

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND 1322 PATTERSON AVENUE, SE SUITE 1000 WASHINGTON NAVY YARD DC 20374-5065

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From: Chief Engineer, Naval Facilities Engineering Systems Command

- Subj: INTERIM TECHNICAL GUIDANCE (ITG) FY24-01 ELECTRIFICATION OF NAVY FACILITIES
- Ref: (a) Department of Defense Memorandum, Electrification of Standard Building Operations, 29 Mar 23

(b) Department of the Navy Building Electrification Implementation Policy, 20 Nov 23(c) UFC 1-200-02 High Performance and Sustainable Building Requirements, change 2, 1 Jun 22

1. <u>Purpose.</u> This Interim Technical Guidance (ITG) provides planning and design criteria to implement the technical requirements of references (a) and (b).

2. <u>Background.</u> On November 20, 2023, the Assistant Secretary of the Navy for Energy, Installations and Environment (OASN (EI&E)) released reference (b), which requires the Department of the Navy (DON) Military Construction (MILCON) and Facilities Sustainment, Restoration and Modernization (FSRM) projects to incorporate the use of all-electric technologies for all building system components. These requirements include but are not limited to, space conditioning, water heating, cooking, and laundry, where market ready technologies exist.

3. <u>Discussion</u>. Reference (b) requires the use of all-electric technologies for component systems of the applicable MILCON and FSRM projects, even if fossil fuel alternatives would normally have been considered and evaluated for project use. This includes requiring existing facilities to shift to all-electric systems as building systems are replaced. In addition, reference (b) requires establishment of a process to share market-ready technologies and best practices, and documentation of the cost impacts, as required in paragraph 5a below, as a result of implementation of this policy.

4. <u>Applicability.</u> This ITG is applicable to new construction and major renovation projects in accordance with references (a) and (b). Exemptions are provided in references (a) and (b) and include primary, on-site electric power sources for the installation, and generators for emergency use, if they are not used for load shedding or peak demand shaving.

5. Action.

a. Use the Life-Cycle Cost-Analysis (LCCA) methodology in reference (c) to determine the cost impact of implementing reference (b). Compare conventional (i.e. carbon-based) and allelectric systems to determine the cost impact. Compare and document the first cost and life-cycle cost of each alternative. Select the most Life-Cycle Cost-Effective (LCCE) all-electric system

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that meets mission requirements for the project.

b. Exceptions to reference (b) may be granted by the Office of the Assistant Secretary of the Navy for Energy Installations and Environment (OASN (EI&E)). Follow the change process, as it is further defined, to request exceptions to this policy.

c. Use the Tri-Service Building Technology Vendor portal on Whole Building Design Guide (WBDG) website to share market-ready technologies (https://www.wbdg.org/ffc/dod/tri-service-technology-vendor-portal). This web-based portal is designed to assist vendors and manufacturers in matching technology and product(s) to DoD specifications and standards, and to facilitate the introduction of these products to DoD.

d. Use the DoD Unified Facilities Criteria (UFC) / Unified Facilities Guide Specification (UFGS) Criteria Change Request (CCR) system on the WBDG to propose changes to the UFCs and UFGSs resulting from lessons learned and proven, market-ready technologies identified in project planning, design and construction and implementation of this policy.

6. <u>Points of Contact</u>: If you have questions or concerns with respect to this ITG, please contact NAVFACSYSCOM technical representatives listed below:

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