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COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES

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Appendix A. Definitions

Activation. The portion of the total facility acquisition process that normally follows construction. It includes the installation of ground support equipment, the integration and checkout of combined facility and equipment systems, the installation of noncollateral equipment, and the demonstration and acceptance of an operable facility.

Adaptive Reuse Feasibility Report (ARFR). A concise report that evaluates the property against projected new construction needs of the Center over the next 3 years. The report compares the square footage, location, and layout of the facilities to determine if any of the proposed needs can be met through refurbishment and adaption of the historic property. Analysis should include some cost estimates if appropriate, i.e., if a Center is proposing to demolish a historic office building, the ARFR should evaluate any new construction proposed and determine if the existing building could be adapted to meet those needs. For example, if a new administrative building is being proposed, the ARFR could demonstrate that those needs cannot be met or are too costly. A reasonable good faith effort should be demonstrated in the ARFR.

Addition, Expansion, Extension. A physical increase to a real property facility that adds to the overall dimension of the facility.

Administrator. The top executive of NASA.

Agency. Any executive department, commission, authority, administration, board, or other independent establishment in the executive branch of the Federal Government, including any corporation wholly or partly owned by the United States that is an instrumentality of the United States. The term as used herein does not include the municipal government of the District of Columbia.

Apportionment. The act of distributing according to a plan or setting apart for a special purpose. OMB is responsible for apportioning NASA's appropriated funds.

Appropriation. Statutory authority that allows Federal agencies to incur obligations and make payments out of the U.S. Treasury for specific purposes. An appropriation usually follows enactment of authorizing legislation. The following is a list of typical appropriation terms:

- a. **Annual Appropriation.** An appropriation that is available for incurring obligations only during one fiscal year specified in the annual Appropriation Act.
- b. **Continuing Appropriation.** An authority to incur obligations until funds are exhausted or to achieve a specific objective.
- c. **Current Appropriation.** An appropriation that is available for obligation during the current fiscal year.
- d. **Lump Sum Appropriation.** An appropriation in a specified amount made for a complete program without prescribing limitation of outlays within the stated purpose and amount.
- e. **Multiple-Year Appropriation.** An appropriation that is available for incurring obligations for a definite period in

excess of one fiscal year (e.g., CoF).

f. **No-Year Appropriation.** An appropriation that is available for incurring obligations for an indefinite period.

g. **One-Year Appropriation.** An appropriation available for obligations only during one specified year.

At-Risk Project. A project for which one of the following applies:

a. Final design has not started by the end of May preceding the fiscal year in which the project is proposed for Congressional authorization or not completed by February of the fiscal year in which the project was authorized and appropriated.

b. The project scope as presented to Congress has significantly changed.

c. Construction award has not been made or is not scheduled to occur by the end of the fiscal year in which the project was authorized and appropriated.

d. The projected growth exceeds \$500,000 for a discrete project or 25 percent of its budget authority for a minor project.

Authority Having Jurisdiction. The person at a NASA Center to whom the Center Director has delegated the authority to ensure compliance with NASA-STD-8719.11 and to approve the Certificate of Occupancy (both Temporary and Permanent) for a building.

Authority to Advertise. The authority received from FED to move forward with a design or construction procurement.

Authorization. A legislative act authorizing money to be spent for Government programs that specify a maximum spending level without provision for actual funds.

Beneficial Occupancy. Limited acceptance and approval by the Authority Having Jurisdiction for occupancy prior to a facility's construction completion and acceptance.

Beneficial Occupancy Date. The date a contractor releases and NASA assumes occupancy of a facility or portion of a facility.

Bid Opening Date. The date when all sealed bids must have been received by the Government and when all bids are opened and recorded for an Invitation for Bid.

Brief Project Document. See Facility Project-Brief Project Document.

Budget. A formal estimate of future revenues, obligations to be incurred, and outlays to be made during a defined period and, when determined to be appropriate, based on accrued expenditures and costs to be incurred.

Budget Cycle. The period that elapses from the initiation of the budget process to the completion of the budget process for a particular fiscal year.

Budget Estimate. A fund requirement for any element included in a budget. Collectively, all estimated fund requirements for a particular operating agency or component or consolidation thereof.

Budget Process. The process encompassing all phases of funding formulation through execution.

Budget Year. The fiscal year of execution, covering the period from October 1 through September 30 (see "Fiscal Year").

Building Information Modeling (BIM). A parametric, computable representation of a facility's project design and construction details integrated into a single model. This model can be used for design, analysis, estimating, detailing, fabrication, construction, operation, and/or maintenance of the facility project and/or any portion or element of the facility project.

Category A. Used for minor projects to indicate that the requirement for the project was included in a Congressional budget submission. For substitution projects, see "Modification."

Category C. Used for projects requesting funds that had not been part of the President's Budget.

Centers. Primary NASA field installations, each led by a Center Director. The following are Centers:

a. Ames Research Center (ARC).

b. Dryden Flight Research Center (DFRC).

- c. Glenn Research Center (GRC) at Lewis Field.
- d. Goddard Space Flight Center (GSFC).
- e. Jet Propulsion Laboratory, a Federally Funded Research and Development Center.
- f. Johnson Space Center (JSC).
- g. Kennedy Space Center (KSC).
- h. Langley Research Center (LaRC).
- i. Marshall Space Flight Center (MSFC).
- j. Stennis Space Center (SSC).

Center Director.

The top executive at a NASA Center.

Center Master Plan.

A Center's statement of its concept for the orderly management and future development of the Center's real property assets, including land, buildings, physical resources, and infrastructure. It provides a narrative, statistical, and graphic record of current capabilities and conditions (natural features, buildings, structures, utilities, transportation systems, and other improvements), as well as necessary changes to support program and institutional activities and NASA's strategic and business planning.

Certificate of Occupancy.

A certificate issued after construction completion by the Center's Authority Having Jurisdiction to certify that the facility is ready for occupancy.

Change in Scope. A change in objectives, work plans, or schedules that results in a material difference from a prior approval from a higher authority.

Change Order. A written direction from the CO to the contractor modifying the contract as awarded.

Chief Financial Officer. The official in charge of all fiscal and financial plans and operations.

Collateral Equipment. Building support equipment and large, substantially affixed equipment/property (also see "[Noncollateral Equipment](#)"). It is normally acquired and installed as a part of a facility project and includes the following:

- a. Building support equipment that normally is required to make a facility useful and operable. It is built-in to the facility, and its removal would impair the usefulness, safety, or environment within the facility; e.g., elevators, transformers, compressors, heaters, ventilators, and air-conditioners. It also includes systems and subsystems such as electrical, plumbing, pneumatic, fire protection, fire suppression, control systems, and monitoring systems.
- b. Large, substantially affixed equipment or property of any type other than building support equipment that is built-in such that the installation costs including building envelope modifications, special foundations, and utility service exceed \$300,000.

Commissioning. A quality process emphasizing procedures to ensure that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the owner's project requirements.

Commitment. When funds are set aside for a particular purpose, but not yet obligated. Issuing a purchase request is an example of a commitment.

Completion Date. The date on which the Government accepts all contract deliverables.

Component Facilities. NASA installations geographically separated from the NASA Centers to which they are assigned (see "Centers"). The Component Facilities annotated with their assigned NASA Centers are as follows:

- a. Deep Space Network, Goldstone, CA; Canberra, Australia; Madrid, Spain; (JPL).
- b. Ground Network at KSC (GSFC).
- c. Independent Verification and Validation Facility (IV&V) (GSFC).
- d. Michoud Assembly Facility (MAF) (MSFC).

- e. NASA Management Office (NMO)/JPL (HQ/Science Mission Directorate).
- f. Palmdale (DFRC).
- g. Plum Brook Station (PBS) (GRC).
- h. Santa Susana Field Laboratory (MSFC).
- i. Space Network (White Sands, NM) (GSFC).
- j. Wallops Flight Facility (Wallops Island, VA) (GSFC).
- k. White Sands Test Facility (WSTF) (JSC).

Computerized Maintenance Management System (CMMS).

Computer software that is used to monitor, plan, and schedule facility and equipment maintenance functions. The software provides historical data, report writing capabilities, job analysis, and more. The data in the system describes equipment, parts, jobs, crafts, costs, step-by-step instructions, and other information involved in the maintenance effort. This information may be stored, viewed, analyzed, reproduced, and updated with just a few keystrokes. The maintenance-related functions typically include the following:

- a. Facility/equipment inventory.
- b. Facility/equipment history.
- c. Work input control.
- d. Job estimating.
- e. Work scheduling and tracking.
- f. Preventive and predictive maintenance.
- g. Facility inspection and assessment.
- h. Material management.
- i. Utilities management.

Constructability. A review of the design documents from a practicality, cost effectiveness, and efficiency perspective. The review includes verifying the integration and coordination of the drawings with the various professional disciplines and the clarity of the design. It also includes a review for maintainability and operability.

Construction. The erection or modification of real property required to support a new capability including additions, sidewalks, parking lots, driveways, and upgrades. This includes alterations to existing facilities that change the original purpose of the facility; e.g., remodeling a warehouse, or portion thereof, into office space.

Construction Completion. Final inspection has been completed and the facility is accepted in the following manner:

- a. Construction was in accordance with the plans and specifications.
- b. All construction deficiencies noted on the "punch list" were corrected.
- c. The contractor or construction agency acknowledged the listed deficiencies and ensured corrective action within the contract.

Construction Contractor. A business entity (i.e., person, corporation, partnership, or joint venture) that has satisfied the CO that they are qualified to perform the work as described in the construction contract documents.

Construction of Facilities. A NASA corporate program that funds planning for future facility needs, design of facilities projects, revitalization projects (repair, rehabilitation, and modification of existing facilities), construction of new facilities, and acquisition of collateral equipment.

Contingency (Construction). An allowance included in a construction cost estimate to cover uncertainties during the construction phase of the project; for example, changes in site conditions or construction interferences.

Contingency (Design). An allowance included in the engineering estimate to allow for added unanticipated costs due to design uncertainties and incomplete or changing user requirements.

Contract. Either an agreement or an order for the acquisition of supplies or services signed by a CO.

Contract Award Date. The date the CO signs the contract.

Contracting Officer (CO). Any person who has the authority to acquire, administer, or terminate contracts. The term includes specifically authorized representatives of the CO acting within the limits of their authority as delegated by the CO.

Contracting Officer's Representative (COR). An authorized representative with technical understanding of the project and acting under the authority delegated by the CO.

Contractor Safety and Health Plan.

A comprehensive written document, specific to the scope of work and applicable to all subcontractors, explaining how the construction contractor affirmatively and proactively assesses work for hazards; complies with applicable Federal, State, local, and NASA health and safety requirements; and provides controls for the specific hazards identified.

Current Cost Estimate. An estimate that is the latest and best professional cost estimate for a given project at any given time during planning, design, or construction. It is the estimated cost for labor, materials, and services to complete a planned facility project. It includes an estimate for land acquisition, site work, construction, and the purchase and installation of collateral equipment. It must include a reasonable estimate for contingencies. If a construction agent is to manage the project for NASA, this estimate includes the agent's contract cost.

Current Year. The present fiscal year (October 1 through September 30).

Data Call. A FED request to identify institutional CoF project requirements as part of the Capital Facility Investment Program.

Deconstruction. The disassembly of a facility by the careful salvaging of reusable or recyclable elements. This method is preferable to Demolition, because it diverts salvageable equipment and materials for reuse instead of disposal into landfills.

Demolition. The tearing down of a facility to clear a site by total destruction or the removal of parts of a building to alter it. Demolition projects (see section 1.1.1.3) are focused on reducing the Center's real property footprint.

Design. The process of developing, planning, and communicating project requirements into workable drawings and specifications to accomplish the project within the established scope, objectives, and budget. This encompasses both the preliminary design and final design for facility projects. It also includes providing cost estimates, design analysis, and construction schedule for the planned project at each design review stage.

Design Review. A collaborative effort during which users and technical experts verify that the design adequately addresses the project scope, objectives, and technical requirements (typically at the 30-percent, 60-percent, and 90-percent design milestones).

Direct Costs. A price that can be completely attributed to the production of specific goods or services. Direct costs refer to materials, labor and expenses directly related to the accomplishment of a contract.

Discrete Facility Project. A CoF project with an estimated cost of \$10 million or more.

Dissenting Opinion. A substantive disagreement with a decision or action that is based on a sound rationale (not on unyielding opposition) that an individual judges is not in the best interest of NASA and is of sufficient importance that it warrants a specific review and decision by higher level management, and the individual specifically requests that the dissent be recorded and resolved by the Dissenting Opinion process.

Drawings. Graphic representations on either electronic media or paper that convey the intent of the project requirements.

Electronic Security Systems. That part of physical security concerned with safeguarding personnel and property by use of electronic systems. These systems include, but are not limited to, intrusion detection systems (IDS), enterprise physical access control systems (EPACS), and closed circuit television systems (CCTV).

Emergency Repair. Restoration of an existing facility or component(s) after a major breakdown or accident, as authorized by the National Aeronautics and Space Act of 1958, as amended. HQ FED defines "emergency" as so urgent that it cannot wait to go through the normal budget cycle or process. For all emergency repairs, the replacement of components or materials will be of the size or characteristic currently required to meet demands or needs.

Energy Savings Performance Contracts. A partnership between a Federal agency and an energy service company (ESCO). The ESCO conducts a comprehensive energy audit for the Federal facility and identifies

improvements to save energy and water. In consultation with the Federal agency, the ESCO designs and constructs a project that meets the Agency's needs and arranges the necessary funding. The ESCO guarantees that the improvements will generate energy and water cost savings sufficient to pay for the project over the term of the contract. After the contract ends, all additional cost savings accrue to the Agency.

Enhanced Commissioning. A set of best practices that go beyond fundamental commissioning to ensure that building systems perform as intended by the owner. These practices include designating a commissioning authority prior to the construction documents phase, conducting commissioning design reviews, reviewing contractor submittals, developing a systems manual, verifying operator training, and performing a post-occupancy operations review.

Enhanced Use Lease (EUL). A real estate agreement that grants to others, by lease, the use of underutilized NASA real property including land, buildings, and other structures. The NASA Center and HQ retain the proceeds derived from such a lease for use as authorized by Public Law 108-7 section 418, as amended. For more information, see [NPR 8800.15, Real Estate Management Program](#) and [The Enhanced Use Leasing Desk Guide](#).

Environmental Analysis. The process of making the initial evaluation of the environmental considerations of a proposed action including alternative proposals.

Environmental Assessment (EA). One of three possible documents required for compliance with the National Environmental Policy Act (NEPA) process. The three documents in order of increasing effort and cost are a Categorical Exclusion (CATEX), an EA, and an Environmental Impact Statement (EIS). The EA is the correct path when the environmental impact is low, but does not qualify as a CATEX. For details, contact the Center Environmental Management Office.

Environmental Impact Statement (EIS). A document developed through the NEPA process when the impact to the environment is significant; e.g., a change in mission to a Center or the Agency with significant environmental ramifications—air/water quality, noise, soil contamination, or an increased risk (perceived or real) to the public. For details, contact the Center Environmental Management Office.

Equipment/Property. Equipment within NASA classified as either "personal property (other terms: noncollateral or accountable)" or "real property installed equipment (collateral)." Personal property is equipment whose maintenance, repair, and replacement are the responsibility of the NASA program owning it. All personal property equipment has attached property tags in the form of NASA bar codes. Real property installed equipment is equipment that is capitalized on the Real Property Inventory by the Center Real Property Accountability Officer.

EUL Net Revenue. The amounts of cash consideration received for an EUL in excess of the full costs to NASA in connection with the lease.

Facilities Maintenance. The recurring day-to-day work required to preserve facilities (buildings, structures, grounds, utility systems, and collateral equipment) in such condition that they can be used for their designated purpose over an intended service life. It includes the cost of labor, materials, and parts.

Facility. Land, buildings, structures, and other real property improvements including utility systems and collateral equipment. The term does not include operating materials, supplies, special tooling, special test equipment, or noncapitalized equipment (see the [Financial Management Manual](#) for criteria for capitalized equipment).

Facility Acquisitions. The acquisition of an interest in land, buildings, other structures and facilities, or leasehold improvements. The normal facility acquisition methods include purchase, transfer, lease, easement, use permit, and rights of way.

Facility Activation. The process of preparing or outfitting a facility for use when a Construction of Facilities project is substantially complete. This includes, but is not limited to, such activities as installation of noncollateral equipment, connection of noncollateral equipment to its interfaces, checkout of systems, and validation activities in support of operational readiness testing.

Facility Need Date. The date when a facility is required for a specific purpose, such as to receive program hardware for test and checkout. First operational use of the facility completes this milestone.

Facility Outfitting. See "Outfitting."

Facility Project. The consolidation of facility work items including related collateral equipment required to provide a complete and usable facility.

Facility Project-Brief Project Document (NASA Form 1509). A multipurpose document that must be used for all facility projects estimated to cost \$100,000 or more, regardless of location or source of funding.

Facility Project Cost Estimate (NASA Form 1510). The form on which the approved facility project cost estimate (AFPCE) is further detailed beyond the summary in [NASA Form 1509](#).

Facility Project Manager (FPM). The individual responsible for organizing, managing, and directing the activities to accomplish facility work within schedule and cost. Different individuals may fill this role at different phases of a project.

Failure Modes and Effects Analysis (FMEA). A process used to determine which parts fail, why they usually fail, and what effect their failure has on the total system. This is an element within Reliability Centered Maintenance (RCM) (see [Reliability Centered Maintenance Guide for Facilities and Collateral Equipment](#)).

Federal Agency. A specific organization established by an executive, legislative, or judicial branch of the U.S. Government.

Fiscal Year. The 12-month period from October 1 through September 30 as established each year by the U.S. Government.

Five-Year Plan. A list by fiscal year of projects that meet the functional requirements needed to achieve a Center's assigned mission.

Flash Bid Report (NASA Form 1579). A form that summarizes the results of a project bidding process.

Fragmentation. The planning, development, or execution of two or more interdependent projects to circumvent the appropriate budget approval process.

Full Disclosure Concept. The concept that project documentation outlines all reasonably identifiable elements of cost necessary to achieve a fully operable facility for all stages of planning, approval, and management of a facility project. The estimated cost of the facility project must include every associated element of real property including non-collateral equipment. It must also identify all other equipment required to the extent practicable (see Appendix D, Facility and Other Related Costs, for a listing of items and types to include).

Full Funding. The provision of funds to cover the complete and entire cost of a project including the design, construction, and activation phases and all activities necessary to support those phases.

Fund. A sum of money authorized by law and set aside for use for specified purposes.

Funding. The issuance of funds to incur commitments, obligations, and disbursements.

Government-Furnished Property. Property owned by the Government and provided to a contractor for use in the performance of a contract.

Ground Support Equipment. Nonflight equipment, implements, and devices required for handling, servicing, inspecting, testing, maintaining, aligning, adjusting, checking, repairing, and overhauling an operational end item or a subsystem or component thereof. This may include equipment required to support another item of ground support equipment as defined in the previous sentence.

Historic Preservation Officer. A NASA employee who is designated by the Center Director and given the responsibility of managing cultural resources at the Center or Component Facility, if any, pursuant to NHPA, ARPA, NAGPRA, and other legal authorities, as identified in NPR 8510.10.

Improvements. An addition to land, buildings, other structures, and attachments or annexations to land that is intended to remain so attached or annexed, such as sidewalks, drives, tunnels, utilities, and installed collateral equipment.

Indirect Cost. Labor and material costs that are not related to specific projects.

Investment Value. The implementation price for ESPC and UESC projects to survey, study, design, construct, and commission to acceptance. This includes indirect costs such as overhead and profit but does not include government payments to the contractor during the performance period term for debt repayment and services such as maintenance, measurement, and verification.

Invitation for Bids. The solicitation documents used to acquire a project requirement under sealed bidding rules in the FAR and NASA FAR Supplement.

Land Acquisition. An acquisition of title to land including any interest in the land such as mineral and water rights, easements, rights of way, or interagency permits whether obtained by purchase or other means.

Lease. An instrument conveying an interest in land, buildings, or other structures and facilities for a specified term in

consideration of payment of a rental fee. A lease is revocable as specified by the terms of the instrument.

Life-Cycle Cost. An estimate of the economic impact over a selected design life of a project or project alternative. This estimate includes first cost, energy consumption, periodic replacement of equipment or materials, operations, maintenance, and residual value.

Limitation. A statutory or administratively imposed restriction within an appropriation or other authorization act that establishes the maximum threshold for a specific purpose.

Long-Lead Items. Items that, because of their complexity of design, complicated manufacturing processes, or limited production, require an extraordinary length of time for delivery.

Maintainability. The design, installation, and operational characteristics of an item used for ease of keeping it operational, e.g., designed access to a chiller's coils for easy cleaning.

Maintenance. See "Facilities Maintenance."

Major Facility Work. See "Discrete Facility Project."

Major Renovation. A repair project on an existing facility that exceeds 50 percent of the replacement value for the space in question.

McKinney Act. The McKinney-Vento Homeless Assistance Act (42 U.S.C. §11411), commonly called the Homeless Assistance Act, or McKinney Act, requires Federal agencies to identify and make available excess Federal real property, such as buildings and land, for use by States, local governments, and nonprofit agencies to assist the homeless.

Negotiation. The method of making purchases and contracts without using sealed bidding procedures.

New Capability. A facility project that supports new programmatic or institutional requirements. This includes projects for the rehabilitation/modernization and repair of existing facilities when the facility supports new programmatic or institutional requirements.

New Construction. A facility project where new real property is built. See definition of "Construction."

Nonappropriated Funds. Funds not associated with an appropriation such as funds received through international cooperation, gifts, donations, and NASA exchanges.

Noncollateral Equipment. Equipment other than collateral equipment that, when acquired and used in a facility or a test apparatus, can be severed and removed after erection or installation without substantial loss of value or damage to the premises where installed.

Notice to Proceed. The date a CO directs a contractor to start work.

Obligation. The award of a contract or purchase order by a CO to satisfy a contractual agreement. See also Commitment. After funds are committed on a purchase request, the CO acquires a contract with a construction contractor. Obligation occurs at the time the contract is signed.

Operational Readiness Review. The final NASA review of a facility immediately prior to placement into its intended operation.

Operations and Maintenance (O&M) Manuals. Organized procedural information specifying methods of operating and maintaining building systems, collateral equipment, and support equipment. O&M personnel use the manuals in the performance of day to day tasks. Preferably, the manuals are in an electronic format.

Outfitting. The process of equipping a facility for its intended purpose during activation.

Option. A unilateral right in a contract by which, for a specified time, the Government may elect to purchase additional supplies or services called for by the contract or may elect to extend the term of the contract.

Partnering. A Government contractor relationship to foster the achievement of mutually beneficial goals (see [NFS, 48 C.F.R., Chapter 18, Part 1836 Subpart 1836.70](#)).

Past-Year. The fiscal year immediately prior to the current fiscal year.

Payback. The amortization period defined in years calculated by dividing the total budget estimate by the total expected discounted annual savings.

Power Purchase Agreement. A partnership authorized or allowed by some States, between a Federal agency and

a renewable energy developer. The developer installs a renewable energy system on Federal land or facilities. In exchange, the Federal agency agrees to purchase the power generated by the system throughout a contract term per a contract rate. These power purchase payments repay the developer over the contract term. The developer owns, operates, and maintains the system for the life of the contract.

Predictive Testing & Inspection (PT&I). The use of advanced technology to assess the condition of equipment, utilities, and systems. When using RCM, the PT&I data obtained allows for planning and scheduling preventive maintenance or repairs prior to failure.

Procurement. The purchase, rent, lease, or other acquisition of supplies, services, or facilities. It includes all functions that pertain to the acquisition of supplies and services including description, but not determination of requirements, selection, and solicitation of sources; preparation and award of contract; and all phases of contract administration.

Program Offices. Headquarters organizational elements, such as the following:

- a. Human Exploration & Operations Mission Directorate.
- b. Aeronautics Research Mission Directorate.
- c. Science Mission Directorate.

Progress Payment. A partial expenditure of funds made to a contractor as work progresses.

Project. A specific investment that has defined goals, objectives, requirements, life-cycle costs, a beginning, and an end. A project yields new or revised products or services that directly address NASA's strategic needs.

Project Definition Rating Index (PDRI). A Construction Industry Institute best practice tool used in front-end planning to determine how well a project is defined. This tool is used throughout project development, but is scored at the 30-percent design stage. The scoring system is based upon a 1000-point scale, and a low score (i.e., 200 or less) reflects a well-defined project.

Project Scope. The description of a facility project limits, objectives, and planned result. The scope of a facility project typically includes a description of its location, purpose, capabilities, capacity, physical dimensions, configuration, and utilities affected.

Project Team. The team responsible for organizing, managing, and directing facility project work. It includes all project stakeholders, such as representatives from the using organization, safety, engineering, fire protection, security, environmental, acquisition, operations and maintenance, and technicians.

Purchase Request/Purchase Order. A document or electronic file used to convey funds to the CO. It also describes the supplies or services required and includes a Government cost estimate for those supplies or services.

Real Property. Land, buildings, structures, utility systems, improvements, and appurtenances permanently annexed to land. The term real property also includes installed collateral equipment.

Recapitalization. The process by which NASA renews its real property assets over the entire service life of its facility inventory in order to maintain operational capability. Implementation can occur through restoration and modernization of existing structures or through total replacement. The process may include phased replacement of entire systems or subsystems over long periods, or a single replacement project.

Related Costs. Estimated cost elements of project work that are not included in the facility project cost estimate (see Appendix D for more detailed information)

Reliability Centered Building and Equipment Acceptance Guide. A technical reference, the Reliability Centered Building and Equipment Acceptance Guide (RCBEA) is for design engineers, project and program managers, construction managers and inspectors, quality control personnel, and NASA quality assurance staff to use prior to and during the equipment startup/checkout phase of new construction, repair, or rehabilitation projects. It focuses on the use of Predictive Testing and Inspection (PT&I) technologies by the contractor to detect latent manufacturing and installation defects as a normal part of the contractor's quality control program.

Reliability Centered Maintenance (RCM). A process used to determine the most effective approach to maintenance. It involves identifying actions that, when taken, will reduce the probability of failure and are the most cost effective. It seeks the optimal mix of Condition-Based Actions, other Time- or Cycle-Based actions, and a Run-to-Failure approach (see [Reliability Centered Maintenance Guide for Facilities and Collateral Equipment](#) and "Predictive Testing & Inspection").

Renewal Rate (Yearly). The Current Replacement Value (CRV) in dollars divided by the revitalization investment

expressed in dollars per year.

Renovate/Repair/Replace. Work required to restore a facility or component to its originally intended condition, capacity, efficiency, or capability.

Resources. Actual assets of a governmental unit, such as funds, human resources, and materials.

Resources Authority Warrant. A document granting authority to initiate, commit, obligate, and outlay funds for approved projects and activities.

Revitalization. Substantial renewal and upgrade work on the physical plant to meet current and future needs, thereby extending its useful life; e.g., a facility project that extends the useful service life beyond the original design life.

Salvage. Property that has some value in excess of its basic material content but is in such condition that it has no reasonable prospect of use for any purpose as a unit, and its repair or rehabilitation for use as a unit is clearly impracticable.

Site Activation Need Date.

The date equipment/Ground Support Equipment is required to support installation and validation. Uncrating, inspecting, and handling time must be allowed for in establishing this date.

Space Act Agreement Maker (SAAM). A Web-based software product that allows for a systematic routing of funding requests within NASA. It records the electronic approval and related stipulations of required reviewers or their identified alternatives.

Spare. An item peculiar to a system or end item held in reserve or for backup.

Specifications. A completely, precisely, and verifiably prescribed requirement, design, behavior, or characteristic of a system or system component.

Specifications Kept Intact (SpecsIntact). The NASA standard construction specification system.

Statutory Limitation. See "[Limitation](#)."

Substantial Completion. The status of a facility project that has been inspected and discrepancies recorded on a "punch list."

Supervision, Inspection, and Engineering Services (SIES). A funding allowance used to provide the necessary controls and management during construction and deliverables such as as built drawings and O&M manuals.

Sustainability. An overarching concept incorporating appropriate sustainable design practices, maintainable design elements, building commissioning processes, safety, health and security features into facility planning, design, construction, activation, operation and maintenance, and decommissioning to enhance and balance facility life-cycle cost, environmental impact, and occupant health, safety, security, and productivity. Done properly, sustainability will optimize the facility acquisition process to ensure the "best fit" of the built environment to the natural environment. It requires a practical and balanced approach to responsible stewardship of natural, human, and financial resources.

Sustainment. A parametric estimated cost to keep facilities in an acceptable condition. This is the lowest recommended funding level for facility maintenance.

Total Building Commissioning. As defined by the Government Accountability Office (GAO), the process for achieving, validating, and documenting that the performance of the total building and its systems meet the design intent and requirements of the owner.

Utility Energy Services Contract (UESC). A partnership between a Federal agency and a serving or franchised utility company. The utility company arranges funding to cover the capital costs of a project, which are repaid over the contract term from cost savings generated by the energy efficiency measures.

Validation. Verification that the equipment/system meets the operational needs of the O&M user. It is part of the turnover process from the design agency to the O&M agency.

Value Engineering. The systematic application of recognized techniques to determine the lowest practical overall cost of a facility consistent with the requirements of performance, reliability, and maintainability.

Work Breakdown Structure. A product-oriented hierarchical division of the hardware, software, services, and data required to produce the program/project end product(s) structured according to the way the work will be performed, reflecting the way in which program/project costs, schedule, technical, and risk data are to be accumulated,

summarized, and reported.

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