Tel: (401) 222-8880 Fax: (401) 222-8244

W. Marila

August 19, 2015

VIA FIRST CLASS MAIL AND ELECTRONIC MAIL:

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

RE: Renewable Energy Growth Program - Solar Quality Assurance Report (Docket No. 4536-B)

Dear Ms. Massaro:

Enclosed for filing on behalf of the Rhode Island Distributed Generation Standard Contract Board ("Board") is an original and ten (10) copies of a letter related to the development of the Renewable Energy Growth Program - Solar Quality Assurance Report (Docket No. 4536-B).

Sincerely,

Daniel W. Majcher, Esq.

DWM/njr

Enclosure

c. Docket 4536B Service List

Tel: (401) 222-8880 Fax: (401) 222-8244

August 19, 2015

SENT VIA FIRST CLASS MAIL AND ELECTRONIC MAIL:

Amy D'Alessandro, Esq. **Public Utilities Commission** 89 Jefferson Boulevard Warwick, Rhode Island 02888

RE: Renewable Energy Growth Program - Solar Quality Assurance Report, Docket # 4536B

Dear Ms. D'Alessandro:

As noted in a filing on August 14, 2015, please find attached a copy of the Request for Proposal for the Solar Quality Assurance Inspection Study and Report ("RFP"). The RFP was publicly posted by Rhode Island Division of Purchases on its website at www.purchasing.ri.gov (Solicitation Opportunities) on Tuesday, August 18, 2015.

Please feel free to contact me with any additional questions.

Sincerely,

Daniel W. Majcher, Esq.

l W March

DWM/njr

Enclosure

c. Kenneth Payne Christopher Kearns Service List 4536B



Sollicitation Information August 18, 2015

RFP # 7549810

TITLE: Solar Quality Assurance Inspection Study and Report

Submission Deadline: September 15, 2015 @ 2:00 PM (Eastern Time)

Pre-Bid conference: No

Questions concerning this solicitation may be addressed to gail.walsh@purchasing.ri.gov no later than Tuesday, August 25, 2015 at 5:00 PM (ET). Questions should be submitted in a Microsoft Word attachment. Please reference RFP # 7549810, Solar Quality Assurance Inspection Study and Report on all correspondence. Questions received, if any, will be answered and posted on the Internet as an addendum to this solicitation. It is the responsibility of all interested parties to download this information.

SURETY REQUIRED: No

BOND REQUIRED: No

Vendors must register on-line at the State Purchasing Website at www.purchasing.ri.gov

NOTE TO VENDORS:

Offers received without the entire completed three-page RIVIP Generated Bidder Certification Form attached may result in disqualification.

THIS PAGE IS NOT A BIDDER CERTIFICATION FORM

Section 1 – Instructions and Notifications to Proposers

The Rhode Island Department of Administration/Division of Purchases, on behalf of the Rhode Island Office of Energy Resources is soliciting proposals for qualified vendors with significant expertise in examining Solar PV Quality Assurance to submit proposals for completing a scope of work under the "Solar Quality Assurance Inspection Study and Report" Project in accordance with the terms of this Request for Proposal and the State's General Conditions of Purchase.

This solicitation, and subsequent award, is governed by the State's General Conditions of Purchase, which is available at www.purchasing.ri.gov

To access the State's General Conditions of Purchase, enter our website, click on General Information, then click on Rules and Regulations. Once the Rules and Regulations are displayed, scroll to the bottom of the page and double click on Appendix A, which contains the State's General Conditions of Purchase.

This is a Request for Proposals, not an Invitation for Bid. Responses will be evaluated on the basis of the relative merits of the proposal, in addition to price; there will be no public opening and reading of responses received by the Division of Purchases pursuant to this Request, other than to name those offerors who have submitted proposals.

INSTRUCTIONS AND NOTIFICATIONS TO OFFERORS:

Potential respondents are advised to review all sections of this solicitation carefully and to follow instructions completely, as failure to make a complete submission as described elsewhere herein may result in rejection of the proposal.

Alternative approaches and/or methodologies to accomplish the desired or intended results of this procurement are solicited. However, proposals which depart from or materially alter the terms, requirements, or scope of work defined by this Request will be rejected as being non-responsive.

All costs associated with developing or submitting a proposal in response to this Request, or to provide oral or written clarification of its content shall be borne by the respondent. The State assumes no responsibility for these costs.

Proposals are considered to be irrevocable for a period of not less than sixty (60) days following the opening date, and may not be withdrawn, except with the express written permission of the State Purchasing Agent.

All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.

Proposals misdirected to other State locations or which are otherwise not present in the Office of Purchases at the time of opening for any cause will be determined to be late and will not be considered.

For the purposes of this requirement, the official time and date shall be that of the time clock in the reception area of the Division of Purchases.

It is intended that an award pursuant to this RFP will be made to a prime vendor who will assume responsibilities for all aspects of the work. Joint venture and cooperative proposals will not be considered. Subcontractors are permitted, provided that their use is clearly indicated in the vendor's proposal and the subcontractor(s) to be used is identified in the proposal.

All proposals should include the vendor's FEIN or Social Security Number as evidenced by a Form W-9, downloadable from the Division of Purchases' website at www.purchasing.ri.gov.

The purchase of goods or services under an award made pursuant to this RFP will be contingent on the availability of funds.

Bidders are advised that all materials submitted to the State of Rhode Island for consideration in response to this Request for Proposal will be considered to be public records, as defined in Title 38 Chapter 2 of the Rhode Island General Laws, without exception, and will be released for inspection immediately upon request, once an award has been made.

Interested parties are instructed to peruse the Division of Purchases website on a regular basis, as additional information relating to this solicitation may be released in the form of an addendum to this RFP. It is the responsibility of all potential offerors to monitor the website and be familiar with any changes issued as part of an addendum.

Equal Employment Opportunity (G.L. 1956 § 28-5.1-1, et seq.) - §28-5.1-1 Declaration of policy – (a) Equal opportunity and affirmation action toward its achievement is the policy of all units of Rhode Island state government, including all public and quasi-public agencies, commissions, boards and authorities, and in the classified, unclassified, and non-classified services of state employment. This policy applies in all areas where State dollars are spent, in employment, public services, grants and financial assistance, and in state licensing and regulation. For further information, contact the Rhode Island Equal Opportunity office at (401) 222-3090, or Raymond.lambert@doa.ri.gov.

In accordance with Title 7, Chapter 1.2 of the General Laws of Rhode Island, no foreign corporation, a corporation without a Rhode Island business address, shall have the right to transact business in the state until it shall have procured a Certificate of Authority to do so from the Rhode Island Secretary of State (401-222-3040). This is a requirement only of the selected vendor(s).

The respondent should be aware of the State's Minority Business Enterprise (MBE) requirements, which addresses the State's ten per cent (10%) participation by MBE's in all State procurements. For further information, contact the MBE Administrator, at (401) 574-8253 or visit the website at http://www.mbe.ri.gov or by e-mail at Dorinda.keene@doa.ri.gov.

Section 2 - Project Background & Goals

1. Background

In 2014, the Rhode Island General Assembly voted to expand the Distributed Generation (DG) Contracts pilot program and created the Renewable Energy Growth (REG) program. The DG Contracts program was a three-year pilot with a goal of increasing distributed energy in the state. Forty megawatts of capacity were allocated across various renewable energy categories of solar, wind, and anaerobic digestion. Participants entered into fifteen year contracts with National Grid

The first DG enrollment occurred in December 2011, with five megawatts allocated to wind and solar photovoltaic projects. There were two enrollments in 2012, with approximately 11.177 megawatts awarded to solar photovoltaic systems. There were three DG program enrollments in 2013 and 2014 for the remaining megawatts available. As of the last enrollment in 2014, there were approximately 37 MW allocated.

The new REG expands the program by 160MW. Participation is now governed by tariffs instead of signing long term contracts with National Grid. However, both the initial pilot program and the REG program is overseen by 10 member DG board, each representing different stakeholder interests. The three non-voting members include representatives from the State's major electric and gas utility (National Grid), the Commissioner of the Office of Energy Resources (OER), and a representative from the Renewable Energy Fund (REF) at the Rhode Island Commerce Corporation.

The new REG program opened for small scale applications on June 15, 2015. Small scale systems are broken up into four categories:

Renewable Energy Class (Nameplate kW)	2015 Enrollment Target (Nameplate MW)	Ceiling Price/Standard PBI (cents/kWh) [20-yr Tariff Terms except *]
Small-Scale Solar – Host Owned (1-10kW DC)		41.35 (*15-yr Tariff)
Small-Scale Solar – Host Owner (1-10kW DC)	3	37.75 (*20-yr Tariff)
Small-Scale Solar – 3rd Party Owned (1-10kW DC)		32.95
Small-Scale Solar (11-25 kW DC)		29.8

Figure 1

The small scale program is expected to have a higher volume of projects than the other renewable classes. A minimum of 3 MW has been set aside for Small Scale program2015. The other renewable classes and the approved ceiling price for each is:

Renewable Energy Class (Nameplate kW)	Enrollment Target (Nameplate kW)	Standard PBI applicable to Medium- Scale Solar only (cents/kWh)	Ceiling Price w/ITC (cents/kWh)	Ceiling Price w/ PTC (cents/kWh)	Ceiling Price w/o ITC/PTC (cents/kWh)	Term of Service (years)
Medium-Scale Solar (26-250kW DC)	4,000	24.4	24.4	N/A	N/A	20
Commercial-Scale Solar (251-999 kW DC)	5,500	N/A	20.95	N/A	N/A	20
Large-Scale Solar (1,000-5,000 kW DC)	6,000	N/A	16.7	N/A	N/A	20
Wind (1,500-5,000 kW) 1,500-2,999 kW	5,000	N/A	18.4	19.85	22.75	20
3,000-5,000 kW	-	N/A	18.4	19.85	22.75 22.35	20
Anaerobic Digestion (up to 1,000 kW) 150-1,000vkW		N/A	N/A	20.2	20.6	20
Small-Scale Hydropower (up to 1,000 kW)	1,500					
10-250 kW		N/A	N/A	19.8	21.35	20
251-1,000 kW		N/A	N/A	18.55	20.1	20

Figure 2

2. Goals for this Study

OER and the DG Board are aware of the safety concerns associated with solar PV technology. Solar PV is a growing industry in Rhode Island with new installers coming into the state and the existing solar installation companies hiring more employees. It is paramount for National Grid, the DG Board, and OER that that all installations are safe, high quality, performing as expected, and in conformance with the stated specifications. OER, on behalf of the DG Board, will engage an independent consultant to perform inspections of installed systems to help accomplish the goals of realizing an expanding PV market and safe PV installations in RI.

An inspection is defined an on-site assessment of the project by a licensed electrician (for PV projects) of an installed system to determine compliance with appropriate codes, including provision of required labeling and operating instructions, and to verify that the system components have been installed with the specifications provided on the project interconnection application to National Grid. Inspections include a final report for each project which is submitted to OER detailing the inspection findings.

Finally, a concurrent study of the inspection results of the REG installations will be compiled, analyzed and presented to the DG Board in the Final Program Report.

While this contract and delivered report shall only cover the REG PV installations that occur in late 2015 and in 2016, the Board shall reserve the right to retain the selected consultant to perform additional solar quality assurance inspections and reports for additional years.

3. Requirements

PV inspectors must hold professional licenses or certifications in the appropriate fields, as applicable¹. To ensure objectivity, OER will give preference to applicants who are not actively installing systems in Rhode Island. Inspectors with the following backgrounds are preferred, if accompanied by appropriate formal training in the relevant technologies:

- Professional Engineers
- Retired or inactive master electricians
- Home Inspectors
- Vocational School/community college instructors

The selected consultant will need to demonstrate:

- Experience and technical knowledge necessary to perform residential and commercial scale solar photovoltaic project inspections
- Ability to present information and speak clearly in order to articulate difficult concepts to a wide audience, including the general public
- Ability to use equipment and software necessary to perform independent shading analyses
- Experience with writing reports
- Demonstrated ability to analyze data and summarize findings
- Demonstrated understanding of the Renewable Energy Growth program and the program requirements.
- Demonstrated understanding and/or experience with the Rhode Island Building and Electrical Codes.
- Ability to climb ladders to inspect roof-mounted systems
- Sufficient flexibility in their schedule to respond to requests for site inspections within one week's time

Inspectors of PV systems must be licensed electricians and should have the following experience and credentials:

- Significant experience with PV system installations
- Good working knowledge of the 2014 National Electric Code
- Ability to use and understand a Solar Pathfinder and respective software to generate detailed reports

¹ PV Inspectors may be a direct employee of the selected consultant or a subcontractor.

Minimum of forty (40) hours of formal training in PV system design and installation

4. Compensation and Selection

Inspectors will be paid by the hour for time actually spent on each inspection and hours spent on writing reports. Travel time will be paid at half the hourly consulting rate. While OER recognizes that the Inspectors will have other demands on their time, factors affecting the frequency of assignments will include:

- Ability to respond promptly to requests for inspection
- Completeness and clarity of inspection reports
- Ability to uphold the rules of the program and applicable Rhode Island codes
- Hourly rate

The selected vendor will enter into a contract with OER for an amount not to exceed \$125,000 for the 2 year duration of the contract. In addition, selection of the vendor will need to be approved by the DG Board.

Section 3 – Scope of Work

Quality Assurance

The DG Board, as directed by the General Assembly (§39-26.6-4), should monitor and evaluate the effectiveness of the REG program. The selected consultant will work with the DG Board and OER to produce a Quality Assurance Study and Report on the quality of the REG projects being installed in 2016. The consultant will conduct a study and analysis of the installations and prepare and present a report to the Board on the findings of to-date completed inspections prior to the development of the 2017 ceiling prices and as requested. The DG Board and/or OER may request periodic updates to be given either at a Board meeting or via email.

Task 1 – Inspections, Audits and Data Analysis of Small Scale Solar PV Projects (<25kW)

Small Scale projects are defined as any project under 25kW in any of the four ceiling price categories listed in Figure 1. At the request of OER, the selected applicant will perform site inspections for PV projects after the installation has occurred.² The evaluation items include, but are not limited to onsite panel shading, National Electrical Code compliance, system design, engineering, layout, and customer satisfaction. All inspections must be scheduled within ten (10) business days from notice of OER³. All reasonable efforts must be made to conduct inspections in a timely manner.

It is expected that many small scale installers will be submitting multiple projects to this program. Due to the high volume of projects expected in the various Small Scale categories, OER recognizes that it is

² It is expected that most inspections will take place after interconnection. However, should an Authority Having Jurisdiction (AHJ) requests a rough inspection or pre-interconnection inspection, the selected consultant may align their site inspection at that time.

³ Should issues arise with scheduling due to property owner conflicts, all reasonable efforts to schedule the inspection should be made. If an inspection takes more than 15 business days to schedule OER must be notified.

not feasible that all projects be inspected in the field. The selected Consultant will work with OER and the DG Board to design an inspection and studies plan for high volume installers to the program - (to be referenced as the High Volume Installer Plan) that will be implemented and included in the final Report to the Board. Some plans may include an "expedited" installer process, a "photo inspection form" submitted by the installer for each project, and/or a "random" inspection algorithm.

Deliverables for inspections will be one (1) PV Site Inspection Report (see Attachment A) per project inspected in the field. Inspection reports are due to OER within thirty (30) business days after the inspection and study has been performed. All inspection reports are public documents and should be written in a professional manner. In the case of high volume installers, a new deliverable for those projects will be developed as part of the High Volume Installer Plan.

Task 2 - Inspections and Audits of Medium Scale Solar PV Projects (25kW-250kW)

Medium Scale projects are defined as any project between 26kW-250kW. It is expected that this program, which has 4MW of capacity allocated in 2015, will also see a high volume of projects. It is expected that Medium Scale project inspections in the field will take a certain number of hours to perform. Please include in the proposal an estimated amount of time it may take, on average, to inspect a 250kW PV system and prepare the inspection report for each site.

Depending on the number of applications in this category, OER may request that the applicant develop a plan to inspect Medium Scale PV projects utilizing the High Volume Installer Plan developed under Task 1 or some other proposal. Should a High Volume Installer Plan be implemented for Medium Scale projects, a new deliverable for those projects will be developed.

Task 3 - Inspections and Audits of Commercial and Large Scale Solar PV Projects (251kW+)

It is expected that all projects 251kW and above will be inspected in the field by the selected vendor. These projects are often complicated and have multiple parties involved. The consultant must be proficient in working with multiple parties to inspect large systems. The evaluation items include, but are not limited to National Electrical Code compliance, system design, engineering, layout, interconnection, and customer satisfaction.

It is expected that the project inspections and studies for these two categories will take a certain number of hours to perform. Please include in the proposal an estimated amount of time it may take, on average, to inspect and produce site inspection reports for the following:

500kW PV System

1mW PV System

3 MW PV System

Task 4 – Optional (Not Required) Inspections of other non-PV Renewable Technologies - Anaerobic Digestion, Hydropower, and Wind

The consultants may be able to subcontract or provide inspection services for other technologies other than solar PV. Should this be possible, provide a plan for implementation to carry out site inspections

and inspection reports for these technologies. This is not a proposal requirement however, an additional points 5 scoring points will be considered when the evaluation team reviews the consultant's ability to provide non-PV inspection services. Should other non-PV technologies be inspected, OER will work with the selected consultant to create the template site inspection report.

Task 5 – Final Report and Presentation to the DG Board (September 2016)

The final deliverable for this project will include the following:

- ❖ A final written report, entitled "2016 REG Program Quality Assurance". The report will contain the results and findings of site inspections from Task 1-4 (if applicable), and recommendations for continuing a quality assurance study and report for REG projects through the duration of the REG program.
- ❖ A final MS PowerPoint slidedeck presentation summarizing the key findings from all inspections and recommendations for future evaluation. The presentation will be provided to OER and the DG Board for use following the conclusion of the contract with the selected consultant. The presentation shall be attached as an Appendix to the final Task 5 report.
- Any spreadsheet data, reports, analysis or other work products that may emerge from the inspections and/or High Volume Installer Plan.
- Following completion of the final report, up to three (3) presentation by the selected consultant to the DG Board, policymakers, legislators, and/or stakeholder groups on the key results, findings, and recommendation of the final report.
- 5 Hard Copies of the report shall be provided to the RI Public Utility Commission

OER expects the selected consultant to be available to make a presentation to the DG Board as requested during the course of the project on the progress of the report. No more than three presentations may be requested by the DG Board during the term of the contract. For these presentations, the selected consultant must provide the documents and PowerPoint presentation at least three (3) days prior to the scheduled DG Board Meeting.

Section 4 – Proposal Submission and Application Requirements

The Proposal must be submitted in the format described below, clearly labeling the sections as described. Please keep fonts to 11 point at a minimum, include page numbers, and limit the length of proposals to 20 pages as a maximum including all sections listed below:

- ❖ TITLE PAGE (1 page)
- EXECUTIVE SUMMARY (1-2 pages)
- ❖ TECHNICAL PROPOSAL (4 pages minimum; 10 pages maximum including figures)
- QUALIFICATIONS & EXPERIENCE (5 pages or fewer)
- COST PROPOSAL (1 page)

1. Title Page

Office of Energy Resources, "Solar Quality Assurance Inspection Study and Report" Proposal, your company name, address, web site address, telephone number, fax number, e-mail address and primary contact person.

2. Executive Summary

The Executive Summary will highlight the contents of the Technical Proposal and provide the review team with a broad understanding of the Consultant's technical approach and ability.

3. Technical Proposal

Discuss your approach to each phase of the proposed scope of work. If you are applying to this Solicitation with the ability to perform Task 4, please indicate this. Provide information on your experience and ability to perform inspections, summarize findings, and produce study results with the relevant technologies. Indicate your ability to complete the scope of work within the established timeframe.

4. Qualifications and Experience

Provide the following:

- Company Profile: Provide information on history, length of time in business, organizational capacity & staff, core competencies. Include staff capacity and any other resources and capacity uniquely suited to the Applicant to complete the scope of work outlined in the RFP.
- Reference Information: Provide names, addresses, telephone numbers and permission to contact two former or current clients for which your organization has performed similar work outlined in the Scope of Work in the last two years.
- ❖ Past Experience: Describe your experience with similar work for governmental agencies and/or businesses in the New England region. Also, include details of any trainings your company has offered in the past to the solar industry, municipal inspectors, and/or building inspectors, including curriculum.
- **Examples of Prior Work**: If possible, reference two or three examples of previous projects that best display your work and outline the role your firm played in each project.
- ❖ Staffing & Administration: Please identify all staff and/or subcontractors proposed as members of the project team and the tasks they will perform on the account. Describe their duties, responsibilities, and concentration of effort applying to each (as well as resumes, curricula vitae or statements of prior experience and qualification). Please also include the estimated availability of staff and subcontractors to carry out the required Scope of Work in a timely manner. OER reserves the right to investigate and review the background⁴ of any or all personnel assigned to work under agreement for services and based on such investigations, to reject the use of any persons within the OER's discretion. Changes to

⁴ Including the requirement of a National Background Search by the Attorney General's BCI Division.

personnel require formal written approval by OER and as such the OER reserves the right to terminate the contract if changes are not approved.

5. Cost proposal

Please provide detailed information on rates of all team members associated with work referenced in Section 3 above. Travel time will be paid at half the hourly consulting rate. Some indirect costs will be allowed (printing, copying etc.) The hourly rates for staff that will or could potentially be associated with work on this effort must be included in the response to this Solicitation.

Section 5 – Scoring and Evaluation

Sanding Criteria	Description	Possible
Scoring Criteria	Description	Points
Technical Proposal	 The quality of the Proposal demonstrates the candidate's ability to provide quality inspections and produce the Task 5 report for OER and the DG Board Applicant demonstrates an understanding of the concepts and motivators of the REG program. The applicant demonstrates an ability to write clearly and can communicate effectively. The Applicant understands the REG program 	35
Qualifications and Experience	 The candidate has completed similar projects and is qualified to undertake the scope of work outlined in the RFP. References and prior work demonstrate the candidate's ability to provide superior modeling analyses, technical support, and trainings. Proposal shows clarity of team management structure, the availability of senior staff to supervise and contribute to the work, and ability to schedule and complete inspections in a timely fashion The firm has personnel capacity and organizational resources well suited to the scope of the RFP 	30
Other RE Technologies	 Optional (Not Required) Inspections of other non-PV Renewable Technologies - Anaerobic Digestion, Hydropower, and Wind and writing inspection reports 	5
Cost Proposal	- The applicant submits a reasonable and competitive pricing structure commensurate with the value offered	30
Total		100

Proposals must attain a minimum score of 60 points to be considered. Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. Proposals that do not include all of the requirements will not be considered.

Only candidates submitting a Proposal in accordance with the criteria set forth above shall be eligible for evaluation. Each submitted Proposal meeting the administrative requirements will be evaluated by OER and ranked from highest to lowest. Upon completion of the initial evaluation, candidates may be invited to participate in an interview phase of the selection process. However, the OER Project Team reserves the right to make a selection and award the contract based on evaluation of the proposals without conducting formal interviews.

Section 6 - Timeline

The following schedule describes the timeline for RFP release, proposal submission and review, evaluation and selection of vendor(s), and Proposal award. OER reserves the right and latitude to modify this schedule as needed. Any revisions to this schedule would be posted the DOA Purchasing website.

Posted	August 18, 2015	
Deadline for Written Questions	August 25, 2015	
Final Question and Answer Posted	September 1, 2015	
Applications due at DOA Purchasing	September 15, 2015	
Award Announced	December 2015	

CONCLUDING STATEMENTS:

Notwithstanding the above, the State reserves the right not to award this contract or to award on the basis of cost alone, to accept or reject any or all proposals, and to award in its best interest.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further.

The State may, at its sole option, elect to require presentation(s) by offerors clearly in consideration for award.

Appendix A Example Solar PV Inspection Report Template

SOLAR PV SYSTEM POST INSTALLATION INSPECTION REPORT

Owner of PV System:		
Developer/Installer:		
Lead Reviewer:		
Report Reviewed By:		
Submission Date:		
Scope and Purpose		
PV system described in the REG S	mall Scale or Commercial Prog ssible, attempt to ascertain the	stallation inspection conducted on the gram, and supporting documentation. e system's compliance with the REF
Compliance with appropriate Accuracy of shading/enerUse of UL listed new equitions	211	ectric Code requirements
Tab	le 1: Overview of Application	Compliance
Requirement	Satisfactory (Y/N)	Comments
Energy Output Estimate Accurate		
Compliant with electrical		

Overall Findings and Recommendations:

requirements (as installed)

Compliant with electrical code requirements (as modified)

Installation Meets REF Program

Application accurately reflects

Requirements

equipment installed

Inspection Findings:				
Output/Shading Analysis	inalysis Review:			
	Table 2: System Output/Shadin	g Analysis Review		
Requirement	Satisfactory (Y/N)	Comments		
Shading Analysis Comp	lete			
Energy Production Estimate Accurate				

System Description:

Design Review Findings:

Calculation Method

matches what was

Information in application

Reasonable

installed

Electrical Design Review⁵

Table 3: Electrical Design Review Findings			
Component/Criteria	Value	Comments	
PV Modules			
Manufacturer			
Model			
Quantity			
UL listed			
Series Fuses Present/Sufficient			
DC Wiring			
Wire Used			
Ampacity Sufficient			
Color Code Correctly Followed			
Rated for Application			
DC Disconnect			
Sufficient Rating for Application			
Wired Correctly?			
Labeling Requirement Met			
Inverter			
Manufacturer			
Model			
Quantity			
Sufficient for Application			
Labeling Requirement Met			
AC Disconnect			
Labeling Requirement Noted			

⁵ This table may be amended should Rhode Island adopt the future National Electrical Code standards.

Table 3: Electrical Design Review Findings			
Component/Criteria	Value	Comments	
Sufficient Rating for Application			
Backfeed Breaker			
Labeling Requirement Noted			
Within Limits of Main Bus Bar			
Sufficient for Application			
Grounding			
DC System Ground Correct			
Equipment Ground Correct			

Disclaimer

This design review/inspection is completed in good faith based on submitted documentation, onsite observations/measurements, and other information received from National Grid, the system installer, and/or other sources. The results of this review are intended to verify that the system, as designed, will meet the requirements of the REG program Rules and Regulations. The reviewer makes no warranty for the design and installation of the system under review and assumes no liability for the reviewed system's operation and/or performance.

Questions or comments regarding this review may be directed to:

Contact Information: