



METERING - ENERGY & WATER USAGE

Region 8 Sustainability & Environmental Management System

1.0 Purpose & Scope

Maintain a history of utility meter readings for each of the top 75% largest energy consuming buildings in GSA's owned covered inventory (EISA, Sec. 431, 2007). This will enable the management team and energy associates to make better decisions regarding the feasibility of projects and individual tenant energy usage within the property. This advanced metering (EPAct, 2005) system is automated through a WinPM Sequel database to compile utility consumption data to allow energy management from a given site, its field office, service center, region, or for national tracking and management purposes. The Region 8 system is a stand alone forerunner to the nationally-adopted Schneider Electric ION/EEM metering system. Although Region 8's system is different, interfaces will join the two systems to streamline data-gathering by Central Office.

2.0 Activities & Departments Affected

Those affected are Property Managers Operations and Maintenance (O&M) operators at all covered sites, and assigned Energy Managers for each tracked facility. The Facilities Management and Services Programs (FMSP) group supports this regional effort and serves as the Point of Contact (POC) to central office.

3.0 Exclusions

This does not affect leased properties or where the tenant agency pays their own utility bills (i.e., delegated facilities).

4.0 Forms Used & Permits Required: (include reporting requirements)

☐ Federal and State Forms and Permits: None

☐ In-house GSA Region 8 and Contractor Forms:

- Team Energy Usage spreadsheets
(located at P:\Energy Management (REM)\Energy Monitoring)
- Team Energy Savings Project Tracking Spreadsheets
(located at P:\Energy Management (REM)\ECO\2010)
- Service Support Agreement (SSA) contractor's bi-weekly report noting issues, remedies, and correspondences related to the Regional Advanced Metering System

5.0 Acronyms, Abbreviations, and Definitions

Acronyms	Meaning
CO	Contracting Officer
COTR	Contracting Officers Technical Representative
EO	Executive Order
EISA	Energy Independence and Security Act of 2007
EPAct	Energy Policy Act of 2005
FMSP	Facilities Management and Services Programs



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Acronyms	Meaning
GSA	General Service Administration
O&M	Operations and Maintenance
POC	Point of Contact
SSA	Service Support Agreement

Definitions:

ION/EEM; [PowerLogic® ION® EEM (enterprise energy management) software]:

Nationally adopted graphical interface database designed by Schneider Electric for tracking advanced metering data that measures real time utility usage (i.e., electricity, gas, water) and emissions through a single unified interface, and graphically presents the data through tables and charts. (Source: Schneider Electric).

No cost low cost projects: Projects less than \$10,000 that have an energy savings pay back of 1 year or less.

Regional Advanced Metering System: A regional system using utility meters that communicate via GSA network to a database to allow real-time energy management by accessing current data stored in 15 minute intervals to help reduce energy consumption and target billing errors.

TMA Enterprise: The Operations and Maintenance service call and preventative maintenance tracking software program.

WinPM: Region 8 advanced metering tracking database.

6.0 Procedure

State Specific Procedures & Requirements [refer to individual State Legal Reviews for details on Statutes, Laws, and Rules]: None

Standardized Procedure:

- 6.1 Teams will maintain metering history data on the Team spreadsheets on P: drive. Property Managers and Energy Managers will review the data and identify facilities and buildings with high or abnormal energy use.
- 6.2 Property Manager will then investigate the high usage building and determine what is causing the high use. For no cost/low cost findings, the Operations and Maintenance contractor will repair the cause of the high usage.
- 6.3 In instances where the costs to reduce the high usage are greater than \$3,000, the teams will assign a project manager to the project and evaluate the cost/benefit of repair. The Property Managers will decide on corrective action.
- 6.4 The Service Support Agreement (SSA) contractor will continually maintain database accuracy and identify faulty meters. He/she will correct errors in data and serve as the primary Point of Contact (POC) to ensure data accuracy. This



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contractor will expand user reports and the WinPM website as needed.

- 6.5 All energy savings project will be documented and tracked on the Team Energy Savings Project Tracking Spreadsheets; located at P:\Energy Management (REM)\ECO\2010
- 6.6 Calibration and Maintenance of Utility Meters will be tracked through the Operation and Maintenance tracking software program called TMA.

7.0 Records Management

- Meter Reading History for each Building
- Team Energy Usage spreadsheets located on P: drive, DFCO, Energy Use
- Team Energy Savings Project Tracking Spreadsheets (located at P:\Energy Management (REM)\ECO\2010)
- Maintenance records in the Operations and Maintenance service call and preventative maintenance tracking software (TMA)

8.0 References

- Energy Independence and Security Act (EISA) of 2007; Public Law 110-140; H.R. 6, 110th Congress; 42 U.S.C. § 17001 et seq [statute]; December 19, 2007
- Energy Policy Act (EPA) of 2005; Public Law 109-58; H.R. 6, 109th Congress; Aug. 8, 2005
- *GSA's Office of Facilities Management & Services Programs Energy Division: Advanced Metering Program Guidebook*, October 2009

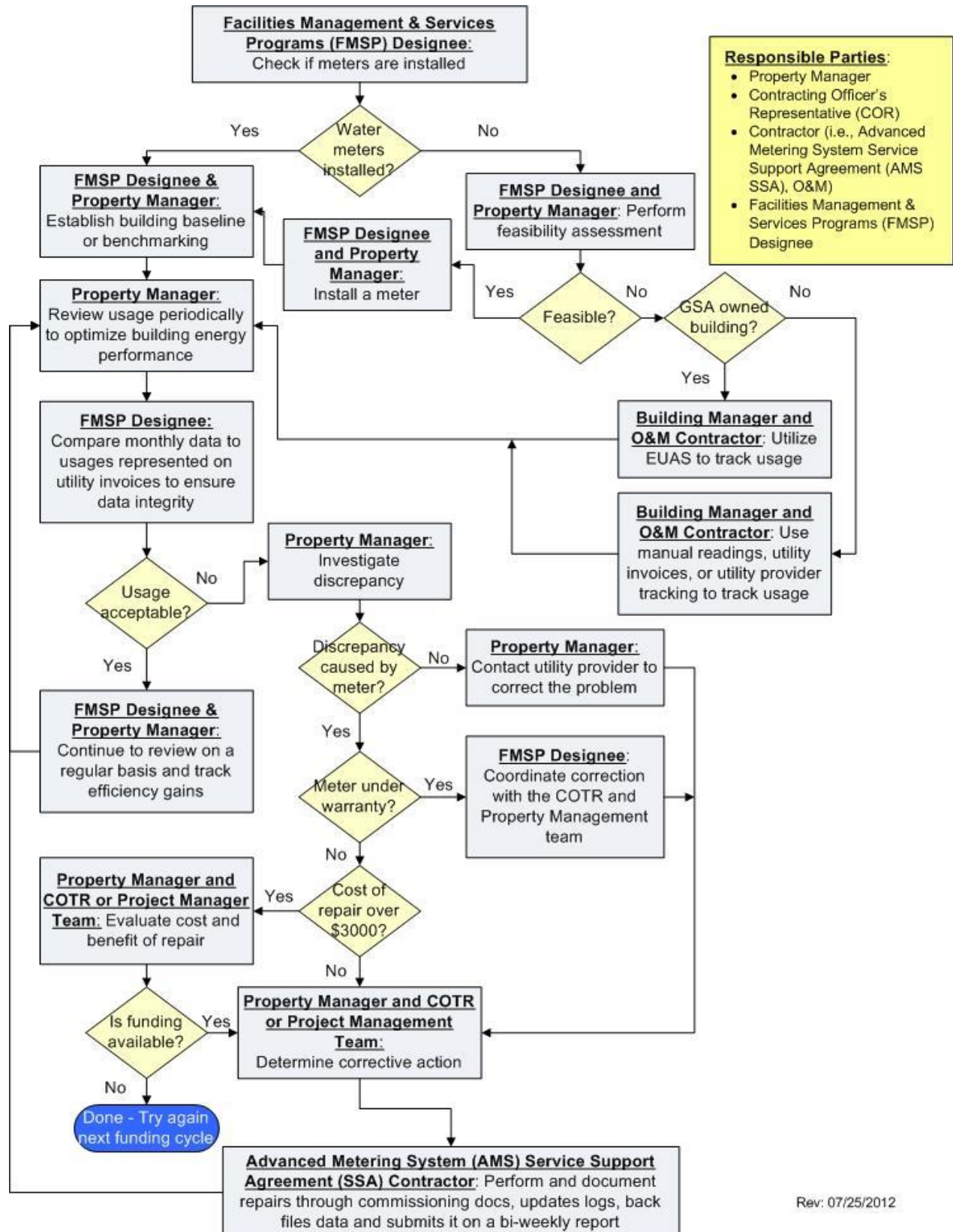
9.0 Appendices

Attachment A: Utility Metering Flowchart

Document Control Information:	Approved & Dated:
Metering (Energy & Water) "Month-Date-Year".doc	RJM July 25, 2012

Document Revision and Update:		
Revision Date	Nature of Revision	Revision made by:
12/06/2005	Working Draft	Charlie Rienhardt
03/16/2006	Original Release	Charlie Rienhardt
01/29/2010	Add ISO 14001 Document Controls, add Flowchart	Robert Melvin
06/02/2010	Outline Region 8 requirements, and update to address new federal regulations	Andrew Bond
07/25/2012	Emphasize Roles and Responsibilities in section 6, update flowchart, drop old name [Utility Metering]	Nick Gutschow, Charlie Rienhardt, Andrew Olsen

ATTACHMENT A: Utility Metering Flowchart for Energy and Water Usage



Rev: 07/25/2012