



**Enabling Technology for
Price Sensitive Load Management
\$1.0 Million Available**

Program Opportunity Notice (PON) No. 740-02

PROPOSALS DUE: January 7, 2003 3PM*

The New York State Energy Research and Development Authority (NYSEDA) invites proposals that expand demand response in the New York Independent System Operator (NYISO) wholesale electricity marketplace. Projects that emphasize the use of innovative technologies and organizational structures to better aggregate and enable end-use participation in the Day-Ahead Demand Response Program (DADRP), Installed Capacity Special Case Resources Program (SCR) and/or the Emergency Demand Response Program (EDRP) are requested. Activities of interest include state-of-the-art communications, networking, transaction management software, advanced metering and direct load controls that are scalable, flexible and responsive to evolving market conditions.

Proposal *teams* should include a NYISO market participant, a technology vendor (where appropriate) and multiple end-users of electricity. All else being equal, preference will be given to teams that: 1) provide effective training and tools to expand participation in market-driven programs (DADRP and SCR); 2) aggregate end-users with a curtailable load of at least 5 MW (500kW for aggregations of residential customers); 3) obtain curtailable load through innovative load shedding/shifting (e.g., improved lighting load management) instead of emergency generation; 4) expand participation to new types/sectors of customers (e.g. commercial buildings), particularly those located in the New York City metropolitan area [NYISO Transmission Zone J]; and 5) are installed and capable of dry-run testing prior to May 1, 2003 and available for operation through September 2003.

A list of Load Serving Entities that are eligible to provide these NYISO programs may be found at <http://www.dps.state.ny.us/eschoice.htm> and a list of eligible Curtailment Service Providers (CSPs) may be found at http://www.nyiso.com/services/documents/groups/bic_price_responsive_wg/demand_response_prog.html.

NYSEDA anticipates making multiple awards at a maximum funding commitment of \$150,000 per project, for a total not to exceed \$1,000,000. Projects that will be conducted with customers in NYISO Transmission Zone J are preferred to be cost-shared at or above 33% whereas projects conducted in other zones are preferred to be cost-shared at or above 50%. Awards will not require repayment but will require that the team, including end-users, participate in an evaluation of program effectiveness conducted by NYSEDA, the NYISO and/or a third party that will include appropriate non-disclosure agreements.

Nine (9) copies of your proposal must be clearly labeled and submitted to:

Karen Whalen
PON No. 740-02
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, New York 12203-6399

Technical questions: **Dave Coup** at (518) 862-1090, ext. 3379 or jdc@nyserda.org;
Contractual questions: **Diane Vogel** at (518) 862-1090, ext. 3299 or drv@nyserda.org.

NOTE: This is not the entire solicitation. Attachments A through E are part of the full solicitation package. They must be obtained from the website at (<http://www.nyserda.org/stdforms.html>) or by contacting Karen Whalen (518) 862-1090 ext. 3268.

**** Late proposals will be returned. Faxed or e-mailed proposals will not be accepted. Proposals will not be accepted at any other NYSEDA location other than the address specified above.***

I. BACKGROUND

Recently, the NYISO developed emergency curtailment and price-responsive load programs to allow end-use customers to participate more fully in wholesale electricity markets. The Emergency Demand Response Program (EDRP) and Installed Capacity Special Case Resources Program (SCR) provide incentive payments for curtailable loads and stand-by generation when called up during an operating reserve shortage or major emergency. The Day-Ahead Demand Response Program (DADRP) allows individual and aggregated customers to bid load curtailment into the day-ahead energy market and be paid for actual in-day reductions.

For questions related to these NYISO programs, please contact Dave Lawrence from the NYISO at (518) 356-6084, dlawrence@nyiso.com or visit the NYISO website at: http://www.nyiso.com/services/documents/groups/bic_price_responsive_wg/demand_response_prog.html. In addition, a number of primers on the fundamentals of these programs and related topics may be found on the NYSERDA website at <http://www.nyserda.org/demandresponse.html>

II. PROPOSAL REQUIREMENTS

Eligible proposals should:

- Have team arrangements including a NYISO market participant, technology vendor (where appropriate) and multiple end-users
- Have verifiable aggregated curtailable load of 5MW or more (0.5 MW for aggregations that exclusively include residential customers)
- Be installed and capable of dry-run testing and verification by May 1, 2003 and be available for operation through September 2003

Each proposal team must explain how it will participate in one or more of the following programs:

- NYISO-sponsored Day-Ahead Demand Response Program (DADRP)
- NYISO-sponsored Installed Capacity Special Case Resources Program (SCR)
- NYISO-sponsored Emergency Demand Response Program (EDRP)

Eligible technology solutions **must** include the following:

- Real-time communications and metering capabilities between market participant and end-user to support all data requirements including NYISO program requirements where appropriate
- Two-way communications protocol between NYISO and market participant for load reduction verification and emergency/price signal receipt, where applicable
- Ability to correctly calculate Customer Base Loads (CBLs) for each NYISO program
- Ability to deliver transaction data in format as defined by the NYISO on its website: http://www.nyiso.org/services/documents/groups/bic_price_responsive_wg/demand_response_prog.html

Eligible technology solutions **may** include the following where applicable:

- Technologies that automate load curtailment and/or backup generation in response to price/emergency signals
- Web-enabled technologies that show customers their electricity usage and CBL in real-time
- Detailed data reporting capability

Project costs that will be considered appropriate for funding include:

- Design and implementation of proposed technology solution
- Data verification and reporting
- Progress reporting to NYSERDA

Ineligible activities and project costs:

- Costs for new electricity generation equipment
- Costs for end-use technologies such as heating, cooling, and lighting
- Costs for enabling technologies and services that are already installed and operational
- Proposers may also participate in NYSERDA's Peak Load Management or the Residential Comprehensive Energy Management programs; however, equipment and/or services covered under those programs are not eligible for funding under this program.

Proposals that involve end-use customers that do not pay the System Benefits Charge must articulate how the project will result in state-wide public benefits (e.g., replicable elsewhere in New York). Projects that include Long Island Power Authority or New York Power Authority customers will require appropriate co-funding from LIPA or NYPA.

Proposal Format:

Submit **nine (9)** copies of your proposal in the following format:

- **Proposal Checklist** - Complete the proposal checklist attached to this PON, and include it as the front cover of each copy of your proposal. Be sure the individual signing the Checklist is authorized to commit the proposer's organization to the proposal as submitted.
- **Executive Summary/Abstract**
Briefly summarize the proposed effort emphasizing the proposed solution, teaming arrangements, and project benefits. Include a one-page table or spreadsheet that summarizes and integrates the tasks from the statement of work, the schedule and a task budget.
- **Proposed Demonstration and Technology Solution**
Describe the proposed demonstration project and the technology solution that will be implemented. Clearly delineate the role and involvement of each party participating in the project, including that of end-users, vendors, and NYISO market participants. Provide a systematic description of the project design, including: a) an explanation of which NYISO program(s) your team will be participating in via this demonstration; b) a description of each specific hardware and software element involved and the functions that they will perform; c) an explanation of system architecture and interfaces {a diagram of system components and data flow is *strongly* encouraged}; and d) a description of data reporting and graphics capabilities. Detail how your team will perform a dry-run test of the overall system and explain whether actual or simulated load reduction will be achieved during this process. Describe how this demonstration project can be scaled to meet future needs for load reduction and how it can be applied to other end-users. In addition, if the team is utilizing any backup generation, the proposal should specify how permit and regulatory requirements will be met.
- **Performance and Benefits**
Outline a project performance plan that includes: a) a specific breakdown of the curtailable load quantities and strategies being utilized in the proposed project; and b) an explanation of how the Contractor will measure, verify, and report the project performance and benefits as the project progresses. Such reporting should quantify the energy, environmental, economic and other tangible benefits resulting from the proposed demonstration. The proposal should specifically explain why this team's approach will dramatically facilitate customers' abilities to participate in one or more emergency and price-responsive program(s). Also include a task in the Statement of Work that explains how the team shall evaluate the effectiveness of the project and the technologies involved in enhancing demand responsiveness.

- **Statement of Work**
List the major tasks necessary to complete the project. Provide a detailed description of each task, indicating who will perform it, how it will be performed, and anticipated results and deliverables. Describe the work to be performed in clear, concise, action-oriented sentences. Use a phrase such as the following to start each task: "**The Contractor shall**"; and clearly indicate the scope of work to be performed. Include a task that explains how the team will perform its dry-run test(s).
- **Schedule**
Prepare a master schedule showing starting and completion times for each task outlined in the Statement of Work in terms of weeks or months. Identify major milestones, demonstration start-up, reporting intervals and other deliverables, as well as meetings.
- **Proposer Qualifications**
Briefly describe **each** organization and the section/department/group proposing to carry out the work. Include education and experience that are relevant to the proposed work. Describe the team's understanding and experience with the New York State energy market. Enclose one-page resumes of all key project personnel, including those of subcontractors and consultants, in the appendix. Place any brochures in an appendix.
- **Budget**
Complete the Contract Pricing Proposal Form (CPPF) attached to this PON for the proposed project/phase and include it in the proposal. A breakdown of the budget for each task in the statement of work should also be included. Note that projects conducted with customers in NYISO transmission zone J are preferred to be cost-shared at or above 33% whereas projects conducted in other zones are preferred to be cost-shared at or above 50%. However, alternate levels could be considered. The proposer's cost share may include in-kind contributions and may also include funding from other organizations. Also, NYSERDA requires monthly progress reports and a final report. Monthly reports must be detailed and include data reporting, so these tasks should be included in the budget.
- **Letters of Commitment or Support**
Include letters of commitment, signed by a person authorized to contractually obligate the organization for all participating organizations and cost sharing parties. Letters from end-users should be included that state the quantity of curtailable load that will be enabled via this project and that expresses their willingness to participate in the program evaluation process. If the proposal is being submitted by a team member other than the team's NYISO market participant, a letter of commitment from the market participant must be enclosed and it should include a statement of its willingness to participate in the program evaluation process with NYSERDA and the NYISO. **Absence of letters of commitment or support will be interpreted as the proposer not having commitment or support from those parties.**

III. PROPOSAL EVALUATION

Proposals that meet all the Proposal Requirements will be reviewed and ranked for technical merit, program merit, and cost-value relationship, including cost-sharing or cofunding, by a Technical Evaluation Panel (TEP). After the proposals are reviewed, NYSERDA will issue a letter to each proposer indicating the proposal evaluation results. Proposals will be scored according to the following technical criteria *listed in order of importance*:

Proposed Work - Is the proposed work innovative, well-conceived, and technologically feasible? Does the solution advance or employ the state-of-the art technologies? Is the proposed solution flexible, allowing for rapidly changing market issues and requirements of future NYISO pricing programs? How diverse is the type of participating end-users (i.e., commercial, residential, etc.)? Given the end-use sector, equipment characteristics and circumstances of the participants, are load reduction expectations realistic? Is the project scalable, and can it be

applied on a larger scale and to a wider audience? Does the proposed work meet required communications capability between NYISO, market participant and end-users?

New York State Energy, Economic and Environmental Impact - Does the proposed effort result in energy benefits? How much curtailable load is a result of load shedding versus backup generation (preference will be given to load shedding)? Does the team include New York State organization(s)? Does a significant portion of the proposed activity occur in New York State? Does the proposed work lead to New York State economic growth and/or yield environmental benefits?

Proposer(s) - Does each member of the team possess the relevant and necessary technical background and experience? Does the team possess the requisite knowledge of the NYISO demand response programs? Does the team demonstrate resourcefulness, cooperation and teamwork? Have the team members committed to work together or have they only expressed interest in pursuing the opportunity further?

Statement of Work and Schedule - Is the Statement of Work comprehensive, realistic, explicit, and consistent with the Proposal Requirements? Are staff allocations reasonable? Is the schedule reasonable and complete?

Cost Criteria - Is the overall cost reasonable? Is the overall project cost justified based on the expected outcome and benefits? Are the preferred co-funding levels met? Are the proposer's cofunding contributions (cash, in-kind services etc.) justified and reasonable?

Other Considerations - Projects will be reviewed to determine whether they reflect the overall objectives of NYSERDA. Some of the considerations include:

- The balance among NYSERDA projects of long-term and short-term benefits, and risk/reward relationships;
- The general distribution of NYSERDA projects among diverse commercial, industrial, residential and other organizations, as well as the distribution of projects within New York State.

IV. 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(d)(2) 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.

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

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 (See Attachment D referenced below) to contract successful proposals. Language from the Web Addendum (See Attachment E referenced below) will be required for projects that use web-based energy information systems.

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.

ATTACHMENTS

NOTE: This is not the entire solicitation. Attachments A through E (listed below) are part of the full solicitation package. They must be obtained from the website at (<http://www.nyserda.org/stdforms.html>) or by contacting Karen Whalen (518) 862-1090 ext. 3268.

Attachment A - Intent To Propose Form
Attachment B - Proposal Checklist
Attachment C - Contract Pricing Proposal Form (CPPF) with supporting schedules
Attachment D - Sample Cost-Sharing Agreement
Attachment E - Web Addendum (Sections 5-7)