Environmentally Preferred Power Systems Technologies
Program Opportunity Notice (PON) 1670
$5 Million Available

Proposals Due: December 10, 2009
by 5:00 PM Eastern Time*

The New York State Energy Research and Development Authority (NYSERDA) seeks proposals to support the development, demonstration, and commercialization of environmentally preferred power systems and electric energy storage technologies. One round is scheduled under this PON and total available funding is $5,000,000. All, or none, of the available funds may be allocated. Category descriptions are as follows:

Category 'A' - Early Stage Innovative Product Development Feasibility and Technology Transfer Studies:
Feasibility studies of innovative renewable and other environmentally preferred power systems technologies that address NYSERDA's energy, environmental, and economic goals involving components that would be manufactured in New York State. Also, Technology Transfer Studies that assess topics of general interest to the DG and renewable communities are eligible. Maximum NYSERDA funding for this Category is $250,000 per project.

Category 'B' - New Product Development: Development of innovative renewable and other environmentally preferred technologies, including distributed generation (DG), electric energy storage, power quality/reliability components, and related technologies that improve performance, and lead to the commercialization of products manufactured in New York State. Maximum NYSERDA funding for this category is $1,000,000 per project.

Category 'C' - Demonstration Projects: Demonstration of innovative renewable and other environmentally preferred technologies that are past the "proof-of-concept" stage, including distributed generation (DG), power quality/reliability components, and related technologies that improve performance, demonstrate application opportunities, and lead to the commercialization of products manufactured in New York State. Also eligible are demonstrations of emerging electric energy storage technologies such as ultra-capacitors, advanced batteries and flywheels for applications such as power quality/reliability improvement, time-of-use energy cost management, renewable energy generating sources firming, etc. Maximum NYSERDA funding for this category is $1,500,000 per project. Proposals under this Category must clearly identify why they fall within Category C (Demonstration) rather than Category B (Product Development).

NOTE: Proposer must indicate to which category they are proposing on the proposal checklist. Each proposal will be considered for only one category of funding. Proposals submitted under Categories B and C must be cost-shared at or above 50% of total project costs and those under Category A are encouraged to be cost-shared at or above 50% of total project costs. Proposals submitted under any category that request NYSERDA funds for product development may be subject to recoupment.

Proposal Submission: Proposers must submit twelve (12) print copies and one (1) electronic media copy (CD or 3½ inch floppy) of the proposal in ***Microsoft Word format*** with a completed and signed Proposal Checklist attached to the front of each copy, one of which must contain an original signature. Proposals must be clearly labeled and submitted to:

Roseanne Viscusi, PON 1670
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact the individuals listed below by e-mail or by phoning (518) 862-1090 and selecting the appropriate extension:

James Foster	**Project Manager**	**Richard Drake**	**Program Manager**	**Jennifer Harvey**	**Sr. Project Manager**
ext. 3376	**jmf@nyserda.org**	**ext. 3258**	**rld@nyserda.org**	**ext. 3264**	**jlh@nyserda.org**

If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 or nsm@nyserda.org.

No communication intended to influence this procurement is permitted except by contacting one of the Designated Contacts listed above. Contacting anyone other than this Designated Contact (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

*Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at www.nyserda.org.

Introduction

New York State Energy Research and Development Authority (NYSERDA), a public benefit corporation, provides energy-related technical and financial assistance to businesses and institutions to promote energy efficiency and economic development. NYSERDA sponsors energy research and development programs that promote safe and economical energy production and efficiency technologies in New York State, issues tax-exempt bonds and notes for energy-related projects, and analyzes the effect of New York's energy, regulatory, and environmental policies on the State's business, institutional, and residential energy consumers.

The New York **Energy $mart** (sm) program is designed to continue energy efficiency, low-income services, research and development, and environmental protection programs during the State's transition to electric retail competition, and is a key element in the restructuring of New York's utility industry. To ensure that these kinds of programs continue to benefit New Yorkers, the State's Public Service Commission (PSC) named NYSERDA administrator of these programs, which are paid for by a System Benefits Charge (SBC) on the electricity transmitted and distributed by the State's investor-owned utilities. The New York **Energy $mart** (sm) program is being implemented in those utility territories.

In addition to this program, NYSERDA has solicitations to assist in technology and business development and establishing manufacturing facilities (http://www.nyserda.org/Funding/default.asp). NYSERDA's Saratoga Technology + Energy Park® (STEP®), a fully integrated knowledge community, also supports the success of clean-energy and environmental companies by providing an eco-friendly environment in which to build and grow (http://step.nyserda.org/).

Under this solicitation, NYSERDA seeks proposals to develop and demonstrate renewable and other environmentally preferred technologies, including distributed generation, power quality and reliability technologies and components that improve performance, demonstrate application opportunities, and lead to the commercialization of products manufactured in New York State. Also of interest are projects that will develop and demonstrate electrical energy storage systems to be installed on the customer side of the electric meter that can provide alternatives to central generating capacity, renewable energy generating sources firming, cost savings, reliability and power quality benefits, improved energy efficiency, and/or environmental benefits.

Anticipated benefits include the introduction of products that provide end users with additional options for improved reliability, power quality, and competitive electric cost using products that have superior environmental attributes as well as benefits that help to achieve NYSERDA's economic development goals including near-term and sustainable creation or retention of jobs in New York, lower energy cost and reduced life-cycle cost through decreased energy use and reduced need for new central station construction.

This solicitation includes three categories:

A. Early Stage Innovative Product Feasibility and Technology Transfer Studies;
B. New Product Development;
C. Demonstration Projects.

The proposer must indicate under which category they are proposing.

Specific requirements for each category are as follows:

Category A: Innovative Product Feasibility and Technology Transfer Studies

I. Program Requirements

Eligibility – Eligible projects for **Early Stage Innovative Product Feasibility and Technology Transfer Studies** of renewable and other environmentally preferred Distributed Generation (DG) power systems, electrical energy storage and/or related components including:

(1) Feasibility Studies to assess the viability of innovative renewable and other environmentally preferred DG product designs/concepts of innovative power systems technologies, including DG and/or Combined Heat and Power (CHP) systems/components and electrical energy storage technologies that would be manufactured in New York State.

(2) Feasibility Studies of other innovative power systems technologies that address NYSERDA's energy, environmental, and economic goals involving components that would be manufactured in New York State.

(3) Technology Transfer Studies that assess and report on topics of general interest to the renewable and other environmentally preferred DG power systems stakeholder communities in New York. Past studies have included such diverse topics as: developing protocols for standardized testing to assess the electrical, thermal, and environmental performance of DG-CHP systems, evaluating the technical, operational and economic feasibility of various retrofit technologies to reduce NOx emissions from engine-driven generators, evaluation of retrofit electrical energy savings technologies, and assessment of various technologies to meet the power quality and reliability requirements for semiconductor research and manufacturing facilities.

Eligible projects for **Early Stage Innovative Product Feasibility and Technology Transfer Studies** of Power System and/or DG Technologies may address areas already within the scope of existing NYSERDA projects, or may represent new approaches to achieving NYSERDA's energy, environmental, and economic goals. Areas of interest include, but are not limited to:

(1) Fuel cells and related components and subsystems;

(2) Innovative electric energy storage technologies including batteries, flywheels, ultra-capacitors, and superconducting magnetic energy storage;

(3) Solar electric technologies, including innovative photovoltaic and solar thermal-electric systems, components of these systems, and products that incorporate photovoltaics;

(4) Wind technologies including innovative wind energy-conversion devices, components, and products that support wind-energy systems and power plants;

(5) Hydro power technologies, including innovative products that increase generating capacity or improve environmental performance;

(6) Power conditioning equipment;

(7) Innovative technologies for upgrading performance of new or existing power generation equipment;

(8) Systems and equipment innovations for improving distribution system performance and reliability;

(9) Biomass, waste heat to energy, and biogas;

(10) Innovative packaging of DG products for targeted purposes, such as baseload, CHP, peak-load reduction, power quality, electrical energy storage, hybrid combinations, and other applications;

(11) Innovative control systems related to power systems, generation, and distribution, such as remote or on-

site monitoring and diagnostic systems, intelligent remote or on-site control systems to provide command and communication with power systems equipment, or control systems technologies to promote safe, reliable integration of DG and electric energy storage technologies into the distribution system.

Limitations – Proposals for projects receiving or anticipating to receive Renewable Portfolio Standard (RPS) funding are ineligible for funding under this solicitation. Both power generation and energy storage projects must produce electricity.

Project Scope – Projects selected for funding must:

(1) Address power generation, availability, reliability, and quality needs of New York State, as well as energy efficiency and environmental performance.

(2) Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as peak electric demand reduction, high fuel-use efficiency, emissions reductions, reduced power costs, job creation, product manufacturing and sales.

(3) Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing total project cost and proposer cost-share. Include a budget breakdown by project task.

(4) Provide sharing of success by agreeing to pay recoupment to NYSERDA upon product commercialization (if applicable, see terms and conditions in Section 8 of attached Sample Agreement.)

(5) Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.

(6) For Product Feasibility Studies, emphasize development and/or application of marketable products for near-term commercialization, rather than basic research.

(7) For Product Feasibility Studies, provide a preliminary commercialization and marketing strategy, and discuss the potential for manufacturing in New York State.

Other Considerations – In addition, note that:

- A proposal may be considered **non-responsive** if it fails to comply with the requirements above, the Proposal Requirements of Category B, Section II, or Section V, General Conditions for ALL categories.

- Prior to an award being made, potential contractors may be required to demonstrate: access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.

II. Proposal Requirements

Proposers must submit twelve (12) print copies and one (1) electronic media copy (CD or 3½ inch floppy) of the proposal in Microsoft Word format with a completed and signed Proposal Checklist attached to the front of each copy, one of which must contain an original signature. Proposal should be addressed to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned.** Faxed or e-mailed copies will not be accepted.

Procurement Lobbying Requirements - **State Finance Law sections 139-j and 139-k**
Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (The text of the laws are available at:
http://www.ogs.state.ny.us/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html). In compliance with §139-j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of $15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal

Checklist referenced in this solicitation will disqualify your proposal.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics - double-sided prints with a staple in the upper left corner is the preferred format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. **The proposal must be in the following format and sequence listed below** (suggested page limits for each section are shown in parentheses following the section title).

1. Proposal Checklist - Complete the specific Proposal Checklist attached as part of this PON, and include it as the front cover of the original and each copy of the proposal. Please note the following:

- Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement. If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.
- Be sure the individual who is signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.

2. Disclosure of Prior Findings of Non-Responsibility Form

3. Executive Summary (one page) – Briefly summarize the power systems-related problem or opportunity, the proposed solution, its innovative characteristics and potential benefits, and the list of team members and their qualifications.

4. Problem Statement and Proposed Solution (two to three pages) – Describe the following:

- The power systems-related problem or opportunity, and its significance to New York State
- The proposed solution and how it addresses the problem or opportunity: the technical basis, innovative characteristics, current stage of research and development, and current market penetration in New York State
- Alternative solutions and why the proposed solution is superior
- Barriers to market entry and your ability to overcome them.
- Any patents or licensing agreements associated with the product or system.
- The status of the earlier phase of a project if the proposal addresses a subsequent follow-on phase of a previously cofunded NYSERDA project.

5. Proposed Statement of Work and Schedule (three to four pages). The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. 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 "active voice" sentence structure to make clear who is responsible for specific actions; for example, use the following phrase to start the description of every task and subtask: "The Contractor shall ...."

Include a list and three to four-sentence description of each of the major tasks to be accomplished. Typical task titles may include, but are not limited to, the following: project management, requirements definition, evaluation of current practices, cost assessment, test plan development, design, installation, metrics (benefits) quantification, etc. For example:

<u>Task 1.0 Project Management.</u>

<u>Subtask 1.1 Subcontracts (if any).</u> The Contractor shall enter into the following agreements

<u>Subtask 1.2 Meetings.</u> The Contractor shall hold a Kick-Off Meeting, Interim Review Meetings (as warranted), and a Wrap-Up Meeting at the end of the project.

<u>Subtask 1.3 Reporting.</u> NYSERDA will expect to receive written progress reports (typically monthly), as part of the project management task. These activities should be considered when developing your cost proposal. Such reports shall describe any difficulties encountered during the reporting period, and shall include a statement of the Project Director setting forth the cost of the work during the reporting period. The progress reports should be

submitted to NYSERDA's Project Manager no later than the 15th of each month. Progress reports shall be in a letter format and shall include the following subjects in the order indicated, with appropriate explanation and discussion.

a. Title of project
b. Agreement number
c. Period of this report
d. Progress of report
e. Planned progress in the future
f. Identification of problems
g. Planned solutions
h. Ability to meet schedule, reasons for slippage in schedule
i. Schedule - percentage completed and projected percentage of completion of performance by months as a bar chart or milestone chart
j. Analysis of actual cost incurred in relation to the budget

Subtask 1.4. Final Report. The Final Report should detail all of the work performed and task deliverables, but exclude proprietary information. The comprehensive Final Report shall cover all aspects of the project and shall merge together, and build further on, the previously generated monthly progress reports.

Task 2.0, 3.0, 4.0, etc. Project-specific Work Scope Tasks. Add as many tasks and subtasks as necessary to cover all actions needed to achieve the goals and objectives of the project. These will be action steps. Each task should include a concise narrative description of the work that will be performed and how the work will be performed and deliverables to be provided. Typical tasks may include, but are not limited to, requirements definition, preliminary design, prototype construction, testing, final design, and demonstration. Deliverable(s) for each Task should be identified as appropriate.

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a bar chart is preferred starting with "Month 1," "Month 2," etc. The schedule should include timing of major milestones such as design reviews, test result analyses, completion of working prototypes, delivery of products, and the start of metrics reporting to NYSERDA, showing progress toward project objectives and goals.

If applicable, a brief description and anticipated duration of additional development or commercialization activities, beyond the proposed work, that will be necessary to fully achieve commercialization.

6. Proposer Qualifications (one to three pages, depending on team size) – Identify the following:

- Proposer and any other team members and major subcontractors, with Project Manager and other key individuals listed. Note: Subcontracts of $25,000 or more are subject to competitive bid procedures except where the proposal identifies a specific subcontractor as an integral participant in the proposed work (see attached Sample Agreement).
- Qualifications of all businesses, organizations, and individuals named above, including relevant experience and references.
- All NYSERDA contracts awarded to the proposer, if any, in the past five years, with the funding totals and current status or outcome of the project included.

7. Project Benefits (two pages) – Outline benefits as follows:

- **Quantify** the following potential direct benefits to New York State to the extent possible:
  - Energy benefits (e.g., barrels/day reductions in petroleum fuels consumption in New York State, percentage improvement in energy efficiency, etc.)
  - Environmental benefits (e.g., pollutant emission reductions, elimination of hazardous materials, etc.)
  - Economic benefits (e.g., near-term jobs created, power generation equipment life-cycle cost reductions, etc.)
- **Identify** other benefits (e.g., compliance with New York State or federal regulations, increased mobility, etc.)
- **Describe** how the success of the project can be measured and verified.

8. Technology Transfer and Commercialization Plan (Two to three pages) – Describe how project results will be used to commercialize or deploy new products and indicate the parties involved in the process. Projects nearing commercialization should have a detailed commercialization plan, whereas an early-stage concept should be accompanied by at least a rough outline of how the concept may ultimately be deployed. Cover the following topics:

- **Project Timeline:** Provide a multi-year timeline (e.g., graph) showing the paths, activities, milestones, resources, timing to take the technology from its current state of development to commercial product, and cost sharing in relation to total costs.
- **Marketing:** Identify target markets and their relevant characteristics (e.g., size, competition, regulatory and technological trends, etc.). Describe your proposed marketing strategies, explain why they should be successful, and provide sales estimates. Provide an estimate of the price of the product or system that eventually will be commercialized and provide a comparison of that price to competing products or systems. Briefly explain the customer's economic motivation for buying the new product or system, versus alternatives.
- **Design & Production:** Describe remaining technical development steps leading to the start of manufacturing or deployment. Describe plans for setting up or expanding manufacturing facilities. Discuss any key issues such as: need for specialized production equipment or strategic alliances; critical make/buy decisions or cost/volume issues; and plans for ancillary activities such as service support functions.
- **Finance:** Estimate funds required to go from the current stage of development to a financially self-sustaining level of commercialization. Include funding for R&D and initial marketing and manufacturing/deployment programs. Identify potential funding sources and how those sources will be addressed. Identify any potential strategic partners who could reduce your costs by providing access to marketing/distribution channels, manufacturing facilities or other assets.
- **Organization Plan:** Describe staffing plans for transition from R&D stage to commercialization stage; include all organizational functions, such as management, administration, engineering, marketing/sales, and manufacturing.
- **Technology Transfer:** Describe any additional actions to promote the new technology, such as the presentation of technical papers.

9. Budget – Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing a total of project costs and proposer cost-share (maximum NYSERDA funding for this category is $250,000 per project). Include a budget breakdown by project task. Use the format below (expand table as needed).

Cost Sharing - Proposals submitted under Category A are encouraged to show non-NYSERDA funding at or above 50% of the total cost of the project. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred.

PROPOSAL COST SHARING TABLE							
Funding Source	**Task 1**		**Task 2**		**Task ...**	**Project Total**	
	Cash	**In-Kind**	**Cash**	**In-Kind**	**...**	**Cash**	**In-Kind**
NYSERDA							
Proposer							
Co-Funder (identify)							
Co-Funder (identify)							
Task Total ($)							

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).

2. If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
3. If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

10. Appendices – Include any resumes, company qualifications, or ancillary information that is deemed necessary to support your proposal. If appropriate, also include:

- **Letters of Interest or Commitment –** If you are relying on any other organization to do some of the work, provide services or equipment, or share in the non-NYSERDA cost, include a letter from that organization describing their planned participation. Also include letters of interest or commitment from businesses or other organizations critical to the future commercialization, demonstration, or implementation of the project. **Absence of letters of interest or commitment will be interpreted as the proposer not having support from the identified parties**.

- **Exceptions to the Terms and Conditions –** If you do not accept the standard terms and conditions (including the recoupment provisions) as contained in the attached Sample Agreement, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

III. Recoupment Provisions

Recoupment may be required. Please refer to Section V, "General Conditions for ALL Categories" located after the "Instructions for Category C" section.

IV. Proposal Evaluation

Proposals that meet Proposal Requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria identified below. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer may also be asked to address specific questions or recommendations of the TEP before contract award.

Evaluation Criteria:

- **Problem and Proposed Solution -** How significant is the problem or opportunity to New York State? How well does the proposed solution address the problem or opportunity? Are fundamental scientific principles well understood and clearly presented? Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs? Is the proposed work technically feasible, innovative, and superior to alternatives? How significant are the barriers to market entry? Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers? If the proposed work is a follow-on to a previously cofunded NYSERDA project, what was the outcome of the earlier phase?
- **Project Scope and Schedule -** How appropriate are the technical and performance goals for the proposed technology or system? Is the statement of work well organized, complete, and appropriate for the goals identified? How realistic is the schedule for achievement of the goals of the proposed project?
- **Proposer Qualifications -** Has the proposer provided evidence of being qualified to perform the proposed work? To what degree does the proposer have the necessary technical and business background and experience? Has the proposer provided evidence of good past performance on other relevant projects?
- **Project Benefits -** How well are the potential benefits to New York State quantified? Does the proposed project have favorable energy, environmental and economic impacts in New York State? How significant are these impacts? Does the proposed project assist New York State in complying with federal clean air regulations or achieving the goals of New York's Renewable Portfolio Standard (RPS)? Is the plan for measurement and verification of the success of the proposed project clear and complete? How well does the project reflect

NYSERDA's overall objectives (risk/reward relationships, similar ongoing or completed projects, the general distribution of NYSERDA projects among industries and other organizations, and the distribution of projects within New York State)?

- **Project Outcome & Cost** - Has the market been identified and characterized? Is the estimated product price competitive with alternative products or solutions? Has a realistic strategy been presented for producing the technology, product, or system and introducing it to the market? Is the commercialization plan appropriate for the stage of development? Is the overall project cost justified based on the expected benefits? How significant is the potential market opportunity relative to the project cost? How appropriate are the proposer's cofunding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization? How firm are the commitments and support from essential participants, cofunders, and related business and other organizations? Are the overhead rates reasonable and supported with appropriate documentation?

Category B: New Product Development

I. Program Requirements

Eligibility – Eligible projects for **New Product Development** of innovative renewable and other environmentally preferred Distributed Generation (DG) power systems and/or related components include:

(1) Development and commercialization of power systems technologies, including DG and/or Combined Heat and Power (CHP) systems or components manufactured in New York State.

(2) Development of other innovative power systems technologies that address NYSERDA's energy, environmental, and economic goals involving components manufactured in New York State. Proposals may address DG and/or CHP technologies at varying stages of development from definition of requirements, through proof of concept and early product development, to field evaluation for initial market introduction.

Eligible projects for **New Product Development** of Power System and/or DG Technologies may address areas already within the scope of existing NYSERDA projects, or may represent new approaches to achieving NYSERDA's energy, environmental, and economic goals. Areas of interest include, but are not limited to:

(1) Fuel cells and related components and subsystems;

(2) Innovative electric energy storage technologies including batteries, flywheels, ultra-capacitors, and superconducting magnetic energy storage;

(3) Solar electric technologies, including innovative photovoltaic and solar thermal-electric systems, components of these systems, and products that incorporate photovoltaics;

(4) Wind technologies including innovative wind energy-conversion devices, components, and products that support wind-energy systems and power plants;

(5) Hydro power technologies, including innovative products that increase generating capacity or improve environmental performance;

(6) Power conditioning equipment;

(7) Innovative technologies for upgrading performance of new or existing power generation equipment;

(8) Systems and equipment innovations for improving distribution system performance and reliability;

(9) Biomass, waste heat to energy, and biogas;

(10) Innovative packaging of DG products for targeted purposes, such as baseload, CHP, peak-load reduction, power quality, electrical energy storage, hybrid combinations, and other applications;

(11) Innovative control systems related to power systems, generation, and distribution, such as remote or on-site monitoring and diagnostic systems, intelligent remote or on-site control systems to provide command and communication with power systems equipment, or control systems technologies to promote safe, reliable integration of DG and storage technologies into the distribution system.

Limitations – Proposals for projects receiving or anticipating to receive Renewable Portfolio Standard (RPS) funding are ineligible for funding under this solicitation. Both power generation and energy storage projects must produce electricity.

Project Scope – Projects selected for funding must:

(1) Address power generation, availability, reliability, and quality needs of New York State, as well as energy efficiency and environmental performance.

(2) Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as peak electric demand reduction, high fuel-use efficiency, emissions reductions, reduced power costs, job creation, product manufacturing and sales.

(3) Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing total project cost and proposer cost-share. Include a budget breakdown by project task.

(4) Provide sharing of success by agreeing to pay recoupment to NYSERDA upon product commercialization (if applicable, see terms and conditions in Section 8 of attached Sample Agreement.)

(5) Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.

(6) Emphasize development and/or application of marketable products for near-term commercialization, rather than basic research.

(7) Provide a preliminary commercialization and marketing strategy, and discuss the potential for manufacturing in New York State.

Other Considerations – In addition, note that:

- A proposal may be considered **non-responsive** if it fails to comply with the requirements above, the Proposal Requirements of Category B, Section II, or Section V, General Conditions for ALL categories.
- Prior to an award being made, potential contractors may be required to demonstrate: access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.

II. Proposal Requirements

Proposers must submit twelve (12) print copies and one (1) electronic media copy (CD or 3½ inch floppy) of the proposal in Microsoft Word format with a completed and signed Proposal Checklist attached to the front of each copy, one of which must contain an original signature. Proposal should be addressed to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned.** Faxed or e-mailed copies will not be accepted.

Procurement Lobbying Requirements - **State Finance Law sections 139-j and 139-k**
Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (The text of the laws are available at:
http://www.ogs.state.ny.us/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html). In compliance with §139-j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of $15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal Checklist referenced in this solicitation will disqualify your proposal.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics - double-sided prints with a staple in the upper left corner is the preferred format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. **The proposal must be in the following format and sequence listed below** (suggested page limits for each section are shown in parentheses following the section title).

1. Proposal Checklist - Complete the specific Proposal Checklist attached as part of this PON, and include it as

the front cover of the original and each copy of the proposal. Please note the following:

- Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement. If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.
- Be sure the individual who is signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.

2. Disclosure of Prior Findings of Non-Responsibility Form

3. Executive Summary (one page) – Briefly summarize the power systems-related problem or opportunity, the proposed solution, its innovative characteristics and potential benefits, and the list of team members and their qualifications.

4. Problem Statement and Proposed Solution (two to three pages) – Describe the following:

- The power systems-related problem or opportunity, and its significance to New York State
- The proposed solution and how it addresses the problem or opportunity: the technical basis, innovative characteristics, current stage of research and development, and current market penetration in New York State
- Alternative solutions and why the proposed solution is superior
- Barriers to market entry and your ability to overcome them.
- Any patents or licensing agreements associated with the product or system.
- The status of the earlier phase of a project if the proposal addresses a subsequent follow-on phase of a previously cofunded NYSERDA project.

5. Proposed Statement of Work and Schedule (three to four pages). The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. 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 "active voice" sentence structure to make clear who is responsible for specific actions; for example, use the following phrase to start the description of every task and subtask: "The Contractor shall ...."

Include a list and three to four-sentence description of each of the major tasks to be accomplished. Typical task titles may include, but are not limited to, the following: project management, requirements definition, evaluation of current practices, cost assessment, test plan development, design, installation, metrics (benefits) quantification, etc. For example:

<u>Task 1.0 Project Management.</u>

<u>Subtask 1.1 Subcontracts (if any).</u> The Contractor shall enter into the following agreements

<u>Subtask 1.2 Meetings.</u> The Contractor shall hold a Kick-Off Meeting, Interim Review Meetings (as warranted), and a Wrap-Up Meeting at the end of the project.

<u>Subtask 1.3 Reporting.</u> NYSERDA will expect to receive written progress reports (typically monthly), as part of the project management task. These activities should be considered when developing your cost proposal. Such reports shall describe any difficulties encountered during the reporting period, and shall include a statement of the Project Director setting forth the cost of the work during the reporting period. The progress reports should be submitted to NYSERDA's Project Manager no later than the 15th of each month. Progress reports shall be in a letter format and shall include the following subjects in the order indicated, with appropriate explanation and discussion.

a. Title of project
b. Agreement number
c. Period of this report
d. Progress of report
e. Planned progress in the future

f. Identification of problems
g. Planned solutions
h. Ability to meet schedule, reasons for slippage in schedule
i. Schedule - percentage completed and projected percentage of completion of performance by months as a bar chart or milestone chart
j. Analysis of actual cost incurred in relation to the budget

Subtask 1.4. Final Report. The Final Report should detail all of the work performed and task deliverables, but exclude proprietary information. The comprehensive Final Report shall cover all aspects of the project and shall merge together, and build further on, the previously generated monthly progress reports.

Task 2.0, 3.0, 4.0, etc. Project-specific Work Scope Tasks. Add as many tasks and subtasks as necessary to cover all actions needed to achieve the goals and objectives of the project. These will be action steps. Each task should include a concise narrative description of the work that will be performed and how the work will be performed and deliverables to be provided. Typical tasks may include, but are not limited to, requirements definition, preliminary design, prototype construction, testing, final design, and demonstration.

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a bar chart is preferred starting with "Month 1," "Month 2," etc. The schedule should include timing of major milestones such as design reviews, test result analyses, completion of working prototypes, delivery of products, and the start of metrics reporting to NYSERDA, showing progress toward project objectives and goals.

If applicable, a brief description and anticipated duration of additional development or commercialization activities, beyond the proposed work, that will be necessary to fully achieve commercialization.

6. Proposer Qualifications (one to three pages, depending on team size) – Identify the following:

- Proposer and any other team members and major subcontractors, with Project Manager and other key individuals listed. Note: Subcontracts of $25,000 or more are subject to competitive bid procedures except where the proposal identifies a specific subcontractor as an integral participant in the proposed work (see attached Sample Agreement).
- Qualifications of all businesses, organizations, and individuals named above, including relevant experience and references.
- All NYSERDA contracts awarded to the proposer, if any, in the past five years, with the funding totals and current status or outcome of the project included.

7. Project Benefits (two pages) – Outline benefits as follows:

- **Quantify** the following potential direct benefits to New York State to the extent possible:
  - Energy benefits (e.g., barrels/day reductions in petroleum fuels consumption in New York State, percentage improvement in energy efficiency, etc.)
  - Environmental benefits (e.g.: pollutant emission reductions, elimination of hazardous materials, etc.)
  - Economic benefits (e.g., near-term jobs created, power generation equipment life-cycle cost reductions, etc.)
- **Identify** other benefits (e.g., compliance with New York State or federal regulations, increased mobility, etc.)
- **Describe** how the success of the project can be measured and verified.

8. Technology Transfer and Commercialization Plan (Two to three pages) – Describe how project results will be used to commercialize or deploy new products and indicate the parties involved in the process. Projects nearing commercialization should have a detailed commercialization plan, whereas an early-stage concept should be accompanied by at least a rough outline of how the concept may ultimately be deployed. Cover the following topics:

- **Project Timeline:** Provide a multi-year timeline (e.g., graph) showing the paths, activities, milestones, resources, timing to take the technology from its current state of development to commercial product, and cost sharing in relation to total costs.
- **Marketing:** Identify target markets and their relevant characteristics (e.g., size, competition, regulatory and technological trends, etc.). Describe your proposed marketing strategies, explain why they should be successful, and provide sales estimates. Provide an estimate of the price of the product or system that eventually will be commercialized, and provide a comparison of that price to competing products or systems. Briefly explain the

customer's economic motivation for buying the new product or system, versus alternatives.

- **Design & Production:** Describe remaining technical development steps leading to the start of manufacturing or deployment. Describe plans for setting up or expanding manufacturing facilities. Discuss any key issues such as: need for specialized production equipment or strategic alliances; critical make/buy decisions or cost/volume issues; and plans for ancillary activities such as service support functions.
- **Finance:** Estimate funds required to go from the current stage of development to a financially self-sustaining level of commercialization. Include funding for R&D and initial marketing and manufacturing/deployment programs. Identify potential funding sources and how those sources will be addressed. Identify any potential strategic partners who could reduce your costs by providing access to marketing/distribution channels, manufacturing facilities or other assets.
- **Organization Plan:** Describe staffing plans for transition from R&D stage to commercialization stage; include all organizational functions, such as management, administration, engineering, marketing/sales, and manufacturing.
- **Technology Transfer:** Describe any additional actions to promote the new technology, such as the presentation of technical papers.

9. Budget – Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing a total of project costs and proposer cost-share (maximum NYSERDA funding for this category is $1,000,000 per project). Include a budget breakdown by project task. Use the format below (expand table as needed).

Cost Sharing - The proposal should show non-NYSERDA funding of at least 50% of the total cost of the project. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred.

PROPOSAL COST SHARING TABLE							
Funding Source	**Task 1**		**Task 2**		**Task ...**	**Project Total**	
	Cash	**In-Kind**	**Cash**	**In-Kind**	**...**	**Cash**	**In-Kind**
NYSERDA							
Proposer							
Co-Funder (identify)							
Co-Funder (identify)							
Task Total ($)							

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
2. If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
3. If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

10. Appendices – Include any resumes, company qualifications, or ancillary information that is deemed necessary to support your proposal. If appropriate, also include:

- **Letters of Interest or Commitment –** If you are relying on any other organization to do some of the work, provide services or equipment, or share in the non-NYSERDA cost, include a letter from that organization describing their planned participation. Also include letters of interest or commitment from businesses or other organizations critical to the future commercialization, demonstration, or implementation of the project. **Absence of letters of interest or commitment will be interpreted as the proposer not having support from the identified parties**.

- **Exceptions to the Terms and Conditions –** If you do not accept the standard terms and conditions (including the recoupment provisions) as contained in the attached Sample Agreement, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

III. Recoupment Provisions

Recoupment may be required. Please refer to Section V, "General Conditions for ALL Categories" located after the "Instructions for Category C" section.

IV. Proposal Evaluation

Proposals that meet Proposal Requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria identified below. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer may also be asked to address specific questions or recommendations of the TEP before contract award.

Evaluation Criteria:

- **Problem and Proposed Solution -** How significant is the problem or opportunity to New York State? How well does the proposed solution address the problem or opportunity? Are fundamental scientific principles well understood and clearly presented? Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs? Is the proposed work technically feasible, innovative, and superior to alternatives? How significant are the barriers to market entry? Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers? If the proposed work is a follow-on to a previously cofunded NYSERDA project, what was the outcome of the earlier phase?
- **Project Scope and Schedule -** How appropriate are the technical and performance goals for the proposed technology or system? Is the statement of work well organized, complete, and appropriate for the goals identified? How realistic is the schedule for achievement of the goals of the proposed project?
- **Proposer Qualifications -** Has the proposer provided evidence of being qualified to perform the proposed work? To what degree does the proposer have the necessary technical and business background and experience? Has the proposer provided evidence of good past performance on other relevant projects?
- **Project Benefits -** How well are the potential benefits to New York State quantified? Does the proposed project have favorable energy, environmental and economic impacts in New York State? How significant are these impacts? Does the proposed project assist New York State in complying with federal clean air regulations or achieving the goals of New York's Renewable Portfolio Standard (RPS)? Is the plan for measurement and verification of the success of the proposed project clear and complete? How well does the project reflect NYSERDA's overall objectives (risk/reward relationships, similar ongoing or completed projects, the general distribution of NYSERDA projects among industries and other organizations, and the distribution of projects within New York State)?
- **Project Outcome & Cost** - Has the market been identified and characterized? Is the estimated product price competitive with alternative products or solutions? Has a realistic strategy been presented for producing the technology, product, or system and introducing it to the market? Is the commercialization plan appropriate for the stage of development? Is the overall project cost justified based on the expected benefits? How significant is the potential market opportunity relative to the project cost? How appropriate are the proposer's cofunding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization? How firm are the commitments and support from essential participants, cofunders, and related business and other organizations? Are the overhead rates reasonable and supported with appropriate

documentation?

Category C: Demonstration Projects

I. Program Requirements

Eligibility – Eligible projects under this Category include demonstrations of Power Systems, DG and/or Electric Energy Storage Technologies that are past the "proof-of-concept" stage. Proposals may address areas already within the scope of existing NYSERDA projects, or may represent new approaches to achieving NYSERDA's energy, environmental, and economic goals. Areas of interest include, but are not limited to:

(1) Innovative storage technologies demonstrating customer benefits including but not limited to: batteries, flywheels, ultra-capacitors, flow batteries, and superconducting magnetic energy storage;

(2) Fuel cells and related components and subsystems;

(3) Solar electric technologies, including innovative photovoltaic and solar thermal-electric systems, components of these systems, and products that incorporate photovoltaics;

(4) Wind technologies including innovative wind energy-conversion devices, components, and products that support wind-energy systems and power plants;

(5) Hydro power technologies, including innovative products that increase generating capacity or improve environmental performance;

(6) Power conditioning equipment;

(7) Innovative technologies for upgrading performance of new or existing power generation equipment;

(8) Systems and equipment innovations for improving distribution system performance and reliability;

(9) Biomass, waste heat to energy, and biogas;

(10) Innovative packaging of DG products for targeted purposes, such as baseload, CHP, peak-load reduction, power quality, electric energy storage, hybrid combinations, and other applications;

(11) Innovative control systems related to power systems, generation, and distribution, such as remote or on-site monitoring and diagnostic systems, intelligent remote or on-site control systems to provide command and communication with power systems equipment, or control systems technologies to promote safe, reliable integration of DG and storage technologies into the distribution system.

Project Scope – Projects selected for funding **must:**

(1) Address power generation, availability, reliability, and quality needs of New York State, as well as energy efficiency and environmental performance.

(2) Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as peak electric demand reduction, high fuel-use efficiency, emissions reductions, reduced power costs, job creation, product manufacturing and sales.

(3) Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing total project cost and proposer cost-share. Include a budget breakdown by project task.

(4) Provide sharing of success by agreeing to pay recoupment to NYSERDA upon product commercialization (if applicable, see terms and conditions in Section 8 of attached Sample Agreement.)

(5) Demonstrate that the proposer and/or team of proposers are qualified to carry out the submitted project proposal.

(6) Provide a preliminary commercialization and marketing strategy, and discuss the potential for manufacturing in New York State.

Limitations - Proposed projects that exclusively benefit ratepayers in the Long Island Power Authority (LIPA) service territory, which do not support the System Benefits Charge, may not be eligible to receive the full NYSERDA funding indicated above. Proposals for projects receiving or anticipating to receive Renewable Portfolio Standard (RPS) funding are ineligible for funding under this solicitation. Both power generation and energy storage projects must produce electricity.

Project Scope - Projects selected for funding **must**:

(1) Have a **New York State demonstration site**;

(2) Provide equipment sensors, instrumentation, and a complete data acquisition system for remote monitoring and reporting as specified below;

(3) Demonstrate the technology viability and monitor the performance, characteristics, and benefits for a minimum period of 18 months;

(4) Present an economic analysis of the proposed technology demonstration including an estimated cost/benefit ratio, and a plan to measure the actual cost/benefit ratio during the demonstration.

(5) Address power generation, availability, reliability, and quality needs of New York State, as well as energy efficiency and environmental performance.

(6) Provide direct and quantifiable energy, environmental, and economic benefits to New York State such as peak electric demand reduction, high fuel-use efficiency, emissions reductions, reduced power costs, job creation, product manufacturing and sales.

(7) Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing total project cost and proposer cost-share. Include a budget breakdown by project task.

(8) Provide sharing of success by agreeing to pay recoupment to NYSERDA upon product commercialization (if applicable, see terms and conditions in Section 8 of attached Sample Agreement.)

All demonstration projects under this solicitation are expected to be commissioned within 12 months of contract award. Additionally, each demonstration project is expected to have a minimum operating performance period of 18 months.

Data Acquisition System (DAS)

It is the intent of NYSERDA to provide system level operation and performance information, including economic performance information, to the general public on each of the demonstration projects funded under this solicitation. In order to meet this objective, it is required that each demonstration project provide sufficient instrumentation and data transmittal capabilities to allow the collection of technical and economic performance data. If necessary, the demonstration project proposal should include a Data Acquisition System (DAS) for the purpose of providing system operating data to be used for evaluation and generation of reports on the overall performance of the technology being demonstrated. Data acquisition sampling rates must be adequate to characterize the application and any event that may influence the overall system. For example, to monitor power quality operations for an electric energy storage system demonstration, a high-speed data acquisition would generally be required to adequately capture power quality or system stability events. In addition, energy management operations such as peak shaving or arbitrage applications require high speed sampling with 15 minute averages to determine the effect (positive or negative) the energy storage system may have had on the over-all system. In the event that the demonstration system performs multiple activities, the DAS must provide for the collection of data for all activities.

All raw and summary data collected at the project sites must be archived and protected from loss on permanent media. At the Electric Energy Storage demonstration project sites, real-time data storage systems must be employed to accommodate at least 365 operating days of data.

Reporting Requirements Specific to Electric Energy Storage (EES) Demonstration Projects
The proposal must identify the project team member who will be responsible for the preparation and delivery of periodic written project reports. System operational summary information must be generated monthly and included in mandatory Monthly Progress Reports. At a minimum, the system operational summary information must include the following:

- A written summary of the economic benefit derived for the month;
- A written summary of all operations and maintenance activities for the month;
- System dispatch information and use patterns associated with the project;
- Energy consumption breakdown of parasitic loads introduced by the demonstration system;
- System performance under typical utility fault conditions, e.g. lightning strikes, primary phase to ground faults, voltage sags/spikes, electric outages, etc.;
- System performance under user fault conditions, e.g. fault in customer plant;
- System reliability, failure rates, and performance summary

Annual reports must be generated that consolidate all the information from the monthly reports and summarize demonstration system performance for the preceding year.

Benefits Data Tracking and Reporting
In addition to the hardware data above, data sufficient to demonstrate the economic and other benefits defined in the proposal must be measured, collected, and recorded. For applications that claim multiple benefits, data must be provided on a monthly basis that adequately supports the claimed benefit for each of the benefits specified in the original proposal. A brief outline of this data and the transmittal method must be included in the proposal. The monthly benefits data report containing this information must be delivered to the NYSERDA Project Manager no later than the 15th day of each month following the month in which the data was collected.

Historical Performance Data Reporting
Historical utility system operational data prior to the installation of the demonstration system is required in order to provide credible baseline data on electrical system performance before and after the installation of the EES demonstration system. Using a time period of at least 6 months prior to system commissioning, information concerning load profiles, peaks, overloads, faults, power quality events, and any other information required to fully characterize the operation of the electrical utility at the demonstration site prior to installation of the demonstration system must be collected by the proposer. Comparison information must be made part of the Monthly Progress Reports starting after the 2-month system commissioning anniversary.

Other Considerations - In addition, note that:

- A proposal may be considered **non-responsive** if it fails to comply with the requirements above, the Proposal Requirements of Category C, Section II, or Section V, General Conditions for ALL categories.
- Prior to an award being made, potential contractors may be required to demonstrate: access to financial resources sufficient to perform the proposed work, technical experience and adequate facilities (or the ability to access them), a good performance record, and the ability to qualify for an award under applicable laws and regulations.

II. Proposal Requirements

Proposers must submit twelve (12) print copies and one (1) electronic media copy (CD or 3½ inch floppy) of the proposal in Microsoft Word format with a completed and signed Proposal Checklist attached to the front of each copy, one of which must contain an original signature. Proposal should be addressed to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist may be returned.** Faxed or e-mailed copies will not be accepted.

Procurement Lobbying Requirements - State Finance Law sections 139-j and 139-k
Procurement lobbying requirements contained in State Finance Law sections 139-j and 139-k became effective on January 1, 2006. (The text of the laws are available at:
http://www.ogs.state.ny.us/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html). In compliance with §139-j and §139-k of the State Finance Law, for proposals submitted in response to this solicitation that could result in agreements with an annual estimated value in excess of $15,000, additional forms must be completed and filed with proposals: (1) a signed copy of the Proposal Checklist including required certifications under the State Finance Law and (2) a completed Disclosure of Prior Findings of Non-Responsibility form. Failure to include a signed copy of the Proposal Checklist referenced in this solicitation will disqualify your proposal.

Proposals should not be excessively long or submitted in an elaborate format that includes expensive binders or graphics - double-sided prints with a staple in the upper left corner is the preferred format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. Each page of the proposal should state the name of the proposer, the PON number, and the page number. **The proposal must be in the following format and sequence listed below** (suggested page limits for each section are shown in parentheses following the section title).

1. Proposal Checklist - Complete the specific Proposal Checklist attached as part of this PON, and include it as the front cover of the original and each copy of the proposal. Please note the following:

- Indicate whether you accept the standard terms and conditions as contained in the attached Sample Agreement. If you do not accept the standard terms and conditions, provide alternate terms with justification based on the risk and benefit to NYSERDA and New York State. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.
- Be sure the individual who is signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.

2. Disclosure of Prior Findings of Non-Responsibility Form

3. Project Summary (one page) - Briefly summarize the proposed demonstration project. Present the proposed effort, teaming arrangements, project scope, and project benefits. What are the energy management, power quality, and/or electric system reliability-related problem(s) that will be addressed by the project? Who will be affected and how? How are similar problems being addressed at other sites? What are likely energy, environmental, and economic benefits to New York State?

4. Proposed Demonstration (four pages) - Describe the proposed technology demonstration, the potential for application of the demonstrated technology at other sites, estimated commercial market in New York State, and potential advantages over competing technologies. Include a plan for using project results to improve technology development and further commercialization efforts. Provide a description of the demonstration project design including the selected project site.

5. Project Team Qualifications (two pages) - Prepare a list of project team members including the project manager, subcontractors, other participants, and project cofunders besides NYSERDA. Clearly delineate the role and involvement of each party in the project. Describe team member qualifications, expertise, and relevant project experience, including a demonstrated understanding of New York State energy markets and interconnection requirements. Attach one-page resumes of all key project personnel, including those of subcontractors and consultants, in the appendix. Also list all NYSERDA contracts awarded to the proposer, if any, in the past five years, with the funding totals and current status or outcome of the project included.

6. Performance and Benefits (four pages) - Outline a plan to measure the performance and benefits of the electric energy storage technology demonstration for a minimum period of 18 months in accordance with the Data Acquisition and Reporting Requirements. The plan must include provisions for remote performance monitoring and independent data analysis by a third party. Discuss how the performance measurements will be used to determine technology benefits and the cost/benefit ratio.

7. Technology Transfer (one page) - Identify the target audience for the demonstrated technology that could benefit from the project results and may consider using the technology for other applications in New York State and nationally. Describe the strategy for transferring project results to the target audience. Include the preparation of a technical paper

for presentation at Electricity Storage Association sponsored conferences and workshops. Discuss arrangements for an on-site public demonstration/media event. Prepare and implement a technology commercialization plan.

8. Proposed Statement of Work and Schedule (three to four pages). The Statement of Work (SOW) is the primary contractual document that outlines work activities and quantifies deliverables. 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 "active voice" sentence structure to make clear who is responsible for specific actions; for example, use the following phrase to start the description of every task and subtask: "The Contractor shall ...."

Include a list and three to four-sentence description of each of the major tasks to be accomplished. Typical task titles may include, but are not limited to, the following: project management, requirements definition, evaluation of current practices, cost assessment, test plan development, design, installation, metrics (benefits) quantification, etc. For example:

Task 1.0 Project Management.

Subtask 1.1 Subcontracts (if any). The Contractor shall enter into the following agreements

Subtask 1.2 Meetings. The Contractor shall hold a Kick-Off Meeting, Interim Review Meetings (as warranted), and a Wrap-Up Meeting at the end of the project.

Subtask 1.3 Reporting. NYSERDA will expect to receive written progress reports (typically monthly), as part of the project management task. These activities should be considered when developing your cost proposal. Such reports shall describe any difficulties encountered during the reporting period, and shall include a statement of the Project Director setting forth the cost of the work during the reporting period. The progress reports should be submitted to NYSERDA's Project Manager no later than the 15th of each month. Progress reports shall be in a letter format and shall include the following subjects in the order indicated, with appropriate explanation and discussion.

a. Title of project
b. Agreement number
c. Period of this report
d. Progress of report
e. Planned progress in the future
f. Identification of problems
g. Planned solutions
h. Ability to meet schedule, reasons for slippage in schedule
i. Schedule - percentage completed and projected percentage of completion of performance by months as a bar chart or milestone chart
j. Analysis of actual cost incurred in relation to the budget

Subtask 1.4. Final Report. The Final Report should detail all of the work performed and task deliverables, but exclude proprietary information. The comprehensive Final Report shall cover all aspects of the project and shall merge together, and build further on, the previously generated monthly progress reports.

Task 2.0, 3.0, 4.0, etc. Project-specific Work Scope Tasks. Add as many tasks and subtasks as necessary to cover all actions needed to achieve the goals and objectives of the project. These will be action steps. Each task should include a concise narrative description of the work that will be performed and how the work will be performed and deliverables to be provided. Typical tasks may include, but are not limited to, requirements definition, preliminary design, prototype construction, testing, final design, and demonstration.

Schedule. Present a work schedule with a starting point and duration for each task and subtask. Presentation of the schedule in a bar chart is preferred starting with "Month 1," "Month 2," etc. The schedule should include timing of major milestones such as design reviews, test result analyses, completion of working prototypes, delivery of products, and the start of metrics reporting to NYSERDA, showing progress toward project objectives

and goals.

If applicable, a brief description and anticipated duration of additional development or commercialization activities, beyond the proposed work, that will be necessary to fully achieve commercialization.

9. Schedule (one page) - Prepare a master schedule showing starting and completion times for each task outlined in the Statement of Work in terms of weeks or months. Identify major milestones, demonstration start-up, reporting intervals and other deliverables, as well as project review meetings.

10. Budget – Include a project budget using the attached Contract Pricing Proposal Form (CPPF) showing a total of project costs and proposer cost-share (maximum NYSERDA funding for this category is $1,500,000 per project). Include a budget breakdown by project task. Use the format below (expand table as needed).

Cost Sharing - The proposal should show non-NYSERDA funding of at least 50% of the total cost of the project. Cost sharing can be from the proposer, other team members, and other government or private sources. Contributions of direct labor (for which the laborer is paid as an employee) and purchased materials may be considered "cash" contributions. Unpaid labor, indirect labor, or other general overhead may be considered "in-kind" contributions. NYSERDA will not pay for efforts that have already been undertaken. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred.

PROPOSAL COST SHARING TABLE							
Funding Source	**Task 1**		**Task 2**		**Task ...**	**Project Total**	
	Cash	**In-Kind**	**Cash**	**In-Kind**	**...**	**Cash**	**In-Kind**
NYSERDA							
Proposer							
Co-Funder (identify)							
Co-Funder (identify)							
Task Total ($)							

Attach supporting documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

1. Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
2. If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
3. If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

11. Letters of Commitment or Support - Include letters of commitment signed by a person authorized to contractually obligate the organization for all participating organizations and cost-sharing parties. Absence of letters of commitment or support may be interpreted as the proposer not having commitment or support from those parties.

III. Recoupment Provisions

Recoupment may be required. Please refer to “General Conditions for ALL Categories” located after the “Instructions for Category C” section.

IV. Proposal Evaluation

Proposals that meet Proposal requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria identified below. After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposers receiving favorable evaluations will be invited to enter into contract negotiations with NYSERDA. The proposer may also be asked to address specific questions or recommendations of the TEP before contract award.

Evaluation Criteria:

- **Proposed Work –** How significant is the demonstration opportunity to New York State? Does the proposed demonstration technology have commercial applications at other New York State sites? Is the proposed demonstration well conceived and technically feasible? Does the proposed technology demonstration address the needs of a deregulated electricity market? Does the proposer exhibit an understanding of the state-of-the-art, competing products and alternative designs? How significant are the barriers to market entry? Does the proposer demonstrate a clear understanding of the steps required to overcome these barriers? If the proposed work is follow-on to a previously cofunded NYSERDA project, what was the outcome of the earlier phase? Has the proposer identified and entered into a contractual agreement with a New York State site? Is a performance monitoring and data analysis effort included in the proposal? Does the proposal include an economic analysis of the technology based on performance measurements?
- **New York State Impact and Project Benefits -** Does the proposed project have favorable energy, environmental and economic impacts in New York State? – e.g.- does the proposed project assist New York State in complying with federal clean air regulations or achieving the goals of New York's Renewable Portfolio Standard (RPS)? How significant are these impacts? How well are the potential benefits to New York State quantified? Does the proposal include a New York State demonstration site? Does the project team include New York State organizations? Does the proposed project lead to New York State economic growth?
- **Proposer Qualifications -** Does each member of the project team possess the relevant and necessary technical background and experience? Does the team have the requisite knowledge of the New York State energy market, utility requirements, and existing tariffs, if applicable? Does the team demonstrate resourcefulness, cooperation, and teamwork? Has the proposer provided evidence of good past performance on other relevant projects?
- **Statement of Work and Schedule** - How appropriate are the technical and performance goals for the proposed technology or system? Is the statement of work well organized, complete, and appropriate for the goals identified? Is the schedule for achievement of the goals of the proposed project realistic and complete? Are staff allocations reasonable?
- **Project Outcome and Cost -** Is the overall cost reasonable? Is the project cost justified based on the expected outcome and benefits? Is the cofunding 50% or more? How appropriate are the proposer's cofunding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization? Has the market been identified and characterized? How significant is the potential market opportunity relative to the project cost? Is the commercialization plan appropriate for the stage of development? Has a realistic strategy been presented for producing the technology, product, or system and introducing it to the market?

V. General Conditions for ALL Categories

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 www.nyserda.org/nyserda.regulations.pdf. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

- Information on the availability of New York subcontractors and suppliers is available from:
  Empire State Development
  Division For Small Business
  30 South Pearl Street
  Albany, NY 12245
- A directory of certified minority- and women-owned business enterprises is available from:
  Empire State Development
  Minority and Women's Business Development Division
  30 South Pearl Street
  Albany, NY 12245

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements that can be found at http://www.ogs.state.ny.us/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of $100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See,* ST-220-TD (available at http://www.tax.state.ny.us/pdf/2006/fillin/st/st220td_606_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. *See,* ST-220-CA (available at http://www.tax.state.ny.us/pdf/2006/fillin/st/st220ca_606_fill_in.pdf). The Department has developed guidance for contractors that is available at http://www.tax.state.ny.us/pdf/publications/sales/pub223_606.pdf.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA expects to notify proposers in approximately ten (10) weeks from the proposal due date whether your proposal has been selected to receive an award.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all

proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest. NYSERDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law that may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Recoupment - For any new product development projects requesting NYSERDA funding over $50,000, NYSERDA will require a royalty based on sales of the new product developed. NYSERDA's standard royalty terms are identified in Attachment D, Sample Agreement.

VI. Attachments for ALL Categories

The following forms (except Attachment D) must be fully completed for the proposal to be considered responsive:

Attachment A - Proposal checklist

Attachment B - Disclosure of Prior Findings of Non-Responsibility Form

Attachment C - Contract Pricing Proposal Form and Instructions

Attachment D - Sample Agreement

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

ATTACHMENT A - PON No. 1670 PROPOSAL CHECKLIST (MANDATORY)

To Which Category Are You Proposing? PLEASE enter ONE category A, B, or C_____			
Proposal Title		Due Date	
Primary Contact (Prime Contractor)		Title	
Company		Phone	Fax
		e-mail	
Federal Tax Identification #/Social Security			
Address	City	State or Province	Zip
Secondary Contact		Title	
Company		Phone	Fax
		e-mail	
Address	City	State or Province	Zip

THE PRIME CONTRACTOR MUST SIGN THIS FORM BELOW and ANSWER THE FOLLOWING QUESTIONS:

Do you accept all Terms & Conditions in the Sample Agreement? (if no, explain on separate pg) __ Yes __ No
(NYSERDA anticipates considering only specifically listed exceptions in negotiations.)

Have you been indicted/convicted for a felony within the past 5 years? (if yes, explain on separate pg) __ Yes __ No

Are you a Minority or Women-Owned Business Enterprise? __ Yes __ No

Does your proposal contain Minority or Women-Owned Business enterprises as subcontractors? __ Yes __ No

Are you submitting the required number of copies? (See proposal instructions – 12 copies required.) __ Yes __ No

Is other public funding pending/awarded on this and/or very similar topic (prior and/or competing proposals)? __ Yes __ No
(if yes, explain on separate page)

ON WHAT PAGE IN YOUR PROPOSAL CAN THESE ITEMS BE FOUND?

Disclosure of Prior Findings (mandatory)	___	Cost-Sharing Chart	___
Executive Summary	___	Completed and Signed Contract Pricing Proposal Form(s)	___
Problem Statement and Proposed Solution	___	Commitment Letters from participating organizations	___
Proposed Work Scope and Schedule	___	Indictment/Conviction of Felony (if applicable)	___
Proposer Qualifications	___	NYSERDA Contracts Awarded (if applicable)	___
Project Benefits	___	Prior and/or Competing Proposals (if applicable)	___
Technology Transfer and Commercialization	___	Exceptions to Terms & Conditions (if applicable)	___

AUTHORIZED SIGNATURE & CERTIFICATION

I certify that the above information, and all information submitted in connection with State Finance Law §139-j and §139-k, is complete, true, and accurate, and that the proposal requirements noted have been completed and are enclosed. I affirm that I understand and will comply with NYSERDA's procedures under §139-j(3) and §139-j(6)(b) of the State Finance Law. I understand that this proposal may be disqualified if the solicitation requirements are not met. I the undersigned am authorized to commit my organization to this proposal.

Signature	Name
Title	Organization
Phone	Date

NOTE: This completed form **MUST** be signed and attached to the front of all copies of your proposal.

Disclosure of Prior Findings of Non-responsibility Form

(Mandatory)

Name of Individual or Entity seeking to enter the procurement contract:		
Address:		
Date:		
Solicitation or Agreement Number: Name and Title of Person Submitting this Form:		
Has any Governmental Entity made a finding of non-responsibility regarding the Individual or Entity seeking to enter the Procurement Contract in the last four years? (Please indicate with an "X")		Yes
		No
Was the basis for the finding of non-responsibility due to a violation of §139-j of the State Finance Law? (Please indicate with an "X")		Yes
		No
Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please indicate with an "X")		Yes
		No
If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.		
Government Agency or Authority:		
Date of Finding of Non-responsibility:		
Basis of Finding of Non-responsibility: (Add additional pages as necessary)		

Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named Individual or Entity due to the intentional provision of false or incomplete information ? (Please indicate with an "X")		Yes
		No

If you answered yes, please provide details below.

Government Agency or Authority:

Date of Termination or Withholding of Contract:

Basis of Termination or Withholding: (Add additional pages as necessary)

Offerer certifies that all information provided to NYSERDA with respect to State Finance Law §139-k is complete, true, and accurate.

By:_____ Date:_____
Signature

Name:_____ Title:_____

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Contract Pricing Proposal Form

New York State Energy Research and Development Authority Contract Pricing Proposal Form	Solicitation/Contract No.	Page
Contractor:	Name of Proposed Project:	
Address:		
Location (where work is to be performed):	NYSERDA funding:	
	Total Project Cost:	

Cost Element			Total Project Cost	Funding & Co-funding via NYSERDA	Cost-sharing & Other Co-funding
1. Direct Materials					
a. Purchased Parts					
b. Other					
Total Direct Materials					
2. Materials Overhead	Rate:				
3. Direct Labor (specify names/titles)	Hours	Rate/hr			
Total Direct Labor					
4. Labor Overhead	Rate %	$ Base			
Total Labor Overhead					
5. Outside Special Testing					
6. Equipment					
7. Travel					
8. Other Direct Costs					
9. Subcontractors/Consultants					
Total Subcontractors/Consultants					
10. General & Administrative Expense	Rate %	Element(s)			
11. Fee or Profit (If allowable) Rate:					
12. Total Estimated Project Cost					

This proposal reflects our best estimates as of this date, in accordance with the instructions to proposers.

Typed Name and Title:	Signature:	Date:

Has any executive agency of the U.S. government performed any review of your records in connection with any prime contract or subcontract within the past twelve months? ____ Yes ____ No If yes, identify:

Supporting Schedule - Contract Pricing Proposal Form		
Element No.	Item Description	Amount

INSTRUCTIONS FOR PREPARATION OF COST ESTIMATE

Your cost proposal may be the basis of contract negotiation; it should be specific and complete in every detail. Supporting schedules (as described in Section B) providing the basis for your estimates must be provided.

A. GENERAL

The schedule must be submitted on NYSERDA's Contract Pricing Proposal Form.

B. INSTRUCTIONS AND DESCRIPTION OF REQUIRED SUPPORT DETAIL

(Title each supporting schedule and cross-reference it to the item number on the Contract Pricing Proposal Form)

1a. DIRECT MATERIALS - PURCHASED PARTS

Provide the following information for each proposed item with an estimated unit cost in excess of $15,000.

- Description of item
- Proposed vendor
- Quantity needed
- Unit cost
- Basis for cost (i.e., catalog, prior purchase, quote, etc.)
- Total cost
- Evidence of a competitive selection process in accordance with the requirements of the Subcontract Procedures section of the attached Sample Agreement.

1b. OTHER DIRECT MATERIALS

In accordance with the requirements of the Subcontract Procedures section of the attached Sample Agreement, for all items in excess of $5,000, provide whatever information would be necessary to understand what is being obtained, how it is being obtained, what it will cost and how the estimated cost was determined with justification for all items.

2. MATERIALS OVERHEAD (also applicable to other Indirect Rate categories: 4. LABOR OVERHEAD and 10. G&A EXPENSE)

- If Government-approved indirect rates are proposed, then supply a copy of an appropriate Government document verifying those rates.
- If Government-approved rates are not proposed, supply the following, unless previously provided, for the years comprising the proposed period of contract performance.
  - A description (chart or other) of the organization of the indirect cost center.
  - The budget of indirect costs, by account, for each proposed indirect expense rate.
  - The budget for the base, for each proposed rate, (direct labor dollars, hours, costs, etc.) itemized as to contract hours or costs, research and development hours of costs, and any other direct base effort.
  - Actual incurred rates for the prior three years, including actual base and pool amounts.

3. DIRECT LABOR

a. Commercial Enterprises

(1) Attach supporting schedules showing:
- o Each category or type of labor being estimated
- o Applicable labor rates per hour (straight-time)

(2) Explain the method used for computing the rates (i.e., actual of an individual, actual average of a category or other grouping, etc.) Also identify any proposed labor escalation and the bases for it.

b. Educational Institutions
Provide the following for each calendar year of the contract:

(1) For individuals not on an "actual hours worked" basis:
- o individual's name
- o annual salary and the period for which the salary is applicable (preferably in weeks)
- o the proportionate time to be charged to this effort.

(2) For individuals who maintain time records as the basis for charging costs, supply the detail as requested in Instructions 3(a)(1)

4. LABOR OVERHEAD (Same as Instructions for 2. MATERIALS OVERHEAD)

5. OUTSIDE SPECIAL TESTING
   a. Describe the effort.
   b. Provide the units of time (hours, days, weeks), cost rates, and the vendor.
   c. In accordance with the requirements of the Subcontract Procedures section of the attached Sample Agreement, provide the basis for selection of the vendor. Identify M/WBE vendors contacted for quotes and if none, explain why. Explain and justify the basis for any non-competitive selection.

6. EQUIPMENT
Capability to perform the work with existing facilities and equipment is assumed. It is NYSERDA's policy not to compensate for general purpose facilities or equipment. If some special purpose items are needed solely for this contract and are not available by other means (contractor assets, lease, etc.), then provide the following information for each item of required equipment.
   - o vendor
   - o model number
   - o quantity
   - o competitive selection process
   - o unit cost and source of cost/price (i.e., quote, catalog, purchase history)
   - o description of the use or application (NYSERDA dedicated, contract dedicated, other)

7. TRAVEL
   a. NYSERDA will accept as a direct charge only that travel required to perform the statement of work.
   b. Attach a schedule indicating the need for the proposed travel, the estimated number of person-trips required, destinations, mode and cost of transportation, and number of days subsistence per trip for each destination.
   c. Identify and support any other special transportation costs required in the performance of this project.

8. OTHER DIRECT COSTS
   a. Identify the type of cost (i.e. postage, telephone, publications, graphics, etc.)
   b. Provide cost details for the amounts estimated (hours or units, rates, etc.)
   c. If any internal service center rates are applied, provide details similar to that required in Instruction #B.
   d. For computer costs identify the make, model and type of computer, hours of service and appropriate rates, and whether the machine is company owned or leased.

9. SUBCONTRACTORS/CONSULTANTS
   a. Explain the specific technical area in which such service is to be used and identify the contemplated consultants.
   b. State the number of days and the hours per day of such service estimated to be required and the consultant's quoted rate per day. Document when/where the consultant has received the proposed rate in performing similar services for others.

10. GENERAL & ADMINISTRATIVE (G&A) EXPENSE (Same as instructions for 2. MATERIALS OVERHEAD)

11. FEE OR PROFIT
List the rate proposed for profit. No fee or profit is allowed under product development, demonstration or other certain cost-sharing projects.

Agreement No.:
Amount:
Type: **Cost-Sharing**

Agreement dated this __ day of _____, 2_____ by and between the **NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY** ("NYSERDA"), a New York public benefit corporation having its principal office and place of business at 17 Columbia Circle, Albany, New York 12203-6399, and _____ having its principal office and place of business at _____ (the "Contractor").

In consideration of the premises and of the mutual covenants and agreements hereinafter set forth, the parties do hereby agree as follows:

Article I

Definitions

Section 1.01. Definitions. Unless the context otherwise requires, the terms defined below shall have, for all purposes of this Agreement, the respective meanings set forth below, the following definitions to be equally applicable to both the singular and plural forms of any of the terms defined.

(a) General Definitions:

Agreement: This Agreement and Exhibits A, B, C, and D hereto, all of which are made a part hereof as though herein set forth in full.

Budget: The Budget set forth in Exhibit A hereto.

Contract Administrator: NYSERDA's Director of Contract Management, Cheryl L. Earley, or such other person who may be designated, in writing, by NYSERDA.

Effective Date: The effective date of this Agreement shall be the date in the first paragraph of page one, above.

Final Report: The Final Report required by the Statement of Work hereof.

Person: An individual, a corporation, an association or partnership, an organization, a business or a government or political subdivision thereof, or any governmental agency or instrumentality.

Progress Reports: The Progress Reports required by the Statement of Work hereof.

Statement of Work: The Statement of Work attached hereto as Exhibit A.

Subcontract: An agreement for the performance of Work by a Subcontractor, including any purchase order for the procurement of permanent equipment or expendable supplies in connection with the Work.

Subcontractor: A person who performs Work directly or indirectly for or on behalf of the Contractor (and whether or not in privity of contract with the Contractor) but not including any employees of the Contractor or the Subcontractors.

Work: The Work described in the Exhibit A (including the procurement of equipment and supplies in connection therewith) and the performance of all other requirements imposed upon the Contractor under this Agreement.

(b) Data Rights and Patents Definitions:

Contract Data: Technical Data first produced in the performance of the contract, Technical Data which are specified to be delivered under the contract, or Technical Data actually delivered in connection with the contract.

Practical Application: To manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system, and under conditions which indicate that the benefits of the invention are available to the public on reasonable terms.

Proprietary Data: Technical Data which embody trade secrets developed at private expense, such as design procedures or techniques, chemical composition of materials, or manufacturing methods, processes, or treatments, including minor modifications thereof, provided that such data:

(i) are not generally known or available from other sources without obligation concerning their confidentiality;

(ii) have not been made available by the owner to others without obligation concerning its confidentiality; and

(iii) are not already available to NYSERDA without obligation concerning their confidentiality.

Subject Invention: Any invention or discovery of the Contractor conceived or first actually reduced to practice in the course of or under this Agreement, and includes any art, method, process, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plants, whether patented or unpatented, under the Patent Laws of the United States of America or any foreign country.

Technical Data: Recorded information regardless of form or characteristic, of a scientific or technical nature. It may, for example, document research, experimental or developmental, or demonstration, or engineering work, or be usable or used to define a design or process, or to procure, produce, support, maintain, or operate material. The data may be graphic or pictorial delineations in media such as drawings or photographs, text in specifications or related performance or design type documents or computer software (including computer software programs, computer software data bases, and computer software documentation). Examples of Technical Data include research and engineering data, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identification, and related information. Technical Data as used herein does not include financial reports, cost analyses, and other information incidental to contract administration.

Unlimited Rights: Rights to use, duplicate, or disclose Technical Data, in whole or in part, in any manner and for any purpose whatsoever, and to permit others to do so.

(c) Payments to NYSERDA Definitions:

Product: [PRODUCT OR TECHNOLOGY DEFINITION]

New York State Manufacturer: Any manufacturer which provides in excess of 50% value added to the manufacture of the Product, and/or any manufacturer which provides in excess of 50% value added to the manufacture of a Subject Invention, as developed in this Project, within the geographical boundaries of the State of New York. Such value added shall be capable of being proven by an audit conducted in accordance with generally accepted auditing standards. "Value added" means any separable component of the Product or a Subject Invention, paid for by the Contractor to others, for parts, components, and services, and all manufacturing costs, including but not limited to labor, labor overhead, materials, and G&A, but excluding profit.

Sale: A sale or lease of the Product or a Subject Invention.

Sale Price: Gross revenue, excluding returns and allowances such as sales tax, freight, and insurance, if applicable, derived from a Sale.

Seller: The Contractor, or any parent, subsidiary, affiliate, franchisee, licensee or assignee thereof.

Article II

Performance of Work

Section 2.01. Manner of Performance. Subject to the provisions of Article XII hereof, the Contractor shall perform all of the Work described in the Statement of Work, or cause such Work to be performed in an efficient and expeditious manner and in accordance with all of the terms and provisions of this Agreement. The Contractor shall perform the Work in accordance with the current professional standards and with the diligence and skill expected for the performance of work of the type described in the Statement of Work. The Contractor shall furnish such personnel and shall procure such materials, machinery, supplies, tools, equipment and other items as may reasonably be necessary or appropriate to perform the Work in accordance with this Agreement.

Section 2.02. Project Personnel. It is understood and agreed that Mr./Ms._____ shall serve as Project Director and as such shall have the responsibility of the overall supervision and conduct of the Work on behalf of the Contractor and that the persons described in the Statement of Work shall serve in the capacities described therein. Any change of Project Director by the Contractor shall be subject to the prior written approval of NYSERDA. Such approval shall not be unreasonably withheld, and, in the event that notice of approval or disapproval is not received by the Contractor within thirty days after receipt of request for approval by NYSERDA, the requested change in Project Director shall be considered approved. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days.

Article III

Deliverables

Section 3.01. Deliverables. All deliverables shall be provided in accordance with the Exhibit A Statement of Work.

Article IV

Compensation

Section 4.01. Cost-Sharing. It is understood and agreed that NYSERDA and the Contractor are sharing the costs for the Work to be performed. In consideration for this Agreement and as full compensation for NYSERDA's share of the costs for the performance of all Work, and in respect of all other direct and indirect costs, charges or expenses incurred in connection therewith, NYSERDA shall pay to the Contractor a maximum amount of $_____for the cost elements identified in the Budget to be funded with NYSERDA funds, subject to the provisions and restrictions contained herein. Such amount shall be paid only to the extent that costs are incurred by the Contractor in performance of the Work in accordance with the provisions of this Agreement, the Budget and the following:

(a) Staff Charges: The Contractor shall be compensated for the services performed by its employees under the terms of this Agreement at the employee's actual wage rate.

(b) Direct Charges: The Contractor shall be reimbursed for reasonable and necessary actual direct costs incurred (e.g., equipment, supplies, travel and other costs directly associated with the performance of the Agreement) to the extent required in the performance of the Work in accordance with the provisions of the Budget. Travel, lodging, meals and incidental expenses shall be reimbursed for reasonable and necessary costs incurred. Costs should generally not exceed the daily per diem rates published in the Federal Travel Regulations. Reimbursement for the use of personal vehicles shall be limited to the Internal Revenue Service business standard mileage rate.

(c) Indirect Costs: The Contractor shall be reimbursed for fringe benefits, overhead, general and administrative (G&A), and other indirect costs included in the Budget at such rates as the Contractor may periodically calculate, consistent with appropriate federal guidelines or generally accepted accounting principles.

Section 4.02. Title to Equipment. Title shall vest in the Contractor to all equipment purchased hereunder.

Section 4.03. Progress Payments. The Contractor may submit invoices for progress payment no more than once each month or no less than once each calendar quarter for Work performed during such period. Invoices shall be addressed to NYSERDA, "Attention: Accounts Payable." Such invoices shall make reference to the Agreement number shown on the upper right hand corner of page one of the Agreement. Invoices shall set forth total project costs incurred. These shall be broken down into NYSERDA's Funding share and into the Cost-Share and other Cofunding share, and they shall be in a format consistent with the cost categories set forth in the Budget. Invoices shall provide reasonable documentation for the above to provide evidence of costs incurred, including:

(a) Staff charges: for each employee, the name, title, number of hours worked, hourly rate and labor extension;

(b) Direct charges: all direct costs shall be itemized on the invoice and supported by documentation, such as vendor invoices, travel vouchers or other documentation; and

(c) Indirect charges: indirect cost rates and method by which rates are applied.

The Contractor shall be notified by NYSERDA in accordance with Section 504.4 (b)(2) of NYSERDA's Prompt Payment Policy Statement, attached hereto as Exhibit D, of any such information or documentation which the Contractor did not include with such invoice.

In accordance with and subject to the provisions of such Exhibit D, NYSERDA shall pay to the Contractor, within the prescribed time after receipt of an invoice for a progress payment, 90% of NYSERDA's share of the amount so requested, unless NYSERDA should determine that any such payment or any part thereof is otherwise not properly payable pursuant to the terms of the Agreement or the Budget.

Section 4.04. Final Payment. Upon final acceptance by NYSERDA of the Final Report and all other deliverables contained in Exhibit A, Statement of Work, pursuant to Section 6.02 hereof, the Contractor shall submit an invoice for final payment with respect to the Work, together with such supporting information and documentation as, and in such form as, NYSERDA may require. An invoice for final payment shall include, in addition to the material required pursuant to Section 4.03 hereof, a statement as to whether any invention or patentable devices have resulted from the performance of the Work. All invoices for final payment hereunder must, under any and all circumstances, be received by NYSERDA within six months following Acceptance of Work pursuant to Section 6.02 hereof. In accordance with and subject to the provisions of NYSERDA's Prompt Payment Policy Statement, attached hereto as Exhibit D, NYSERDA shall pay to the Contractor within the prescribed time after receipt of such invoice for final payment, the total amount payable pursuant to Section 4.01 hereof, less all progress payments previously made to the Contractor with respect thereto and subject to the maximum commitment of $_____ set forth in Section 4.07 hereof.

Section 4.05. Release by the Contractor. The acceptance by the Contractor of final payment shall release NYSERDA from all claims and liability that the Contractor, its representatives and assigns might otherwise have relating to this Agreement.

Section 4.06. Maintenance of Records. The Contractor shall keep, maintain, and preserve at its principal office throughout the term of the Agreement and for a period of three years after acceptance of the Work, full and detailed books, accounts, and records pertaining to the performance of the Agreement, including without limitation, all bills, invoices, payrolls, subcontracting efforts and other data evidencing, or in any material way related to, the direct and indirect costs and expenses incurred by the Contractor in the course of such performance. Further, the Contractor shall keep, maintain, and preserve at its principal office until such time as the Contractor's payment obligations to NYSERDA pursuant to Section 8.03 of the Agreement have been met, full and detailed books, accounts, and records in connection with Sales, and shall require licensees to maintain records of Sales.

Section 4.07. Maximum Commitment. The maximum aggregate amount payable by NYSERDA to the Contractor hereunder is $_____. NYSERDA shall not be

liable for any costs or expenses in excess of such amount incurred by the Contractor in the performance and completion of the Work.

Section 4.08. Audit. NYSERDA shall have the right from time to time and at all reasonable times during the term of the Agreement and such period thereafter to inspect and audit any and all books, accounts and records at the office or offices of the Contractor where they are then being kept, maintained and preserved pursuant to Section 4.06 hereof. Any payment made under the Agreement shall be subject to retroactive reduction for amounts included therein which are found by NYSERDA on the basis of any audit of the Contractor by an agency of the United States, State of New York or NYSERDA not to constitute an allowable charge or cost hereunder. Further, the Contractor shall provide to NYSERDA, on a reasonable basis, access to its books and records and those of any parent, subsidiary, affiliate, franchisee, licensee, or assignee to assure compliance with the payment provisions contained in Section 8.03 of the Agreement.

Article V

Assignments, Subcontracts and Purchase Orders

Section 5.01. General Restrictions. Except as specifically provided otherwise in this Article, the assignment, transfer, conveyance, subcontracting or other disposal of this Agreement or any of the Contractor's rights, obligations, interests or responsibilities hereunder, in whole or in part, without the express consent in writing of NYSERDA shall be void and of no effect as to NYSERDA.

Section 5.02. Subcontract Procedures. Without relieving it of, or in any way limiting, its obligations to NYSERDA under this Agreement, the Contractor may enter into Subcontracts for the performance of Work or for the purchase of materials or equipment. Except for a Subcontractor or supplier specified in a team arrangement with the Contractor in the Contractor's original proposal, and except for any Subcontract or order for equipment, supplies or materials from a single Subcontractor or supplier totaling under $15,000, the Contractor shall select all Subcontractors or suppliers through a process of competitive bidding or multi-source price review. A team arrangement is one where a Subcontractor or supplier specified in the Contractor's proposal is performing a substantial portion of the Work and is making a substantial contribution to the management and/or design of the Project. In the event that a competitive bidding or multi-source price review is not feasible, the Contractor shall document an explanation for, and justification of, a sole source selection. The Contractor shall document the process by which a Subcontractor or supplier is selected by making a record summarizing the nature and scope of the work, equipment, supplies or materials sought, the name of each person or organization submitting, or requested to submit, a bid or proposal, the price or fee bid, and the basis for selection of the Subcontractor or supplier. An explanation for, and justification of, a sole source selection must identify why the work, equipment, supplies or materials involved are obtainable from or require a Subcontractor with unique or exceptionally scarce qualifications or experience, specialized equipment, or facilities not readily available from other sources, or patents, copyrights, or proprietary data. All Subcontracts shall contain provisions comparable to those set forth in this Agreement applicable to a Subcontractor or supplier, and those set forth in Exhibit B to the extent required by law, and all other provisions now or hereafter required by law to be contained therein. The Contractor shall submit to NYSERDA's Contract Administrator for review and written approval any Subcontract(s) specified in the Statement of Work as requiring NYSERDA approval.

Section 5.03. Performance. The Contractor shall promptly and diligently comply with its obligations under each Subcontract and shall take no action which would impair its rights there

under. The Contractor shall not assign, cancel or terminate any Subcontract without the prior written approval of the Contract Administrator as long as this Agreement remains in effect. Such approval shall not be unreasonably withheld and, in the event that notice of approval or disapproval is not received by the Contractor within thirty days after receipt of request for approval by NYSERDA, the requested assignment, cancellation, or termination of the Subcontract shall be considered approved by NYSERDA. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days.

Article VI

Schedule; Acceptance of Work

Section 6.01. Schedule. The Work shall be performed as expeditiously as possible in conformity with the schedule requirements contained herein and in the Statement of Work. The draft and final versions of the Final Report shall be submitted by the dates specified in the Exhibit A Schedule. It is understood and agreed that the delivery of the draft and final versions of such reports by the Contractor shall occur in a timely manner and in accordance with the requirements of the Exhibit A Schedule.

Section 6.02. Acceptance of Work. The completion of the Work shall be subject to acceptance by NYSERDA in writing of the Final Report and all other deliverables as defined in Exhibit A, Statement of Work.

Article VII

Force Majeure

Section 7.01. Force Majeure. Neither party hereto shall be liable for any failure or delay in the performance of its respective obligations hereunder if and to the extent that such delay or failure is due to a cause or circumstance beyond the reasonable control of such party, including, without limitation, acts of God or the public enemy, expropriation or confiscation of land or facilities, compliance with any law, order or request of any Federal, State, municipal or local governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom, fires, floods, storms, explosions, accidents, riots, strikes, or the delay or failure to perform by any Subcontractor by reason of any cause or circumstance beyond the reasonable control of such Subcontractor.

Article VIII

Technical Data; Patents; Payments to NYSERDA

Section 8.01. Rights in Technical Data

(a) Technical Data: Rights in Technical Data shall be allocated as follows:

(1) NYSERDA shall have:

(i) unlimited rights in Contract Data except as otherwise provided below with respect to Proprietary Data; and

(ii) no rights under this Agreement in any Technical Data which are not Contract Data.

(2) The Contractor shall have:

***[CASE I: If there are no pre-existing patents -- Sections (i), (ii) and (iii)]*:**

(i) the right to withhold Proprietary Data except as otherwise provided in paragraph (ii) below;

(ii) the right to make, use and sell the Product. If the Contractor fails to make, use, and sell the Product within five years from the Contractor's receipt of Final Payment as described in Section 4.04 hereof, under conditions which indicate that the benefits of the Product are available to the public on reasonable terms, NYSERDA shall have a royalty-free, exclusive, worldwide license sufficient in scope to allow NYSERDA to make, use or sell the Product and to allow others to do so, including a non-exclusive right in Proprietary Data incorporated into or necessary for use in connection with the making, use, or sale of the Product by NYSERDA or its sublicensees. The Contractor agrees to disclose such Proprietary Data to NYSERDA, and NYSERDA may disclose such Proprietary Data to its sublicensees who have agreed to keep such Proprietary Data confidential; and

(iii) the right to use for its private purposes subject to patent, or other provisions of this Agreement, Contract Data it first produces in the performance of this Agreement provided the data requirements of this Agreement have been met as of the date of the private use of such data.

[CASE II: If there are pre-existing patents -- Sections (i), (ii) and (iii)]:

(i) the right to withhold Proprietary Data except as otherwise provided in paragraph (ii) below; and

(ii) the right to make, use and sell the Product. If, within five years from the Contractor's receipt of Final Payment as described in Section 4.04 hereof, the Contractor fails to make, use, and sell the Product under conditions which indicate that the benefits of the Product are available to the public on reasonable terms, NYSERDA shall have a royalty-free, exclusive, worldwide license sufficient in scope to allow NYSERDA to make, use or sell the Product and to allow others to do so, including a non-exclusive right in Proprietary Data and a non-exclusive right throughout the world to United States Patent No. _____ incorporated into or necessary for use in connection with the making, use, or sale of the Product by NYSERDA or its sublicensees. The Contractor agrees to disclose such Proprietary Data to NYSERDA, and NYSERDA may disclose such Proprietary Data to its sublicensees who have agreed to keep such Proprietary Data confidential; and

(iii) the right to use for its private purposes subject to patent, or other provisions of this Agreement, Contract Data it first produces in the performance of this Agreement provided the data requirements of this Agreement have been met as of the date of the private use of such data.

The Contractor agrees that to the extent it receives or is given access to Proprietary Data or other technical, business or financial data in the form of recorded information from NYSERDA or a NYSERDA contractor or subcontractor, the Contractor shall treat such data in accordance with any restrictive legend contained thereon, unless another use is specifically authorized by prior written approval of the Contract Administrator.

Section 8.02. Patents.

(a) The Contractor may elect to retain the entire right, title and interest throughout the world to each Subject Invention of the Contractor conceived or first actually reduced to practice in the performance of the Work under the Agreement; except, that with respect to any Subject Invention in which the Contractor elects to retain title, NYSERDA shall have a non-exclusive, non-transferrable, irrevocable, paid-up license for itself, the State of New York and all political subdivisions and other instrumentalities of the State of New York, to practice or have practiced for or on their behalf the Subject Invention throughout the world, exclusively for their own use of the Subject Invention.

(b) Within six months of the time a Subject Invention is made, or as part of the request for final payment, whichever shall occur first, the Contractor shall submit to NYSERDA a written invention disclosure. Within twelve months of the time a Subject Invention is made, or as part of the request for final payment, whichever shall occur first, the Contractor shall advise NYSERDA in writing whether the Contractor elects to retain principal rights in the Subject Invention. The Contractor shall file the patent application for a Subject Invention within two years of the date of election. If the Contractor fails to disclose a Subject Invention, fails to elect to retain principal rights thereto, or to file a patent application within the time specified in this paragraph, or if the Contractor elects not to retain principal rights in a Subject Invention, the Contractor shall convey to NYSERDA title to the Subject Invention unless NYSERDA shall waive in writing its right to take title. In the event the Contractor elects not to retain principal rights in a Subject Invention, the Contractor shall retain a non-exclusive, royalty-free license throughout the world in such Subject Invention transferable only with the written approval of NYSERDA. Such approval shall not be unreasonably withheld, and, in the event that notice of approval or disapproval is not received by the Contractor within thirty days after receipt of request for approval, the requested transfer shall be considered approved. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days.

(c) The Contractor shall submit to NYSERDA, not less frequently than annually, written reports which indicate the status of utilization of Subject Inventions in which the Contractor retains principal rights. The reports shall include information regarding the status of development, date of first commercial sale or use, and gross royalties received by the Contractor. Such report shall be furnished to NYSERDA not later than February 1 following the calendar year covered by the report. The Contractor may include the information required by this Section in the Annual Report required by Section 8.03 of this Agreement. In the event the Contractor

fails to demonstrate that the Contractor has taken effective steps within three years after a patent is issued to bring the Subject Invention to the point of Practical Application, then NYSERDA shall have the right to grant a non-exclusive or exclusive license to responsible applicants under terms that are reasonable under the circumstances, or to require the Contractor to do so.

(d) The Contractor shall include the foregoing patent clauses, suitably modified to identify the parties, in all subcontracts which involve the performance of Work under this Agreement. The Subcontractor shall retain all rights provided for the Contractor, and the Contractor shall retain all rights provided for NYSERDA, as set forth above.

Section 8.03. Payments to NYSERDA.

(a) Payments to NYSERDA: The Contractor agrees to pay to NYSERDA the following amounts:

(1) When a Sale is made by a Seller when the Seller is a New York State Manufacturer: 1.5% of the Sale Price.

(2) When a Sale is made by a Seller when the Seller is not a New York State Manufacturer: 5% of the Sale Price.

The Contractor's obligation to make payments to NYSERDA shall commence from the date of the first Sale and shall extend for a period of time as follows:

(i) in the event of Sales made by a Seller when the Seller is a NewYork State Manufacturer, for a period of fifteen years thereafter, or until the Contractor pays NYSERDA an amount equal to one times the amount of funds actually paid by NYSERDA to the Contractor under this Agreement, whichever comes first; or

(ii) in the event of Sales made by a Seller when the Seller is not a New York State Manufacturer, for a period of fifteen years thereafter, or until the Contractor pays NYSERDA an amount equal to three times the amount of funds actually paid by NYSERDA to the Contractor under this Agreement, whichever comes first.

Such payments shall be payable in annual installments and shall be paid by the first day of March in the calendar year immediately following the year during which the Contractor receives revenues as described above (the "Due Date"). Any payment not received by the applicable Due Date shall be deemed delinquent. A delinquent payment shall be made with interest with such interest computed commencing with the Due Date of such payment. The interest rate payable shall be the "Prime Rate" existing as of the Due Date of such payment plus five (5) percentage points. Such interest shall be compounded monthly.

(b) Annual Reports. The Contractor shall provide NYSERDA an annual report detailing, by manufacturer, the number of items sold or leased, or the payment or other receipts received, and the resultant amount earned by, and paid to, NYSERDA in accordance with paragraph (a) hereof. Such report shall be furnished to NYSERDA not later than February 1 following the calendar year covered by the report. The Contractor's obligation to provide Annual Reports shall commence on February 1 of the calendar year following either the Contractor's receipt of Final Payment pursuant to Section 4.04 hereto, or upon the first Sale, whichever event occurs first. In the event that, for a period of five consecutive years, the annual reports indicate that no Sales are made and no payment is due to NYSERDA, the Contractor may cease submittal of annual reports. If, however, Sales are made in subsequent years, the Contractor's obligation to submit annual reports shall resume.

(c) Licensing or Franchise Agreements. The Contractor shall not enter into any agreement with any party with respect to the licensing, franchising, or assignment of rights in the Product or any Subject Invention which contains provisions inconsistent with the Contractor's obligation as set forth in this Section. The Contractor shall provide copies of any proposed licensing or franchise agreements to NYSERDA and shall not execute any such agreements without the prior written consent of NYSERDA. Such consent shall not be unreasonably withheld, and, in the event that notice of consent or disapproval is not received by the Contractor within thirty days after receipt of request for approval by NYSERDA, such licensing or franchise agreement shall be considered approved. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days.

Article IX

Warranties and Guarantees

Section 9.01. Warranties and Guarantees. The Contractor warrants and guarantees that:

(a) it is financially and technically qualified to perform the Work;

(b) it is familiar with and will comply with all general and special Federal, State, municipal and local laws, ordinances and regulations, if any, that may in any way affect the performance of this Agreement;

(c) the design, supervision and workmanship furnished with respect to performance of the Work shall be in accordance with sound and currently accepted scientific standards and engineering practices;

(d) all materials, equipment and workmanship furnished by it and by Subcontractors in performance of the Work or any portion thereof shall be free of defects in design, material and workmanship, and all such materials and equipment shall be of first-class quality, shall conform with all applicable codes, specifications, standards and ordinances and shall have service lives and maintenance characteristics suitable for their intended purposes in accordance with sound and currently accepted scientific standards and engineering practices;

(e) neither the Contractor nor any of its employees, agents, representatives or servants has actual knowledge of any patent issued under the laws of the United States or any other matter which could constitute a basis for any claim that the performance of the Work or any part thereof infringes any patent or otherwise interferes with any other right of any Person;

(f) there are no existing undisclosed or threatened legal actions, claims, or encumbrances, or liabilities that may adversely affect the Work or NYSERDA's rights hereunder;

(g) it has no actual knowledge that any information or document or statement furnished by the Contractor in connection with this Agreement contains any untrue statement of a material

fact or omits to state a material fact necessary to make the statement not misleading, and that all facts have been disclosed that would materially adversely affect the Work; and

(h) during the time the Contractor has obligations to NYSERDA pursuant to Section 8.03 the Contractor will not permit its current or future principals to engage in any competing activities for so long as such principals are employed by the Contractor and for a period of three years thereafter (excluding teaching and research.) Also, during the time the Contractor has obligations to NYSERDA pursuant to Section 8.03 the Contractor will not, and it will not permit its current or future principals to loan monies to entities competing in the development, enhancement, or revision of the Product or any Subject Invention.

Article X

Indemnification

Section 10.01. Indemnification. The Contractor shall protect, indemnify and hold harmless NYSERDA and the State of New York from and against all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon or incurred by or asserted against NYSERDA or the State of New York resulting from, arising out of or relating to the performance of this Agreement. The obligations of the Contractor under this Article shall survive any expiration or termination of this Agreement, and shall not be limited by any enumeration herein of required insurance coverage.

Article XI

Insurance

Section 11.01. Maintenance of Insurance; Policy Provisions. The Contractor, at no additional cost to NYSERDA, shall maintain or cause to be maintained throughout the term of this Agreement, insurance of the types and in the amounts specified in the Section hereof entitled Types of Insurance. All such insurance shall be evidenced by insurance policies, each of which shall:

(a) name or be endorsed to cover NYSERDA, the State of New York and the Contractor as additional insureds;

(b) provide that such policy may not be cancelled or modified until at least 30 days after receipt by NYSERDA of written notice thereof; and

(c) be reasonably satisfactory to NYSERDA in all other respects.

Section 11.02. Types of Insurance. The types and amounts of insurance required to be maintained under this Article are as follows:

(a) Commercial general liability insurance for bodily injury liability, including death, and property damage liability, incurred in connection with the performance of this Agreement, with minimum limits of $1,000,000 in respect of claims arising out of personal injury or sickness or death of any one person, $1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and $1,000,000 in respect of claims arising out of property damage in any one accident or disaster; and

(b) Commercial automobile liability insurance in respect of motor vehicles owned, licensed or hired by the Contractor and the Subcontractors for bodily injury liability, including death and property damage, incurred in connection with the performance of this Agreement, with minimum limits of $500,000 in respect of claims arising out of personal injury, or sickness or death of any one person, $1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and $500,000 in respect of claims arising out of property damage in any one accident or disaster.

(c) Upon commencement of marketing of the Product, product liability insurance for bodily injury liability, including death, and property damage liability, arising out of the use of the Product with minimum limits of $1,000,000 in respect of claims arising out of personal injury or sickness or death of any one person, $1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and $1,000,000 in respect of claims arising out of property damage in any one accident or disaster. Product liability insurance naming the NYSERDA and State of New York as additional insureds required under this Agreement shall remain in effect for as long as the payment obligation pursuant to Section 8.03 of this Agreement is in effect.

Section 11.03. Delivery of Policies; Insurance Certificates. Prior to commencing the Work, the Contractor shall deliver to NYSERDA certificates of insurance issued by the respective insurers, indicating the Agreement number thereon, evidencing the insurance required by Sections 11.02 (a) and (b) hereof and bearing notations evidencing the payment of the premiums thereon or accompanied by other evidence of such payment satisfactory to NYSERDA. Upon commencement of marketing of the Product, the Contractor shall deliver to NYSERDA certificates of insurance issued by the respective insurers, indicating the Agreement number thereon, evidencing the insurance required by Section 11.02 (c) hereof and bearing notations evidencing the payment of the premiums thereon or accompanied by other evidence of such payment satisfactory to NYSERDA. In the event any policy furnished or carried pursuant to this Article will expire on a date prior to acceptance of the Work by NYSERDA pursuant to the section hereof entitled Acceptance of Work, the Contractor, not less than 15 days prior to such expiration date, shall deliver to NYSERDA certificates of insurance evidencing the renewal of such policies, and the Contractor shall promptly pay all premiums thereon due. In the event of threatened legal action, claims, encumbrances, or liabilities that may affect NYSERDA hereunder, or if deemed necessary by NYSERDA due to events rendering a review necessary, upon request the Contractor shall deliver to NYSERDA a certified copy of each policy.

Article XII

Stop Work Order; Termination

Section 12.01. Stop Work Order.

(a) NYSERDA may at any time, by written Order to the Contractor, require the Contractor to stop all or any part of the Work called for by this Agreement for a period of up to 90 days after the Stop Work Order is delivered to the Contractor, and for any further period to which the parties may agree. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this Section. Upon receipt of such an Order, the Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the Work covered by the Order during the period of work stoppage consistent with

public health and safety. Within a period of 90 days after a Stop Work Order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, NYSERDA shall either:

(i) by written notice to the Contractor, cancel the Stop Work Order, which shall be effective as provided in such cancellation notice, or if not specified therein, upon receipt by the Contractor, or

(ii) terminate the Work covered by such order as provided in the Termination Section of this Agreement.

(b) If a Stop Work Order issued under this Section is cancelled or the period of the Order or any extension thereof expires, the Contractor shall resume Work. An equitable adjustment shall be made in the delivery schedule, the estimated cost, the fee, if any, or a combination thereof, and in any other provisions of the Agreement that may be affected, and the Agreement shall be modified in writing accordingly, if:

(i) the Stop Work Order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this Agreement, and

(ii) the Contractor asserts a claim for such adjustments within 30 days after the end of the period of Work stoppage; provided that, if NYSERDA decides the facts justify such action, NYSERDA may receive and act upon any such claim asserted at any time prior to final payment under this Agreement.

(c) If a Stop Work Order is not cancelled and the Work covered by such Order is terminated, the reasonable costs resulting from the Stop Work Order shall be allowed by equitable adjustment or otherwise.

(d) Notwithstanding the provisions of this Section 12.01, the maximum amount payable by NYSERDA to the Contractor pursuant to this Section 12.01 shall not be increased or deemed to be increased except by specific written amendment hereto.

Section 12.02. Termination.

(a) This Agreement may be terminated by NYSERDA at any time during the term of this Agreement with or without cause, upon 30 days prior written notice to the Contractor. In such event, compensation shall be paid to the Contractor for Work performed and expenses incurred prior to the effective date of termination in accordance with the provisions of the Article hereof entitled Compensation and in reimbursement of any amounts required to be paid by the Contractor pursuant to Subcontracts; provided, however, that upon receipt of any such notice of termination, the Contractor shall cease the performance of Work, shall make no further commitments with respect thereto and shall reduce insofar as possible the amount of outstanding commitments (including, to the extent requested by NYSERDA, through termination of subcontracts containing provisions therefore). Articles VIII, IX, and X shall survive any termination of this Agreement, and Article XVI shall survive until the payment obligations pursuant to Article VIII have been met.

(b) In the event of termination, the Contractor's payment obligations set forth in Section 8.03 of the Agreement shall be adjusted as of the effective date of termination, with such payment obligations being calculated as follows:

$$\frac{\text{Total NYSERDA funds actually paid to the Contractor}}{\text{NYSERDA total maximum commitment set forth in Section 4.07 of the Agreement}} \times \text{Payments defined in Section 8.03 of the Agreement}$$

(c) Nothing in this Article shall preclude the Contractor from continuing to carry out the Work called for by the Agreement after receipt of a Stop Work Order or termination notice at its own election, provided that, if the Contractor so elects, (i) any such continuing Work after receipt of the Stop Work Order or termination notice shall be deemed not to be Work pursuant to the Agreement and (ii) NYSERDA shall have no liability to the Contractor for any costs of the Work continuing after receipt of the Stop Work Order or termination notice.

Article XIII

Independent Contractor

Section 13.01. Independent Contractor. The status of the Contractor under this Agreement shall be that of an independent contractor and not that of an agent, and in accordance with such status, the Contractor, the Subcontractors, and their respective officers, agents, employees, representatives and servants shall at all times during the term of this Agreement conduct themselves in a manner consistent with such status and by reason of this Agreement shall neither hold themselves out as, nor claim to be acting in the capacity of, officers, employees, agents, representatives or servants of NYSERDA nor make any claim, demand or application for any right or privilege applicable to NYSERDA, including, without limitation, rights or privileges derived from workers' compensation coverage, unemployment insurance benefits, social security coverage and retirement membership or credit.

Article XIV

Compliance with Certain Laws

Section 14.01. Laws of the State of New York. The Contractor shall comply with all of the requirements set forth in Exhibit B hereto.

Section 14.02. All Legal Provisions Deemed Included. It is the intent and understanding of the Contractor and NYSERDA that each and every provision of law required by the laws of the State of New York to be contained in this Agreement shall be contained herein, and if, through mistake, oversight or otherwise, any such provision is not contained herein, or is not contained herein in correct form, this Agreement shall, upon the application of either NYSERDA or the Contractor, promptly be amended so as to comply strictly with the laws of the State of New York with respect to the inclusion in this Agreement of all such provisions.

Section 14.03. Other Legal Requirements. The references to particular laws of the State of New York in this Article, in Exhibit B and elsewhere in this Agreement are not intended to be

exclusive and nothing contained in such Article, Exhibit and Agreement shall be deemed to modify the obligations of the Contractor to comply with all legal requirements.

Article XV

Notices, Entire Agreement, Amendment, Counterparts

Section 15.01. Notices. All notices, requests, consents, approvals and other communications which may or are required to be given by either party to the other under this Agreement shall be deemed to have been sufficiently given for all purposes hereunder when delivered or mailed by registered or certified mail, postage prepaid, return receipt requested, (i) if to NYSERDA, at 17 Columbia Circle, Albany, New York 12203-6399 or at such other address as NYSERDA shall have furnished to the Contractor in writing, and (ii) if to the Contractor, at __ _____, or such other address as the Contractor shall have furnished to NYSERDA in writing.

Section 15.02. Entire Agreement; Amendment. This Agreement embodies the entire agreement and understanding between NYSERDA and the Contractor and supersedes all prior agreements and understandings relating to the subject matter hereof. Except as otherwise expressly provided for herein, this Agreement may be changed, waived, discharged or terminated only by an instrument in writing, signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

Section 15.03. Counterparts. This Agreement may be executed in counterparts each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

Article XVI

Business Reorganizations

Section 16.01. Business Reorganizations. In the event the Contractor proposes to consolidate or merge into or with another corporation or entity, or to sell or dispose of all or a majority of the assets of the Contractor, or to otherwise undertake a reorganization which alters or changes the rights of NYSERDA as provided in this Agreement, before any such action shall be taken, the Contractor shall either:

(a) buy out its obligation to make payments to NYSERDA as described in Section 8.03 of this Agreement by paying NYSERDA an amount equal to three times the amount of funds actually paid by NYSERDA to the Contractor under this Agreement; or

(b) assign or otherwise transfer to a new entity the Contractor's obligations under this Agreement, including, but not limited to, the obligation to make payments to NYSERDA as described in Section 8.03 of this Agreement. Such assignment or transfer shall be subject to the prior written approval of NYSERDA. Such approval shall not be unreasonably withheld, and, in the event that notice of approval or disapproval is not received by the Contractor within thirty days after receipt of request for approval, the assignment or transfer shall be considered approved. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days.

Article XVII

Publicity

Section 17.01. Publicity.

(a) The Contractor shall collaborate with NYSERDA's Director of Technical Communications to prepare any press release and to plan for any news conference concerning the Work. In addition the Contractor shall notify NYSERDA's Director of Technical Communications regarding any media interview in which the Work is referred to or discussed.

(b) It is recognized that during the course of the Work under this Agreement, the Contractor or its employees may from time to time desire to publish information regarding scientific or technical developments made or conceived in the course of or under this Agreement. In any such information, the Contractor shall credit NYSERDA's funding participation in the Project, and shall state that "NYSERDA has not reviewed the information contained herein, and the opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York." Notwithstanding anything to the contrary contained herein, the Contractor shall have the right to use and freely disseminate project results for educational purposes, if applicable, consistent with the Contractor's policies.

(c) Commercial promotional materials or advertisements produced by the Contractor shall credit NYSERDA, as stated above, and shall be submitted to NYSERDA for review and recommendations to improve their effectiveness prior to use. The wording of such credit can be approved in advance by NYSERDA, and, after initial approval, such credit may be used in subsequent promotional materials or advertisements without additional approvals for the credit, provided, however, that all such promotional materials or advertisements shall be submitted to NYSERDA prior to use for review, as stated above. Such approvals shall not be unreasonably withheld, and, in the event that notice of approval or disapproval is not received by the Contractor within thirty days after receipt of request for approval, the promotional materials or advertisement shall be considered approved. In the event that NYSERDA requires additional time for considering approval, NYSERDA shall notify the Contractor within thirty days of receipt of the request for approval that additional time is required and shall specify the additional amount of time necessary up to 180 days. If NYSERDA and the Contractor do not agree on the wording of such credit in connection with such materials, the Contractor may use such materials, but agrees not to include such credit.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day, month and year first above written.

NEW YORK STATE ENERGY RESEARCH
AND DEVELOPMENT AUTHORITY

By _____

Name _____

Title _____

By _____
Jeffrey J. Pitkin
Treasurer

STATE OF _____)
) SS.:
COUNTY OF _____)

On the ____ day of _____ in the year _____, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individuals(s), or the person upon behalf of which the individual(s) acted, executed the document.

_____
Notary Public

EXHIBIT B

REVISED 9/06

STANDARD TERMS AND CONDITIONS
FOR ALL NYSERDA AGREEMENTS

(Based on Standard Clauses for New York State Contracts and Tax Law Section 5-a)

The parties to the attached agreement, contract, license, lease, amendment, modification or other agreement of any kind (hereinafter, "the Agreement" or "this Agreement") agree to be bound by the following clauses which are hereby made a part of the Agreement (the word "Contractor" herein refers to any party other than NYSERDA, whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. NON-DISCRIMINATION REQUIREMENTS. In accordance with Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, disability or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is an Agreement for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this Agreement shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this Agreement. If this is a building service Agreement as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of $50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this Agreement and forfeiture of all moneys due hereunder for a second subsequent violation.

2. WAGE AND HOURS PROVISIONS. If this is a public work Agreement covered by Article 8 of the Labor Law or a building service Agreement covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates

for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

3. NON-COLLUSIVE BIDDING REQUIREMENT. In accordance with Section 2878 of the Public Authorities Law, if this Agreement was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to NYSERDA a non-collusive bidding certification on Contractor's behalf.

4. INTERNATIONAL BOYCOTT PROHIBITION. If this Agreement exceeds $5,000, the Contractor agrees, as a material condition of the Agreement, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the Agreement's execution, such Agreement, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify NYSERDA within five (5) business days of such conviction, determination or disposition of appeal. (See and compare Section 220-f of the Labor Law, Section 139-h of the State Finance Law, and 2 NYCRR 105.4).

5. SET-OFF RIGHTS. NYSERDA shall have all of its common law and statutory rights of set-off. These rights shall include, but not be limited to, NYSERDA's option to withhold for the purposes of set-off any moneys due to the Contractor under this Agreement up to any amounts due and owing to NYSERDA with regard to this Agreement, any other Agreement, including any Agreement for a term commencing prior to the term of this Agreement, plus any amounts due and owing to NYSERDA for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.

6. CONFLICTING TERMS. In the event of a conflict between the terms of the Agreement (including any and all attachments thereto and amendments thereof) and the terms of this Exhibit B, the terms of this Exhibit B shall control.

7. GOVERNING LAW. This Agreement shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

8. NO ARBITRATION. Disputes involving this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily required) without the NYSERDA's written consent, but must, instead, be heard in a court of competent jurisdiction of the State of New York.

9. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law and Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon NYSERDA's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify NYSERDA, in writing, of each and every change of address to which service of process can be made. Service by NYSERDA to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

10. CRIMINAL ACTIVITY. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of any allegation previously unknown to it that the Contractor or any of its principals is under indictment for a felony, or has been, within five (5) years prior to submission of the Contractor's proposal to NYSERDA, convicted of a felony, under the laws of the United States or Territory of the United States, then NYSERDA may exercise its stop work right under this Agreement. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of the fact, previously unknown to it, that Contractor or any of its principals is under such indictment or has been so convicted, then NYSERDA may exercise its right to terminate this Agreement. If the Contractor knowingly withheld information about such an indictment or conviction, NYSERDA may declare the Agreement null and void and may seek legal remedies against the Contractor and its principals. The Contractor or its principals may also be subject to penalties for any violation of law which may apply in the particular circumstances. For a Contractor which is an association, partnership, corporation, or other organization, the provisions of this paragraph apply to any such indictment or conviction of the organization itself or any of its officers, partners, or directors or members of any similar governing body, as applicable.

11. PERMITS. It is the responsibility of the Contractor to acquire and maintain, at its own cost, any and all permits, licenses, easements, waivers and permissions of every nature necessary to perform the work.

12. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this Agreement will be in accordance with, but not limited to, the specifications and provisions of State Finance Law Section 165 (Use of Tropical Hardwoods), which prohibits purchase and use of tropical hardwoods, unless specifically exempted by NYSERDA.

13. COMPLIANCE WITH TAX LAW SECTION 5-a. The following provisions apply to Contractors that have entered into agreements in an amount exceeding $100,000 for the purchase of goods and services:

a. Before such agreement can take effect, the Contractor must have on file with the New York State Department of Taxation and Finance a Contractor Certification form (ST-220-TD).

b. Prior to entering into such an agreement, the Contractor is required to provide NYSERDA with a completed Contractor Certification to Covered Agency form (Form ST-220-CA).

c. Prior to any renewal period (if applicable) under the agreement, the Contractor is required to provide NYSERDA with a completed Form ST-220-CA.

d. Certifications referenced in paragraphs (b) and (c) above will be maintained by NYSERDA and made a part hereof and incorporated herein by reference.

e. NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Contractor in accordance with Tax Law Section 5-a was false when made.

EXHIBIT C

REPORT FORMAT AND STYLE GUIDE

PURPOSE

This document explains how to prepare a technical report for the New York State Energy Research and Development Authority (NYSERDA). It describes editorial and production procedures and gives electronic data-transfer information. NYSERDA's contractors prepare the reports describing NYSERDA research and development projects that NYSERDA publishes. Please direct questions about format and style to Diane Welch of NYSERDA's Technical Communications unit: (518) 862-1090, ext. 3276; fax (518) 862-1091; e-mail dlw@nyserda.org

COPYRIGHTS

All material borrowed or adapted from other sources should be properly identified (i.e., document, source, date, and page). The contractor must obtain and submit to NYSERDA the copyright owner's written permission to use copyrighted illustrations, tables, or substantial amounts of text from another publication.

REPORT FORMAT AND SEQUENCE

The following items are required in all technical reports and should be paginated in the following sequence:

- Title page (no page number)
- Notice (no page number)
- Abstract (iii)
- Acknowledgments (optional) (iv)
- Table of Contents, including listings of figures and tables (v or vii)
- Summary (S-1)

NOTE: the Abstract, Table of Contents, and each section begin on right-hand, odd-numbered pages.

Title Page

- The following information is required (see sample on last page):
  - Report title and type of report (i.e., final, interim, or summary)
  - Name of NYSERDA project manager(s)
  - Corporate name, city, and state of contractor(s), including contact person(s) or project manager(s)
  - Project cosponsors, including contact person(s) or project manager(s)
  - Contract number (e.g., 3178-ERTER-MW-94)

Notices

One of these legal notices or disclaimers is required:

- When NYSERDA is the project's sole sponsor, this notice must be used:

NOTICE

This report was prepared by _____ in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

- When there are other project cosponsors, use the following notice instead:

NOTICE

This report was prepared by _____ in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority and the _____ (hereafter the "Sponsors"). The opinions expressed in this report do not necessarily reflect those of the Sponsors or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, the Sponsors and the State of New York make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. The Sponsors, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

Abstract and Key Words — right-hand, odd-numbered page [iii]

An abstract is a brief, 200-word description of project objectives, investigative methods used, and research conclusions or applications. This information will be used when NYSERDA registers the report with the National Technical Information Service (NTIS). A list of key words that describe the project and identify the major research concept should be submitted with the report. Four to six precise descriptors are generally sufficient and will be used for indexing, registering, and distributing the report through NTIS.

Acknowledgments (optional) — left-hand, even-numbered page [iv]

Acknowledgments precede the contents and should be no longer than two paragraphs.

Table of Contents and Lists of Figures and Tables — begin on odd-numbered, right-hand pages [v. vii, ix, etc.]]

The Table of Contents should list section numbers, titles, second-level headings, and their page numbers. Third-level headings also may be listed. If the report contains five or more figures or tables, they should be listed using the style of the Table of Contents. The following samples are boxed only to set them apart in this document.

Summary — right-hand, odd-numbered page [S-1]

The Summary, which immediately precedes the body of the text, should be written for a general audience. The Summary may be the only part of the technical report closely read by a number of people, many of whom lack a technical background. These may include industry and utility executives, government officials, legislators, the general public, and media representatives. The Summary should be 500-1000 words long.

TABLE OF CONTENTS

Section ..... Page

SUMMARY S-1

1. DESCRIPTION OF STUDY 1-1
Sources of Information 1-5
Bases of Evaluation 1-9

2. EXISTING CONDITIONS 2-1
Architecture 2-3
Mechanical and Electrical Systems 2-13

3. ANALYSIS OF PRESENT ENERGY USE 3-1
Analysis of Use by Systems 3-3
Analysis of Use by Hospital Services 3-17

APPENDIX A Comparison of Expenses for NYS Hospitals A-1
APPENDIX B Forms for Energy Audits in Hospitals B-1

FIGURES

Figure Page

1-1 Comparative Energy Use Per Cubic Foot in Hospitals Under 200 Beds 1-2
2-1 View of Community Hospital from South 2-1
2-2 Site Plan 2-5

GENERAL INFORMATION

The first reference to NYSERDA should read "the New York State Energy Research and Development Authority (NYSERDA)." Subsequent references should read simply "NYSERDA." When it is clear that you are referring to New York State, use State; otherwise, use New York State or the State of New York.

COPY

- Page format:
  - Margins should be 1.25 inches left and right; 1 inch top and bottom.
    - Use left-hand justification only.
    - Text should be in a 10-point serif font (i.e., Times Roman, Bookman, etc.); captions, tables, and figures should be in a sans-serif font (i.e., Helvetica, Arial, etc.).
    - Spacing should be 1.5 lines, printed on one side of the paper.
    - Block-style paragraphs should be used, with no indentation (except for fifth-level headings, which should be blocked on the left; see Heading Styles, below).

- There should be two returns between a paragraph and the next heading.

- Material borrowed or adapted from external sources must be identified (i.e., document, source, date, and page). Written permission to use copyrighted illustrations, tables, or text taken from another publication must be submitted with the report.
- Avoid half-page and one-sentence paragraphs.
- Do not use contractions.
- When referring to a specific figure or table, spell out and capitalize the words "Figure" and "Table."
- Indented lists of material should be set off with bullets:
  - If a typographical bullet is unavailable, the bullet is a lower case "o," not zero.
  - One blank line should precede and follow a list.
  - Bulleted items should be indented left and right.
- All new sections should begin on a right-hand, odd-numbered page (e.g., 1-1, 2-1, A-1, etc.).
- Percentages should be written as follows: 1%, 76%, etc.
- Acronyms must be spelled out the first time used, followed by the acronym in parentheses.

HEADING STYLES

The heading styles illustrated below should be used. (Only section headings should be numbered.)

FIRST-LEVEL HEADING

Section 1

INTRODUCTION

The heading is upper case, centered, and boldfaced; the text is below the heading, at the left margin.

SECOND-LEVEL HEADING

The heading is upper case, at the left margin, and boldfaced; the text is at the left margin.

Third-Level Heading

The heading is upper and lower case, at the left margin, boldfaced, and underscored; the text is at the left margin.

Fourth-Level Heading. The heading is upper and lower case, at the left margin, boldfaced, and underscored, with a period at the end. The text continues on the same line as the heading. The remaining text goes back out to the left margin.

Fifth-Level Heading. The heading is upper and lower case, indented, boldfaced, and underscored with a period at the end. The text continues on the same line, with the remaining text indented left and right.

TABLES AND FIGURES

- Tables and figures must be numbered sequentially and titled individually.
- Place tables and figures as close as possible to the text in which they are mentioned.
- Distinguish tabular material from the text.
- Cite a source if the tabular material or figure content has not been generated by the contractor.
- Figure captions should be complete sentences when appropriate.
- Use "Figure 1," not "Fig. 1," or "Table 1." in the text, as well as for captions. Examples:
    - Table 1 details demand-side management options.
    - As shown in Figure 1, the demand-side management program offers numerous options.
- Figure captions should be typed in boldface.
    - **Figure 1. Demand-Side Management Options in New York State.**
- Unless generated by the contractor, a source should always be cited. The figure source should appear after the caption (e.g., Source: Lawrence Berkeley Laboratory); the table source should be noted with an asterisk and footnoted.

- Photographs and drawings should be limited in number, with the following guidelines:
    - Black-and-white line drawings or good-quality, clear halftones (black-and-white photographs) may be used. Color artwork and photos will be printed in black-and-white.
    - Slides should be converted to black-and-white photos before being submitted.
    - Photographs should be printed on glossy stock, preferably 5"x7".

REFERENCES AND BIBLIOGRAPHIES

The format in Manual of Style (University of Chicago Press, Chicago, Illinois) should be used for reference listings and bibliographies.

Bibliographic entries should be listed alphabetically by author, as follows:

Hawkins, R.R. Scientific, Medical, and Technical Books Published in the United States of America. 2d ed. New York: Bowker, 1958.

REPORT REQUIREMENTS

Two hard copies of the draft final report must be submitted to NYSERDA's Director of Communications. After review by the Project Manager and Technical Communications staff, the draft will be returned to the contractor for final corrections. The contractor is responsible for satisfactorily addressing technical comments from NYSERDA and other co-funders. When making editorial corrections, the contractor must ensure that technical content is not compromised.

After editorial corrections have been made, the contractor must submit two hard copies of the final report (one a camera-ready original and the other a photocopy) and the report on a compact disc, Iomega 100 PC-Zip disk, or IBM personal computer-compatible diskette to NYSERDA’s Director of Communications.

Electronic Requirements

- Material must be submitted in any of the following formats:
    - Compact disc (CD-ROM)
    - Iomega 100 PC-Zip disk

- IBM personal computer-compatible 3.5-inch, double-sided (DS), high-density (HD) diskette

- Textual material should be created in a format compatible with WordPerfect 9.While other word-processing programs may be able to be converted, results may vary. Characteristics such as underlining, bold, italics, and special characters that often appear in equations may be lost if WordPerfect 9 is not used.

- Reports that are to be published on the web must be submitted as either a PDF or HTML file.

If you are unable to meet these electronic transfer requirements, before submitting your report please contact
Diane Welch of NYSERDA's Technical Communications unit at (518) 862-1090, ext. 3276; fax (518) 862-1091; e-mail dlw@nyserda.org

CITY OF LOCKPORT INFLUENT HYDROPOWER
FEASIBILITY STUDY
Final Report

Prepared for

THE NEW YORK STATE
ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
Albany, NY

Lawrence J. Pakenas, P.E.
Senior Project Manager

Prepared by

CITY OF LOCKPORT
Lockport, NY

Michael Diel
Project Manager

and

MALCOLM PIRNIE, INC.
Buffalo, NY

Vincent J. Funigiello, P.E.
Project Manager

4311-ERTERMW-97

NYSERDA
Report 98-11

July 1998

*Sample title page. Font is a serif font (Times Roman). Bold-faced text is 13 pt., small caps. The rest of the type is 11 pt., plain text.

EXHIBIT D

PART 504

PROMPT PAYMENT POLICY STATEMENT

Section 504.1 Purpose and applicability. (a) The purpose of this Part is to implement section 2880 of the Public Authorities Law by detailing the authority's policy for making payment promptly on amounts properly due and owing by the authority under contracts. This Part constitutes the authority's prompt payment policy statement as required by that section.

(b) This Part generally applies to payments due and owing by the authority to a person or business in the private sector under a contract it has entered into with the authority on or after May 1, 1988. This Part does not apply to payments due and owing:

(1) under the Eminent Domain Procedure Law;

(2) as interest allowed on judgments rendered by a court pursuant to any provision of law except Section 2880 of the Public Authorities Law;

(3) to the Federal government; to any state agency or its instrumentalities; to any duly constituted unit of local government, including but not limited to counties, cities, towns, villages, school districts, special districts or any of their related instrumentalities; to any other public authority or public benefit corporation; or to its employees when acting in, or incidental to, their public employment capacity;

(4) if the Authority is exercising a legally authorized set-off against all or part of the payment; or

(5) if other State or Federal law or rule or regulation specifically requires otherwise.

Section 504.2 Definitions. As used in this Part, the following terms shall have the following meanings, unless the context shall indicate another or different meaning or intent:

(a) "Authority" means the New York State Energy Research and Development Authority.

(b) "Contract" means an enforceable agreement entered into between the Authority and a contractor.

(c) "Contractor" means any person, partnership, private corporation, or association:

(1) selling materials, equipment or supplies or leasing property or equipment to the Authority pursuant to a contract;

(2) constructing, reconstructing, rehabilitating or repairing buildings,

highways or other improvements for, or on behalf of, the Authority pursuant to a contract; or

(3) rendering or providing services to the Authority pursuant to a contract.

(d) "Date of payment" means the date on which the Authority requisitions a check from its statutory fiscal agent, the Department of Taxation and Finance, to make a payment.

(e) "Designated payment office" means the Office of the Authority's Controller, located at 17 Columbia Circle, Albany, New York 12203.

(f) "Payment" means provision by the Authority of funds in an amount sufficient to satisfy a debt properly due and owing to a contractor and payable under all applicable provisions of a contract to which this Part applies and of law, including but not limited to provisions for retained amounts or provisions which may limit the Authority's power to pay, such as claims, liens, attachments or judgments against the contractor which have not been properly discharged, waived or released.

(g) "Prompt payment" means a payment within the time periods applicable pursuant to Sections 504.3 through 504.5 of this Part in order for the Authority not to be liable for interest pursuant to Section 504.6.

(h) "Payment due date" means the date by which the date of payment must occur, in accordance with the provisions of Sections 504.3 through 504.5 of this Part, in order for the Authority not to be liable for interest pursuant to Section 5.06.

(i) "Proper invoice" means a written request for a contract payment that is submitted by a contractor setting forth the description, price or cost, and quantity of goods, property or services delivered or rendered, in such form, and supported by such other substantiating documentation, as the Authority may reasonably require, including but not limited to any requirements set forth in the contract; and addressed to the Authority's Controller, marked "Attention: Accounts Payable," at the designated payment office.

(j)(1) "Receipt of an invoice" means:

(i) if the payment is one for which an invoice is required, the later of:

(a) the date on which a proper invoice is actually received in the designated payment office during normal business hours; or

(b) the date by which, during normal business hours, the Authority has actually received all the purchased goods, property or services covered by a proper invoice previously received in the designated payment office.

(ii) if a contract provides that a payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice the 30th calendar day, excluding legal holidays, before the date so specified or predetermined.

(2) For purposes of this subdivision, if the contract requires a multifaceted,

completed or working system, or delivery of no less than a specified quantity of goods, property or services and only a portion of such systems or less than the required goods, property or services are working, completed or delivered, even though the Contractor has invoiced the Authority for the portion working, completed or delivered, the Authority will not be in receipt of an invoice until the specified minimum amount of the systems, goods, property or services are working, completed or delivered.

(k) "Set-off" means the reduction by the Authority of a payment due a contractor by an amount equal to the amount of an unpaid legally enforceable debt owed by the contractor to the Authority.

Section 504.3 Prompt payment schedule. Except as otherwise provided by law or regulation or in Sections 504.4 and 504.5 of this Part, the date of payment by the Authority of an amount properly due and owing under a contract shall be no later than 30 calendar days, excluding legal holidays, after such receipt.

Section 504.4 Payment procedures.

(a) Unless otherwise specified by a contract provision, a proper invoice submitted by the contractor to the designated payment office shall be required to initiate payment for goods, property or services. As soon as any invoice is received in the designated payment office during normal business hours, such invoice shall be date-stamped. The invoice shall then promptly be reviewed by the Authority.

(b) The Authority shall notify the contractor within 15 calendar days after receipt of an invoice of:

(1) any defects in the delivered goods, property or services;

(2) any defects in the invoice; and

(3) suspected improprieties of any kind.

(c) The existence of any defects or suspected improprieties shall prevent the commencement of the time period specified in Section 504.3 until any such defects or improprieties are corrected or otherwise resolved.

(d) If the Authority fails to notify a contractor of a defect or impropriety within the fifteen calendar day period specified in subdivision (b) of this section, the sole effect shall be that the number of days allowed for payment shall be reduced by the number of days between the 15th day and the day that notification was transmitted to the contractor. If the Authority fails to provide reasonable grounds for its contention that a defect or impropriety exists, the sole effect shall be that the payment due date shall be calculated using the original date of receipt of an invoice.

(e) In the absence of any defect or suspected impropriety, or upon satisfactory correction or resolution of a defect or suspected impropriety, the Authority shall make payment, consistent with any such correction or resolution and the provisions of this Part.

Section 504.5 Exceptions and extension of payment due date. The Authority has determined that, notwithstanding the provisions of Sections 504.3 and 504.4 of this Part, any of the following facts or circumstances, which may occur concurrently or consecutively, reasonably justify extension of the payment due date:

(a) If the case of a payment which a contract provides will be made on a specific date or at a predetermined interval, without having to submit a written invoice, if any documentation, supporting data, performance verification, or notice specifically required by the contract or other State or Federal mandate has not been submitted to the Authority on a timely basis, then the payment due date shall be extended by the number of calendar days from the date by which all such matter was to be submitted to the Authority and the date when the Authority has actually received such matter.

(b) If an inspection or testing period, performance verification, audit or other review or documentation independent of the contractor is specifically required by the contract or by other State or Federal mandate, whether to be performed by or on behalf of the Authority or another entity, or is specifically permitted by the contract or by other State or Federal provision and the Authority or other entity with the right to do so elects to have such activity or documentation undertaken, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when any such activity or documentation has been completed, the Authority has actually received the results of such activity or documentation conducted by another entity, and any deficiencies identified or issues raised as a result of such activity or documentation have been corrected or otherwise resolved.

(c) If an invoice must be examined by a State or Federal agency, or by another party contributing to the funding of the contract, prior to payment, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when the State or Federal agency, or other contributing party to the contract, has completed the inspection, advised the Authority of the results of the inspection, and any deficiencies identified or issues raised as a result of such inspection have been corrected or otherwise resolved.

(d) If appropriated funds from which payment is to be made have not yet been appropriated or, if appropriated, not yet been made available to the Authority, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when such funds are made available to the Authority.

Section 504.6 Interest eligibility and computation. If the Authority fails to make prompt payment, the Authority shall pay interest to a contractor on the payment when such interest computed as provided herein is equal to or more than ten dollars. Interest shall be computed and accrue at the daily rate in effect on the date of payment, as set by the New York State Tax Commission for corporate taxes pursuant to Section 1096(e)(1) of the Tax Law. Interest on such a payment shall be computed for the period beginning on the day after the payment due date and ending on the date of payment.

Section 504.7 Sources of funds to pay interest. Any interest payable by the Authority pursuant to this Part shall be paid only from the same accounts, funds, or appropriations that are lawfully available to make the related contract payment.

Section 504.8 Incorporation of prompt payment policy statement into contracts. The provisions of this Part in effect at the time of the creation of a contract shall be incorporated into and made a part of such contract and shall apply to all payments as they become due and owing pursuant to the terms and conditions of such contract, notwithstanding that the Authority may subsequently amend this Part by further rulemaking.

Section 504.9 Notice of objection. Unless a different procedure is specifically prescribed in a contract, a contractor may object to any action taken by the Authority pursuant to this Part which prevents the commencement of the time in which interest will be paid by submitting a written notice of objection to the Authority. Such notice shall be signed and dated and concisely and clearly set forth the basis for the objection and be addressed to the Vice President, New York State Energy Research and Development Authority, at the address set forth in Section 504.2(e). The Vice President of the Authority, or his or her designee, shall review the objection for purposes of affirming or modifying the Authority's action. Within 15 working days of the receipt of the objection, the Vice President, or his or her designee, shall notify the contractor either that the Authority's action is affirmed or that it is modified or that, due to the complexity of the issue, additional time is needed to conduct the review; provided, however, in no event shall the extended review period exceed 30 working days.

Section 504.10 Judicial Review. Any determination made by the Authority pursuant to this Part which prevents the commencement of the time in which interest will be paid is subject to judicial review in a proceeding pursuant to Article 78 of the Civil Practice Law and Rules. Such proceedings shall only be commenced upon completion of the review procedure specified in Section 504.9 of this Part or any other review procedure that may be specified in the contract or by other law, rule, or regulation.

Section 504.11 Court action or other legal processes.

(a) Notwithstanding any other law to the contrary, the liability of the Authority to make an interest payment to a contractor pursuant to this Part shall not extend beyond the date of a notice of intention to file a claim, the date of a notice of a claim, or the date commencing a legal action for the payment of such interest, whichever occurs first.

(b) With respect to the court action or other legal processes referred to in subdivision (a) of this section, any interest obligation incurred by the Authority after the date specified therein pursuant to any provision of law other than Public Authorities Law Section 2880 shall be determined as prescribed by such separate provision of law, shall be paid as directed by the court, and shall be paid from any source of funds available for that purpose.

Section 504.12 Amendments. These regulations may be amended by resolution of the Authority, provided that the Chair, upon written notice to the other Members of the Authority, may from time to time promulgate nonmaterial amendments of these regulations.