

RTEM + Tenants - Contract Addendum Guidelines

This document should be used as a guide when developing contract addenda for projects applying to NYSERDA's Real Time Energy Management Program with Tenants (RTEM + Tenants.) To ensure NYSERDA approves your projects promptly, please include the information in the format below as an addendum to existing system/service contracts.

1. Existing Conditions Summary

1.1 Project Site Summary

Describe the project site, including the complete street address, number of floors, total square-footage, all appropriate CBECS building types¹, and the year when the building was completed for occupancy.

1.2 Tenant Candidates for Energy Management

Tabulate all the tenants² in the building and the square-footage occupied by each. Identify the tenants with electricity consumption that will be monitored in real time using interval data by a submeter according to New York City LL88. Demonstrate the total submetered and monitored tenant spaces must equal to or greater than 75% of the tenant-occupied square-footage according to LL88 in the building.

1.3 Site Significant System/Equipment

Itemize all significant mechanical systems/equipment, including nameplates and rated capacities of all major mechanical systems, onsite generation, and onsite electrical or thermal storage systems. Identify each system/equipment that is monitored as part of the project scope. Please include a separate table for the equipment in each participating tenant space.

1.4 Site Energy Inputs and End Uses

Tabulate all site utilities monitored in real time by the RTEM system using interval data. Quantify each utility as a percentage of the site's total energy consumption for the prior 12-months. Demonstrate the total monitored utilities must constitute 75% or greater of the site's total energy footprint. Please also provide separate tables for each participating tenant.

2. Scope of Work

2.1 System Components

2.1.1 Hardware Descriptions

This section should itemize all new data hardware such as meters, sensors, IoT devices, gateways, assembled enclosures, installed at the site, and its intended purpose. Also, identify the hardware used to capture all the site utilities and the certification rating of the required power quality metering included with (e.g., Class A device based on IEC61000-4-30) the RTEM project.

2.1.2 Software Descriptions

This section should itemize all new software included in the project and describe its intended purpose and functionality, including RTEM ASO, FDD and Visualization software, and any other packages that will be integrated as part of the project, such as tenant engagement app, work order management, maintenance tracking, and asset management packages.

2.1.3 Building Automation and Control Systems

This section should itemize existing or new automation systems that will be integrated, including BAS make, model and vintage (current versions, last update dates, etc.), lighting control panels/systems make, model and vintage, onsite-generation/storage control systems make, model and vintage, and any other major supervisory and control equipment.

¹ Commercial Buildings Energy Consumption Survey (CBECS) building usage type definitions

² Each tenant is an organization or individual who is allowed to occupy a space in the building by signing a lease

2.1.4 Building/Floors Occupancy Counting

This section should itemize all the existing or new occupancy sensing/counting equipment and system at the site or is included with the RTEM system.

2.1.5 Building End-Use Breakdown

Describe the method to disaggregate the site's major energy end-uses, such as directing metering or measurements or through software analytics, and the expected accuracy of each disaggregated component (comfort cooling, comfort heating, ventilation, lighting, elevators/escalators, process, and miscellaneous electric loads.)

2.1.6 Tenants End-Use Breakdown

Describe the method to disaggregate each tenant's major energy end-uses, such as directing metering or measurements or through software analytics, and the expected accuracy of each disaggregated component (comfort cooling, comfort heating, ventilation, lighting, elevators/escalators, process, and miscellaneous electric loads.)

2.1.7 System Diagrams

Provide high-level RTEM system diagrams using schematic such as one-line, P&ID, or block diagrams where all major hardware installed or will be integrated as part of the project scope are identified.

2.2 Service Offerings

2.2.1 Data Availability

This section should itemize the frequency at which RTEM data is collected, locally marshaled, stored, uploaded to the cloud, and made available to the customer-facing functionalities.

2.2.2 Semi-Annual Building Ownership/Management Deliverables (Report & Data)

This section should itemize the property owner/manager deliverables that will be provided, what they will contain, and how frequently reports will be prepared. Also, assert that the vendor will provide a copy of the customer reports and all associated data consumed to create the report to NYSERDA.

2.2.3 Service Duration

Describe the contract length between the vendor and the site owner/manager and tenants.

2.2.4 Functional Descriptions: Automation vs. Consultant

Describe what RTEM functionalities are performed autonomously by the system/software and what functionalities are performed by a human, technical consultant.

3. Project Responsibilities

3.1 Obligation of Customer

Make sure to specify if the site owner/property manager must perform or maintain any actions to ensure the system operates correctly (e.g., maintain active internet service)

3.1.1 List of Contactors and Sub-contractors and their respective services

This section should itemize all the vendors working for the customer and what service they perform on the project scope.

3.2 Obligation of Vendor

3.2.1 RTEM System Provider Responsibilities

This section should identify the vendor that is responsible for the installation and active management of the RTEM system, including security updates, patches, maintenances and upgrades and describe their scope of work. Also, significant hardware warranties and software licensing should be identified, as applicable.

3.2.2 RTEM Service Provider Responsibilities

This section should identify the overall vendor responsible for delivering the RTEM services to the site owner or property management, and describe the scope of services offered, including analysis of data, identification of opportunities, and generation and delivery of reports.

3.2.3 Tenant Service Provider Responsibilities

This section should identify the vendor responsible for delivering the RTEM services to the site tenants, and describe the scope of services offered, including analysis of data, identification of opportunities and generation and delivery of reports.



- 3.2.4 List of Contractors and Sub-Contractors and their respective services
This section should identify vendors that will be working under your company and what services they perform.

3.3 RTEM Specific Obligations

- 3.3.1 Data Quality
This section should identify the responsible vendor for ensuring ongoing data quality and what actions will be taken by each party upon discovering data error or device failure.
- 3.3.2 Data Path Integrity
This section should identify the vendor responsible for ensuring that data is continuously secured while onsite and at the cloud servers
- 3.3.3 Data Storage Duration
This section should assert that data from the RTEM project will be perpetually available or archived for the contract's duration and describe the periods after the contract will the data remain available or archived.
- 3.3.4 Customer Support Responsibilities
This section should itemize all customer support activities included in the project scope, when the support will begin, and the duration the activities are available. This should include both initial and ongoing training, as well as any on-demand support, such as a call center or help line.

4. Project Schedule

- 4.1 Pre-Installation Walkthroughs
List the anticipated NYSERDA walkthrough date (estimated 2-4 weeks after project submission.)
- 4.2 Installation Schedule
List the timeline of all significant installation activities, including estimated dates (Month/Year.)
- 4.3 Proposed Commissioning Date
List the significant activities to be performed during commissioning and provide the anticipated date that they will be complete (Month/Year.)

5. Project Cost Breakdown

State whether Option A or B is proposed for billing structure (i.e., System payment, then Service or SaaS)

- 5.1 RTEM System Costs
 - 5.1.1 Installation Breakdown
Provide a breakout of hardware, software, engineering, and integration costs
 - 5.1.2 Total Sum System Costs
- 5.2 RTEM Service Costs
 - 5.2.1 Annual Breakdown
Provide a breakout of what is covered in the annual service cost
 - 5.2.2 Total Sum Service Costs



Please include a signature block for both the customer and RTEM Vendor(s) to sign & date. After NYSDERDA review the RTEM Addendum will need to be signed by all parties involved.

Customer Name _____
Title _____
Signature _____
Date _____

Vendor Name _____
Title _____
Signature _____
Date _____

Any revisions to contract(s) will require NYSDERDA review for continued Program participation