

2002/2003

SOLICITATION

FOR:

THE RENEWABLE ENERGY ADVANCED POWER PROGRAM  
**To Support Distributed Renewable Electricity  
Generation in New Jersey.**

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# **SOLICITATION FOR THE RENEWABLE ENERGY ADVANCED POWER PROGRAM: TO SUPPORT RENEWABLE ELECTRICITY GENERATION IN NEW JERSEY**

October 1, 2003

## **1.0 PROGRAM INFORMATION**

### **1.1 PROGRAM SUMMARY:**

The Board of Public Utilities (“Board”) announces a competitive incentive and financing program to encourage development of distributive renewable electricity generation (“DREG”) projects in New Jersey. This Solicitation is the second in what the Board envisions to be an ongoing process of growth and development of a more comprehensive program, able to address the barriers preventing the development of emerging renewable technologies. By order dated March 9, 2001, the Board determined the funding level that would be allocated to this program its second and third years, and the Board has determined that up to \$50,000,000 as a combination of incentive and guaranteed financing would be allocated for this solicitation. Additional funding may be added in additional program years as well. This solicitation will remain open until the funding is fully committed or reallocated.

This program’s objectives are to gain and document experience constructing and operating DREG projects in New Jersey that will operate over a long period of time, overcome barriers to private investment in renewable energy, and identify the best opportunities for long-term development of DREG projects based on New Jersey’s resources. Proposals that provide clean energy generation, emerging technologies and maximum energy production during peak demand periods are, but other criteria will also be considered to encourage a diversity of technologies, mitigated transmission and distribution constraints, increased energy security and reliability and maximized environmental benefits. The funds to be awarded to successful proposals will include a grant award of up to 20% of the total construction costs and other qualifying costs, as well as guaranteed long-term financing for the incremental cost of construction of the project.

The BPU will partner with the New Jersey Economic Development Authority to provide long-term low-interest financing for distributive renewable electricity generation. Respondents seeking low-interest, tax-exempt bond financing will be required to qualify under the parameters laid out in the Internal Revenue Tax Code (“IRC”) in addition to the general credit, underwriting, public purpose, and programmatic parameters discussed in this RFP. There are several qualifying categories under the IRC for financing using tax-exempt debt that may be relevant to the types of projects contemplated under the NJ Clean Energy Program. These categories include, but are not restricted to, projects involving the processing and disposal of solid waste; facilities for the local furnishing of electric energy or gas; projects that provide heating and cooling to a local area, and projects that furnish water to the general public. Tax-exempt bond financing may also be available for projects undertaken by schools and municipalities.

Projects that do not qualify for tax-exempt bond financing under the IRC may still qualify for taxable bond financing or other loan products available under the NJ Clean Energy Program.

The New Jersey Clean Energy Program will start accepting proposals for funding as of October 1, 2003. Qualifying proposals that met the criteria of the program will be awarded funds

depending on the availability of program funding as of the time of completed application process. The funding for renewable electricity generation projects available at this time for this Solicitation is up to \$50 million, with the potential for additional funding to be added to the program in the future. Funds not utilized in this program will be made available for future solicitation(s).

**PROPOSAL SUBMISSION:**

Please submit proposals or direct inquiries to:  
Cassandra Kling, Renewable Energy Program  
Manager  
Office of Clean Energy  
New Jersey Board of Public Utilities  
P.O. Box 350  
44 South Clinton Avenue  
Trenton, NJ 08625-0350  
[Cassandra.kling@bpu.state.nj.us](mailto:Cassandra.kling@bpu.state.nj.us)  
609-292-7471

**1.2 PURPOSE AND INTENT**

To provide a competitive incentive and financing program that substantially accelerates the deployment of distributive renewable electricity generation in New Jersey. Projects will be expected to supply electricity to the PJM Power Pool, or for large power users, to incorporate a minimum of 1 Megawatt (MW) power generation at their facility or aggregate a minimum of 1 MW of renewable electricity generation systems into one proposal. This Solicitation is designed to provide seed grants and access to capital in order to make renewably-powered electricity cost competitive with conventional power plants. This program is designed to ensure a diverse portfolio of renewable energy technologies are used to provide power and environmental benefits to the ratepayers in New Jersey; to accelerate the rate of deployment for large-scale renewable power plants and to encourage the development of a thriving renewable energy market in New Jersey. Projects that receive funding through the Customer Onsite Renewable Energy Program are prohibited from receiving funding through this Solicitation as well.

For the successful implementation of the full intent of the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq., (“the Act”), the Board will provide an arena in which renewable energy technologies, which may not be able to compete as yet on a first cost basis, are not denied the opportunity to prove themselves as viable alternatives to traditional electricity supply. Therefore, environmental impacts and the need to foster diverse technologies, as well as cost will be considered when reviewing project proposals. Data will be collected on the environmental attributes of various renewable technologies. Each project offered in response to this Solicitation has associated environmental impacts, which may include air emissions, land use, water consumption, wastewater disposal, and solid waste generation. Proposals will be reviewed with due consideration of the project’s relative environmental impact in these areas, as well as its economic cost, viability, project development team and production capacity.

Successful DREG projects that are accepted by the surrounding community are very important to the future of renewable energy in New Jersey. For this reason, the New Jersey Clean Energy Program is seeking proposals that include plans to address real or perceived community concerns by minimizing negative environmental impacts and including appropriate involvement of the local community. Reliable long-term operation is also very important. Eligible

technologies and fuels for DREG projects are photovoltaics, solar electric, wind energy, renewably-fueled fuel cells, methane gas from landfills (as defined in this Solicitation), wave/tidal and biomass, provided that the biomass is cultivated and harvested in a sustainable manner. Technologies selected should be suitable for use in New Jersey's environment.

### **1.3 BACKGROUND**

N.J.S.A. 48:3-60(a)(3) required that the Board undertake a Comprehensive Resource Analysis (CRA), now the New Jersey Clean Energy Program, originally of existing energy efficiency policies and programs. The CRA included, but was not be limited to "an assessment of existing market barriers to the implementation of energy efficiency and renewable technologies that are not or cannot be delivered to customers through a competitive marketplace." N.J.S.A 48:3-51. This analysis has led to careful consideration of a myriad of programs and technologies, ranging from the familiar energy efficiency appliance programs to new programs utilizing Class I renewable energy defined as, "electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, and methane gas from landfills or a biomass facility provided that the biomass is cultivated and harvested in a sustainable manner." N.J.S.A. 48:3-51. With the CRA Order issued on March 9, 2001, the Board took another step to address the challenges of the Act. With the Act's elimination of the traditional retail monopolies held by electric public utilities for electric power generation and supply services, New Jersey energy consumers are being afforded the chance to access the competitive market for these services, and to select the energy supplier of their choice. At the same time the Act provided that the long term energy needs of New Jersey consumers will be met in an environmentally sound manner by requiring the Board to re-evaluate existing energy efficiency policies and programs, to consider new energy supply alternatives, and to foster creation of new energy resources to facilitate competitive and diverse electricity supply for New Jersey, including renewable energy sources.

The Board's March 9, 2001 CRA Order determined the funding level for the first three years of the minimum of the Act's required eight years of funding for CRA programs, the programs to be funded, the funding allocation and the initial program administration. The CRA (now called the New Jersey Clean Energy Program) total funding for 2001 is \$115 million, \$119.326 million for 2002, and \$124.126 million for 2003. In addition, the Board determined that \$15 million would be added to funding for the fourth year, as will be determined to be appropriate by the Board after the lifting of the utilities' rate caps in August 2003. The Board allocated the funding at a proportion of 75/25 between energy efficiency and renewable energy programs, respectively. The renewable energy programs include the Customer Onsite Renewable Energy Program and the Renewable Energy Advanced Power Program and the Renewable Energy Economic Development Program. The Office of Clean Energy a division of the New Jersey Board of Public Utilities administers the Renewable Energy Programs that are part of the New Jersey Clean Energy Program, which consist of this program, the Renewable Energy Advanced Power Program, the Customer Onsite Renewable Energy Program and the Renewable Energy Economic Development Program. In accordance with the Act, the Board also adopted the Renewable Portfolio Standard ("RPS"), which requires electric suppliers to include a certain percentage of Class I and Class II renewable energy supply in their generation portfolio.

Proposals for renewable energy projects submitted in response to this Solicitation will result in air emissions reductions versus generation of electricity from conventional fossil fuels. The Board and the New Jersey Department of Environmental Protection (NJDEP) will track these air emission reductions to facilitate possible future accounting of greenhouse gas emissions in New Jersey. Tradable emission credits or tradable renewable energy certificates or attributes which result from projects funded through New Jersey Clean Energy programs will be the property of the project developer, unless the developer defaults on their financing commitment in which case the ownership of the credits will revert to the New Jersey Clean Energy Program until such

time as the project financing provided through this program is fully recovered including any fees, penalties or interest; unless otherwise negotiated. Distributive renewable electricity generation projects funded through the New Jersey Clean Energy Program qualify toward meeting the requirements of the Renewable Portfolio Standard in accordance with the RPS guidelines established by the Board.

Air emission trading includes oxides of nitrogen, oxides of sulfur and greenhouse gases. Renewable energy certificates are the unbundled attribute of renewable electric generation separated from the purchase of the electricity and attributes refer to a specific aspect of the electric generation (e.g., generated from solar resources).

## **1.4 KEY EVENTS**

The Solicitation will be issued on October 1, 2003. Funds will be committed to applicants that successfully complete the application process on an ongoing basis, provided that the program funds are not fully committed.

The solicitation will remain open as long as funding is available.

## **2.0 DEFINITIONS AND SCOPE OF WORK**

### **2.1 DEFINITIONS**

“Air Emissions Credits” - Regulations concerning credits are under the jurisdiction of the NJDEP. Ownership is as specified above.

“Bid Evaluation Environmental Impact Adjustment (“BEEIA”) – means the associated environmental costs in terms of resource consumption including both land and water usage, air emissions, wastewater discharges, and solid waste generated by the project offered by the Proposer. The environmental factors of the product's associated air emissions, water consumption, land use, wastewater discharge and solid waste generation are to be expressed on a per megawatt-hour basis using the procedure outlined in Section 5.3.

“Biomass” means, for the limited purpose of this Solicitation, as it is defined in Executive Order 13134, published in the Federal Register on August 16, 1999, “...any organic matter, but not solid waste, that is available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, wood and wood residues, animal wastes, and other waste materials. Old-growth timber means timber of a forest from the late successional stage of forest development. The forest contains live and dead trees of various sizes, species composition, and age class structure. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another.”

“Class I Renewable Energy” for the limited purpose of this Solicitation means electric energy produced from commercially available technologies including solar electric generation, photovoltaics, wind energy, renewably fueled fuel cells, wave/tidal, methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner.

“Distributive Renewable Electricity Generation” “DREG” means electricity that is generated by Class I renewable energy.

“Electric Discount and Energy Competition Act” means the New Jersey State legislation found at N.J.S.A. 48:3-49 et seq.

“Emission tradable Credits” - Means a discrete emissions reduction credit based on reductions of a greenhouse gas. One greenhouse gas credit has an assigned value of one metric ton (2,205 pounds) of carbon equivalent or as specified by NJDEP.

“Grid Connected” means, for the limited purpose of this solicitation, any project which is either directly connected to the transmission or distribution system or owned and installed by a third party (i.e. not the building owner) and operates in unison with the transmission or distribution system.

“Methane from landfills” means, for the limited purpose of this Solicitation, methane gas generated in the decomposition of municipal solid waste (“MSW”) in a state of the art landfill that is constructed, operated and maintained in accordance with the NJDEP sanitary landfill requirements at NJAC 7:26-2A. The proposed project to produce electric energy from methane gas shall not include those components required to be installed to collect either non-methane organic compounds (“NMOC”) as set forth in the USEPA requirements at 40CFR60.750 Standards of Performance for Municipal Solid Waste Landfills, or landfill gases as set forth in the NJDEP requirements at NJAC 7:26-2A(f) requirements for sanitary landfill gas collection and venting systems. The proposed project shall include only the landfill gas cleanup components, the combustion units and the electric energy generating units provided the system meets the definition as State of the Art (“SOTA”) for emissions controls as set forth as NJAC 7:27-8.12.

"PJM Interconnection, L.L.C." ("PJM ISO") - Means the Independent System Operator that operates the power exchange in sections of Pennsylvania, New Jersey, Maryland and Virginia, and all of Delaware and the District of Columbia.? Do we need more?

“Societal Benefits Charge” – In accordance with the Act, each electric and gas public utility may recover costs for programs approved under the CRA through a societal benefits charge (“SBC”). The SBC is a nonbypassable distribution charge imposed on all electric and gas utility customers as appropriate N.J.S.A. 48:3-60(a)(3).

“Sustainably Grown and Harvested Biomass” means, for the limited purpose of this Solicitation, electric energy produced from biomass, either by the burning of captured gas or liquid fuels derived from biomass derived from the following materials)

- a). Gas from the anaerobic digestion of source separated food waste and sewage sludge.
- b). Gas from the anaerobic digestion of other biomass fuels, including bioenergy crops and agricultural waste, provided documentation demonstrates that the biomass was cultivated and harvested in a sustainable manner; (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the

local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification);

c). A bioenergy crop, provided that documentation is maintained that demonstrates that the crop was cultivated and harvested in a sustainable manner; (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification);

d). Any of the following types of wood, provided that the wood is clean and untreated and that documentation is maintained that demonstrates that at least 75% of the wood can be verified to have been cultivated and harvested in a sustainable manner (e.g. it was grown in accordance with applicable state Department of Agriculture Farm Conservation Plan - approved by the local soil conservation district, state approved forest management plan, or a third party forestry or agricultural sustainability certification):

- wood produced at a biomass energy plantation;
- wood from the thinning or trimming of trees and/or from a forest floor, except wood from old growth forests;
- ground wood, produced through the grinding or shredding of pallets and other scrap wood (and the removal of nails and any other metal) at a recycling facility that is classified as a Class B recycling facility by the New Jersey Department of Environmental protection's Bureau of Landfill and Recycling Management or an equivalent recycling facility approved by the state environmental agency in which the facility is located; or
- wood shavings and scrap from the wood products industry, including, but not limited to a lumberyard, paper mill, or "secondary product manufacturer".

Final satisfactory demonstration of the sustainability of any of the feedstocks listed above will be demonstration by the bidder providing information that the bioenergy crop was sustainably grown and harvested as set forth in b through d above; and for all biomass that the ash, and similar residues, resulting from the combustion of the biomass feedstock to generate electricity, are reused, or incorporated into, useable endproduct, and not disposed of as solid waste and the combustion unit exceeds the existing standards for air emissions, including energy efficiency guidance by a minimum of 10% as set forth at NJAC 7:27-8.12.

"Tax-Exempt Bonds" Tax-exempt bond financing is a form of long-term financing that is subject to the terms and conditions of the Internal Revenue Tax Code ("IRC"). The interest income earned by the holders of these bonds is exempt from Federal and NJ State Gross Income Tax. Because of these exemptions, an applicant may be able to borrow money at more favorable interest rates than those offered through conventional bank financing.

"Taxable Bonds" Taxable bond financing is a form of long-term financing. There are fewer restrictions regarding qualified costs under a taxable bond structure than under a tax-exempt bond structure; however, the interest rate on a taxable bond is typically higher than that of a tax-exempt bond. Taxable bonds typically provide interest rates that are comparable or better than those offered through conventional bank financing.

## 2.2. SCOPE OF WORK

- No feasibility studies, or location research will be funded through this Solicitation.
- Projects encompassing multi-year completion schedules will be entertained, but rapid development and commissioning of projects is a primary aim.
- Teaming arrangements are encouraged when necessary to meet project goals. Teams may consist of commercial firms, government organizations, universities, or other organizations. Proposing teams should include members who have renewable energy plant development and operational experience.

Proposals for project funding must meet the following minimum requirements to be considered for funding:

- Total installed capacity in Megawatts and expected annual energy production in Megawatt-hours are required to be submitted so the size of the DREG project in relation to the amount of incentive/financing requested can be evaluated.
- Project Developers should have applicable experience in projects of this size and scope.
- The proposal should include members on the team that have an identifiable track record in construction and operations of power plants
- A maximum of 20% of the total cost of the project may be requested upfront for design, permitting and other qualifying costs. Projects should look to leverage the grant and public financing with private investment and loans.
- There is no minimum level of cost sharing, however, higher levels are preferred and will be given additional weight in proposal evaluation.
- Proposers must demonstrate that they have financial resources to perform the proposed work, appropriate technical expertise, access to adequate facilities or the ability to get them, and a good performance record; and be qualified for an award under applicable laws and regulations.
- The project must be installed at one or more sites within New Jersey. This program does not preclude selling energy from the project to locations outside New Jersey.
- The project should not exceed 1 year for design, 1 year for permitting and 2-3 years for construction.
- . For renewable energy systems that use combustion driven generation, the project must evaluate the opportunities for use waste heat to offset additional energy needs and provide the results of that analysis.
- In certain situations, projects smaller than a megawatt will be considered if the developer commits to aggregating individual projects for a minimum project size of 1 megawatt.

### **3.0 PROPOSAL SUBMITTAL**

#### **3.1 PROPOSAL INSTRUCTIONS**

Proposals must be submitted to the address above. Proposals that are received by the Board will be logged in and time-stamped. Proposals may be hand-delivered, but must be delivered to the BPU Office in Trenton.

Every proposal must include the required information.

**All proposals must include a cover sheet that includes all of the following information:**

- Name of Proposal:
- Name of Primary Contact:
- Name of Primary Applicant's Organization:
- Mailing Address, Physical Address, Phone Number, Fax Number, Email Address, and Webpage Address.
- Physical Address of the proposed facility
- Total amount requested in incentive and as a loan
- Total amount offered as a direct cash match or in-kind services.
- Contact Person and Affiliation of all partnering organizations
- An Executive Summary of the Project Not to Exceed 50 Words and, which includes the renewable resource or technology to be funded.

Proposals that do not include the required information will be disqualified.

Further descriptions of these information items are provided in the subsections below.

Proposers must deliver, mail or fax (2) copies or email an electronic copy of the complete proposal;

If there is a real need for confidentiality for some of the information provided in a proposal, the pages containing confidential information should be clearly marked and a letter explaining the basis for the confidentiality claim should be submitted with the proposal. Otherwise the proposal will be subject to the Open Public Records Act and can be requested as a public document.

#### **3.2 PROPOSAL PREPARATION**

**3.2.1 ABSTRACT** – *(limit – 1 page)* Summarize the project. To the extent known, include proposed status of project development, operation date, location, size of project (kilowatts and acreage), type and size of technology, interconnection issues, and a general site description (wooded, rural, farm, recreational, park, etc.)

#### **3.2.2 PROJECT DESCRIPTION**

Please provide the following information:

- Previous New Jersey Siting Work – Describe the work done to date in developing the proposed project
- Site Location and Description – Indicate the candidate area or areas for project development and the basis for site selection. If a specific site has been selected, include a map with the location of the site clearly marked. Describe the current uses and type of vegetation of the land under consideration. Specify whether the project is located at one site, or divided among several sites.
- Environmental Impacts and Benefits – For each candidate site, and the proposed Class I renewable energy technology, discuss known environmental impacts including, but not limited to, avian, noise, aesthetics, endangered species, wetlands impact, and storm water management. Indicate how each environmental issue if impacted, will be addressed. The discussion shall include compliance with NJDEP standards as appropriate. Guidance on environmental impact assessments is available by calling the NJDEP Office of Program Coordination’s Document, “Environmental Assessment” at 609-292-2662. Also describe the environmental benefits of the Class I renewable energy technology including reduction in air emissions over the New Jersey and PJM average emissions and other environmental factors, include reduction in waste water discharges, water use, land use, and solid waste generated when compared to the New Jersey average grid generated electricity.
- Permits – For each candidate area, identify permits required to build and operate the project and the expected time to obtain permit approvals. Discuss plans for community outreach and how the local community will be involved in the permitting process. Information on all NJDEP permits is available from the Office of Pollution Prevention and Permit Coordination (“OPP/PC”) through the One Stop program can be obtained from the NJDEP website at [www.state.nj.us/dep/oppc/](http://www.state.nj.us/dep/oppc/). For combustion equipment the project developer is required to exceed the existing SOTA standard for emissions by 10% at a minimum.
- Schedule – For each DREG project, identify the expected duration of both the permitting, design and construction phases.
- Land Acquisition – For each candidate area, identify the nature of land ownership, and propose a plan to acquire land or leases. Indicate the type and number of entities owning the land.
- Electric Interconnection – For each candidate area, discuss issues associated with electrical interconnection, including the distance between the project and a suitable point to interconnect with the electrical grid. Identify new equipment to be installed and upgrades to existing equipment required.
- Identify your strategy for offering the electricity provided in the electric market.
- Plans for using waste heat from the generation process (if applicable).
- Data – For each candidate area, describe the renewable resource characteristics applicable to the technology and the site of the project. See: <http://rredc.nrel.gov/>.

For Wind: an average monthly wind speed at turbine hub height, average wind shear, turbulence intensity, annual wind speed frequency distribution (0.5 m/s bins), seasonal variations and annual wind rose (shown graphically). Provide the period of data collection. Where the data is estimated, provide the basis for estimate. Estimate outputs of electricity. See: <http://rredc.nrel.gov/wind/>.

For Photovoltaics: an average monthly insolation on the proposed plane of installation. Provide the azimuth angle at which the array will be installed, the tilt angle and the type of tracking whether fixed, one axis or two axis. State which measuring data site you have used for your estimate. Provide source if the data is from a source other than the National Renewable Energy Laboratories database. Estimate outputs of electricity. See: <http://rredc.nrel.gov/solar/>.

For Landfill or Biomass: the source of fuel, characterization of fuel source by percent of methane, amount and type of contaminants and type of cleanup that will be required to utilize gas, average monthly production of methane gas from the intended site, seasonal variation, combustion technology and estimated outputs in electricity, steam/heat and emissions, as well as plans for utilizing the waste heat of the process.

For Sustainably Grown and Harvested Biomass: source of biomass, documentation that biomass was cultivated and harvested in a sustainable manner, method of utilizing biomass to produce electricity, reuse of byproducts such as ash and residues, amount of residues and byproducts to be used or reused, amount of methane or other fuel recapture beyond that which is required by existing federal and state rules, type of equipment to be used to reduce emissions.

For Fuel Cells: source of renewable fuel, average monthly supply of the fuel source, seasonal variation, makeup of the fuel, contaminants, estimated outputs of electricity, water and emissions as well as plans for using the waste heat.

- Equipment – Indicate the type of equipment that will be installed. If not yet selected, indicate the candidate technologies and the characteristics you are looking for. Indicate whether you plan to own or lease equipment and whether equipment will be new or used. Describe the equipment candidate, the specifications, warranties and how long it has been commercial and approximately how many are currently in service. Include a description of the ability of the equipment to work in New Jersey’s climate. Indicate the equipment’s delivery time once an order has been placed. If a combustion unit is being utilized, detail the ability to exceed the state of the art emission standards (SOTA), including energy efficiency guidance, by 10% at a minimum and any additional emission controls contemplated. SOTA requirements are listed in NJAC 7:27-8.12.
- Plant Capacity and Energy Production – Indicate the expected nameplate capacity for the plant and the anticipated number of units for the selected technology or for each candidate technology. Indicate the potential total nameplate capacity that could be developed on the site if known. Based on a candidate technology, estimate the net yearly energy output for the plant, accounting for losses and availability and include any assumptions that are the basis for the estimate.

- The Estimated Generation per Year Over the life of the Plant – Proposers must, to the best of their ability, accurately estimate the level of generation that their proposed project will be able to provide over the life of the equipment. Sound engineering estimates and information on plant performance from similar plants must be included as back-up documentation to the estimate. .
- Proposal Information and Signatures – The Proposal should include the full business address of the Proposer, and the names and phone numbers of authoritative and technical contact persons. A principal of the firm must sign the attached statement of Verification of Bid Information (Appendix A) and of the Proposers intent to proposal and to abide by the protocols of proposals and the structure of incentive payments as described. The name and title (if any) of the person that signs the proposal shall be typed or printed below their signature and the signature shall be witnessed. Satisfactory evidence of authority of each person signing the proposal shall be furnished upon request.
- Cover sheets with the information requested above in section 3.1 must be included with each proposal.

### **3.3 POST-AWARD CHANGES IN PROPOSED PROJECT**

Projects are expected to go from award to completion unaltered from their original proposal; that is, projects are expected to be designed and proposed as feasible, serious projects that can be permitted. The Board, however, recognizes that some project changes may be required due to permitting requirements or events that are unforeseen by the proposals. The Board must be notified in advance in writing of any proposed change in a winning project while the incentive program is pending or operational for that project. Changes that have no material bearing upon the purposes or process of the program, or on the amounts of award and financing received by the project, will receive a letter of notification that the proposed change will not affect the project's award.

Changes having a material bearing upon the purposes or process of the incentive program may, upon determination by the Board, result in forfeiture of incentive payments, or termination of grant award to the project and in some cases repayment of some or all of the award. For example, a project that is or becomes non-renewable will materially affect the program.

The Board will determine an appropriate response, ranging from notification that the proposed change will not affect the project's award, to an order terminating or reducing the project's funding commitment.

### **3.4 ECONOMICS – Describe plans for selling or using energy from the plant.**

- Proposers may request upfront incentives to facilitate project design, permitting and/or construction up to 20% of the total qualifying project costs. Documentation of scope or work and budget for each stage of development need to be included.
- Indicate your plans for marketing energy from the plant and the status of negotiations with potential purchasers or users of the energy. Include your consideration of marketing energy from the distributive renewable electricity generation to fulfill the Board's RPS requirements and other green power pricing options.

- For information on New Jersey's Independent System Operator, visit the PJM website at [www.pjm.com](http://www.pjm.com).
- Provide a cash flow analysis over the lifetime of the project. Indicate any private, venture or existing project financing and the total amount of bond financing required for the project and any other incentives, subsidies or other funding associated with the project.
- Include a complete operation and maintenance plan for the life of the plant, including any estimated increases resulting from additional fuel costs.
- Discuss the proposed treatment of all "secondary environmental attributes" associated with the renewable generation, such as SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> emission credit allowances and renewable energy certificates.
- Business plan, which should include a description of the business, the proposed project and ownership/management.
- Three years financial statements for the business, which reflect ability to service existing debts as well as the requested loan.
- Current resumes, personal financial statements and tax returns for any person or entity having 10% or more ownership in the business, which will help in the evaluation of guarantor support to the request.
- Description of collateral available to secure the loan request, which should include value of collateral and amount of liens filed against the collateral.

### **3.5 PROPOSING TEAM**

- Organizational Chart – Prepare an organizational chart listing all team members, including the project manager and any subcontractors and other sponsors involved in the project, showing their roles and responsibilities.

Qualifications – State the proposing team's individual and combined expertise that would enable successful completion of this project. Describe sources of private financing that will be used by the proposer to perform the proposed work. Submit resumes of all key project team members, including those of proposed subcontractors. Include education and experience that are relevant to the proposed work.

Previous DREG Development Experience – Describe the proposing team's experience in developing and operating conventional or renewable energy plants, marketing power, and other relevant areas. List related projects that have been undertaken and successfully completed by the proposer and/or subcontractors. For each project, provide a brief project summary and the name and phone number of a client contact. The Board reserves the right to contact anyone so listed.

**3.6 DECOMMISSIONING PLAN** – While the Board prefers that the plant continue to operate beyond the financing term, the issue of decommissioning must be addressed in the proposal, to ensure that the future of renewable grid supply in New Jersey is not marred by inoperable, abandoned plants. Describe your plans for decommissioning the plant at the end of its life.

Identify what you will do to ensure the site is restored and the plant is not abandoned or left inoperable for an extended period of time. A surety bond or equivalent is preferred.

**3.7 STATEMENT OF WORK** – The Statement of Work is the primary contractual document that outlines work activities and required performance for payment and financing. It specifically delineates each step or procedure required to accomplish the project objectives. Therefore, each action shall be identified, indicating who will perform it, how it will be performed and its intended result. Be clear and specific; concentrate on “how” and not “why”. Use the following guidelines as the basis for your Statement of Work and modify it as necessary to fit your project and provide additional information. Clearly identify what has been done and present the results here in and what still needs to be done and how it will be done.

The Statement of Work must be structured as an ordered set of tasks and attachments as follows:

Introduction Briefly and clearly state the overall technical goals of the project.

Task 1: Project Management

Subcontractor Coordination – State how activities will be coordinated between the proposer and any partners, any subcontractors, and the Board. A discussion of subcontracting arrangements should also be included.

Project Management Meetings – Plan a kickoff meeting, an acceptance meeting, and a wrap-up meeting. Identify parties to participate at each meeting. Identify parties responsible for scheduling the meeting, providing the agenda (in advance), and issuing minutes.

Task 2: Reporting

The Contractor shall submit reports by the 15<sup>th</sup> of the month following the reporting period. Quarterly reports shall summarize progress, difficulties, and planned solutions associated with developing and installing the plant. After construction, monthly reports shall summarize the power plant’s performance and identify all operational problems and actions taken to fix the problem. Additional reports may be requested as needed for project facilitation.

### **3.8 RATES, CHARGES AND BILLING**

All projects are expected to come on-line by the date specified in the proposal. Any project failing to come on-line by this date may have its award and financing commitment reduced or terminated by the Board.

Plants must operate and provide the amount of electric power that the Proposer committed to or the plant will need to be optimized until it meets or exceeds the performance goals.

### **3.9 FAILURE TO SUPPLY**

If a project consistently generates less than estimated in its proposal or current project award package, the project will run the risk of an overestimation penalty. The Board will determine, based upon the generation information submitted, whether a project may be at risk for a penalty for overestimation, and what measures should be taken to rectify the production problem.

The Board will have the final determination in certifying the qualifying generation at each plant. It will look at what generation was available for sale and whether or not it was generated by renewable feedstock or resources.

## **4.0 PROPOSAL EVALUATIONS AND CONTRACT AWARD**

### **4.1 PROPOSAL ADVISORY COMMITTEE**

The Board will have an advisory committee to assist it in consultation with the NJDEP and the New Jersey Economic Development Authority to review proposals requesting funding. The Board Staff will decide upon funding commitments for each applicant having considered the recommendations of the advisory committee, NJDEP and the New Jersey Economic Development Authority.

### **4.2 EVALUATION CRITERIA**

The following evaluation criteria, not necessarily listed in order of significance, will be used to evaluate proposals. These evaluation criteria categories may be used to develop more detailed evaluation criteria to be used during the evaluation process.

**4.2.1** The Proposer general approach and plans to meet the requirements of the Solicitation.

**4.2.2** The Proposers detailed approach and plans to perform the services required by the scope of work of this Solicitation.

**4.2.3** The Proposers documented experience in successfully completing contracts of a similar size and scope to those required by this Solicitation.

**4.2.4** The qualifications and experience of personnel assigned by the Proposer to the contract with emphasis on documented experience in successfully completing required services of a similar size and scope to those required by this Solicitation.

**4.2.5** The overall ability of the Proposer, as judged by the State, to gear-up, undertake and successfully complete the contract within the required schedule or on time.

**4.2.6** The cost of the project, taking into account both the Proposer's cost per kW, overall generation, operations and maintenance costs and the environmental impacts of the project (described by Appendix C) associated with the proposed technology. This environmental cost will be evaluated in accordance with Section 4.3 below. The State reserves the right to reject any bid if the emissions of NO<sub>x</sub>, SO<sub>2</sub>, or CO<sub>2</sub> associated with the electricity product being offered is not less than current SOTA standards by a minimum of 10% including energy efficiency guidance.

**4.2.7** The amount of funding requested as a percentage of the total project cost.

**4.2.8** The location of the proposed facility in relation to transmission and distribution constraints.

**4.2.9** The appropriateness of the proposed location of the DREG project, including siting and permitting issues.

**4.2.10** Consideration of the goals with the State Development and Redevelopment Plan regarding land uses in Smart Growth Areas and the efforts of the project developer to solicit local participation and acceptance of the project.

**4.2.11** The overall mix of technologies and the projects ability to assist in meeting the goals of market transformation for emerging technologies.

**4.2.12** The environmental attributes of the proposed technology (defined in Section 4.3 below).

**4.2.13** The timeframe for construction/startup of the project.

**4.2.14** Feasibility.

**4.2.15** Financing qualifications

All applicants will need to provide all financial information required to complete the underwriting process through the New Jersey Economic Development Authority.

**4.2.15** Incentives requested for the project.

**4.2.16** Verified performance of the technology.

**4.2.17** Concurrence with the NJ Sustainability Greenhouse Gas Action Plan.

**4.2.18** Prohibited locations are: no wind projects will be approved for funding as part of this solicitation in areas in which the NJDEP, through its Green Acres program, or the New Jersey Department of Agriculture through its Farmland Preservation Program have funded either the direct acquisition or through lease agreement any farmland within a preservation program or transfer of development rights at a local or state level, unless the project developer is able to gain written approval from the appropriate agency for the siting of the project..

**4.2.19** Whether or not the technology was substantially manufactured in New Jersey.

**4.2.20** The Proposers ability to meet financial underwriting criteria.

4.2.21 Whether or not the project has taken steps to minimize negative impacts on habitat and wildlife and has taken into consideration the recommendations, in this regard, of the U.S. Fish and Wildlife Service.

#### **4.3 PROPOSAL EVALUATION ENVIRONMENT IMPACT ADJUSTMENT**

The electricity product offered by a proposal has associated environmental costs to varying degrees. In some cases, the specific environmental externalized costs may be zero. These environmental attributes include air emissions, water use, land use, wastewater generation and solid waste generation. The air emissions, water use, wastewater generation, land use and solid waste generation must be calculated by the Proposer and provided to the Board as a component of the bid. These environmental impacts will be used to calculate environmental externality costs and will be considered, along with the proposal price, in determining which proposals receive funding. For this reason, use Appendix C to provide the information with each bid.

## **5.0 ATTACHMENTS**

Appendix A Verification and Proposal Information

Appendix B Certifications

Appendix C Environmental Adjustment

## APPENDIX A - - VERIFICATION OF PROPOSAL INFORMATION

1. "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for a civil administrative penalties and that submitting false information may be grounds for denial, revocation or termination of any electric power supplier's license for which I may be seeking approval or now hold."
2. The certification in 1 above shall be signed by the applicant as follows:
  - i. For a corporation, by a principal executive officer of at least the level of vice president;
  - ii. For a partnership or sole proprietorship, by a general or the proprietor, respectively; or
  - iii. For a municipality, county, State, Federal or other public agency, by either a principal executive officer or ranking elected official.

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(Signature and Title)

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(Name, please print)

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(Date)

**APPENDIX B - - CERTIFICATIONS**

I. Certification Regarding Debarment, Suspension or Ineligibility for Award

The Proposer certifies, to the best of its knowledge and belief, that:

- (1) The Proposer and/or any of its principals \_\_\_ are, \_\_\_ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal or State agency, and
- (2) The Proposer and/or any of its principals \_\_\_ have, \_\_\_ have not, within a three-year period proceeding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a Federal, state, or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and \_\_\_ are, \_\_\_ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with commission of any of those offenses.

II. Clean Air and Water Certification

The Proposer certifies that:

- (1) Any facility to be used in the performance of this proposed project is \_\_\_ is not \_\_\_ listed on the Environmental Protection Agency (“EPA”) List of Violating Facilities;
- (2) The Proposer will immediately notify the BPU, before award, of the receipt of any communication indicating that the site the Propose plans to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities;
- (3) The Proposer will include a certification substantially the same as the certification, including this paragraph, in every nonexempt subcontract.
- (4) The Proposer will notify the BPU if it the site is in violation of any NJDEP regulations.

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Name, please print)

\_\_\_\_\_  
(Date)

**APPENDIX C - - ENVIRONMENT ADJUSTMENT**

List the NO<sub>x</sub> emissions of the technology, per MWh. \_\_\_\_\_

List the sulfur dioxide (SO<sub>2</sub>) emissions of the technology, per MWh. \_\_\_\_\_

List the carbon dioxide (CO<sub>2</sub>) emissions of the technology, per MWh. \_\_\_\_\_

List the land usage, in acreage, of the proposal. \_\_\_\_\_

List the water usage of the proposal, in gallons per MWh. \_\_\_\_\_

List the wastewater disposal related to the proposal, in gallons per MWh. \_\_\_\_\_

List the solid waste generated, related to the proposal, in (metric) tons per MWh \_\_\_\_\_

List of potential impacts to fish, wildlife and natural habitats -----

The Board reserves the right to use a portion of the award from this solicitation to hire an independent third party consultant to verify the environmental impacts of the project, including those to fish, wildlife and natural habitats.

## Appendix D Project Summary

Project Type (Technology)	_____
Fuel if any	_____
Size (MW)	_____
Annual Generation	_____
Upfront Incentive \$	_____
Project Cost \$	_____
Incentive as a % of Total Project Cost	_____
Estimated Rate of Return %	_____
Location	_____