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

POLICY

SUBJECT: PROGRAM MANAGEMENT

PURPOSE AND SCOPE

To establish the Department of Energy's (DOE) expectations for program management to accomplish the Agency's mission and goals efficiently and effectively per various statutory, regulatory, administrative, and agency requirements, including:

- Public Law (P.L.) 112-74, *Consolidated Appropriations Act, 2012*;

- P.L. 114-264, *the Program Management Improvement Accountability Act*; and

- P.L. 115-435, *Foundations for Evidence-Based Policymaking Act of 2018.*

DOE programs cover a wide spectrum of activities, including mission support, research and development, high risk/high uncertainty technology sharing, weapons refurbishment, power marketing, and acquisition of capital assets. DOE's program diversity necessitates the tailored application of program management guiding principles to accommodate the requirements of each program.

Departmental Elements are responsible for implementing this policy and ensuring that program managers (PgMs) and program staff have the necessary skills and experience commensurate with the complexity and size of the program. The policy applies to programs that acquire capital assets and those that do not. Additional DOE policy concerning program and project management for acquisition of capital assets is covered by DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, current version.

POLICY

Departmental programs execute programs effectively while maintaining the safety and security of workers, the public, and the environment. The framework for Departmental programs is depicted in Appendix A, *DOE Program Management Framework and Context*. Programs develop accurate government requirements, define measurable performance standards, and manage life-cycle activities to achieve intended outcomes.

Departmental Elements ensure that program managers (PgMs) and program staff have the necessary skills and experience commensurate with the complexity and size of the program. The Chief Human Capital Officer (CHCO) assists Departmental Elements with development of position descriptions by outlining capabilities and competencies for program managers and program staff. Departmental Elements ensure program managers and program staff receive training commensurate with their duties and aligned with applicable government and industry standards. The Chief Learning Officer (CLO) will develop a PgM Competency Model and Career Path to assist in developing and documenting such training.

GUIDING PRINCIPLES OF PROGRAM MANAGEMENT

The Department has adopted the following program management guiding principles for efficient and effective program execution. The principles are to be applied using a graded approach to ensure the level of implementation is commensurate with program scope, complexity, and capability (see Appendix B, *Program Complexity and Capability*):

1. DECISION POINTS. Planning, Programming, Budgeting, and Execution (PPBE) phases, as referenced in DOE O 130.1A, *Budget Planning, Formulation, Execution and Departmental Performance Management*, are established as part of a tailored approach, considering the size and complexity of the program, to manage program activities and make critical programmatic decisions. Establishing these phases is central in the identification and execution of programs in the Department.

2. ROLES AND RESPONSIBILITIES. Roles and responsibilities of program managers are clearly defined.

3. REQUIREMENTS. Program requirements are established and aligned to government policy, Department priorities, and organizational objectives.

4. RISK. Risk management principles and practices are implemented.

5. GOVERNANCE. Governance, management frameworks, and controls are appropriate to the work and level of risk. A structure for appropriate line management authority approvals is established for various phases of the program throughout its life cycle, as applicable, considering the complexity and capability of a program.

6. QUALITY MANAGEMENT. Work is defined, planned, monitored, and controlled to achieve the necessary level of quality.

7. PROGRAM PLANNING. Program plans and strategies are documented to formally express organization concept, vision, mission, and expected benefits of the program.

8. COST ESTIMATION. Forecasting program cost is essential to delivering the program within budget.

9. SCHEDULING. Determining and sequencing program activities is critical to meeting program delivery expectations.

10. PERFORMANCE REPORTING/MONITOR AND CONTROL. Performance Reporting of actual progress against the plan is periodically communicated to line authority.

11. EVIDENCE-BASED DECISION MAKING. Program evaluations are conducted periodically (e.g., annually, triennially, etc.) to confirm effectiveness, efficiency, and relevance of DOE programs.

12. CONTINUOUS IMPROVEMENT. Experience and lessons are captured, stored, shared, and used to improve future performance of personnel and processes.

13.   MAINTAIN COMPETENT WORKFORCE. Planned work is consistent with available resources and administered by people who have the required capability and capacity. Continuity/succession planning and recruitment activities are implemented to sustain programs.

For supplementary considerations, see Appendix C, *Supplementary Considerations*. These supplementary considerations are to be applied using a graded approach to ensure the level of implementation is commensurate with program scope, complexity, and capability.

REFERENCES

- Public Law (P.L.) 97-255, *Federal Managers' Financial Integrity Act of 1982 (FMFIA)*: https://www.congress.gov/bill/97th-congress/house-bill/1526

- OMB Memorandum M-16-17, *OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control*: https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2016/m-16-17.pdf

- OMB Memorandum M-18-19, *Improving the Management of Federal Programs and Projects through Implementing the Program Management Improvement Accountability Act (PMIAA)*, June 25, 2018: https://www.whitehouse.gov/wp-content/uploads/2018/06/M-18-19.pdf

- OMB Memorandum M-20-12, *Phase 4 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program Evaluation Standards and Practice*s), March 10, 2020: https://www.whitehouse.gov/wp-content/uploads/2020/03/M-20-12.pdf

- DOE Order 130.1, *Budget Planning, Formulation, Execution and Departmental Performance Management*, current version: https://www.directives.doe.gov

- DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*, current version: https://www.directives.doe.gov

- DOE Order 414.1, *Quality Assurance*, current version: https://www.directives.doe.gov

- DOE Order 415.1, *Information Technology Project Management*, current version: https://www.directives.doe.gov

CONTACT

Office of Strategic Resources Analysis (CF-33).

BY ORDER OF THE SECRETARY OF ENERGY:

DAVID M. TURK
Deputy Secretary

APPENDIX A
DOE PROGRAM MANAGEMENT FRAMEWORK AND CONTEXT

Program Management is the coordinated application of general and specialized knowledge, skills, expertise, and practices to a program for effective implementation. Effective program management requires programs be managed by individuals and organizations, working in concert to achieve benefits and advance outcomes toward accomplishment the agency's mission, goals, and objectives. Program management is differentiated from either portfolio or project management as scope, scale, and requirements vary. DOE elements will use the framework provided below to identify their programs:

- **Enterprise Management** is at the Departmental level and provides broad guidance as to the execution of the Agency's Strategic Plan. Decisions and levels of authority reside with the Secretary of Energy, Deputy Secretary of Energy, and Undersecretaries.

- **Portfolio Management** is the management of a combination of programs to achieve strategic goals and objectives. Decisions and levels of authority reside with Assistant Secretaries and Deputy Assistant Secretaries or equivalent officials.

- **Program Management** is the management of activities to achieve a specific outcome. A program is managed by Headquarters, Site, or Power Marketing Administrator elements, and has its own budget control point or separate justification in the annual Congressional Budget Submission.

- **Project Management** is the management of finite efforts – including but not limited to the acquisition of major capital asset projects (see DOE Order 413.3, current version), information technology (IT) (see DOE O 415.1, current version), and research and development – to deliver unique products or services.

A representation depicting the program management level is illustrated in Figure 1, *DOE Program Management – Level of Activities*, as well as differing levels of responsibility, decision making, and guidance.
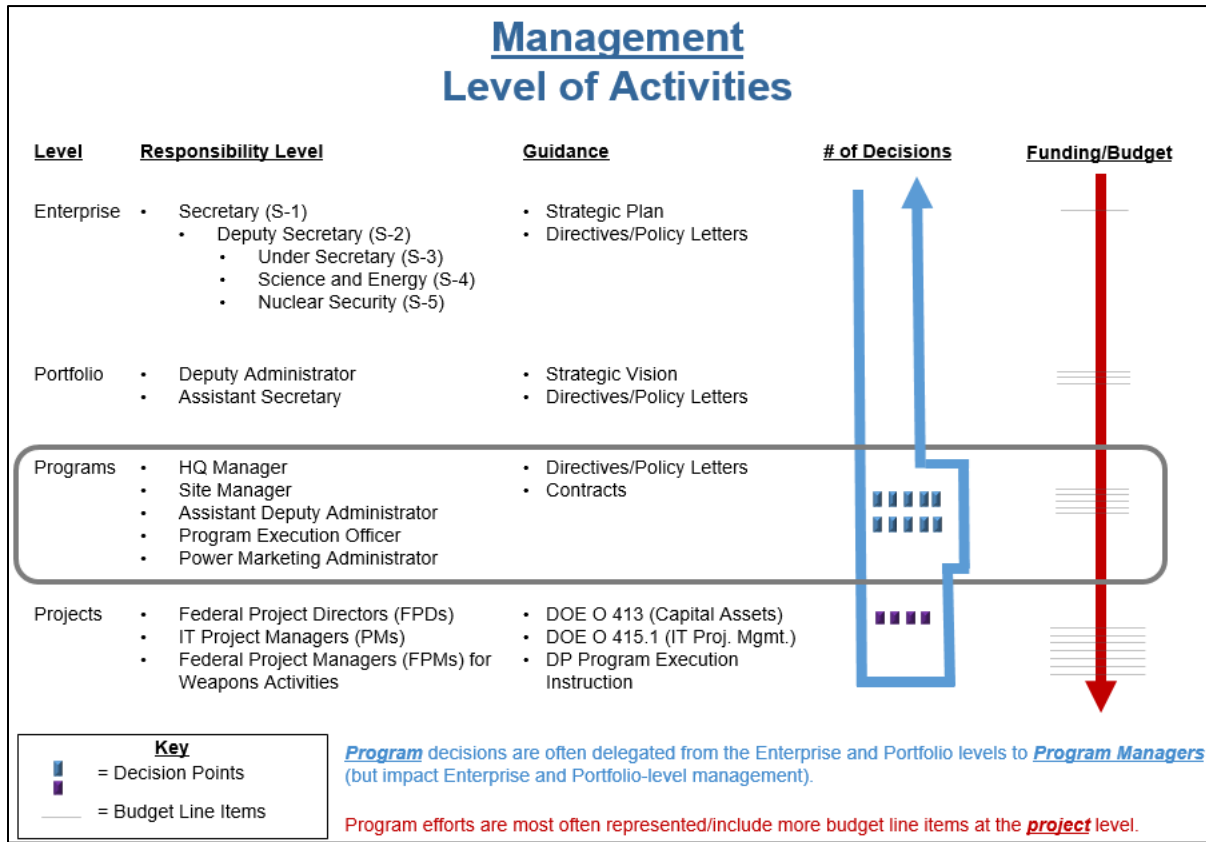
FIGURE 1: PROGRAM MANAGEMENT – LEVEL OF ACTIVITIES

APPENDIX B
PROGRAM COMPLEXITY AND CAPABILITY

Program Management has varying levels of complexity, and requires commensurate program manager and staff capabilities and implementation of the program management guiding principles. These capabilities (i.e., attributes) – with proficiency levels based on program scope, scale, and complexity – are based on varying levels of experience, leadership, acquisition knowledge, and financial experience. A depiction of how program complexity varies, and affects PgM training and development needs, is illustrated in Figure 2, *Program Complexity and Capability*.
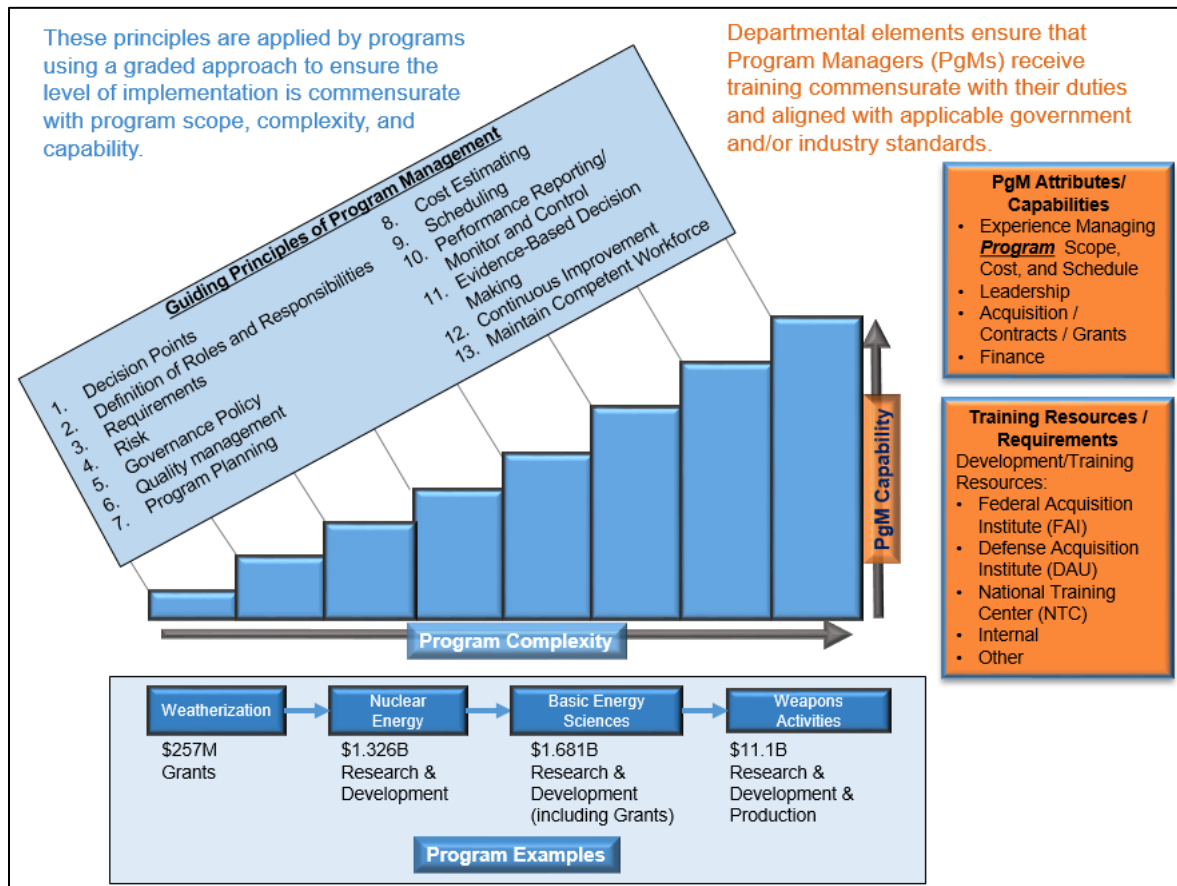

FIGURE 2: PROGRAM COMPLEXITY AND CAPABILITY

APPENDIX C
SUPPLEMENTARY CONSIDERATIONS

1. LEADERSHIP. DOE programs are managed with a combination of technical knowledge and soft skills to ensure programs are adequately and effectively executed. This combination includes:

   - Knowledge of organizational, missions, functions, programs, internal operations, and administrative policies and procedures;

   - Familiarity with the internal and external politics that impact the program;

   - Ability to describe the benefits of approaching each problem situation with a clear perception of program and political reality, and the impact of alternative courses of action;

   - Developing networks, building alliances, and collaborating across boundaries to build strong relationships and achieve common goals;

   - Awareness of areas of personal and professional strengths as well as areas for development;

   - Controlling emotions in a manner that maintains personal effectiveness even in the face of provocation, stress, and/or high workload;

   - Contributing to maintaining the integrity of the program;

   - Displaying a high standard of ethical conduct and understanding the impact of violating these standards on a program, self, and others;

   - Holding oneself and others accountable for measurable high-quality, timely, and cost-effective results;

   - Accepting responsibility for mistakes and complying with established control systems and rules;

   - Applying negotiation principles to achieve desired goals and objectives; and

   - Exercising tact and diplomacy when dealing with sensitive or unprecedented situations, including negotiating with superiors to gain acceptance of recommendations or persuading others to accept recommendations, cooperate, or change their behaviors in which proposals may involve substantial agency resources or require changes in established procedures.

2. EVIDENCED-BASED DECISION MAKING. DOE programs conduct rigorous and independent evaluations to:

    - Determine effectiveness, efficiency, relevance, and sustainability of DOE programs;

    - Develop and disseminate lessons learned from evaluations to inform planning, programming, and resource decisions; and,

    - Facilitate mutual learning and reduce costs.

    For evaluations to be useful to interested or affected parties, metrics should be developed at the Planning phase and include those that are under the control or sphere of influence of DOE, and matched to meaningful outputs and outcomes during the Evaluation phase. Program performance should be compared to established targets using methods that obtain internal validity of measurement, thereby establishing credibility of analysis, and disclosing findings to interested and affected parties. These evaluations help DOE better understand processes and practices, and apply lessons learned and best practices to inform resource and policy decisions and improve performance. Program managers should consider integrating Program Evaluation standards at each phase of program management.

    The following core Program Evaluation standards are fundamental to ensuring high quality, scientific integrity, and consistent evaluation results:

    - Relevance and utility;

    - Rigor;

    - Independence and objectivity;

    - Transparency;

    - Diversity, equity, inclusion, and accessibility;

    - Cost efficiency; and,

    - Integration.

    For additional details regarding Program Evaluation standards, refer to OMB Memorandum M-20-12, *Phase 4 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program Evaluation Standards and Practices*.

3. RISK MANAGEMENT. DOE programs conduct identification, assessment, response, and monitoring of risks – pertaining to security, safety, workforce planning, infrastructure, cybersecurity, financial, environmental impact, etc. – to achieve strategic objectives and mission goals. DOE programs, based on a tailored approach:

- Implement strategies and actions that are risk informed by common understanding of risk, which is essential for determining priorities and allocating resources. Processes and procedures, as well as applicable tools to be used for performing risk management functions, should be considered, established, and well defined when implemented.

- Integrate risk management practices into all practices and activities to inform decision making and establishing priorities. Identification of potential risks, and appropriate responses to those risks, is a critical management responsibility that enhances decisions and outcomes.

- Proactively identify, assess, resolve, manage, report, and monitor risks. Using information from risk analysis makes DOE program assumptions more transparent; strengthens processes; encourages innovation; provides the basis for more informed, defensible decisions; and increases likelihood of achieving objectives.

- Implement a consistent and disciplined approach to responding to identified risks. It is important that risk management be a visible and integral part of DOE culture, allowing DOE to fulfill its mission and goals more effectively and efficiently.

- Continue to adhere to the requirements of Office of the Chief Financial Officer (CF) guidance on risk management and internal controls, including the development/update of Risk Profiles and Risk Registers, testing of controls, and timely submission of Assurance Statements required by Public Law (P.L.) 97-255, *Federal Managers' Financial Integrity Act of 1982 (FMFIA)*.

For additional details, refer to P.L. 97-255 and Office of Management and Budget (OMB) Memorandum M-16-17, *OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control*.

4. QUALITY MANAGEMENT. Emphasis is placed on Continuous Improvement to support effective sharing, analysis, and dissemination of program management lessons and notable practices to improve delivery of programs within scope, cost, schedule, and performance. Also, DOE programs implement Knowledge Management processes, practices, and systems, ensuring essential information is accessible to and usable by staff, stakeholders, and customers.

5. PROGRAM PLANNING. Program plans define program-specific goals and objectives and identify the relationship between program objectives and an organization's strategy to clarify alignment to mission and leadership initiatives. Programs have a program roadmap, which is the chronological or sequential representation that depicts dependencies among major milestones and used to communicate the linkage between business strategy and planned prioritized work.

6. COST ESTIMATION. When necessary, a cost baseline is developed, and includes all available financial information relative to a program. Once a cost baseline is set, it is the primary financial target against which the program is measured. An integrated life-cycle cost

estimate aligns the cost estimates from multiple program components, such as cost estimates of an organization's sub-programs and projects, into a program cost estimate. A comprehensive life-cycle cost estimate includes all costs (i.e., development, implementation, execution, and long-term sustainment costs that may occur after the program is complete), regardless of which Departmental element is responsible for cost, and appropriate evaluations of cost (e.g., earned value, etc.) are performed throughout the course of a program.

7. SCHEDULING. Integrated master schedules are developed and serve as the top-level program document that defines individual component schedules and dependencies among program components (e.g., individual project, site, and program level activities) required to achieve the program goal(s). Appropriate evaluations of schedule (e.g., earned value, assessment of milestones, etc.) are performed throughout the course of a program.

8. PERFORMANCE REPORTING/MONITOR AND CONTROL. Programs collect, measure, and disseminate performance information and assess program trends to make evidence-based decisions, using existing processes to reduce redundancy and streamline when possible. Performance Reporting gives the current state of a program – based on objective, quality data – at any given time. It includes gathering and communicating information regarding program status as well as projections, and can include Status Reports.