

Center for Energy, Economic & Environmental Policy www.policy.rutgers.edu/ceeep

732-932-5680

Rutgers, The State University of New Jersey

33 Livingston Avenue, First Floor

Fax: 732-932-0394

TO:	Scott Hunter, New Jersey Board of Public Utilities
FROM:	Jaclyn Trzaska, Center for Energy, Economic & Environmental Policy
DATE:	August 4, 2011
RE:	Small Wind Project Data Collection

## **Project Summary**

In January of 2011, the Board of Public Utilities (BPU) requested that the Center for Energy, Economic, and Environmental Policy (CEEEP) at Rutgers, The State University of New Jersey acquire onshore wind resource data from New Jersey Anemometer Loan Program participants. The project included the collection, formatting, and compilation of the data, as well as composition of a final report and the establishment of web-based centralized data center to make the small wind information available online. Once checked for formatting errors and outlying data points, the data was to be uploaded onto the New Jersey Energy Data Center's website (<u>http://www.njenergydatacenter.org/</u>) to supplement the electricity, natural gas, petroleum, energy efficiency/renewable energy, and economic/demographic data for New Jersey and other key states.

## Methods

In order to obtain the requested anemometer data, we contacted Loan Program partners Rutgers, the State University of New Jersey, Rowan University, Richard Stockton College, Ocean County College, and the College of New Jersey by email. We relied on the contact information listed for the Anemometer Loan Program on the New Jersey Office of Clean Energy's website, some of which was not up to date. For those individuals who did not respond, we left voicemails and attempted to identify alternative contacts. Due to the limited number of answers we received, we reached out to commercial and residential anemometer partners, also with little success. At the present time, we have only received anemometer data from Ocean County College. The data was processed using NRG Systems utility program, as instructed by Chris McFarland of Ocean County College. We then reformatted them by converting the database files into text files, imported them into excel spreadsheets, and organized them by year and location.

## **Results and Challenges**

There were considerable obstacles in collecting the data from the Loan Program partners. Several of the university contacts did not respond. Of those that did respond, some were reluctant to share their information and others were unable to dedicate the necessary time to locating and downloading the data sets. Inconsistently recorded intervals, irregularities in the data, and missing information added to the challenge of analysis and raised questions about the accuracy of the labels and the reliability of the records.

Ocean County sites 1601 (Ocean County College) and 1602 (Beachwood Town Hall) were the only sites from which we were able to obtain data. The Ocean County anemometer information we received was recorded in ten minute intervals with time and date stamps. The readings were documented in 12 channels: channel one through six are anemometers, and channel seven through 12 are wind vanes. There are significant lapses of varying lengths in the records (see Figure 3), as well as inconsistencies that indicate mislabeled or mis-recorded data. The heights for all 12 of the channels, for example, were listed as "0" (see Figure 2). At times, channel readings suggest abnormally large variations and/or device malfunctions (see Figure 3). Channels often recorded an apparent default reading for days at a time, implying that the consistency is an error in measurement or recording. In addition, limited logger, site, and sensor information was provided for both data sets, but site location, elevation, or latitude and longitude were not recorded (see Figures 1 and 2). Despite attempts to clarify these irregularities, we were unable to get more detailed information about the channels, gaps, or measurements.

In addition, once the data was organized in excel it became apparent that it would be difficult to draw conclusions because of the significant uncertainty surrounding the data. Furthermore, there may be additional recorded data, but we were unable to obtain access to it. While the Ocean County Anemometer Program website explains that the data is collected monthly, our correspondences with the contact there indicated that no data had been collected for one of the sites for 2011.

4						
5	Logger Information					
6	Model #	3090				
7	Serial #	21602				
8	Hardware Rev.	012-010-0	00			
9						
10	Site Information	-				
11	Site #	1602				
12	Site Desc	New Site				
13	Project Code	New				
14	Project Desc	New Proje	ect			
15	Site Location					
16	Site Elevation					
17	Latitude	N 000° 00	.000'	)		
18	Longitude	W 000° 00	.000'			
19	Time offset (hrs)	÷				
20						

Figure 1: Logger and Site Information (Excel)

72		
73	Channel #	6
74	Туре	1
75	Description	NRG #40 Anem. m/s
76	Details	
77	Serial Number	SN:
78	Height	
79	Scale Factor	0.765
80	Offset	0.35
81	Units	m/s
82		
83	Channel #	7
84	Туре	3
85	Description	#200P Wind Vane
86	Details	
87	Serial Number	SN:
88	Height	
89	Scale Factor	0.351
90	Offset	0
91	Units	deg
92		

Figure 2: Sensor Information (Excel)

Date & Time Stamp	CH1Avg	CH1SD	CH1Max	CH1Min	CH2Avg	CH2SD	CH2Max	CH2Min	CH3Avg	CH3SD	CH3Max	CH3Min
April												
4/29/2009 5:00	) 15.2	0.1	15.3	14.9	15.2	0.1	15.3	14.9	15.2	0.1	15.3	14.9
4/29/2009 5:10	15.2	0.1	15.3	14.9	15.2	0.	15.3	14.9	15.2	0.1	15.3	14.9
4/29/2009 5:20	) 15.2	0.1	15.3	14.9	15.2	0.1	15.3	14.9	15.2	0.1	15.3	14.9
4/29/2009 5:30	) 15.2	0.1	15.3	14.9	15.2	0.1	15.3	4.9	15.2	0.1	15.3	14.9
4/29/2009 5:40			15.3	14.9	15.2	0.1	15.3		15.2	0.1		14.9
4/29/2009 5:50		7.3	15.3	0.4	6.3	7.3	15.3		6.3	7.3		0.4
7/27/2007 0.00		0		0.4	0.4	0	0.4		0.4	0		0.4
4/29/2009 6:10		0.1	1.1	0.4	0.4	0.1	1.1		0.4	0.1		0.4
4/29/2009 6:20		0		0.4	0.4	0	0.4	0.4	0.4	0		0.4
4/29/2009 6:30		0		0.4	0.4	0	0.4	0.4	0.4	0		0.4
4/30/2009 5:50		0		0.4	0.4	0	0.4	0.4	0.4	0		0.4
October	CH1Avg	CH1SD	CH1Max	CH1Min	CH2Avg	CH2SD	CH2Max	CH2Min	CH3Avg	CH3SD	CH3Max	CH3Min (
10/90/2009 10:10		0		0.4	0.	0	0.4		0.4	0		0.4
10/30/2009 10:20			4.6	0.4	0,4	0	0.4		2.4	0	0.4	0.4
10/30/2009 10:30			6.5	1.5	04	0	0.4		0.4	0		0.4
10/30/2009 10:40		1.1	6.5	0.4	04	0	0.4		0.4	0		0.4
10/30/2009 10:50		1.7	5.7	0.4	04	0	0.4	0.4	0.4	0		0.4
10/30/2009 11:00		1.1	6.1	1.1	0.4	0	0.4	0.4	0.4	0		0.4
10/30/2009 11:10		0.8	4.6	1.1	0.4	0	0.4		0.4	0		0.4
10/30/2009 11:20		0.8	4.9	1.5	0.	0	0.4	0.4	0.4	0		0.4
10/30/2009 11:30	) 3	0.9	5.7	1.1	0.4	0	0.4	0.4	0.4	0		0.4
			<b>5</b> 0	0.7				0.4				0.4
10/30/2009 11:40		0.8	5.3	0.7	0.4	0	0.4	0.4	0.4	0		0.4
10/30/2009 11:40 10/30/2009 11:50	3.3	0.8	5.3	1.1	0.4	0	0.4	0.4	0.4	0	0.4	0.4
10/30/2009 11:40 10/30/2009 11:50 10/30/2009 12:00	) 3.3 ) 3	0.8 0.8	5.3 4.9	1.1 1.1	0.4 0.4	0	0.4	0.4 0.4	0.4 0.4	0	0.4 0.4	0.4 0.4
10/30/2009 11:40 10/30/2009 11:50 10/30/2009 12:00 10/30/2009 12:10	) 3.3 ) 3 ) 4	0.8 0.8 1.1	5.3 4.9 6.8	1.1 1.1 1.1	0.4 0.4 0.4	0	0.4 0.4 0.4	0.4 0.4 0.4	0.4 0.4 0.4	0	0.4 0.4 0.4	0.4 0.4 0.4
10/30/2009 11:40 10/30/2009 11:50 10/30/2009 12:00 10/30/2009 12:10 10/30/2009 12:20	) 3.3 ) 3 ) 4 ) 3.4	0.8 0.8 1.1 1.1	5.3 4.9 6.8 6.1	1.1 1.1 1.1 1.1	0.4 0.4 0.4 0.4	0 0 0 0 0	0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4	000000000000000000000000000000000000000	0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4
10/30/2009 11:40 10/30/2009 11:50 10/30/2009 12:00 10/30/2009 12:10 10/30/2009 12:20 10/30/2009 12:30	) 3.3 ) 3 ) 4 ) 3.4 ) 4.3	0.8 0.8 1.1 1.1 0.9	5.3 4.9 6.8 6.1 6.1	1.1 1.1 1.1 1.1 2.3	0.4 0.4 0.4 0.4 0.4	0 0 0 0 0 0 0 0 0	0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4	0 0 0 0	0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4
10/30/2009 11:40 10/30/2009 12:00 10/30/2009 12:00 10/30/2009 12:10 10/30/2009 12:30 10/30/2009 12:30	) 3.3 ) 3 ) 4 ) 3.4 ) 4.3 ) 4.3	0.8 0.8 1.1 1.1 0.9 0.8	5.3 4.9 6.8 6.1 6.1 6.1	1.1 1.1 1.1 2.3 2.3	0.4 0.4 0.4 0.4 0.4 0.4	000000000000000000000000000000000000000	0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4 0.4	0 0 0 0 0	0.4 0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4 0.4
10/30/2009 11:40 10/30/2009 11:50 10/30/2009 12:00 10/30/2009 12:10 10/30/2009 12:20 10/30/2009 12:30	) 3.3 ) 3 ) 4 ) 3.4 ) 4.3 ) 4.3 ) 4.3	0.8 0.8 1.1 1.1 0.9 0.8 0.9	5.3 4.9 6.8 6.1 6.1	1.1 1.1 1.1 1.1 2.3	0.4 0.4 0.4 0.4 0.4	0 0 0 0 0 0 0 0 0	0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4	0 0 0 0	0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	0.4 0.4 0.4 0.4 0.4 0.4

# **Final Steps**

The funds for this assignment have been fully expended, so CEEEP will contact Anemometer Loan Program partners one additional time to request available wind data and will attempt to clarify the known issues with the Ocean County College wind data and remedy any errors.



CHRIS CHRISTIE Governor

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State of New Jersey Board of Public Utilities PO Box 350 Trenton, NJ 08625-0350 Phone (609)777-3328 Fax (609)777-3336 Lee A. Solomon President Tel: (609)777-3322

March 28, 2011

Frank A. Felder Rutgers The State University Center for Energy, Economic & Environmental Policy 33 Livingston Avenue, First Floor New Brunswick, New Jersey 08901

Dear Frank:

The Board of Public Utilities, Office of Budget and Finance(BPU), on behalf of the Office of Clean Energy, is pleased to forward to your attention the Contract for the project entitled "Collection of Wind Resource Data from Anemometer Equipment and the Development of a Web Based Centralized Data Center". Release of the Contract totaling \$4,889.23 serves to establish a commitment on the part of BPU, to satisfy expenses incurred by Rutgers University, Center for Energy, Economic & Environmental Policy(University), in performing the services associated with the Contract Scope of Work/Proposal.

In this connection, be apprised that the following enclosed documents represent the Contract between the BPU and the University:

- 1. Project Proposal entitled "Collection of Wind Resource Data from Anemometer Equipment and the Development of a Web Based Centralized Data Center".
- 2. Standard Terms & Conditions, Pages 1-3.
- Funding has been encumbered via a Agency Contract Order(AO) in accordance with State of New Jersey OMB Circular Letter No.: 05-14-OMB(copy enclosed). A copy of the New Jersey Comprehensive Financial System(NJCFS) printout of the AO(No. 2014600066) is enclosed.

Enclosed for your convenience is an Attachment describing the Administrative Requirements through the life of the Contract. In addition, enclosed is a New Jersey State Payment Voucher, which has been partially completed with information specific to the Contract. The University is to submit a voucher together with monthly Grant Budget Reports(GBR's) and Payroll Distribution Reports(PDR's). The voucher together with the level of financial documentation described in the Attachment is to be forwarded to my attention at the following address: Board of Public Utilities; Office of Budget and Finance; 44 South Clinton Avenue-9th Floor ; PO Box 350; Trenton, NJ 08625-0350.The Board of Public Utilities looks forward to working closely with Rutgers University in conducting the Contract activities. If I can be of assistance, please call me at (609)777-3328.

Yours Truly, Jun / US. Bruce J. Goldberg

Administrative Analyst

Enclosures

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c: Alma Rivera, BPU Project Manager Dee Evans, Rutgers Office of Research and Sponsored Programs Maria L. Salviejo, Rutgers Division of Grant and Contract Accounting

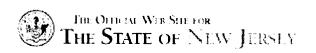
#### ATTACHMENT A ADMINISTRATIVE REQUIREMENTS UNDER CONTRACT

- 1. The Contract work period is: January 1, 2011 through September 30, 2011. Extensions to the work period, at no-cost, shall NOT be granted. For no-cost time extensions to be entertained by the BPU, we must first amend the Federal Grant with the USDOE for the purpose of extending the grant, at no-cost. Only then would BPU have the authority to grant no-cost time extensions to this grant. If required, the University must initiate a written request to Ms. Rivera at the earliest possible date.
- 2. The University is to submit quarterly payment requests, no later than thirty(30) days after expiration of the quarter. With the contract work period scheduled for anywhere from 6-9 months, the University must submit quarterly payment requests based on the date in which it initiated the Contract Scope of Work. Enclosed are State Vouchers which must accompany each payment request. Information placed on the voucher should be limited to that reflected on the voucher. Additional detail may be included on cover and supporting documentation.
- 3. Performance Reports in support of each payment request must be submitted. The report is to reflect the accomplishments during the period billed as measured against the Contract Proposal. Reports are to be forwarded to the attention of Alma Rivera and myself.
- 4. The following comments establish the level of fiscal documentation that must be submitted in support of each payment request, consistent with the Cost Proposal included in support of the Project Proposal:
  - a. Computer Budget Reports(GBR's) must be submitted in support of each month of the period billed.
  - b. Payroll Distribution Reports(PDR's) must be submitted in support of each GBR, when payroll costs have been incurred during the period billed.
  - c. When applicable, Journal Entries must be included in support of the GBR in which the Journal Entry is included specific to one of the existing Budget Codes established in accordance with the Contract Approved Project Budget.
- 5. All correspondence specific to submission of Requests for Payment/Supporting Documentation; and Performance Reports, is to be forwarded to my attention at: Board of Public Utilities; Office of Budget and Finance; 44 South Clinton Avenue-9th Floor; PO Box 350; Trenton, NJ 08625-0350. Correspondence specific to the submission of Performance Reports; Deliverables; and written requests for no-cost time extensions is to be forwarded directly to Alma Rivera at the same address-7th Floor.

	Paymer (Ven F0#		TC AO			NT NUMBER Number Sched Pay Date		AGY 0 <b>8</b> 2 Cat	BATCH Number (A) Vendor I.D. N 226001096-13		FY 09
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(.	D) Payee Name & Add	ress				(E)	Se	nd Com	pleted Form To:		
Rutgers T	he State Univer	sity		NJ Board of Public Utilities							
Div. of G	rant and Contra	ct Accounting		Office of Budget and Finance							.
3 Rutgers	Plaza; ASB I	II			PO Box 350						
New Bruns	wick, NJ 0890	L			Trenton, NJ 08625-0350						
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Item No.	Description of item(s)	Qu	antity	Unit	l	Jnit Price	Amount
	Payment due for services rendered in accordance with the Contract entitled "Collection of Wind Resource Data from Anemometer Equipment and the Development of a Web Based Centralized Data Center".					· · ·	
					т	otal Amount	· ·
Certification by received or serv	Receiving Agency: I certify that the above articles hav vices rendered as stated herein.	e been	Certificati correct a	on by Appr nd just, and	this payment voucher is		
	Signature					Signature	
	itle Date		•••••	Title			Date



Governor Chris Christie • Lt Governor Kim Guada Search

NJHome I Services A to Z I Departments/Agencies I Fi

# Department of the Treasury Accounting for the Purchase of Goods or Services from State Colleges and Universities

# **ORIGINATING NO.:** 05-14-OMB

**AGENCY: OFFICE OF MANAGEMENT AND BUDGET** 

**EFFECTIVE DATE:** 4-4-05

**EXPIRATION DATE: INDEFINITE** 

SUPERSEDES: 05-04-OMB

**SUBJECT:** ACCOUNTING FOR THE PURCHASE OF GOODS OR SERVICES FROM STATE COLLEGES AND UNIVERSITIES

**ATTENTION: CHIEF FISCAL OFFICERS AND BUSINESS MANAGERS** 

# FOR INFORMATION CONTACT: PATRICIA LEAHEY

PHONE: (609) 292-8938

This circular letter establishes the proper procedure to procure and account for the purchase of goods or services from the state colleges and universities.

There is an expressed preference for the use of other Agencies, such as the state colleges and universities provide professional services rather than outside private vendors. The reason is that where feasible, the direct, actual use of in-state, professional resources of state entities are always preferable. However, the preference does not extend to those situations where, while some professional services may be provided the state college or university, the major portion of the services are to be provided by subcontracts to priv companies or independent contractors. In such situations, the State Agency should contract directly with state college or university for only those professional services or student resources as are provided direct and use advertised or non-advertised competitive procurements to obtain the subcontracted services. Further, a waiver of advertising is not required if the services are being directly provided by a state college or university. The use of entities such as the state colleges and universities does not preclude compliance with Circular Letter 98-14-OMB/DPP/OTS Professional Services: Review, Control, Monitoring, and Extensions.

All state colleges and universities are autonomous and operate independently of the New Jersey Comprehensive Financial System (NJCFS) and banking system. Therefore, the state colleges and universities cannot be paid via a using agency payment transaction (UA). The proper procedure to accou for the procurement of goods or services is as follows:

- A. Obligate funds payable to a state college or university by entering an agency contract order (AO) i NJCFS. The statement "supporting documentation is on file at the agency" must be included in the text. A print screen of the AO, text and the formal contract must be kept on file at the agency for a period of seven years.
- B. Prepare an Accounting Bureau payment voucher (A1) to issue payment to the college or university Reference the agency contract order indicated in (A) above.
- C. Instructions for completion of the above forms are contained in the NJCFS manual, Expenditure Accounting Section, Chapter 4, pages EXP 4-10 for the AO and EXP 4-35 for the A1.
- D. The autonomous colleges and universities are as follows:

Kean University Rutgers University The Richard Stockton College of NJ Thomas Edison State University of Medicine and Dentistry of NJ William Paterson University

NJ Institute of Technology Montclair State University Rowan University College The College of NJ NJ City University Ramapo College of NJ

Charlene M. Holzbaur Director

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VENDOR CODE: 226001086AGENCY: 082TRANS NUMBER: 20146000066TRANS CODE: AOVENDOR NAME: RUTGERS THE STATE UNIV OF NJ<br/>: GENERAL ACCOUNTING ACCTS RECBUDGET FY: 09ORDER TYPE: C OFF RES ACT: 3400COMMENTS: WPAGRANTSTART DATE: 11 01 01END DATE: 11 09 30MONTHS FUNDED:<br/>CLOSED AMOUNT:0.00PO AMOUNT:4,889.23OUTSTANDING AMT:4,889.23

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VENDOR CD: 226001086 AGENCY: 082 TRAN NO: 20146000066 LINE NO: 01 TRAN CD: AO LINE DESCRIPTION: WIND POWER AMERICA GRANT FUND: 100 AGENCY: 082 ORG: 2014 I/G REF FUND: JOB NUMBER: 30560000 I/G REF AGENCY: PROJECT: OBJECT: 3610 LINE AMOUNT: 4,889.23 APPR UNIT: 124 SUB-OBJ: SUB-ORG: LINE CLD AMT: 0.00 ACTIVITY: VVVV REPT CATG: 0001 LINE EXP AMT: 0.00 TEXT FLAG: OUTSTANDING: 4,889.23 LAST-REF-TRAN#/DATE:

STANDARD TERMS & CONDITIONS	PURCHASE ORDER	
MANAGEMENT & ADMINISTRATION. BPU PUBLIC UTILITIES	NUMBER 20146000066	PAGE
44 South Clinton Ave-7 <sup>th</sup> Floor PO Box 350	REQ NUMBER:	ł
Trenton, NJ 08625-0350	VENDOR RUTGERS THE STATE UNIVERSITY	

The following terms and conditions shall apply to all contracts or purchase agreements made with the State of New Jersey.

For agency purchase orders issued against term contracts, additional provisions shall apply in accordance with the provisions of the agreement between the State of New Jersey and the Contractor.

## 1. STATE LAW REQUIRING MANDATORY COMPLIANCE BY ALL CONTRACTORS

1.1 CORPORATE AUTHORITY- It is required that all corporations be registered with the Office of the Secretary of State prior to conducting business in the State of New Jersey,

1.2 ANTI-DISCRIMINATION- All parties to any contract with the State of New Jersey agree not to discriminate in employment and agree to abide by all anti-discrimination laws including those contained within N.J.S.A. 10:2-1 through 10:2-4, N.J.S.A. 10:5-1 et seq. and N.J.S.A. 10:5-31 through 10:5-38, and all rules and regulations issued thereunder.

1.3 PREVAILING WAGE ACT- The New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.26 et seq. is hereby made a part of every contract entered into on behalf of the State of New Jersey through the Division of Purchase and Property, except those contracts which are not within the contemplation of the Act. The bidder's signature on this proposal is his guarantee that neither he nor any subcontractors he might employ to perform the work covered by this proposal has been suspended or debarred by the Commissioner, Department of Labor for violation of the provisions of the Prevailing Wage Act.

1.4 THE WORKER AND COMMUNITY RIGHT TO KNOW ACT- The provisions of N.J.S.A. 34:5A-1 et seq. which require the labeling of all containers of hazardous substances are applicable to this contract. Therefore, all goods offered for purchase to the State must be labeled by the contractor in compliance with the provisions of the Act.

1.5 OWNERSHIP DISCLOSURE- Contracts for any work, goods or services cannot be issued to any corporation or partnership unless prior to or at the time of bid submission the bidder has disclosed the names and addresses of all its owners holding 10% or more of the corporation or partnership's stock or interest. Refer to N.J.S.A. 52:25-24.2.

1.6 COMPLIANCE - LAWS- The contractor must comply with all local, state and federal laws, rules and regulations applicable to this contract and to the goods delivered and/or services performed hereunder.

1.7 COMPLIANCE - STATE LAWS- It is agreed and understood that any contracts and/or orders placed as a result of this proposal shall be governed and construed and the rights and obligations of the parties hereto shall be determined in accordance with the laws of the STATE OF NEW

1.8 COMPLIANCE - CODES- The contractor must comply with NJUCC and the latest NEC70, B.O.C.A. Basic Building Code. OSHA and all applicable codes for this requirement. The successful vendor will be responsible for securing and paying for all necessary permits, where applicable.

#### 2. LIABILITIES

2.1 LIABILITIES - COPYRIGHT- The contractor shall hold and save the State of New Jersey, its officers, agents, servants and employees, harmless from liability of any nature or kind for or on account of the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of this contract.

2.2 INDEMNIFICATION- The contractor shall assume all risk of and responsibility for, and agrees to indemnify, defend, and save harmless the State of New Jersey and its employees from and against any and all claims, demands, suits, actions, recoveries, judgment and costs and expenses in connection therewith on account of the loss of life, property or injury or damage to the person, body or property of any person or persons whatsoever, which shall arise from or result directly or indirectly from the work and/or materials supplied under this contract. This indemnification obligation is not limited by, but is in addition to the insurance obligations contained in this agreement.

2.3 INSURANCE- The contractor shall secure and maintain in force for the term of the contract liability insurance as provided herein. The contractor shall provide the State of New Jersey with current certificates of insurance for all coverages and renewals thereof which must contain the proviso that the insurance provided in the certificate shall not be canceled for any reason except after thirty days written notice.

The insurance to be provided by the contractor shall be as follows:

- a. General liability policy as broad as the standard coverage forms currently in use in the State of New Jersey shall not be circumscribed by any endorsements limiting the breadth of coverage. The policy shall be endorsed to include:

  - 1. Broad Form Comprehensive General Liability 2. Products / Completed Operations
  - 3. Premises / Operations
- The limits of liability for bodily injury and property damage shall not be less than \$1 million per occurrence as a combined single limit. b. Automobile liability insurance which shall be written to cover any automobile used by the insured. Limits of liability for bodily injury and property damage shall not be less than \$1 million per occurrence

  - as a combined single limit.

c. Worker's Compensation Insurance applicable to the laws of the State of New Jersey and Employers Liability Insurance with limits of not less than: \$100,000 Bodily Injury, Each Occurrence \$100,000 Disease Each Employee

\$500,000 Disease Aggregate Limit

3. TERMS GOVERNING ALL PROPOSALS TO NEW JERSEY PURCHASE BUREAU

3.1 SUBCONTRACTING OR ASSIGNMENT- The contract may not be subcontracted or assigned by the contractor, in whole or in part, without the prior written consent of the Director of the Division of Purchase and Property. Such consent, if granted, shall not relieve the contractor of any of his responsibilities under the contract.

Nothing contained in the specifications shall be construed as creating any contractual relationship between any subcontractor and the State.

3.2 PERFORMANCE GUARANTEE OF BIDDER- The bidder hereby certifies that

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a. The equipment offered is standard new equipment, and is the maunfacturer's latest model in production, with parts regularly used for the type of equipment offered; that such parts are all in production and not likely to be discontinued; and that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice

b. All equipment supplied to the State and operated by electrical current is UL listed where applicable.

c. All new machines are to be guaranteed as fully operational for the period stated in the Request for Proposal from time of written acceptance by the State. The bidder will render prompt service without charge, regardless of geographic location.

d. Sufficient quantities of parts necessary for proper service to equipment will be maintained at distribution points and service headquarters.

e. Trained mechanics are regularly employed to make repairs to equipment in the territory from which the service request might emanate within a 48 hour period or within the time accepted as industry practice.

f. During the warranty period, the contractor shall replace immediately any material which is rejected for failure to meet the requirements of the contract.

g. All services rendered to the State shall be performed in strict and full accordance with the specifications stated in the contract. The contract shall not be considered complete until final approval by the State's using agency is rendered.

3.3 DELIVERY GUARANTEES- Deliveries shall be made at such time and in such quantities as ordered in strict accordance with conditions contained in the specifications.

The contractor shall be responsible for the delivery of material in first class condition to the State's using agency or the purchaser under this contract, and in accordance with good commercial practice.

Items delivered must be strictly in accordance with the specifications.

In the event delivery of goods or services is not made within the number of days stipulated or under the schedule defined in the specifications, the using agency may be authorized to obtain the material or service from any available source, the difference in price, if any, to be paid by the contractor failing to meet his commitments.

3.4 STATE'S RIGHT TO INSPECT BIDDER'S FACILITIES- The State reserves the right to inspect the bidder's establishment.

3.5 MAINTENANCE OF RECORDS- The contractor shall maintain records for products and/or services delivered against the contract for a period of three (3) years from the date of final payment. Such records shall be made available to the State upon request.

4. TERMS RELATING TO PRICE QUOTATIONS

4.1 PRICE FLUCTUATIONS DURING CONTRACT- All prices shall be firm through issuance of contract or purchase order and shall not be subject to

In the event of a manufacturer's or contractor's price decrease during the contract period, the State shall receive the full benefit of such price reduction on any undelivered purchase order and on any subsequent order placed during the contract period.

4.2 DELIVERY COSTS- Unless otherwise noted in this purchase order, all prices for items are to be F.O.B. Destination. Regardless of the method of quoting shipment, the contractor shall assume all liability and responsibility for the delivery of merchandise in good condition to the State's using angecy or designated purchaser.

F.O.B. Destination does not cover "spotting" but does include delivery on the receiving platform of the ordering agency at any destination in the State of New Jersey unless otherwise specified. No additional charges will be allowed for any transportation costs resulting from partial shipments made at the contractor's convenience when a single shipment is ordered. The weights and measures of the State's using agency

4.3 C.O.D. TERMS- C.O.D. terms are not acceptable.

4.4 TAX CHARGES- The State of New Jersey is exempt from State sales or use taxes and Federal excise taxes. Therefore, they must not be included in the invoice. The State's Federal Excise Tax Exemption Number is 22-75-0050k.

4.5 PAYMENT TO VENDORS- Payment for goods and/or services purchased by the State will only be made against State Payment Vouchers. The State Payment Voucher in duplicate together with original Bill of Lading, express receipt and other related papers must be sent to the consignee on the date of each delivery.

4.6 NEW JERSEY PROMPT PAYMENT ACT- The New Jersey Prompt Payment Act (P.L. 1987,c.184) requires state agencies to pay for goods and acceptance of goods and services, which ever is later.

#### 5. CASH DISCOUNTS

a. A discount period shall commence on the day the State Using Agency received a properly signed and executed State Payment Voucher for products and services that have been duly accepted by the State Using Agency in accordance with the terms, conditions and specifications of the Contract/Purchase Order. If the State Payment Voucher is received prior to the delivery of the goods and services, the discount period begins with the acceptance of the goods of services.

b. The date on the check issued by the State in payment of that State Payment Voucher shall be deemed the date of the State's response to that Voucher.

8. STANDARDS PROHIBITING CONFLICTS OF INTEREST- The following prohibition on vendor activities shall apply to all contracts or purchase agreements made with the State of New Jersey, pursuant to Executive Order No. 189 (1988).

a. No vendor shall pay, or agree to pay, either directly or indirectly, any fee, commission, compensation, gift, gratuity, or other thing of value of any kind to any State officer or employee or special State officer or employee, as defined by N.J.S.A. 52:13D-13b. and e., in the Department of the Treasury or any other agency with which such vendor transacts or offers or proposes to transact business, or to any member of the immediate family, as defined by N.J.S.A. 52:13D-13i., of any such officer or employee, or any partnership, firm or corporation with which they are employed or associated, or in which such officer or employee has an interest within the meaning of N.J.S.A. 52:13D-13g.

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b. The solicitation of any fee, commission, compensation, gift, gratuity or other thing of value by any State officer or employee or special State officer or employee from any State vendor shall be reported in writing forthwith by the vendor to the Attorney General and the Executive Commission on Ethical Standards.

c. No vendor may, directly or indirectly, undertake any private business, commercial or entrepreneurial relationship with, whether or not pursuant to employment, contract or other agreement, express or implied, or sell any interest in such vendor to, any State officer or employee or special State officer or employee having any duties or responsibilities in connection with the purchase, acquisition or sale of any property or services by or to any State agency or any instrumentality thereof, or with any person, firm or entity with which he is employed or associated or in which he has an interest within the meaning of N.J.S.A. 52:13D-13g. Any relationships subject to this provision shall be reported in writing forthwith to the Executive Commission on Ethical Standards, which may grant a waiver of this restriction upon application of the State officer or employee upon a finding that the present or proposed relationship does not present the potential, actuality or appearance of a conflict of interest.

d. No vendor shall influence, or attempt to influence or cause to be influenced, any State officer or employee or special State officer or employee in his official capacity in any manner which might tend to impair the objectivity or independence of judgment of said officer or employee.

e. No vendor shall cause or influence, or attempt to cause or influence, any State officer or employee or special State officer or employee to use, or attempt to use, his official position to secure unwarranted privileges or advantages for the vendor or any other person.

f. The provisions cited above in paragraph 6a. shall not be construed to prohibit a State officer or employee or special State officer or employee from receiving gifts from or contracting with vendors under the same terms and conditions as are offered or made available to members of the general public subject to any guidelines the Executive Commission on Ethical Standards may promulgate under paragraph 6c.



Center for Energy, Economic & Environmental Policy Rutgers, The State University of New Jersey 33 Livingston Avenue, First Floor New Brunswick, NJ 08901

732-932-5680 Fax: 732-932-0394

Request for Proposal for the collection of wind resource data from anemometer equipment and the development of a web based centralized data center

In a letter dated January 11, 2011, the New Jersey Board of Public Utilities (BPU) requested services from the Center for Energy, Economic, and Environmental Policy (CEEEP) at Rutgers, the State University of New Jersey in acquiring wind data from anemometers in New Jersey and compiling them into an online information center. This scope of work describes the tasks that CEEEP will complete as part of this project.

## Task 1: Collect Wind Resource Data from Anemometer Loan Program partners

CEEEP will work with the five State Anemometer Program partners to assemble the data that has been collected by the instruments and understand where it was collected from and how it was formatted. The partners CEEEP will work with include the Center for Advanced Energy Systems at Rutgers University, Rowan University, Richard Stockton College, Ocean County College, and the College of New Jersey. In addition, and as time/funding permits, CEEEP may also acquire data from the anemometers installed through the New Jersey Clean Energy Program Customer On-Site Renewable Energy and Renewable Energy Incentive Program installations, Atlantic County Utilities Authority, PJM-GATS, and through any other highly regarded sources.

# Task 2: Format Data and Compile onto New Jersey Energy Data Center

CEEEP will check the wind resource data collected during task 1 for any obvious formatting errors or outlying data points. The data will then be added to the New Jersey Energy Data Center, which already contains electricity, natural gas, petroleum, energy efficiency/renewable energy, and economic/demographic data for New Jersey and other key states. The Energy Data Center 's website is <u>http://www.njenergydatacenter.org/</u>.

## **Task 3: Final Report**

CEEEP will submit a brief report on what type of data was found, lessons learned during the process, and on suggestions for future work related to the data.

## **Project Period and Funding**

The project period will be March 1, 2011 through September 30, 2011. The start date is dependent on contract approval by the BPU and Rutgers University; the end date has been set by the US Department of Energy.

The total funding available is \$4900 and a projected budget is included below

	Daily	Rate		FY Tota	ls
Personnel	FY11	FY12	FY11	FY12	Total
3/1/11 through 9/30/11					
Jaci Trzaska, Research Project Coordinator	\$190	\$199	\$379	\$398	\$777.77
Hourly student	\$15	\$15	\$1,695	\$1,695	\$3,390.00
Subtotal - Personnel Costs				<b>•</b> 1,000	\$4,167.77
Facilities and Administrative			\$133	\$143.81	\$276.98
Overhead					\$444
TOTAL COST	\$				\$4,889.23

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