

**U.S. Department of Energy**  
**Washington, D.C.**

**ORDER**

**DOE O 430.1B**

Approved: 9-24-03

This directive was reviewed and certified as current and necessary by James T. Campbell, Acting Director, Office of Management, Budget and Evaluation/Acting Chief Financial Officer, 9-24-03.

**SUBJECT: REAL PROPERTY ASSET MANAGEMENT**

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1. OBJECTIVE. Establish a corporate, holistic, and performance-based approach to real property life-cycle asset management that links real property asset planning, programming, budgeting, and evaluation to program mission projections and performance outcomes. To accomplish the objective, this Order identifies requirements and establishes reporting mechanisms and responsibilities for real property asset management. This Order implements Department of Energy (DOE) P 580.1, *Management Policy for Planning, Programming, Budgeting, Operation, Maintenance and Disposal of Real Property*, dated 05-20-02 (reference p).
2. CANCELLATION. DOE O 430.1A, *Life-Cycle Asset Management*, dated 10-14-98. Cancellation of an Order does not modify or otherwise affect any contractual obligation to comply with such an Order. Cancelled Orders incorporated by reference in a contract remain in effect until the contract is modified to delete the reference to the requirements in the cancelled Orders.
3. APPLICABILITY.
  - a. DOE Elements. Except for the exclusions in paragraph 3c, this Order applies to all DOE elements listed in Attachment 1 with responsibility for real property assets, including the National Nuclear Security Administration (NNSA). No requirements in this order will be implemented in a manner that would conflict with the provisions of the National Nuclear Security Administration Act.
  - b. Site/Facility Management Contracts.
    - (1) Except for the exclusions in paragraph 3c, the Contractor Requirements Document (CRD), Attachment 2, sets forth the requirements of this Order that must apply to all site/facility management contracts that include the CRD.
    - (2) This CRD must be included in site/facility management contracts that involve the acquisition, management, maintenance, disposition, or disposal of real property assets. Modifications to the CRD must be reviewed by the Office of Engineering and Construction Management (OECM) before incorporation.

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**DISTRIBUTION:**  
All Departmental Elements

**INITIATED BY:**  
Office of Management, Budget and  
Evaluation/Chief Financial Officer

- (3) This Order does not automatically apply to other than site/facility management contracts. Any application of requirements from this Order to other than site/facility management contracts must be communicated separately from this Order.
- (4) The Lead Program Secretarial Office (LPSO) and Cognizant Secretarial Office (CSO) are responsible for notifying contracting officers about the site/facility management contracts for which this Order is applicable. Once notified, contracting officers are responsible for incorporating the CRD into affected site/facility management contracts via the laws, regulations, and DOE directives clause of the contracts.
- (5) As the laws, regulations, and DOE directives clause of site/facility management contracts states, regardless of the performer of the work, site/facility management contractors with the CRD incorporated into their contracts are responsible for compliance with the requirements of the CRD. Affected site/facility management contractors are responsible for flowing down the requirements of this CRD to subcontracts at any tier to the extent necessary to ensure compliance with the requirements. In doing so, contractors must not unnecessarily or imprudently flow down requirements to subcontracts. That is, contractors will (a) ensure that they and their subcontractors comply with the requirements of this CRD and (b) only incur costs that would be incurred by a prudent person in the conduct of competitive business.

c. Exclusions.

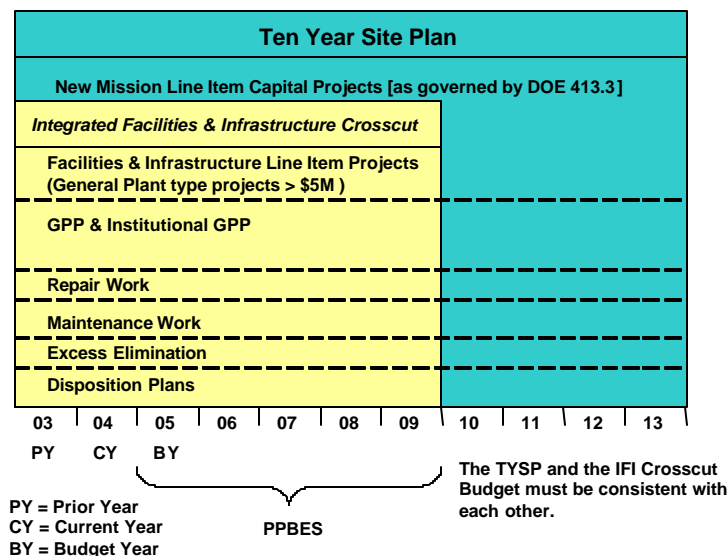
- (1) Office of the Deputy Administrator for Naval Reactors, National Nuclear Security Administration.
- (2) Power Marketing Administrations. In accordance with Section 302 of the Department of Energy Organization Act of 1977, Section 302 (reference bb), the Secretary operates and maintains the Power Marketing Administrations' (PMAs') electric power transmission systems by and through the PMA administrators. The PMAs are uniquely established within the Department by nature of their administrators' obligations to meet statutory and public utility responsibilities for the safety, security, and reliability of electric power transmission. Administrators must determine the appropriate real property asset management program for their facilities, including consideration of appropriate parts of the criteria set forth in this Order and prudent utility industry practice.

4. REQUIREMENTS. The management of real property assets must take a corporate, holistic, and performance-based approach to real property life-cycle asset management that links real property asset planning, programming, budgeting, and evaluation to program mission projections and performance outcomes. Acquisitions, sustainment, recapitalization, and disposal must be balanced to ensure real property assets are

available, utilized, and in a suitable condition to accomplish DOE missions. The following paragraphs set the requirements for the major real property asset management functional components of planning, real estate, acquisition, maintenance and recapitalization, disposition and long-term stewardship (LTS), value engineering (VE), and performance goals and measures. (Note: See paragraph 6 in the main body of this Order for references, Attachment 3 for definitions, and Attachment 4 for acronyms).

The requirements of this Order are for immediate use and implementation, and must be fully implemented by September 30, 2004.

- a. Planning. Planning is the overarching function within real property asset management that integrates the other functions of acquisition, real property utilization, maintenance, recapitalization, disposition, and LTS into a coordinated effort to ensure that current and future mission needs are met. Planning is dependent on clear objectives, sound data, and effective communication.
  - (1) Site planning for real property assets must be consistent with DOE P 430.1, *Land and Facility Use Planning*, dated 7-9-96 (reference o), be based on accepted planning principles and industry wide practices, and must—
    - (a) assess current real property assets against delineated program mission requirements and
    - (b) identify the specific real property asset projects and activities required to meet program mission projections.
  - (2) For each nonclosure site, results of real property asset site planning and performance must be documented in a Ten-Year Site Plan (TYSP) that is kept current and covers a 10-year planning horizon. For closure sites, disposition plans must be developed.
    - (a) The TYSP will be consistent with and support development of the Integrated Facilities and Infrastructure (IFI) Crosscut Budget, identifying the resource requirements associated with TYSP implementation. (Figure 1 represents the relationship between the TYSP and IFI Crosscut Budget.)
    - (b) The TYSP will be integral to and support the DOE Planning, Programming, Budgeting, and Evaluation System (PPBES).
    - (c) The TYSP will result in a consolidated and integrated plan replacing multiple reports. It will use the Facilities Information Management System (FIMS), DOE's corporate real property asset database, for real property asset information.



**Figure 1. Ten-Year Site Plan (TYSP); Integrated Facilities and Infrastructure (IFI) Crosscut Budget; and Planning, Programming, Budgeting, and Evaluation System (PPBES).**

- (3) The content of the TYSP must address how the site's real property assets will support the Department's strategic plan, the Secretary's 5-year planning guidance, and appropriate program guidance. It must be a comprehensive sitewide plan encompassing the needs of tenant activities. The format of the TYSP should be consistent within a program in accordance with program direction and guidance. Sections of the TYSP can be rearranged to meet the unique requirements of a site. As a minimum, TYSPs must address the following.
- (a) The site's plan to meet program missions, budgets, planning estimates, and performance outcomes within the program's budgetary and out-year fiscal projections.
  - (b) An assessment of the current status of the site real property assets against delineated program missions including discussions of condition assessments, maintenance and recapitalization plans, space utilization, real estate, excess facilities disposition, LTS, and unique site issues.
  - (c) The prioritized real property asset projects and activities required to meet program missions, budgets, and planning estimates. These include acquisition projects, elimination of excess property projects and activities, maintenance and recapitalization plans, disposition projects, and LTS requirements.

- (d) The prior year (PY) plus ten (10) additional fiscal years of activities, planned in accordance with LPSO, CSO, and Program Secretarial Office (PSO) annual program direction and guidance for mission projections and fiscal projections. It will be consistent with the Department's PPBES and the field budget call. (See Attachment 3, Definitions, for more information on "prior year.")
  - (e) A report on past performance and projected future outcomes, including the results from real property asset corporate and program performance measures (see paragraph 4g for corporate performance goals and measures). The report must compare the budget authority against the actual expenditures and the performance outcomes achieved at the site for the fiscal year that precedes the PY.
  - (f) Space utilization activities and land-use that stabilize then reduce the costs by consolidating operations where practicable and eliminating excess facilities.
- (4) The TYSP must be submitted either concurrently with responses to the field budget call, or as directed by the LPSOs/CSOs/PSOs to be consistent with the PPBES cycle.
- b. Real Estate. The real estate function encompasses several key activities over the life cycle of real property assets. These activities involve acquisition by lease or purchase; planning and management, including taking inventory, making assignments, conducting utilization surveys, and tracking assets; screening for excess real property assets; and disposal of real property assets.
- (1) The Secretary's authority to acquire, manage, and dispose of real property can be redelegated, with the exception of accepting donations and initiations on condemnation actions or executions of declarations of takings. In exercising the delegated authority, all real estate actions to acquire, manage, and dispose of real property assets must be reviewed and approved by a DOE Certified Realty Specialist (CRS) before executing the action. The senior realty officer in OECM will provide the review and approval for those offices without a CRS.
  - (2) A CRS must be involved in planning, acquisitions, utilization surveys, excess declarations, and disposal by demolition or sale of real property assets. These actions are to be performed in accordance with requirements in 41 CFR, Chapters 101 and 102, Federal Property Management Regulations, (reference d), and DOE real property authorities. The DOE *Real Estate Process—Desk Guide for Real Estate Personnel* (reference f) provides detailed guidance and procedures for completing real estate actions. These actions will be reflected in TYSPs.
  - (3) Land-use planning and management integrates land uses at each site and examines multiple land-use options. Land-use planning must be consistent

with DOE P 430.1 (reference o). The land-use plan must provide a clear view of the land-use issues, capabilities, opportunities, and limitations of the site. It will identify all land that is needed to support the site mission through annual utilization surveys. The plan must be kept current and support development identified in the site TYSP. At cleanup and closure sites, identified uses must be consistent with a Record of Decision's anticipated future or end-point use.

Land-use plans should be tailored based on local site condition and must consider the National Environmental Policy Act, site planning and asset management, LTS plans, institutional control plans, stakeholder public participation, economic development under community reuse organizations, privatization of assets, environmental law, cultural asset management, historic preservation, and natural resource management.

Land-use planning and management must be established through one or more of the following, as approved by the LPSO responsible for the site.

- (a) Disposition plans, and LTS plans at cleanup or closure sites.
  - (b) Implementation of a sitewide National Environmental Policy Act document that addresses land-use or resource management.
  - (c) A Land-Use Control Action Plan under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
  - (d) Administrative mechanisms to assign use to areas that support implementation of the TYSP.
- (4) Real property assets not fully utilized or excess to mission needs must be identified to facilitate reuse or disposal as follows.
- (a) LPSOs/CSOs/PSOs must annually identify all project/program mission terminations to site/field managers. This is normally accomplished in program planning documents.
  - (b) Except for environmental closure sites, site/field managers must annually report to responsible LPSOs/CSOs/PSOs any real property identified as not utilized through utilization surveys. This may be accomplished through updates to TYSPs to reflect planned excess facilities and disposition schedules. Utilization status will be recorded in FIMS.
  - (c) LPSOs/CSOs must annually declare as excess the real property reported to them as not utilized and not needed to support their program missions. These formal declarations must be transmitted to OECM no later than December 31st of each year.

- (d) OECM will screen all LPSO/CSO declared excess real property with remaining useful life with all other LPSOs/CSOs/PSOs to determine whether the property is excess to all programs in the Department.
  - (e) If not accepted for transfer by another program, the responsible LPSO/CSO must plan and program the elimination of excess real property through reuse, demolition, disposal, transfer, or sale based on reducing risks and minimizing life-cycle costs. (See requirements paragraph 4e for additional details.). The report must compare the budget authority against the actual expenditures and the performance outcomes achieved in the last full fiscal year of execution.
- (5) Excess real property assets that are appropriate for economic-development transfer must be identified and disposed of in accordance with 10 CFR 770, Transfer of Real Property at Defense Nuclear Facilities for Economic Development (reference b).
  - (6) Real estate actions for out-grant must be performed in accordance with the Joint DOE/EPA Interim Policy Statement on Leasing Under the Hall Amendment, dated June 30 1998 (reference x), and applicable DOE directives. Clear definition of roles, responsibilities, and liabilities must be developed to ensure safety and protection of the workers, the public, and the environment in accordance with Guidance on Protection of Workers Utilizing DOE Leased Facilities (reference v) for all stakeholders of Departmental real property assets that are leased to private parties.
  - (7) Headquarters (Office of General Counsel; Office of Management, Budget and Evaluation; and LPSOs/CSOs) must be notified 90 days before all disposals by sale or lease under DOE authorities. Notification must be accomplished as follows.
    - (a) For non-economic-development leases, e-mail notifications are acceptable.
    - (b) For economic-development-related leases and sales, a notification package must be submitted to Congress, 30 days before transfer by sale or lease.
    - (c) For sales of land that do not use the standard Federal practices of 41 CFR, Chapters 101 and 102 (reference d), a notification to the Energy and Water Appropriations Committee is required 60 days before any proposed sale of land. The notification is to provide a detailed explanation for the waiver of Federal practices for the sale of property.

- (8) Real Estate Records and Reports.
- (a) FIMS is the Department's real property asset inventory system and fulfills the requirement in 41 CFR, Chapters 101 and 102 (reference d), for each Agency to have a real property inventory system. FIMS data will be used to meet routine reporting requirements. [See Attachment 5, Section 1, and the FIMS Web site (reference t).]
- 1 FIMS data must be maintained as complete and current throughout the life cycle of real property assets, including real property related institutional controls.
- 2 FIMS data must be archived after disposal of real property assets. Those necessary for LTS must be identified, reviewed, and retained.
- 3 Site/field managers will ensure that FIMS data is verified annually as complete and accurate using a quality control process.
- (b) Real property asset inventory reports must be provided as specified in the DOE *Real Estate Process—Desk Guide for Real Estate Personnel* (reference f).
- c. Acquisition. Acquisition of real property assets through construction must be planned and accomplished to meet program mission projections. Acquisition planning should include life-cycle cost considerations.
- (1) Acquisition of real property assets up to \$5 million will be accomplished as General Plant Projects (GPPs). GPPs are miscellaneous minor new construction projects of a general nature, the Total Estimated Costs of which may not exceed the Congressionally established limit of \$5 million. GPPs are necessary to adapt facilities to new or improved production techniques; to affect economies of operation; and to reduce or eliminate health, fire, and safety problems. These projects provide for design and/or construction and additions and improvements to land, buildings, and utility systems, and they may include the construction of small new buildings, replacements or additions to roads, and general area improvements. Institutional General Plant Projects (IGPPs) are a class of GPPs that are of a general institutional nature whose benefit cannot be directly attributed to a specific or single program and are required for a general sitewide need. Further, IGPPs may be used at the discretion of the LPSOs/CSOs/PSOs. (Attachment 6 of this Order provides additional IGPP requirements.)

- (2) Acquisition of real property assets greater than \$5 million must be in accordance with DOE O 413.3, *Program and Project Management for the Acquisition of Capital Assets*, dated 10-13-00 (reference n). While not required by this Order, project management techniques in O 413.3 may be tailored for GPPs and IGPPs based on the nature and complexity of the individual project.
  - (3) As directed in House Conference Report 107-258 accompanying the FY 2002 Energy and Water Development Appropriations Bill (reference w), increases in facility area, as a result of new construction projects requested in fiscal year 2003, must be offset by transfer, sale, or demolition of excess buildings and facilities of equivalent size at each site. Waivers permitting the requirement to be met by reduction of excess facilities at another site can be requested in the interest of critical mission and will be considered on a case-by-case basis and approved by the Secretary through the Chief Financial Officer. This excess reduction to new construction does not apply to environmental management closure sites.
  - (4) All acquisition projects (GPPs, IGPPs, and line items) must be included in the TYSP.
- d. Maintenance and Recapitalization. Real property assets will be maintained in a manner that promotes operational safety, worker health, environmental protection and compliance, property preservation, and cost-effectiveness while meeting the program missions. This requires a balanced approach that not only sustains the assets but also provides for their recapitalization.

Sustainment consists of maintenance and repair activities necessary to keep the inventory of facilities in good working order. Sustainment includes regularly scheduled maintenance and anticipated major repairs or replacement of components that occur periodically over the expected service life of the facilities. Lack of sufficient levels of sustainment can result in a reduction in service life.

Facilities eventually wear out or become outdated and incapable of supporting mission needs. These facilities will be replaced, recapitalized, or disposed of if excess to needs. Recapitalization extends the service life of facilities or restores lost service life and consists of alterations and betterments needed to keep existing facilities modern and relevant in an environment of changing standards and missions. Recapitalization investments do not sustain facilities and will, therefore, be complemented by an effective sustainment program to protect the facility.

Sustainment and recapitalization requirements must be developed in support of the Department's strategic plan, the Secretary's 5-year planning guidance, and appropriate program guidance.

- (1) Each site must have a maintenance program to maintain each real property asset, including plant, property, and equipment, in a condition suitable for its intended use. The maintenance program will include condition assessments of real property assets, a work control system, management of deferred maintenance, a method to prioritize maintenance projects, and cost accounting systems to budget and track maintenance expenditures. Configuration management of all assets in the maintenance program will be consistent with the intent of DOE STD-1073-93, *Guide for Operational Configuration Management Program*, dated November 1992 (reference r). In addition to the maintenance requirements of this Order, sites with nuclear facilities must also comply with DOE O 433.1, *Maintenance Management Program for DOE Nuclear Facilities*, dated 6-01-01 (reference ee).
- (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. Some real property assets, such as those that are mission critical or safety related, may require a more frequent inspection cycle as determined by the LPSO/CSOs or the site/field manager. [See Attachment 5 to this Order and the DOE Condition Assessment Survey (CAS) reference e) for amplifying information.]
- (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 identified deficiencies. (See Attachment 5 for amplifying information.) The results of condition assessments must be reported in FIMS.
- (4) The repair costs for the deficiencies identified during the condition assessments must be estimated using the DOE Condition Assessment Information System (CAIS) or another nationally recognized cost estimating system. Costs must include contractor overhead/burden.
- (5) Preventive, predictive, and corrective maintenance will be used to ensure real property asset availability for planned use and/or proper disposition.
- (6) Five-year sustainment requirements must be developed and maintained based on projections of serviceability, economic life, condition assessments, the mission of facilities and projected funding for deferred maintenance reduction. These requirements will be summarized in the TYSP.
- (7) Each site must develop recapitalization requirements structured to keep existing facilities modern and relevant in an environment of changing standards and missions.

- (a) Recapitalization requirements are in addition to sustainment activities (i.e., maintenance and repair) and consist of alterations and betterments to replace or modernize existing facilities.
  - (b) Recapitalization activities are traditionally funded by GPPs, IGPPs, or line item projects. (See Attachment 3 under “Alterations” and “Betterments” for more information.)
  - (c) Recapitalization will be summarized in the TYSP.
- (8) Each site must evaluate the relative importance and contributions of all real property assets to mission accomplishment. A holistic systems approach will be used to identify those facilities and infrastructure assets that directly contribute to the accomplishment of the assigned mission or mitigation of environment, safety, and health issues. Mission essential assets are those that are critical to mission accomplishment and, if not available, would adversely impact the mission. The mission essential determination will be based upon program assigned mission requirements. Assets will be designated as mission essential in FIMS.
- e. Disposition and Long-Term Stewardship. Planning for disposition must be initiated when real property assets are identified as no longer required for current or future programs. Disposition includes stabilizing, preparing for reuse, deactivating, decommissioning, decontaminating, dismantling, demolishing, and/or disposing of real property assets.

LTS includes the physical controls, institutions, information, and other mechanisms needed to ensure protection of people and the environment where DOE has completed, or plans to complete, disposition. Disposition and LTS requirements are directly influenced by decisions made during the acquisition, maintenance, and operation of the assets. Decisions made during the utilization of assets need to consider their disposition and LTS implications. A balance must be established between accomplishment of DOE missions and the disposition and LTS required to reduce risks to workers and the public and minimize real property asset life-cycle costs.

Disposition and LTS activities must be consistent with the guiding principles and core functions of the Department’s integrated safety management and facility disposition policies.

- (1) When real property assets are identified as no longer required for current program missions, a disposition baseline must be developed to assess and prepare the assets for disposition. Technical, programmatic, and regulatory information is to be used in developing the disposition baseline. The disposition baseline must include the following information and considerations.

- (a) Identification and characterization of hazardous and radioactive materials, waste, and hazardous conditions of the real property asset.
  - (b) Surveillance and maintenance requirements to ensure the real property asset, including its systems, and stored hazardous materials and waste remain in a stable and known condition and that adequate protection is provided to workers, the public, and the environment pending disposition.
  - (c) Assessment and adjustment of the facility authorization basis, as necessary, to reflect conditions and activities pending disposition.
- (2) The disposition plan must integrate environmental, safety, and health requirements into disposition activities in accordance with DOE STD 1120-98, *Integration of Environment, Safety, and Health into Facility Disposition Activities*, dated May 1980 (reference q). The disposition plan should be tailored based on the disposition baseline and disposal method to be used (e.g., reuse, demolition, or decommissioning) and must consider DOE P 455.1, *Use of Risk-Based End States* (reference dd) and the guidance in the following Guides (references h, i, j, and k).
- DOE G 430.1-2, *Implementation Guide for Surveillance and Maintenance During Facility Transition and Disposition*, dated 9-29-99;
  - DOE G 430.1-3, *Deactivation Implementation Guide*, dated 9-29-99;
  - DOE G 430.1-4, *Decommissioning Implementation Guide*, dated 9-2-99; and
  - DOE G 430.1-5, *Transition Implementation Guide*, dated 4-24-01.

The disposition plan shall include the following.

- (a) A method for identifying, evaluating, and selecting disposition alternatives and LTS requirements. Selection of the preferred disposition alternative needs to be documented and be in accordance with relevant regulatory standards. Stakeholder involvement is required in the development of LTS plans.
- (b) The identification and completion of required activities related to historical preservation.
- (c) A postclosure/postdisposition/LTS records turnover or retention plan.

- (d) Surveillance and maintenance plans for facilities and land parcels with residual contamination, hazards, or other conditions that are projected to require postdisposition LTS. These plans must identify appropriate management and funding requirements to ensure safety, health, and environmental regulatory compliance and meet relevant requirements of treaties, agreements, or other DOE commitments.
  - (e) A process to track status of LTS actions, including gap analysis of the LTS transition framework to identify actions remaining before end-point conditions are satisfied. This should include a method to periodically reassess monitoring requirements and make any necessary revisions.
  - (f) Development of specific end-point criteria for declaring disposition complete.
  - (g) Cost and schedule information for disposition activities and any follow on surveillance and maintenance and LTS requirements must be identified in the TYSP.
- (3) Where transfer of real property assets is required for disposition (e.g., turning a facility or site over to another organization for reuse or transferring it to another office within the Department to support the transition from one disposition phase to another or initiation of LTS), applicable DOE policies, assigned missions and responsibilities, appropriate industry standards, and the guidance provided in DOE G 430.1-5 (reference k) must be adhered to. Real property asset transfers must include the following.
- (a) Identification of the real property assets as candidates for transfer, formal notification of the potential receiving organizations, and issuance of other reports and notifications in accordance with the applicable requirements under paragraph 4b of this order.
  - (b) Development of a transfer acceptance process to ensure pretransfer verification of the technical and regulatory information in the disposition baseline and agreement on a transfer date and the disposition/LTS scope, cost, and schedule. Normally, to match the Departmental budget cycle, the date of transfer for a facility will be the 1st of October after the 2-year (or 3-year) anniversary of the date when the receiving organization was notified unless the parties reach an agreement that stipulates an alternative transfer date.
  - (c) Pretransfer review for formal acceptance of the real property assets being transferred. Formal acceptance must be documented by an

agreement signed by relevant LPSOs/CSOs/PSOs. FIMS will be updated to reflect the transfer of property accountability and custody.

- (d) Conveyance of the appropriate funding and budget targets along with the real property assets being transferred.
- (4) Decommissioning must adhere to the relevant requirements for non-time-critical removal actions under CERCLA, using a tailored process negotiated with the Environmental Protection Agency, with continued Defense Nuclear Facilities Safety Board oversight to the extent authorized by law.
  - (5) Records data collection, management, and reporting requirements for disposition and LTS are as follows.
    - (a) FIMS data fields must be kept current throughout real property asset disposition (e.g., identified as excess, transferred to another program, placed into inactive status, dismantled, or placed in LTS).
    - (b) FIMS information regarding real property assets that have been disposed of, including all related institutional controls, must be archived.
    - (c) Records necessary for LTS must be identified, reviewed, and retained per applicable DOE directives and Federal regulations.
    - (d) A final report or equivalent document must be developed for each disposition and land parcel remediation/LTS project. The final report/document must describe, as a minimum, project activities, final facility status, and cost and performance information to demonstrate that specific end-point criteria have been met.
- f. Value Engineering. VE is an organized effort directed at analyzing the functions of systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, maintainability, environmental protection, and safety. VE requirements are provided in the following.
- Office of Management and Budget (OMB) Circular A-131, *Value Engineering*, (reference aa);
  - Public Law 104-106, *Value Engineering for Federal Agencies* (reference cc);
  - DOE N 413.2, *Value Engineering*, dated 12-30-02 (reference m); and
  - ASTM Practice 1699-00, *Standard Practice for Performing Value Analysis for Buildings and Building Systems* (reference a).

For real property asset acquisition, disposition, demolition, repair and recapitalization projects where the total value for a single item of purchase or contract is expected to be less than or equal to \$5 million, the LPSO/CSO or site/field manager shall assess the application of VE requirements based on the complexity, risks, and potential economic benefit.

- (1) For real property asset acquisition, disposition, demolition, repair, and recapitalization projects where the total value for a single item of purchase or contract is expected to be greater than \$5 million, VE assessment shall be performed in accordance with DOE O 413.3 (reference n).
- (2) Real estate acquisitions are excluded from VE.

g. Performance Goals and Measures. The DOE PPBES requires that performance measures be established that link performance of program goals and budgets to outputs and outcomes. All DOE elements must develop real property asset performance measures commensurate with their duties and responsibilities. The LPSOs/CSOs must establish annual performance targets for their real property assets and state their expected performance outputs and outcomes in their annual direction and guidance. Site-specific measures must be developed by each site/field manager to assess the level to which the LPSO-/CSO-established outputs and outcomes have been attained. Corporate measures for real property asset management include the following.

- (1) Asset Utilization Index (AUI). AUI is the Department's corporate measure of facilities and land holdings against requirements. The index reflects the outcome from real property acquisition and disposal policy, planning, and resource decisions. The index is the ratio of the area of operating facilities or land holdings justified through annual utilization surveys (numerator) to the area of all operational and excess facilities or land holdings without a funded disposition plan (denominator). The AUI is derived from data in FIMS obtained from annual utilization surveys. [See 41 CFR, Chapters 101 and 102 (reference d), and Executive order 12512, Federal Real Property Management Survey (reference s).] Separate AUIs will be developed for facilities and for land holdings.

$$\text{AUI} = \frac{\text{utilization justified assets}}{\text{current real property assets}}$$

Ratings are assigned to AUI range measures. The AUI improves as excess facilities are eliminated and consolidation increases the space utilization rate of the remaining facilities. AUI ranges and ratings are as follows.

<u>AUI Range</u>	<u>AUI Rating</u>
$1.00 \geq 0.98$	Excellent
$0.98 \geq 0.95$	Good
$0.95 \geq 0.90$	Adequate
$0.90 \geq 0.75$	Fair
$0.75 \geq$	Poor

- (2) Asset Condition Index (ACI). ACI is the Department's corporate measure of the condition of its facility assets. The ACI reflects the outcomes of real property maintenance and recapitalization policy, planning, and resource decisions. The index is one (1) minus the Facility Condition Index (FCI). FCI is the ratio of Deferred Maintenance to Replacement Plant Value. The FCI is derived from data in FIMS.

$$ACI = 1 - FCI$$

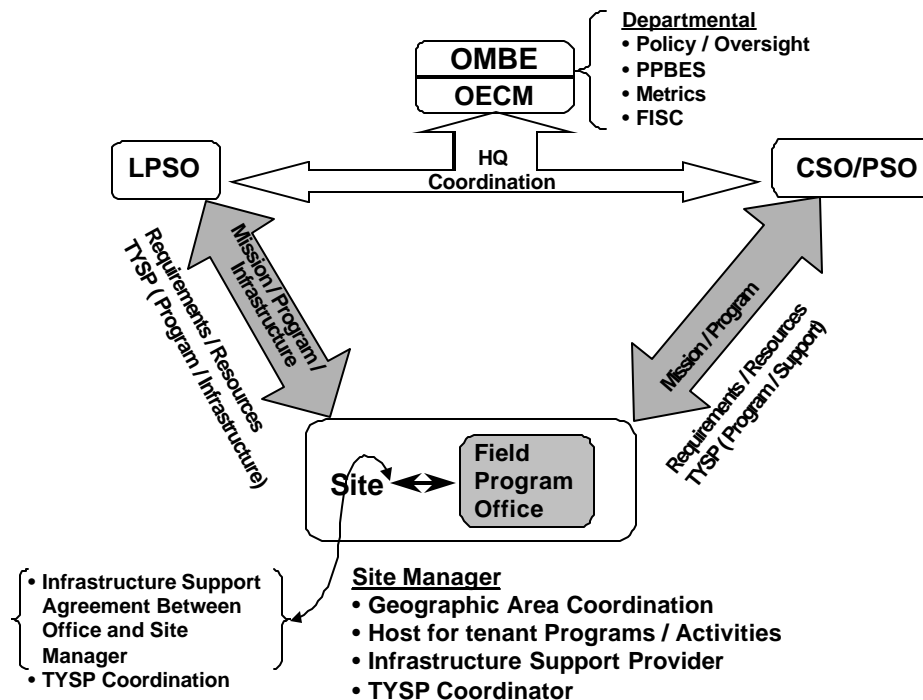
Ratings are assigned to ACI range measures. The goal is for the ACI to approach one (1). The ACI increases and approaches one (1) as the condition of facilities improves at a site. ACI ranges and ratings are as follows.

<u>ACI Range</u>	<u>ACI Rating</u>
$1.00 \geq 0.98$	Excellent
$0.98 \geq 0.95$	Good
$0.95 \geq 0.90$	Adequate
$0.90 \geq 0.75$	Fair
$0.75 \geq$	Poor

- (3) AUI and ACI measure the net result of numerous real property management and disposal policy, planning, and resource decisions over time. PPBES requires accounting for execution of resource decisions made during planning, programming, and budgeting. To assess the use of real property asset budgets for their intended purposes, the following execution measures are established.
- (a) On a quarterly basis, Headquarters program offices (LPSOs/CSOs) will review their sites' real property maintenance and disposition budget execution against the amounts shown in the IFI Crosscut Budget. The use of those budgets for other than their intended purposes requires advance approval by the cognizant Under Secretary.
  - (b) Assessment of IFI Crosscut Budget execution for real property maintenance and disposition by Headquarters program offices

(LPSOs/CSOs) are to be submitted to OECM not later than 45 calendar days following the end of each fiscal year quarter.

5. RESPONSIBILITIES. A qualified DOE Federal facilities management staff must be assigned at cognizant Headquarters offices and field elements to provide for implementation of this Order and to ensure accountability. The paragraphs below describe the responsibilities and authorities for effective management of DOE real property assets and establish accountabilities for real property asset management from planning and acquisition through operations and disposal. Figure 2 provides an overview of the interrelationships of those responsible for achieving the requirements of this Order.
- LPSOs issue program missions, budgets, and planning estimates covering a 10-year planning horizon for site infrastructure and LPSO-related real property assets and approve TYSPs and land-use management plans for their sites.
  - CSOs/PSOs issue program missions, budgets, and planning estimates covering a 10-year planning horizon for their program-related work and/or real property assets and approve elements of TYSPs related to their programmatic responsibilities at related sites.
  - Site/field managers ensure mission resource requirements for real property assets, including their plans and budgets, are prepared to meet the program missions, budgets, and planning estimates, and the results are documented in the TYSP. Site/field managers perform a key role coordinating program and tenant activities and real property asset needs at the site;
  - TYSPs are submitted by site/field managers to the LPSOs/CSOs/PSOs as the plans for real property assets at the sites. TYSPs support LPSO/CSO/PSO programming decisions regarding real property assets and subsequent site budget requests.
  - OECM develops policies and procedures for real property asset management and provides corporate oversight for implementation.
- a. Secretary.
- (1) Establishes the corporate policy for real property asset management.
  - (2) Authorizes actions to acquire title to or interest in real property by condemnation.
  - (3) Accepts donations of real property assets from outside DOE.
- b. Deputy Secretary.
- (1) As DOE's Chief Operating Officer, exercises responsibility for implementation of this Order by Departmental elements.
  - (2) Resolves real property asset issues between program offices or between program offices and NNSA.



**Figure 2. Real property asset management interrelationships.**

- c. Director, Office of Management, Budget and Evaluation, and Chief Financial Officer.
- (1) Establishes budget formulation and execution policy and procedures for real property assets.
  - (2) Reviews and coordinates all economic-development sales and leases and sales of land for less than fair market value.
  - (3) Reviews and coordinates transfer issues between program offices or between program offices and NNSA
- d. Office of Engineering and Construction Management.
- (1) Serves as the Department's principal point of contact relating to real property asset management.
  - (2) Develops, promulgates, and maintains policies and procedures to implement and sustain an effective corporate, holistic, performance-based program for real property asset management, including planning, real estate, acquisition, maintenance and recapitalization, disposition and LTS, VE, and performance goals and measures.

- (3) Provides independent corporate oversight for the implementation of the real property asset management requirements of this Order and provides an annual summary report to the Deputy Secretary on the state of the Department's real property assets.
- (4) Submits required Congressional reports related to real property assets in coordination with other responsible Departmental elements.
- (5) Provides technical assistance and support to Departmental elements for real property asset management.
- (6) Develops and monitors Departmental corporate performance measures for real property asset management to monitor the efficiency and effectiveness of real property asset management.
- (7) Maintains property reports to reflect the Department's entire real property inventory, including the current status of maintenance and disposition of excess real property at each site.
- (8) Sponsors and coordinates the Facilities and Infrastructure Executive Steering Committee (FISC) to guide the overall direction of real property asset management in the Department and promote the resolution of cross-program issues.
- (9) Sponsors and coordinates the Facilities Data Development Committee (FDDC) to guide the overall direction of FIMS.
- (10) Manages the administration and maintenance of the FIMS database and DOE's CAIS, including associated Web sites. (See Attachment 5.)
- (11) Participates in real property asset management concerns for the Corporate Review Budget.
- (12) Develops and issues annual implementing guidance to determine and report in FIMS the deferred maintenance estimate for the DOE Consolidated Financial Statement using condition assessment data.
- (13) Manages the certification program for DOE real estate specialists, working with LPSOs, CSOs, and site/field managers to ensure adequate numbers of CRSs are deployed to meet Departmental real estate requirements.
- (14) Coordinates the possible reuse of facilities that LPSOs, CSOs, and site/field managers report as excess, including management assistance and coordination for the disposal by sale, lease, or transfer of excess Departmental real property assets.

- (15) Reviews proposed changes to the CRD of this Order.
  - (16) Facilitates issue resolution between LPSOs, CSOs, and site/field managers regarding aspects of this Order.
- e. Lead Program Secretarial Office—with Single Program Site.
- (1) Is accountable to the Secretary for the proper stewardship of real property assets at the site, including maintaining the condition of infrastructure to support mission activities reliably, efficiently, and effectively.
  - (2) Ensures a qualified DOE Federal facilities management staff is assigned at Headquarters offices and field elements to provide for implementation of this Order and to ensure Federal accountability for the proper stewardship of real property assets and real estate actions.
  - (3) Develops components for both the Department's and the program's strategic plans that link real property assets to missions, and establishes a rational basis for real property asset planning and budgets, including issuing annual direction and guidance relative to planning, programming, budgeting, execution, and evaluation activities.
  - (4) Provides annual program direction, guidance, and oversight for implementing the requirements of this Order by the program and sites under the LPSO's cognizance.
    - (a) This must include program missions, budgets, and planning estimates for use in developing the TYSP; project prioritization factors based on mission critical importance; decision making that considers risks and links plans and budgets to accomplishment of program mission projections and budgets; and establishment of performance measures for corporate and program real property asset performance.
    - (b) Program mission projections and terminations must be for the 10-year planning horizon, and program budget and planning estimates must be for at least the 5-year planning horizon.
    - (c) LPSOs must provide critical mission requirements so that sites can identify and report in FIMS mission essential real property assets that directly support these requirements.
  - (5) Reviews and approves TYSPs submitted by the site/field manager.

- (6) Declares excess real property assets in accordance with the requirements of this Order, including an annual declaration and report to OECM on the real property assets that are excess to program needs and notification to the site/field manager of mission terminations.
  - (7) Approves the appropriate land-use planning and management process documentation (e.g., Site Closure Plan, Sitewide National Environmental Policy Act Document, Land-Use Action Control Plan under CERCLA).
- f. Lead Program Secretarial Office—with Multiprogram Site. A multiprogram site is defined as a contiguous site that is used by more than one DOE program. The LPSO at a multiprogram site has all of the responsibilities identified above under the LPSO for a single program site and an additional responsibility to act as a host landlord for its tenant CSOs/PSOs, including the following.
- (1) Provides annual program direction and guidance consistent with agreements between the LPSO and CSOs at the site for details of real property assets.
  - (2) Coordinates all CSO/PSO programmatic needs at a site with the site/field manager for a consolidated TYSP that includes all tenant CSOs/PSOs.
  - (3) Ensures the TYSP is consistent with agreements between the LPSO and CSOs about the details of programmatic real property assets, especially pertaining to site infrastructure.
  - (4) Resolves conflicts at the site between LPSO, CSOs, and the site/field manager for planned site infrastructure.
- g. Cognizant Secretarial Office/Program Secretarial Office—Multiprogram Site. A PSO at a multiprogram site may be a tenant with no ownership role for facilities or infrastructure, or the PSO may be a CSO distinguished by cognizance and ownership of program-specific (programmatic) facilities or areas at the site. Responsibilities vary for these differing roles as identified below.
- (1) A CSO has responsibilities 5e(1), (3), (4), and (6) identified above under LPSO-Single Program Site; responsibilities 5f(1), (2), and (3) identified above under LPSO-Multiprogram Site; and additional responsibilities to act as a tenant to its host LPSO, including the following.
    - (a) Prepares and approves CSO-specific TYSPs for their requirements at the site when the CSOs separately plan and budget for their programmatic real property assets at the site. These TYSPs can be separate from the site/field manager's TYSP, but must be coordinated with the site/field manager and LPSO and attached to the site/field manager's TYSP for a consolidated site TYSP.

Alternately, CSOs can agree to the site/field manager preparing a TYSP that includes all CSO requirements.

- (b) Approves the TYSP if it was prepared by the CSO's site/field manager.
  - (c) Reviews and comments on the TYSP if it was prepared by the site/field manager to ensure expected real property asset needs, especially for site infrastructure, are covered consistent with agreements between the LPSO/CSOs/PSOs about the details of real property assets.
- (2) A PSO has the following responsibilities to the host LPSO and the site/field manager.
- (a) Provides annual program direction and guidance, including program missions, budgets, and planning estimates for use in developing the TYSP and notification of its site program mission terminations.
    - 1 Program mission projections must be for the 10-year planning horizon, and program budget and planning estimates must be for at least the 5-year planning horizon.
    - 2 Program direction and guidance must be consistent with agreements between the LPSO/CSOs/PSOs at the site for details of real property assets
  - (b) Reviews the TYSP to ensure expected real property asset needs, especially for site infrastructure, are covered for their program concerns consistent with agreements between the LPSO/CSOs/PSOs about the details of real property assets.

h. Site/Field Manager—with Single Program Site.

- (1) Is accountable to the LPSO for the proper stewardship of real property assets at the site, including maintaining the condition of infrastructure to support mission activities reliably, efficiently, and effectively.
- (2) Ensures a qualified DOE Federal facilities management staff is assigned to implement this Order and to ensure accountability.
- (3) Develops components for the site's strategic plan that link real property assets to missions, and establishes a rational basis for real property asset plans and budgets.
- (4) Oversees implementation of the requirements in this Order at the site consistent with the annual program direction and guidance issued by the LPSO responsible for the site.

- (5) Identifies and reports in FIMS mission essential real property assets that directly support these program defined mission requirements
  - (6) Reviews and submits the TYSP to the LPSO for approval.
  - (7) Participates in the DOE certification program for real estate specialists.
  - (8) Normally serves as the DOE contracting officer's representative for site contracts as designated by those contracts (unless otherwise delegated) and all other contracts and financial assistance agreements executed at the site.
    - (a) Ensures applicable requirements found in this Order are implemented through site contracts and subcontracts.
    - (b) Establishes and uses agreed upon performance-based measures and expectations for real property assets.
  - (9) Monitors Order implementation through the establishment, by contract or financial assistance agreement, of a site-specific performance measurement system. Through the performance measurement system, the site/field manager—
    - (a) develops output-/outcome-based performance measures to drive achievement of the corporate and real property asset performance;
    - (b) leads in negotiating performance measures with contractors to meet defined performance;
    - (c) performs assessments of contractor performance in accordance with the performance measurement system;
    - (d) uses independent or line management oversight to verify effectiveness of assessments, identify deficiencies, and recommend corrective actions; and
    - (e) ensures population and validation of data in FIMS and that objectives of the condition assessment program defined in paragraph 4d of this Order are met.
- i. Site/Field Manager—Multiprogram Site. A multiprogram site is defined as a contiguous site that is used by more than one DOE program. The site/field manager at a multiprogram site has all of the responsibilities identified above under the site/field manager for a single program site and an additional responsibility to act as a host for tenant CSOs/PSOs, including the following.
- (1) Coordinates the facilities management requirements and activities at the site including LPSO/CSOs/PSOs and other non-DOE tenants/owners.

Secures agreements with non-DOE tenant/owners regarding their facilities and infrastructure responsibilities at the site.

- (2) Determines whether other site program needs can be met with property affected by program mission terminations.
- (3) Presents a single, coordinated TYSP, including any tenant-specific TYSPs.

## 6. REFERENCES.

- a. American Society for Testing and Materials (ASTM) Practice 1699-00, Standard Practice for Performing Value Analysis for Buildings and Building Systems
- b. 10 Code of Federal Regulations (CFR) 770, Transfer of Real Property at Defense Nuclear Facilities for Economic Development
- c. 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan, Parts 410 and 415
- d. 41 CFR, Chapters 101 and 102, Federal Property Management Regulations
- e. DOE Condition Assessment Survey Web site, <http://cas.hr.doe.gov>
- f. DOE *Real Estate Process—Desk Guide for Real Estate Personnel*, June 2001
- g. DOE G 120.1-5, *Guidelines for Performance Measurement*, dated 6-30-96
- h. DOE G 430.1-2, *Implementation Guide for Surveillance and Maintenance During Facility Transition and Disposition*, dated 9-29-99
- i. DOE G 430.1-3, *Deactivation Implementation Guide*, dated 9-29-99
- j. DOE G 430.1-4, *Decommissioning Implementation Guide*, dated 9-2-99
- k. DOE G 430.1-5, *Transition Implementation Guide*, dated 4-24-01
- l. DOE G 450.4-1B, *Integrated Safety Management System Guide*, dated 3-1-01
- m. DOE N 413.2, *Value Engineering*, dated 12-30-02
- n. DOE O 413.3, *Program and Project Management for the Acquisition of Capital Assets*, dated 10-13-00
- o. DOE P 430.1, *Land and Facility Use Planning*, dated 7-9-96

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- p. DOE P 580.1, *Management Policy for Planning, Programming, Budgeting, Operation, Maintenance and Disposal of Real Property*, dated 5-20-02
- q. DOE STD 1120-98, *Integration of Environment, Safety, and Health into Facility Disposition Activities*, dated May 1980
- r. DOE STD-1073-93, *Guide for Operational Configuration Management Program*, dated November 1992
- s. E.O. 12512, Federal Real Property Management Survey
- t. Facilities Information Management System (FIMS) Web site, <http://fims.hr.doe.gov>
- u. General Accounting Office Report, NSIAD-99-100 *Military Infrastructure: Real Property Management Needs Improvement*, dated September 1999
- v. Guidance on Protection of Workers Utilizing DOE Leased Facilities, dated August 6, 1999
- w. House Conference Report 107-258, Making Appropriations for Energy and Water development for the Fiscal Year ending September 30, 2002
- x. Joint DOE/EPA Interim Policy Statement on Leasing Under the Hall Amendment, dated June 30, 1998
- y. National Association of College and University Business Officers *Managing the Facilities Portfolio—A Practical Approach to Institutional Facility Renewal and Deferred Maintenance*, 1991
- z. NISTIR 6389, *UNIFORMAT II Elemental Classification for Building Specifications, Cost Estimating, and Cost Analysis*, October 1999
- aa. Office of Management and Budget Circular A-131, *Value Engineering*, dated 5-21-93
- bb. Public Law (P.L.) 95-91, 91 Stat. 578, Department of Energy Organization Act of 1977, Section 302
- cc. P.L. 104-106, Section 4306, Value Engineering for Federal Agencies (41 U.S.C. 401 et seq.)
- dd. DOE P 455.1, *Use of Risk-Based End States*, dated 7-17-03
- ee. DOE O 433.1, *Maintenance Management Program for DOE Nuclear Facilities*, dated 6-01-01

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7. CONTACT. For answers to questions, contact the Office of Engineering and Construction Management at 202-586-1784.

BY ORDER OF THE SECRETARY OF ENERGY:



KYLE E. McSLARROW  
Deputy Secretary

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Attachment 1  
Page 1 (and Page 2)

### **DOE ORGANIZATIONS TO WHICH DOE O 430.1B IS APPLICABLE**

Except for the exclusions in paragraph 3c, DOE O 430.1B applies to all DOE elements/organizations with responsibility for real property assets, including the National Nuclear Security Administration (NNSA).

**CONTRACTOR REQUIREMENTS DOCUMENT**  
**DOE O 430.1B, *Real Property Asset Management***

This Contractor Requirements Document (CRD) establishes the requirements for Department of Energy (DOE) contractors, including National Nuclear Security Administration contractors, whose contracts involve the acquisition, management, maintenance, disposition, or disposal of real property assets. Contractors are expected to meet these functional requirements through tailoring of their business processes and management practices, and use of standard industry practices.

Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this CRD. The contractor is responsible for flowing down the requirements of this CRD to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements. In doing so, the contractor must not unnecessarily or imprudently flow down requirements to subcontracts. That is, the contractor must ensure both that it and its subcontractors comply with the requirements of this CRD and that they only incur costs that would be incurred by a prudent person in the conduct of competitive business.

The contractor provides services to DOE related to real property asset planning, real estate, maintenance, disposition and long-term stewardship (LTS), and value engineering (VE) to balance acquisition, sustainment, recapitalization and disposal to ensure that real property assets are available, utilized, and in a suitable condition to accomplish DOE's missions. (Definitions for terms used in this CRD are provided in DOE O 430.1B, Attachment 3.)

1. **PLANNING**. Based on DOE-furnished program planning guidance, the contractor must (a) assess the current real property assets against program mission projections, (b) identify the specific real property asset projects and activities required to meet program mission projections, and (c) propose a 10-year planning horizon through the development of a Ten-Year Site Plan (TYSP) or a disposition plan for closure sites. [See also paragraph 4a of DOE O 430.1B.]
2. **DOCUMENTATION**. The contractor must document its real property management activities, including (a) the site's plan to meet program missions, (b) budgets and planning estimates, and (c) performance outcomes.
3. **FACILITIES INFORMATION MANAGEMENT SYSTEM**. The contractor must maintain Facilities Information Management System (FIMS) data and records, which are DOE's corporate real property inventory database for all lands, buildings, trailers, and other structures and facilities. FIMS data must be current and verified annually.
4. **REAL ESTATE**. The contractor must—
  - a. submit all real estate actions to acquire, utilize, and dispose of real property assets to DOE for review and approval;

- b. maintain, in a complete and current condition, all real estate records identified by DOE; and
  - c. have a land-use planning and management process approved by the site Lead Program Secretarial Office.
5. MAINTENANCE. The contractor must maintain real property assets in a manner that promotes operational safety, worker health, environmental compliance, property preservation and cost-effectiveness while meeting the program missions. This requires a balanced approach that not only sustains the assets, but also provides for their recapitalization and includes the following as a minimum.
  - a. A maintenance management program that includes a condition assessment of the real property assets, a work control system, management of deferred maintenance, a method to prioritize, and systems to budget and track maintenance expenditures.
  - b. Identification of 5-year maintenance and repair requirements (sustainment) and funding for deferred maintenance reduction.
  - c. Identification of 5-year recapitalization requirements to replace or modernize existing facilities.
  - d. Condition assessments must be performed on real property assets at least once within a five-year period, and may be required more frequently for mission-essential facilities and infrastructure. The condition assessment program shall utilize a tailored approach based on facility status, mission and importance and the magnitude of the hazards associated with facilities and infrastructure. Inspection methodology shall be consistent with industry practice, and shall include identification of safety and health hazards. Deferred maintenance estimates will be based on nationally recognized cost estimating systems or the DOE Condition Assessment Information System (CAIS). The condition assessment program will support the reporting requirements of FIMS.
6. DISPOSITION AND LONG-TERM STEWARDSHIP. When DOE identifies that a program mission is no longer required, the contractor must initiate preparation of affected real property assets for disposition, including potential reuse for other missions. Disposition and LTS activities must be consistent with the guiding principles and core functions of the Department's integrated safety management and facility disposition policies. To prepare for disposition, the contractor must do the following.
  - a. Identify real property assets that are likely to be declared as excess in a 10-year planning horizon and the anticipated year of excess. This information must be included in FIMS and incorporated within the TYSP.
  - b. Develop a disposition baseline to assess and prepare the facility for disposition. Technical, programmatic, and regulatory information is to be used in the

disposition preparation and planning process. The disposition baseline must include the following information.

- (1) Identification and characterization of hazardous and radioactive materials, waste, and hazardous conditions of the real property asset.
  - (2) Surveillance and maintenance requirements needed to ensure the real property asset, including its systems, and stored hazardous materials and waste remain in a stable and known condition and that adequate protection is provided to the workers, the public, and the environment pending disposition.
  - (3) Assessment and adjustment of the facility authorization basis, as necessary, to reflect conditions and activities pending disposition.
- c. Develop a disposition plan that identifies, assesses, and evaluates alternatives and integrates environmental, safety, and health requirements into disposition activities. The disposition plan should be tailored based on the disposition baseline and disposal method to be used (e.g., reuse, demolition, or decommissioning). The disposition plan shall include the following.
- (1) A method for identifying, evaluating, and selecting disposition alternatives and LTS requirements. Selection of the preferred disposition alternative needs to be documented and be in accordance with relevant industry standards. Stakeholder involvement is required in the development of LTS plans.
  - (2) The identification and completion of required activities related to historical preservation.
  - (3) A postclosure/postdisposition/LTS records turnover or retention plan.
  - (4) Surveillance and maintenance plans for facilities and land parcels with residual contamination, hazards, or other conditions that are projected to require postdisposition LTS. These plans must identify appropriate management and funding requirements to ensure safety, health, and environmental regulatory compliance and meet relevant requirements of treaties, agreements, or other DOE commitments.
  - (5) A process to track the status of LTS actions, including gap analysis of the LTS transition framework to identify actions remaining before end-point conditions are satisfied. This should include a method to periodically reassess monitoring requirements and make any necessary revisions.
  - (6) The cost and schedule information for disposition activities and any follow on surveillance and maintenance and LTS requirements must be included in the TYSP.

- (7) The development of specific end-point criteria for declaring disposition complete.
  - (8) The use of non-time-critical removal actions under CERCLA, using a tailored process negotiated with the Environmental Protection Agency, with continued Defense Nuclear Facilities Safety Board oversight to the extent authorized by law.
- d. Summarize disposition cost and schedule information and end-point criteria in a 10-year planning horizon.
  - e. Update FIMS data fields during real property asset disposition (e.g., identified as excess, transferred to another program office, placed into inactive status, dismantled, or placed in LTS), and archive information regarding real property assets that have been disposed and add all real property related institutional controls to FIMS.
  - f. Develop a final report or equivalent document for each disposition and land parcel remediation/LTS project that describes, at a minimum, final facility status and includes information demonstrating that end-point criteria have been met.
7. VALUE ENGINEERING. The contractor must use VE techniques in a tailored manner to reduce DOE's real property asset ownership costs (e.g., acquisition, operations, maintenance, and disposal) while maintaining the necessary level of performance and safety. For real property asset acquisition, disposition, demolition, repair, and recapitalization projects where the total value for a single item of purchase or contract is expected to be greater than \$5 million, a VE assessment shall be performed. Real estate acquisitions are excluded from VE.

## DEFINITIONS

1. Alterations. Adjustments to interior arrangements or other physical characteristics of an existing facility so that it may be more effectively adapted to or used for its designated purpose. Alterations do not result in betterment to a facility. Examples of alterations are as follows.
  - Removal or installation of interior walls for purposes of rearranging the layout of an office building, and incidental heating and ventilation ducting system.
  - Modifications that do not significantly extend the capacity of the system.
  - Construction of a door or passage through an interior structural wall.
  - Installation of new lighting fixtures that do not significantly increase the lumens emitted but may result in energy or maintenance savings.
2. Annual Utilization Surveys. Annual utilization surveys are directed by Federal Property Management Regulations § 101-47.802 to determine how well the real property assets are being put to use. The survey content must address the standard specified in Federal Property Management Regulations § 101-47.801, Standards.
3. Authorization Basis. Safety documentation supporting the decision to allow a process or facility to operate. Included are corporate operational and environmental requirements as found in regulations and specific permits and, for specific activities, work packages or job safety analysis [per DOE G 450.4-1B, *Integrated Safety Management System Guide*, dated 3-1-01 (reference 1)].
4. Betterments. Capitalized improvements to facilities that result in better quality work, increased capacity, and/or extended useful life as required to accommodate regulatory and other changes to requirements. Determining when and to what extent expenditure should be treated as betterment requires judgment. The proper basis for determining whether or not betterment is effected is when the effect of the replacement is related to each unit when a minor item is replaced in each of a number of similar units, rather than to the cumulative costs. Listed below are the various terms that are commonly used to describe various categories of betterments.
  - Construction is the erection, installation, or assembly of a new plant facility; the addition, expansion, improvement, or replacement of an existing facility; or the relocation of a facility. Construction includes equipment installed in and made part of the facility and related site preparation; excavation, filling and landscaping, or other land improvements; and design of the facility. Examples of improvements to an existing facility include the following types of work.
    - (a) Replacing standard walls with fireproof walls.

- (b) Installing a fire sprinkler system in a space that was previously not protected with a sprinkler system.
  - (c) Replacing utility system components with a significantly larger capacity components (e.g., replacing a 200-ton chiller with a 300-ton chiller) and converting the functional purpose of a room (e.g., converting an office into a computer room).
- Conversion is a major structural revision of a facility that changes the functional purpose for which the facility was originally designed or used.
  - Major Renovation and Replacement is a complete reconstruction of a facility that has deteriorated or has been damaged beyond the point where its individual parts can be economically repaired. If the item replaced is a retirement unit, its original costs (including installation cost) are removed from the plant and capital equipment accounts, and the cost of the newly installed item (including installation cost) is added to the plant and capital equipment accounts.
5. Candidates for Transfer. Land and facilities that include (a) contaminated facilities for which DOE has responsibility or owns; (b) contaminated portions of facilities, if structurally independent and with separate utilities and support systems; (c) real property or related personal property that is ancillary to a candidate facility; and (d) facilities otherwise agreed to by the DOE parties involved.
  6. Certified Realty Specialist (CRS). A DOE employee who is certified in one or more of the four specialty realty areas: acquisition, non-General Services Administration leasing, General Services Administration leasing, and land management and disposal. Employees so certified are authorized to prepare and implement real estate actions within certified specialty areas. Detailed guidance and procedures for becoming a CRS are found in the DOE Real Estate Process Desk Guide for Real Estate Personnel.
  7. Cognizant Secretarial Office (CSO). A Program Secretarial Office that has responsibility as an owner for a program-specific (programmatic) facility or area present on a site that is owned by another program office [i.e., the Lead Program Secretarial Office (LPSO)]. The CSO coordinates with the site owner (i.e., the LPSO) to ensure needed infrastructure support is planned and provided for its facilities/area.
  8. Contaminated Facilities. DOE facilities that have structural components and/or systems contaminated with hazardous chemical and/or radioactive substances. This definition excludes facilities that contain no residual hazardous substances other than those present in building materials and components, such as asbestos-containing material, lead-based paint, or equipment containing PCBs. This definition excludes facilities in which bulk or containerized hazardous substances, including radionuclides, have been used or managed if no contaminants remain in or on the structural components and/or systems.

9. Corrective Maintenance. The repair or restoration of failed or malfunctioning equipment, systems, or facilities to their intended functions or design conditions. It does not result in a significant extension of the expected useful life.
10. Current Real Property Assets. The site's total area in square feet for all operating and excess facilities less (a) those excess that have been funded for disposal, including demolition, sale, and out-lease, in the enacted budget and (b) those facilities (e.g., DR reactor at Hanford) that have been deactivated and decontaminated but not fully decommissioned and are being placed into long-term stewardship. For land it is the acreage of the DOE site.
11. Deactivation. Placing a facility in a stable and known condition including the removal of hazardous and radioactive materials to ensure adequate protection of workers, public health and safety, and the environment, thereby limiting the long-term cost of surveillance and maintenance. Actions include the removal of fuel, draining and/or de-energizing nonessential systems, removal of stored radioactive and hazardous materials, and related actions. Deactivation does not include all decontamination necessary for the dismantlement and demolition phase of decommissioning (e.g., removal of contamination remaining in the fixed structures and equipment after deactivation).
12. Decommissioning. The process of closing and securing a nuclear facility or nuclear materials storage facility to provide adequate protection from radiation exposure and to isolate radioactive contamination from the human environment. It takes place after deactivation and includes surveillance, maintenance, decontamination, and/or dismantlement. These actions are taken at the end of the life of a facility to retire it from service with adequate regard for the health and safety of workers and the public and protection of the environment. The ultimate goal of decommissioning is unrestricted release or restricted use of the site.
13. Decontamination. The removal or reduction of residual chemical, biological, or radiological contaminant and hazardous materials by mechanical, chemical or other techniques to achieve a stated objective or end condition.
14. Deferred Maintenance. Maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period.
15. Disposal. Permanent or temporary transfer of DOE control and custody of real property assets to a third party who thereby acquires rights to control, use, or relinquish the property.
16. Disposition. Those activities that follow completion of program missions, including, but not limited to, preparation for reuse, surveillance, maintenance, deactivation, decommissioning, and long-term stewardship.
17. Disposition Baseline. The technical, programmatic, and regulatory information which serves as input to the disposition preparation and planning process, and is essential to

- meeting the goal of maximum risk reduction and long-term cost savings in the elimination of excess real property assets.
18. DOE Elements. First tier organizations at Headquarters and in the field (field includes all operations offices and field offices including site offices, service centers, and energy technology centers).
  19. Economic-Development Transfers. Those transfers of real property, by sale or lease, executed under the requirements and processes of 10 CFR 770, Transfer of Real Property at Defense Nuclear Facilities for Economic Development (reference b).
  20. End Point. The detailed specification of conditions to be achieved for a facility's spaces, systems, and major equipment. Fundamental to the determination of end points is risk reduction through elimination or stabilization of hazards, effective facility containment and facility monitoring and control.
  21. Excess Real Property. Land, improvements to land, or both, including interest therein, which is not required for the Department's needs or the discharge of its responsibilities. For the purposes of reporting deferred maintenance, excess real property is an asset that is on the path for disposition.
  22. Facility. Land, buildings, and other structures, their functional systems and equipment, and other fixed systems and equipment installed therein, including site development features outside the plant, such as landscaping, roads, walks, parking areas, outside lighting and communication systems, central utility plants, utilities supply and distribution systems, and other physical plant features. These include any of the DOE-owned, -leased, or -controlled facilities, and they may or may not be furnished to a contractor under a contract with DOE.
  23. Facility Condition Index (FCI). DOE adopted the FCI in 1998 as its tool for measuring the condition of its facilities. [See GAO Report, NSIAD-99-100 *Military Infrastructure: Real Property Management Needs Improvement*, dated September 1999 (reference u) and National Association of College and University Business Officers *Managing the Facilities Portfolio—A Practical Approach to Institutional Facility Renewal and Deferred Maintenance*, 1991 (reference y).] The FCI is the ratio of the cost of deferred maintenance to the facility's replacement plant value. The cost of deferred maintenance deficiencies is determined by condition assessment inspections. Facilities Information Management System data is used to calculate FCI.
  24. Field Elements. All operations offices and field offices including site offices, service centers, and energy technology centers.
  25. General Plant Projects. See the DOE Accounting Handbook, Chapter 10, "Plant and Capital Equipment."
  26. Institutional General Plant Project (IGGP). Miscellaneous minor (i.e., up to \$5 million new construction of a general institutional nature benefiting multiple cost objectives and

- required for general purpose sitewide needs. IGPPs do not include projects whose benefit can directly be attributed to a specific or single program. IGPPs are consistent with the General Plant Project threshold and capitalization criteria in the DOE Accounting Handbook, Chapter 10. Example IGPP projects are multiprogrammatic/interdisciplinary scientific laboratory, institutional training facility, sitewide maintenance facilities and utilities, new roads, multiprogrammatic office space, multiprogrammatic facilities required for “quality of life” improvements, and replacement or upgrade to a core utility, land, and facility that is no longer reliable.
27. Integrated Facilities and Infrastructure (IFI) Crosscut Budget. A crosscut budget exhibit that has been developed to ensure sustained improvement in real property management. It constitutes, with the exception of new mission line-item projects, the resources required to implement a Ten-Year Site Plan. This crosscut budget identifies renovation, recapitalization, maintenance and demolition projects for buildings and facilities by program and site. The IFI budget also includes reports on direct maintenance and an estimate of indirect maintenance and repair funding requirements. The IFI is developed in conjunction with the Department’s budgeting process and submitted annually with the Presidential Budget to Congress.
  28. Infrastructure. All real property, installed equipment, and related real property that is not solely supporting a single program mission at a multiprogram site or that is not programmatic real property at a single program site.
  29. Institutional Controls. Nonengineering measures intended to affect human activities in such a way as to prevent or reduce exposure to hazardous substances. Institutional controls are almost always used in conjunction with, or as a supplement to, other measures such as waste treatment or containment. There are four categories of institutional controls: governmental controls; proprietary controls; enforcement and permit tools with institutional controls components; and information devices (see the Environmental Protection Agency’s Comprehensive Environmental Response, Compensation and Liability Act policy definition). For this Order, institutional controls are those governmental controls such as deed notifications, easements, use restrictions, leases and other property interests that are inventoried as records and notes in records in the Facilities Information Management System.
  30. Land-Use Planning. A formal, integrated planning process that is used to identify an appropriate mix of land uses at each site and guidelines for development. [See DOE P 430.1, *Land and Facility Use Planning*, dated 7-9-96 (reference o).]
  31. Lead Program Secretarial Office (LPSO). A Program Secretarial Office (PSO) that is responsible for implementation of policy promulgated by Headquarters staff and support organizations for a field office. The LPSO owns the site, manages its own program projects, and acts as a host for tenant Cognizant Secretarial Offices/PSOs by providing facility and/or infrastructure support.

32. Life Cycle. The life of an asset from planning through acquisition, maintenance, operation, remediation, disposition, long-term stewardship, and disposal.
33. Life-Cycle Cost. The sum total of the direct, indirect, recurring, nonrecurring, and other related costs incurred or estimated to be incurred in the design, development, production, operation, maintenance, support, and final disposition of real property over its anticipated useful life span.
34. Line Item Project. Those separately identified project activities that are submitted for funding and are specifically reviewed and approved by Congress.
35. Long-Term Stewardship. The physical controls, institutions, information and other mechanisms needed to ensure protection of people and the environment at sites where DOE has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization). This concept includes land-use controls, monitoring, maintenance, and information management.
36. Maintenance. Day to day work that is required to sustain property in a condition suitable for it to be used for its designated purposes, including preventive, predictive, and corrective maintenance. Maintenance costs and work do not include the following.
  - Regularly scheduled janitorial work such as cleaning, and preserving facilities and equipment.
  - Work performed in relocating or installing partitions, office furniture, and other associated activities.
  - Work usually associated with the removal, moving, and placement of equipment.
  - Work aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from or significantly greater than those originally intended.
  - Improvement work performed directly by in-house workers or in support of construction contractors accomplishing an improvement.
  - Work performed on special projects not directly in support of maintenance or construction.
  - Nonmaintenance roads and grounds work such as grass cutting and street sweeping.
37. Mission Essential Real Property Assets. Those facilities and infrastructure assets that directly contribute to accomplishment of the program assigned missions or mitigation of environmental, safety, or health issues, which if not available, would adversely impact the mission.
38. Non-Time-Critical Removal. This is a type of response action recognized by the Environmental Protection Agency as appropriate for addressing hazardous substance threats where a planning horizon of six months or more is appropriate. Removal responses, including non-time-critical removals, are the subject of 40 CFR 300, National

- Oil and Hazardous Substances Pollution Contingency Plan, Parts 410 and 415 (reference c). Under a signed agreement with the Environmental Protection Agency (EPA), the Department uses a non-time-critical removal approach tailored for DOE's decommissioning of contaminated facilities. That approach comprises threat assessment; identification, analysis, and documentation of decommissioning alternatives; opportunities for public participation in the decommissioning decision; and planning and performance of decommissioning activities. Under the DOE/EPA agreement (reference x), regulator involvement in decommissioning is determined locally.
39. Operating Facilities. Facilities that have a Facilities Information Management System status code of operating, operating standby, operating pending excess, operating under out-grant, or operating pending decontamination and demolition/disposition.
  40. Optimum Period. That time in the life cycle of an asset when maintenance actions should be accomplished to preserve and maximize the useful life of the asset. The determination is based on engineering/maintenance analysis and is independent of funding availability or other resource implications.
  41. Performance Measures. A quantitative or qualitative characterization of performance toward an objective. [See DOE G 430.1-4 (reference j).]
  42. Performance Objective. A statement of the desired output/outcome for an organization or activity. [See DOE G 430.1-4 (reference j).]
  43. Plant, Property & Equipment. Tangible assets that meet the capitalization criteria, that are not intended for sale in the ordinary course of operations, and have been acquired or constructed with the intention of being used, or being available for use by the entity. Plant, property, and equipment includes site infrastructure.
  44. Predictive Maintenance. Those activities involving continuous or periodic monitoring and diagnosis to forecast component degradation so that "as needed" maintenance can be scheduled.
  45. Preventive Maintenance. Those periodic and planned actions taken to maintain a piece of equipment within design operating conditions and extend its life and performed before equipment failure or to prevent equipment failure.
  46. Prior Year (PY). The fiscal year immediately preceding the current year and 2 fiscal years preceding the budget year. For the field, Congressional Review, and the Office of Management and Budget, PY is the fiscal year in which the budget is being executed. For the Congressional cycle, the PY is the most recently completed fiscal year.
  47. Programmatic Real Property. Refers to reactors, accelerators, and similar devices used by programmatic personnel, acquired with line item funding, and listed in the Facilities Information Management System as "Other Structures and Facilities" under the 3200 series usage codes, such as 3209, 3221, 3251 and 3261.

48. Program Secretarial Office (PSO). A senior outlay program office which has work performed at a site, but not as the host Lead Program Secretarial Office or Cognizant Secretarial Office at that site, and provides annual program direction and guidance to the site/field manager for the work to be performed at the site, and for budgeting to support program work and an appropriate share of their tenant costs to the landlord.
49. Real Estate Actions. Documents and activities related to acquisition, management, and disposal of real property interests (e.g., easements, leases, fee title, public domain withdrawals, mineral rights). This includes, but is not limited to, land-use permits; land surveying; appraisals; market surveys; acquisitions; in-granting; out-granting; management directives; utilization surveys; encroachment; disposal of any real estate interests; disposal of Departmental improvements without the underlying land; and establishment of use restrictions, easements, and similar institutional controls.
50. Real Property Assets. Any interest in land, together with the improvements, facilities, structures, and fixtures located thereon, including prefabricated movable structures and appurtenances thereto, under the control of DOE. All real property owned by or leased to the Government or acquired by the Government under the terms of the contract. It includes both government-furnished property and contractor-acquired property as defined in Federal Acquisition Regulation 45.101. DOE-owned, -used and -controlled land, land improvements, structures, utilities, installed equipment, and components are included. Real property and real estate means land and rights in land, ground improvements, utility distribution systems, and buildings and other structures. Real Property Assets are defined by the Federal Property Management Regulations § 101-47.103-12, Real Property.
51. Recapitalization. Major renovations or reconstruction activities, including facility replacements, needed to keep existing facilities modern and relevant in an environment of changing standards and missions. This includes the restoration and modernization of existing facilities but not the acquisition of new facilities or the demolition of old ones, unless the demolition is carried out as part of a renovation project or in conjunction with construction of replacement footprint elsewhere.
52. Repair. The restoration of failed or malfunctioning equipment, system, or facility to its intended function or design condition. Repair does not result in a significant extension of the expected useful life.
53. Replacement Plant Value (RPV). Cost to replace the existing structure with a new structure of comparable size using current technology, codes, standards, and materials.
54. Site. A geographic area owned or leased by or for the account of the Federal Government for the performance of DOE program activities. The term includes any extant buildings, infrastructure and other improvements.
55. Site/Field Manager. Individual responsible for planning, programming, budgeting, and evaluation of activities in support of Secretarial office programs located on sites under his/her cognizance including host Lead Program Secretarial Office (LPSO) to tenant Cognizant Secretarial Office (CSO)/Program Secretarial Office (PSO) activities

establishing site priorities consistent with mission objectives and goals established by DOE program offices having line responsibility, leading site technical direction, preparing and defending the site budget, supporting milestones agreed to with LPSO/CSOs/PSOs, providing public and private sector liaison, expediting followup actions, and retaining overall accountability for site activities in support of program office successes.

56. Surveillance and Maintenance. Activities conducted throughout the facility life-cycle, including providing, in a cost effective manner, periodic inspections and maintenance of structures, systems and equipment necessary for the satisfactory containment of contamination, and for the protection of workers, the public, and the environment.
57. Sustainment. Maintenance and repair activities necessary to keep the inventory of facilities in good working order. This includes regularly scheduled maintenance as well as anticipated major repairs or replacement of components that occur periodically over the expected service life of the facilities.
58. Ten-Year Site Plan (TYSP). A planning document that identifies the site's annual and strategic program requirements and priorities, and links these to real property asset requirements. Real property asset requirements must be consistent with program missions, budgets, and planning estimates. Planning employs costing efficiencies, eliminates excess buildings, consolidates operations where practicable, and addresses mission-critical requirements through an appropriate mix of recapitalization, new construction, and disposal of excess facilities.
59. Total Estimated Costs (TEC). The Total Estimated Cost of a project is the specific cost of the project including cost of land and land rights; engineering, design, and inspection costs; direct and indirect construction costs; and the cost of initial equipment necessary to place the plant or installation in operation.
60. Transfer of Facilities. Transferring programmatic and financial responsibility of land and/or facilities from one program office to another.
61. Utilization Justified Assets. The summation for a site of the product of each operating facilities area, in square feet, times its utilization rate in FIMS. For land, it is the acreage of the site identified as fully utilized under an E.O. 12512 survey (reference s).
62. Value Engineering (VE). An organized effort directed at analyzing the functions of systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety. For purposes of this Order, value analysis, value management, and value control are considered synonymous with VE.

**ACRONYMS USED IN DOE O 430.1B**

ACI	Asset Condition Index
AUI	Asset Utilization Index
CAIS	Condition Assessment Information System
CAS	Condition Assessment Survey
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CRD	Contractor Requirements Document
CRS	Certified Realty Specialist
CSO	Cognizant Secretarial Office
DOE	Department of Energy
EPA	Environmental Protection Agency
FAC	FIMS Advisory Committee
FCI	Facility Condition Index
FDDC	Facilities Data Development Committee
FIMS	Facilities Information Management System
FISC	Facilities and Infrastructure Executive Steering Committee
GPP	General Plant Project
IGPP	Institutional General Plant Project
IFI	Integrated Facilities and Infrastructure
LPSO	Lead Program Secretarial Office
LTS	long-term stewardship
NEPA	National Environmental Policy Act
NNSA	National Nuclear Security Administration
OECM	Office of Engineering and Construction Management
OMB	Office of Management and Budget

PMA	Power Marketing Administration
PPBES	Planning, Programming, Budgeting, and Evaluation System
PSO	Program Secretarial Office
PY	prior year
RPV	Replacement Plant Value
TYSP	Ten-Year Site Plan
VE	value engineering

## FACILITY ASSET MANAGEMENT TOOLS

### 1. FACILITIES INVENTORY SYSTEMS.

#### a. Facility Information Management System.

- (1) The essential first step of an effective facility management strategy begins with establishing a detailed, centrally controlled, computerized database of facility inventory information. DOE has implemented the Facilities Information Management System (FIMS) as its corporate real property inventory database. FIMS must be maintained as the complete and official record of all owned and leased lands, buildings, trailers, and other structures and facilities. The Office of Management, Budget and Evaluation and Chief Financial Officer, in keeping with the Secretary's property stewardship mandate and with the Deputy Secretary's approval, issued a memorandum dated August 29, 2001, directing verification and completion of the population of FIMS by the end of FY 2002. This population effort results in up-to-date reliable real property information for DOE managers to make decisions regarding buildings, trailers, and structures.
- (2) New records and changes to the database will be reported as follows.
  - (a) Energy consumption information for buildings and trailers; deferred, required, and actual maintenance costs; last inspection date and deficiency system information for buildings, trailers, and structures; and financial adjustment information and annual rent payments for buildings, trailers, and structures must be reported on an annual basis.
  - (b) Land, transfer, withdrawals, improvements, and acquisition of leases, permits and licenses, and other actions are updated when the actions are reported and issued.
  - (c) Data closeout and financial reconciliation takes place from October 1st to October 31st of each year. Actions completed before October 1st are only permitted for entry.
- (3) The FIMS Users Guide and other documentation contain detailed information on procedures for data entry and system operation. The complete set of FIMS guides is available from the FIMS Web site at <http://fims.hr.doe.gov>.
- (4) FIMS data program office sponsors serve as the FIMS governing body, the Facilities Data Development Committee (FDDC). This committee must

review recommendations for enhancements, database element additions or deletions, and database population.

- (5) The FIMS Advisory Committee (FAC) has been established to serve as a forum for discussing and evaluating suggestions regarding development, operation, or administration of FIMS. FAC reviews are provided to the FDDC and FIMS Technical Monitor for discussion and adoption. FAC voluntary membership consists of Federal and site contractor representatives.
- (6) Real property data elements in the DOE Integrated Management Navigation System (I-MANAGE), the Condition Assessment Information System (CAIS) database, and the Office of Environmental Management Integrated Planning and Budgeting System database must be consistent with the corresponding FIMS real property data elements.

## 2. CONDITION ASSESSMENT SYSTEM.

- a. Condition Assessment System. The second step in an effective facility management strategy to know the condition of your facilities and how much it will cost to replace and repair facility systems and components. The assessment or inspection process supports the vital process of identifying facility conditions that are founded on recognized, fully defined industry based inspection and deficiency standards. An assessment program is an essential tool in determining realistic requirements needed to obtain budgetary funding. It provides a picture across a site that can be used along with mission and other prioritization criteria to direct limited resources to crucial areas. A condition assessment program is the basis for developing supportable asset management projects and funding requests.
- b. Minimum Condition Assessment System Characteristics.
  - (1) A standardized, documented inspection process that provides accurate, consistent, and repeatable results.
  - (2) A detailed, ongoing inspection of real property assets, including facilities; infrastructure; and large, in-place nonprogrammatic equipment that is validated at predetermined intervals.
  - (3) Standardized cost data using CAIS or another nationally recognized cost estimating system to determine repair and replacement costs.
  - (4) A user-friendly information management system or process that prioritizes current and anticipated maintenance and repair requirements to maximize the utilization of resources (labor and dollar) and return on investment and minimizes the cost of irreversible loss of service life and total penalty cost.

- (5) A facility condition assessment program that identifies deficiencies in order to take timely, cost-effective corrective actions. Condition assessments must involve inspections by craft or engineering specialists of all architectural, civil/structural, mechanical, and electrical components of each asset to determine asset deficiencies and must provide a comprehensive evaluation that can be used to make informed facilities management decisions.
  - (6) Condition assessments must provide for the following.
    - (a) Inspection of all assets using applicable codes and accepted industry standards.
    - (b) A tailored approach based on facility status, mission and importance and the magnitude of the hazards within the facility.
    - (c) A valid estimate of deferred maintenance costs.
    - (d) A 5-year maintenance plan based on projections of serviceability, economic life, the mission of facilities and projected funding for deferred maintenance reduction.
    - (e) Identification of safety and health hazards.
    - (f) Accurate and supportable information for budget planning and justification.
    - (g) Comparison of conditions and costs between sites and programs.
    - (h) Supportable cost estimates and funding priorities for General Plant Project (GPP), Institutional General Plant Project (IGPP), line item projects, and other site funded maintenance projects.
- c. Condition Assessment Information System Database.
- (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.
  - (2) The condition assessment data collected will feed FIMS.

**Table 1. Characteristics of a National Cost Estimating System**

1.	Costs based/adjusted to geographic locations at DOE sites.
2.	Unit costs based on maintenance, renovation and replacement costs.
3.	Unit costs cover all building systems listed in FIMS.
4.	Unit costs updated annually.
5.	Costs cover all types of properties including commercial and industrial.
6.	Cost items include current technology items.
7.	Costs classified by building elements in the UNIFORMAT II formatting system. [See NISTIR 6389, <i>UNIFORMAT II Elemental Classification for Building Specifications, Cost Estimating, and Cost Analysis</i> , October 1999 (reference z).]
8.	Unit costs based on national and international benchmarks.

## INSTITUTIONAL GENERAL PLANT PROJECTS

### 1. GENERAL.

Institutional General Plant Projects (IGPPs) are miscellaneous minor (i.e., up to \$5 million) new construction and betterment projects of a general institutional nature benefiting multiple cost objectives and required for general-purpose sitewide needs. IGPPs do not include projects whose benefit can be directly attributed to a specific or single program. Further, IGPPs may be used at the discretion of the Lead Program Secretarial Office (LPSO), Cognizant Secretarial Office (CSO), or Program Secretarial Office (PSO). They result in a renewed and revitalized infrastructure with—

- cost beneficial impact on a site's operations;
- replacement or upgrade to a core utility, land, and facility that is no longer reliable;
- improved productivity or efficiency in a core utility, land, and facility; and
- enable/facilitate world-class science and technology (e.g., attraction and retention of scientific and technical workforce).

The following are examples of IGPPs.

- Multiprogrammatic/interdisciplinary scientific laboratory and office space
- Institutional training facility
- Sitewide maintenance facilities and utilities
- New roads
- Multiprogrammatic facilities required for “quality of life” improvements

### 2. IGPP CRITERIA.

The following criteria apply to IGPPs.

- IGPP requirements are identified in the Ten-Year Site Plan (TYSP) and approved by the LPSO.
- IGPP resource requirements must be identified in the Integrated Facilities and Infrastructure Crosscut Budget.
- IGPPs are not intended for use in incremental segments to construct larger facilities including, for example, segmentation of a parking lot or utility system from the main structure it is designed to support or segmenting a single facility into separate segments located within close proximity to each other. Each IGPP must provide a complete and usable facility to satisfy mission need at the site. As part of each IGPP, the DOE field/area office manager must personally certify that the project is not part of an incremental segment such that the total would exceed the current authorized

- ceiling of \$5 million. This certification must be provided to the Headquarters program office before the start of each project and made a part of each project file.
- The program will have the contractor chief financial officer or comptroller certify that—
    - Indirect funds will not be utilized for IGPP at the expense of maintenance or any other essential facilities program.
    - The overall indirect budget will not increase to fund IGPP. Funds can be reallocated within the indirect budget to fund IGPP requirements.
  - IGPPs are consistent with DOE's existing threshold and capitalization criteria and the GPP definition contained in the DOE Accounting Handbook. A cost collection and distribution mechanism must be used to ensure there is adequate tracking and accountability for IGPPs from inception to the recording of an asset.
  - Accounting for IGPP must be in compliance with the following cost accounting standards:
    - Cost Accounting Standard 401, Consistency in Estimating, Accumulating, and Reporting Costs;
    - Cost Accounting Standard 402, Consistency in Allocating Costs Incurred for the Same Purpose;
    - Cost Accounting Standard 409, Depreciation of Tangible Capital Assets; and
    - Cost Accounting Standard 418, Allocation of Direct and Indirect Costs.

The contractor must clearly identify in its Disclosure Statement those costs that must be IGPP funded and ensure such funding is consistently applied for all such costs that are incurred for the same purpose and in like circumstances. In those instances where there are similar types of costs which are sometimes accounted for as direct and sometimes accounted for as indirect, the contractor must set forth in the Disclosure Statement the specific criteria and circumstances for making such distinctions.