



ASSISTANT SECRETARY OF DEFENSE

3500 DEFENSE PENTAGON
WASHINGTON, DC 20301-3500

01/14/2021

SUSTAINMENT

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS
ENERGY AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY (ENERGY,
INSTALLATIONS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE
(INSTALLATIONS, ENVIRONMENT AND ENERGY)
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DEFENSE FIELD ACTIVITIES

SUBJECT: Utilities Meter Policy

This policy supersedes the previous Utilities Meter Policy dated April 16, 2013. In order to effectively manage energy and water use across the Department of Defense (DoD), it is critical to develop an accurate and sufficiently detailed understanding of how the Department uses energy and water on its installations. The Department recognizes that because DoD Components (hereafter referred to as “Components”) have significant differences in the number and types of facilities, buildings, and operations, to be effective, metering programs will differ for each Component.

Within one year of publication of this policy, each Component shall establish a policy containing specific criteria for installations to establish metering programs in accordance with the requirements below and any additional Component-specific metering goals. Each Component’s metering program should result in the capture of a minimum of 60 percent electricity and natural gas use, with a goal of 85 percent electricity and natural gas use, using advanced meters by September 30, 2024. Component metering programs are intended to provide installations with the information necessary to improve resilience and mission assurance, increase utility systems reliability, and optimize resource use. While meters do not alter energy or water use directly, they improve understanding of energy and water use, enabling Components to achieve program goals.

Metering Requirements

It is the Department’s policy to meter utilities in compliance with statutes, regulations and Executive Orders. Further, it is the Department’s policy to install advanced meters on appropriate DoD-owned facilities in order to meet Component-specific objectives. For the purposes of this policy, advanced meters are electronic meters that, at a minimum, measure, record and store regular interval use at least hourly and communicate that data to an advanced metering system (AMS). Existing analog meters fitted with pulse counters and virtual meters that have the capabilities defined above are considered advanced meters.

The energy consumption of all facilities used to support critical mission operations as identified in the Installation Energy Plans should be measured, with advanced meters to the maximum extent practicable. As an option to meters, Components may utilize alternative means, such as energy audits or calculation of the connected load from nameplate data, to accurately determine the energy consumption of facilities used to support critical mission operations.

In addition to facilities used to support critical mission operations, appropriate facilities for advanced metering are those for which the Component has determined advanced metering would be cost effective and practical as a management tool to identify utility cost savings or improve installation resilience. For existing facilities, cost-effectiveness can generally be achieved where the cost of the meter, installation, and ongoing maintenance, data collection, and data management does not exceed 20 percent of the average yearly cost of the utility being metered or the estimated potential utility cost avoidance (savings) over the life of the meter.

Advanced meters are required on all newly awarded construction and utilities system renovation projects exceeding \$200,000 dollars. In addition, meters shall be installed as necessary to enable measurement and verification of performance requirements of Energy Savings Performance Contracts (ESPCs), Utility Energy Service Contracts (UESCs), Energy Resilience and Conservation Investment Program (ERCIP) projects and privately financed energy projects. Performance requirements may include energy and/or water savings, availability, reliability, or other metrics and standards.

For electricity, Components shall install advanced meters on mission-critical facilities and other appropriate facilities where advanced metering has been determined to be cost effective. Where practical, energy-intensive buildings should be sub-metered to identify electricity use by major mechanical and electrical subsystems or by critical loads. If applicable, sub-metering of Electric Vehicle Supply Equipment (EVSE) should be considered.

For natural gas, Components shall install advanced meters on mission-critical facilities and appropriate facilities where advanced metering has been determined to be cost effective.

For steam, Components shall install meters on facilities connected to district steam systems and industrial units to accurately identify individual facility steam use and system losses.

For both potable and non-potable water, Components shall install meters on all mission-critical and water-intensive facilities. Water-intensive facilities may include district heat and chiller plants, barracks, galleys/kitchens, dining facilities, swimming pools, gyms, piers, dry docks, vehicle wash stations, industrial facilities, data centers, hospitals, and laboratories. Where cost effective, meters shall be installed as necessary to measure the consumption of industrial, landscaping and agricultural water from both potable and non-potable sources to permit reporting of progress towards goals for reduced consumption. In addition, Components shall install meters on wells and internal supply lines and sufficient meters or other leak detection devices on distribution systems to effectively identify system losses.

For installations with privatized utilities, Components should work with distribution system owners to share existing meter data, install new meters in accordance with contract

terms where applicable, or negotiate acceptable terms for new meter installation and cost sharing. Additionally, each installation shall have the capability to monitor base-wide energy and water use through an advanced meter shadowing the utility meter or through a data sharing agreement with the system owner.

Components may exclude existing facilities from energy or water metering if it is not practicable or cost effective to install meters. Each Component should identify specific criteria for excluding facilities in accordance with program objectives. In the absence of Component-level guidance, installations may utilize published criteria found in the Department of Energy Federal Building Metering Guidance and Metering Best Practices Guide.

Cybersecurity

All energy management systems with interfaces to DoD systems or networks that process DoD information must comply with the DoD's Information Assurance/Cyber Security 8500 series of directives and instructions, and the Committee for National Security Systems (CNSS) Instruction 1253. In addition, energy management systems must implement a corresponding set of security controls from NIST SP 800-53, NIST SP 800-82, and NIST SP 800-171 through the life of the Facility Related Control Systems (FRCS). For water systems, cybersecurity threats and responses should be addressed following America's Water Infrastructure Act (AWIA) guidance for Risk and Resilience Assessments and Emergency Response Plans. This level of protection is required at a minimum. Components may identify higher security requirements for mission critical utility monitoring as needed.

Suppliers and contractors working with and on behalf of the government must comply with supply chain guidelines to ensure downstream liabilities are mitigated and government data is adequately protected when handling Controlled Unclassified Information (CUI). At a minimum, suppliers should comply with the guidance outlined in DFARS 252.204-7012. All new utility service contracts, as specified by the Component, shall incorporate the Cybersecurity Maturity Model v1.0 by the timeline required to maintain compliance with DFARS Clause 252.204-7012. Until the CMMC is in place, prime contractors are required to submit an annual self-attestation letter to the Government of having a Cyber Risk Management Plan (CRMP) for IT systems in accordance with NIST SP 800-171.

Conclusion

An increased understanding of energy and water use is essential to the DoD's strategic approach to increasing installation resilience, enhancing mission assurance, and achieving efficient use of energy and water resources. This policy promotes the maximum appropriate use of advanced metering technology, with an emphasis on mission-critical facilities, allowing identification of opportunities to improve energy resilience and reduce energy and water consumption and costs.

My point of contact for this policy is Mr. Walter Ludwig, Office of the Deputy Assistant Secretary of Defense for Environment and Energy Resilience, at 571-372-6859 or walter.s.ludwig.civ@mail.mil.

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