

October 16, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 4404 – Commission Review into the Adequacy of Renewable Energy
Supplies Pursuant to R.I. General Laws §39-26-6
Responses to Division Data Requests – Set 1**

Dear Ms. Massaro:

On behalf of National Grid¹, attached are ten (10) copies of the Company's responses to the Rhode Island Division of Public Utilities and Carriers' First Set of Data Requests in this proceeding.

Thank you for your attention to this transmittal. If you have any questions, please feel free to contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Docket 4404 Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹ Submitted on behalf of The Narragansett Electric Company d/b/a National Grid (the "Company").

Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically transmitted to the individuals listed below. Copies of this filing were hand delivered to the RI Public Utilities Commission and to the RI Division.



October 16, 2013

Docket No. 4404 – Commission’s Review Into the Adequacy of Renewable Energy Supplies Pursuant to RIGL 39-26-6(d), to go into effect 2015

Service list updated on 9/18/13

Name/Address	E-mail Distribution List	Phone
Karen Lyons, Esq. Dept. of Attorney General 150 South Main St. Providence, RI 02903	Klyons@riag.ri.gov	401-222-2424
	dmacrae@riag.ri.gov	
	Jmunoz@riag.ri.gov	
Jon Hagopian, Esq. Division of Public Utilities and Carriers	Jhagopian@ripuc.state.ri.us	
	Jspirito@ripuc.state.ri.us	
	Sscialabba@ripuc.state.ri.us	
	Dstearns@ripuc.state.ri.us	
	acontente@ripuc.state.ri.us	
Thomas R. Teehan, Esq. Celia O’Brien, Esq. National Grid 280 Melrose St. Providence, RI 02907	Thomas.teehan@nationalgrid.com	401-784-7667
	Celia.obrien@nationalgrid.com	
	Joanne.scanlon@nationalgrid.com	
	Margaret.janzen@nationalgrid.com	
Richard Hahn LaCapra Associates One Washington Mall, 9 th floor Boston, MA 02108	rhahn@lacapra.com	617-778-2467
Jerry Elmer, Esq. Conservation Law Foundation 55 Dorrance Street Providence, RI 02903	Jelmer@clf.org	401-351-1102
File an original & 10 copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02889	Luly.massaro@puc.ri.gov	401-780-2107
	Cynthia.WilsonFrias@puc.ri.gov	
	Alan.nault@puc.ri.gov	
	Nicholas.ucci@puc.ri.gov	
	Dilip.shah@puc.ri.gov	

Interested Parties:		
Eric Johnson, ISO-New England	Ejohnson@iso-ne.com	
Eric Krathwohl, Esq.	ekrathwohl@richmaylaw.com	
George Wood Oak Point Energy Associates, LLC	george4wood@verizon.net	
Christopher Kearns, OER	Christopher.Kearns@energy.ri.gov	
Dave Owens	do@stateside.com	
Stephan Wollenberg, Energy Consumers Alliance of NE	stephan@massenergy.org	
Carolyn O'Connor HQUS	Oconnor.carolyn@hydro.qc.ca	
Deborah Donovan, Sr. Senior Consultant Sustainable Energy Advantage	Ddonovan@seadvantage.com pyuen@seadvantage.com	
Francis Pullaro, Executive Director Renewable Energy New England, Inc.	fpullaro@renew-ne.org	646-734-8768
Scott Albert, GDS Associates	Scott.Albert@gdsassociates.com	
Bob Grace, Sustainable Energy Advantage	bgrace@seadvantage.com	

The Narragansett Electric Company
d/b/a National Grid
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Division 1-1

Request:

Questions 1-4 are in regard to the testimony of Margaret Janzen.

Please provide National Grid's RES Procurement Plan as Approved by the Commission in Docket No. 4393.

Response:

Please see the Div 1-1 Attachment "2014 RES Procurement Plan" included with this filing.

2014 Renewable Energy Standard Procurement Plan

I. Objectives

A. This plan satisfies Section 8.2 of the Commission's Rules and Regulations Governing the Implementation of a Renewable Energy Standard ("RES Regulations"). Under Section 8.2, the Company is required to annually submit a Renewable Energy Standard Procurement Plan that sets out its procedures for obtaining resources that satisfy its obligations under the Rhode Island Renewable Energy Standard ("RES") (R.I. Gen. Laws § 39-26-1 et seq.).

B. The plan is for the procurement of the RES renewable energy certificates ("RECs") to meet the obligations associated with provision of Standard Offer Service ("SOS") for 2014. A competitive procurement process will be utilized for the purchase of 2014 requirements for both Existing and New RECs, either bundled with Full Requirements Service ("FRS") transactions or purchased separately.

II. Requirements

The following table displays the anticipated number of RECs that will be necessary to satisfy RES Regulations in 2014.

Year	Percentage from New Renewable Energy Resources	Percentage from <i>either</i> New <i>or</i> Existing Renewable Energy Resources	Total RES Target Percentage	Estimated Standard Offer Load (MWhs)	Standard Offer Existing RES Obligation (RECs)	Standard Offer New RES Obligation (RECs)
2014	6.5	2.0	8.5	5,141,486	102,830	334,197

III. REC Procurement

A. In order to comply with the Distributed Generation Standard Contracts Act and the Long-Term Contracting Standard for Renewable Energy ("Long Term Renewable Contracts"), the Company enters into transactions with renewable energy resources that include New RECs. As approved in Docket No. 4315, the Company proposes to continue to utilize these RECs to partially satisfy its New RES requirements for the SOS load. The Company believes SOS customers will benefit from this approach because it minimizes transaction expenses.

As described in Docket No. 4338, the Company proposes to determine the market costs of these RECs for reconciliation by utilizing the most representative data sources, such as recent

solicitation results, broker sheets, and market indices. This market cost will be charged to SOS customers for their RES obligation.

B. Procurement of RECs (both New and Existing) will be linked to the purchase of FRS contracts through SOS competitive solicitations. Separate pricing would be requested from bidders to accept the RES obligations for the period served by the SOS contract. The bidders may decline to provide RES pricing. The lack of RES pricing will not impact the award of FRS transactions because the lowest FRS price will be the winner regardless of RES pricing. The Company will then evaluate the RES pricing provided by the winning bidders and compare it to the Company's best estimate of REC market prices. If the pricing provided by the winning SOS supplier is at or less than the Company's market price estimate, the SOS supplier will also be contracted to provide the RECs necessary to satisfy the RES obligation. For FRS RFPs that span multiple years, the Company will continue to only evaluate the bidders' RES pricing for the first year.

The Company continues to reserve the right to not award RES pricing in all SOS competitive solicitations. Due to the amount of New RECs acquired from the Long Term Renewable Contracts, the Company may not award RES pricing in a SOS solicitation.

C. The Company will issue standalone REC RFPs to procure the remaining REC amounts for each REC class necessary to satisfy the RES Regulations. The Company intends to issue two or more REC RFPs in 2014.

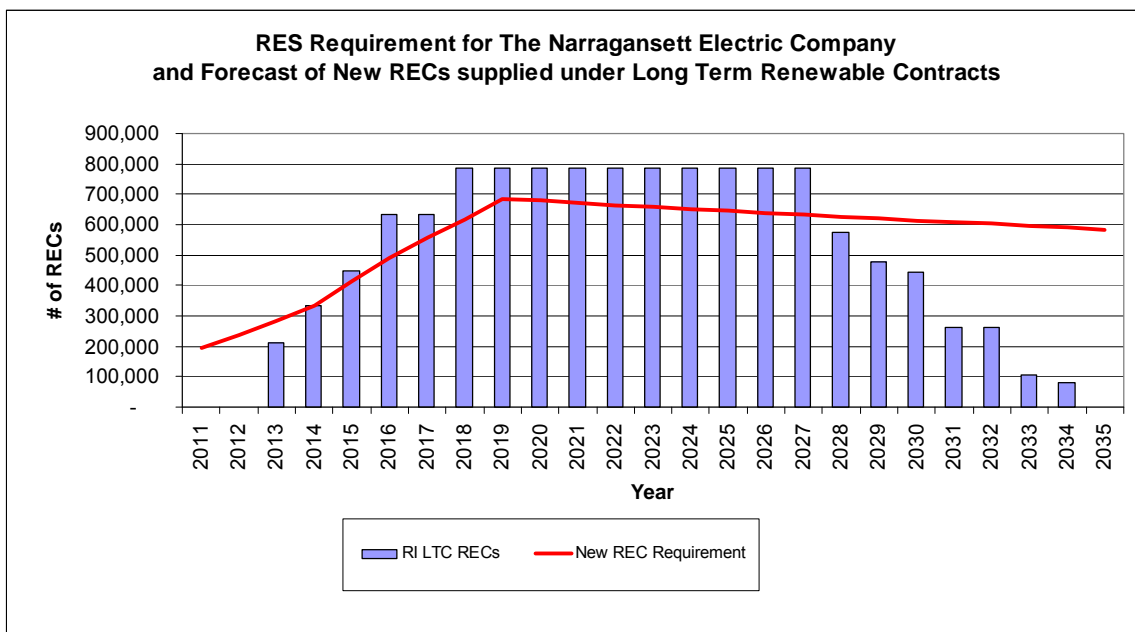
The principal criteria to be used in evaluating REC RFP proposals will be lowest evaluated bid price. In the event of identical low bids, the Company will allocate the offered RECs to all bidders with identical prices based on the quantities bid and the quantities solicited. For example, the Company solicits 5,000 RECs and receives two identical low bid prices. Bidder A offers 5,000 RECs and Bidder B offers 2,500 RECs. Bidder A will receive 3,333 RECs ($5,000 / 7,500 * 5,000$) and Bidder B will receive 1,667 RECs ($2,500 / 7,500 * 5,000$).

D. The Company may also evaluate unsolicited offers from brokers or other parties.

E. If the Company still has an obligation shortfall in a calendar year, the Company will make an Alternative Compliance Payment to the RI Economic Development Corporation for the unmet obligation.

IV. New RES Requirement and Forecast of RECs from Long Term Renewable Contracts

The chart below shows a projection of the New RES requirement over the next 20 years compared to the estimated output of RECs obtained through the Long Term Renewable Contracts.



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d/b/a National Grid
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Division 1-2

Request:

Please provide the workpapers behind Table 1 in electronic form with all spreadsheet formulas in-tact.

Response:

Please see the attached spreadsheet labeled "Div 1-2 – Table 1 workpapers updated with revised LTC CODs.xls" included with this filing. These work papers are being provided on CD-ROM.

The Narragansett Electric Company
d/b/a National Grid
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Division 1-3

Request:

Please provide the workpapers behind Table 3 in electronic form with all spreadsheet formulas in-tact.

Response:

Please see attached spreadsheet labeled "Div 1-3 – Table 3 workpapers.xls" included with this filing. These work papers are being provided on CD-ROM.

The Narragansett Electric Company
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Division 1-4

Request:

Please provide a description of the status of the Deepwater Wind, Orbit Energy and Black Bear Hydro Projects.

Response:

Deepwater Wind

Deepwater Wind has provided a progress report dated September 30, 2013, which is attached as Attachment Div 1-4(a), regarding the Block Island Wind Farm. In addition, Deepwater Wind continues to move forward with conceptual engineering, permitting, and the acquisition of property rights for the construction of the transmission cable that will connect the Town of New Shoreham (Block Island) with the mainland. The Company and Deepwater Wind are continuing to negotiate a Transmission Facilities Purchase Agreement to acquire the engineering, permits, property rights, and other site development work associated with the transmission cable and will submit the final agreement to the Division for review and consent.

Orbit Energy

In February 2012, Orbit Energy elected to extend the Critical Milestones under Section 3.1(a) of its Power Purchase Agreement with the Company (the "PPA") by one year, as provided in Section 3.1(c) of the PPA. Subsequently, Orbit and the Company entered into a First Amendment to the PPA dated as of April 11, 2013 to amend the site location of the Facility. The Company is providing a copy of this First Amendment as Attachment Div 1-4(b).

The Company recently learned that Orbit is currently in negotiation for a new lease at a nearby parcel, and once those negotiations have been concluded, Orbit will request a second amendment to the PPA. In addition, Orbit did not satisfy the Critical Milestones, as extended in February 2012, and Orbit has recently informed the Company that it will provide the additional Development Period Security required for a further extension of those Critical Milestones under Section 3.1(c) of the PPA once it has executed that new lease. Orbit has asked the Company for a further extension of those Critical Milestones to account for the delay in development activities, and the Company is considering that request in conjunction with the amendment to address the new location of the Facility.

Black Bear Hydro

Black Bear Hydro is near completion and expected to achieve commercial operation in November of 2013.



September 30, 2013

Via Electronic Mail

Corinne Abrams
Manager, Environmental Transactions
Energy Procurement
National Grid
100 E. Old Country Road
Hicksville, NY 11801-4218
Email: corinne.abrams@us.ngrid.com

RE: Power Purchase Agreement (PPA) dated June 30, 2010 Progress Report

Dear Corinne:

Pursuant to Section 3.2 and Section 17 of the PPA, attached hereto please find the Quarterly Progress Report for the quarter ending September 30, 2013. This report is provided to satisfy the requirements of section 3.2 of the PPA, and does not constitute a waiver of any rights under the PPA. Please let me know if you have any questions.

Regards,

Deepwater Wind Block Island, LLC

By: Deepwater Wind Rhode Island, LLC, its member

By: Deepwater Wind Holdings, LLC, its member


Jeffrey Grybowski, Chief Executive Officer

Attachment

cc: Brooke K. Skulley, Esq. (brooke.skulley@us.ngrid.com)

Block Island Wind Farm

Progress Report Q3 2013

Status of construction and significant construction milestones achieved during the quarter:

Construction has not commenced.

Status of permitting and significant Permits obtained during the quarter:

Permitting work is on-going. The ACOE and CRMC public comment periods have closed, although it is anticipated that they will reopen briefly to solicit comments on the Scarborough beach landing. The next step in the process is for the ACOE to issue its ROD and for the CRMC to schedule hearings.

Status of Financing for Facility:

The project has retained a financial consultant to assist with the project's financing. A Lender's Technical Advisor was retained in Q1, 2013 to begin a preliminary review of the project.

Events during quarter expected to result in delays in Commercial Operation:

At this point there are two activities that are impacting COD. One, the timing of receipt of necessary permits. Two, the timing of the regulatory approvals of the agreements respecting the Block Island Transmission System.

Current projection for Commercial Operation:

It is anticipated that the major permits for the BIWF and BITS project will be received in 2013. Financial closing will follow the issuance of permits. Project execution will start immediately after financial closing. The Commercial Operation Date will be December 31 of the calendar year in which the conditions to Commercial Operation set forth in Section 3.3(b) of the PPA are satisfied; provided that in no event will the Commercial Operation Date be later than December 31, 2017.

FIRST AMENDMENT TO POWER PURCHASE AGREEMENT

This FIRST AMENDMENT TO POWER PURCHASE AGREEMENT (this "**Amendment**") is entered into as of April 11, 2013, by and between The Narragansett Electric Company, d/b/a National Grid, a Rhode Island corporation ("**Buyer**"), and Orbit Energy Rhode Island, LLC, a Rhode Island limited liability company ("**Seller**"). Buyer and Seller are individually referred to herein as a "**Party**" and are collectively referred to herein as the "**Parties**").

WHEREAS, Buyer and Seller are parties to that certain Power Purchase Agreement dated as of May 26, 2011 (the "**Agreement**") pursuant to which Seller has agreed to sell and deliver, and Buyer has agreed to purchase and receive, the Products generated by or associated with the Facility during the Services Term (in each case as defined in the Agreement); and

WHEREAS, Seller has chosen to locate its Facility at an address other than as set forth in the Agreement;

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. In the introductory paragraph of the Agreement, the phrase "(this "**Agreement**")" is deleted in its entirety and replaced with "(as amended from time to time in accordance with the terms hereof, this "**Agreement**")".

2. The text of Exhibit A to the Agreement is deleted in its entirety and replaced with the following:

Facility: The Orbit Energy Rhode Island, LLC facility is located on Lot 28 and Lot 38 on the Town of Johnston, Rhode Island Tax Assessor's Plat 33. The facility consists of two Caterpillar G3520C generator sets (Generator #1 and Generator #2). Each generator set is rated at 1.6 MW for a combined 3.2 MW of electric generation capacity. Orbit Energy will generate renewable power using biogas generated from on-site anaerobic digestion of food scraps and other organic waste.

3. The usage in this Amendment of terms which are defined in the Agreement is in accordance with the usage thereof in the Agreement.

4. Except as specifically amended hereby, all terms and provisions contained in the Agreement shall remain unchanged and in full force and effect, and each of the Parties ratifies and confirms all such terms and provisions. In the event of a conflict between the provisions of this Amendment and the Agreement, the provisions of this Amendment shall govern.

5. Two or more counterparts of this Amendment may be signed by the parties, each of which shall be an original but all of which together shall constitute one and the same

instrument. Facsimile signatures hereon shall be deemed to have the same effect as original signatures.

6. Interpretation and performance of this Amendment shall be in accordance with, and shall be controlled by, the laws of the State of Rhode Island (without regard to its principles of conflicts of law).

[Signature Page Follows]

IN WITNESS WHEREOF, each of Buyer and Seller has caused this Amendment to be duly executed on its behalf as of the date first above written.

THE NARRAGANSETT ELECTRIC COMPANY, D/B/A NATIONAL GRID

By: _____

Name: John V. Vaughn
Title: Authorized Signatory

ORBIT ENERGY RHODE ISLAND, LLC

By: _____

Name:
Title:

IN WITNESS WHEREOF, each of Buyer and Seller has caused this Amendment to be duly executed on its behalf as of the date first above written.

THE NARRAGANSETT ELECTRIC COMPANY, D/B/A NATIONAL GRID

By: _____
Name:
Title:

ORBIT ENERGY RHODE ISLAND, LLC



By: _____
Name: Anwar Shareef
Title: Manager

The Narragansett Electric Company
d/b/a National Grid
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Division 1-5

Request:

Questions 5-16 are in regards to the ESAI report.

Please provide the workpapers behind Table 1 in electronic form with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. These work papers are being provided on CD-ROM.

The Narragansett Electric Company
d/b/a National Grid
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Division 1-6

Request:

Please provide a list of the operational resources that ESAI has included in its analysis with the assumed capacity and annual energy generation from each resource.

Response:

The detailed list of operational resources includes approximately 500 individual resources with relevant capacity factors and generation. ESAI considers this data proprietary and does not wish to forward in the detail requested. ESAI includes all generation that reports into the NEPOOL Generator Information System ("GIS") as well as some behind-the-meter generation included in the various state solar and distributed generation programs. Capacity factors for each plant are taken from actual production where known, and class averages are used where data is not available. Generators with capacities of 25 megawatts or greater must report emissions data to the U.S. Energy Information Administration ("EIA"), which is then reported via CEMS ("Continuous Emissions Monitoring System"). Via CEMS, ESAI obtains actual historical generation for each plant as available. For smaller units that are not required to report emissions and generation data, ESAI utilizes class average capacity factors for each resource type. ESAI's assessment of existing generation has been very close to actual aggregate production figures that are derived from the individual state Renewable Portfolio Standard compliance reports. For example, ESAI's 2010 estimate of total production and imports was within 3-4 percent of actual. (Final figures for 2011 are not available yet; Connecticut is still outstanding).

ESAI notes that considerable detail on existing resources has been provided in the report in Tables 5 and 6. These tables provide detailed production in gigawatt-hours by resource type and by state.

Lastly, ESAI notes that existing production is static from 2013 forward. Any uncertainties in the forward assessment of REC supply come from outlooks derived from the queue and future generation. As the existing production is static and consistent with actual production, any variations or uncertainties in supply to meet future demand will be within the assumptions made for the resources in the queue and for future generation. Therefore, there should be very little uncertainty associated with the existing portion of the supply outlook.

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Division 1-7

Request:

Does ESAI assume that all operational resources will remain online and qualified for the RPS throughout the study period.

Response:

Yes, the underlying assumption is that if units were to retire after 2020, then they would be replaced with new build capacity.

The Narragansett Electric Company
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Division 1-8

Request:

Did ESAI consider recent changes to Biomass eligibility in Connecticut and Massachusetts in its analysis?

Response:

ESAI has considered the changes in biomass eligibility and the tightening regulations for qualification. At this time, ESAI has not developed a methodology for determining the metrics that would eliminate or reduce REC generation from specific generators in Connecticut or Massachusetts. However, these RECs may be able to be sold into RI, NH, or Maine depending on the unit characteristics and year built. It is possible that we are slightly overestimating RECs sourced from biomass generators and would tend to offset areas where we might be slightly underestimating.

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Division 1-9

Request:

Please provide the workpapers behind Table 4 with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. The Company is providing this file on CD-ROM.

The Narragansett Electric Company
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Division 1-10

Request:

Please provide the workpapers behind Figure 5 with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. The Company is providing this file on CD-ROM.

The Narragansett Electric Company
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Division 1-11

Request:

Please provide the workpapers behind Figure 10 with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. The Company is providing this file on CD-ROM.

The Narragansett Electric Company
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Division 1-12

Request:

Please provide the workpapers behind Table 9 with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. These work papers are being provided on CD-ROM.

The Narragansett Electric Company
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Division 1-13

Request:

Please provide the workpapers behind Table 10 with all spreadsheet formulas intact.

Response:

Please see attached spreadsheet labeled "ESAI Response to Division Data Requests Set 1 – Docket 4404 – 2013-10-14. xlsx" included with this filing. These work papers are being provided on CD-ROM.

The Narragansett Electric Company
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Division 1-14

Request:

Please describe the justification for ESAI's assumption that 350 MW of nameplate onshore wind capacity will be built each year in 2018 and beyond?

Response:

The annual increases in renewable energy in the 2013-2020 time frame could be met on average with 500-550 megawatts ("MW") of equivalent nameplate wind capacity additions each year, depending on load growth. While it is possible and likely that this 500-550 MW level of new wind-equivalent additions could be built in any single year, it is not likely to be sustainable in New England due to a number of factors. The number of quality on-shore wind sites is somewhat limited and the highest quality sites are in remote areas in northern Maine and New Hampshire. Many of these high quality sites do not have adequate access to the grid. Biomass development is limited due to both tightening restrictions on efficiency standards as well as limited availability of suitable biomass fuel.

From a pure market perspective, ESAI believes that approximately 200 MW of wind-equivalent renewable capacity could get built each year, without the intervention of state-supported RFPs and renewable-enabling transmission. With the addition of state-supported RFPs and new transmission build-out to support the transfer of wind energy that would otherwise be constrained, ESAI believes that 350 MW per year of new wind capacity could be built on average until the deficit is erased.

From 2007 to 2013, REC supply increased by approximately 725 GWh per year, or approximately 300 MW per year. The ESAI estimate of 350 MW per year is slightly above the 300 MW performance over the past six years. The current ESAI estimate for 2017 indicates that over 750 MW of wind-equivalent capacity will be built; however, much of this is contingent upon the construction of renewable-enabling transmission projects. ESAI believes that this transmission will be built, but timing will be an issue with respect to 2017 and transfer capacity will be an issue for future years in terms of supporting significant additional wind build-outs. 2016 and 2017 builds may be higher than would otherwise be expected due to the potential phase-out of the production tax credit. 'Significant' investment for new projects must be made prior to the end of 2013 to qualify for the production tax credit and this deadline is supporting a rush to push projects forward that will come on line in 2016 and 2017.

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Division 1-14, page 2

ESAI believes that 350 MW per year of new wind-equivalent capacity is sustainable in 2018 and beyond despite the significant additions expected in 2016 and 2017. We anticipate continued state-mandated purchases through RFPs, and we expect that at least one major renewable-enabling transmission project will be built to support wind exports from northern New England to the rest of the pool.

Division 1-15

Request:

Please describe the methodology behind determining the probability of completion of Queue resources in Table 12.

Response:

Potential new generation resources must enter the ISO-NE interconnection queue and go through a technical vetting process in order to obtain access to the grid. ESAI tracks each project in the queue and handicaps each project according to its probability of completion. Not all projects that enter the queue move to construction and operation, in fact, only 20 percent of projects that enter the queue will ultimately be completed. This level of projects that move to completion is consistent in each of the three Northeast pools, New England, New York and PJM. By ranking each project by its probability of completion, ESAI avoid 'picking favorites' and can rely on the weighted average outcome for new build projections. As projects enter the queue, they are given a low probability of completion, typically 5 percent. As a project moves along in the development process, gaining permits, completing successive phases of interconnection studies (Feasibility Study, System Impact Study, Facilities Study), obtaining financing, etc., ESAI increases the probability of completion.

There are a number of factors that ESAI considers in developing the probability of completion for each project including:

- Strength and experience of the developer
- Location on the grid (accessibility for offtake)
- Permitting progress
- Interconnection study progress
- Local support/opposition
- Long term contracts
- Financing

For greater levels of progress in each of these areas, ESAI assigns a higher rating for probability of completion. Significant weighting is given to projects with long term contracts. The current weighted average probability of completion for projects considered in the ESAI queue is 58 percent and included several projects under construction and a 100 percent weighting for Cape Wind. This number is also skewed higher due to 75 percent probability of completion given to projects recently awarded in the MA, RI, and CT RFPs.

Prepared by or under the supervision of: Paul Flemming

The Narragansett Electric Company
d/b/a National Grid
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Division 1-16

Request:

What is the source of the Start Date data in Table 12?

Response:

ESAI uses all available public data such as news reports, company announcements, and notifications to the ISO. Where possible, we use data gathered from the developers themselves and from other industry contacts to estimate Start Dates.