

Government Accountability Office review of the Nuclear Command, Control, and Communications System

The U.S. nuclear command, control, and communications system (NC3) includes the activities, processes, and procedures performed by appropriate military commanders and support personnel to allow for senior-level decisions on nuclear weapons employment. The committee commends the Department of Defense (DOD) for directing a number of initiatives to improve the reliability of the NC3 system. However, the committee is concerned that the Department's efforts are being pursued in a piecemeal fashion rather than part of a coherent system architecture and investment strategy with consistent leadership. For example, a key Air Force modernization program that has been in development for a decade, the Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program, which is the base terminal for the Advanced Extremely High Frequency Satellite, has veered off track and it may take years longer than expected before any of the needed capability becomes part of the NC3 system, especially in the B-2 and B-52H fleet. This means that our strategic bombers, which can carry nuclear weapons, will not be able to use the very satellites designed for nuclear command and control.

The committee directs that the Government Accountability Office (GAO) to assess DOD's efforts to sustain and improve the NC3 system. Specifically, the committee directs GAO to examine: (1) the DOD's efforts and activities underway or planned to upgrade and modernize the Nation's nuclear NC3 capabilities, including activities associated with cryptographic modernization; (2) the extent to which DOD's modernization and upgrade efforts are being coordinated as part of an overarching NC3 architecture and investment strategy; (3) whether there are NC3 gaps, shortcomings, technical challenges, or funding issues that need to be addressed currently; (4) the factors that caused the FAB-T program to go off track and the Air Force's plans to salvage the program, including how land and air platform integration challenges will be addressed; and (5) extent to which DOD has identified and addressed gaps or shortcomings in the NC3 system through its inspections, training, and exercise programs.

Hazard assessments related to new construction of obstructions on military installations and operations

Section 358 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383) required the Secretary of Defense to establish a systematic process and a comprehensive strategy for assessing and addressing military impacts of renewable energy projects and other energy projects with the objective of ensuring that the robust development of renewable energy sources and the expansion of the commercial electrical grid in the United States are conducted in a manner that minimize or mitigate any adverse impacts on military operations and readiness.

The Department of Defense (DOD) has implemented the requirement of section 358 by establishing a Siting Clearinghouse to serve as a focal point for DOD consideration of proposed energy projects. The Clearinghouse has developed a consistent process for review of such projects, including evaluation criteria, operational impact as-

assessment tools, and mitigation response teams. This process has enabled the Department to focus its attention on those projects that are likely to have adverse impacts on military missions and to conduct additional analysis needed to determine if mitigation is possible.

The Clearinghouse has reviewed 249 renewable energy projects to date that were under consideration at the time section 358 was enacted, and has determined that 229 of them would have little or no impact to military missions. The remaining 20 have been assessed as potentially having an adverse impact on military test, readiness, and operational missions. While further study and negotiations with project developers are underway in consultation with appropriate federal agencies, no determination of an unacceptable risk to national security has yet been made with regard to any of these projects.

The committee expects that any DOD hazard assessment under subsection (e) of section 358 will include an analysis of the electromagnetic interference that the proposed project would cause for the relevant military installation (including interference with military-owned or military-operated air traffic control radar sites, navigation aids, and approach systems), as well as any other adverse impacts on military operations, safety, and readiness (including adverse effects on instrument or visual flight operations). In the event that a potential risk is identified, the hazard assessment should consider the feasibility of the full range of mitigation measures. Such mitigation measures could include modifications to the proposed project (including changes in size, location, or technology), upgrades or modifications to existing DOD systems or procedures, acquisition and fielding of new systems by DOD or other federal agencies, and modifications to military operations.

The committee also expects the Secretary of Defense to give careful consideration to the recommendations of senior military officers with primary responsibility for the affected military installation and affected military operations in making any final determination of unacceptable risk.

The committee concludes that section 358 requires a set of established criteria in order to ensure the risk assessments are objective, rational, and justifiable. The committee also notes that final routes and sites may change after a determination is made, due to ongoing environmental studies, changes in developer plans, and the assessment of alternatives as part of mitigation efforts. In such cases, the Clearinghouse should have processes in place to reopen the review, continue the analysis, and amend the determination if the review results in a change in the determination.

Therefore, the committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide to the congressional defense committees by December 1, 2012, a description of the processes and criteria used to make the determination whether or not an energy project poses an unacceptable risk to national security.

Impacts of "Sequestration" on the Department of Defense

The committee is aware that the Department of Defense is subject to automatic funding reductions known as "sequestration" of

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**NATIONAL DEFENSE AUTHORIZATION
ACT FOR FISCAL YEAR 2013**

R E P O R T

[TO ACCOMPANY S. 3254]

ON

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2013 FOR
MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR
MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF
THE DEPARTMENT OF ENERGY, TO PRESCRIBE MILITARY PER-
SONNEL STRENGTHS FOR SUCH FISCAL YEAR, AND FOR OTHER
PURPOSES

TOGETHER WITH

ADDITIONAL VIEWS

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE



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