# <u>Request for Information</u> Evaluation & Research Services New Jersey Clean Energy Program (NJCEP) Energy Efficiency and Renewable Energy Programs

#### Purpose

The New Jersey Board of Public Utilities (BPU) is seeking information to assist it in developing an upcoming Memoranda of Agreement (MOA) with state universities and colleges. These MOA are anticipated to cover a range of activities from evaluation and research studies related to New Jersey's Clean Energy Program (NJCEP) and its suite of energy efficiency and renewable energy program offerings, to the evaluation and design of the NJCEP website(s).

Funding for the MOAs is estimated at \$2M annually for a period of four (4) years, subject to annual funding approval by the BPU.

### **Background NJCEP**

The NJCEP is one of the nation's most ambitious energy efficiency and renewable energy initiatives. In order to fully cover the demands of the breadth, scope, and complexity of NJCEP initiatives, the BPU has historically used a mix of publicly procured contractors, MOAs with state universities and colleges, and grants to non-governmental organizations. The State has most recently engaged TRC Environmental Services Corporation (TRC) to serve as Program Administrator in managing NJCEP's statewide energy efficiency and renewable energy programs that are available to customers in service territories of New Jersey's natural gas and electric utilities.

The following links offer access to information on the NJCEP Evaluation & Research Program:

- Board of Public Utilities public website: <u>http://www.bpu.state.nj.us/</u>
- NJCEP website: <u>http://www.njcleanenergy.com/</u>
- NJCEP FY17 Evaluation Plan: http://www.njcleanenergy.com/files/file/FY2017%20Evaluation%20Plan.pdf
- NJCEP Evaluation & Research Reports: <u>http://www.njcleanenergy.com/main/public-reports-and-library/market-analysis-protocols/market-analysis-baseline-studies/marke</u>
- Rutgers CEEEP Evaluation Reports: <u>http://ceeep.rutgers.edu/publications/</u>
- New Jersey Energy Data Center: <u>http://pppolicy.rutgers.edu/ceeep/edc/index.php</u>
- New Jersey Energy Master Plan: <u>http://www.nj.gov/emp/</u>

Information on the State's contract with TRC who manages NJCEP, including the Request for Proposal through which the contract was awarded is accessible at the following url: <a href="http://www.state.nj.us/treasury/purchase/noa/contracts/t3009\_16-x-23938.shtml">http://www.state.nj.us/treasury/purchase/noa/contracts/t3009\_16-x-23938.shtml</a>.

Information on the State's Budget for NJCEP and for Evaluation & Research Services provided by Rutgers CEEEP, is accessible at the following url: http://www.state.nj.us/bpu/pdf/boardorders/2015/20151120/11-16-15-8F.pdf

## **Research & Evaluation and Other Services**

NJCEP requires a significant commitment to transparent, accurate, and timely evaluation of its programs along with special projects on an ad hoc basis. Evaluation and research activities, both prospective and retrospective, afford a feedback loop to policymakers, administrators, and managers to help guide NJCEP program design, performance and other objectives. Accordingly, evaluation and other needed activities cover a wide range of disciplines and expertise related to energy markets and program delivery including but not limited to economic, financial, technical (engineering), survey design, execution, and analysis and web site development. Research and evaluation activities may also require interdisciplinary analysis of the financial, economic and/or engineering aspects of proposed technologies and programs.

The principal types of reoccurring evaluation activities include:

- **Cost Benefit Analyses** of clean energy programs, policies and clean energy technologies including Distributed Energy Resources;
- **Rate Impact Analysis** associated with proposed or modified NJCEP Programs and clean energy policies such as the Renewable Portfolio Standard;
- **Economic Impact Modeling** using IMPLAN, RECON or some other input-output model to estimate economic impacts resulting from clean energy programs, policies and activities;
- **PJM Simulation Modeling** including locational energy market simulation models (e.g. DAYZER, PROMOD, GE-MAPS) along with transmission models, operational models and capacity market models;
- **Benchmarking and Metric Studies** of NJCEP Program vs peer clean energy programs in other states;
- Market Potential Studies for Renewable Energy and Energy Efficiency Programs;
- **Market Assessments** for Clean Energy Technologies such as Combined Heat & Power (CHP), Fuel Cells, Solar, Wind, Biomass and Storage technologies ;
- **Baseline Studies** for Residential and Commercial Energy Efficiency Measures;
- Market Impact Evaluations for NJCEP Programs;
- Net Economic & Environmental Benefit Evaluations (including jobs, cost of energy, direct and indirect benefits, supply chain impacts, emission reductions, etc.);
- NJCEP Process Evaluations related to the implementation and operation of the NJCEP programs;
- Assessment of NJCEP's Information Management System (tracking);
- **Review of Protocols for Estimating Program Impacts** including review and update of all assumptions, algorithms, lifetimes, deemed incremental costs and other data used to calculate energy savings associated with implementation of clean energy measures;
- NJCEP Goals, Objectives and Outcomes Assessment;

- Development and maintenance of the New Jersey Energy Data Center Website including hosting the site, outreach and education, routine monthly updates and special projects including EMP indicator updates
- Economic Impact Assessment and leveraging of New Jersey Clean Energy Program, including both positive impacts such as creation of clean energy industry jobs, federal funding, and private capital, and negative impacts such as resulting rate surcharges needed to pay for the program;
- Energy Master Plan Goals Tracking & Progress Report;
- Student-assisted commercial energy audits for state buildings;
- Engineering evaluations of aftermarket equipment related to combined heat & power and/or combined cycle;
- Operational analysis and modeling of distributed energy resources.
- The New Jersey Energy Data Center;
- **Renewable Portfolio Standard (RPS) Impact Evaluation** including Class I, Class II and Solar Renewable Energy Certificates (SRECs), Offshore Wind Renewable Energy Certificates (ORECs) and Alternative Compliance Payments;
- PJM Electric Market Pricing Evaluation;
- Solar Valuation Studies and SREC Market Review;
- Offshore Wind Energy Modeling & Assessment ;
- Fuel Cell Evaluation Study;
- Distributed Generation Modeling.

Attachment 1 presents a listing of citations for past research and evaluation projects along with a timeline of existing/planned evaluation projects.

## Next Step

The BPU seeks feedback from State universities and college who may desire to partner with the NJCEP through an MOA. While institutions may collaborate with one another, and may subcontract up to 50% of the value of the contract to private sector service providers, the BPU will execute the MOA with the lead party. Responses to this RFI should provide detailed information in the following areas:

- **Capabilities, expertise, and resources** related to the evaluation of clean energy and energy efficiency programs and markets that an institution may possess;
- **Specific modeling expertise**, **experience and proprietary modeling software** related to the PJM electricity market and/or integration of clean energy resources on to the grid;
- **Identification of research centers and academic departments** within your institution that will contribute faculty and staff towards meeting the requirements of any MOA;
- A listing of key personnel within these centers/departments citing academic/professional experience and availability to work under MOA;

- **Strategic partners and partnerships** that may be leveraged to execute this MOA and the resources/expertise that they would contribute;
- Approach to providing technical expertise and administrative services necessary to coordinate evaluation activities with BPU, TRC and its market managers.
- **Detailed experience successfully completing MOA** within the energy efficiency, renewable energy sector; and
- Hourly rates, by job title, for personnel projected to work under a MOA.

Important note: Responses to this Request for Information are subject to the Open Public Records Act.

Please email responses with the heading, "NJCEP RFI" to:

Anne Marie McShea Clean Energy Program Administrator <u>Anne.Mcshea@bpu.nj.gov</u>.

#### Responses are requested in Microsoft Word format by

### May 31, 2017

See Attachment 1 for listing of past research and evaluation projects and a timeline of existing/planned evaluation projects.