

Summary

The instructions and procedures presented here are intended to be a brief overview of how to set-up and use the energy reporting system presented in the State Energy Management Plan. This document will serve as the basis of the training provided by DMS for agency-designated personnel. The agencies are encouraged to explore this document as well as the new reporting system and provide questions, comments, and recommendations to DMS Real Estate Development and Management at any time.

Set-Up Procedures

1. Building Energy Reports & Campus Energy Reports

- a. Save one Building Energy Report file for each stand-alone building and one Campus Energy Report file for each campus facility.
- b. Provide the building-specific information at the top of each Building Energy Report and Campus Energy Report, including:
 - agency name
 - building/campus name
 - billing address
 - fiscal year
 - facility type
 - building/campus gross square footage
- c. For facility type, choose from the following types:
 - education
 - health care
 - housing
 - industrial
 - office
 - public assembly
 - retail
 - service
 - vacant
 - warehouse/storage
 - other (specify)
- d. Reference (link) the following building end-use sections on the Building Energy Report forms and Campus Energy Report forms to the Utility Worksheets for sub-meters located in the same file:

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- HVAC cooling
- HVAC heating
- water heating
- ground water

Note: All other building end-uses are already linked to the Utility Worksheets, so no other set-up is required

- e. For Campus Energy Report files, the Campus Energy Report worksheet is already referenced (linked) to the summary tables located in the Utility Worksheets. The Campus Energy Report shall only reference data from:
- the Utility Worksheet summary tables
 - consumption and demand data from individual Sub-Meter Worksheet data tables for utility systems that serve the entire campus – this applies to main campus electrical feeds, HVAC production plants, domestic water heating, and groundwater consumption when required by the plan

The Subordinate Building Energy Reports shall only reference data from:

- individual meters or charges from the Utility Worksheets that specifically apply to the respective building (not the Utility Worksheet summary tables)
- consumption and demand data from individual sub-meter data tables in the Sub-Meter Utility Worksheet that specifically apply to the respective building – this applies to building electrical loads, building HVAC loads, domestic water heating, and groundwater consumption when required by the plan

Note: When one of the campus buildings is a metered electrical distribution station or HVAC production plant, extra care must be taken to ensure that the consumption data from subordinate building sub-meters is not inadvertently added to data from the primary meter devices located upstream. This caution applies to all utility reporting systems, not just the system developed for this plan. Nevertheless, the Agencies must have or develop a thorough understanding of their utility distribution systems.

- f. The agency will need to modify the itemized cost descriptions on the Utility Worksheets to match the itemized cost descriptions on the utility bill statements. The Utility Worksheets have extra spaces provided to allow for this and the summary tables in each worksheet are already referenced to these extra spaces.

Note: DMS strongly recommends that the agency modify the itemized cost descriptions to exactly match the itemized costs on the utility bill statement in order to prevent data entry error.

The agency will also be required to enter information that is specific to each meter or utility bill. This should include information such as the meter identification number, the account number, and the building name. The agencies are expected to modify this information to suit their needs.

2. Agency Energy Reports

- a. Save one Agency Energy Report file to be used for the current fiscal year.
- b. Provide the agency-specific information at the top of each report, including:
 - agency name
 - fiscal year
 - fiscal quarter
 - total agency gross square footage
- c. List all agency buildings and/or campuses in alphabetical order where indicated in Section 1 of the Agency Energy Report. The report can be modified as necessary to create additional lines if needed.
- d. On the Data References worksheet:
 - provide the building names where indicated in the same order as they were listed in Section 1 of the Agency Energy Report
 - insert a hyperlink to the Building Energy Report file for each agency building
 - For each building, open the hyperlink and copy the contents of the Building Energy Report and use the command PASTE SPECIAL, then click ALL, then click PASTE LINK, in order to create external links to the Building Energy Report. Follow the same procedure for each agency building.

Note: The external links created here will update perpetually. Also, the external links can easily be modified to reference a different Building Energy Report file when the subsequent fiscal year arrives.

- e. On Section 1 and Section 2 of the Agency Energy Report, create references (links) to the Data References worksheet to collect the information that is required in the Agency Energy Report.

Note: These data references will only have to be created once.

Data Entry Procedures

1. All utility bill data will be entered in the Utility Worksheets located in the Building Energy Report files. No energy consumption or cost data shall be entered directly into the Building Energy Report form.
2. All sub-meter data will be entered in the Utility Worksheet for sub-meters located in the Building Energy Report files. No sub-meter consumption data shall be entered directly into the Building Energy Report form.

Note: All sub-meter consumption data will need to be converted to kBtUs (thousand BTUs) prior to being entered into the Utility Worksheet for sub-meters. There is a unit conversion tool in the Building Energy Report file to assist in this conversion.

Structure of Reporting System

Energy consumption and cost information will originate at the building level for both stand-alone buildings and campuses and be consolidated in the Agency Energy Report as shown below.

