FY23 NDAA Section 336

“SEC. 336. STUDY ON ALTERNATIVE USES FOR RED HILL BULK FUEL FACILITY.

(a) STUDY REQUIRED.—

(1) IN GENERAL.—Not later than 30 days after the date of the enactment of this Act, the Secretary of Defense shall seek to enter into an agreement with a federally funded research and development center that meets the criteria specified in paragraph under which such center will conduct a study to determine the range of feasible alternative Department of Defense uses for the Red Hill Bulk Fuel Facility and provide to the Secretary a report on the findings of the study. The conduct of such study shall include—

(A) engagement with stakeholders;

(B) a review of historical alternative uses of facilities with similar characteristics; and

(C) such other modalities as determined necessary to appropriately identify alternative use options, including data and information collected from various stakeholders and through site visits to physically inspect the facility.

(2) CRITERIA FOR FFRDC.—The federally funded research and development center with which the Secretary seeks to enter into an agreement under paragraph shall meet the following criteria:

(A) A primary focus on studies and analysis.

(B) A record of conducting research and analysis using a multidisciplinary approach.

(C) Demonstrated specific competencies in—

(i) life cycle cost-benefit analysis;

(ii) military facilities and how such facilities support missions; and

(iii) the measurement of environmental impacts.

(D) A strong reputation for publishing publicly releasable analysis to inform public debate.

(b) COST-BENEFIT ANALYSIS.—An agreement entered into pursuant to subsection shall specify that the study conducted under the agreement will include a cost benefit analysis of the feasible Department of Defense alternative uses considered under the study. Such cost-benefit analysis shall cover each of the following for each such alternative use:

(1) The design and construction costs.

(2) Life-cycle costs, including the operation and maintenance costs of operating the facility, such as annual operating costs, predicted maintenance costs, and any disposal costs at the end of the useful life of the facility.

(3) Any potential military benefits.

(4) Any potential benefits for the local economy, including any potential employment opportunities for members of the community.

(5) A determination of environmental impact analysis requirements.

(6) The effects of the use on future mitigation efforts.

(7) Any additional factors determined to be relevant by the federally funded research and development center in consultation with the Secretary.

(c) DEADLINE FOR COMPLETION.—An agreement entered into pursuant to subsection (a) shall specify that the study conducted under the agreement shall be completed by not later than February 1, 2024.

(d) BRIEFING.—Upon completion of a study conducted under an agreement entered into pursuant to subsection (a), the Secretary shall provide to the Committees on Armed Services of the Senate and House of Representatives a briefing on the findings of the study.

(e) PUBLIC AVAILABILITY.—

(1) FFRDC.—An agreement entered into pursuant to subsection (a) shall specify that the federally funded research and development center shall make an unclassified version of the report provided to the Secretary publicly available on an appropriate website of the center.

(2) DEPARTMENT OF DEFENSE.—Upon receipt of such report, the Secretary shall make an unclassified version of the report publicly available on an appropriate website of the Department of Defense.”

RAND Proposed Alternatives For Consideration

Based on the Nakapuna data and energy storage options looked at by the University of Hawaii, RAND will conduct feasibility and cost analyses of the following options to satisfy the Section 336 requirement:

- Closure with no beneficial reuse
- Energy Production using Renewable Sources (Wind or Solar Photovoltaics)
- Energy Storage using Pumped Hydropower
- Water Storage
- Museum

Navy Red Hill Energy Storage Feasibility Study

- Background: Study prepared for Hawaii Natural Energy Institute (HNEI)/University of Hawaii by Makai Ocean Engineering , Inc. in October 2023. Study was funded by Office of Naval Research (ONR) at the request of Naval Facilities Engineering Systems Command – Engineering and Expeditionary Warfare Center.
- Scope: Develop a preliminary comparison of energy storage technologies that may be applicable for use within the Red Hill tank volumes and associated infrastructure.
- Alternatives Evaluated:
    1. Pumped Hydro Storage (PHS)
    2. Compressed Air Energy Storage (CAES)
    3. Compressed Carbon Dioxide Energy Storage (CCDES)
    4. Cryogenic Energy Storage/Liquid Air Energy Storage (LAES)
    5. Lifted Weight Energy Storage (LWES)
    6. Buoyance Energy Storage Technology (BEST)
    7. Hydrogen Storage
    8. Thermal Storage
    9. Chemical Batteries

NAVFAC Naval Facilities Engineering Systems Command