

**Synopsis of New York's Comprehensive Application  
State Energy Program Formula Grant through American Recovery and Reinvestment Act  
Prepared by New York State Energy Research and Development Authority  
(Funding Opportunity DE-FOA-0000052)**

**Overview**

On March 12, 2009, the U.S. Department of Energy issued Funding Opportunity Announcement (FOA) DE-FOA-0000052, through which New York State is eligible to receive \$123,110,000 of funds allocated through the American Recovery and Reinvestment Act (ARRA) for State Energy Program Formula Grants. As outlined in the FOA, the purposes of the ARRA funds allocated to the SEP are to: stimulate the creation and increased retention of jobs; save energy; increase energy generation from renewable sources; and reduce greenhouse gas emissions. As required by the FOA, NYSERDA filed an Initial Application with the DOE on March 23, 2009, which included a preliminary list of project activities. The final list of project activities has been developed and is described below. In developing the final plan, NYSERDA is taking into account the relative cost-effectiveness of the strategies, the budgets needed to carry out the activities, and the provisions of ARRA that apply to use of SEP funds. Further, NYSERDA has considered:

- The needs expressed by many localities, institutions, and organizations in New York State that responded to Governor Paterson's call for shovel ready projects;
- Priorities to help New York State meet important clean energy goals;
- The opportunity to use the SEP funds to augment New York's rate-payer funded programs and fill critical gaps; and
- Methods to use the SEP funds to leverage other resources and provide an ongoing funding stream for efficiency projects.

The list below provides program descriptions for each of the four primary activities that will be undertaken with the SEP ARRA funds. Information on the benefits of the activities are included, as well as the budget allocation. Budgets include costs associated with project incentives, grants, contractors, administration, and evaluation.

**Planned Project Activities**

**Energy Efficiency Program for Municipalities, Schools, Hospitals, Public Colleges and Universities, and Non-Profit Organizations**

*Program Description:* This Program will provide direct financial support for eligible customers to implement energy efficiency projects. Eligible customers will be defined as any: municipal, local or county government; public (State and City) university or community college; public K-12 school; public or private, non-profit hospital; and not-for-profit organization. Eligible measures may include, but are not limited to: lighting, cooling, heating, motors, building envelope, building or facility optimization, combined heat and power, geothermal, and other cost-effective energy strategy. Program participants will be selected through a competitive process consistent with Department of Energy requirements for ARRA State Energy Program funds. Additional program criteria will be designed to maximize the use of performance contracting to further leverage funding and impact a greater number of projects.

NYSERDA will ensure geographically equitable distribution of funds through allocations to 5 to 10 regions across the State. The funding allocations within those regions will be based proportionately on the population data, and may take into account other factors. Additionally, each of the eligible customer sectors will receive a sub-allocation of the available funds. It is anticipated that up to 100% of the project cost could be covered by the Program with a project funding cap of \$1 million. The solicitation that will be issued for this Program will seek proposals for energy efficiency measures, as well as proposals for the eligible transportation and renewable energy projects that are addressed in other sections of the SEP Plan. This coordinated approach will make it easier for customers to participate and streamline the application process. The Program will also be coordinated with activities focused on the municipal sector that will be included in NYSERDA's plan for use of funds through the Energy Efficiency Conservation Block Grant program.

The competitive proposals seeking SEP funding will be evaluated based on: projected energy savings, anticipated job creation and/or retention, ability to implement projects expeditiously, wealth of the applicant's core constituency, green house gas emissions reduced, and leveraging of SEP funds, including cost-share provided by the customer and/or from another source. Cost-effective energy projects that will achieve annual savings of greater than 10 million source BTUs saved per \$1,000 spent will receive priority. Turn-key energy projects, such as those offered by energy service companies (ESCOs) and other state entities such as the New York Power Authority (NYPA), will be encouraged. Performance projects typically include: auditing, design, project management, implementation, commissioning and financing as necessary, as a packaged project and can often be implemented faster than traditional capital projects in the targeted sectors.

Cost-shared technical assistance will be available to the targeted sectors through NYSERDA's Flexible Technical Assistance Program (FlexTech) to assist customers in developing their energy projects. NYSERDA will also use one or more contractors through its Energy Smart Focus Program to provide outreach and support to the customers in the targeted sectors, and to assist NYSERDA in the development of solicitations, compiling required reports, and performing various project management and assessment tasks.

It is anticipated that the SEP funding will enable energy projects to be implemented at 200 customers across the state and affect 25,000,000 square feet of building renovation.

*Estimated Jobs Created/Retained: 867*

*SEP ARRA Allocation: \$82,608,000*

### **Energy Code Program**

*Program Description:* Governor David A. Paterson is currently advancing legislation to amend the existing Energy Conservation Construction Code of New York State to meet or exceed the commercial building requirements of ASHRAE 90.1 -2007, and the residential requirements of the International Energy Conservation Code (IECC) 2009, as required by the America Recovery and Reinvestment Act. DOS is charged with the implementation and support of the Energy Code and NYSERDA has a long-standing relationship with DOS, having provided technical and training support through several Energy Code grants funded by DOE. This proposed Program, developed by NYSERDA in close cooperation with DOS, will support the Governor's effort to adopt more stringent energy codes and will provide various implementation and support services to the entire building community, and work aggressively to achieve over 90% compliance in the commercial and residential sectors. The primary audience includes

local code officials in the 1600 local municipalities who are charged with local implementation of the state-wide Energy Code, the entire architectural and engineering profession, and home builders. Activities funded through the State Energy Program will broadly provide implementation support, training services and compliance assessments to the building community across the State. Program activities contemplated under the Energy Efficiency Conservation Block Grant will focus on local community support through regional code advisors, circuit-rider assistance and plan review services.

All measures that affect heating, cooling, electric energy use and process operations in buildings would be included within the scope of the Energy Code. All buildings of any kind that are heated or cooled for human occupancy are covered by the Energy Code. Program services will be provided in the form of technical assistance, training, support and compliance assessment. Most program services will be provided by contractors selected through a competitive bid process conducted by NYSERDA. Training and instructional courses will be provided across the State on a first-come, first-served basis. Technical assistance services will be provided to selected communities across the state at locations to be determined by NYSERDA and the DOS. Compliance assessments will be conducted statewide. Outreach will be conducted through existing NYSERDA and DOS stakeholder channels, including but not limited to the NYS Builders Association, NYS Building Officials Conference, architectural and engineering associations, local engineering chapters, home improvement retailers and retail lumber associations.

A benchmarking compliance assessment will be conducted to establish a baseline of compliance levels, from which to measure improvements. A determination of the energy impacts on improved compliance (how much additional energy savings are accruing from specific increases in compliance with Energy Code requirements) will be made, and used to assess the overall energy savings impacts. Commercial and residential metrics will be calculated separately.

*Estimated Jobs Created/Retained: 72*

*SEP ARRA Allocation: \$4,489,000*

### **Renewable Energy Program**

*Program Description:* The Renewable Energy Program is designed to expand the use of solar energy across New York through four initiatives:

- 1) NYSERDA will partner with the Long Island Power Authority (LIPA) to implement power purchase agreement (PPA) arrangements to purchase 50 MW of solar capacity and to promote the installation of large-scale, multi-megawatt PV installations in load pockets. LIPA is negotiating contracts that were selected through a competitive process (Solar RFP) to purchase the output from two or more PV installations to be built on Long Island within the next 18 months. The LIPA solar PPA program was targeted to utility-scale and large commercial and industrial customers. These will be the first large-scale PPA solar projects in New York. LIPA conducted a rigorous and thorough competitive solicitation process in order to select the proposals from the 28 that were submitted. Over the next five months, LIPA and the selected proposers will be working to complete the PPAs and the necessary environmental reviews. The costs associated with implementing the program include the costs for installation and operation of equipment to interconnect the photovoltaic equipment to the utility grid and a power purchase agreement for the electricity and associated environmental attributes. The SEP ARRA funds will be used directly for the costs of the interconnection and associated improvements for transmission and utilization of the power from the distributed generation sites to the LIPA electric grid. Based on

the purchase of 50 MW of solar capacity, energy, and renewable energy credits with its selected proposers in the Solar RFP, LIPA will purchase approximately 66,000 MWh per year.

- 2) NYSERDA will provide capacity-based incentives to customers, PV system integrators, or others for the installation of medium-scale PV systems. The principal barrier to widespread adoption of PV is the initial high capital cost. The market for PV in New York is driven by national, state and local incentive programs (various forms of rebates, performance payments and tax credits) that are designed to bring the financial cost of the PV installation close to the level of the financial benefits the system will deliver. The current NYSERDA PV Incentive program provides a fixed, capacity-based incentive for relatively small installations for customers that pay a Renewable Portfolio Standard (RPS) charge for the power used in the building where the PV system is to be located. For non-residential systems, incentives are provided for systems up to 80 kW in size. With SEP ARRA funds, NYSERDA will develop a new competitive program that allows market participants to propose the incentive level necessary to install aggregated blocks of PV systems. This program will target systems larger than 80 kW or customers that do not currently pay into the RPS. A competitive solicitation will define an upper limit of incentive payment request that will be considered along with other program requirements. Proposals will be ranked according to the predefined criteria and selected based on the ranking, with those requesting the least amount of incentive funding per watt of installed PV receiving priority. NYSERDA expects to issue a solicitation and select projects by the end of 2009. NYSERDA will select one or more contractors to provide design review, and measurement and verification for the solar installations, based on a competitive solicitation. It is expected that this competitive program will result in between 3 to 6 MW of PV installations that will generate between 3, 400 and 7,000 MWh annually.
- 3) New York is a national leader in the development and implementation of accredited training programs for PV installers. There are currently 6 active training programs in the State with another 23 programs under development. Four of the programs have been accredited through the Institute of Sustainable Power and the rest are in the process of completing the necessary requirements. In addition, NYSERDA continues to support the North American Board of Certified Energy Practitioners in their program to provide certification to PV installers. One of the hurdles for students is the ability to gain installation experience beyond the practice installations in the classroom. This program will support the installation of PV systems at local not-for-profit facilities. NYSERDA will develop an application for institutions to use to request a predetermined amount of funding support for the hardware components of the PV system. The program will offer the students on-the-job experience.
- 4) This element of NYSERDA's Program for the institutional sector will provide direct financial support for eligible customers to implement solar thermal, photovoltaic (PV) systems, or other renewable technologies. Eligible customers will be defined as any: municipal, local or county government; public (State and City) university or community college; public K-12 school; public or private, non-profit hospital; and not-for-profit organization. The solicitation that will be issued for this Program will seek proposals for eligible renewable energy projects, as well as proposals for the eligible energy efficiency and vehicle projects that are addressed in other sections of the SEP Plan. Renewable energy projects will be selected based on their projected energy savings, anticipated job creation and/or retention, ability to implement shovel ready projects expeditiously, green house gas emissions reduced, energy cost savings, and leveraging of SEP funds, cost-effectiveness, amongst other criteria. The solicitation will include elements to

ensure equitable geographic distribution of funds. With funding from the program, approximately 0.5 MW could be installed. These installations would generate between 550 MWh to 585 MWh per year.

*Estimated Jobs Created/Retained: 300*

*SEP ARRA Allocation: \$31,370,000*

### **Clean Fleet Program**

Program Description: This element of NYSERDA's program for the institutional sector will provide direct financial support to accelerate the introduction of light-, medium-, and heavy-duty alternative fuel vehicles and certain advanced vehicle technologies into local communities. Eligible fleets will be defined as any municipal, local or county government; public (State and City) university or community college; public K-12 school; public or private, non-profit hospital; and not-for-profit organization, that will own lease, or otherwise operate the vehicles or equipment for which funds are requested. Funds may be used to cost-share up to 75% of the incremental purchase costs of alternative fuel vehicles or refueling and recharging equipment, or installing anti-idling equipment, up to \$500,000 per applicant. Light-, medium-, or heavy-duty alternative fuel vehicles eligible for incremental cost funding must be fueled by natural gas, propane, hydrogen, or use electricity either stored or generated on-board, as the primary motive force. Medium and heavy-duty hybrid electric vehicles that use an electric motor directly connected to the drive train to provide traction force to the wheels are eligible. Light-duty plug in (charge-depleting) hybrid electric vehicles are eligible for funding only for the incremental cost compared to a charge-sustaining hybrid vehicle.

The competitive solicitation that will be issued will seek proposals for eligible vehicle fleet projects, as well as proposals for the eligible energy efficiency and renewable projects that are addressed in other sections of the SEP Plan. Fleet projects will be selected based on: quantity of emissions reduced; amount of petroleum displaced; anticipated job creation/retention; location with respect to Clean Air Act non-attainment areas; cost-share and leveraging of SEP funds; and other appropriate factors. The solicitation will include elements to ensure equitable geographic distribution of funds.

Cost-shared technical assistance will be available to the targeted sectors through NYSERDA's Flexible Technical Assistance Program (FlexTech) to assist customers in analyzing their vehicle fleet operations to assess the opportunity to incorporate alternative fuels. Additionally, NYSERDA will work with the six designated Clean City organizations in New York as well as one or more contractors to provide outreach and support, and to assist NYSERDA in the development of solicitations, compiling required reports, and performing various project management and assessment tasks.

A minimum of eight fleets will be awarded funding under the program. Vehicle projects are expected to displace approximately 350,000 gallons of petroleum per year with alternative fuels.

*Estimated Jobs Created/Retained: 43*

*SEP ARRA Allocation: \$4,643,000*