

IMPACT OF DOE ORDER 430.2B

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430.2B Interpretation

- During Order review for implementation, identified 5 categories:
 - Vague and interpretive requirements
 - Requirements that require projectized efforts
 - Requirements that need complex-wide integration prior to implementation to be effective
 - Requirements that are considered part of the current course of business and may already be implemented
 - Requirements that require a level of change that is reasonable with minimal impact
- From Nevada Test Site (NTS) perspective, the terms of the Contractor Requirements Document (CRD) can sit in multiple bins

Contract Requirements Categorization - I

- CRD terms that are considered vague and interpretive are: 1c, 2b, 3, 4a, 4b, 5b, 5c, 5d, 6a, 6b, 6e, 6f, 6h, 7c
- Example: 1c requires that the contractor maintain Energy Management staff. The Federal Energy Management Program (FEMP) recommends 32 course hours for “Facility Energy Manager.” The Facility Manager (FM) is to devote all or a substantial portion of their time to implement the Order. This would impact 7 FTEs annually and conflicts with Real Property Asset Management requirements for FMs.
- Path forward
 - Establish an Implementation Plan that is consistent between sites
 - This will facilitate data roll-up needed to monitor at Headquarters (HQ) level
 - Results will be from site working level instead of driven by top-down requirements
 - Need baseline data and to develop feedback loops
 - Establish timelines for processes
 - Change expectation that it will all be ready today

Contract Requirements Categorization - II

- CRDs that are consistent with a complex-wide approach: 1d, 4c, 5d, 6a, 6b, 6e, 6f, 6h, 6j, 7a, 7b, 7c
- Example: 4c requires the contractor to provide third-party verification to FEMP that each excluded building has undergone a comprehensive energy audit in the last 3 years
- Path forward
 - Develop multi-site program and have an execution plan as part of the effort; Specifically address how we as a complex are going to do this
 - Include projectized work, and not just work paid for by Energy Savings Performance Contracts (ESPCs)
 - Look for way to optimize resources – either use teams taken from the complex or use teams within the organization that are outside the energy program sphere of influence
 - Plan the work, then work the plan

FY 2009 NNSA/NSO Energy Executable Plan

- NNSA/NSO is moving forward with a three-pronged approach:
 - **Program:** Setting up an Energy Management Program based on size, funding, duration, and sequencing of activities. DOE O 430.2b assumes a robust energy management program is in place and has been functioning long-term, which is not the case at the NTS.
 - **Baselining:** Performing audits and assessments to obtain data that will need to be managed
 - **Conduit for Change:** We are thinking globally and acting locally using quality initiatives to ensure we do it right the first time.
- Does this mean we are in front of the pack or following the emerging industry?

Accomplishments

- An onsite Concentrating Solar Power Plant project is being pursued
- Newest renovation (B-3) earned Leadership in Energy and Environmental Design Silver
- Awarded \$5.7M ESPC contract
- NSTec is in the process of developing an enterprise-wide Facility Asset Management System
- For Energy conservation: *The Joule*, purchasing low-wattage bulbs, monitoring energy spikes, motion sensors
- NNSA/NSO sites save water through several water conservation measures: installation of WaterSense products, xeric landscaping, using non-potable water for dust suppression, institution of 4-day work weeks, purchasing of low-flow fixtures
- The current Fleet has 540 Alternative Fuel Vehicles (AFVs) which equates to 96 percent of the covered fleet. The AFV goal of acquiring 75 percent of AFVs for the fleet has been met and exceeded
- In FY 2008, the total actual usage of E-85 was 182,997 gallons, a 35 percent increase in usage from 2007
- Biodiesel fuel is used in all equipment with the exception of emergency generators and boilers and is currently at the maximum possible usage level
- NSTec CD-0442.017, *Recyclable Material*, identifies the appropriate pathways for recycling various waste streams generated by each location and assigns responsibility for tracking and reporting those recycling activities
- The NSTec Information Services Department Client Care Manager ensures all leased computer equipment contracts contain language that requires Energy Star 4.0 compliance, Electronic Product Environmental Assessment Tool registered, utilize reduced packaging that is recyclable, and returned equipment must be refurbished and reused through a certified recycler

Ideas

- Using Requisition Compliance Reviews - Energy Management is now a compliance function to monitor the purchase of energy-consuming products and water use fixtures
- Investigating solar parking covers for electric vehicles
- Investigating how to recycle water from sumps for use in evaporative coolers
- Investigating NNSA/NSO-wide relamping using LED to replace fluorescent fixtures like the Los Alamos Operations site

Areas of Concern

- No funding has been identified or distributed; its an unfunded mandate
 - \$16.6M implementation cost at NTS thru 2015. NNSA wide estimate may exceed \$200M.
 - FEMP funding concept is implementation by ESPC. This method amounts to paying by “credit card” with finance charges.
- Mission Impacting
 - At NTS, Order compliance at mission critical facilities, e.g., Device Assembly Facility and Area 12 Camp, will force increased indirect cost recovery charges
 - Assumption that future site-wide numbers must be reduced by a percentage of a historical number results in no consideration for mission growth – something that is being actively pursued
- DOE EE/RE and FEMP approval process
 - Current process requires DOE FEMP approval of NNSA Site Office submitted Executable Plans
 - Expectation gap exists between DOE FEMP, NNSA HQ, and Site Offices regarding level of compliance
 - DOE FEMP expectations exceed NNSA ability to implement, i.e., human capital, strain to indirect budgets, and mission impacts

Recommendations

- Funding source needs to be identified
- Varying levels of Order compliance by the Site Offices should be recognized in Executable Plans
- Relief from Order requirements is needed to avoid mission impacts
- Waivers from Order requirements are needed if no funding is provided
- Energy Order needs to be aligned with other Orders for a consistent set of requirements
- Guidance documents need to be modeled after the Order, current guidance bears little resemblance to Order requirements