

July 22, 2016

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4587 – Long-Term Contracting for Renewable Energy Recovery Factor
Docket 4265 – Review Power Purchase Agreement with Orbit Energy Rhode Island
LLC
Responses to PUC Post-Open Meeting Data Requests

Dear Ms. Massaro:

Enclosed please find ten (10) copies of National Grid's¹ responses to the Rhode Island Public Utilities Commission's (PUC) data requests in the above-referenced dockets, arising out of the PUC's recent open meeting for Docket 4587 and from the Company's recent filing in Docket 4265.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosure

cc: Docket 4587 Service List Docket 4265 Service List

Jon Hagopian, Esq.

Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate were electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

July 22, 2016

Jennifer Brooks Hutchinson

Date

Docket No. 4587 - National Grid – Filing to Amend Long-Term Contracting Recovery Factor (Year 2016)

Service List updated 6/16/16

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Jenga Bings Hallo	
	<u>July 22, 2016</u>
Jennifer Brooks Hutchinson	Date

Docket No. 4265 National Grid – PPA w/ Orbit Energy RI Service List updated 7/11/16

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The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265

In Re: Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Responses to Commission's Post-Open Meeting Data Requests Issued on July 1, 2016

PUC 1-1

Request:

For each contract entered into under the Long Term Contracting for Renewable Energy statute (not including distributed generation) for which commercial operation has not begun, please provide an update as to the status.

Response:

1. Orbit Energy Biogas

On July 15, 2016, Orbit Energy provided a progress report for activities performed during the second quarter of 2016. The progress report is included here as Attachment PUC 1-1(a). As highlighted in the progress report, various mechanical, electrical and construction work continues on site. The current projection for commercial operations is partial generation capabilities by the middle of October 2016 and full generation in the first quarter of 2017.

At the request of the counterparty, on May 27, 2016, National Grid executed a Fourth Amendment to the Power Purchase Agreement which extends the deadline of achieving the Commercial Operation Date to June 30, 2017.

On July 7, 2016, National Grid consented to a request for change in control from Orbit Energy Rhode Island LLC. This change in control documentation reflects that Rhode Island Energy Partners, LLC obtained control over Orbit Energy Rhode Island effective April 8, 2015. York Renewable Energy Partners, LLC owns the majority of the membership interest in Rhode Island Energy Partners, LLC.

2. Block Island Wind Farm

On June 29, 2016, Deepwater Wind provided a progress report for activities performed during the second quarter of 2016. The progress report is included here as Attachment PUC 1-1(b). As indicated in that progress report, installation of wind turbines is scheduled to begin in August 2016. Because of delays with the in-service date under the Large Generator Interconnection Agreement, commissioning will initially be performed with a temporary micro-grid. Permitting work is complete. As stated in the progress report, in no event will the Commercial Operation Date be later than December 31, 2017.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265

In Re: Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Responses to Commission's Post-Open Meeting Data Requests Issued on July 1, 2016

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3. Bowers Wind (Champlain) Project

On December 30, 2015, Champlain Wind provided notice to the Company that they have elected to extend the critical milestone dates under the Power Purchase Agreement by one year, thereby changing the deadline for their Commercial Operation Date to March 31, 2018. However, as provided by Section 3.1(e) of the contract, if Champlain Wind fails to make material progress towards the Commercial Operation Date by August 2, 2016 (the third anniversary of the Agreement Date), as reasonably determined by either National Grid or the Public Utilities Commission based on Champlain Wind's progress with respect to the milestones set forth in Section 3.1(a) of the contract, National Grid may terminate the contract by written notice delivered within 60 days after that date.

4. Copenhagen Wind Farm

On June 30, 2016, EDF Renewable Energy provided a progress report for activities performed during the second quarter of 2016. The progress report is included here as Attachment PUC 1-1(c). As indicated in that progress report, the turbine model used for the project has been changed, which may ultimately impact the backfeed date at the Point of Interconnection, which is directly linked to the Commercial Operation Date. The progress report indicates that, however, technical solutions are being considered and there are no delays expected to the Commercial Operation Date of December 31, 2017.

Also on June 30, 2016, EDF Renewable Energy posted an additional \$3M Letter of Credit, thereby increasing its Development Period Security to \$7.2M by July 1, 2016, as required under the Second Amendment to its Power Purchase Agreement.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265 Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Attachment PUC 1-1(a) Page 1 of 6

EXIBIT C (OF PPA) FORM PROGRESS REPORT

For Quarter Ending -June 30, 2016

1. Status of construction and significant milestones achieved during the quarter

Tanks:

All tanks installed and tested except testing for waste water treatment. Insulation installed on tanks.

CHPs

- 1. All CHP's Installed
- 2. SCR and other air pollution controls, delivered and installed.
- 3. MCC to CHP interconnections completed.
- 4. Heat exchanger container received and installed in place.



Biogas Line

- 1. Above ground stainless piping for connection to chiller and CHP is in fabrication off-site and will be delivered shortly.
- 2. Underground piping completed and tested.
- 3. Biogas wash towers (scrubbers) installed and set in place.

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MCC

All MCC units except waste water treatment plant have arrived and installed.

Transformers

All transformers in place.

Completed connection of ground wires in all four transformers.

Final wiring being done, waiting for inspection.

Safety Torches

Safety torches were delivered and installed on site.

Wiring and controls in place and final connections in process.



The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265 Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Attachment PUC 1-1(a) Page 3 of 6

Reception Building

Building panels, wall panels, roof and interior insulation of the reception building have been completed.

Tornados delivered and installation started.



Odor line in fabrication.
Sand trap arrived and placed.
Control and office storage container located at building.



The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265 Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Attachment PUC 1-1(a) Page 4 of 6

Feedstock screw conveyors arrived.



Underground wires and pipes.

Middle voltage connections for auxiliary load and generation were terminated. All underground conduit is complete.

Completed underground piping for Calpex lines.

Backfilling trenches.

National Grid and Verizon

Executed 4th amendment of the PPA with National Grid. Submitted to PUC pending approval.

On site interconnect work completed. Recloser installed.

2. Status of permitting and significant Permits obtained during the quarter:

- 1. Qualifying facility registration done
- 2. Non-regulated Power Producer Registration –done
- 3. Air Permit –approved on January 20, 2016 by RIDEM.
- 4. Solid Waste Permit Application- approved on April 18th., 2016
- 5. Zoning Permit- approved "Renewable Energy 3.2MW Power Plant" by city of Johnston, RI zoning committee meeting on August 28th
- 6. Planning Board Committee application (Building Permit):

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- · 1st Phase –Grading Permit –approved on October 7, 2014
- · 2nd Phase Excavation and Civil Works –approved on November 18, 2014.
- 7. Fresh Water Wetland Permit Modification Approved October 23, 2014
- 8. Site survey done
- 9. Soil survey done.
- 10. Wastewater Industrial Pretreatment Permit The discharge of effluent and parameters were approved by Narragansett Bay Commission, RI on November 19th, 2014 meeting.
- 11. Wastewater Industrial Pretreatment Permit Application was approved on March 28, 2016. The formal permit will be issued on July 2016.
- 12. Sewer Connection Permit Approved, January 14, 2015
- 13. Water Connection Permit Approved, January 14, 2015

All work to be permitted per Johnston Building Official

All required seller's permits according to the Exhibit B to the PPA were submitted and approved by authorities.

3. Status of financing for Facility:

The project is fully financed by Entropy Investment Management

The financial closing was on April, 2015.

4. Events during the quarter expected to result in delay of Commercial Operation Date.

During the conference call on April 13, 2016, John Rathburn from NG gave a rough date of the middle of November 2016 for completion of design and construction of the Direct Transfer Trip (DTT) system., Full power generation of the plant will only be possible towards the end of November, 2016, when live testing of the DTT system is completed. John Rathburn strongly emphasized that the critical path is still the progress with the

The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265 Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Attachment PUC 1-1(a)

Verizon phone line, which is needed to have the DTT system operational.

The current work force strike of all Verizon employees (since today) may also impact the schedule negatively!

NG expects the generator energization tests to be carried out around the middle of June 2016

Upon successful testing and sign-off, the generator(s) will be permitted to produce no more than 1,300kW until the DTT system is in place and fully commissioned.

The current schedule of DTT system permits partial generation of 1.3 MW at the end of June 2016 and the full capacity of 3.2 MW at the end of November 2016.

5. Critical Milestones not yet achieved and projected date for achievement.

Non

6. Current projection for Commercial Operation Date:

1.3 MW - October 15, 2016

3.2 MW - November 30, 2016.



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June 30, 2016

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 September 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 June 30, 2016. 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:

Jeffrey Grybowski, Chief Executive Office

Attachment

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

The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265 Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Attachment PUC 1-1(b)

Block Island Wind Farm

Progress Report Q2 2016

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

Manufacturing of the wind turbines is on-going. Installation of the wind turbines is scheduled to begin in August; commissioning will initially be performed with a temporary micro-grid due to delays in the in-service date under the LGIA. Manufacturing of the export cable and inter-array cable is complete and installation commenced in April. Fabrication and installation of the foundations is complete. Punch list items for the installation of the foundations is expected to be completed in July 2016.

Status of permitting and significant Permits obtained during the quarter:

Permitting work is complete.

Status of Financing for Facility:

Financial close occurred effective February 27, 2015.

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

Delays on the part of National Grid with respect to the installation of the Sea2Shore cable.

Current projection for Commercial Operation:

The Commercial Operation Date will be on or before 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.

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CDF

renewable energy

Copenhagen Wind Project

Progress report Q2 2016

For the Quarter ending in June 2016.

1) <u>Status of construction and significant construction milestones achieved during</u> the quarter:

Construction is planned to start in October 2016 with the tree clearing and the civil work. The project is well advanced in the preliminary design phase. We have issued a request for proposal to 8 BoP Contractors to get proposal for the construction of the following items:

- the interconnection line,
- the substation,
- the collector system,
- the existing road improvements and the temporary road construction
- the turbine foundations
- the turbine erection and wiring

The project is in the process of selecting the contractor. It is expected to sign a contract in August 2016.

We will issue later on a request for proposal for the switching station once we have the functional specifications.

The selected turbine is the Vestas V110 at 95m hub height. Our consultant Siemens PTI has just issued the final report for the materiality change study. The signature of the Cost Recovery Agreement (CRA) with National Grid is on hold until the change to the Vestas turbine is approved by New York ISO and National Grid. It should occur in July 2016.

With the PTC extension on December 18th, 2015 the PPA letter of credit has been increased to 4.2M\$. The next extension is due for July 1, 2016.

The main planned construction dates are the following:

Activity	Start Date	End Date
Tree Clearing	2016-10-01	2016-12-31
Road work	2016-10-01	2017-06-31

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CDF

renewable energy

POI station	2017-03-01	2017-09-03
Project substation	2016-10-01	2017-07-15
Collector system	2017-06-01	2017-09-15
Delivery of components	2017-07-10	2017-09-10
Turbine erection & installation	2017-07-15	2017-10-01
Commissioning	2017-11-01	2017-12-01
Commercial Operation Date	2017-12-01	

These dates might evolve depending on the BoP Contractor that will be selected.

2) Status of permitting and significant Permits obtained during the quarter:

The permitting process continues to progress

We obtained from the FAA the Determination of No Hazard.

We proceeded with the subdivision of the lands for the O&M building, the substation and the POI Station, which is the first step for EDF RE to secure these lands. We have some options to buy these lands for the POI station and the O&M Building.

We secured the Special Use permit for the town of Denmark (Turbines, roads, collector system). We secured the Special Use permits for the Transmission line.

We applied for the Special Use permit for the POI station.

The remaining permits are the following:

- Special use permit for the POI station in Rutland: expected July 21, 2016
- Special use permit for the permanent met tower in Harrisburg, expected July 7, 2016
- Nationwide Wetland Permit, expected end of July 2016
- FAA permit updated, expected in October 2016

3) Status of Financing for Facility:

It is expected that financing during construction will be provided by a parent of the Seller. Financing of the project, if needed, will be done once Commercial Operation Date is achieved.

4) Events during quarter expected to results in delays in Commercial Operation Date:

The project has decided to change the turbine model used for the project. Until the change is approved by NYISO and National Grid, a Cost Recovery Agreement cannot be executed with National Grid, which would allow National Grid to start the interconnection work. This may have an impact on the backfeed date at the POI station, which is directly linked to the Commercial Operation Date. We are looking at some technical solution (such as

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precommissioning of the turbines with generators) to mitigate the impact of a potential later backfeed date.

There are no delays currently expected to the Commercial Operation Date of December 31, 2017.

5) Critical Milestones not yet achieved and projected date for achievement:

Milestone	Guaranteed date	Expected date	Status
All Permits necessary	2017/06/31	2016/12/31	Ongoing
to construct the			
Facility			
Real property and site	2017/06/31	2016/05/01	Ongoing.
control access			All the leases are signed.
			Acquisition of the POI station,
			substation and O&M building to be
			completed.
Closing of Financing	2017/06/31	2017/12/31	The project construction will be
			financed internally with EDF
			Energies Nouvelles or one of its
			subsidies.
Notice to Proceed	2017/06/31	2016/09/01	The selection process is ongoing.
from Seller to its			
general contractor, and			
commencement of			
construction			
Commercial Operation	2017/12/31	2017/12/31	The project is on track to reach COD
Date			on or before December 31, 2017

6) <u>Current projection for Commercial Operation Date:</u>

The project is on line to reach Commercial Operation Date on or before December 31, 2017

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The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4587 and 4265

In Re: Long-Term Contracting for Renewable Energy Recovery Factor and Review of Power Purchase Agreement With Orbit Energy Rhode Island LLC Responses to Commission's Post-Open Meeting Data Requests Issued on July 1, 2016

PUC 1-2

Request:

National Grid has filed a fourth amendment to the long term contract between National Grid and Orbit Energy. The original order was issued in 2011. What is National Grid's assessment of the likelihood that the commercial operation date will be met by June 30, 2017?

Response:

As referenced in the response to PUC 1-1, the Orbit Energy project continues to make progress in all areas of mechanical, electrical and construction activities on the premises. With the end of a work stoppage of Verizon employees on May 31, 2016, there is more certainty that progress will be made on the telecommunications connections in the substation, as part of the interconnection process before full generation can occur. The Company's reasonable assessment, based on continued progress on-site, is that this project should be able to achieve commercial operations by June 30, 2017.