# ADVANCED ENERGY SYSTEMS FOR NYC PASSENGER MASS TRANSIT

## Program Opportunity Notice (PON) 1217
## $ 2,500,000 Available for Two Rounds

| | |
|---|---|
| **PROPOSALS DUE:** | **July 24, 2008 - 5:00 pm Eastern Time, Round 1*** |
| | **January 7, 2009 - 5:00 pm Eastern Time, Round 2*** |

The New York State Energy Research and Development Authority (NYSERDA) Program Opportunity Notice (PON) 1217 seeks proposals to support activities leading to the study, development, qualification and/or demonstration of innovative products and systems that reduce the energy use of passenger transit systems under the jurisdiction of the New York City Metropolitan Transportation Authority (MTA). Two rounds are scheduled under this PON and the total available NYSERDA funding is $ 2,500,000. All, or none, of the available funds could be allocated in either round. This solicitation includes the following:


| | Section | Page |
|---|---|---|
| I. | Introduction | 2 |
| II. | Program Requirements | 3 |
| III. | Proposal Requirements | 5 |
| IV. | Recoupment Provisions | 10 |
| V. | Proposal Evaluation | 10 |
| VI. | General Conditions | 11 |
| VII. | Attachments | 13 |


Proposers must submit fifteen (15) copies of the proposal 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 No. 1217**
**NYS Energy Research and Development Authority**
**17 Columbia Circle, Albany, NY 12203-6399**

If you have technical questions concerning this solicitation, contact Frank Ralbovsky at (518) 862-1090, ext. 3260 (fsr@nyserda.org) or Richard Drake at (518) 862-1090, ext. 3258 (rld@nyserda.org). If you have contractual questions concerning this solicitation, contact Nancy Marucci at (518) 862-1090, ext. 3335 (nsm@nyserda.org).

No communication intended to influence this procurement is permitted except by contacting Frank Ralbovsky (Designated Contact) at (518) 862-1090, ext. 3260 (fsr@nyserda.org). 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 will 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.

## *I. INTRODUCTION*

Proposals are sought for projects that will ultimately lead to the deployment of systems that improve the efficiency, performance and reliability of the existing passenger transit systems within the jurisdiction of the New York City MTA and that provide readily-quantifiable benefits as follows:

- **Mobility & Reliability benefits** are sought in the form of improvements to New York City transportation systems that will allow predictable trip times.

- **Energy benefits** are sought in the form of reduced petroleum use, electrical energy use, or electrical demand/peak load reduction.

- **Environmental benefits** are sought in the form of enhanced sustainability and reduced air pollution, especially if the product or system assists New York State and New York City in complying with federal clean air laws, and reductions in other transportation-related pollution, including greenhouse gases.

- **Economic benefits** are sought in the form of increased economic viability of New York State businesses and the creation or retention of jobs in New York State. Benefits also are sought in the form of reduced overall life-cycle costs to the MTA.

- **Safety & Security benefits** are sought in the form of methods and products which protect the transportation infrastructure and its users from harm, minimize the negative effect of any man-made or natural disaster, and/or facilitate the response and recovery from a disaster. Benefits are also sought in mitigating adverse quality-of-life issues, as they pertain to transportation.

Examples of technology/application areas of interest in this solicitation include, but are not limited to:

**1. Available or Near-Term Technologies**

- Ventilation of Subway Cars, Stations and Tunnels - Subway car air conditioning is essential to passenger comfort. However, air conditioning loads increase electrical demand, and the heat exhaust associated with air conditioning contributes to station overheating in the summer months, resulting in the need to air-temper a number of station platform areas. The subway system is ventilated solely through the natural piston action of subway trains. The MTA is interested in technologies, including subway car demand control ventilation and platform edge doors, that ca n reduce electrical demand related to air conditioning (while maintaining passenger comfort) and/or control tunnel ventilation to reduce station overheating.

- Station Lighting - Post 9/11 security concerns have resulted in a demand for increased light levels in subway and commuter train stations. The MTA is interested in lighting technologies that can maximize light levels, while decreasing electrical loads.

- Elevators and Escalators - The MTA system includes hundreds of elevators and escalators. The MTA is interested in technologies that improve efficiency, reduce electrical demand, and increase reliability. Demand control escalators and hydraulic elevator lifts are examples of technologies that may have MTA applications.

**2. Technological Synergies**

- Platform Edge Doors and Subway Car Air Conditioning Controls/Improvements - Reducing the loss of tempered air in stations (e.g., via platform edge doors) and simultaneously decreasing heat exhaust from train car air conditioning units (e.g., via demand control) may result in synergies that have the potential to substantially reduce energy use.

- Photovoltaic Cells and Battery Storage Systems - With its many elevated and surface-level train stations, the MTA owns substantial square footage of roof space that could potentially house photovoltaic cells. However, since these stations receive a natural light, electrical demand during the day is minimal, and generally will not support the cost of a photovoltaic installation. The combination of efficient and cost effective photovoltaic cells and battery storage systems could allow the use of stored photovoltaic energy at night and change the economics of such projects.

- Wayside Energy Storage Systems and Regenerative Braking - Regenerative braking provides the potential for capturing energy that would otherwise be lost into the contact rail. A wayside energy storage system could provide the means to store regenerative braking energy and return it to the contact rail at the moment it is needed. The combination of these two technologies has great potential to decrease both energy demand and reduce voltage spikes.

- Aluminum Contact Rail and Regenerative Braking - The lowered resistance of aluminum contact rail in conjunction with regenerative braking also has the potential to both decrease energy usage and allow for reduced voltage demand.

**3. Emerging Technologies**

- Buses - Ultracapacitor hybrids, hydraulic hybrids, and fuel cell powered buses.

- Rolling Stock - Lightweight aluminum rail cars

- Renewable Power – Small wind power or kinetic hydro power applicable to MTA bridges infrastructure.

**Note: This solicitation is open to <u>any</u> technology that results in reduced energy use and/or demand reduction within the New York City MTA passenger transit system. The preceding examples are included for illustration only. Proposals shall be evaluated in competition with each other, however, a portion of the funds for this PON have been set aside for electrified transportation projects and proposals in that topic area will be evaluated as a separate category competing for the set-aside funds. All other proposals will be evaluated against each other in a "general" category. Projects in the electrified transportation category should be beneficial in reducing electrical energy use or demand on the electrical grid. NYSERDA is particularly interested in, and seeking proposals that reduce electrical energy use or demand on the electrical grid.**

## *II. PROGRAM REQUIREMENTS*

**Project Types –** Three types of projects and will be considered for funding:

1. **Studies Leading to New Product Development, Testing of Emerging Technologies, or Demonstration of Existing Underutilized Commercial Technologies**. Studies may comprise feasibility assessments, engineering studies, and related analysis necessary to establish the energy, environmental, and additional benefits of a proposed product or technology, its financial impacts, and additional potential impacts in the areas of operations, maintenance, safety, reliability, mobility, and security of existing commercial technologies, that have not been previously deployed in New York State to any significant extent. Projects funded of this type will be limited to a maximum of $50,000 of New York State funds per project.

2. **Testing of Emerging Technologies** to establish potential benefits and barriers to implementation. of emerging, pre-commercial transportation technologies. Projects funded of this type will be limited to a maximum of $150,000 of New York State funds per project.

3. **Demonstration of Underutilized Commercial Technologies**, including existing commercial technologies that have not been previously deployed in New York State to any significant extent. Projects funded of this type will be limited to a maximum of $500,000 of New York State funds per project.

A **New Product Development** refers to any new technology, product, or system that is not commercially available or at the point of commercial product readiness.

An **Underutilized, Commercial Technology** is defined to be a product or system that is sold or traded in reasonable quantities on the open market within the course of normal business operations at prices based on established catalog or market prices with industry-standard deliveries, terms, and warranties, but which have not been previously applied or deployed within New York State transit systems to any significant extent.

An **Emerging Technology** is defined as a product or system that has relatively recently been advanced to commercial readiness and availability, but has not been previously applied or deployed within any transit system to any significant extent.

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

- Address energy improvements to the existing mass transit systems of the NYC MTA.
- Further the key strategies and policy objectives of New York State as described in the State Energy Plan, at http://www.nyserda.org/publications/sep_annual_report.pdf, and of the MTA as described in The Interim Report of the Blue Ribbon Commission on Sustainability and the MTA, at http://www.mta.info/environment/pdf/Interimforweb.pdf
- Emphasize the ultimate deployment of technical solutions rather than basic research.
- Provide readily-quantifiable mobility and reliability, energy, environmental, economic, safety and security benefits in New York State and New York City.
- Be consistent with metropolitan transportation plans in New York State and New York City, and with transportation-related regulations at the federal or state level.
- Provide cost-sharing by the proposer or third parties:
    - In the form of cash or in-kind labor, materials, equipment, facilities, and other resources, subject to reasonable and verifiable valuation. Co-funding may be from the proposer or other private or government sources. New York State funds cannot be used to reimburse or replace normal expenses of other government organizations.
    - Preferably in the amount of 50% or more of the total project cost. The quality of the proposer's co-funding is examined during the proposal evaluation process. Cash, labor, and materials are considered superior to other types of co-funding. The level of co-funding will be considered an indicator of the proposer's commitment to the success of the project and the type of co-funding offered should be appropriate for the proposer's financial condition and the product's stage of development (degree of risk).

Proposers may submit multiple proposals, but each proposal must address one technology/application area or synergy between technologies/application areas.

**Project Schedule, Phasing and Teaming –** The following guidelines should be considered when developing proposals:

- Projects are expected to begin within six months of the proposal due date. The project schedule should not exceed 24 months, except to indicate the approximate duration of future phases (beyond the proposed phase) of a multi phase project.

- Requirements for Multi phase Projects – Multi phase projects are acceptable as long as the proposal:

  - Briefly describes all phases along with significant milestones, and provides an estimate of the total cost and schedule for all phases.

  - Only requests funding for one clearly-defined phase and adheres to the funding limit for the appropriate project category as described under "Project Categories" above. The proposer must accept that any contract awarded to fund one phase of a multi phase project does not in any way obligate New York State to fund later phases. Funding requests for additional phases may need to be submitted under a future PON for competitive evaluation.

- Teaming arrangements are encouraged, where appropriate, to enhance the likelihood of project success. Teams may include commercial firms, industry associations or research organizations, universities, government agencies, end-users, and other stakeholders. **Include letters of interest or commitment from each identified team member in an appendix to the proposal.**

**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 Section III, or the General Conditions of Section VI.

- 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.

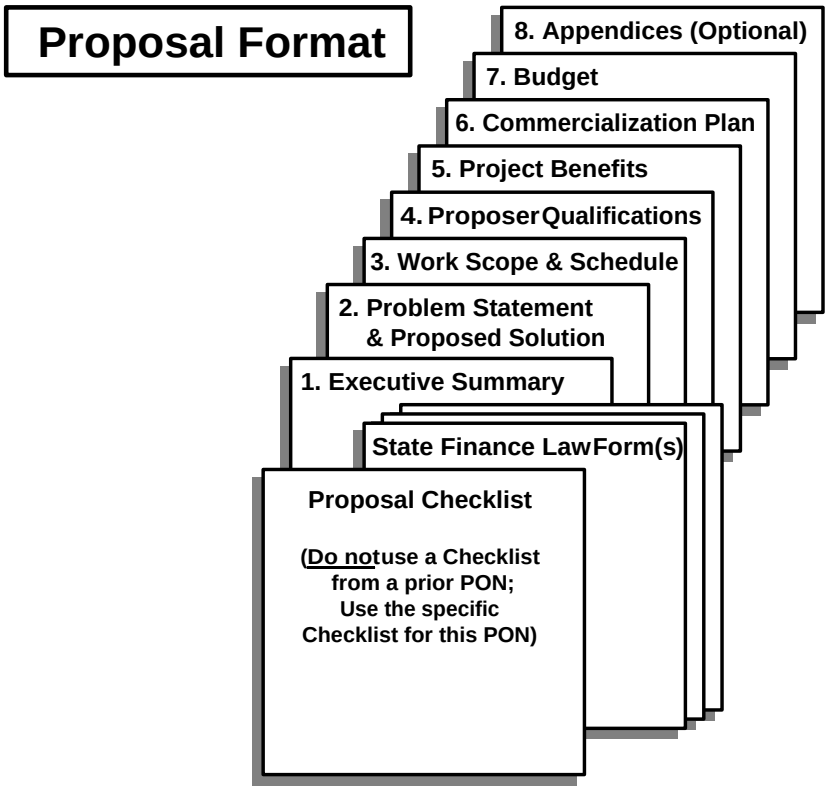
## *III. PROPOSAL REQUIREMENTS*

It is suggested that total proposal length should be 20 pages or less, not including supplementary material, such as letters of interest or commitment, which may be included in appendices. Suggested page limits for each section are provided below in parentheses. **If you believe proprietary information must be submitted to present an adequate proposal, please contact an individual listed at the beginning of this PON and comply with the Section VI instructions for submitting proprietary material.**

Rigid bindings and other elaborate presentation material should not be used – a staple in the upper left corner is preferred. Your goal as a proposer should be to concisely present the information needed to fully address the evaluation criteria (see Section IV). Proposals that grossly exceed the page limits or fail to follow the format guidelines may be rejected as non-responsive.

Proposers must submit fifteen (15) copies of the completed proposal to the attention of Roseanne Viscusi at the address on the front of this Program Opportunity Notice/Request for Proposal. A completed and signed Proposal Checklist must be attached as the front cover of your proposal, one of which must contain an original signature. **Late proposals and proposals lacking the appropriate completed and signed Proposal Checklist will be returned.** Faxed or e-mailed copies will be not be accepted.

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 should present the items in the sequence indicated below.




**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.**

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 New York State.

- Be sure the individual signing the Proposal Checklist is authorized to commit the proposer's organization to the proposal as submitted.

**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, the following 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.

**Proposal Sections –** Sections of your proposal should be as follows:

1. **Executive Summary** (one to two pages) – Briefly summarize your proposal, emphasizing:
    - The transportation-related issue or opportunity being addressed, and its significance to New York State.
    - Your proposed solution, how it will address the issue or exploit the opportunity, and also be consistent with the State's key policy objectives with respect to transportation energy.
    - A list of the project team members and their qualifications to do the work.
    - Benefits if the project is successful. Include an estimate of market potential and quantify the energy, environmental, economic, and safety benefits to the extent possible.
    - User economics. Provide an estimate of the price of the product or service that eventually will be implemented and the price(s) of relevant alternatives. Briefly explain the economic motivation for implementing the new product or service, versus alternatives.

2. **Transportation-Related Issue and Proposed Solution** (three to four pages) – Describe:
    - The transportation-related issue or opportunity being addressed, and its significance to New York State.
    - Which key policy objectives as described in the State Energy Plan, (http://www.nyserda.org/publications/sep_annual_report.pdf) and of the MTA as described in The Interim Report of the Blue Ribbon Commission on Sustainability and the MTA, (http://www.mta.info/environment/pdf/Interimforweb.pdf ) does your proposal address and to what extent would successful implementation of the proposed solution help to meet the relevant policy objective(s).
    - Alternative solutions, and why your proposed solution is more effective than the alternatives.
    - If applicable, your solution's relevance to any New York City metropolitan transportation plan or transportation-related regulation.
    - If this proposal addresses a subsequent phase of a previously funded research project, the results of the earlier phase(s) and current project status.

3. **Proposed Work Scope and Schedule** (three to four pages) – Provide:
    - Technical or performance goals for proposed demonstration or qualification project.
    - A list of major tasks to be accomplished and a three- or four-sentence description of each. Typical task titles may include, but are not limited to, the following: project management and reporting, requirements definition, teaming agreements, test plan development, design, installation, data collection, and demonstration. (Note: NYSERDA will expect to receive written progress reports and a final report, and have occasional project meetings, as part of the project management task. These activities should be considered when developing your cost estimates.)
    - The duration of the project and timing of major milestones, such as design reviews, test plan reviews, data collection, and reporting, showing progress toward project objectives and goals.

- If applicable, a brief description of additional phases, beyond the proposed work, that will be necessary to fully achieve New York State implementation, and their anticipated duration.

**4. Proposer Qualifications** (two to four pages, depending on team size) – Identify:

- Proposer and any other team members and major subcontractors. 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 Att. E: Sample Agreement).

- Project Manager and other key individuals.

- Qualifications of all entities named above, including relevant experience and references.

- NYSERDA, MTA, NYCT, MNR, LIRR, or NYPA contracts awarded to the proposer, if any, in the past five years.

**5. Project Benefits** (two to three pages) – Outline benefits as follows:

- Discuss how New York State's key transportation energy policy objectives will be advanced.

- Quantify the following direct benefits to New York State to the extent possible:
    - Mobility and Reliability benefits
    - Energy benefits (e.g.: electrical energy reduction, and/or demand reduction; fuel economy improvements, etc.)
    - Environmental benefits (e.g.: emission reductions, hazardous material reductions, etc.)
    - Economic benefits (e.g.: jobs created or retained, reduced transportation system life-cycle costs, enhanced viability of NYS business entities, etc.)
    - Safety and Security benefits

- Identify other benefits (e.g.: lowering the cost of compliance with New York State or federal regulations, enhanced quality of life issues, etc.)

- Describe how the success of the project can be measured or verified, and how and for how long these metrics will be provided to NYPA and NYSERDA.

**6. Implementation Plan** (Two to three pages) – Describe how project results will be leveraged for significant implementation in New York State. Projects undertaking a commercial demonstration should have a detailed implementation plan, whereas an early-stage study should be accompanied by at least a rough outline of how the concept may ultimately be implemented. Cover the following topics:

- Timeline: Provide a multi-year timeline showing the paths, activities, milestones, resources, timing to take the technology from its current state of development to significant deployment.

- Institutional Barriers: Identify known institutional barriers to implementation, such as the need for changes to current state policies, procedures, or specifications, or the need for inclusion on approved state product listings. If institutional barriers are not clearly known by the proposer, they should be further researched as part of the work effort.

- Design & Production: Describe remaining technical development steps leading to commercial production or implementation. Describe plans for setting up facilities for manufacturing or related deployment activities. Discuss any key issues such as: need for specialized production equipment or strategic alliances; cost/benefit 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 significant level of implementation; include funding for R&D and initial marketing and

manufacturing/deployment programs. Identify potential funding sources and how those sources will be addressed. Describe proper cost sharing in relation to total costs. 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 transitioning from the current stage of development to significant deployment; include major organizational functions, such as management, administration, engineering, marketing/sales, and manufacturing.

- Technology Transfer: Describe efforts required to identify relevant groups and/or individuals needing information on the proposed technology and develop and/or propose actions to promote, familiarize, and implement the new technology. These may include demonstration projects, developing appropriate workshops or training materials, and presentations at relevant meetings, workshops or conferences.

**7. Budget** – A Contract Pricing Proposal Form (CPPF), with associated instructions, is provided as Attachment C to this PON. **Each proposal must include a completed CPPF and also a cost-sharing table identifying the allocation of funding by task.**

**Cost-Sharing: Cost sharing is required** and will be an important consideration in the proposal evaluation process. It is preferred that the proposal contain 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. New York State funds cannot be used to reimburse or replace normal expenses of other government organizations. 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. The amount and source of cost sharing should be consistent with the level of New York State funding. For example, labor may be provided at discount rates. Qualification prototypes may be provided at no cost to the project, while products for commercial demonstration may be provided at cost. It is the responsibility of the proposer to adequately quantify and document the level of cost share being provided. The proposer or proposing team cannot claim as cost-share any expenses that have already been incurred. Show the cost sharing plan in the following format within your proposal (expand table as needed).

| **PROPOSAL COST SHARING TABLE** | | | | | | |
|---|---|---|---|---|---|---|
| **Proposed Funding By Task (Cash and In-Kind)** | | | | | **Project Total ($)** | |
| **Funding Source** | **Task 1 ($)** | **Task 2 ($)** | **Task 3 ($)** | **...** | **Cash ($)** | **In-Kind ($)** |
| **New York State** | | | | | | |
| **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:

- 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).

- If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- If rate(s) is based on estimated costs or prior period actual results, include calculations to support the 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.

**8. Appendices** – Include any resumes, company qualifications, or ancillary information which 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 provide services, equipment or cost share, include a letter from that organization describing their planned participation. Where appropriate, proposed product qualifications and demonstrations should include letters of commitment from the host site or vehicle fleet owner. Also include letters of interest or commitment from businesses or other organizations critical to the future commercialization 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 Attachment D: Sample Agreement, provide alternate terms with justification based on the risk and benefit to New York State.

## *IV. RECOUPMENT PROVISIONS*

For any new product development projects requesting NYSERDA funding over $50,000, NYSERDA will require a royalty based on sales of the new product. Refer to “General Conditions” in Section VI.

## *V. PROPOSAL EVALUATION*

Proposals will be reviewed by a Technical Evaluation Panel (TEP) and will be scored and ranked according to the following criteria, **listed in order of importance**. 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 will be required to submit a detailed statement of work, budget, and schedule, and may also be asked to address specific questions or recommendations of the TEP before contract award.

**Requirements –** A **negative response** to any one of the questions identified below **may eliminate** the proposal from further consideration. **Does the proposal:**

- Conform with key transportation energy strategies in New York State?
- Address mass transit needs in New York State and the New York City MTA?
- Emphasize development of deployable solutions rather than basic research?
- Provide direct and quantifiable energy, environmental, economic, safety, security, mobility and reliability benefits in New York State and the New York City MTA?
- Show consistency with NYC MTA transportation plans and State or federal transportation-related regulations?
- Provide a level of cost-sharing consistent with the project scope and funding?
- Include an Implementation Plan in line with the current stage of development?

**Evaluation Criteria in Order of Importance**

**1. Proposed Solution/Scope –** How significant is the issue or opportunity? How pertinent is the issue or opportunity to new York State? Is the proposed project likely to solve the issue or exploit the opportunity? Is the proposed work technically feasible, innovative, and superior to alternatives? Is the work strategy sound and consistent in addressing the State's key transportation energy policy objectives?

**2. Project Benefits –** How significant are the mobility and reliability, energy, environmental, economic, safety and security benefits to New York State and New York City? Are the expected benefits likely to be realized, given other constraints or barriers? Are there additional significant benefits? Upon implementation, will there be economic benefits in New York State in the form of subsequent manufacturing or technical service activity?

**3. Proposer(s) –** To what degree does the team have relevant and necessary technical and business background and experience? Does the team include New York State businesses, thereby providing economic benefits in the form of jobs? How firm are the commitments and support from essential participants, cofunders, and related businesses and other organizations?

**4. Project Outcome and Cost –** Is the overall project cost justified based on the expected benefits? Relative to the project cost, how significant is the potential market or deployment opportunity? Is the implementation or commercialization strategy well-conceived and appropriate for the stage of development? How appropriate are the proposer's co-funding contributions (sources and amounts) with respect to the degree of risk, potential to benefit from the work, and financial status of the organization? Is documentation to support indirect cost included?

**Other Considerations –** Proposals will be reviewed to determine if they reflect New York State's overall objectives, including: risk/reward relationships, similar ongoing or completed projects, the general distribution of transportation research projects among industries and other organizations, and the distribution of projects within New York State.

## *VI. GENERAL CONDITIONS*

**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 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.banking.state.ny.us/pr080213a.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.banking.state.ny.us/pr080213b.pdf). See guidance available at http://www.tax.state.ny.us/pdf/publications/sales/pub223_507.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.

**Recoupment** - For any new product development projects requesting New York State funding over $50,000, NYSERDA will require a royalty based on sales of the new product developed. NYSERDA's standard royalty terms are 1.5% of sales for products produced in New York State (for a period of fifteen years or until the contractor pays NYSERDA an amount equal to the amount of funds paid by NYSERDA to the contractor, whichever comes first) and 5% of sales for products produced outside of New York State (for a period of fifteen years or until the Contractor pays NYSERDA an amount equal to three times the amount of funds paid by NYSERDA to the Contractor, whichever comes first).

**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.

**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 which 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.

## *VII. ATTACHMENTS*

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. 1217 PROPOSAL CHECKLIST (MANDATORY)

| | | | |
|---|---|---|---|
| Proposal Title (What product/concept will be focus of proposed work?) | | Due Date (Circle one): July 24, 2008 – Round 1<br>January 7, 2009 – Round 2 | |
| **Primary Contact** (Prime Contractor) | | Title | |
| Company | | Phone | Fax |
| Address | City | State/Province & Zip | e-Mail |
| **Secondary Contact** | | Title | |
| Company | | Phone | Fax |
| Address | City | State/Province & Zip | e-Mail |

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 page) __ Yes __ No

Have you been indicted/convicted for a felony within the past 5 years? (if yes, explain on separate page) __ 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.) __ 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?

1. Disclosure of Prior Findings (mandatory) ___
2. Executive Summary ___
3. Problem Statement and Proposed Solution ___
4. Proposed Statement of Work and Schedule ___
5. Proposer Qualifications ___
6. Project Benefits ___
7. Commercialization Plan ___
8. Completed and Signed Contract Pricing Form(s) ___
9. Cost-Sharing Chart ___
10. Commitment Letters from Participating Organizations ___
11. Indictment/Conviction of Felony (if applicable) ___
12. NYSERDA Contracts Awarded (if applicable) ___
13. Prior and/or Competing Proposals (if applicable) ___
14. 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 (Type or Print) |
| Title | Organization |
| Phone | Date |

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

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

**Attachment B - PON 1217**
**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:<br><br>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?<br>(Please indicate with an "X") | | Yes |
| | | No |
| Was the basis for the finding of non-responsibility due to due to a violation of §139-j of the State Finance Law?<br>(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 Government al 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”)<br>(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)<br><br>Offerer certifies that all information provided to NYSERDA with respect to State Finance Law §139-k is complete, true, and accurate.<br><br>By:_____ Date:_____<br>Signature<br><br>Name:_____ Title:_____ | | |

# Attachment C: PON 1217 Contract Pricing Proposal Form

| | | | | | |
|---|---|---|---|---|---|
| **New York State Energy Research and Development Authority** | | | **Solicitation No. PON 1217** | | 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 (0 for cost-sharing agreements) | 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<br>If yes, identify: | | | | | |

## Attachment C:  PON 1223 Contract Pricing Proposal Form

| 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:
         - Each category or type of labor being estimated
         - 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:
         - individual's name
         - annual salary and the period for which the salary is applicable (preferably in weeks)
         - 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.
   - vendor
   - model number
   - quantity
   - competitive selection process
   - unit cost and source of cost/price (i.e., quote, catalog, purchase history)
   - 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.

**Attachment D: PON 1217**

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 Contract 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.

***OR***

Any manufacturer that (produces/assembles) the Product within the geographic boundaries of New York State.

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.

***[OR, if specific equipment has been identified by the Project Manager for NYSERDA to retain title in, then use the following:]***

Section 4.02. Title to Equipment. Title shall vest in NYSERDA to all of the following equipment purchased hereunder:

1)
2)
3)
4)

Upon the request of NYSERDA, the Contractor shall execute, acknowledge, deliver and perform, or cause to be executed, acknowledged, delivered or performed, all such bills of sale, assignments, conveyances or other documents or acts as NYSERDA may reasonably request in order to assure the better vesting in and confirming to NYSERDA, its successor and assigns, of title to and possession of such equipment. If, after six months following the completion of the Work or the termination of this Agreement, NYSERDA has not removed any such equipment, it will be deemed abandoned and become the property of the Contractor. Any such removal of equipment by NYSERDA shall be at NYSERDA's expense.

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 $25,000, 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 thereunder. 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:

(1) in the event of Sales made by a Seller when the Seller is a New York 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

(2) 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;

(h) Contractor certifies that all information provided to NYSERDA with respect to State Finance Law Sections 139-j and 139-k is complete, true and accurate; and

(i) 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 therefor). 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) NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Contractor in accordance with State Finance Law Sections 139-j and 139-k was intentionally false or intentionally incomplete. Upon such finding, NYSERDA may exercise its termination right by providing written notification to the Contractor as set forth in Article XV of this Agreement.

(c) NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Contractor in accordance with New York State Tax Law Section 5-a was intentionally false when made. Upon such finding, NYSERDA may exercise its termination right by providing written notification to the Contractor as set forth in Article XV of this Agreement.

(d) 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:

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

(e) 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:

(1) 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).

(2) 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).

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

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

(5) 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 |


## 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 Manager of Technical. 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 Manager of Technical 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-ERTER-MW-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.

New York State
Energy Research
and
Development Authority
Technical Communications
17 Columbia Circle
Albany, New York 12203-6399

October 2000

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.