

## RTEM - Installation & Commissioning Report Guidelines

*Please use the following guidelines to formulate a comprehensive RTEM I&C Report during post installation of a RTEM project. Fill in and attach the cover page (page 3) to the submitted RTEM I&C.*

*The purpose of the installation and commissioning report is to demonstrate the RTEM System has been installed and tested to satisfy the contract document and is completely functional as expected by the customers, and to identify all variances and follow-up activities remaining to complete commissioning. Please include the following sections and content within your report:*

1. Contract Variances
  - a. Identify and explain all **variances** between the contract document and as-built conditions.
2. Unfinished Activities / Unresolved Point Issues
  - a. Describe if any, including deferred & pending equipment testing (e.g. Chiller monitoring pending, waiting for cooling season to verify all operating conditions).
  - b. Provide a **summary** of all **unresolved point issues** (explain why a point is not commissioned)
3. Lessons Learned
  - a. Document all **lessons learned** in the **baseline operations** and deviations of the building systems observed for later determination of abnormal and fault conditions.
4. Operating Procedures and Protocols
  - a. Briefly **explain operating procedures and protocols** including details for the ongoing usage of the RTEM system.
5. Equipment Status
  - a. List equipment that requires repair and refurbishment or needs to be replaced.
6. End User Training
  - a. Explain any training provided to the customer and list key users of the system.
7. Trend Graphs
  - a. Include **trend graphs** for **selected points** that will be principally monitored by the Service Provider to document baseline or normal conditions.
8. Configured Reports
  - a. Include a copy of all the configured reports demonstrating the commissioned functionality of the reporting system.
9. As-Built Diagram
  - a. Include an as-built diagram of the RTEM system with the installed RTEM hardware identified.

Points Table:

Provide a **complete** points table with a minimum of the following tributes. Be sure to include the values/states of the points in the points table representing the commissioned values of the points.

Point Name	Data Source	Actual or Virtual	Unit	Expected Range	Alarm Thresholds	Collection Frequency	Date Verified	Initial by Verifier	Commissioned Status
AHU-1	Temp Sensor	Actual	Deg F	50 deg F - 80 deg F	Below 50 Above 80	5 minutes	xx/xx/xxxx		Commissioned / Not Commissioned



## **Real Time Energy Management Installation & Commissioning Report Cover Page**

**Vendor(s):**

**Customer(s):**

**Project # (Salesforce):**

This report is to summarize the completion of the Real-Time Energy Management Project at \_\_\_\_\_ (address(es)). This project \_\_\_\_\_ (did/did not) deviate from the original Statement of Work. The length of the contract is \_\_\_\_\_ (months), with a starting on \_\_\_\_\_ (date) and ending on \_\_\_\_\_ (date).

The RTEM System was installed on \_\_\_\_\_ (date), and commissioning was completed on \_\_\_\_\_ (date). The final number of data points on this project is \_\_\_\_\_ (number). These points are on \_\_\_\_\_ (names of high-level equipment), which represent approximately \_\_\_\_\_ (percentage) of the buildings annual energy use.

The RTEM Services for this project will commence on \_\_\_\_\_ (date). The first report is expected to be delivered to the customer on \_\_\_\_\_ (date).