

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
PUBLIC UTILITIES COMMISSION

In re: Petition for Dispute Resolution Relating :  
to Interconnection Wind Energy Development, LLC : Docket No. 4483  
and ACP Land, LLC :

Wind Energy Development, LLC (WED)  
and/or ACP Land, LLC (ACP)'s Response to  
Commission Staff's Data Requests to the  
(February 28, 2014)

1. Please indicate the date upon which you believe the ACP impact study application was complete, and please provide any supporting documentation, including acknowledgements received by National Grid, if any.

**Response:** The impact Study Agreement is dated January 24, 2012. ACP signed it and issued a check for \$5,000 on February 16, 2012. The study issued on October 12, 2012. Documents attached at Exhibit A. ACP knows that there was some back and forth related to project changes during this review period and though the review period was very long ACP withdraws its delay claim preferring to focus on the interconnection tax and cost issues.

2. Please indicate the date upon which you believe the WED Coventry II's impact study application was complete, and please provide any supporting documentation, including acknowledgements received by National Grid, if any.

**Response:** WED provides the following summary and attached documents.

*WED One*

- 1.9.13: Emailed NG Interconnection application. Overnighted \$2,500 check for Feasibility Study to be completed
- 1.23.13: Emailed NG Legal Information document and Feasibility Study Agreement
- 1.28.13: Interconnection Application received by NG and review complete
- 3.5.13: Feasibility Study received from NG
- 3.6.13: Impact Study or ISRDG Agreement received from NG
- 6.12.13: PUC Decision WED Coventry 1 & 2 are (1) project
- 6.17.13: Sent signed Impact Study Agreement and \$10,000 fee
- 7.23.13: NG requested flicker data to complete Anti-islanding study
- 8.1.13: Wire transfer for DG Contract \$46,905
- 1.13.14: NG received flicker data

*WED Two*

- 1.9.13: Emailed NG Interconnection application. Overnighted \$2,500 check for Feasibility Study to be completed

- 1.16.13: NG requested WED to complete Schedule B - Application of Renewable Net Metering and Excess Renewable Net Metering Credits & Legal Information document
  - 2.20.13: Emailed Schedule B and Legal Information document to NG
  - 2.25.13: Interconnection Application received by NG and review complete
  - 3.5.13: Email from Power Engineers saying that NG will complete the Impact Studies together
  - 8.9.13: Screening Memo received from NG
  - 9.23.13: WED received Impact Study Agreement from NG
  - 10.22.13: JK said Impact Studies were complete. NG requested \$30,000 payment
  - 10.24.13: JK stated Impact Study was 99% complete. Requested signed Impact Study Agreement and payment
  - 11.26.13: Requested payment to complete combined study
  - 2.12.14: NG recently completed combined study. Awaiting signed agreement and payment
  - 2.25.14: JK email revises fee to \$10,000
3. Please provide evidence of all payments made to National Grid related to WED's NK Green Project, Coventry II Project, and ACP Land's Middletown solar project.

**Response:** Responsive documents are attached, as follows:

1. **ACP:** Feasibility Study fee of \$1,500 paid 10/6/11; Impact Study fee of \$5,000 paid 2/16/12; Interconnection fee of \$91,531 paid 2/21/13. Documentary evidence provided as Exhibit C.
  2. **WED:** Evidence of all payments are provided with the documents produced in response to PUC 1-2.
4. For each of the three projects, please indicate where in the process they are, with dates, as necessary.
1. **ACP:** Project complete; interconnection cost audit requested of National Grid on 10/15/13; no response yet.
  2. **WED NK Green:** Project completed with Commercial Operation Date of March 1, 2013.
  3. **WED Coventry I:** Awaiting National Grid's Impact Study as outlined above.
  4. **WED Coventry II:** Awaiting National Grid's Impact Study as outlined above.

**Docket 4483**  
**PUC Data Request 1-1**  
**ACP Document Response**

THIS CHECK HAS A COLORED BACKGROUND AND CONTAINS MULTIPLE SECURITY FEATURES - SEE BACK FOR DETAILS

RTERRA LLC  
97 JOHN CLARKE ROAD  
MIDDLETOWN, RI 02842

BANK OF AMERICA

1562

57-1/115 RI

Oct. 6, 2011

PAY TO THE  
ORDER OF

National Grid

\$ 1,500.00

Fifteen hundred and 00/100

DOLLARS

MEMO:

28 Jacome 500kw  
Interconnection Application



*Mary P. Radeka*

AUTHORIZED SIGNATURE  
Mary P. Radeka, Manager

⑈001562⑈ ⑈011500010⑈ 394003275797⑈

RTERRA LLC  
97 JOHN CLARKE ROAD  
MIDDLETOWN, RI 02842

BANK OF AMERICA

1321

57-1/115 RI

Feb. 16, 2012

PAY TO THE  
ORDER OF

National Grid

\$ 5,000.00

Five thousand and 00/100

DOLLARS

MEMO:

Impact Study  
28 Jacome Way



*Mary P. Radeka*

AUTHORIZED SIGNATURE

Mary P. Radeka, Manager

⑈001321⑈ ⑆011500010⑆ 394003275797⑈

RTERRA LLC

1321

ACP Land, LLC  
244 Gano Street  
Providence, RI 02906

Citizens Bank  
Providence, RI 02903

115

57-12 / 115

2/21/2013

PAY TO THE  
ORDER OF

National Grid

\$ \*\*91,531.00

Ninety-One Thousand Five Hundred Thirty-One and 00/100\*\*\*\*\*

DOLLARS

National Grid

MEMO

Invoice No. 800010484

SECURITY FEATURES INCLUDED. DETAILS ON BACK

*Larry M. White*

AUTHORIZED SIGNATURE

⑈000115⑈ ⑆011500120⑆ 2249 537 1⑈

ACP Land, LLC

National Grid

2/21/2013

115

91,531.00

Checking

Invoice No. 800010484

91,531.00

The Narragansett Electric Company  
Standards for Connecting Distributed Generation

**Exhibit E – Impact Study or ISRDG Agreement**

This Agreement, dated 1-24-12, is entered into by and between xTerra, LLC ("Interconnecting Customer") and the Company, for the purpose of setting forth the terms, conditions and costs for conducting an Impact Study relative to the Standard Process as defined in Section 1.0 and outlined in Section 3.0 of the Interconnection Tariff. This Impact Study pertains to Application Number 21-239 (the Interconnecting Customer's application ID number).

1. The Interconnecting Customer agrees to provide, in a timely and complete manner, all additional information and technical data necessary for the Company to conduct the Impact Study not already provided in the Interconnecting Customer's application.
2. All work pertaining to the Impact Study that is the subject of this Agreement will be approved and coordinated only through designated and authorized representatives of the Company and the Interconnecting Customer. Each party shall inform the other in writing of its designated and authorized representative, if different than what is in the application.
3. Where there are other potentially Affected Systems, and no single Party is in a position to prepare an Impact Study covering all potentially Affected Systems, the Company will coordinate but not be responsible for the timing of any additional studies required to determine the impact of the interconnection request on other potentially Affected Systems. The Interconnecting Customer will be directly responsible to the potentially Affected System operators for all costs of any additional studies required to evaluate the impact of the interconnection on the potentially Affected Systems. The Company will not proceed with this Impact Study without the Interconnecting Customer's consent to have the other studies conducted.
4. If the Company determines, in accordance with Good Utility Practice, that the System Modifications to the Company EPS are not substantial, the Impact Study will determine the scope and cost of the modifications. If the Company determines, in accordance with Good Utility Practice, that the System Modifications to the Company EPS are substantial, the Impact Study will produce an estimate for the modification costs (within  $\pm 25\%$ ) and a Detailed Study Agreement and its estimated cost.
5. Impact Study, together with any additional studies contemplated in Paragraph 3, shall form the basis for the Interconnecting Customer's proposed use of the Company EPS and shall be furthermore utilized in obtaining necessary third-party approvals of any required facilities and requested distribution services. The Interconnecting Customer understands and acknowledges that any use of study results by the Interconnecting Customer or its agents, whether in preliminary or final form, prior to NEPOOL 18.4 approval, should such approval be required, is completely at the Interconnecting Customer's risk.  

\$5,000.00
6. The Impact Study fee of \$XX (except as noted below) is due in full prior to the execution of the Impact Study. For a Renewable Interconnecting Customer the ISRDG Study fee is as per Table 2 in Section 3.5 of the interconnection tariff.
7. Final Accounting. Upon request by the Interconnecting Customer, the Company within ninety (90) business days after completion of the construction and installation of the System Modifications described in an attached exhibit to the Interconnection Service Agreement, shall provide Interconnecting Customer with a final accounting report of any difference between (a) Interconnecting Customer's cost responsibility under the Interconnection Service Agreement for the actual cost of such System Modifications, and (b) Interconnecting Customer's previous aggregate payments to the Company for such System Modifications. To the extent that Interconnecting

The Narragansett Electric Company  
Standards for Connecting Distributed Generation

Customer's cost responsibility in the Interconnection Service Agreement exceeds Interconnecting Customer's previous aggregate payments, the Company shall invoice Interconnecting Customer and Interconnecting Customer shall make payment to the Company within forty-five (45) days. To the extent that Interconnecting Customer's previous aggregate payments exceed Interconnecting Customer's cost responsibility under this agreement, the Company shall refund to Interconnecting Customer an amount equal to the difference within forty-five (45) days of the provision of such final accounting report.

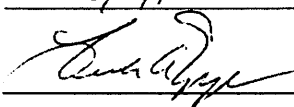
8. In the event this Agreement is terminated for any reason, the Company shall refund to the Interconnecting Customer the portion of the above fee or any subsequent payment to the Company by the Interconnecting Customer that the Company did not expend or commit in performing its obligations under this Agreement. Payments for work performed shall not be subject to refunding except in accordance with Paragraph 11 below.
  9. Nothing in this Agreement shall be interpreted to give the Interconnecting Customer immediate rights to wheel over or interconnect with the Company's EPS.
  10. Except as precluded by the laws of the State of Rhode Island and the Providence Plantations, Interconnecting Customer and Company shall each indemnify, defend and hold the other, its directors, officers, employees and agents (including, but not limited to, affiliates and contractors and their employees), harmless from and against all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence or willful misconduct of the party seeking indemnification.
- Notwithstanding the foregoing, the Interconnecting Customer hereby waives recourse against the Company and its Affiliates for, and releases the Company and its Affiliates from, any and all liabilities arising from or attributable to incomplete, inaccurate, or otherwise faulty information supplied by the Interconnecting Customer. Moreover, with respect to an ISRDG provided to a Renewable Interconnecting Customer, the Company may not be held liable or responsible if the actual costs exceed the estimate as long as the estimate was provided in good faith and the interconnection was implemented prudently the Company.
11. If either party materially breaches any of its covenants hereunder, the other party may terminate this Agreement by serving notice of same on the other party to this Agreement.
  12. This agreement shall be construed and governed in accordance with the laws of the State of Rhode Island and the Providence Plantations.
  13. All amendments to this Agreement shall be in written form executed by both Parties.
  14. The terms and conditions of this Agreement shall be binding on the successors and assigns of either Party.
  15. This Agreement will remain in effect for a period of up to two years from its effective date.
  16. This Agreement may be terminated under the following conditions.
    - a) The Parties agree in writing to terminate the Agreement.
    - b) The Interconnecting Customer may terminate this agreement at any time by providing written notice to Company.

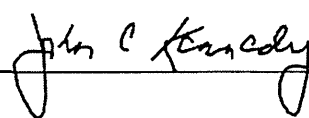
The Narragansett Electric Company  
Standards for Connecting Distributed Generation

c) The Company may terminate this Agreement if the Interconnecting Customer either: (1) has not paid the fee or, (2) has not responded to requests for further information in accordance with provisions in the Interconnection Tariff.

Interconnecting Customer:

Narragansett Electric Company d/b/a National Grid:

Name: FRANK A. EPPS.  
Title: President & CEO  
Date: 2/16/12  
Signature: 

Name: John C. Kennedy  
Title: Lead Technical Consultant  
Date: 1/24/12  
Signature: 

national <b>grid</b>	<b>DISTRIBUTION PLANNING DOCUMENT</b> Interconnection Study	Page 1 of 30
	Revised Distributed Generation Impact Study	10/02/12
<b>Project RI239</b>	<b>RTERRA LLC</b> Install 405 kW Inverter Based PV Generation	<b>V2</b>

**System Impact Study  
For  
rTerra LLC  
28 Jacome Way  
Middletown, RI**

**405kW Three-Phase, Inverter Based Photovoltaic  
Generation**

**Interconnection to National Grid's 4.16 kV System**

"THIS DOCUMENT AND ANY ATTACHMENTS HERETO ("DOCUMENT") IS MADE AVAILABLE BY NATIONAL GRID USA UPON AND SUBJECT TO THE EXPRESS UNDERSTANDING THAT: (A) NEITHER NATIONAL GRID NOR ANY OF ITS OFFICERS, DIRECTORS, AFFILIATES, AGENTS, OR EMPLOYEES MAKES ANY WARRANTY, ASSURANCE, GUARANTY, OR REPRESENTATION WITH RESPECT TO THE CONTENTS OF THE DOCUMENT OR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR REFERENCED IN THE DOCUMENT, AND (B) NATIONAL GRID USA, ITS OFFICERS, DIRECTORS, AFFILIATES, AGENTS, AND EMPLOYEES SHALL NOT HAVE ANY LIABILITY OR RESPONSIBILITY FOR INACCURACIES, ERRORS, OR OMISSIONS IN, OR ANY BUSINESS OR POLICY DECISIONS MADE BY ANY DIRECT OR INDIRECT RECIPIENT IN RELIANCE ON, THIS DOCUMENT OR THE INFORMATION CONTAINED OR REFERENCED THEREIN; ALL SUCH LIABILITY IS EXPRESSLY DISCLAIMED

PRINTED COPIES ARE NOT DOCUMENT CONTROLLED. FOR THE LATEST AUTHORIZED VERSION PLEASE REFER TO THE DISTRIBUTION ASSET MANAGEMENT DOCUMENTS CABINET IN DOCUMENTUM.		
	Originating Department: Retail Connections engineering	Sponsor: Distributed Generation Services Technical sales - NE

national <b>grid</b>	<b>DISTRIBUTION PLANNING DOCUMENT</b>	Page 2 of 30
	<b>Interconnection Study Revised Distributed Generation Impact Study</b>	10/02/12
<b>Project RI239</b>	<b>RTERRA LLC Install 405 kW Inverter Based PV Generation</b>	<b>V2</b>

Table of Contents	
Section	Page
1.0 Introduction .....	4
2.0 Scope.....	5
3.0 Executive Summary .....	6
4.0 Background.....	8
4.1 Proposed Service Configuration .....	8
4.2 Distribution Circuit Connecting to Proposed Generator.....	9
5.0 Interconnection Analysis – Planning Issues .....	10
5.1 General Thermal Analysis.....	10
5.2 South Aquidneck Substation .....	10
5.3 Wholesale Metering at South Aquidneck Substation .....	10
5.4 122J4 Feeder.....	10
5.5 Voltage Regulation .....	11
5.6 Reverse Power Flow .....	11
5.7 Flicker Analysis .....	12
5.8 PCC & Power Revenue Meter Requirements .....	12
5.9 Reactive Demand – Power Factor Correction .....	13
5.10 122J4 Feeder Capacitor Banks .....	13
6.0 Relay and Protection Review .....	14
6.1 Temporary Over-voltages as a result of DG in feed .....	14
6.2 Fault Current Contributions.....	14
6.4 Protection Scheme Assessment .....	20
7.0 Inspection, Compliance Verification, Customer Testing, and Energization Requirements.....	21
8.0 Gen. Monitoring Status & Control– RTU Requirement .....	23
9.0 Cost Estimates .....	24
10.0 Conclusion & Scheduling.....	25

PRINTED COPIES ARE NOT DOCUMENT CONTROLLED. FOR THE LATEST AUTHORIZED VERSION PLEASE REFER TO THE DISTRIBUTION ASSET MANAGEMENT DOCUMENTS CABINET IN DOCUMENTUM.		
	Originating Department: Retail Connections engineering	Sponsor: Distributed Generation Services Technical sales - NE

national <b>grid</b>	<b>DISTRIBUTION PLANNING DOCUMENT</b>	Page 3 of 30
	<b>Interconnection Study Revised Distributed Generation Impact Study</b>	10/02/12
<b>Project RI239</b>	<b>RTERRA LLC Install 405 kW Inverter Based PV Generation</b>	<b>V2</b>

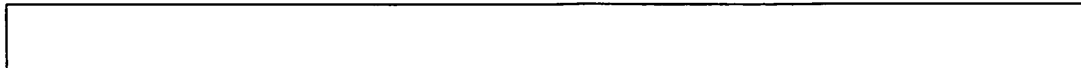


Table of Figures	
Figure	Page
Figure 1 - Generator One-Line .....	26
Figure 2 Site Plan .....	27
Figure 3 -Line Work On Private Property .....	28
Figure 4 EPS in Interconnection Area.....	29
Figure 5 Analysis .....	30

PRINTED COPIES ARE NOT DOCUMENT CONTROLLED. FOR THE LATEST AUTHORIZED VERSION PLEASE REFER TO THE DISTRIBUTION ASSET MANAGEMENT DOCUMENTS CABINET IN DOCUMENTUM.		
	Originating Department: Retail Connections engineering	Sponsor: Distributed Generation Services Technical sales - NE