

Real Time Energy Management (RTEM) – Basic vs Premium

To fund projects that purposefully go beyond RTEM, we must define the average projects received in the current program offering, which we are now referring to as RTEM Basic. RTEM Premium supplements the scope of RTEM Basic to provide a more comprehensive data set to drive new control strategies and identify smart building technology. **RTEM Premium is only for Commercial sector projects.**

RTEM Basic:

RTEM Basic projects involve monitoring and control of primary base building HVAC equipment such as chillers, boilers, DOAS, AHU/Distribution, VAVs, cooling towers, and/or pumps.

Current Funding:

RTEM Basic projects are eligible for a total project cost-share on System and Service of up to 30%. Project cost-share caps are up to \$300,000 per site (utility account). With Commercial Real Estate tenant included in project, cost-share caps are raised up to \$400,000 per site.

Project Limits:

RTEM Basic projects are eligible for a cost-share capped at 5-years of Service. A minimum of 1 year of service is required. Awarded projects must be installed and commissioned within six months of the qualified RTEM Vendor receiving a NYSERDA Purchase Order (“PO”).

RTEM Premium:

RTEM Premium seeks to drive technology deeper into building systems and incentivize the development of more comprehensive systems, solutions, and services. Premium provides a higher level of incentive for RTEM systems that integrate multiple, interoperable systems within a building. Funding is available on first come, first serve basis. It is at NYSERDA’s discretion to accept projects. Three years of service must be included on all integrated systems.

RTEM Premium projects are defined as an RTEM Basic system, as defined above. Additionally, RTEM Premium projects must include the monitoring and control of:

1. All applicable building-level utility meters (electric, natural gas, steam, water)
2. Building-level, Power Quality Meter (certified for Class A measurement methods based on the current edition of IEC 61000-4-30) to monitor voltage, frequency, power factor, and apparent power (KVA)

And fully integrate at least two (2) secondary major systems. Examples include:

1. Lighting (interior/exterior)
2. Indoor Air Quality ventilation control (e.g. DCV., etc.)
3. Whole building/floor-level occupant detection/counting
4. Distributed Energy Resources (DERs)

And integrate at least one (1) additional ancillary system. Examples include:

1. Plug Loads (without existing control)
2. Terminal HVACs (e.g., PTAC, PTHP, Mini-Split)
3. Elevators / Escalators
4. Security / Access Control (e.g. turnstiles)
5. Building Weather Station
6. Occupant Comfort/Convenience App

Any additional data acquisition or metering devices/equipment can be proposed if fully integrated with the RTEM Premium systems and services.

Enhanced Funding:

RTEM Premium projects are eligible for a bonus cost-share on System and Service of an additional 20% of project costs, representing a **total project cost-share of 50%**. Project cap is raised up to \$500,000 per site. With Commercial Real Estate tenant (anchor tenant preferred) included in project, cost-share caps are raised up to \$600,000 per site.

Project Limits:

All RTEM Premium projects must be contracted for three-years of service. Vendors must attach a customer signature to their proposal submission indicating that the commercial sector customer is committed to the project, pending RTEM Premium application approval. Awarded projects must be installed and commissioned within six months of the qualified RTEM Vendor receiving a NYSERDA Purchase Order (“PO”).

RTEM Vendors:

As technologies and standards continue to develop within the complex environment of cyber systems, RTEM Premium seeks to incentivize vendors that are capable of securely and intelligently storing data and system access to expand into this space. These requirements are intended to address system security and usability for RTEM Premium eligibility, as outlined below.

1. Cybersecurity

- a. Handles cybersecurity risks with proof of certification. Examples include:
 - i. Certified Information Systems Security Professional (CISSP)
 - ii. Computing Technology Industry Association Security Certification (CompTIA Security+)
 - iii. Certified Information Security Manager (CISM)

2. Data Standards

- a. Maintains clean data standards through participation in Project Haystack

RTEM Premium 2019 Timeline:

As part of the new revised RTEM PON3689, RTEM Premium projects will follow the same submission procedures as RTEM Basic and can be submitted immediately for evaluation.

Please contact RTEM@nyserda.ny.gov if you have any questions on RTEM Premium