



RUTGERS
UNIVERSITY

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

Request for Proposal # 2482

**Subcontractor to Investigate Approaches to Mitigate Solar Development
Volatility**

POINTS OF CONTACT AND LOCATION

Date of Issuance: December 06, 2013

Proposal Due Date: January 03, 2014

Issuing Office: Purchasing Department
Sara Vecchio, Senior Buyer
Administrative Services Building III, 2nd Floor
3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Phone: 848-932-2915
Email: sara.vecchio@rutgers.edu

1. Introduction

The New Jersey Solar Act of 2012 (L. 2012, c.24) requires that “[n]o more than 24 months following the date of enactment of P.L.2012, c.24, the board [of Public Utilities (BPU or Board)] shall complete a proceeding to investigate approaches to mitigate solar development volatility and prepare and submit, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), a report to the Legislature, detailing its findings and recommendations.”

On October 4, 2012, the Board directed Staff to investigate solar development volatility, and on November 9, 2012, a public meeting was held to begin discussions and review solar market related data. Discussions have continued with stakeholders at the monthly Renewable Energy Committee meetings. Staff has received written comments on the definition of and possible solutions to solar development volatility.

2. University Overview

With major campuses in northern, central, and southern New Jersey and extension offices and activities in all of the states twenty-one counties, Rutgers is the flagship institution of New Jersey’s public higher education system. Dedicated to a threefold mission, Rutgers is equally committed to excellence in teaching, scholarship, and public services. Founded over 200 years ago in 1766, Rutgers is distinguished as one of the oldest institutions of higher education in the country. At the same time, modern-day Rutgers, which was designated New Jersey’s state university in 1945 and 1956, qualifies as the youngest of America’s major public research institutions. For detailed information and facts about Rutgers, please visit <http://www.rutgers.edu/about-rutgers/who-we-are>.

3. Scope of Work for Consultant

At the request of Board Staff, the Center for Energy (CEEEP), Economic and Environmental Policy (Bloustein School of Planning and Public Policy, Rutgers University) has been asked to conduct a literature review of national and international approaches to mitigate solar development volatility, and to retain a Consultant on behalf of the Board. The Consultant’s tasks are to augment and supplement CEEEP’s literature review (provided as part of this RFP), review the public record compiled by Board Staff, write a report (draft and final) detailing its findings, provide specific short term and long term recommendations regarding approaches to mitigate solar development volatility in New Jersey, and present its results at a public forum hosted by CEEEP at the Bloustein School in New Brunswick, New Jersey.

The anticipated schedule for this project is the following:

Table 1: Anticipated Timeline for Solar Development Volatility Consultant

Task	Date
Rutgers Issues RFP# 2482	December 6, 2013
Vendors Submit Written Questions (if desired)	December 16, 2013
Vendors Submit Proposals	January 3, 2014
Vendor Selected	January 17, 2014
Vendor Commences Work	January 17, 2014
Vendor Submits Draft Report to the BPU	February 14, 2014
Vendor Presents at Public Forum	March, 2014
Vendor Submits Final Report to the BPU	April 14, 2014

Proposals shall include all labor, material, equipment and related costs associated with this RFP.

3.1 Contract Term

The contract awarded as a result of this RFP will be for seven months. Any extension to this Contract must be made in writing and signed by both parties subject to approval by Board Staff. The original terms and conditions will remain in effect for any extension period. Unless otherwise noted by Rutgers University Procurement Services at the time of the agreed upon extension, pricing for each optional additional year is to remain the same as during the original contract term.

3.2 The Request for Proposal (RFP) Package

This RFP is designed to provide interested Bidders with sufficient basic information to submit proposals meeting minimum requirements, but is not intended to limit a proposal's content or exclude any relevant or essential data. Bidders are at liberty and are encouraged to expand upon the specifications to evidence service capability under any agreement.

The documents included in this RFP package are listed in Table 2 - RFP Contents. Bidders are strongly encouraged to carefully read the information contained in this RFP package to ensure compliance, and submit a complete response. Please notify the buyer listed in Section 3.3: Questions Regarding the RFP, if any of the following documents are missing.

Table 2 - RFP Contents
Request for Proposal # 2482
Exhibit A: Bidders Declaration
Exhibit B N.J.P.L 1975, C.127. Mandatory Affirmative Action Language
Exhibit C Insurance Requirements
Exhibit D: Declaration of Ownership Form
Exhibit E: General Terms and Conditions
Exhibit F: CEEEP's Literature Review

3.3 Questions Regarding the RFP

It is the University's practice to accept inquiries and questions from all potential Bidder(s) receiving this RFP. The Deadline for questions regarding this RFP is December 16, 2013 by **3:00 PM (EST)**. All questions are to be emailed to **Sara Vecchio (sara.vecchio@rutgers.edu)** and refer to RFP #2482 the subject line. **Responses, if any, will be sent to all Bidders by December 23, 2013 by 3:00 PM (EST)** by email.

3.4 Addenda and Acknowledgment

In the event it becomes necessary to clarify or revise this RFP, such clarification or revision will be by addendum. Any RFP addendum shall become part of the RFP and part of any contract resulting from this RFP. All addenda should be acknowledged by signing for each addendum in the space provided on the RFP Cover Sheet.

4. RFP REQUIREMENTS

The proposal package must be submitted in a sealed envelope, and may be hand delivered or sent by mail or express mail. It is the responsibility of the Bidder to ensure that the proposal package arrives at the University Procurement Services Department by the specified proposal due date and time. Bidder(s) using U.S. Postal Service regular or express mail should allow additional time since the U.S. Postal Service does not deliver directly to the University Procurement Services Department.

Directions to Rutgers University Procurement Services are located at <http://rumaps.rutgers.edu/location.jsp?id=C72252> . GPS systems may or may not locate Rutgers Plaza, and therefore, Bidders are advised to confirm directions in advance.

At this time Rutgers does not accept electronic bid submissions. Proposals received by email or facsimile will not be considered. Any communication that reveals the contents of a sealed proposal may result in disqualification of the entire proposal.

Proposals or amendments to Proposals received after the closing time and date, for any reason, may, at Rutgers' sole discretion, not be considered.

Should you wish to be considered for this opportunity, please submit your proposal by **January 03, 2014, by 3:00 p.m.** to the following address:

**University Procurement Services
Rutgers, The State University of New Jersey
Attn: Sara Vecchio, Senior Buyer
Administrative Services Building III, 2nd Floor
3 Rutgers Plaza
New Brunswick, NJ 08901-8559**

4.1 Proposal Preparation and Content

Bidders shall submit three (3) original (clearly marked) and two (2) electronic copies (disk or flash drive) of their proposal response package.

The contents of each proposal response package shall include:

1. Bidder's detailed responses to the RFP
2. Price/Cost Proposal
3. Exhibit A: RFP 2482 Bidder's Declaration executed by the Bidder (including all addenda, if any).
4. Exhibit D -. Declaration of Ownership Form

Requirements to be supplied after award, prior to the execution of a Contract or issuance of a Purchase Order:

1. N.J.P.L 1975, C.127. Mandatory Affirmative Action Language (Within seven (7) days after receipt of a purchase order).
2. Certificate of Insurance with the University named as an "additional insured"; to be provided after award and prior to start of work.

5. SPECIFIC RESPONSE REQUIREMENTS

Bidders shall respond to each item in this section by listing the item number, then providing a detailed explanation and response to the requirement.

5.1 Professional Profile

Provide a brief history of your firm and your firm's background. Include number of years in business, equipment list, number of employees, their job classifications and ability to provide the services outlined herein. Provide a photocopy of any license or certificates as they pertain to the requested services, if applicable.

FIRMS THAT HAVE BEEN OR ARE INVOLVED FINANCIALLY IN THE NEW JERSEY'S SOLAR MARKET ARE NOT ELIGIBLE TO SUBMIT A PROPOSAL.

5.6 Fee Proposal

Bidder will provide complete and detailed pricing breakdown of all costs associated with all tasks.

5.7 References

List at least five (5) recent clients for positions of similar function and scope, including the organization, contact person, address, email address, telephone number, fax number and brief description of the services provided.

5.8 Supplier Diversity

It is the policy of the University to stimulate the growth of disadvantaged business enterprises (DBE) e.g. minority, woman-owned, veteran-owned, disabled veteran, 8(A) and Hub Zone businesses by ensuring they are afforded an equal opportunity to provide goods and services to the university. The University goals are 5% for minority, and 5% for woman-owned businesses. As part of this proposal, Bidders are asked to:

A. Describe your firm's commitment and plan to solicit and include DBE(s) if awarded a contract to the extent consistent with what is being purchased.

B. List the diversity utilization goals your firm would adopt if awarded a contract.

5.9 Subcontractors

The university reserves the right to approve any and all subcontractors utilized in the execution of this event. Please identify all subcontractors for this event, detailing how they will be utilized, your relationship with the subcontractor, and a description of joint work you have undertaken with this subcontractor.

5.10 Evaluation and Selection Process

5.10.1 Evaluation Committee and Criteria

Proposals may be evaluated by an Evaluation Committee composed of members including but not limited to representative(s) from University Procurement Services, departments that will utilize the Contract, and members of the university community including students, staff and board members. The Evaluation Committee may choose to make use of the expertise of an outside consultant in an advisory role.

The following evaluation criteria will be used to evaluate Proposals. The categories are not listed in any order of significance and may be used to develop more detailed criteria to be used in the evaluation process.

Table 3: Proposal Evaluation Criteria

Evaluation Criteria	Points
1. QUALITY OF TECHNICAL PROPOSAL	50
A. The technical proposal demonstrates the proposer’s clear understanding of the tasks outlined in the Statement of Work and shows how the proposer’s partners, if any, will contribute to the tasks.	15
B. The technical proposal shows the proposer’s technical expertise in proposed project, If the proposer lacks expert knowledge in one or more of the relevant areas, the technical proposal will show that they have established partnerships with other individuals or organizations to supply the missing expertise.	30
C. The technical proposal includes a statement describing how the contractor will address organizational and other conflicts of interest for persons who are consultants or who work for organizations with potential conflicts.	5
2. QUALITY OF KEY PERSONNEL	30
A. The technical proposal clearly shows that the key personnel have the technical knowledge and experience required for the functions, activities, and tasks described in the Statement of Work.	15
B. The technical proposal adequately describes the staff hours needed for each task and that the proposer has dedicated adequate staff hours sufficient to complete the requirement according to the established timeline.	15
3. REASONABLENESS OF BUDGET	20
The technical proposal provides a clear and logical budget, with a reasonable time allocation for participating staff and reasonable rates based on the complexity of the project.	20
TOTAL POSSIBLE SCORE	100

5.11 Proposals and Final Product Will Belong to the University

Material submitted by a Bidder becomes the property of the University. To the extent such material is subject to the New Jersey Right to Know law, all proposals submitted to the University's Purchasing Department may become public documents.

5.12 Proposal Format

All proposals must be typed or written in ink. Required signature must be in ink, and any corrections (whiteouts, erasures, write-over's, etc.) must be initialed in ink.

5.13 Proposal Form

Bidder agrees that its proposal will be subject to these instructions, and in the event the university accepts the proposal, the Bidder will be subject to the General Terms and conditions of Purchase of Services and Merchandise as attached. Buyer reserves the right to reject any proposal made on terms and conditions additional to or different from the ones herein obtained.

5.14 Applicable Laws

Bidder must comply with all local, state and federal laws, rules and regulations applicable to the proposal and to the work to be done hereunder.

5.15 Rejection of Proposals

The University reserves the right to reject any or all proposals, or to accept a proposal in whole or in part if deemed to be in the best interest of the University to do so. The University also reserves the right to waive any informality in proposals received, to waive any technicalities overlooked in the proposal and judged as inconsequential by the University and in the best interest of the University, and to reject all non-conforming, non-responsive or conditional proposals.

5.16 Additional Information

The University reserves the right to seek clarification and additional information on any point in connection with the Bidder's information or other communication regarding this RFP. This process does not allow for changes, rather to simply clarify the proposal submitted.

5.17 Right to Cancel

The University reserves the right to cancel this RFP in part or in its entirety, without any obligation and for any reason. Should the University cancel or revise the RFP, the University will notify, in writing, all Bidders that have received the initial RFP.

5.18 Proposal Withdrawal

Bidders may change or withdraw a proposal at any time prior to the scheduled proposal opening by addressing a written communication to the address set forth in Section 2.3 Questions Regarding the RFP.

5.19 Confidentiality

As an instrumentality of the State of New Jersey, Rutgers is subject to the Open Public Records Act (OPRA) and has an obligation to keep its business dealings and transactions transparent. Consequently, the presumption applicable to all bids is that bid forms, proposals, documents and responses submitted to the University are releasable under OPRA. OPRA only provides for certain exemptions where documents in the possession of the University, as a public entity, are exempt from disclosure. If a Bidder believes that a certain, limited, portion of the information included in the bid proposal is a proprietary trade secret, that portion should be clearly marked "Confidential".

Please consult the OPRA website prior to identifying any portion of a bid "Confidential" <http://www.state.nj.us/opra>. It is not acceptable to simply label the entire bid proposal "Confidential."

5.20 Insurance

Neither the Supplier nor any subcontractor shall commence work until it has complied with all insurance requirements set forth in this RFP. (Exhibit D)

5.21 Taxes

The University is not subject to any Federal Excise Taxes or New Jersey Retail Sales and Use Tax, and the University is not required to hold any exemption certificate. The supplier shall not include excise taxes in computing prices or on invoices.

5.22 Additional Information

The University reserves the right to seek clarification and additional information on any point in connection with the Bidder's information or other communication regarding this RFP.

5.23 Errors and Omissions

The University reserves the right to reject any or all proposals if they are, in its sole discretion, judged unacceptable and to waive any technical or formal defect therein.

5.24 Assignment

The Supplier shall not, under any circumstances, assign, subcontract, transfer, or encumber its interest under the contract(s) without the express written consent of the University, which consent may be withheld at the University's discretion.

Violation of this provision by the agency may result in the immediate termination of the contract(s).

5.25 Notification

5.26.1 The University and the Supplier agree that any request, demand, authorization, direction, notice, consent, waiver, or other document provided or permitted by the agency for provision of collection services to be made upon, given, furnished, or filed with the University shall be in writing and shall be delivered by hand or by deposit in the certified mails of the United States, postage prepaid, in an envelope addressed as follows:

**Rutgers, The State University of New Jersey
Sara Vecchio, Senior Buyer
Administrative Services Building III
3 Rutgers Plaza
New Brunswick, NJ 08901-8559**

5.26.2 The University and the Supplier agree that either party may change the name and address of the recipients by notifying the other party to the Contract of such change in writing.

5.27 Contract Award

The University seeks to make an award to the Bidder(s) who best meet or exceed the University's requirements. The University reserves the right to award all, any part, or no part of the requirements set forth in this RFP. The University shall have authority to award orders or contract to the Bidder or Bidders that it determines in its sole discretion best meets all requirements.

6. CONTRACTUAL TERMS AND CONDITIONS

The enclosed Standard Terms and Conditions of Services and Merchandise, RFP 2482 and Bidders proposal response will become part of any Agreement consummated between the University and the Successful Bidder(s).

EXHIBIT A

BIDDER'S DECLARATION

This proposal is in response to Rutgers Request for a Proposals ("RFP 2482") for **Subcontractor to Investigate Approaches to Mitigate Solar Development Volatility**

Bidder agrees to perform in accordance with all provisions of the RFP documents and any addenda thereto, except as may be specifically stated in this proposal, at the prices set forth in their proposal.

Signature of the bidder attests that the bidder has read, understands, and agrees to all terms, conditions, and specifications set forth in this Request for Proposal unless otherwise stated in writing and submitted with the proposal and that Rutgers shall not be responsible for any errors or omissions on the part of the undersigned in preparing this proposal.

Authorized Signatory

Title

Company Name

Date

Company Address

Telephone Number

Federal Taxpayer I.D. Number

Email Address

DUNS Number

EXHIBIT B

N.J.P.L. 1975, C127 – MANDATORY AFFIRMATIVE ACTION

**Affirmative Action Regulations
Procurement, Professional and Service Contracts
New Jersey Statutes Administration**

N.J.S.A. 10:5-31 *et seq.*, N.J.A.C. 17:27

Note: Bidders are required to comply with the regulations of N.J.S.A. 10:5-31 *et seq.*, N.J.A.C. 17:27

Any contract awarded under this bid is subject to all regulations of the above laws and any vendor submitting a bid under this RFP agrees to comply with all provisions of the laws. The following are enclosed for reference or completion as applicable: Exhibit C and to Attachments 1, 2, and 3.

Specific requirements for the Contractor(s) to whom an award is made are listed below:

I. Contractors must furnish one of the following:

- a) A Certificate of Employment Information Report Approval (copy to be submitted with bid) issued by the State of New Jersey Affirmative Action Office and a signed copy of Exhibit B as an indication the Mandatory Language is part of the contract.

Or

- b) Evidence of a current federally approved Affirmative Action Program, photostatic copy of said approval and signed Exhibit B.

If “a” or “b” cannot be furnished and if an Employee Information Approval has not been applied for, the contractor is required to submit a signed Exhibit A and a completed Information Report Form AA 302. Form AA302 will be provided by Rutgers University, upon request.

Employment goals, as per enclosure, are incorporated into any contract as part of the mandatory contract language.

AFFIRMATIVE ACTION

PROCUREMENT, PROFESSIONAL AND SERVICE CONTRACTS

QUESTIONNAIRE

Instructions: Kindly complete questionnaire in the event your firm is awarded a contract (Purchase Order).

1. Our company has a current federally approved Affirmative Action Plan. If yes, submit a photostatic copy of said approval.

2. Our company has an approved State of New Jersey Affirmative Action Plan.
 - a) If yes, submit a photocopy of your State of New Jersey Certificate of Employee Information Report Approval.
 - b) AA302 previously furnished to Rutgers University on

I certify the above information is correct to the best of my knowledge.

Company Name:

Individual Name:

Signature:

Title:

Date:

Phone:

Toll-Free:

PLEASE COMPLETE THIS FORM AND RETURN WITHIN SEVEN (7) DAYS AFTER RECEIPT OF THE PURCHASE ORDER

N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27
Mandatory Affirmative Action Language

GOODS, PROFESSIONAL SERVICES AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et seq.**, as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with **N.J.A.C. 17:27-5.2**.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such

actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval

Certificate of Employee Information Report

Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at www.state.nj.us/treasury/contract_compliance)

The contractor and its subcontractor shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C.17:27**.

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

GOODS & SERVICES

EMPLOYMENT GOALS

Female Percentage	Minority Percentage	County
43%	20%	Atlantic
39%	6%	Bergen
38%	10%	Burlington
38%	13%	Camden
40%	10%	Cape May
42%	18%	Cumberland
42%	32%	Essex
36%	16%	Gloucester
42%	21%	Hudson
37%	5%	Hunterdon
42%	18%	Mercer
39%	6%	Middlesex
37%	11%	Monmouth
37%	5%	Morris
36%	5%	Ocean
41%	16%	Passaic
37%	15%	Salem
38%	5%	Somerset
36%	5%	Sussex
40%	15%	Union
38%	5%	Warren

EXHIBIT C

INSURANCE/ INDEMNITY REQUIREMENTS

(a) The selected Firm shall, at its own cost and expense maintain the following types of insurance with insurers licensed to do business in the State of New Jersey and approved by the University.

INSURANCE REQUIREMENTS

The Department of Risk Management's insurance requirements for vendors or Firms selected of the University are:

After the award and prior to the start of service, the Firm will provide evidence in the form of current Certificates of Insurance certifying the following applicable coverage. **Failure to furnish will result in service not being allowed to commence.**

WORKERS COMPENSATION COVERAGE AND EMPLOYERS' LIABILITY: Insurance covering all employees for Workers' Compensation in accordance with the laws of the State of New Jersey and a minimum limit of \$500,000 for Employers' Liability.

FIDELITY OR BLANKET CRIME COVERAGE: Insurance with a Minimum Limit of \$2,000,000.00,

PRIVACY AND SECURITY BREACH COVERAGE: Insurance with a Minimum Limit of \$5,000,000.00 to cover breaches of cardholder data for both Notification and third party liability.

AUTOMOBILE LIABILITY: Insurance for all owned, non-owned and hired vehicles with limits of liability of at least \$1,000,000 combined single limit per occurrence.

COMPREHENSIVE GENERAL LIABILITY: Insurance with a minimum of \$1,000,000 (combined single limit). **Rutgers – The State University must be named as an additional insured in this policy.** Such insurance shall be primary over other collectible insurance that may apply and shall include coverage for the following indemnification:

“The Firm agrees to hold harmless, indemnify and defend Rutgers – The State University, against any claims, demands or suits by any persons and against related damages, liabilities, costs and expenses (including attorneys' fees) which may arise out of the performance of the contract.”

All certificates shall contain the provision that the insurance shall not be cancelled for any reason, except after thirty (30) days written notice and indicate the nature of service performed.

(b) Upon signing any Agreement, the selected Firm shall deliver to University, certificates of insurance evidencing the coverage's required pursuant to subparagraph (a) above to University at address provided by University. Each certificate of insurance, with the exception of Worker's Compensation and Employer's Liability shall:

1. Name "Rutgers, The State University" as an additional insured and the certificate holder
2. Provide for a 30-day written notice of cancellation

(c) The insurance required pursuant to the Article shall be primary coverage; any insurance the University may purchase will be excess and non-contributory. The selected Firm's Comprehensive General Liability Insurance shall be written to cover claims incurred, discovered, manifested or made during or after expiration of any Agreement.

(d) The insurance requirements stated above in this insurance provision shall apply as written to any sub firm selected for the service specified. Accordingly, the selected Firm shall be fully responsible for having each sub firm selected or carrier provide documentation to the University's Controller for the insurance requirements slated herein.

Exhibit D

DECLARATION OF OWNERSHIP FORM

BIDDER'S NAME: _____

INSTRUCTIONS: This form must be completed in its entirety, signed by an authorized representative of the Bidder and submitted to Rutgers with the supplier's bid package. If Bidder has completed this form for previous RFP's with Rutgers, please update any necessary information in Section I or indicate "no change" and the RFP number you submitted the original form with, and complete sections II and III of this form. If there are any questions regarding the form, please contact the Buyer listed in the RFP package.

I. OWNERSHIP DISCLOSURE

1. Are there any individuals, corporations, or partnerships owning a 10% or greater interest in the firm? (If no, proceed to Section II; if yes please go to Question 2)

Yes No

2. Please provide the names and addresses of all individuals, corporations or partnerships owning a 10% or more interest in the firm. Attach additional pages if necessary.

NAME ADDRESSES

_____	_____
_____	_____
_____	_____
_____	_____

II. REPRESENTATIONS

1. Has any person listed in this form or its attachments ever been arrested, charged, indicted, pled guilty or been convicted in a criminal or disorderly persons matter by the State of New Jersey, any other Political subdivision state or the U.S. Government? (If yes, attach a detailed explanation for each instance.)

Yes No

2. Has any person or entity listed in this form or its attachments ever been excluded suspended, debarred or otherwise declared ineligible by any agency of government from bidding or contracting to provide services, labor, material or supplies? (If yes, attach a detailed explanation for each instance.)

Yes No

3. Are there now any criminal matters, suspension or debarment proceedings pending in which the firm and/or its officers and/or managers are involved? (If yes, attach a detailed explanation for each instance.)

Yes No

4. Has any federal, state or local license, permit or other similar authorization, necessary to perform the work applied for herein and held or applied for by any person or entity listed in this form, been suspended or revoked, or been the subject of any pending proceedings specifically seeking or litigating the issue of suspension or revocation? (If yes to any part of this question, attach a detailed explanation for each instance.)

Yes No

III. CERTIFICATION

I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge that Rutgers is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with Rutgers to notify Rutgers in writing or any changes to the answers or information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with Rutgers and that Rutgers at its option, may declare any contract(s) resulting from this certification void and unenforceable.

I, being duly authorized, certify that the information supplied above, including all attached pages, is complete and correct to the best of my knowledge. I certify that all of the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

Exhibit E



STANDARD TERMS AND CONDITIONS

1. DEFINITIONS:

“Supplier” shall mean any seller furnishing merchandise, services or other work to Rutgers.

“Merchandise” shall mean goods, products, materials or supplies.

“Services” shall mean design, engineering, installation, testing, evaluation, training, maintenance, repair, management, consulting and any other services necessary to fulfill Supplier’s obligations under a Purchase Order.

“Work” shall mean “Merchandise” and “Services” required under this Purchase Order.

“Specifications” shall mean the specifications, qualities, nature, type, properties, amounts and other descriptions of and requirements for the Work as stated in this Purchase Order.

“Subcontractor” shall mean Suppliers, suppliers, and subcontractors of any tier contracting directly or indirectly with Supplier for the performance of Work under the Purchase Order.

2. CONTRACT TERMS AND RULES OF PRECEDENCE: The following terms and conditions, together with any, quotes, bid documents, specifications or other documents as incorporated by reference or as amended in any subsequent writing from Rutgers, shall constitute the entire contract between Rutgers and Supplier and will be referenced as the “Purchase Order”. These terms and conditions shall prevail over any conflicting terms set forth by Supplier unless Rutgers approves in writing to the alternate terms and conditions. All terms and conditions of any Purchase Order shall prevail over the Uniform Commercial Code (UCC) Article 2.

3. OFFER AND ACCEPTANCE: The terms and conditions of the Purchase Order shall be deemed accepted if: (1) Supplier sends an acknowledgment or confirmation of the Purchase Order that agrees with the Purchase Order as to identification of Merchandise, quantity, price and delivery schedule; (2) Supplier commences work on the Purchase Order; (3) Supplier ships all or part of the Merchandise ordered in the Purchase Order; or (4) Supplier gives any other expression of acceptance of the terms and conditions hereof. Rutgers reserves the right to revoke the Purchase Order at any time before acceptance by Supplier.

4. CHANGES: No changes to a Purchase Order shall be made except in writing by Rutgers.

5. DELIVERY AND TITLE:

a) Time is of the essence in Supplier’s performance of the Purchase Order. Rutgers is relying upon the promised delivery date, installation and/or service performance set forth in Supplier’s quote, bid or proposal as material and basic to Rutgers’ acceptance. If Supplier fails to deliver or perform as and when promised, Rutgers, in its sole discretion, may cancel its order, or any part thereof, without prejudice to its other rights, return all or part of any shipment made, and charge Supplier with any loss or expense sustained as a result of such failure to deliver or perform as promised.

- b) Delivery of Merchandise required by the Purchase Order must be made in the quantities specified by Rutgers. Unless otherwise specified in the solicitation or Purchase Order, delivery shall be made F.O.B. delivery point during Rutgers' normal business hours. Unless otherwise agreed, items received must be new and in first class condition and, if type of materials normally packaged for protection and convenience in storage, shall be in proper container.
- c) Supplier certifies that it has all power and authority to convey ownership of the Merchandise to Rutgers in accordance with the Purchase Order, that the Merchandise is free and clear of all liens and encumbrances, and that Supplier has a good and marketable title to same.
- d) Title to and risk of loss shall remain with Supplier until receipt by Rutgers, subject to Rutgers' right of inspection and rejection in the event of nonconformance. For a reasonable time after delivery and before acceptance, Rutgers shall have the right to inspect and test the Merchandise. Rutgers shall notify Supplier if the Merchandise does not conform to the Purchase Order. At its sole option, Rutgers may return to Supplier any rejected Merchandise. Such rejected goods shall remain at Supplier's risk until returned to Supplier at Supplier's expense. Rutgers may, at its sole option, demand that Supplier promptly correct, repair or replace all nonconforming Merchandise at its sole expense. Payment for Merchandise by Rutgers prior to its inspection shall not constitute acceptance thereof and is without prejudice to any and all claims that Rutgers may have against Supplier.

6. WARRANTIES:

- a) **Merchandise:** Supplier expressly warrants that all Merchandise: (i) is in accordance with the specifications; (ii) is fit for the purpose for which similar materials and articles are ordinarily employed; (iii) is free from defects in materials and/or workmanship, and merchantable; (iv) was not manufactured and is not being priced or sold in violation of any federal, state or local law, including without limitation those relating to health and safety; (v) will perform or be performed according to industry standards; and (v) will not infringe or misappropriate the rights of any third party. These Warranties shall survive acceptance of and payment for the Merchandise and shall be in addition to any other warranties or service guarantee, express or implied, given by Supplier to Rutgers. Replaced and repaired goods shall be warranted for the remainder of the warranty period of six (6) months, whichever is longer.
- b) **Services:** Supplier represents, warrants and guarantees that any services provided under the Purchase Order shall be: (1) provided in accordance with the Specifications and correct and appropriate for the purposes contemplated in the Purchase Order; and (2) provided in a skillful, workmanlike and professional manner and consistent with generally accepted industry practices and procedures
- c) **Equipment:** Supplier represents that the equipment offered is the manufacturer's latest model in production; that parts are all in production and not likely to be discontinued; that trained mechanics are regularly employed to make necessary repairs to equipment in the territory from which the service request may emanate within a 48-hour period or within the time accepted as industry practice; and that during the warranty period the Supplier shall replace immediately any material which is rejected for failure to meet the requirements of the contract or purchase order.

7. CONFLICT OF INTEREST: Supplier warrants that there exists no actual, potential or appearance of conflict between Supplier and Rutgers. Furthermore, Supplier represents that it has not offered (and will not offer during the term of this Purchase Order) any compensation, reward, gift, favor, service, outside employment, reimbursement of expenses, loan, ownership interest, or anything else of value, to any officer, employee, or faculty member of Rutgers as an inducement to enter into this Purchase Order. Supplier will notify Rutgers in writing of any change in conditions that might give the appearance of a conflict of interest.

8. DEBARMENT: By acceptance of this Purchase Order, Supplier warrants that it is not debarred, suspended, proposed for debarment, or declared ineligible by any State or Federal agency.

9. INDEMNIFICATION: Supplier shall indemnify, hold harmless and defend Rutgers, its governors, officers, faculty, students, agents, and employees against any and all damages, suits, actions, claims, liabilities, losses, judgments, costs and expenses arising out of or relating to (i) any personal or bodily injury (including death) or property damage caused by Supplier's acts, omissions, or breach of this Purchase Order, (ii) any and all claims by Supplier's employees including those employees of any of its subcontractors, (iii) Supplier's use or possession of Rutgers property, or (iv) an infringement or misappropriation of any third party intellectual property or proprietary rights (including, without limitation, trademark, trade secret, copyright or patent) by the Services or Work Product. The indemnification obligation is not limited by but is in addition to the insurance obligations contained in this Purchase Order.

10. INSURANCE: Supplier shall, and cause its subcontractors of any tier, to maintain, at its own cost and expense, the insurance policies described herein and submit to Rutgers at execution of this Purchase Order evidence thereof in the form of current certificates of insurance certifying all coverage. All policies and certificates of insurance, except workers compensation, shall be endorsed to name Rutgers as an additional insured and provide for the insurer's waiver of subrogation in favor of Rutgers. Such coverage shall be deemed primary coverage irrespective of any insurance maintained by Rutgers. All policies and certificates shall contain the provision that the insurance shall not be cancelled for any reason, except after thirty (30) days written notice to Rutgers. The following insurance coverage is the minimum required and shall not relieve the Supplier of any liability where liability for injury, death, and property damage is greater than the insurance coverage

(1) Commercial General Liability Insurance covering bodily injury, death or property damage with minimum combined single limits of \$2,000,000.00 per occurrence and in the aggregate. This policy shall be endorsed to name the Rutgers as an additional insured and include broad form contractual liability, products liability and completed operations coverage.

(2) Worker's Compensation and Employer's Liability Insurance which provides statutory coverage in accordance with the Worker's Compensation Laws of the State of New Jersey and Employer's Liability coverage with limits of not less than:

- \$1,000,000 each employee for Bodily Injury by Accident
- \$1,000,000 each employee for Bodily Injury by Disease
- \$1,000,000 Bodily Injury by Disease policy limit

(3) Business Automobile Liability insurance covering all owned, non-owned and hired vehicles with a combined single limit of \$1,000,000 each accident and in the aggregate
Failure to maintain insurance coverage consistent with the provisions of this Section shall be considered a material breach of contract.

11. ENVIRONMENTAL COMPLIANCE: If applicable to the Work to be performed under this Purchase Order, prior to commencement of any Work, Supplier shall provide to Rutgers a list of all hazardous or potentially hazardous substances and associated Material Safety Data Sheets that may be used or generated in connection with the Work. Supplier and its Subcontractors shall comply with all applicable federal, state and local laws, ordinances, codes and regulations relating to the safety and protection of the environment including, but not limited to handling, protection, transportation and disposal of all hazardous substances and residual wastes.

12. PREMISES: Supplier shall confine its facilities, materials, tools and equipment in areas specified by Rutgers for that purpose. Supplier shall on a daily basis and on completion of Work, clean up and remove all waste materials, rubbish, tools and machinery and leave adjoining premises, driveways and streets free and clear from all obstructions. At the completion of the Work, Supplier shall return Rutgers' site to its original condition or as otherwise required in the scope of work.

13. PAYMENT: Rutgers shall pay undisputed invoices within forty five (45) days of receipt of invoice. If any portion of the Merchandise does not conform to the requirements of the Purchase Order, a corresponding portion of the price may be withheld by Rutgers until the nonconformity is corrected. No additional charges of any kind, including, but not limited to, charges for boxing, packing, transportation, insurance, or container charges, will be allowed unless specifically agreed to in writing by Rutgers.

14. TAXES: Rutgers is not subject to any sales or excise taxes. Taxes are not to be included in any quotations or invoices to Rutgers.

15. TERMINATION OF PURCHASE ORDER:

- a) **Termination for Convenience:** Rutgers may terminate the Purchase Order for convenience and without cause at any time, in whole or in part, upon no less than ten (10) days' written notice to Supplier. Rutgers shall pay Supplier a proportionate amount of the amount due to Supplier for work completed up to the effective date of termination, plus costs necessarily incurred directly as a result of the termination, subject to Rutgers right to audit Supplier's books and records.
- b) **Termination for Cause:** Rutgers may terminate the Purchase Order for cause if Supplier fails to perform in accordance with the terms and conditions of the Purchase Order, fails to perform the work with promptness and diligence, or is otherwise in breach of the terms of the Purchase Order, provided that prior to such termination Rutgers shall provide written notice of its intent to terminate and the reasons therefore. If, after the time provided in such notice for correcting non-performance, such non-performance remains uncorrected, Rutgers may, at its sole option, complete or contract with a third party to complete all of part of Supplier's obligations under the Purchase Order, and Supplier shall be liable to Rutgers for the costs of performing such obligations and any other damages resulting from Supplier's failure to perform.
- c) **Limitation of Damages:** Rutgers' liability and Supplier's recovery for any damages arising out of the cancellation of any part of the Purchase Order shall be limited to the lesser of: (1) the reasonable costs incurred by Supplier prior to such cancellation; or (2) the contract balance remaining for the Purchase Order. In no event shall Rutgers be liable to Supplier for consequential or incidental damages.

16. CONFIDENTIAL/PROPRIETARY INFORMATION: Except as otherwise required by applicable laws or regulations, including but not limited to, the New Jersey Open Public Records Act, the parties agree to, and to cause their respective affiliates to, keep confidential all non-public information relating to this Purchase Order.

17. USE OF NAME: Supplier shall not use Rutgers' name, insignia, or any logos or symbols of Rutgers, nor issue any publicity releases, including but not limited to, news releases and advertising, relating to this Purchase Order without the prior written consent of Rutgers.

18. TRADEMARK AND LICENSING: Supplier agrees to comply with all licensing and trademark policies and procedures for goods sold by Supplier with the Rutgers logo. Requirements may be found at <http://ur.rutgers.edu/trademark/index.shtml> All costs associated with this process will be borne by the Supplier.

19. FORCE MAJEURE: Neither party shall be liable for any failure or delay in performing its obligations hereunder, or for any loss or damage resulting there from, due to causes beyond its reasonable control, including but not limited to, acts of God, public enemy or government, riots, fires, natural catastrophe or epidemics. In the event of such failure or delay, the date of delivery or performance shall be extended for a period not to exceed the time lost by reason of the failure or delay; provided that Rutgers may terminate the Purchase Order if the period of failure or delay exceeds fifteen (15) days. Rutgers shall have no obligation to make any payments to Supplier

during the period of failure or delay. Each party shall notify the other promptly of any failure or delay in, and the effect on, its performance.

20. NOTICES: Any notice required under the Purchase Order shall be in writing and sent to Supplier and Rutgers at their respective addresses identified on the Purchase Order.

21. INDEPENDENT CONTRACTOR: Supplier shall operate as an independent contractor under the terms of this Purchase Order and not as an agent or employee of Rutgers.

22. LAWS; CODES; RULES; REGULATIONS: Supplier must comply with all local, state, and federal laws, rules and regulations applicable to this Purchase Order. Supplier and its subcontractors, at their own expense, shall obtain all necessary licenses and permits relating to performance of the work.

23. COMPLIANCE: Each party certifies that it shall not violate the federal anti-kickback statute, set forth at 42 U.S.C. 1320a-7b(b) ("Anti-kickback Statute"), or the federal "Stark Law," set forth at U.S.C. 1395nn ("Stark Law"), with respect to the performance of its obligations under this Agreement.

Where the sale of goods and services hereunder requires compliance with any state or federal anti-kickback statute, and/or any federal or state anti-referral law, including the "Stark Law", Supplier certifies that it has received a copy of the RBHS Code of Conduct and Rutgers' Stark Law and Anti-Kickback Statute Policies and Procedures. The RBHS Code of Conduct is available at <http://www.umdnj.edu/complweb/code/conduct.pdf>. Rutgers' Stark Law and Anti-Kickback Statute Policies and Procedures are available at <http://policies.rutgers.edu/10027-currentpdf> <http://policies.rutgers.edu/10024-currentpdf> <http://policies.rutgers.edu/10021-currentpdf>

24. NON-DISCRIMINATION IN EMPLOYMENT: Rutgers is an Equal Opportunity Employer. Supplier hereby represents that it is an Equal Opportunity Supplier and it and its subcontractors (if any) agree to comply with the laws and regulation pursuant to the New Jersey Law Against Discrimination, N.J.S.A. 10:5-1 et seq., the Civil Rights Act of 1964, Title VII, 42 U.S.C.A. S200e et seq., the Age Discrimination in Employment Act, 29 U.S.C.A. S621 et seq., the Americans with Disabilities Act, 42 U.S.C.A S12101 et seq., Executive Order 11246, the Vietnam Era Veterans Readjustment Assistance Act of 1974 and Section 503 of the Vocational Rehabilitation Act of 1973, Executive Order 13496 (29 CFR Part 471, Appendix A to Subpart A) as applicable, relating to the notice of employee rights under federal labor laws, and all other laws guaranteeing equal employment.

25. ADDITIONAL AFFIRMATIVE ACTION REQUIREMENTS: If this Purchase Order is for \$50,000 or greater, and is for a goods or service contract as defined by N.J.A.A 17:27 [Exhibit A](#) is incorporated herein by reference. If this Purchase Order is for \$50,000 or greater, and is a construction contract as defined by N.J.S.A. 17:27 [Exhibit B](#) is incorporated herein by reference.

Supplier is required to provide Rutgers with a copy of either a federally approved Affirmative Action program or a certificate of Employment Information Report. If neither form is available the Supplier must provide a copy of the completed [AA 302](#) or [AA201](#) form. Certificates must be mailed to University Procurement Services, Rutgers, The State University of New Jersey, Attn: Affirmative Action Administrator, 3 Rutgers Plaza, ASB III, 2nd Floor, New Brunswick, NJ 08901.

26. PREVAILING WAGE:

- a) **“Public Works” Projects:** Vendors awarded Purchase Orders by Rutgers for all “public works” projects, as defined by the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.26 et seq. (“PWA”), shall adhere to all requirements of the PWA. The PWA, N.J.S.A. 34:11-56.26(5), defines “public works” as “construction, reconstruction, demolition, alteration, custom fabrication, repair work, maintenance work, including painting and decorating.” Vendor guarantees that neither it nor any Subcontractor it might employ to perform Work covered by this Purchase Order has been suspended or debarred by the Commissioner of Labor and Workforce Development for violation of the provisions of the PWA. Vendor agrees that it shall comply with the provisions of the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48, where required. Certified payroll records shall be submitted to Rutgers c/o the project manager for the project for each payroll period within ten (10) days of payment of wages in accordance with N.J.A.C. 12:60-62. The Vendor is also responsible for obtaining and submitting all Subcontractors’ certified payroll records.
- b) **Building Services:** With respect to any Purchase Order for “Building Services,” the employees of the Vendor or its Subcontractor shall be paid prevailing wage for “Building Service” rates, as provided in N.J.S.A 34:11.56.60. N.J.S.A 34:11-56.59 defines “Building Services” as “any cleaning or building maintenance work, including but not limited to sweeping, vacuuming, floor cleaning, cleaning of rest rooms, collecting refuse or trash, window cleaning, engineering, securing, patrolling or other work in connection with the care, securing, or maintenance of an existing building.” The prevailing wage shall be adjusted annually during the term of this Purchase Order.

27. FEDERAL FUNDING: If this Purchase Order is funded by the federal government, Supplier is required to comply with all applicable federal laws, which are hereby incorporated by reference as if they were set forth herein, including, but not limited to all laws, regulations and rules. Procurements made with federal funds are subject to compliance with the standards and requirements as set for in 2CFR, Part 215, OMB Circular A-133, Paragraph 5. All procurement requirements contained in the above Circular are incorporated herein by reference.

28. ARRA FUNDING: If this Purchase Order is funded from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, Supplier is required to comply with all applicable laws, hereby incorporated by references as if they were set forth herein including, but not limited to the Davis-Bacon Act and Buy American Act.

29. SUBCONTRACTING OR ASSIGNMENT: This Purchase Order may not be subcontracted or assigned by Supplier, in whole or in part, without the prior written consent of Rutgers’ University Procurement Services Department. Any such attempt at assignment or delegation without Rutgers written consent shall be void. Nothing in this Purchase Order shall be construed as creating any contractual relationship between any subcontractor and Rutgers, nor shall this Purchase Order be construed as conveying any third party beneficiary rights on any subcontractor.

30. GOVERNING LAW; JURISDICTION: This Purchase Order shall be governed by the laws of the State of New Jersey, Each party irrevocably submits to the exclusive jurisdiction of the courts of the State of New Jersey and the United States District Court for the District of New Jersey for the purpose of any suit, action, proceeding or judgment relating to or arising out of the Purchase Order.

31. SEVERABILITY: If any provision(s) of the Purchase Order is found by a New Jersey court of competent jurisdiction to be illegal or otherwise unenforceable, such provision(s) shall be deemed not to be a part of the Purchase Order and the remaining provisions shall remain in full force and effect.

32. NON-WAIVER: The failure of Rutgers in any one or more instances to insist upon the performance of any of the terms or conditions of this Purchase Order or to exercise any right hereunder shall not be construed as a waiver or relinquishment of the future performance of any such terms or conditions or the future exercise of any such right.

33. BANKRUPTCY: In the event the Supplier files for bankruptcy protection, this Purchase Order is automatically null and void, and is terminated without further notice.

34. MAINTENANCE OF RECORDS: Supplier shall maintain records for Merchandise and Services furnished under this Purchase Order for a period of three (3) years from the date of final payment. Such records shall be made available to Rutgers upon request for the purpose of conducting an audit.

EXHIBIT F

CEEEP Literature Review

SOLAR VOLATILITY LITERATURE REVIEW (Vendors May Supplement This Literature Review As Appropriate)

These documents can be assessed at the below web link:

<http://policy.rutgers.edu/ceep/solarRFP/>

I. ACADEMIC ARTICLES

- a) Bird, Lori, Jenny Heeter, and Claire Krercik. "Solar Renewable Energy Certificate (SREC) Markets: Status and Trends." *National Renewable Energy Laboratory* (n.d.): Web. An overview assessment of the strategies used to develop and maintain SREC programs across the country- these markets are relatively young and compliance has proved difficult in recent years
- b) Felder, Frank, and Colin Loxley. "The Implications of a Vertical Demand Curve in Solar Renewable Portfolio Standards." *Center for Energy, Economic and Environmental Policy at Bloustein School of Planning and Public Policy, Rutgers University and Asset Management & Centralized Services Public Service Electric & Gas* (2012). Identifies the difficulties experienced in the NJ SREC market, and proposes several fixes such as a floor price, increasing the solar requirement etc.
- c) Flynn, Hilary, Dwayne Breger, and Andrew Belden. "System Dynamics Modeling of the Massachusetts SREC Market." *Sustainability 2* (2012): 2747-761. Google Scholar. Web. 7 Aug. 2013. <http://www.mdpi.com/2071-1050/2/9/2746> (Cannot save text) This article takes a look at the auction based price support mechanism, identifying that system dynamics can be helpful however there are risks to the market.
- d) Gaul, Chip, and Sanya Carley. "Solar Set Asides and Renewable Electricity Certificates: Early lessons from North Carolina's Experience with Its Renewable Portfolio Standard." *Energy Policy 48* (2012): 460-69. Google Scholar. North Carolina's experience is compared to NJ and PA to understand why the RPS has only enabled a few large solar power producers to compete with utility companies to finance, install, and operate solar generating systems.
- e) Hart, David. "Making, Breaking, and (partially) Remaking Markets: State Regulation and Photovoltaic Electricity in New Jersey." *Energy Policy 38* (2010): 6662-6673. Google Scholar. Web. NJ has experiences a boom and bust SREC market, this article looks at NJs experience along the way.

- f) Shrimali, Gireesh, and Sumala Tirumalachetty. "Renewable Energy Certificate Markets in India—A Review." *Renewable and Sustainable Energy Reviews* 26 (2013): 702-16. *Google Scholar*. Web. 7 Aug. 2013. Although India has great potential and aggressive renewable energy targets, the country's renewable energy market has not experienced the intended growth. The lack of growth can be attributed to ineffective REC market design, i.e. uncertain demand because of a lack of long term targets or price signals and unclear compliance penalties.

II. CASE STUDIES

A. New Jersey

a) State Documents

a. Legislation

1. S.B. 1925 Solar Act of 2012 enacted to Act of 2012- enacted to address low SREC prices due to an oversupplied solar market and implement policies set forth in the State Energy Master Plan.
2. S.B. 3525 Solar Advancement Act of 2010 – an attempt to provide more support for the solar market by adjusting the SACP levels, SREC requirement changed to GWh rather and a percentage, increased Solar Carve Out RPS etc.

b. Regulation and Agency Documents

3. NJ BPU Office of Clean Energy Total State Retail Sales Number Announcement Correction for Solar RPS Compliance on 10-17-13.
4. NJ BPU Office of Clean Energy EY 13 Solar Compliance Final Update as of 10-4-2013.
5. New Jersey Board of Public Utilities. Office of Clean Energy. "Request for Public Comment and Status of Proceeding to Investigate Approaches to Mitigate Solar Development Volatility." Solar Act Proceedings Achieve. . 6-11- 2013.
6. New Jersey Office of Clean Energy – Renewable Energy Committee Meeting Market Manager Presentations on Solar Act: Mitigating Solar Volatility 11-9-12 to 10-9-2013.
 - a. Market Manager Presentation on 11-9-12
 - b. Market Manager Presentation on 12-11-12
 - c. Market Manager Presentation on 1-1-13
 - d. Market Manager Presentation on 2-14-13
 - e. Market Manager Presentation on 3-13-13
 - f. Market Manager Presentation on 4-9-13
 - g. Market Manager Presentation on 5-14-13
 - h. Market Manager Presentation on 6-11-13
 - i. Market Manager Presentation on 10-9-13

7. NJ BPU Office of Clean Energy EY 12 Solar Compliance Update as of 9-28-2012.
8. NJ Board of Public Utilities Solar Transition Working Group Straw Proposal on the Solar Transition Next Steps for EDC SREC Programs 3-6-12.
9. NJ BPU Office of Clean Energy EY 11 Solar Compliance Update as of 9-30-2011.
10. New Jersey BPU Office of Clean Energy- Renewable Portfolio Standard Rules 2010 Annual Report.
11. New Jersey BPU Office of Clean Energy- Renewable Portfolio Standard Rules 2009 Annual Report

b) Stakeholder Documents

12. Public comments on the implementation of the Solar Act received by November 7-1-13 Compiled and listed on the BPU NJ Office of Clean Energy website.
13. NJ Solar Grid Supply Association presentation on Mitigating Solar Development Volatility Analysis of the NJ Solar Project Pipeline at the Renewable Energy Committee Meeting. Trenton. 4 -9- 2013.
14. Mid-Atlantic Solar Energy Industries Association presentation on MSEIA Supply/Demand Model: Implications for Solar Development Volatility. 4-9-13 Renewable Energy Committee Meeting. Trenton. 4-9-2013.
15. Public comments on Mitigating Solar Development Volatility Act received by February 7, 2013. Compiled and listed on the BPU NJ Office of Clean Energy website.
16. Additional comments from Alpha Inception, LLC on Solar Development volatility and market structure received February 14, 2013.
17. Public comments on the implementation of the Solar Act received by November 23, 2012. Compiled and listed on the BPU NJ Office of Clean Energy website.

c.) Graphics and Data

18. New Jersey Board of Public Utilities, Office of Clean Energy Solar Project Pipeline and Installations as of 9-18-13.
19. New Jersey New Jersey Board of Public Utilities, Office of Clean Energy Solar Installations by Interconnection Type as of 8-21-13.
20. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for July 2012 to November 2013.
21. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for July 2011 to November 2012.
22. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for July 2010 to November 2011.
23. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for Overlapping Reporting Years July 2011 to November 2011.

24. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for Overlapping Reporting Years July 2010- September 2010.
25. New Jersey Board of Public Utilities, Office of Clean Energy SREC Prices for July 2009 to September 2010.

B. Massachusetts

a.) State Documents

a. Legislation

26. Green Communities Act of 2008 – The initial act to establish a renewable energy and energy efficiency program in the commonwealth.

b. Regulation and Proposed Rule Amendments.

27. 225 CMR 14.00 RPS Class I Regulation 10-1-13 final rule amendments after Post 400 MW cap process.
28. 225 CMR 14.00 RPS RPS Solar Carve-Out Construction Timeline Extensions Draft - guidance for Solar Carve-Out Generation Units that have not received the authorization to interconnect or permission to operate from their local distribution company by September 27, 2013.
29. 225 CMR 14.00 RPS Class I Regulation 6-28-13 Tracked Changes – initial emergency rule amendments changes to address the Post 400 MW cap.
30. 225 CMR 14.00 RPS Class I Regulation 4-12-13 Tracked Changes – initial emergency rule amendments changes to address the Post 400 MW cap.
31. 225 CMR 14.00 RPS Class I Regulation 2-14-13 Tracked Changes – initial emergency rule amendments changes to address the Post 400 MW cap.
32. 225 CMR RPS Original Rules Passed

c. Agency Documents

33. Reports prepared in support of the DOER's Solar Policy Program and post 400-MW policy analysis under a competitive contract awarded to by Cadmus, Meister Consultants Group, and Sustainable Energy Advantage, LLC on September 30, 2013.
 - a) DOER Task 1: Evaluation of Current Solar Costs and Needed Incentive Levels across Sectors.
 - b) DOER Task 2: Comparative Evaluation of Carve-out Policy with Other Policy Alternatives.
 - c) DOER Task 3a: Evaluation of the 400 MW Solar Carve-out Program's Success in Meeting Objectives.
 - d) DOER Task 3b: Analysis of Economic Costs and Benefits of Solar Program.
 - e) DOER Task 4: Comparative Regional Economic Impacts of Solar Ownership/ Financing Alternatives.

34. Massachusetts Solar Market Stakeholder Meeting Presentation 8-12-2013 to review and discuss the RPS Solar Carve-Out II Updated Proposed Design. Reviews solar market data and design objectives.
35. Final Determination of CY 2014 Total Compliance Obligation (per 225 CMR 14.07(2)(d)) (Revised on August 1st, 2013) Details the calculation for the obligation.
36. Massachusetts Solar Market Stakeholder Meeting 6-7-2013 on the Post MW Solar Program Policy Design – Stakeholder Briefing Presentation.
37. SREC Emergency Regulation Public Hearing Recordings from 7-26-13 (1-3)
38. Massachusetts Solar Market Stakeholder Meeting 3-22-2013 on the Post MW Solar Program Policy Design.
39. Department of Energy Resource Email Announcements to Stakeholders on the stakeholder process for the Post 400 MW program design from May 2013- September 2013.
40. Department of Energy Resources RPS Solar Carve Out Assurance of Qualification Guideline updated on 5-22-13 to provide timeline potential generation unit with they will receive qualification under 225 CMR 14.00.
41. Solar Carve Out Credit Auction Clearing House announcement – auction at NEPOOL GIS is now open for 2011 vintage SRECs, unsold SRECs during the final 31 days of each Compliance Year’s 4th quarter trading period (May 16-June 15).
42. Massachusetts Solar Carve Out SRECS Overview and Program Basics Presentation on 12-18-2012. Describes the policy design, program growth and current market status.
43. Massachusetts RPS and APS Annual Compliance Report for 2011 4-9-2013 identifying that the Solar Carve Out obligation in 2011 fell short by 80 MW.
44. Massachusetts RPS and APS Annual Compliance Report for 2010 1-11-2012 identifying that the Solar Carve Out obligation in 2011 fell short by 34 GWh.
45. Solar Carve Out Credit Auction Clearing House announcement – auction at NEPOOL GIS is now open for 2010 vintage SRECs, unsold SRECs during the final 31 days of each Compliance Year’s 4th quarter trading period (May 16-June 15).

b.) Stakeholder Documents

46. Public Comments received on Guidelines for RPS Solar Carve-Out Construction Timeline Extensions 10-7-13.
47. Massachusetts Solar Market Stakeholder Meeting Comments on the SREC II Proposed Program Design, compiled and posted on the Department of Energy Resource website 8-12-13.
48. Massachusetts Solar Market Stakeholder Meeting Comments on Post 400 MW Post MW Program Design, compiled and posted on the Department of Energy Resource website 6-7-13.

49. Massachusetts Solar Market Stakeholder Meeting Comments on Post 400 MW design and Current Market Status, compiled and posted on the Department of Energy Resource website 3-22-13.
 50. Massachusetts General Court Joint Committee on Telecommunications, Utilities and Energy Comments on Proposed Changes to the RPS Solar Carve Out Program (225 CMR 14.00) 4-25-13.
- c.) Graphics and Data
51. Knollwood Energy Selling Prices for SRECs from 2010 to 2013 for each quarter sale.
 52. Massachusetts Flett Exchange Graph – SREC Settlement Prices 1/7/10 to 4/26/12.
 53. Massachusetts RPS Price Support Chart – Chart that explains the sets and process for the SREC auction mechanism.
 54. Massachusetts Compliance - A graph that shows the RPS Class I Compliance from 2003 to 2010 (taken from the RPS Annual Report).
 55. MA Department of Energy Resources Solar Carve-Out Units – A list of all the RPS Solar Carve Out qualified renewable generation units, updated on Oct. 16, 2013.
 56. MA Department of Energy Resources SREC- table Minted – A table of the RPS Solar Carve Out SRECs that are minted and expected from 2010 to 2013.

C. Pennsylvania

- a.) State Documents
 - a. Legislation
 57. Massachusetts House Bill No. 100 2013 (proposed) Session- Referred to Environmental Resources and Energy Committee on 2-25-13. Increased the RPS to 15% by 2022, and the solar carve out to 1.5% by 2022. Adjusts the ACP- decreasing from \$250 in 2014 to \$50 in 2021.
 58. Massachusetts Senate Bill No. 1350 (proposed) 8-14-2012 - Accelerates the existing Pennsylvania Renewable Portfolio Standard, Establishes a cap on the SREC prices through a set Alternative Compliance Payment (ACP) of \$285 per SREC out to 2019, Does not include a clause to prevent qualified out of state photovoltaic facilities from selling SRECs in the Pennsylvania market.
 59. House Bill No. 1580 (proposed) Caps the Alternative Compliance Payment (ACP) for solar at \$325, Offsetting early-year increases in the solar requirement with decreases in later years and extending the SREC program through 2026, Ensuring that utilities cannot procure any AEPS resource above the ACP price.
 60. House Bill No. 1128 (proposed) September 2010- Introduced a fixed alternative compliance payment (ACP) for the Solar PV portion of the Alternative Energy Program.

61. Alternative Energy Portfolio Standards Act (S.B. 1030) (Enacted) 11-20-2004 requires that electric distribution companies and electric generation suppliers include a specific percentage of electricity from alternative resources in the generation that they sell to Pennsylvania customers.
- b. Regulation and Rule Amendments
 62. Final Policy Statement Order in Support of Pennsylvania Solar Projects- September 2010 The proposed policy statement sought to provide longer term revenue stability likely needed to support both small-scale and large-scale solar development, and to address other barriers.
- c. Agency Documents
 63. Pricing for Alternative Energy Credit Sales from 2007-2013.
 64. 2011 Annual Report Alternative Energy Portfolio Standards Act of 2004 –October 2012.
 65. 2010 Annual Report Alternative Energy Portfolio Standards Act of 2004 –August 2011.
 66. Policy Statement in Support of Pennsylvania Solar Projects- outline a process to provide more solar alternative energy credit price certainty and to reduce or eliminate barriers to solar project development to further the goals of the Commonwealth’s Alternative Energy Portfolio Standards Act (AEPS Act). 12-3-2010.
 67. Executive Summary for the Solar Working Group Documents- Summarizes the issues resolved and issues still open to discussion. 6-21-2010.
 68. 2008-2009 Annual Report Alternative Energy Portfolio Standards Act of 2004 –June 2010.
 69. 2007 Annual Report Alternative Energy Portfolio Standards Act of 2004 –May 2008.
- b.) Stakeholder Documents
 70. Pennsylvania Atlantic Solar Energy Industry Association – Pennsylvania Update Presentation (MSEIA 1st Quarterly Meeting 2013) on 1-30-2013.
 71. First Energy Public Comments on the Policy Statement in Support of the Pennsylvania Solar Projects received on 3-8-2010.
 72. Mid-Atlantic Solar Energy Industries Association and Pennsylvania Atlantic Solar Energy Industries Association Public Comments on Proposed Policy Statement on Pennsylvania Solar Projects received on 3-8-2010.
 73. Massachusetts Office of Consumer Advocate Public Comments on the Policy Statement in Support of Pennsylvania Solar Projects received on 3-8-2010.
 74. Sustainable Energy Fund Public Comments on the Policy Statement in Support of Pennsylvania Solar Projects received on 3-8-2010.
 75. The Solar Alliance Public Comments on the Policy Statement in Support of Pennsylvania Solar Projects received on 3-5-2010.

76. Solar Energy Industries Association Fact Sheet for Pennsylvania 2-12-13.

c.) Graphics and Data

77. Pennsylvania Utility Commission, Alternative Energy Program Requirements for Reporting Years 2007 to 2021. (Taken from PUC website)

78. Flett Exchange graph showing Pennsylvania SREC Settlement prices from 2-28-2010 to 9-23-2013.

79. PJM-EIS Solar Weighted Average Price for SRECs from November 2009 to October 2013.