



REAL TIME ENERGY MANAGEMENT (RTEM)

Program Opportunity Notice (PON) 3689

\$31 Million Available for Commercial RTEM

\$5.7 Million Available for Industrial RTEM

\$2.83 Million Available for Multifamily RTEM

NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available

Applications accepted on a first-come, first-served basis dependent on funding availability until June 30, 2021 by 5:00 PM Eastern Time

The New York State Energy Research and Development Authority (NYSERDA) Real Time Energy Management (“RTEM”) Program (the “Program”) promotes effective, energy-efficient solutions for commercial, multifamily, and industrial sites and processes for practitioners in the energy management software and services sector. To accelerate the adoption of RTEM practices, NYSERDA is offering cost-shared support for integrating RTEM systems and services into existing buildings and facilities. This Program works in conjunction with NYSERDA RFQ 3691 Real Time Energy Management (RTEM) Qualified Vendor. Only NYSERDA RTEM Qualified Vendors may be Applicants to this Program.

RTEM technology is the combination of building data collection systems (sensors, meters, equipment feeds) with data analytics and building data information services that can show building management the actual state of building performance at any point in time. Service providers then capture the discreet data such as set points, power loads, flow rates, temperature and humidity, and feed the information back to site operators with key insights about operations and systems to fine-tune and identify capital projects.

Within the Industrial sector, RTEM technologies are often referred to as Energy Management Information Systems (EMIS) – software systems that store, analyze, and display energy consumption data collected from sensors, equipment feeds, and meters. EMIS for the industrial market offers entities the means to monitor energy consumption data in real-time and to identify operational changes and capital projects that will increase efficiency. EMIS incorporate environmental and production variables for a more thorough, holistic analysis of efficiency opportunities than energy consumption data alone.

NYSERDA’s RTEM Qualified Vendor list consists of both RTEM System Providers and RTEM Service Providers. RTEM System Providers are defined as providers of the monitoring hardware and software used to extract, process, and store energy usage data. RTEM Service Providers are defined as consulting services that customers contract with to analyze the data from the RTEM system installation and provide, enable, and/or implement energy savings measures based on the data.

The Program offers cost-sharing for RTEM system implementation and services for up to five (5) years (see Program Incentives).



How to Apply:

RTEM Qualified Vendors with eligible projects can log on to <https://nyserdaportal.force.com/login> to complete an Application.

Building Owners and Managers in need of an RTEM Qualified Vendor can visit the NYSERDA list at <http://www.nyserda.ny.gov/Contractors/Find-a-Contractor/RTEM-Qualified-Vendors>.

RTEM questions should be directed to rtem@nyserda.ny.gov or Michael Reed (866-NYSERDA, ext. 3244). All Contractual questions should be directed to Nancy Marucci (866-NYSERDA, ext. 3335) or nancy.marucci@nyserda.ny.gov.

*Incomplete or unsigned applications will be returned. NYSERDA reserves the right to close or extend the Solicitation at any time and/or add funding to the Solicitation should other program funding sources become available. If changes are made to this solicitation, notification will be posted on NYSERDA's website at www.nyserda.ny.gov

INTRODUCTION

NYSERDA's Real Time Energy Management (RTEM) Program (the "Program") is intended to accelerate market adoption of RTEM systems and services. Furthermore, the Program will help to identify and expand the industry's best practices for leveraging RTEM technologies. The Program will focus on how to efficiently extract and analyze data that enables customers to receive the full potential of RTEM benefits.

Research shows that customers who unlock their site's energy data, at the system level, make better energy related decisions than if they were to use only monthly utility bills. NYSERDA seeks to demonstrate the value of comprehensive monitoring and metering analytics, and the advantages gained by obtaining system level energy usage data. The Program seeks to illustrate how customers can use RTEM to maximize energy performance and processes, improve equipment/building optimization, and provide better informed capital investment recommendations. The RTEM Program, is available to commercial, industrial, and multifamily customers. Some Program rules vary based on the sector.

This solicitation is divided into the following components:

- Section II: Eligibility
- Section III: Program Incentives
- Section IV: Application Requirements & Approval Process Overview
- Section V: General Conditions
- Section VI: List of Attachments

Definitions:

- **RTEM systems** are the monitoring hardware and software used to extract, process, and store energy usage data.
- **RTEM services** are ongoing consulting services that customers contract with to analyze energy usage data and provide, enable, and/or implement energy savings measures, such as energy efficiency or renewable energy, based on the data.
- **Qualified RTEM Vendors:** Any RTEM system, RTEM service, or RTEM system and service vendor who has qualified as a NYSERDA RTEM vendor through the RFQ 3691 process. Vendors qualified under the previous RFQ 3164 are considered qualified RTEM vendors.
- **Applicant** is the qualified RTEM vendor who is applying for an RTEM project cost-share incentive. Any qualified vendor may be the applicant. All project applications must include an RTEM service provider, unless the customer is granted an RTEM service waiver (Attachment B).
- **Customer** is the commercial, multi-family, or industrial facility owner or manager who is procuring the RTEM system and service.

ELIGIBILITY

ELIGIBLE APPLICANTS

NYSERDA intends for RTEM Qualified Vendors to apply to the Program with eligible participant site(s). Sites must work with an RTEM Qualified Vendor to receive project funding. To become an RTEM Qualified Vendor (RFQ 3691) apply on-line at <http://nyserda->



site.force.com/CORE_CONAPP_Program_Page?programFamily=Commercial&programName=Commercial_Real_Time_Energy_Management

Providers qualified to be an RTEM vendor for the commercial sector through RFQ 3164 are automatically qualified to apply for eligible commercial and multifamily sector RTEM projects. However, if a qualified vendor would like to apply for an RTEM project in the industrial sector, they will need to apply separately through RFQ 3691 to be qualified to serve the industrial sector.

If a provider is not already on NYSERDA’s RTEM Qualified Vendor List, they are required to apply to RFQ 3691: RTEM Qualified Vendor. Applications to this Program from providers that are not on the RTEM Qualified Vendor List will not be approved until such time that the provider is accepted to the RTEM Qualified Vendor List. If the provider is rejected from the RTEM Qualified Vendor List, the project application will be rejected.

NYSERDA will make all system installation and service cost-share payments in this Program directly to the RTEM Project Applicant. If the RTEM System Provider is different from the RTEM Service Provider, then the RTEM Service Provider and the RTEM System Provider will be responsible for establishing their own payment arrangements. Customers can apply for a waiver to be exempted from the RTEM service requirement. In this instance, the RTEM System Provider would be the Project Applicant. Please see Attachment B for more details.

Building Owners and Facility Managers seeking NYSERDA funding for their sites must choose from NYSERDA’s RTEM Qualified Vendor List. Firms interested in applying to be on the NYSERDA RTEM Qualified Vendor List may include, but are not limited to: energy management system providers, Energy Service Companies (ESCOs), energy consultants, and engineering companies. Providers that fail to qualify for the list will not be eligible to submit applications to this Program.

ELIGIBLE PARTICIPANT SITES

Participants must be New York State electricity distribution customers of a participating utility company that pays into the System Benefits Charge (SBC). These utilities include Central Hudson Gas & Electric Corporation, Consolidated Edison, New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation.

Eligible participant sites include:

New York State commercial facilities which include, but are not limited to, office buildings, retail, colleges and universities, health care facilities, state and local governments, not-for-profit and private institutions, and public and private K-12 schools.

New York State industrial facilities which include, but not limited to, facilities involved in manufacturing, forest products, food and beverage processing, mining and extraction.

New York State multifamily buildings with five (5) or more units including rentals, cooperatives and condominiums.

ELIGIBLE PROJECTS

Awarded projects must be installed and commissioned within one year of receiving a NYSERDA Purchase Order (“PO”). A one-time extension of up to twelve months may be requested. Failure to install within the one-year timeframe or the approved extension timeframe will result in project cancellation.

RTEM systems that are installed prior to the launch of this Program are not eligible to receive a System Installation Cost-Share (as defined in Section III below).

Existing operational RTEM systems and service agreements are eligible for service cost-share (as defined in Section III below) provided all other Program requirements are met.

For commercial facilities, a tenant space that relies on base-building energy equipment can participate in the Program. The tenant’s building must either already have a qualified RTEM system installed or be in the process of pursuing an eligible RTEM project. In such cases, NYSERDA will cost share the additional cost of including a tenant in an RTEM project, and increase total project cost-share incentive to a maximum of \$200,000 (see section III Program Incentives for funding details). All other Program rules apply. Tenant spaces with dedicated energy equipment (e.g. chillers, air handling units, pumps, rooftop units) are eligible to apply as a standalone RTEM project and receive cost-share for both system and services.

Monitoring requirements:

All RTEM projects must monitor energy usage at levels more granular than the whole-building. The time frequency of energy data monitoring must be at least fifteen minutes or more frequent. All industrial projects must monitor and integrate production or production-related data. Monitoring hardware must be permanently installed, and not intended for temporary use.

The following are ineligible for funding:

- Whole-building monitoring or the installation of sub-meters in tenant spaces without incorporating an eligible RTEM system.
- Site-Based (local) dedicated controllers and control stations where control sequences are programmed and executed in real-time, with or without remote monitoring and remote access capabilities, are ineligible.
- An autonomous Building Automation System executing local terminal and machine control functions does not qualify.
- New facilities, or those that have undergone substantial renovations, that have been occupied for less than one year are ineligible.

III: PROGRAM INCENTIVES

All projects must include cost-sharing in the form of matching cash support from the site(s). Each qualifying project site is limited to receiving \$155,000 of program funding based on the following:

For RTEM System Installations:

- NYSERDA System Installation Cost-Share is 30%.

For RTEM Services (1-5 years eligible):

- NYSERDA Service Cost-Shares are 30% for years 1 – 3;
- Applicants submitting for more than three years of service length will receive a reduced cost share of 20% in years 4 – 5.

There are two cost-share incentive options available. RTEM Applicants will be able to select, on project-by-project basis, either Option A or Option B, as seen below. It is important to note, system and service costs must be disclosed to NYSERDA, regardless of the payment option chosen. Additionally, for both options, payments will only be made to the RTEM Project Applicant. RTEM Project Applicants must disclose information regarding the NYSERDA RTEM cost-share amount for the participating site.

Incentive Levels:

Option A: available for when customers pay upfront costs for RTEM system installations. RTEM system cost-share is a one-time payment, RTEM service cost-share is an annual payment up to five years.

Option A Incentive Structure	
Incentive Type	NYSERDA Cost-Share
RTEM System Installation	30%
RTEM Service Years 1 – 3	30%
RTEM Service Years 4 – 5	20%

Option B: available when the RTEM system costs are embedded in the RTEM services costs, and the customer pays little or no upfront costs, allowing both the system and service cost sharing structure to be stretched over a five-year period.

Option B Incentive Structure	
Incentive Type	NYSERDA Cost-Share
RTEM System/Service Years 1 – 3	30%
RTEM System/Service Years 4 – 5	20%

Additional requirements

- NYSERDA will issue a maximum of 5 years of cost-share regardless of contract length (i.e. system or service costs that extend past 5 years will not be eligible for cost-sharing).

If the RTEM system costs are embedded into the RTEM services costs, the incentive structure will provide cost sharing for the RTEM service, as well as a weighted portion of the systems costs. The system cost-sharing shall not exceed the length of the RTEM contract, nor the 5-year requirement mentioned above. The RTEM Qualified Vendor will indicate, to the extent possible, the expected costs of the RTEM systems and RTEM services payments in the contract.

FUNDING LIMITATIONS

Site Cap

Each qualifying project site is limited to receiving \$155,000 of program funding.

Commercial Portfolio Expansion Cap

A portfolio of commercial sites submitted as an aggregated project or as separate Applications having the same ownership or management capable of authorizing the installation of and acting upon information from a RTEM system are limited to receiving funding for either a maximum of ten (10) sites OR a combined square footage total of 300,000 ft².

Commercial Tenant Cap

NYSERDA will cost share the additional cost of including commercial tenant(s) in a RTEM project, and increase total site cost-share incentive to a maximum of \$200,000.

Provider Cap

Commercial and Multifamily sectors: each applicant is limited to receiving 20% of overall available program funding.

Industrial sector: there is no applicant funding cap.

Sites already receiving financial assistance in the form of grants through the New York Power Authority (NYPA) for compliance with Executive Order 88, or programs offered by their local utilities, are not eligible to receive incentives for the same activities under this Program. (Financing from NYPA or NY Green Bank is allowable in combination with cost-share from this Solicitation).

Cloud-based controls/analytics

Cloud-based analytic derived set-point changes, selection of control sequences or other generally supervisory modifications of fine tuning to site-based (local) controllers and control stations are eligible for inclusion into the RTEM system cost-share. Remote-initiated supervisory changes to setpoint and selections of control sequence functionalities implemented using the same communication and data infrastructures as the pathway to the cloud-based repository, analysis routines, and visualization displays can be included in the eligible RTEM system work scope. Output devices and equipment without local intelligences that are used to translate analytics into physical actions (examples include relays for digital outputs, 4-20ma or 0-10V for analog outputs) are considered protocol converters and are eligible for inclusion into the RTEM system.

NYSERDA recommends qualified RTEM System Providers submit control type of functions for review and pre-approval prior to project proposal.

Onsite machine and system control functionalities such as Building Automation and Building Management Systems are ineligible.

IV: APPLICATION REQUIREMENTS AND APPROVAL PROCESS OVERVIEW

APPLICANT:

Required: Applicants may apply on-line through a NYSERDA portal. The following documents will be requested:

1. Signed RTEM application agreement by RTEM Qualified Vendor (Attachment A-1).
2. Current, complete electric utility bill of each site documenting the SBC payment
3. RTEM System/Service Contract: full signed contract agreement between RTEM Qualified Vendor(s) and customer
4. RTEM System/Service Contract Addendum: specific information from the RTEM System/Service Contract that is reformatted as an addendum for NYSERDA review (see Attachment C).

NYSERDA evaluates the project based on the above submitted information. All Applications will be reviewed on a first-come, first-served basis until funds are fully committed.

After the Applicant submits the Application, NYSERDA or its contractor will review the application in its entirety, and evaluate the RTEM system specifications and RTEM services offered. NYSERDA or its contractor will conduct a pre-installation site visit on at least the first two projects for all new Applicants. Applicants are encouraged to continuously engage with NYSERDA as they submit more projects for funding. Upon review and approval of the Application information and completion of the pre-installation site visit (if required), NYSERDA will notify the Applicant and site contact(s) that the Application is approved and issue a Purchase Order (PO) for the approved incentive amount.

Note: An Applicant proceeding with project demolition or installation prior to the NYSERDA conducted pre-installation site visit and approval will not receive a system installation cost-share. NYSERDA is not committed to cost-sharing a project until a PO is issued.

If at any time the project, RTEM system, or services do not meet the minimum requirements established by the Program, the Applicant will not be eligible to receive funds and the project will be cancelled.

PROGRAM DELIVERABLES:

Participation in the Program requires the Applicant to submit the following deliverables to NYSERDA during the project:

1. RTEM System/Service Contract Addendum – as stated above, prior to receiving a PO from NYSERDA.

The Applicant will provide information and supporting documentation to NYSERDA to help summarize the projects scope of work and to ensure it meets the intent of the Program.

2. RTEM Installation and Commissioning Report – prior to receiving the system cost-share from NYSERDA.

The Applicant will provide information and supporting documentation to summarize the complete installation of the RTEM system and to explain the roles and responsibilities of project participants.

3. RTEM Service Reports

The Applicants will provide bi-annual information and supporting documentation to help summarize the performance of the project on a bi-annual basis. This includes a summary of energy usage over the given reporting period, pre and post analysis of any implemented energy savings measures (both capital and operation and maintenance (O&M) projects), and an account of potential future energy saving measures under consideration. The list shall also specify the expected energy savings and installation cost from each measure.

RTEM Service Reports for Industrial projects will be required to provide CUSUM Energy Savings Model data. This regression model must be developed as per the standards of any of the following:

- IPMVP Option C;
- NREL Uniform Methods Project SEM Protocol; OR
- Equivalent standards at the discretion of NYSERDA.

PROJECT PAYMENTS:

NYSERDA intends to issue progress payments based on the following:

1. System installation cost-share will be issued to the Applicant upon review and approval of installation and commissioning of the RTEM system. NYSERDA or its contractor will authorize the payment, the approval of required documents needed to prepare the RTEM Installation and Commissioning Report, and associated data. Failure to provide documents needed to complete the report within 30 days after the commissioning date may forfeit funding from this Program.
2. Service cost-share will be provided annually, after review and approval of all required Service Reports and associated data. This process will repeat each following year. If reporting is not received within the first six months after commissioning, and thereafter, Applicants may forfeit project funding from the Program.

V: 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 <http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDARegulations.ashx>. 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
625 Broadway
Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
625 Broadway
Albany, NY 12207

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 new procurement lobbying requirements which can be found at <https://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/sfl139-j.htm> 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 Nonresponsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSERDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSERDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. *See*, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf). Prior to contracting with NYSERDA, the prospective contractor must also certify to



NYSERDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a perspective contractor prior to contacting and filed with NYSERDA. *See*, ST-220-CA (available at https://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award - NYSERDA anticipates making multiple awards under this solicitation. NYSERDA may request additional data or material to support submissions including scope of work modifications or negotiations before issuing a Purchase Order. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. A sample Purchase Order is available on request. NYSERDA expects to notify customers in approximately three (3) weeks from the receipt of a complete project package whether the submission has been selected to receive an award.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

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.

VI: ATTACHEMENTS FOR REFERENCE

Attachment A-1 – RTEM Industrial Application

Attachment A-2 - Multiple Sites Template

Attachment A-3 - Terms and Conditions

Attachment B - Waiver of RTEM Service Requirement Request for RTEM Projects

Attachment C – RTEM Contract Addendum Guidelines