



Condition Assessment Program

Sandia National Laboratories

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Purpose of CAS

- **Comply with DOE Order 430.1B**
- **Correctly identify condition of real property assets to inform capital investments**
 - Annual budget needed to maintain RPAs in a fit-for-mission-use condition to meet contract performance goals for deferred maintenance.



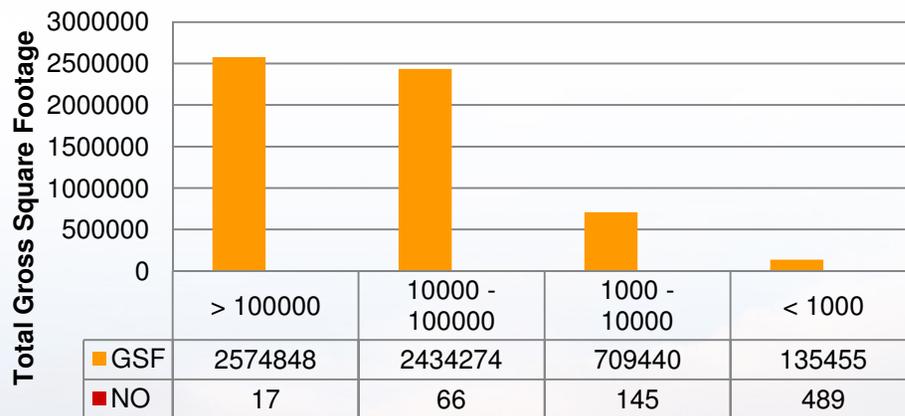
Requirements – DOE Order 430.1B

- 4. d (1) “Each site must have a maintenance program to maintain each real property asset, including plant, property and equipment, in a condition suitable for it’s use”.
- 4. d (2) “Condition assessments must be performed on all real property assets at least once during any 5-year period **using inspection methods in accordance with industry standards**”.
- 4. d (3) “Condition assessments result in a determination of the **current condition of real property assets, their estimated time to failure, the optimal period to accomplish maintenance actions based on engineering/maintenance analysis, and the estimated cost to correct deficiencies**. The results of condition assessments must be reported in FIMS”.
- 4.c (1) Use the DOE CAIS database or another nationally recognized cost estimating system to estimate deficiency costs. (See Table 1 for minimum characteristics.) The costs must include contractor overhead/burden. The database or cost estimating system must accommodate site craft, engineering service contractor, or other data entry. Each must (a) break out asset deferred maintenance cost by asset components or systems, (b) calculate a facility condition index by system, and (c) have the ability to separate rehabilitation and improvement costs from deficiency costs.

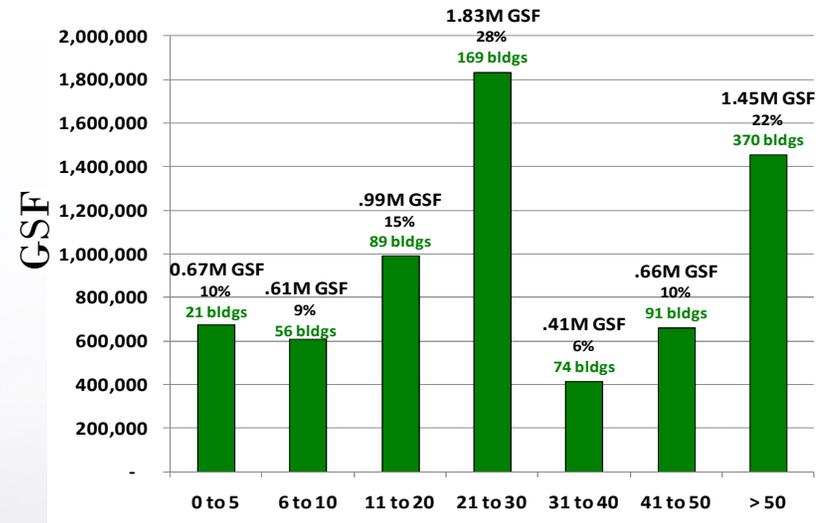
Background

- SNL has a wide variety of RPA types sizes, locations, and ages.
- Limited resources and budgets demand efficiency.

Size Distribution of RPAs at SNL/NM



Age of Building



212 Trailers and Mobile Offices house over 1000 staff

Average GSF = 1440



Proposed Graded Approach

- **Conduct Formal Condition Assessments on RPAs with the following exceptions:**
 - Buildings < 1,000 square feet
 - ◆ Graded approach depending on purpose
 - ◆ Remove smaller, portable structures from FIMS as RPAs.
 - Mobile Offices and Trailers
 - ◆ Exterior (non-invasive) inspection
 - Other Structures and Facilities (with the exception of infrastructure)
 - ◆ Exterior (non-invasive) inspection
 - Leased buildings and facilities
 - ◆ Do not assess
 - Buildings scheduled for D&D within 2 years of scheduled disposition date.
 - ◆ Do not assess



Looking Forward – Parametric Approach

- **Integrated into our Facilities Management System (FMS), Tririga database.**
 - Qualitatively Assess nine building systems.
 - Rank them 1 (worst) to 5 (best).
 - RPV of RPA is loaded into FMS.
 - FMS calculates DM based on algorithm weighting qualitative ratings.
 - System components are pre-loaded in FMS with optimal year, depreciation and replacement costs.
- **Based on model used by NASA, Smithsonian**
- **Opportunities/Deficiencies decoupled from Parametric CAS.**
 - Opportunities/Deficiencies can be identified during CAS or at any other time.
 - Funded opportunities transferred to Projects Module in FMS. RS Means imbedded in FMS.
 - Identification of gaps on Parametric evaluation and identified opportunities.



Potential Resolutions

- **Justification Memorandum (JM) for Intent to Revise DOE O 430.1B**
 - Directives Review Board (DRB) meeting held on 20 October 2011
 - ◆ Outcome Not Yet Known
 - National Laboratories Directors' Council (NLDC) Recommendations
 - ◆ Submitted to DRB by OECM – 10 Recommendations
 - **Data Validation (re: FIMS)**
 - **Condition Assessments**
 - **Real Property Definition**

- **In meantime:**
 - Exemption for CAS on (full-service) leased space – if necessary
 - Remove “shed” type assets from FIMS
 - ◆ Based upon FY11 FIMS Validation
 - ◆ Potential new FIMS guidance