

Culture change now will make a difference for the future

by Don Juhasz

The Army is working toward meeting energy statute requirements, but it is uncertain the Army will get where it needs to be if its “culture” remains status quo. A huge mind-set shift is needed in which Military Construction Transformation and other construction changes can occur.

The Energy Policy Act of 2005 (EPAAct05) and Executive Order (EO) 13423 set clear goals, but the impact on the Army construction community is in conflict. The mission to construct more square footage with less available funding is priority. Available dollars currently go for immediate needs and not for long-term impacts. Also, history has demonstrated time and time again that just increasing funding does not proportionally increase compliance or implementation of statutes or policy.

Congress and Army organizations have resorted to using Energy Savings Performance Contracts (ESPCs) to supplement needed dollars. ESPCs require guaranteed energy reductions and provide “avoided cost.” But such contracts have expensive financing costs that essentially place a high-rate mortgage on the taxpayer. An ESPC, however, does provide immediate influx of capital for energy reduction projects that help EPAAct05 compliance. But ESPCs are not appropriate for MILCON projects because the facilities are not yet in existence.

Higher efficiency equipment can and should be put in up front on new construction. Obviously, if it is cost effective to retrofit or replace proposed inefficient equipment as soon as the facility is completed, then it is cost effective to install it in the first place. ESPCs are legally intended to help with our existing inventory of facilities, not to serve as a cash cow to supplement MILCON.

The apparent issue is that incentives to incorporate the statute requirements have not been provided. Without incentives, needed cultural changes rarely occur, even when the goal is to implement processes and procedures that many would agree are the right thing to do. Unfortunately, sometimes needed change occurs only when there are real consequences for failing to comply.

This may be the case for the impact of EPAAct05 on MILCON Transformation. When rising utility costs become intolerable, then construction standards for energy consumption will weigh in. Until then, the required mission of more square footage will prevail over long-term utility and facility-maintenance costs.

The long-range impact of current operations on maintenance budgets has made its mark. The poor conditions in installations’ infrastructures are a direct result of under-maintenance and lack of capitalization of utilities systems. This is the main argument for the Utilities Privatization program. This situation will only become worse with current funding limits, which is another challenge and incentive for the needed culture change in MILCON Transformation thinking.

Current funding shortages will limit the ability of Directorates of Public Works and installation commanders to take care of their infrastructures in ways that would return the greatest investment for the dollars used. Their predecessors for the last 20 years have made decisions that did not fund the maintenance of their utility infrastructures or efficiency improvements. They have concentrated their allotted funds into high visibility issues.

The out-of-site, out-of-mind infrastructure has fallen into failed or failing conditions that have been left to the current DPWs and commanders to solve. In addition, the infrastructure becomes proportionally much more expensive to restore than the cost would have been to maintain it. Currently due to funding limitations, we are on a repair-on-failure mode with little or no preventive maintenance occurring.

Research shows how future costs are affected by funding priority decisions made now. It is not, and has not been, strictly a lack of funding but a lack of where the funding went. Current conditions are a direct result of prior funding decisions that were not based on the value of the dollar spent but the immediate visibility improvements provided. This is the culture that must change for both new construction mind set and expenditure of funds on maintaining existing facilities.

Priorities must be changed to reflect long-term cost considerations over short-term maximum square footage construction. Current studies by the Navy show that four facilities that are EPAAct05 compliant will provide more future dollars to support continued growth and operations than five new inefficient facilities built using current noncompliant standards at a cost that is less than 3 percent more than the construction cost of the five noncompliant facilities. Also, the five noncompliant facilities would require four to five times the annual maintenance and operational costs of an equivalent compliant facility. This is the price of forcing the additional square footage to be constructed now without the implementation of the energy-compliant standards.

The same is true of improvements on existing facilities, for which utility and maintenance costs continue to climb. Without this cultural shift among design engineers, construction and management teams and Army leadership — an understanding that future long-term costs are tied to first cost decisions — the Army will not be able to sustain the increases in utility and maintenance costs as they continue to be an ever increasing percentage of limited resources and budgets. The situation will threaten our energy and physical security as a nation.

We must incorporate the statutory requirements of EPAAct05 and the requirements of EO 13423 now if we are to remain sustainable in the next decade.