Groton Wind and Hoosac Wind facilities: (1) energy; and (2) RECs<sup>5</sup> (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 18; NSTAR-JGD-2 (rev.) at 5, 14, § 2; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 18; NSTAR-JGD-2 (2d rev.) at 5, 14, § 2). Under the proposed Blue Sky East, LLC contract, NSTAR Electric will purchase, for a term of 15 years, three

<sup>&</sup>lt;sup>5</sup> In addition to the energy and RECs, NSTAR Electric will retain the rights to environmental attributes that may exist in the future (D.P.U. 11-05, D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 18).

products associated with the output of the Bull Hill facility: (1) energy; (2) capacity; and (3) RECs<sup>6</sup> (D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 18; NSTAR-JGD-2 (2d rev.) at 5, 14, § 2). Each contract establishes prices for the products to be purchased that will remain fixed over the terms of the contract (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 3).<sup>7</sup>

#### B. Additional Provisions

The proposed contracts each include the following provisions. First, the project developers bear all risk associated with eligibility for tax credits (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 25-26; <u>see</u> Exh. NSTAR-JGD-2 (2d rev.) at Annex A; D.P.U. 11-06: Exh. NSTAR-JGD-1, at 26; <u>see</u> Exh. NSTAR-JGD-2 (2d rev.) at Annex A; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 26; NSTAR-JGD-2 (rev.) at 27, § 5.4(b)). Second, the facilities must qualify as Class I renewable generation sources under the Massachusetts Renewable Portfolio Standard ("RPS") before NSTAR Electric is obligated to buy any output from the facilities and NSTAR Electric is not obligated to purchase RECs if the facilities fail to maintain qualification as RPS Class I sources (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 15, 17, 20, 26, §§ 3.1(f), 4.1(b), 4.7, 7.2(g); DPU 2-2; Tr. 1, at

<sup>&</sup>lt;sup>6</sup> In addition to the energy, RECs, and capacity, NSTAR Electric will retain the rights to environmental attributes that may exist in the future (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 18).

<sup>&</sup>lt;sup>7</sup> At the Company's request, the Department has granted confidential treatment pursuant to G.L. c. 25, § 5D of the pricing information for all three contracts. D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07, Motions of NSTAR Electric Company for Protective Treatment of Confidential Information (February 18, 2011) (Stamp-Granted August 17, 2011).

38-39, 175-180; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 15, 17, 20, 26, §§ 3.1(f), 4.1(b), 4.7, 7.2(g); DPU 3-2; Tr. 1, at 38-39, 175-180; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 26; NSTAR-JGD-2 (rev.) at 18, 20, 23, §§ 3.5(f), 3.7, 4.1(b), 4.7; DPU 2-2; Tr. 1, at 38-39, 175-180). Third, NSTAR Electric is obligated to buy energy, RECs, and/or capacity from the facilities only up to the maximum contract quantities (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 6, 17, §§ 1, 4.1(b); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 6, 17, §§ 1, 4.1(b); D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 26; NSTAR-JGD-2 (rev.) at 6, 20, §§ 1, 4.1(b)). Fourth, NSTAR Electric is not obligated to make any payments if the facilities operate below the contractual maximum or do not operate at all (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 26; see Exh. NSTAR-JGD-2 (rev.) at 17-18, §§ 4.1, 4.3; D.P.U. 11-06: Exh. NSTAR-JGD-1, at 26; see Exh. NSTAR-JGD-2 (2d rev.) at 17-18, §§ 4.1, 4.3; D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 26; see Exh. NSTAR-JGD-2 (rev.) at 20-21, § 4.1, 4.3). The proposed contracts also provide that NSTAR Electric: (1) is under no obligation to purchase products from the facilities during test periods;<sup>8</sup> and (2) is entitled to delay damages, as specified in the contracts, if the facilities do not achieve commercial operation by a designated date<sup>9</sup> (D.P.U. 11-05: Exh. NSTAR-JGD-2 (2d rev.) at 21, § 4.8,

<sup>&</sup>lt;sup>8</sup> The test period is the time before a project's commercial operation date (D.P.U. 11-05: Exh. NSTAR-JGD-2 (2d rev.) at 21, § 4.8; D.P.U. 11-06: Exh. NSTAR-JGD-2 (2d rev.) at 21, § 4.8; D.P.U. 11-07: Exh. NSTAR-JGD-2 (rev.) at 16, 24, §§ 3.4(a), 4.8).

<sup>&</sup>lt;sup>9</sup> In addition, the Blue Sky East, LLC contract includes provisions that require the project developer to meet certain critical milestones by dates certain, including:

Annex A, § 2; D.P.U. 11-06: Exh. NSTAR-JGD-2 (2d rev.) at 21, § 4.8, Annex A, § 2; D.P.U. 11-07: Exh. NSTAR JGD-2 (rev.) at 15, 16, 24, §§ 3.2, 3.4(a), 4.8).

#### IV. DESCRIPTION OF THE SOLICITATION PROCESS

#### A. Introduction

NSTAR Electric participated, along with the other Massachusetts electric distribution companies, in a joint statewide solicitation process for the supply of renewable energy, RECs, and/or capacity (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1,

at 10-11). In accordance with Section 83, the electric distribution companies developed a

request for proposals ("RFP") in consultation with DOER<sup>10</sup> (D.P.U. 11-05, D.P.U. 11-06,

D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 10-11). The RFP established a standardized

framework for the evaluation of bids and the negotiation of long-term contracts for renewable

energy and related products by individual electric distribution companies (D.P.U. 11-05,

D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 10-11; NSTAR-JGD-3, at 4-19).

On July 14, 2010, the electric distribution companies and DOER jointly filed a request for Department approval of the RFP. <u>Fitchburg Gas and Electric Light Company d/b/a Unitil</u> et al., D.P.U. 10-76, at 1 (2010). On August 27, 2010, the Department approved the

<sup>(1)</sup> receipt of necessary permits to construct the facility; (2) acquisition of required real property rights; (3) demonstration of financial capability to develop, construct, and interconnect the facility; (4) commencement of facility construction; and (5) achievement of the commercial operation deadline (D.P.U. 11-07: Exh. NSTAR-JGD-2 (rev.) at 14-15, § 3.1).

<sup>&</sup>lt;sup>10</sup> The distribution companies and DOER considered comments from prospective bidders in formulating the RFP (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 11).

timetable and method of solicitation and execution of long-term contracts for renewable energy contained in the RFP. D.P.U. 10-76, at 33-35. The Department determined that the timetable and method of solicitation and execution for long-term contracts contained in the RFP were

consistent with: (1) Section 83; and (2) the Department's regulations at 220 C.M.R. § 17.00

et. seq issued in D.P.U. 10-58.11 D.P.U. 10-76, at 34-35.

On September 2, 2010, the electric distribution companies issued the RFP to over

300 entities (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 7, 13;

AG 1-1 Att.). The electric distribution companies and DOER collaborated to create the

distribution list for the RFP with the object of making it as broad as possible (D.P.U. 11-05,

D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 7, 13; AG 1-1; AG 1-2). Recipients

<sup>11</sup> On December 29, 2009, the Department approved the timetable and method of solicitation for a statewide solicitation process submitted jointly by the Massachusetts electric distribution companies and DOER in Fitchburg Gas and Electric Light Company et al., D.P.U. 09-77 (2009). This statewide solicitation process employed an RFP that contained the geographic limitation set out in Section 83 and was, thus, limited to eligible in-state bidders ("Initial RFP"). The electric distribution companies issued the Initial RFP on January 15, 2010. D.P.U. 09-77, RFP Filing at 16. On June 9, 2010, the Department issued an Order which, among other things, suspended the applicability of the geographic limitation in accordance with Section 83 and adopted emergency regulations amending the Department's Section 83 long-term contracts regulations. Order Adopting Emergency Regulations on Long-Term Contracts for Renewable Energy, D.P.U. 10-58, at 5 (2010). The Department also directed that the Initial RFP be reopened for a reasonable period of time to allow eligible out-of-state bidders to submit proposals. D.P.U. 10-58, at 6. On July 14, 2010, the electric distribution companies and DOER jointly filed a request for approval of the instant RFP, which reopened the Initial RFP for a period of 35 days to allow eligible bidders, from inside and outside of the Commonwealth, to submit or refresh bids. As noted above, the Department subsequently approved the timetable and method of solicitation and execution of long-term contracts contained in the instant RFP on August 27, 2010. D.P.U. 10-76, at 33-35.

of the RFP included: (1) DOER certified RPS-eligible entities; (2) each distribution company's internal list of potential bidders; and (3) representatives from the following service lists: (a) <u>Order Instituting a Rulemaking Pursuant to G.L. c. 30A § 2 and 220 C.M.R. § 2.00</u> <u>et seq. to Implement Net Metering</u>, D.P.U. 08-75 (2009); (b) <u>Order Adopting Regulations</u> <u>Pursuant to 220 C.M.R. § 2.00 et seq. to Implement the Provisions on Long-Term Contracts</u> <u>for Renewable Energy</u>, D.P.U. 08-88 (2009); (c) D.P.U. 09-77; and (d) <u>Massachusetts</u> <u>Electric Company and Nantucket Electric Company, each d/b/a National Grid</u>, D.P.U. 09-138 (2009) (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 1-2).

Prior to submission of bids, all communications with prospective bidders occurred via a website hosted by the electric distribution companies and DOER that allowed potential bidders to submit questions regarding the RFP process<sup>12</sup> (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 11; NSTAR-JGD-3, at 7, § 1.5). Notices of intent to bid were due on September 20, 2011, and the deadline for the submission of bids was October 7, 2010 (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-3, at 19, § 3.1). The Company received a total of 81 bids in response to the RFP (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07; Exhs. NSTAR-JGD-1, at 13-14).

#### B. <u>Bid Evaluation Process</u>

Pursuant to the RFP, NSTAR Electric performed a three-stage bid evaluation process (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 12; NSTAR-JGD-3,

<sup>&</sup>lt;sup>12</sup> A pre-bid conference was also held in which potential bidders were able to seek clarification regarding the RFP process (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-3, at 19-20, § 3.2).

at 7-19). In the first stage of the bid evaluation process, the Company considered whether the bids satisfied the eligibility,<sup>13</sup> threshold,<sup>14</sup> and other minimum requirements of the RFP<sup>15</sup> (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 13-14; NSTAR-JGD-3, at 8-15). The Company states that all but seven of the bids it received complied with the eligibility, threshold, and minimum requirements<sup>16</sup> (D.P.U. 11-05,

<sup>14</sup> Threshold requirements include the following: (1) reasonableness of project schedule; (2) site control; (3) viability of the technology; (4) experience of bidder in project development; (5) project contribution to electric reliability in Massachusetts, project contribution to moderation of system peak load and employment; (6) whether the developer can meet the requirements for development and operating period security; (7) whether the bid was submitted on time; and (8) impact of the contract on the distribution company's balance sheet (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 14; NSTAR-JGD-3, at 10-13).

<sup>15</sup> Other minimum requirements include the following: (1) bidder certification that the bid was valid for at least 120 days; (2) conformance of the proposed pricing structure with the RFP; and (3) completeness of the bid package (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 14; NSTAR-JGD-3, at 13-15).

<sup>16</sup> The Company states that the seven nonconforming projects did not meet the eligibility and threshold requirements for one of the following reasons: (1) the entity that submitted the bid did not own the project; (2) the project was unable to deliver energy to ISO-NE; (3) the project was smaller than one MW; (4) the project did not or would not qualify as an RPS Class I Renewable Generation Unit pursuant to 225 C.M.R. § 14.01; or (5) the proposed pricing structure did not conform to the RFP (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 2-9).

Eligibility requirements include the following: (1) the bidder must be the owner of the facility or have development rights; (2) the facility must qualify as an RPS Class I Renewable Generation Unit pursuant to 225 C.M.R. § 14.01; (3) the facility must have a commercial operation date on or after January 1, 2008; (4) the proposed contract must provide for the sale of electric energy, capacity, and/or RECs from an eligible facility and be both unit-specific and unit-contingent; (5) the proposed term of the contract must be between ten and 15 years; and (6) the proposed contract size must be for at least one MW (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 8, 14; NSTAR-JGD-3, at 8-10).

D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 14; AG 2-9). The 74 remaining bids had a total potential capacity of 2,513 MW (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 13).

During the second stage of the bid evaluation process, NSTAR Electric evaluated the bids that satisfied the eligibility and threshold requirements for both price and non-price factors on a 100-point scale, with price accounting for up to 80 points and non-price factors accounting for up to 20 points (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 14-15; NSTAR-JGD-3, at 15-17). The evaluation of price was based on two criteria: (1) the degree to which the costs of the contract are expected to be above or below the projected market price forecast;<sup>17</sup> and (2) the degree to which the above- or below-market costs of the contract are front-loaded (<u>i.e.</u>, the degree to which the contract is structured so that any above-market costs are higher in the early years of the contract term) (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15; NSTAR-JGD-3; at 15-16; AG 2-11). Projects with lower bid prices relative to the market price forecast received higher scores, as did projects that did not have front-loaded costs (D.P.U. 11-05,

<sup>&</sup>lt;sup>17</sup> When evaluating bids, the electric distribution companies compared the bids to a common long-term price forecast for energy, capacity, and RECs that a consultant developed for use in Section 83 proceedings (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 4, 15, 21-23; NSTAR-JGD-3, at 15; NSTAR-JGD-6 (Confidential)). The common forecast includes a forecast of the locational marginal price of energy for each of the New England load zones (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 23; NSTAR-JGD-6 (Confidential)).

D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15; NSTAR-JGD-3, at 15-16; AG 2-11).

For each bid that received at least 50 of 80 possible points for price, NSTAR Electric performed the evaluation of non-price factors (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15-16).<sup>18</sup> The evaluation of non-price factors was based on the following: (1) the ability of the bidder to site and permit the project; (2) the project development status and operational viability; (3) the experience and capabilities of the bidder and the project development team; (4) financing considerations;<sup>19</sup> and (5) any requested exceptions to the model power purchase agreement (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15; NSTAR-JGD-3, at 16-17; AG 2-11). The Company combined the points received for price and non-price factors to determine an overall score and relative ranking for each bid (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 16).

<sup>&</sup>lt;sup>18</sup> According to the Company, projects that received less than 50 points in the price evaluation, even if they received the maximum non-price score of 20 points, were mathematically incapable of ranking better than the higher scoring bids (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15-16).

<sup>&</sup>lt;sup>19</sup> The financing criteria included the following factors: (1) the credibility of the financing plan; (2) the financial strength of the bidder; and (3) the extent to which a contract would facilitate the financing of the project (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-3, at 17).

Based on the rankings from the second stage evaluation, the Company targeted the nine highest ranked bids for further consideration ("target list")<sup>20</sup> (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 16-17; AG 3-3). The Company provided the bidders on the target list with an opportunity to improve their overall score by refreshing their bids. (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 17; AG 2-3; AG 3-3).<sup>21</sup>

In order to arrive at its short list of bidders, the Company evaluated the price and/or non-price factors of the refreshed bids as well as the following additional factors: (1) the cost-effectiveness of the bid; (2) the risk associated with project viability; (3) the extent to which the project would create jobs; and (4) the diversity of resources, including size and type (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 16; NSTAR-JGD-3, at 17). The Company eliminated bids for projects that were already built or for which the Company determined that a contract was not needed to facilitate the financing of the project

<sup>&</sup>lt;sup>20</sup> The target list represented approximately one million megawatt hours ("MWh") of electricity, while the Company's goal was to purchase approximately 0.3 MWh through the RFP (or approximately 1.5 percent of the Company's service territory load obligation) (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 17).

<sup>&</sup>lt;sup>21</sup> Before creating a target list, the Company accepted a refreshed bid from a developer (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 5-2 & Att. A; DOER 1-42). Subsequently, in response to NSTAR Electric's request for refreshed bids, another developer that had a project on the target list improved the price for a facility that was not on the target list and this facility was ultimately selected for the short list (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 2-8; AG-JCJW-1, at 23-24 (Confidential); Tr. 1, at 118-122).

(D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 17; NSTAR-JGD-3, at 17; AG 3-5; DOER 1-30).

The Company ultimately selected four wind projects for its short list, with an estimated installed capacity of 146.4 MW (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 17, DPU 1-5; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 17, DPU 2-5; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 17, DPU 1-5). After the Company selected the short list, one of the four bidders withdrew its bid from consideration (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 17, DPU 1-6; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 17, DPU 2-6; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 17, DPU 1-6). NSTAR-JGD-1, at 17, DPU 2-6; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 17, DPU 1-6). NSTAR Electric subsequently entered into contracts with the three remaining projects on the short list (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 17). The three executed contracts represent 1.6 percent of the Company's service territory load obligation (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 17).

#### V. STANDARD OF REVIEW

Section 83 of the Green Communities Act requires each electric distribution company to enter into cost-effective long-term contracts to facilitate the financing of renewable energy generation, subject to the review and approval of the Department.<sup>22</sup> See also 220 C.M.R.

<sup>&</sup>lt;sup>22</sup> The Department's approval pursuant to Section 83 does not encompass a determination of the rate at which the power would be sold, which is subject to the jurisdiction of the Federal Energy Regulatory Commission pursuant to sections 205 and 206 of the Federal Power Act, 16 U.S.C. §§ 824d, 824e. Instead, Department approval pursuant to Section 83 is an approval of an electric distribution company's decision to enter into a long-term contract with a renewable energy developer and the attendant cost recovery in light of the alternatives. <u>Pike County Light & Power Co. v. Penn. Pub. Util.</u>

§ 17.01(1). Thus, as an initial matter, an electric distribution company must demonstrate that the long-term contract facilitates the financing of the renewable energy generating source to which the contract applies.<sup>23</sup> St. 2008, c. 169, § 83.

In addition, Section 83 and the Department's applicable regulations set forth specific findings that the Department must make in order to approve a long-term contract for renewable energy generation. In particular, pursuant to Section 83 and 220 C.M.R. § 17.05(1), the Department must determine that the renewable energy generating source: (1) provides enhanced electricity reliability within the Commonwealth; (2) contributes to moderating system peak load requirements; (3) is cost-effective to Massachusetts electric ratepayers over the term of the contract; and (4) where feasible, creates additional employment. The Department must take into consideration both the potential costs and benefits of such contracts and approve a contract only upon a finding that it is a cost-effective mechanism for procuring renewable energy on a long-term basis. St. 2008, c. 169, § 83; 220 C.M.R. § 17.05(1).

Additionally, the public interest constitutes an overarching consideration in the Department's fulfillment of its regulatory and ratemaking duties. <u>Attorney General v. Dep't of</u> Telecomm. & Energy, 438 Mass. 256, 268 (2002); see also Wolf v. Dep't of Pub. Utils.,

<u>Comm'n</u>, 465 A.2d 735, 738 (1983); <u>see also Commonwealth Elec. Co. v. Dep't of</u> <u>Pub. Utils.</u>, 397 Mass. 361, 378 (1986); <u>Central Vt. Pub. Serv. Corp.</u>, 84 FERC ¶ 61,194 (1998).

<sup>&</sup>lt;sup>23</sup> To be an eligible renewable energy generating source, Section 83 requires that the generator: (1) have a commercial operation date, as verified by DOER, on or after January 1, 2008; and (2) be qualified by DOER as eligible to participate in the RPS program and sell RECs under the program, pursuant to G.L. c. 25A, § 11F. St. 2008, c. 169, § 83; 220 C.M.R. § 17.05(1).

407 Mass. 363, 369 (1990) (the "mission of the [Department] is to regulate in the public interest"). Accordingly, in our review of long-term contracts for renewable energy generation under Section 83, the Department also considers whether the contract is in the public interest.<sup>24</sup> D.P.U. 09-138, at 12. The Department will further consider whether the associated cost recovery method is in the public interest and will result in just and reasonable rates pursuant to G.L. c. 164, § 94. D.P.U. 09-138, at 12; see also 438 Mass. at 264 n.13; Boston Edison Company/ComEnergy Merger, D.T.E. 99-19, at 8 (1999) (citing Mass. Oilheat Council v. Dep't of Pub. Utils., 418 Mass. 798, 804 (1994); Boston Real Estate Bd. v. Dep't of Pub. Utils., 334 Mass. 477, 495 (1956)).

## VI. COMPLIANCE WITH GREEN COMMUNITIES ACT

#### A. Introduction

Section 83 of the Green Communities Act and the Department's regulations at 220 C.M.R. § 17.00 <u>et seq.</u> require the Department to make a number of determinations regarding a proposed long-term contract for renewable energy. These six required determinations, discussed below, relate to: (1) the facility's proposed commercial operation

 <sup>&</sup>lt;sup>24</sup> Pursuant to G.L. c. 164, § 94A ("Section 94A"), an electric or gas distribution company must obtain Department approval to enter into a contract for the purchase of electricity or gas covering a period in excess of one year. The Department has construed our approval under Section 94A to require a determination that the contract is consistent with the public interest. See, e.g., NSTAR Electric Company, D.P.U. 07-64-A at 58 (2008); New England Electric System/Nantucket Electric Company, D.P.U. 95-67, at 21-22 (1995), citing New England Power Company, D.P.U. 1204 (1982). The Department's public interest review in this proceeding will therefore satisfy the review otherwise performed under Section 94A.

date; (2) the facility's qualification for the Massachusetts RPS; (3) the facility's effect on electric reliability; (4) the facility's effect on system peak load requirements; (5) job creation; and (6) the cost-effectiveness of the proposed contract.

#### B. Commercial Operation Date and RPS Qualification

Pursuant to Section 83 and 220 C.M.R. § 17.05 (1), the Department must make two threshold determinations regarding the eligibility of the facilities. To be an eligible renewable energy generating source, each facility must: (1) have a commercial operation date of January 1, 2008 or after; and (2) be qualified by DOER as eligible to participate in the RPS program and sell RECs under the program, pursuant to G.L. c. 25A, § 11F. <u>See also</u> 220 C.M.R. § 17.05 (1). The Groton Wind, Hoosac Wind, and Bull Hill facilities are not currently in operation and each expects to begin operation in 2012. Therefore, the Department finds that they will have a commercial operation date of January 1, 2008 or after as required by Section 83 and 220 C.M.R. § 17.05 (1) (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 19).

Although the project developers have not yet applied to DOER for Class I RPS qualification, as wind generation facilities, Groton Wind, Hoosac Wind, and Bull Hill are each eligible for qualification as Class I RPS sources pursuant to 225 C.M.R. § 14.05 (1)(a) (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 2-2). Each contract requires the project developers to obtain Class I RPS qualification (D.P.U. 11-05: Exhs. AG 2-2; NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7(c), 7.2(g); D.P.U. 11-06: Exhs. AG 2-2; NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7(c), 7.2(g); D.P.U. 11-07: Exh. NSTAR-JGD-2

(rev.) at 20, 23, §§ 3.7, 4.7(c)). Further, the contracts specify that the products delivered under the contracts shall meet Class I RPS requirements (D.P.U. 11-05:

Exhs. NSTAR-JGD-1, at 19, NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7(b), 7.2(g);

D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 19; NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7(b),

7.2(g); D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 19; NSTAR-JGD-2 (rev.) at 20, §§ 3.7,

4.1(b)). Therefore, prior to the delivery of any products under the contracts, the Department finds that the facilities will meet the RPS eligibility requirements of Section 83 and

220 C.M.R. § 17.05 (1).

#### C. Facilitation of Financing

1. Introduction

Pursuant to Section 83, an electric distribution company is required to demonstrate that the proposed long-term contract will facilitate the financing of the applicable renewable energy project. <u>See also 220 C.M.R. § 17.01 (1); Massachusetts Electric Company and Nantucket</u> <u>Electric Company, each d/b/a National Grid</u>, D.P.U. 10-54, at 50-51 (2010). Accordingly, the Department must determine whether NSTAR Electric has demonstrated that its proposed long-term contracts with Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC will facilitate the financing of each wind facility.

Iberdrola will finance both the Groton Wind and Hoosac Wind facilities without seeking outside financing (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 26, DPU 1-9; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 26-27, DPU 2-8). Blue Sky East, LLC will contribute 20 to

40 percent equity to the project and the remainder will be financed through the issuance of debt (D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 27; DPU 1-9).

#### 2. <u>Positions of the Parties</u>

NSTAR Electric argues that its proposed contracts will facilitate the financing and development of each of the three facilities (NSTAR Electric Brief at 21). The Company states that, due to limited financing, Iberdrola typically enters into long-term contracts to sell the power for each of its projects and it only builds a small number of projects without such contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Tr. 1, at 131-132). Also, NSTAR Electric contends that, in Blue Sky East, LLC's experience, attractive financing terms are difficult to obtain without the assured revenue stream associated with a long-term contract and, therefore, that such a contract will ultimately lead to the successful development of Bull Hill (D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 27; DPU 1-9).

Blue Sky East, LLC asserts that its contract with NSTAR Electric will facilitate the financing of the Bull Hill project (Blue Sky East, LLC Brief at 2). No other party addressed the issue of facilitation of financing.

#### 3. Analysis and Findings

Under Section 83, NSTAR Electric must demonstrate that its proposed long-term contracts with Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC will facilitate the financing of Groton Wind, Hoosac Wind, and Bull Hill, respectively. NSTAR Electric contends that a predictable source of revenue with a creditworthy entity like an electric distribution company will assist the developers in attracting financing for each wind facility

(D.P.U. 11-05: Exh. DPU 1-9, Tr. 1, at 131-132; D.P.U. 11-06: Exh. DPU 2-8, Tr. 1, at 131-132; D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 27, DPU 1-9).

NSTAR Electric has shown that the revenue stream from its proposed long-term contract will permit Blue Sky East, LLC to provide 20 to 40 percent project equity and raise capital by issuing long-term debt at attractive financing terms (D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 27; DPU 1-9). Without a long-term contract, NSTAR Electric

has demonstrated that Blue Sky East, LLC may obtain less favorable financing terms for Bull Hill or no financing at all (D.P.U. 11-07: Exh. DPU 1-9).

Further, while Iberdrola plans to carry the Groton Wind and Hoosac Wind projects on its corporate balance sheet, NSTAR Electric has shown that the predictable revenue stream of a long-term contract with the Company as a credit-worthy counterparty will allow Iberdrola to avoid the volatile short-term financing market (D.P.U. 11-05: Exh. DPU 1-9; D.P.U. 11-06: Exh. DPU 2-8). We are persuaded that such certainty is required to allow Iberdrola to commit its internal funds to the Groton Wind and Hoosac Wind facilities (D.P.U. 11-05: Exh. DPU 1-9, Tr. 1, at 131-132; D.P.U. 11-06: Exh. DPU 2-8; Tr. 1, at 131-132). For each of the reasons discussed above, the Department finds that the Company's proposed long-term contracts with Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC will facilitate the financing of the Groton Wind, Hoosac Wind, and Bull Hill facilities, respectively.

#### D. Enhanced Reliability

#### 1. Introduction

Pursuant to Section 83, the Department must determine that the renewable energy generating resources will "provide enhanced electricity reliability within the

[C]ommonwealth." <u>See also</u> 220 C.M.R. § 17.05 (1)(c)(1). While Section 83 does not define reliability, the Northeast Power Coordinating Council ("NPCC") and North American Electric Reliability Council ("NERC") define reliability as the ability to contribute to system resource adequacy and system security. D.P.U. 10-54, at 181.<sup>25</sup> As the Department found in D.P.U. 10-54, at 181-182, enhanced reliability is a difficult to quantify, but nonetheless important, benefit of a long-term contract with a renewable energy resource.

## 2. <u>Positions of the Parties</u>

NSTAR Electric argues that because each of the facilities will be connected to an ISO-NE node, the output of each facility will be available to serve load in New England and will, therefore, contribute to system reliability (NSTAR Electric Brief at 14, <u>citing</u> D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 19-20). According to the Company, the capacity of the facilities will supplement the region's base of installed capacity and increase supply reserve margins (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 19-20, DPU 1-7; D.P.U. 11-06: Exh. NSTAR-JGD-1, at 19-20; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 19-20, DPU 1-7). NSTAR Electric acknowledges that wind

<sup>&</sup>lt;sup>25</sup> NERC is the electric reliability organization certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk power system. NPCC is one of nine regional electric reliability councils under NERC authority.

facilities have variable output but contends that wind facilities can nonetheless be relied on to increase reserve margins (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07:

Exhs. NSTAR-JGD-1, at 20). Furthermore, the Company argues that, because wind facilities have zero fuel cost, they will be placed toward the bottom of the bid stack of the ISO-NE dispatch, displacing the marginal units and thereby increasing the reserve margins for the displaced units (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 20).

Blue Sky East, LLC asserts that Bull Hill will provide enhanced reliability within the Commonwealth (Blue Sky East, LLC Brief at 2). No other parties commented on enhanced reliability.

#### 3. Analysis and Finding

Because Hoosac Wind will be located in Massachusetts and interconnect to the electric transmission grid in Massachusetts, we find that the facility will provide enhanced electric reliability in the Commonwealth (D.P.U. 11-06: Exhs. DPU 2-9; NSTAR-JGD-2 (2d rev.) Exh. A; <u>see also</u> D.P.U. 10-54, at 188-189). The Groton Wind and Bull Hill facilities will interconnect to the grid in New Hampshire and Maine, respectively (D.P.U. 11-05: Exhs. DPU 1-10, NSTAR-JGD-2 (2d rev.) Exh. A; D.P.U. 11-07: Exh. NSTAR-JGD-2 (rev.) Exh. A). Compared to resource additions within Massachusetts, resource additions outside of Massachusetts that are not as close in proximity to load centers in Massachusetts have less of an effect on electric reliability in Massachusetts due to line loss and regional

system constraints (<u>i.e.</u>, transmission congestion).<sup>26</sup> However, because Massachusetts is part of a regional electric system, an enhancement of reliability in one area of the system will likely enhance the reliability of the system as a whole. In addition, as local sources of energy, the facilities will contribute to reducing the reliance of the region, including Massachusetts, on energy from sources outside the region and, therefore, will contribute to improving the reliability of the region's electric system. Accordingly, we find that the Groton Wind and Bull Hill facilities will provide enhanced electric reliability in the Commonwealth.

#### E. Moderation of System Peak Load Requirements

#### 1. Introduction

Pursuant to Section 83 and 220 C.M.R. § 17.05 (1)(c)(2), the Department must determine that the renewable energy generating resources that are the subject of long-term contracts will contribute to the moderation of system peak load requirements.

#### 2. Positions of the Parties

NSTAR Electric argues that, because each of the facilities will be connected to an ISO-NE node, the output of the facilities will be available to serve load in New England and, therefore, the facilities will contribute to the moderation of system peak load (NSTAR Electric Brief at 14). According to the Company, the energy from the facilities will be bid into the energy market as a price taker, which will put the resources at the bottom of the supply stack

<sup>&</sup>lt;sup>26</sup> Generation resources that are located close to load centers: (1) reduce transmission line loss, which also serves to improve system voltage, thereby reducing the amount of power needed from elsewhere; and (2) are not subject to transmission constraints, which better positions the electric system to respond to any contingencies in the availability of power supply, thereby reducing the probability of surges, brownouts, and blackouts. D.P.U. 10-54, at 189.

and reduce the amount of load to be met by the remaining generation fleet (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 20).<sup>27</sup> Also, the Company states that the energy will be delivered into the local networks near the facilities and will not have to be transmitted over long transmission lines, thereby reducing local system peak loads near the facilities (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 20-21).

Blue Sky East, LLC asserts that Bull Hill will contribute to moderating system peak load requirements (Blue Sky East, LLC Brief at 2). No other parties commented on the moderation of system peak load requirements.

#### 3. Analysis and Findings

To determine whether a renewable energy resource will moderate system peak load requirements, the Department considers a facility's output and capacity factor at the electric system's peak. D.P.U. 10-54, at 198. Based on our review of each facility's generation characteristics and in consideration of the capacity value of land-based wind during both summer and winter periods,<sup>28</sup> we find that the facilities are likely to produce power during

 <sup>&</sup>lt;sup>27</sup> The Company acknowledges that wind-powered generation is variable but maintains that, on average, wind power can be relied upon to increase supply reserve margins (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 19-20). NSTAR Electric notes that a study produced for ISO-NE in 2007 estimated the summer capacity factor of on-shore wind to be 19 percent and the winter capacity factor of on-shore wind to be 19 percent and the winter capacity factor of on-shore wind to be 41 percent (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 20). ISO-NE, <u>New England Electricity Scenario Analysis</u>, at 23 (August 2, 2007), available at <a href="http://www.iso-ne.com/committees/comm\_wkgrps/othr/sas/mtrls/elec\_report/scenario analysis final.p\_df">http://www.iso-ne.com/committees/comm\_wkgrps/othr/sas/mtrls/elec\_report/scenario analysis final.p\_df</a>.

<sup>&</sup>lt;sup>28</sup> D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 20.

peak times and will, therefore, contribute to moderating system peak load requirements (D.P.U. 11-05, D.P.U. 11-07: Exhs. DPU 2-3, Att. DPU 2-3(a) (Confidential), DPU 2-4, Att. DPU 2-4(a) (Confidential); D.P.U. 11-06: Exhs. DPU 3-3, Att. DPU 3-3(a) (Confidential), DPU 3-4, Att. DPU 3-4(a) (Confidential)).

#### F. Employment Benefits

#### 1. Introduction

Pursuant to Section 83, the Department must determine whether the renewable energy resource to be used by a developer under a long-term contract will create additional employment, where feasible. See also 220 C.M.R. § 17.05 (1)(c)(4).<sup>29</sup>

## 2. Positions of the Parties

The Company contends that the record evidence in these proceedings demonstrates that the facilities will create additional employment (NSTAR Electric Brief at 14-15, <u>citing</u> D.P.U. 11-05: Exh. NSTAR-JGD-1, at 27-28; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 27-28; DPU 3-6 Att. at 5-6; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 28; DPU 2-6 Att. (Confidential) at 4-5). With regard to Groton Wind, the Company contends that 339 full-time jobs are expected to be created during construction, which will contribute \$24.5 million to the local economy (NSTAR Electric Brief at 15, <u>citing</u> D.P.U. 11-05: Exh. NSTAR-JGD-1, at 27-28). Further, the Company argues that the facility is expected to

<sup>&</sup>lt;sup>29</sup> In D.P.U. 10-58, at 5 and the accompanying emergency regulations, the Department suspended the applicability of the geographic limitation contained in Section 83 that such additional employment be created "within the Commonwealth." <u>See also Order Adopting Final Regulations on Long-Term Contracts for Renewable Energy</u>, D.P.U. 10-58-A (2010).

require six full-time jobs during the operational phase and contribute \$2.9 million to the local economy per year (NSTAR Electric Brief at 15, <u>citing</u> D.P.U. 11-05: Exh. NSTAR-JGD-1, at 27-28). NSTAR Electric argues that construction of Hoosac Wind will: (1) provide approximately \$3 million in direct payroll for engineering, environmental, permitting, cultural, and legal services; (2) likely provide between \$5 and \$10 million in payroll for direct labor during the construction phase; and (3) result in three full-time positions once the project is completed (NSTAR Electric Brief at 14, <u>citing</u> D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 27-28; DPU 3-6 Att. at 5-6). Finally, NSTAR Electric contends that 200 jobs will be added during the construction phase of the Bull Hill facility and that five to six full-time jobs will be necessary for continuing operations and maintenance (NSTAR Electric Brief at 15, citing D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 28; DPU 2-6 Att. (Confidential) at 4-5).

Blue Sky East, LLC asserts that the record in D.P.U. 11-07 demonstrates that Bull Hill will create additional employment (Blue Sky East, LLC Brief at 2). No other party commented on the creation of additional employment.

## 3. Analysis and Findings

NSTAR Electric provided the following employment estimates for each of the facilities: (1) Groton Wind—approximately 339 full-time equivalent jobs are estimated to be created during the construction phase and six jobs for maintenance and operation of the facility; (2) Hoosac Wind—between 75 to 100 jobs are estimated to be created during the construction phase and three to four jobs for maintenance and operation of the facility; and (3) Bull Hill approximately 200 jobs are estimated to be created during the construction phase and five or

six jobs for maintenance and operation of the facility (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 27-28, AG 1-8 Att. (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 27-28, AG 1-8 (Confidential), DPU 3-6 Att. (rev.); D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 28, AG 1-8 Att. (Confidential), DPU 2-6 Att. at 4-5 (Confidential)). We are cognizant of the fact that all of the employment estimates contain uncertainties and that the actual effects could be different from the impacts estimated above. However, there is no dispute that the construction and operational phases for each of the facilities will result in additional employment (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 27-28, AG 1-8 Att. (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 27-28, AG 1-8 (Confidential), DPU 3-6 Att. (rev.); D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 28 (rev.), AG 1-8 (Confidential), DPU 2-6 Att. at 4-5 (Confidential)). Accordingly, the Department finds that the Groton Wind, Hoosac Wind, and Bull Hill facilities will create additional employment.

#### G. Cost-Effectiveness

1. Introduction

In order to approve a long-term contract with a renewable energy generating resource, the Department must determine that the contract is "cost effective to Massachusetts electric ratepayers over the term of the contract." St. 2008, c. 169, § 83, ¶ 3; 220 C.M.R. § 17.05 (1)(c)(3).<sup>30</sup> Section 83, ¶ 3 further requires the Department to "take into consideration both the potential costs and benefits of such contracts" and provides that the Department "shall

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Section 83 does not define the term cost-effective.

approve a contract only upon a finding that it is a cost effective mechanism for procuring renewable energy on a long-term basis."

In D.P.U. 10-54, at 64-71, the Department first considered the appropriate standard for evaluating the cost-effectiveness of a long-term contract for renewable energy pursuant to Section 83. After examining the relevant statutory language and objectives of the Green Communities Act, the Department determined that it would:

consider in our cost-effectiveness analysis all costs and benefits associated with [a proposed contract], including the non-price benefits that are difficult to quantify, and including costs and benefits of complying with existing and reasonably anticipated future federal and state environmental requirements. . . . In reviewing [the] benefits and costs of [a proposed contract]. . . our focus is on the benefits and costs that accrue to [the distribution company proposing the contract] and its customers.

D.P.U. 10-54, at 71. Accordingly, as discussed below, the Department will evaluate the cost-effectiveness of the contracts at issue based on the costs and benefits of the contracts to NSTAR Electric ratepayers (<u>i.e.</u>, the difference between the contract costs and market value of the products). In addition, the Department will consider whether additional, unquantified benefits will accrue to the Company's ratepayers over the terms of the contracts.

- 2. Net-Below Market Costs
  - a. Introduction

In order to evaluate the cost-effectiveness of a proposed contract, the Department must determine the contract's above- or below-market costs. Above- or below-market costs are the difference between the costs of the contract and the market value associated with the products purchased pursuant to the contract (i.e., energy, capacity, and/or RECs). D.P.U. 10-54,

at 79. The projected market value of the products is determined by multiplying the estimated production of the facility by the estimated market revenue of the products, based on a forecast of market prices. See D.P.U. 10-54, at 90.

Under the contracts in D.P.U. 11-05 and D.P.U. 11-06, NSTAR Electric will purchase the energy and RECs associated with the output of the Groton Wind and Hoosac Wind facilities at prices that remain fixed over the terms of the contracts (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 3, 18; D.P.U. 11-06: Exh. NSTAR-JGD-1, at 3, 18). Under the contract in D.P.U. 11-07, NSTAR Electric will purchase energy, RECs, and capacity associated with the output of the Bull Hill facility at prices that remain fixed over the term of the contract (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 3, 18). For all three contracts, NSTAR Electric will sell the energy and, for the Blue Sky East, LLC contract, the capacity, it purchases in the applicable markets and use the RECs for RPS compliance associated with basic service (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 30, NSTAR-HCL-1, at 5; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 30, NSTAR-HCL-1, at 5; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 29-31, NSTAR-HCL-1, at 5).

To develop estimates of the market value of the contracts, NSTAR Electric used a forecast of market prices (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 22; NSTAR-JGD-6 (Confidential)). The market price forecast provides an estimate of the market prices of energy and RECs over the terms of the contracts and includes locational marginal pricing for each of the New England load zones (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 22-23; NSTAR-JGD-6 (Confidential)). Based on the forecasted market prices and estimated production of the facilities,<sup>31</sup> the costs of the contracts are projected to be below the market value for each of the products for the terms of the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 21; NSTAR-JGD-4 (Confidential)). In particular, the Company's analyses project net savings over the life of the contacts, with nominal net savings of: (1) \$39 million for the Groton Wind, LLC contract; (2) \$15 million for the New England Wind, LLC contract; and (3) \$57 million for the Blue Sky East, LLC contract (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 21, NSTAR-JGD-4 (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4 (Confidential); D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4 (Confidential)).

Other than the prices set in the contracts, there are no additional costs to NSTAR Electric ratepayers as a result of changes in the costs of the projects. Specifically, NSTAR Electric customers do not bear any financial risk related to: (1) whether the facilities are eligible for tax credits; or (2) variability associated with the output of the facilities.<sup>32</sup> The contracts also provide that the project developers are solely responsible for obtaining and

<sup>&</sup>lt;sup>31</sup> The estimated production of the facilities was provided by bidders as part of their response to the RFP (D.P.U. 11-05: Exhs. NSTAR-JGD-3, at 22, § 3.6, App. B, AG 1-4 Att. 4 (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-3, at 22, § 3.6, App. B; AG 1-4 Att. 1 (Confidential); D.P.U. 11-07: Exhs. NSTAR-JGD-3, at 22, § 3.6, App. B, AG 1-4 Att. 3 (Confidential)).

<sup>&</sup>lt;sup>32</sup> D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 25-26, NSTAR-JGD-2 (2d rev.) at 17-18, §§ 4.1, 4.3, Annex A; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 25-26, NSTAR-JGD-2 (2d rev.) at 17-18, §§ 4.1, 4.3, Annex A; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 25-26, NSTAR-JGD-2 (rev.) at 27, §§ 4.1, 4.3, 5.4(b).

maintaining qualification to participate in the RPS program and that the products delivered under the contracts shall meet Class I RPS requirements.<sup>33</sup>

### b. <u>Positions of the Parties</u>

NSTAR Electric asserts that the uncontested record demonstrates that the proposed contracts are cost-effective to its ratepayers (NSTAR Electric Brief at 17; NSTAR Electric Reply Brief at 1, 22). Specifically, the Company argues that the costs of the three contracts are estimated to be below projected market costs by a total of \$111 million over the terms of the contracts (NSTAR Electric Brief at 16-17, <u>citing</u> D.P.U. 11-05, D.P.U. 11-06,

D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 22; NSTAR Electric Reply Brief at 3).

Blue Sky East, LLC asserts that the record in D.P.U. 11-07 demonstrates that its contract with NSTAR Electric is cost-effective to Massachusetts ratepayers over the term of the contract and is a cost-effective mechanism for procuring renewable energy on a long-term basis (Blue Sky East, LLC Brief at 2). No other parties commented on the cost-effectiveness of the contracts.

# c. <u>Analysis and Findings</u>

In order to determine if the resulting projections of below-market contract costs are reasonable, the Department must evaluate whether the price forecast and market revenue

<sup>&</sup>lt;sup>33</sup> D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 15, 17, 20, 26, §§ 3.1(f), 4.1(b), 4.7, 7.2(g); DPU 2-2; Tr. 1, at 38-39, 175-180; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 26; NSTAR-JGD-2 (2d rev.) at 15, 17, 20, 26, §§ 3.1(f), 4.1(b), 4.7, 7.2(g); DPU 3-2; Tr. 1, at 38-39, 175-180; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 26; NSTAR-JGD-2 (rev.) at 18, 20, 23, §§ 3.5(f), 3.7, 4.1(b), 4.7; DPU 2-2; Tr. 1, at 38-39, 175-180.

analyses are reliable. To do so, the Department must determine whether the forecast is a realistic projection of energy, capacity, and RECs. D.P.U. 10-54, at 108.

There are always uncertainties inherent in market price forecasts. See, e.g., D.P.U. 10-54, at 105, citing D.P.U. 07-64-A at 67. However, we note that no evidence has been presented in these cases to refute the validity of the market forecast or the method used for calculating project-specific market revenues. In D.P.U. 10-54, the Department analyzed the same market price forecast used in the instant proceedings and found that it included reasonable estimates of energy and capacity, but likely underestimated the future value of RECs. D.P.U. 10-54, at 105-108. Market conditions have not changed substantially since the Department first assessed the market price forecast in D.P.U. 10-54. Accordingly, we find that the market forecast presented in these cases remains a reliable method for estimating the revenues associated with the proposed contracts. Further, we find that the RECs procured through the instant contracts will likely have a greater market value than reflected in the market price forecast. <u>See</u> D.P.U. 10-54, at 107-108.

Having found that the market price forecast is reliable, we further find that the benefits of the contracts are expected to exceed the costs of the contracts by at least approximately: (1) \$39 million for the Groton Wind, LLC contract, (2) \$15 million for the New England Wind, LLC contract; and (3) \$57 million for the Blue Sky East, LLC contract (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 21, NSTAR-JGD-4 (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4 (Confidential); D.P.U. 11-07:

Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4 (Confidential)).<sup>34</sup> Accordingly, because the benefits of the proposed long-term contracts with Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC are expected to exceed the costs of the contracts, the Department finds that the contracts are cost-effective mechanisms for procuring renewable energy on a long-term basis pursuant to Section 83 and, further, that the contracts will be cost-effective to NSTAR Electric's ratepayers over the contract terms.

# 3. Additional Unquantified Benefits

# a. <u>Introduction</u>

Having determined that the contracts are cost-effective, our analysis could end here. However, there are many other benefits associated with the contracts that, while difficult to quantify, have the potential to represent significant benefits to NSTAR Electric ratepayers and, therefore, merit discussion. <u>See</u> D.P.U. 10-54, at 213. In addition to the benefits from the moderation of system peak load, enhanced reliability, and additional employment discussed above, these benefits include: (1) compliance with the Commonwealth's renewable energy and environmental requirements; and (2) hedge and price certainty. <u>See</u> D.P.U. 10-54, at 213-215.

<sup>&</sup>lt;sup>34</sup> If the actual production of the facilities differs from the estimate, the total net benefit will change. However, because the contracts protect the Company and its ratepayers from any variability associated with the output of the facilities, the net benefit per unit will not change—only the total number of units purchased under the contracts will change (see D.P.U. 11-05, D.P.U. 11-06: Exhs. NSTAR-JGD-2 (2d rev.) at 17, § 4.1; D.P.U. 11-07: Exh. NSTAR-JGD-2 (rev.) at 20, § 4.1). Therefore, even if the production of the facilities differs from the estimates, the contracts will remain cost-effective.

# b. <u>Compliance with Renewable Energy and Environmental</u> Requirements

The contracts offer benefits to NSTAR Electric and its ratepayers in meeting renewable energy and environmental requirements, including compliance with RPS requirements and the Global Warming Solutions Act ("GWSA"), G.L. c. 21N. With respect to the RPS, G.L. c. 25A, § 11F requires retail electricity suppliers to procure a minimum percentage of their electricity sales from qualified renewable energy generating sources on an annual basis. The RPS defines two categories of qualified renewable energy generating sources, Class I and Class II. G.L. c. 25A, § 11F; 225 C.M.R. §§ 14.00, 15.00 <u>et seq.</u> Pursuant to Section 83, ¶ 3, a renewable energy generating source that seeks a long-term contract pursuant to Section 83 must be qualified by DOER as eligible to participate in the RPS program and to sell RECs under the program.<sup>35</sup> The Class I RPS requirement increases at one percent per year. G.L. c. 25A, § 11F(a); 225 C.M.R. § 14.07. In 2013, the first full year that each of the facilities is expected to be in commercial operation, the RPS requirement will be at eight percent of annual electric sales for every retail electricity supplier. 225 C.M.R. § 14.07. As facilities that will ultimately be qualified as Class I renewable energy sources, Groton Wind,

As discussed above, none of the facilities at issue in these proceedings has yet received a Statement of Qualification from DOER as a Class I renewable energy source but, as explained in Section VI.B above, wind-powered generation is eligible as a Class I source and the contracts require that the products delivered meet Class I RPS requirements (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 19, NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7 (b), (c), 7.2 (g), AG 2-2; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 19, NSTAR-JGD-2 (2d rev.) at 20, 26, §§ 4.7 (b), (c), 7.2 (g), AG 2-2; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 19, NSTAR-JGD-2 (2d rev.) at 20, 23, §§ 3.7, 4.1 (b), 4.7 (b), (c), AG 2-2; see 225 C.M.R. § 14.05 (1)(a)).

Hoosac Wind, and Bull Hill will assist NSTAR Electric in complying with its Massachusetts RPS requirements. The facilities also will provide significant amounts of renewable generation to help fill the anticipated gap between the supply of and demand for renewable energy in New England.<sup>36</sup> See, e.g., D.P.U. 10-54, at 161-162. We find, therefore, that the ability of the Groton Wind, Hoosac Wind, and Bull Hill facilities to help meet the Commonwealth's RPS requirements is a significant, yet unquantified, benefit of the contracts. See D.P.U. 10-54, at 162-163.

In addition, the GWSA establishes a number of requirements for reducing greenhouse gas ("GHG") emissions in the Commonwealth.<sup>37</sup> The GWSA and its implementation by the Massachusetts Executive Office of Energy and Environmental Affairs ("EOEEA") mandate that the Commonwealth: (1) reduce its GHG emissions by 25 percent of 1990 levels by 2020; (2) reduce its GHG emissions by at least 80 percent of 1990 levels by 2050; and (3) develop interim 2030 and 2040 emissions limits, to "maximize the ability of the [C]ommonwealth to meet the 2050 emissions limit." G.L. c. 21N, §§ 3(b), 4(a).

<sup>&</sup>lt;sup>36</sup> Massachusetts is part of a regional RPS market that includes all other New England states (except Vermont), each with its own RPS requirements. D.P.U. 10-54, at 140 & n.119. Because Massachusetts Class I RECs may be used to meet the other New England states' RPS requirements, the supply and demand for renewable energy are influenced by the combined RPS requirements of the region. D.P.U. 10-54, at 140.

<sup>&</sup>lt;sup>37</sup> The GWSA defines greenhouse gas as, "any chemical or physical substance that is emitted into the air and that the [D]epartment [of Environmental Protection ("DEP")] may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrogen oxides, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride." G.L. c. 21N, § 1.

The GWSA does not specify policies for achieving the GHG emissions reduction targets. Rather, it broadly empowers the EOEEA and DEP, in consultation with DOER, to conduct analyses and implement policies in order to realize the targets. D.P.U. 10-54, at 164-165; see also G.L. c. 21N, §§ 1-7. On December 29, 2010, pursuant to G.L. c. 21N, § 4 (a), the Secretary of the EOEEA established a requirement that the Commonwealth reduce its GHG emissions by 25 percent of 1990 levels by 2020 and an accompanying plan to achieve the reductions.<sup>38</sup>

The carbon dioxide reductions from the Groton Wind, Hoosac Wind, and Bull Hill facilities will make meaningful contributions toward helping NSTAR Electric and the Commonwealth meet GWSA emissions reduction targets in the electricity sector. The Groton Wind facility is estimated to reduce carbon dioxide emissions by 78,000 tons per year and 780,000 tons over the term of the contract (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 25). The Hoosac Wind facility is estimated to reduce carbon dioxide emissions by 51,800 tons per year and 518,000 tons over the term of the contract (D.P.U. 11-06: Exh. NSTAR-JGD-1, at 25). Finally, the Bull Hill facility is estimated to reduce carbon dioxide emissions by 63,333 tons per year and 950,000 tons over the term of the contract (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 25).<sup>39</sup> The contracts will, therefore, contribute to achieving a portion of the emissions

<sup>&</sup>lt;sup>38</sup> Ian A. Bowles, <u>Massachusetts Clean Energy and Climate Plan for 2020</u> at 92 (2010), available at http://www.mass.gov/Eoeea/docs/eea/energy/2020-clean-energy-plan.pdf.

<sup>&</sup>lt;sup>39</sup> The Company calculated the emissions reduction estimates based on the assumption that the facilities would displace the typical natural gas generation unit on the margin in the ISO-NE system during all hours of operation (D.P.U. 11-05: Exhs. NSTAR-JGD-1,

reductions necessary to comply with the GWSA targets for the duration of the contracts. <u>See</u> D.P.U. 10-54, at 173-175. For these reasons, we conclude that the contracts will provide an unquantified, but significant, benefit to NSTAR Electric customers and the Commonwealth in helping to avoid future GWSA compliance costs.

### c. Hedge and Price Stability

NSTAR Electric's ratepayers will benefit from the ability of the contracts to provide price stability and act as a hedge against price increases and volatility. The fixed price nature of the contracts provides a benefit in the form of price stability. <u>See</u> D.P.U. 07-64-A at 66. In addition, the Department has found that fixed-price long-term contracts provide a hedge against both increasing electricity prices and increasing REC prices. D.P.U. 10-54, at 138; D.P.U. 07-64-A at 56, 66, 71. The value of such a hedge is based on the possibility that future market prices will exceed the cost of the fixed-price contract. D.P.U. 10-54, at 138. In the immediate dockets, the contracts are expected to be below market value for the duration of the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 21). As such, the hedge value of the contracts could be significant. Although the value of the benefits was not quantified in these proceedings, we conclude that price stability and the ability of the contracts to act as a hedge against future price increases and volatility are a benefit to NSTAR Electric ratepayers.

at 25, DPU 1-8; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 25, DPU 2-7; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 25, DPU 1-8).

Based on all of the considerations above, the Department finds that there are significant quantifiable benefits to NSTAR Electric ratepayers associated with the proposed long-term renewable energy contracts well in excess of the costs of the contracts. The market revenues from the contracts are expected to exceed the costs of the contracts by approximately: (1) \$39 million for the Groton Wind, LLC contract; (2) \$15 million for the New England Wind, LLC contract; and (3) \$57 million for the Blue Sky East, LLC contract. Accordingly, we find that the Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC contracts are cost-effective mechanisms for procuring renewable energy on a long-term basis and that the contracts will be cost-effective to NSTAR Electric's ratepayers over the terms of the contracts.

These below-market estimates do not account for the additional non-price benefits of the contracts to NSTAR Electric's ratepayers that are difficult to quantify. As we found above, there are significant unquantified benefits associated with the contracts in relation to their contributions to: (1) hedge and price stability; (2) compliance with existing and reasonably anticipated future federal and state environmental requirements such as the RPS and GWSA; (3) enhanced reliability; (4) moderation of system peak load; and (5) creation of employment.

### VII. PUBLIC INTEREST

#### A. Introduction

In Section VI.G, above, the Department found that the contracts will be cost-effective to NSTAR Electric ratepayers over their terms. However, a Department finding that the contracts are cost-effective does not necessarily mean that procuring such contracts are in the best interest of ratepayers and, therefore, in the public interest. D.P.U. 10-54, at 65.

The Department's review of the public interest impacts of long-term contracts for renewable energy is based on the specific issues that are relevant to each proposed contract. D.P.U. 10-54, at 65-66. Here, as part of our evaluation of whether a contract is in the public interest, the Department considers whether the pricing terms in the contracts are reasonable, given the type of renewable resource being purchased. <u>See</u> D.P.U. 10-54, at 217. The Department also considers whether other lower cost, Section 83-eligible resources were available to the Company and, if so, whether the benefits of the proposed contracts justify any higher costs. <u>See</u> D.P.U. 10-54, at 217. Finally, the Department considers whether the bill impacts of the contracts on NSTAR Electric's customers are acceptable in light of the benefits of the contracts. See D.P.U. 10-54, at 217.

The contracts in these cases were procured using a joint statewide solicitation process (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 13). Although Section 83 does not require that contracts be procured using competitive bidding, a properly conducted competitive procurement process provides a direct comparison of the costs and benefits of alternative resources, as well as some assurance that the bidders are not charging

too high a price for a given resource. D.P.U. 10-54, at 41, 66-67. A competitive bidding and qualification process provides an objective benchmark for analyzing the reasonableness of price. <u>See New England Gas Company</u>, D.P.U. 10-114, at 221 (2011), <u>citing Bay State Gas Company</u>, D.P.U. 09-30, at 228-229 (2009); <u>Fitchburg Gas and Electric Light Company</u>, <u>d/b/a Unitil</u>, D.P.U. 07-71, at 101 (2008); <u>Boston Gas Company</u>, <u>d/b/a KeySpan Energy</u> Delivery New England, D.T.E. 03-40, at 152 (2003).

### B. Competitive Procurement Process

### 1. Introduction

In evaluating the competitiveness of a procurement process, the Department considers whether the process was fair, open, and transparent. <u>See, e.g.</u>, D.P.U. 10-114, at 221; D.P.U. 07-64-A at 60-61 (noting the "Department's fundamental interest in open, competitive, and transparent procurement processes"); <u>Boston Gas Company, Colonial Gas Company, and Essex Gas Company, each d/b/a KeySpan Energy Delivery New England</u>, D.T.E. 04-9, at 10 (2004) ("An RFP is acceptable if the process was 'fair, open, and transparent[,]'" <u>quoting Natural Gas Unbundling</u>, D.T.E. 98-32-B at 54–55 (1999)). Further, with respect to the bid evaluation process, the Department considers whether the bids were evaluated and the winning bids were selected in a reasonable manner, based on the criteria set forth in the RFP. D.T.E. 04-9, at 10; The Berkshire Gas Company, D.T.E. 02-56, at 10 (2002).

# 2. <u>Positions of the Parties</u>

NSTAR Electric contends that the joint statewide RFP was designed to create interest in the market and elicit more responses than if the distribution companies had each issued an RFP individually (NSTAR Electric Brief at 16, <u>citing</u> D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-3, § 1.3). According to the Company, the solicitation produced a highly

competitive response, with bids totaling 2,500 MW from 74 projects (NSTAR Electric Reply Brief at 4).

NSTAR Electric further asserts that its execution of the solicitation process adhered to all criteria of the RFP and that the Company appropriately applied its discretion during the bid evaluation process with respect to the consideration of non-price factors, the assessment of project risks, and the evaluation of whether each project needed a contract in order to facilitate financing (NSTAR Electric Brief at 16-17; NSTAR Electric Reply Brief at 4). NSTAR Electric further notes that: (1) the Attorney General's expert witnesses were able to replicate and confirm the Company's bid scoring and rankings and also verify that the projects with which NSTAR Electric executed contracts were the top-ranked projects; and (2) DOER agrees that the Company appropriately implemented the RFP (NSTAR Electric Brief at 17, <u>citing</u> D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG-JCJW-1, at 9; NSTAR Electric Reply Brief at 2, 3).

The Attorney General and DOER maintain that the Company followed the process outlined in the RFP (Attorney General Brief at 2; DOER Brief at 4, 5). In addition, the Attorney General states that her independent analysis<sup>40</sup> indicated that the proposed contracts

<sup>&</sup>lt;sup>40</sup> The Attorney General retained outside consultants to assist in her evaluation of the proposed contracts. D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07, Attorney General Notice of Retention of Experts and Consultants, Stamp-Approval (April 21, 2011). The Attorney General's expert witnesses reviewed the solicitation process and performed an independent economic analysis of the contracts, comparing the

were the highest-ranked options available at the conclusion of the RFP process (Attorney General Brief at 2, 15). Although the Attorney General maintains that the Company appropriately followed the RFP process, the Attorney General proposes improvements to the bid solicitation and evaluation process for future statewide RFPs<sup>41</sup> (Attorney General Brief at 2, 15-16). No other party addressed whether the contracts are in the public interest.

## 3. Analysis and Findings

To determine whether the RFP was competitive, the Department must evaluate whether the process was fair, open, and transparent. <u>See</u>, e.g., D.P.U. 10-114, at 221; D.P.U. 07-64-A at 60-61 & n.21; D.T.E. 04-9, at 10. With regard to whether the solicitation was open, NSTAR Electric disseminated the statewide RFP to a broad group of potential bidders—over 300 entities in the renewable energy development industry received the RFP (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 13; AG 1-1 Att.; AG 1-2). In response to the RFP, the Company received a considerable number of bids. Specifically, there were 74 bids from conforming projects, which totaled 2,513 MW and approximately 7.5 million MWh (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 13). Accordingly, the Department finds that the solicitation was open.

Company's evaluation of the bids to their own evaluation of the bids. See D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG-JCJW-1, at 6.

<sup>41</sup> We address the Attorney General's recommendations in Section IX, below.

In order to assess whether the solicitation process was fair and transparent, the Company must demonstrate that: (1) the evaluation process was clearly stated to each potential bidder; (2) the evaluation criteria were provided in the RFP; and (3) there was an opportunity for bidders to request clarification on both the evaluation criteria and the REP process itself

for bidders to request clarification on both the evaluation criteria and the RFP process itself. See, e.g., D.P.U. 07-64-A at 60-61 & n.21, <u>citing</u> D.T.E. 04-9, at 10. As discussed in Section IV, above, the RFP specifically provided the criteria that the distribution companies were to use in each step of the bid evaluation process (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-3). In addition to the guidelines provided in the RFP, the Company provided potential bidders with the opportunity to submit questions on the RFP process electronically via a website hosted by the electric distribution companies and DOER and also held a pre-bid conference two weeks after the RFP was issued in which potential bidders could seek further clarification (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 11; NSTAR-JGD-3, at 19-20, § 3.2; AG 1-9). Accordingly, the Department finds that the solicitation process was fair and transparent.

With regard to the Company's bid evaluation process, we find that the Company conducted a thorough evaluation of the bids based on the criteria provided in the RFP (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 13-17, NSTAR-JGD-5 (rev.) (Confidential); D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 13-17, NSTAR-JGD-5 (rev.) (Confidential); D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 13-18, NSTAR-JGD-5 (rev.) (Confidential)). We further find that the Company appropriately applied the criteria set forth in the RFP to the Company's selection of bids for the short list and ultimate selection of winning bidders

(D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 13-17, NSTAR-JGD-3, at 7-17, AG-JCJW-1, at 14-25, 37-38; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 13-17, NSTAR-JGD-3, at 7-17, AG-JCJW-1, at 14-25, 37-38; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 13-18, NSTAR-JGD-3, at 7-17, AG-JCJW-1, at 14-17, 37-38).<sup>42</sup>

Pursuant to the RFP, the Company ranked bids in order from highest net benefit to lowest net benefit (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 16-17; NSTAR-JGD-3, at 16, § 2.3.1; Tr. 1, at 24-25). At the conclusion of the evaluation

of the bids pursuant to the RFP, the Company entered into contracts with the three

highest-ranked bids available based on a combination of price and non-price factors<sup>43</sup>

(D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)).

Two of the projects selected for long-term contracts ranked the highest overall on price factors

(D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)).

Each of these projects was also ranked highly based on non-price criteria (D.P.U. 11-05,

<sup>&</sup>lt;sup>42</sup> We note that prior to its selection of a short list, the Company accepted refreshed bids. (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 16-17; AG 5-2 Att. A; Tr. 1, at 26, 28-29). This resulted in a project that was not on the target list making the short list and ultimately being selected for a long-term contract (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 2-8; AG-JCJW-1, at 23-24 (Confidential)). No party has argued that this process had any impact on the ultimate results of the RFP. Going forward, where electric distribution companies determine that it is appropriate to solicit refreshed bids, the companies should ensure that all qualified bidders are allowed the opportunity to refresh bids.

<sup>&</sup>lt;sup>43</sup> Although there were other bids that ranked higher than some of the projects that were selected, the Company eliminated these bids from consideration during the third-stage evaluation because the Company determined that the bidders did not demonstrate a need for a long-term contract in order to facilitate financing (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG 2-12).

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D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)). For the third contract ("Bidder 3"), there were bids that ranked higher based on price factors alone; however, Bidder 3's score on price factors was nonetheless among the highest of the projects on the target list (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)). In addition, Bidder 3 had the second best score overall based on non-price factors, which assessed the likelihood of a project's coming to fruition (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)).<sup>44</sup> Bidder 3's high ranking on non-price factors outweighed its slightly lower ranking based on price factors, which made Bidder 3's score higher overall on total points (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)). In light of Bidder 3's combined price and non-price factors, the Department finds that the contract with Bidder 3 compares favorably to other contracts for renewable energy that were available to the Company.

None of the parties to this proceeding raised any issues with respect to the Company's bid evaluation process or ultimate selection of winning bidders. Moreover, the Department notes that the Attorney General was able to replicate the Company's evaluation process and confirm that the Company: (1) followed the evaluation process as specified in the RFP; and

<sup>&</sup>lt;sup>44</sup> The non-price factors were: (1) the ability of the bidder to site and permit the project; (2) the project development status and operational viability; (3) the experience and capabilities of the bidder and the project development team; (4) bidder financing plan and the extent to which a contract will facilitate the financing of the project; and (5) any requested exceptions to the model power purchase agreement (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 15; NSTAR-JGD-3, at 16-17, § 2.3.2.2; AG 2-11).

(2) entered into contracts with the three highest ranked bids (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. AG-JCJW-1, at 17, 23). Based on the factors discussed above, we find that the Company's bid evaluation process was reasonable and appropriate.

### C. Comparison with Other Section-83 Eligible Resources

Through its use of a competitive solicitation process, we find that NSTAR Electric has adequately compared the costs and benefits of alternative Section 83-eligible resources. Based on the factors discussed in Section VII.B, above, for two of the long-term contracts, we find that there were no other Section 83-eligible resources available to the Company that scored higher on price factors (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)). For the third long-term contract, we find that, while there were other available Section 83-eligible resources that scored higher on price factors, the Company has adequately demonstrated that the benefits of the proposed contract justify the slightly higher costs (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-5 (rev.) (Confidential)).

### D. Reasonableness of Contract Price

With respect to reasonableness of the contract prices, we have found that a competitive bidding process provides an objective benchmark for the reasonableness of price.

D.P.U. 10-114, at 221, citing D.P.U. 09-30, at 228-229; D.P.U. 07-71, at 101;

D.T.E. 03-40, at 152. As the Department determined above, the bids that the Company selected were the highest ranked based on price and non-price factors and, thus, were the best bids compared to other available market resources. In addition, as described in Section VI.G,

the contracts are expected to be \$111 million below market over their terms (D.P.U. 11-05: Exh. NSTAR-JGD-1, at 21; D.P.U. 11-06: Exh. NSTAR-JGD-1, at 21-22; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 21-22). Finally, as described in Section III.B, the contracts provide additional safeguards for both the Company and its customers by shifting any increased project costs to the respective developers (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 25-26, NSTAR-JGD-2 (2d rev.) at 15, 17-18, 20-21, 26, §§ 3.1(f), 4.1(b), 4.3, 4.7, 4.8, 7.2(g), Annex A, DPU 2-2; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 26, NSTAR-JGD-2 (2d rev.) at 15, 17-18, 20-21, 26, §§ 3.1(f), 4.1(b), 4.3, 4.7, 4.8, 7.2(g), Annex A, DPU 3-2; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 26, NSTAR-JGD-2 (rev.) at 15, 16, 18, 20-21, 23, 24, 27, §§ 3.2, 3.4(a), 3.5(f), 3.7, 4.1(b), 4.3, 4.7, 4.8, 5.4(b), DPU 2-2). For these reasons, we find that the pricing terms of the contracts are reasonable, given the type of renewable resource being purchased.

### E. Bill Impacts

One of the Department's considerations in assessing a long-term contract under Section 83 with respect to public interest is whether its bill impacts are reasonable in light of its benefits. D.P.U. 10-54, at 274. As discussed in Section VI.G above, over the life of the contracts NSTAR Electric expects the contracts to result in overall net savings for customers (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 21, NSTAR-JGD-4; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4; D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 21-22, NSTAR-JGD-4). Although the contracts could cause a customer's bill to increase or decrease slightly in any given year depending on the actual market value of the products, we

nonetheless expect that all else being equal, the contracts will reduce NSTAR Electric customers' rates over the terms of the contracts (D.P.U. 11-05: Exhs. NSTAR-JGD-1, at 21, NSTAR-JGD-4; D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4; D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 21-22, NSTAR-JGD-4). Accordingly, the Department finds the bill impacts of the Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC contracts are reasonable in light of the benefits of the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-4 (rev.); NSTAR-HCL-5 (rev.); NSTAR-HCL-6 (rev.)).

# F. Conclusion

We found above that the Company selected the projects using a solicitation process that was open, fair, and transparent and, therefore, competitive. The Department also found that the Company sufficiently considered alternative Section 83-eligible renewable resources. In these cases, no other higher net benefit, Section 83-eligible resources were available to the Company.

In addition, we found that the pricing terms of the contracts are reasonable, given the type of renewable resource being purchased. Finally, the Department found that the bill impacts of the contracts are acceptable in light of the benefits of the contracts. Based on these findings, the Department further finds that NSTAR Electric's proposed long-term contracts with Groton Wind, LLC, New England Wind, LLC, and Blue Sky East, LLC are in the public interest.

# VIII. REMUNERATION

### A. Introduction

The Company proposes to collect a remuneration of four percent on the annual payments under the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 28).<sup>45</sup> No party commented on the Company's proposed remuneration.

# B. Analysis and Findings

Section 83, ¶ 3 expressly provides an annual remuneration for an electric distribution company equal to four percent of the annual payments under the contract to compensate the company for accepting the financial obligation of the long-term contract for renewable energy. D.P.U. 10-54, at 316; see also 220 C.M.R. § 17.07.<sup>46</sup> Accordingly, the Department finds that NSTAR Electric may collect four percent remuneration on the annual payments made under the contract.

<sup>46</sup> Section 83, ¶ 3 provides:

The regulations shall . . . provide for an annual remuneration for the contracting distribution company equal to [four] per cent of the annual payments under the contract to compensate the company for accepting the financial obligation of the long-term contract, such provision to be acted upon by the [Department] at the time of contract approval . . .

<sup>&</sup>lt;sup>45</sup> The proposed remuneration is included in the Company's estimates of the net below-market costs of the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-JGD-1, at 22). Therefore, the contracts are projected to be below market even when remuneration is factored in.

## IX. ATTORNEY GENERAL RECOMMENDATIONS

#### A. Proposed Changes to the RFP Process

### 1. Attorney General Proposal

While not challenging the results of the RFP process here, the Attorney General recommends that the Department require the electric distribution companies to incorporate language in future RFPs to improve the RFP process (Attorney General Brief at 2-3, 15-16). Specifically, the Attorney General proposes four changes to the RFP process going forward: (1) improvement of the evaluation of bid structures (e.g., the front-loading or back-loading of contract prices); (2) clarification of the short-listing process of bids; (3) clarification of what constitutes allowable communication between bidders and the electric distribution companies; and (4) clarification of the treatment of bids where the bidder may not need a long-term contract to ensure financing (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07:

Exhs. AG-JCJW-1, at 29-37). Although she identified areas in the RFP with respect to which she contends more clarification would be useful, the Attorney General did not propose specific revised language for any future RFP (Tr. 2, at 192-195).

### a. Positions of the Parties

### i. <u>Company</u>

NSTAR Electric states that the Department should dismiss the Attorney General's recommendations as unwarranted, unnecessary, and untimely (NSTAR Electric Reply Brief at 12). NSTAR Electric asserts that the Attorney General's recommendations are premature and should, instead, be raised during the next solicitation process (NSTAR Electric Reply Brief at 18-19). NSTAR Electric states that the Attorney General herself concedes that her remarks

likely will have no role in this proceeding (NSTAR Electric Reply Brief at 18). Accordingly, NSTAR Electric maintains that there is no need for the Department to address the Attorney General's proposed changes for future RFPs in the context of these proceedings (NSTAR Electric Reply Brief at 18).

## ii. Attorney General

Although the Attorney General concluded that NSTAR Electric evaluated the bids consistent with the framework of the RFP and selected the top ranked projects available, the Attorney General states that, through her evaluation in these proceedings, she identified a number of improvements that should be made to the solicitation process going forward (Attorney General Brief at 15). Therefore, the Attorney General requests that the Department issue an order in these proceedings that directs all of the electric distribution companies to incorporate her recommendations into future Section 83 solicitations (Attorney General Brief at 15-16). The Attorney General states that, at the time a distribution company submits a solicitation for approval, the Department should then evaluate whether the proposed RFP appropriately incorporates her recommendations (Attorney General Brief at 16 n.10).

### iii. DOER

DOER asserts that the Department has no need to address the recommendations of the Attorney General in the immediate dockets because the recommendations have no bearing on the Company's request for approval of the three proposed contracts (DOER Reply Brief at 1). DOER further asserts that it would not be good public policy for the Department to consider the merits of the Attorney General's proposal in these cases because the design of the RFP was a collaborative process involving complex considerations (DOER Reply Brief at 1-2). Instead, DOER contends that the Attorney General can make her proposed recommendations when a new proposed solicitation is filed for Department review and approval (DOER Reply Brief at 2). No other party commented on the Attorney General's recommendations regarding future solicitations.

# 2. Analysis and Findings

The Attorney General proposes revisions to any future RFP process for the solicitation of long-term contracts pursuant to Section 83, while the Company and DOER maintain that the Attorney General has chosen the wrong forum to raise such revisions.<sup>47</sup> The notices issued by the Department in the instant proceedings did not indicate that changes to future RFPs would be considered (see D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Notices of Filing, Public Hearing, and Procedural Conference (March 29, 2011)). Accordingly, because the Attorney General's proposal addresses the design and implementation of future RFPs, we find that the current proceedings are not the appropriate forum to pursue her recommendations.

Section 83, ¶¶ 1, 2 and the Department's regulations at 220 C.M.R. § 17.04 (1), (4) require the electric distribution companies to collaborate with DOER in the development of the timetables and methods for solicitation and contracting, and that such timetable and method of solicitation and contracting shall be subject to review and approval by the Department. During

<sup>&</sup>lt;sup>47</sup> As set forth in Section VII, above, none of the parties is contesting the Company's contract solicitation and bid evaluation process, or the resulting contracts proposed in these proceedings.

the development of future RFP(s), the Department encourages DOER and the electric distribution companies to consult with the Attorney General.

### B. Content of Future Section 83 Filings

## 1. Introduction

The Attorney General argues that the Company should include more information in future Section 83 filings so that interested persons have sufficient information to understand the Company's decision-making process (Attorney General Brief at 22-23). Specifically, the Attorney General argues that the Company's initial filings contained two major deficiencies that should have been addressed without the need for discovery: (1) the Company did not adequately explain the process it used to accept updated bids; and (2) the Company did not provide its analysis of the bids and other supporting information regarding the development of its target list (Attorney General Brief at 22-23). The Attorney General contends that such information is essential and should be included in all future Section 83 filings (Attorney General Brief at 23). No party responded to the Attorney General's recommendations on the content of future filings.

### 2. Analysis and Findings

When a distribution company submits a filing seeking approval of a long-term contract for renewable energy pursuant to Section 83, the company has the burden of demonstrating that its proposal satisfies the requirements of Section 83 and any other applicable law. <u>See The</u> <u>Berkshire Gas Company</u>, D.T.E. 01-56-A, Order on Motions for Reconsideration, Clarification, and Recalculation at 16 (2002) ("The burden of proof is the duty imposed upon a proponent of a fact whose case requires proof of that fact to persuade the factfinder that the fact exists. . . . In order for a proponent to prevail on an issue, . . . that position must be supported by the record." (citations omitted)).

A distribution company's initial filing should contain sufficient information for the Department and interested parties to critically evaluate the proposal. Given that NSTAR Electric sought expedited review of the proposed contracts,<sup>48</sup> it should have provided more information in its initial filing on its bid-evaluation process in order to facilitate an efficient review process. Nonetheless, because each Section 83 proceeding will raise different issues, the Department declines to set specific filing requirements here. However, we remind all electric distribution companies of their obligation to make full and complete filings.

# X. <u>COST RECOVERY</u>

### A. Company Proposal

The Company proposes to sell the energy and capacity, as applicable, from the three contracts into the wholesale spot market and ISO-NE Forward Capacity Market ("FCM"),<sup>49</sup>

 <sup>&</sup>lt;sup>48</sup> D.P.U. 11-05: Exh. NSTAR-JGD-2 (2d rev.) at 62, ¶ 2; D.P.U. 11-06: Exhs. NSTAR-JGD-2 (2d rev.) at 64, ¶ 4(ii), Att. DPU 1-2; D.P.U. 11-07: Exh. NSTAR-JGD-2 (2d rev.) at 52, ¶ 2.

<sup>&</sup>lt;sup>49</sup> For the capacity purchased from Bull Hill, Blue Sky East, LLC will bid the project capacity into the FCM. Blue Sky East, LLC will transfer any payments for that capacity to the Company on a monthly basis. The difference between the contract rate and the amount received from the FCM will be credited or charged to all distribution customers (D.P.U. 11-07: Exh. NSTAR-JGD-1 (rev.) at 29).

respectively, and credit the proceeds to its distribution customers<sup>50</sup> (D.P.U. 11-05,

D.P.U. 11-06, D.P.U 11-07: Exhs. NSTAR-HCL-1, at 5). The Company proposes to retain

the RECs to meet part of the Company's RPS obligation for basic service customers

(D.P.U. 11-05, D.P.U. 11-06: Exhs. NSTAR-JGD-1, at 29, NSTAR-HCL-1, at 5-6;

D.P.U. 11-07: Exhs. NSTAR-JGD-1 (rev.) at 30, NSTAR-HCL-1, at 5-6).<sup>51</sup> The price

charged to basic service customers will be determined using the weighted average price<sup>52</sup> paid

by the Company to third-party suppliers for RECs procured through competitive solicitations to

meet the Company's RPS obligations (D.P.U. 11-05: Exhs. DPU 2-9, at 2, Att. DPU 2-9(a)

at 2; D.P.U. 11-06: Exhs. DPU 3-10, at 2, Att. DPU 3-10(a) at 2; D.P.U. 11-07:

Exhs. DPU 2-10, Att. DPU 3-10(a) at 2).<sup>53</sup> The Company would then credit or charge all

<sup>&</sup>lt;sup>50</sup> The Company will net the difference of: (1) the costs of the payments made under the contracts for energy and capacity; and (2) the market value of energy and capacity (D.P.U. 11-05, D.P.U. 11-06, D.P.U 11-07: Exhs. NSTAR-HCL-1, at 7).

<sup>&</sup>lt;sup>51</sup> In the event that the Company has excess RECs, it will sell the RECs into the market and credit or charge all distribution customers the actual market price received from the RECs sold (D.P.U. 11-05, D.P.U. 11-06, D.P.U 11-07: Exhs. NSTAR-HCL -1, at 7).

<sup>&</sup>lt;sup>52</sup> This weighted average would exclude amounts paid for Solar Carve-out RECs (D.P.U. 11-05: Exh. DPU 2-9, at 2; D.P.U. 11-06: Exh. DPU 3-10, at 2; D.P.U. 11-07: Exh. DPU 2-10).

<sup>&</sup>lt;sup>53</sup> The Company originally proposed to base the price of RECs (and, thus, the price of RECs charged to basic service customers) on the price provided in the contracts (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 7; NSTAR-HCL-2). On brief, the Company proposes to adopt the recommendations of the Compact that basic service customers instead be charged a short-run market price for RECs established through the Company's basic service REC procurements (NSTAR Electric Brief at 19-20; NSTAR Electric Reply Brief at 2 n.1, 3). The Company provided a revised Long-Term Renewable Contract Adjustment Clause reflecting this

distribution customers with the net difference between the contract prices for RECs and the weighted average price paid for RECs (D.P.U. 11-05: Exh. DPU 2-9, at 2; D.P.U. 11-06: Exh. DPU 3-10, at 2; D.P.U. 11-07: Exh. DPU 2-10, at 2).

NSTAR Electric proposes to recover any costs and the remuneration<sup>54</sup> associated with the contracts from all distribution customers through a new tariff—the Long-Term Renewable Contract Adjustment ("LRCA") tariff, M.D.P.U. No. 164 (D.P.U. 11-05:

Exhs. NSTAR-HCL-1, at 3-5, Att. DPU 2-9(a); D.P.U. 11-06: Exhs. NSTAR-HCL-1,

at 3-5, Att. DPU 3-10(a); D.P.U. 11-07: Exh. NSTAR-HCL-1, at 3-5, Att. DPU 2-10(a)).

The proposed LRCA tariff provides for a reconciliation of the Company's estimated costs

under the contracts to the actual costs incurred (D.P.U. 11-05: Exhs. NSTAR-HCL-1, at 5-6,

Att. DPU 2-9(a); D.P.U. 11-06: Exhs. NSTAR-HCL-1, at 5-6, Att. DPU 3-10(a);

D.P.U. 11-07: Exh. NSTAR-HCL-1, at 5-6, Att. DPU 2-10(a)). Specifically, the Company proposes, on an annual basis, to compare the net of: (1) its actual costs associated with the contracts; and (2) the actual revenue it receives from the energy, capacity, and RECs (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 5-6). The resulting

method (D.P.U. 11-05: Exh. Att. DPU 2-9(a); D.P.U. 11-06: Exh. Att. DPU 3-10(a); D.P.U. 11-07: Exh. Att. DPU 2-10(a)).

<sup>54</sup> As we discuss in Section VIII, above, the contracts, including remuneration, are projected to be below market for their terms. However, it is possible that the contracts will be above market in any specific year, in which case NSTAR Electric will charge customers the difference between the contract price and the market price. over- or under-collection will be included in the calculation of a LCRA factor in the following year (D.P.U. 11-05, D.P.U. 11-06, D.P.U 11-07: Exhs. NSTAR-HCL-1, at 6).<sup>55</sup>

# B. <u>Positions of the Parties</u>

# 1. Company

The Company states that its proposed treatment of the products is an alternative

transactional approach permitted under 220 C.M.R. § 17.06 (1)(c)<sup>56</sup> (D.P.U. 11-05,

D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 6). Accordingly, the Company

argues that the Department should approve its proposed revised LRCA tariff (NSTAR Electric

Brief at 20). According to the Company, charging basic service customers a price that is based

on the short-run market value of RECs instead of the contract price, as it originally proposed,

addresses the Compact's and AIM's concerns that basic service customers would have a

competitive advantage over distribution customers if the price were based on the contract

prices (NSTAR Electric Brief at 19-20; NSTAR Electric Reply Brief at 6).

<sup>56</sup> The Department's regulations at 220 C.M.R. § 17.06 (1) provide:

After purchasing renewable energy, or RECs, or both, a distribution company may: (a) [s]ell the energy to its basic service customers, and retain RECs for the purpose of meeting the applicable annual RPS requirements; (b) [s]ell the energy into the wholesale electricity spot market, and sell the purchased RECs through a competitive bid process; or (c) [s]elect an alternative transactional approach, in consultation with DOER and subject to review and approval of the Department.

<sup>&</sup>lt;sup>55</sup> The proposed LRCA tariff does not contain an effective date (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 3). NSTAR Electric proposes to set the effective date closer to when the first facility becomes operational, which is expected to be 2012 (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 3-4). However, at this time, the Company estimates that it will make its first LRCA factor filing on October 1, 2011 for effect January 1, 2012 (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 3-4).

The Company contends that the Department should reject the Attorney General's argument that the Department should not approve its LRCA tariff at this time and, instead, direct the Company to refile the tariff at the time it seeks approval of a specific rate (NSTAR Electric Reply Brief at 7, citing Attorney General Brief at 23). The Company argues that it is both appropriate and necessary for the Department to approve the tariff providing for the recovery of the costs incurred under these contracts at the same time that the Department approves the contracts (NSTAR Electric Brief at 20, citing Tr. 1, at 149-150; NSTAR Electric Reply Brief at 7). In particular, the Company maintains that Section 83 expressly provides for the recovery of contracts costs, including remuneration, in order " 'to compensate the company for accepting the financial obligation of the long-term contract,' " and that such remuneration is to be acted upon by the Department at the time a contract is approved (NSTAR Electric Brief at 20-21; NSTAR Electric Reply Brief at 7-8, quoting Section 83, § 3). Noting that the contract imposes liability on the Company to pay for the procurement of renewable energy and RECs, NSTAR Electric asserts that, without an approved cost-recovery mechanism in place, such liabilities would fall on the Company's shareholders and could affect execution of the contracts (NSTAR Electric Reply Brief at 8 & n.4, citing D.P.U. 11-05:

Exh. NSTAR-JGD-2 (2d rev.) § 8.2 (a)). The Company argues that if the Department were to approve contracts in these proceedings but not approve a cost-recovery mechanism, it would be extremely difficult for the Company to move forward with the proposed contracts due to the regulatory risk associated with cost recovery (NSTAR Electric Reply Brief at 8).<sup>57</sup>

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The Company argues that approval of a cost-recovery mechanism contemporaneously

Further, the Company disputes the Attorney General's contention that it is not appropriate for the Department to approve the tariff formula until the Company has filed a specific rate (NSTAR Electric Reply Brief at 9). The Company argues the Department's well established practice is to establish a formula for determining the costs to be recovered in advance of the time that an actual factor is proposed and to approve the specific application of the formula at the time that costs are proposed for recovery (NSTAR Electric Reply Brief at 9). According to the Company, the Department may approve a tariff so long as the tariff contains a sufficiently descriptive rate method, which the Company contends the proposed LRCA tariff contains (NSTAR Electric Reply Brief at 9, 10, citing Fitchburg Gas and Electric Light Company, D.P.U. 95-75 (1995)). In addition, the Company notes that it has submitted evidence of the rates expected to be charged under the tariff and the associated bill impacts on its customers (NSTAR Electric Reply Brief at 11, citing D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-3 (rev.); NSTAR-HCL-4 (rev.); NSTAR-HCL-5 (rev.); NSTAR-HCL-6 (rev.)). NSTAR Electric states that it will file full documentation of its calculation of the initial rate for Department review and approval prior to the rate's taking effect (NSTAR Electric Reply Brief at 11).

As to AIM's argument that the Company's retention of RECs for basic service is not permitted by Section 83, the Company contends that the Department should reject this

with contract approval is consistent with the Department's treatment of the long-term contract for renewable energy between Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, and Cape Wind that was approved in D.P.U. 10-54 (NSTAR Electric Reply Brief at 10, <u>citing D.P.U. 10-54</u>, at 338-339).

argument as contrary to Department precedent (NSTAR Electric Reply Brief at 20). The Company contends that AIM's interpretation of Section 83 as requiring a distribution company to either retain both the energy and RECs purchased under the contracts or to sell both the energy and the RECs is unduly restrictive and was rejected by the Department in D.P.U. 10-54 (NSTAR Electric Reply Brief at 20, <u>citing</u> D.P.U. 10-54, at 333). The Company maintains that its proposal is permitted under Section 83 (NSTAR Electric Reply Brief at 20, <u>citing</u> 220 C.M.R. § 17.06). The Company also argues that its proposal as to the use of RECs is more efficient and less costly to customers because it will avoid transaction costs associated with selling the RECs into the market and then repurchasing RECs for basic service (NSTAR Electric Reply Brief at 21, citing Tr. 1, at 49, 67, 103).

## 2. Attorney General

The Attorney General argues that the Department should not approve the proposed LRCA tariff at this time because the Company has not yet proposed a rate or provided documentation to substantiate a rate (Attorney General Brief at 23; Attorney General Reply Brief at 2, <u>citing NSTAR Electric Company</u>, D.P.U. 10-161-A/D.P.U. 10-163, at 5 (2011); <u>NSTAR Electric Company</u>, D.P.U. 09-33, at 74 (2010)).<sup>58</sup> The Attorney General recommends that the Department refrain from ruling on the proposed tariffs here until the Company provides a rate that is substantiated with the appropriate documentation (Attorney General

<sup>&</sup>lt;sup>58</sup> According to the Attorney General, in D.P.U. 09-33, the Department approved NSTAR Electric's recovery of smart grid pilot program costs but did not approve the cost-recovery mechanism (<u>i.e.</u>, a tariff) until several months later when the Company filed a proposed rate and tariffs (Attorney General Reply Brief at 2, <u>citing</u> D.P.U. 09-33, at 67–68, 74; D.P.U. 10-161-A/D.P.U. 10-163, at 1, 4).

Reply Brief at 2). Furthermore, the Attorney General maintains that a tariff and associated factor that generally increase rates must be filed in accordance with G.L. c. 164, § 94 (Attorney General Brief at 24, <u>citing Attorney General v. Department of Public Utilities</u>, 453 Mass. 191, 199-200 (2009)). The Attorney General requests that, once the Company submits its comprehensive cost-recovery mechanism proposal, the Department issue a procedural schedule allowing for the full investigation of the proposed rate and tariff (Attorney General Reply Brief at 2, <u>citing G.L. c. 30A</u>).

The Attorney General contends that the Company's concerns related to its contractual liabilities in the event that the Department does not approve the tariff in this proceeding are without merit because, once a contract is approved by the Department, Section 83 entitles a company to recover all prudently incurred costs (Attorney General Brief at 24; Attorney General Reply Brief at 2).

Finally, the Attorney General argues that the tariff formulas could potentially become out of date or otherwise become inappropriate between now and when the Company files for recovery of costs (Attorney General Brief at 24-25). For example, the Attorney General states that the tariff rate formula for the Blue Sky East, LLC contract depends on the value of the products as determined, in part, through the sale of products in the applicable markets (Attorney General Brief at 25). Because the markets for these products are continually changing, the Attorney General contends that the market value of the products may vary from current estimates (Attorney General Brief at 25).

# 3. AIM

AIM argues that the Company's proposed method of cost recovery is not permissible under Section 83 (AIM Brief at 8). According to AIM, Section 83 allows a distribution company either to use both the energy and RECs for basic service or to sell both the energy and RECs into the competitive market (AIM Brief at 9-11; AIM Reply Brief at 4-6). AIM contends that the use of the word "and" in Section 83,  $\P$  5, 6 connects energy and RECs such that one product cannot be retained while the other is sold (AIM Brief at 9-10). Therefore, in order for an electric distribution company to charge or credit all distribution customers with above- or below-market costs, AIM contends that a distribution company must sell both of the products into the market (AIM Brief at 11; AIM Reply Brief at 5-6). Because NSTAR Electric is proposing to sell the energy into the market but retain the RECs, AIM argues that the proposed treatment is not permissible (AIM Brief at 12; AIM Reply Brief at 10). AIM states that, although the Department's regulations at 220 C.M.R. § 17.06 (1)(c) appear to allow for an alternative transactional approach in which one product can be sold while the other is retained, the Department's regulation does not accord with Section 83 in this regard (AIM Brief at 9).

Furthermore, AIM asserts that the Company cannot maintain that its proposal complies with Section 83 because it will set the price of RECs based on an average price obtained through its RPS solicitations (AIM Reply Brief at 5-7). AIM contends that use of a market proxy is not the equivalent of auctioning the RECs in the actual marketplace and that auctioning the RECs could in fact result in RECs being sold at a higher price, which would

lead to lower costs for both basic service and competitive supply customers (AIM Brief at 8). AIM further argues that the alleged transaction costs associated with selling and repurchasing RECs do not justify a departure from Section 83's plain language, which it contends requires that RECs be auctioned in the market in order for the above- or below-market costs to be allocated to all distribution customers (AIM Reply Brief at 6-7, 10).

In addition, AIM argues that using a market proxy price for RECs could distort the market price of RECs (AIM Reply Brief at 8). AIM contends that because the electric distribution companies will be increasingly procuring RECs through long-term contracts instead of in the market, the price of RECs will be based on the price set in a market in which they are not participating (AIM Reply Brief at 8, citing D.P.U. 10-54).

# 4. <u>Cape Light Compact</u>

The Compact argues that the Department should approve NSTAR Electric's modified tariff and cost recovery proposal because it is consistent with Section 83, is in the public interest, and will result in just and reasonable rates pursuant to G.L. c. 164, § 94 (Compact Brief at 2). The Compact states that the revised cost-recovery approach addresses the Compact's previous concerns regarding subsidization of basic service customers by distribution customers (Compact Brief at 11).<sup>59</sup> Specifically, because the price of RECs will be based on the market price for RECs as determined through the Company's quarterly RFPs, the Compact

<sup>&</sup>lt;sup>59</sup> The Compact argues that basing the price of RECs on the contract price would result in a subsidization of basic service because basic service customers would see the benefits of the RECs while distribution customers would overpay for the net contract costs by not receiving the benefits of RECs and would only receive the benefit of energy and capacity (Compact Brief at 11).

contends that the approach would provide more appropriate price signals to the marketplace than the Company's original proposal (Compact Brief at 12, <u>citing</u> St. 1997, c. 164, § 1). The Compact asserts that, although the approach will not involve a market sale, the end result would be the same as if the RECs were sold into the wholesale market with distribution customers being charged the contract costs for RECs and credited with the revenues from those REC market sales (Compact Brief at 13 & n.4, citing D.P.U. 10-54, at 336).

With regard to the Attorney General's argument that the Department should not approve the proposed LRCA tariff at this time, the Compact argues that Section 83 and 220 C.M.R. § 17.00 <u>et seq.</u> expressly provide for recovery of a distribution company's costs associated with long-term contracts (Compact Reply Brief at 2). Therefore, the Compact supports the Company's request for approval of the LRCA tariff at this time (Compact Reply Brief at 2).

## 5. DOER

DOER agrees with the Company's proposal to set the price of RECs based on the price determined in the Company's RPS solicitations (DOER Reply Brief at 3). DOER argues that the proposal serves the objectives of ensuring that the method of cost recovery is competitively neutral with respect to basic service customers and competitive supply customers (DOER Reply Brief at 3). DOER also contends that the approach serves to minimize transaction costs associated with procuring RECs while providing distribution customers with the same market value that they would receive for the RECs if the RECs were sold into the market (DOER Reply Brief at 3).

# C. Analysis and Findings

### 1. Proposed Treatment of Products

The Company proposes to sell the electricity and capacity it procures under the contracts into the applicable markets and will retain the RECs to meet part of the Company's RPS obligation for basic service customers (D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07: Exhs. NSTAR-HCL-1, at 5-6). AIM argues that the Company's proposed treatment of the products is not permissible because Section 83 does not allow a distribution company to retain RECs for basic service while selling the energy into the market (AIM Brief at 9; AIM Reply Prief at 5.6).

Brief at 5-6).

Section 83, ¶ 5 provides in relevant part:

An electric distribution company may elect to use any energy purchased under such contracts for resale to its customers, and may elect to retain RECs for the purpose of meeting the applicable annual RPS requirements set forth in said section 11F of said chapter 25A. If the energy and RECs are not so used, such companies shall sell such purchased energy into the wholesale spot market and shall sell such purchased RECs through a competitive bid process. . . .

The plain language of Section 83 states that an electric distribution company "may elect" to use energy purchased under a long-term contract for resale to its basic service customers and "may elect" to retain RECs to meet its RPS requirements for basic service. The use of the permissive term "may elect" with respect to both energy and RECs provides an electric distribution company with the discretion to make two distinct choices: (1) to elect to resell energy to its customers, or not; and (2) to elect to retain RECs, or not. The statute does not require that the treatment of each product be the same. The statute is restrictive, however, with respect to a company's treatment of energy and RECs that are not used for basic service. If the electric distribution company elects not to resell the energy to its basic service customers and/or elects not to retain the RECs to meet its basic service RPS requirements, Section 83 directs that the products must be sold into the market. Section 83,  $\P$  5. Therefore, we find that Section 83 does not restrict an electric distribution company from retaining one renewable energy product while selling the other.<sup>60</sup>

Having found that NSTAR Electric may elect to retain the RECs and elect to sell the energy, the Department must determine whether NSTAR Electric's proposed cost-recovery treatment of each of the products is appropriate and in the public interest. With respect to the Company's proposed treatment of energy, as noted above, Section 83,  $\P$  6<sup>61</sup> explicitly prescribes the cost recovery treatment if a distribution company sells the purchased energy and/or RECs—the distribution company must credit or charge all distribution customers any

<sup>61</sup> Section 83, ¶ 6 provides in relevant part:

If the distribution company sells the purchased energy into the wholesale spot market and auctions the RECs as described in the fifth paragraph, the distribution company shall net the cost of payments made to projects under the long-term contracts against the proceeds obtained from the sale of energy and RECs, and the difference shall be credited or charged to all distribution customers through a uniform fully reconciling annual factor in distribution rates, subject to review and approval of the [D]epartment . . .

<sup>&</sup>lt;sup>60</sup> As AIM acknowledges, the Department's regulations at 220 C.M.R. § 17.06 (1)(c) specifically recognize that an electric distribution company may: (1) use the energy and RECs for basic service; (2) sell the energy and RECs; or (3) in consultation with DOER, and subject to review and approval by the Department, select an alternative approach. NSTAR Electric's proposed alternative approach of selling the energy into the market and retaining the RECs for basic service is consistent with Section 83 and the Department's regulations.

#### D.P.U. 11-05; D.P.U. 11-06; D.P.U. 11-07

above- or below-market costs of the contract. D.P.U. 10-54, at 333; see also 220 C.M.R. § 17.06 (2). Because the Company proposes to sell the energy into the wholesale market and credit all distribution customers with the above- or below-market costs, the Department finds that the proposal is consistent with Section 83,  $\P$  6.

With respect to the Company's proposed treatment of RECs, Section 83 is silent as to the appropriate ratemaking treatment if a distribution company retains the energy and/or RECs for basic service customers. D.P.U. 10-54, at 333. AIM argues that the Department should not approve the Company's proposal to base the price of RECs on the weighted average price obtained in its RPS solicitations because using RPS solicitations as a proxy for a market price: (1) is not the equivalent of participating in the marketplace and selling the RECs in the market could yield higher prices and, thus, more value for customers; and (2) could distort the market (AIM Brief at 8; AIM Reply Brief at 8). There is no evidence, however, that the Company's quarterly auctions in the REC market will yield anything but a price that reflects the market.

NSTAR Electric's proposal is identical to the treatment of RECs that the Department approved in D.P.U. 10-54 (see D.P.U. 11-05: Exhs. DPU 2-9, Att. DPU 2-9(a); D.P.U. 11-06: Exhs. DPU 3-10, Att. DPU 3-10(a); D.P.U. 11-07: Exhs. DPU 2-10, Att. DPU 2-10(a)). In D.P.U. 10-54, at 335, the Department determined that a cost-recovery treatment in which RECs are priced using a market-based rate that reflects a company's RPS solicitations was reasonable because it is consistent with the rate treatment prescribed in Section 83 for a company's sale of the renewable energy products into the market. We find that the use of a weighted average price obtained from a fair, open, and transparent competitive solicitation process will yield an appropriate approximation of the price that would be obtained from the market. Moreover, we find that the Company's proposal will not have any impact on the competitive supply market because basic service rates will not change. <u>See</u> D.P.U. 10-54, at 335-336. It is reasonable to conclude that the market value that the Company will ascribe to the RECs under its proposal will be equal to the revenue that the Company would receive if it were to sell the RECs in the market. <u>See</u> D.P.U. 10-54, at 335. Therefore, under the Company's proposal, we find that basic service customers will pay the same rates they would have paid to obtain RECs from the REC market.<sup>62</sup>

Moreover, by retaining the RECs for basic service, the Company will avoid the transaction costs associated with selling the RECs and then buying them back. NSTAR Electric estimates that such transaction costs equal approximately 3.5 percent of its costs for RECs for each market transaction (D.P.U. 11-05: Exh. DPU 2-8; D.P.U. 11-06: Exh. DPU 3-9; D.P.U. 11-07: Exh. DPU 2-9). The Company's proposal reduces the cost to basic service customers of complying with RPS and, at the same time, has no effect on distribution costs, creating a pareto optimal situation for all NSTAR Electric customers. For

<sup>&</sup>lt;sup>62</sup> In addition, Section 83, ¶ 5 requires DOER to "conduct periodic reviews to determine the impact on the energy and REC markets of the disposition of energy and RECs [under Section 83], and may issue reports recommending legislative changes if it determines that actions are being taken that will adversely affect the energy and REC markets." The Department notes that DOER did not object to the Company's treatment of the RECs and energy in the instant cases.

the reasons discussed above, the Department finds that the Company's proposal to determine the price of RECs using a weighted average price obtained through its RPS solicitations is appropriate and in the public interest.

### 2. Long-Term Renewable Contract Adjustment Tariff

The Attorney General argues that the Department should not approve the LRCA tariff at this time because the Company is not proposing a rate for effect under the tariff (Attorney General Brief at 23-24; Attorney General Reply Brief at 2). Section 83, ¶ 6 expressly provides that an electric distribution company may recover all of the costs it incurs under Department-approved contracts. Section 83, ¶ 6 ("The reconciliation process shall be designed so that the distribution company recovers all costs incurred under such contracts."). Section 83, ¶ 3 also provides for an annual remuneration for the contracting distribution company equal to four percent of the annual payments under the contract to compensate the company for accepting the financial obligation of the long-term contract and expressly states that the Department is to act upon such remuneration "at the time of contract approval." We find that Section 83, therefore, contemplates the establishment of a cost recovery mechanism at the time of contract approval.

The Attorney General argues that in D.P.U. 10-161-A/D.P.U. 10-163, the Department did not approve a cost recovery mechanism for costs associated with a smart grid program until the Company filed a proposed rate for Department approval and that the Department should similarly refrain from approving the proposed tariff here (Attorney General Reply Brief at 2, citing D.P.U. 09-33, at 67–68, 74; D.P.U. 10-161-A/D.P.U. 10-163, at 1, 4).

However, in those proceedings, the Department did not approve the proposed tariff because the Company did not propose a rate or provide documentation to substantiate components of the proposed cost recovery formula because such components were not reasonably known.<sup>63</sup> See D.P.U. 10-161-A/10-163, at 5. In the instant cases, the Company provided an illustrative LRCA factor based on its current estimates of costs and revenues of the contracts as well as associated bill impacts (D.P.U. 11-05: Exhs. NSTAR-HCL-4 (rev.) at 15-73, NSTAR-HCL-5 (rev.), NSTAR-HCL-6 (rev.)), Att. DPU 2-9(b); D.P.U. 11-06: Exhs. NSTAR-HCL-4 (rev.) at 15-73, NSTAR-HCL-5 (rev.), NSTAR-HCL-5 (rev.), NSTAR-HCL-5 (rev.), NSTAR-HCL-5 (rev.), NSTAR-HCL-6 (rev.), Att. DPU 3-10(b); D.P.U. 11-07: Exhs. NSTAR-HCL-4 (rev.) at 15-73, NSTAR-HCL-6 (rev.), Att. DPU 2-10(b)). Therefore, we find that the Company has provided sufficient information for the Department to evaluate the mechanics of its future recovery of costs.

By approving the proposed tariff in these proceedings, the Department is putting in place the mechanism under which the Company will be able to recover its contract costs in the future. Our approval of the tariff does not affect the ability of an interested party such as the Attorney General to challenge the specific rate to be charged under the tariff once the rate is proposed.<sup>64</sup> Because Section 83 explicitly provides for the recovery of a distribution company's costs associated with long-term contracts for renewable energy and contemplates

<sup>&</sup>lt;sup>63</sup> Among other things, a forecast that would impact components of NSTAR Electric's rate was not yet complete. D.P.U. 10-163, NSTAR Electric Company Smart Grid Rate Adjustment Filing, Cover Letter at 2 & n.1 (November 19, 2010).

<sup>&</sup>lt;sup>64</sup> Once the Company submits its proposed LRCA factor, the Department will provide interested parties an appropriate opportunity to investigate the proposed rate.

that approval of a cost recovery mechanism will occur contemporaneously with contract approval, we find that it is appropriate for the Department to approve a cost recovery mechanism at this time.<sup>65</sup>

Upon review of the proposed LRCA tariff, the Department finds that the proposed tariff appropriately explains the basis for the Company's recovery of costs associated with the contracts (D.P.U. 11-05: Exh. Att. DPU 2-9(a) at 2; D.P.U. 11-06: Exh. Att. DPU 3-10(a); D.P.U. 11-07: Exh. Att. DPU 2-10(a) at 2). <u>See</u> 220 C.M.R. § 5.02(3)(b). With the exception of the tariff language regarding the filing of the annual LRCA factor, the Department approves the LRCA tariff, M.D.P.U. No. 164.

For the purpose of administrative efficiency, the Department directs the Company to submit its annual LRCA factor filing as part of the Company's annual electric reconciliation filing. The Company currently submits its annual reconciliation filing at least 45 days before the proposed rates take effect.<sup>66</sup> Within ten days of the date of this Order, the Company shall

<sup>&</sup>lt;sup>65</sup> The Attorney General argues that any new tariff that generally increases rates must be filed in accordance with the procedures outlined in G.L. c. 164, § 94 (Attorney General Brief at 24). The Department notes that our investigation of the proposed LRCA tariff satisfied the procedural due process requirements of G.L. c. 164, § 94. <u>See D.P.U. 11-05, D.P.U. 11-06, D.P.U. 11-07, Notices of Filing, Public Hearing, and Procedural Conference at 1 (March 29, 2011); G.L. c. 164, § 94 (requiring the provision of a public hearing and investigation as to the propriety of proposed changes after first causing notice of the time, place, and the subject matter of such hearing to be published at least 21 days before such hearing).</u>

 <sup>&</sup>lt;sup>66</sup> <u>NSTAR Electric Company</u>, D.P.U. 10-124, 2010 Distribution Rate Adjustment/Reconciliation Filing (October 8, 2010); <u>NSTAR Electric Company</u>, D.P.U. 09-95, 2009 Distribution Rate Adjustment/Reconciliation Filing (October 1, 2009); <u>NSTAR Electric Company</u>, D.P.U. 08-55, 2008 Distribution Rate Adjustment/Reconciliation Filing (October 1, 2008).

file a revised LRCA tariff indicating that its LRCA factor filing will be submitted as part of the Company's annual electric reconciliation filing, at least 45 days before the LRCA factor takes effect.

# 3. <u>Attorney General's Recommendations Regarding Reconciliation Filings</u> a. Introduction

The Attorney General recommends that the Department direct the Company to include cumulative information about the proposed contracts as part of its annual LRCA factor reconciliation filings (Attorney General Brief at 25). Specifically, the Attorney General states that the Company should provide the following information: (1) data and supporting information on the actual amount of energy and RECs purchased under the contracts; (2) the price paid for the products as well as a comparison of the forecasted prices to actual market prices; and (3) remuneration payments (Attorney General Brief at 25).

#### b. <u>Positions of the Parties</u>

#### i. <u>Company</u>

The Company agrees to provide, as part of its annual reconciling filing, an accounting of the actual amounts of energy and RECs obtained, the prices paid, and remuneration received (NSTAR Electric Reply Brief at 19). The Company opposes, however, the Attorney General's request that the Company be required to provide a comparison of the actual contract prices to the forecasted prices (NSTAR Electric Reply Brief at 19). The Company states it does not undertake an annual market forecast (NSTAR Electric Reply Brief at 19). Further, the Company argues that comparing the costs of each bid against the market forecast provided in these proceedings as a means of arriving at a consistent, uniform measure for all bids is not a valid analysis because forecasted market prices will likely be different from actual prices in the future (NSTAR Electric Reply Brief at 19). Finally, the Company indicates that it cannot abandon its contractual obligations should the forecast of prices change in the future (NSTAR Electric Reply Brief at 19). Therefore, the Company opposes any requirements that it undertake an annual market forecast (NSTAR Electric Reply Brief at 19).

# ii. <u>Attorney General</u>

The Attorney General argues that review of the supplemental information she seeks will inform an evaluation of the impact of the contracts on rates and the actual value of the long-term contracts (Attorney General Brief at 26). Specifically, the Attorney General contends that the actual value of the below-market estimates are dependent on market value forecasts of energy, RECs, and capacity over the terms of the contracts (Attorney General Brief at 26). Therefore, the Attorney General maintains that information that compares the actual prices paid for the products to the forecasted prices will provide for a true evaluation of the costs to customers (Attorney General Brief at 26).

# c. <u>Analysis and Findings</u>

As noted above, the Company has agreed to provide in its annual reconciliation filing an accounting of the actual amount of energy and RECs obtained, the price paid, and remuneration received (NSTAR Electric Reply Brief at 19). As part of its reconciliation filing, the Company also should provide a comparison of the actual price of energy and RECs it paid in the respective year to the forecasted values provided in the market price forecast presented in these cases. We decline to require the Company to prepare an annual market price forecast at this time. A comparison of the actual prices to newly forecasted prices will have no bearing on an evaluation of the impact of the contracts on rates or the actual value of the long-term contracts.

## D. Conclusion

For the reasons discussed above, the Department finds that the Company's proposed treatment of the products it will purchase under each long-term contract is consistent with Section 83 and Department precedent, and is in the public interest. Accordingly, the Company's proposed treatment is approved. Further, with the exception of the tariff language regarding the filing of the annual LRCA factor, the Department finds that the Company's proposed cost recovery mechanism is consistent with Section 83 and Department precedent, is in the public interest, and will result in just and reasonable rates pursuant to G.L. c. 164, § 94.

#### D.P.U. 11-05; D.P.U. 11-06; D.P.U. 11-07

# XI. ORDER

Accordingly, after due notice, hearing, and consideration, it is:

<u>ORDERED</u>: That the ten-year power purchase agreement between NSTAR Electric Company and Groton Wind, LLC for wind power and renewable energy certificates, filed on February 18, 2011, pursuant to St. 2008, c. 169, § 83 and 220 C.M.R. § 17.00 <u>et seq.</u>, is APPROVED; and it is

<u>FURTHER ORDERED</u>: That the ten-year power purchase agreement between NSTAR Electric Company and New England Wind, LLC for wind power and renewable energy certificates, filed on February 18, 2011, pursuant to St. 2008, c. 169, § 83 and 220 C.M.R. § 17.00 et seq., is APPROVED; and it is

<u>FURTHER ORDERED</u>: That the 15-year power purchase agreement between NSTAR Electric Company and Blue Sky East, LLC for wind power, renewable energy certificates, and capacity, filed on February 18, 2011, pursuant to St. 2008, c. 169, § 83 and 220 C.M.R. § 17.00 <u>et seq.</u>, is <u>APPROVED</u>; and it is

<u>FURTHER ORDERED</u>: That the proposed Long-Term Renewable Contract Adjustment Mechanism tariff, M.D.P.U. No. 164, filed by NSTAR Electric Company, on February 11, 2011, is DISALLOWED; and it is

<u>FURTHER ORDERED</u>: That NSTAR Electric Company shall file, within ten days of the date of this Order, a revised Long-Term Renewable Contract Adjustment Mechanism tariff, which reflects the changes ordered herein; and it is

# D.P.U. 11-05; D.P.U. 11-06; D.P.U. 11-07

<u>FURTHER ORDERED</u>: That NSTAR Electric Company shall comply with all other directives contained in this Order.

By Order of the Department,

/s/ Ann G. Berwick, Chair

/s/ Jolette A. Westbrook, Commissioner

/s/ David W. Cash, Commissioner An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.