

DOE requires structured project management

The DOE Order 413.3, Program and Project management for the Acquisition of Capital Assets, and the DOE Manual 413.3-1, Project Management for the Acquisition of Capital Assets, establish a management process to translate user needs and technological opportunities into reliable and sustainable facilities, systems and assets that provide the required mission capability.

The management process is organized by project development phases and "Critical Decisions (CDs)." The Deputy Secretary is the Secretarial Acquisition Executive (SAE) for the Department of Energy (DOE). As the SAE, he/she promulgates Department-wide policy and direction, and personally will make critical decisions for Major System Projects. The project development phases represent a logical maturing of broadly stated mission needs into well-defined technical, system safety and quality requirements, and ultimately into operationally effective, suitable, and affordable facilities, systems, and other end products.

Ref: Energy Systems Acquisition Advisory Board Procedures, 9/22/2004

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ITER TBM Meeting

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Book Descriptions:

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Language English. File format An electronic version of a printed manual that can be read on a computer or handheld device designed specifically 31 Mar 2003 1. Briefing on Project Management. Manual 413.31. Offices of Environmental Management. National Nuclear Security Administration, and. Portland maine police report, Photek form x26 function, Online privacy statement study, Bank rec form, Pdf users manual isuzu rodeo. Reload to refresh your session. Reload to refresh your session. Not a MyNAP member yet. Register for a free account to start saving and receiving special member only perks. At the time of the first of the three assessment reports—the 1999 Phase II report NRC, 1999—there was little documentation of DOE management’s expectations regarding project management, if there were any. In 1999 the basic perception reported by DOE The view of the Committee to Assess the Policies and Practices of the Department of Energy to Design, Manage, and Procure Environmental Restoration, Waste Management, and Other Construction Projects the Phase II committee was that DOE management should define its expectations regarding acceptable project management and then document these expectations so that everyone in the organization would know what they were. Less important than the details of the expectations was the fact that DOE management had some expectations and would adhere to them. DOE management’s intentions regarding policies and procedures in general were defined in 2000 by Order O 413.3 DOE, 2000, but the requirements for implementing program and project management were not issued until 2003 in Manual M 413.31 DOE, 2003. This delay is an indication that DOE management does not have a consistent set of expectations about project management across the agency. Even though the order had been issued and the decision made, considerable opposition existed internally and externally. <http://kor-ra.ru/UserFiles/casio-ct-370-manual-download.xml>

- **doe m 413.3-1, doe guide 413.3-15, doe guide 413.3-16a, doe guide g-413.3-12, doe manual 413.3-1, doe manual 471.3-1.**

The philosophy of successful organizations, that once the leadership has made a decision everyone unites to carry it out, has not been implemented at DOE with regard to project management. Notable among these process improvements are the following Concerning DOE doing the right projects to support its missions—raised as an essential point in the 1999 NRC report NRC, 1999—DOE has made substantial progress in defining mission requirements The integration of preproject planning with longterm mission statements, if continued, should do much to advance DOE’s project acquisition process. In spite of the expense and complexity of its projects, DOE invests little in human resource development for project management compared with the efforts of other federal agencies or private corporations in this area. However, although DOE project directors could benefit from more professional education in the roles of the owner’s representative, the problem is as much concerned with quantity as with quality. There are simply too few qualified DOE project directors and project management support staff for the number and complexity of DOE projects. The committee believes that DOE cannot afford to forgo adequate human resources devoted to project management. The progress cited above and documented throughout this final report is largely paper progress. The concern of the committee is not so much that Order O 413.3, Manual M 413.31, other documents, and the PMCDP will be rescinded, but rather that they will be circumvented. DOE’s record of continual internal opposition to the order, understaffing of project directors and staff, and underfunding of project management training does not augur well for future success. The view of the committee is that if DOE were serious about continuous improvement of project management, it would put metrics in place to measure progress. However, there are no metrics in

place. <http://emehck.com/upload/casio-ct-638-user-manual.xml>

Even in obvious areas—for example, value engineering, which is required by Order O 413.3 and even by public law—there are no indicators to show any actual improvement in 3 years. The common factors that drove improvements in these companies are 1 a commitment from top management, 2 a strong, visible champion for project management and process improvement, and 3 a consistent, disciplined process with an emphasis on frontend planning. The case studies reviewed by the committee demonstrated that excellence in project management in industry is achieved only when the chief executive officer CEO or chief operating officer COO becomes convinced that it is essential to the success of the corporate mission, puts the resources and prestige of his or her position behind it, appoints a project management champion reporting directly to the CEO or COO, and becomes directly involved in approvals of project plans from the earliest stages. There is no In these companies, commitment to the corporate position on project management becomes a condition of employment. The committee has not observed this consistent level of commitment throughout DOE. Although DOE has made progress in 3 years, it is far from a complete turnaround, and the battle is far from over. These include the desire of DOE personnel and contractors to be independent of oversight from DOE headquarters, slow implementation of the PMCDP and insufficient support for training, inadequate numbers of professional project directors DOE project managers, and the absence of a champion for project managers and process improvement who is at a level of authority to be able to ensure adherence to policies and procedures and the availability of the necessary funding and personnel resources. The result of these impediments is inconsistent project performance. These issues require senior management attention to achieve progress in the future.

The areas that the committee finds to be in need of additional attention are addressed in findings and recommendations in previous reports NRC, 2001, 2003 see Appendix D and in the recommendations in Chapters 2 and 3. Some of these people have now left DOE. Whether DOE can develop new leaders or whether the remaining leaders are or will become strong and visible champions of project management issues in DOE remains to be seen. 1 Nevertheless, there has been internal opposition to project manager training and professional certification, and funding for the PMCDP, training courses, project management workshops, and other professional development activities has been continually in jeopardy. The amount at issue for project management professionalization is less than 0.001 percent of the amount that DOE spends on projects. In December 2003 the DOE deputy secretary appointed an associate deputy secretary with responsibilities for capital acquisition and project management, a positive step of which readers should be aware as they consider the committee's comments and recommendations regarding the need for a strong and visible champion of project management issues in DOE. Nevertheless, the number of project management positions is apparently being cut back. Many project directors and others comment that they have received useful information from these reviews, but others continue to deny their value. While improvements in the EIR process are possible and desirable, the committee strongly believes it would be a mistake to reduce the EIR program at this time. Senior management attention and actions are essential if past improvements are to be made permanent and ingrained in the organization. The committee wholeheartedly agrees with this view, but does not find that this goal has yet been achieved. The committee could not stress more strongly the need for continued active support from the senior leadership and staff of DOE to make that goal a reality.

<http://www.diamondsinthemaking.com/content/corolla-ae92-service-manual-pdf>

Indeed, if such individuals did not exist, improvement would be impossible. But many of these people feel that they lack support in headquarters, lack authority to carry out their duties, and lack the senior management advice and support needed to be a strong owner's representative. They need a champion to back them up, just as project managers in industry need champions in their organizations. As such, the deputy secretary has the responsibility for assuring that projects are

effectively planned and executed. To perform these functions, the deputy secretary himself or herself either should be the champion for project management improvement—to develop project management into a core competency of the department, to assure that the department maintains an adequate staff of qualified project directors to manage its portfolio of projects, and to assure that the disciplined execution of projects is a priority for managers at all levels—or Senior DOE managers have shown visible support for policies and procedures and the ability to step in to resolve deadlocks, but these actions are the equivalent of short-term fire fighting, which may be insufficient to sustain continued process improvement. The escalation of organizational deadlocks and internal disputes up to senior management for resolution is an indication of how the system is not working. The new policies and procedures demonstrate substantial progress in DOE, but the committee is not confident that these changes will be permanent without a strong champion to implement and solidify these procedures across the complex see footnote on page 4. Washington, D.C. National Academy Press. Washington, D.C. National Academy Press. Washington, D.C. National Academy Press. Washington, D.C. The National Academies Press. Login or Register to save! This report, the 2003 Assessment, is the final one in that series.

It presents an examination of DOE's progress in improving program management over the past three years including the Department's response to the recommendations of the previous assessments in this series. In addition to assessing DOE's progress, the report also describes opportunities for further improvement and gives a prognosis for future developments. Based on feedback from you, our users, we've made some improvements that make it easier than ever to read thousands of publications on our website. Also, you can type in a page number and press Enter to go directly to that page in the book. Click here to buy this book in print or download it as a free PDF, if available. Sign up for email notifications and we'll let you know about new publications in your areas of interest when they're released. Directives are the primary means to establish, communicate, and institutionalize policies, requirements, responsibilities, and procedures for Departmental elements and contractors. If you continue browsing the site, you agree to the use of cookies on this website. See our User Agreement and Privacy Policy. If you continue browsing the site, you agree to the use of cookies on this website. See our Privacy Policy and User Agreement for details. If you wish to opt out, please close your SlideShare account. Learn more. You can change your ad preferences anytime. I sent a request to www.HelpWriting.net and found a writer within a few minutes. Because I had to move house and I literally didn't have any time to sit on a computer for many hours every evening. Thankfully, the writer I chose followed my instructions to the letter. I know we can all write essays ourselves. For those in the same situation I was in, I recommend www.HelpWriting.net. This directive states "the integrated master plan and schedule tie together all project tasks by showing their logical relationships and any constraints controlling the start or finish of each task. However, the DOD 5000.

02 and Integrated Master Plan IMP paradigm provides the mechanism to answer the question and should be adopted by DOE. The DOD applies the Integrated Master Plan IMP paradigm, to assess the increasing maturity of the project through Measures of Effectiveness MoE, Measures of Performance MoP, Key Performance Parameters KPP, and Technical Performance Measures TPM to assess the increasing Probability of Project Success PoPS. The plan identifies the key activities, events, milestones, and reviews that make up the program or project. The program or project office, support contractors or the prime contractor may prepare the plan. The plan also identifies those events and activities that will be included in the integrated master schedule. The integrated master schedule is a networked multilayered schedule generated by the contractor that begins with all identified integrated master plan events, accomplishments, and criteria. It also shows the expected start and finish dates of these events and contains all contractually required events and milestones such as reviews, tests, completion dates, and deliveries specified in the Work Breakdown Structure. The

integrated master plan is prepared prior to completion of the Conceptual Design process and is subsequently maintained by the government and the contractor through a collaborative effort involving all the stakeholders. The integrated master plan and schedule tie together all project tasks by showing their logical relationships and any constraints controlling the start or finish of each task. Engineering of these systems is an interdisciplinary process that deals with the work and tools that manage risk, technical activities, and the human-centered disciplines need for success. Systems Engineering Management A Practitioners' View on Integrating the Project and Product Domains," Amira Sharon, Olivier L. de Weck, and Dov Dori, Systems Engineering, Volume 14, Number 4, 2011.

3 These units include Measures of Effectiveness MoE from the customer's point of view, Measures of Performance MoP from the contractor's or owner's point of view, the agreed Key Performance Indicators KPI, and the Technical Performance Measures TPM for all work activities. The trends in these measures MoP, MoE, KPI, and TPM reveal project progress and when compared with standard contingency values, highlight when corrective actions should be considered. These measures of the system technical performance have been chosen because they are indicators of increasing maturity of the project outcomes that impact the probability of project success. They are based on high risk or significant driving requirements or technical parameters. These measures are attached to each Significant Accomplishment and Accomplishment Criteria shown in Figure 1 to provide measures of increasing maturity, as well as other measures needed to assess the probability of project success. These measures are distinctly different from measures of cost and schedule performance and their related milestone compliance. Cost, schedule, and milestone compliance are necessary, but do not sufficient to provide visibility into the effectiveness of the project for the customer. Measures of Effectiveness MoE are operational measures of. Measures of Performance MoP characterize physical or functional attributes relating to the system operation, measured or estimated under specific conditions. This approach enhances project planning, scheduling, and successful execution. This plan is a hierarchy of Project Events, each event supported by specific Accomplishments, and each accomplishment associated with specific Criteria to be satisfied for its completion. This approach is different from the traditional horizontal schedule that measures progress through cost and schedule performance.

While deliverables are defined in the Integrated Master Schedule IMS, measures of Effectiveness MoE, Performance MoP, and its related Key Performance Parameters KPI and Technical Performance Measures TPM are not embedded in the Performance Measurement Baseline PMB. By applying the IMP paradigm, a vertical Plan is created where each Accomplishment defines the desired results prior to the completion of an Event that indicates a level of the project's progress. Accomplishment Criteria provide tangible evidence that a specific accomplishment has been completed according to its Measure of Effectiveness and Measure of Performance. 5 But this PMB does not define the Accomplishments and Criteria that must be met to successfully deliver the outcomes of the project. Using the IMP paradigm, units of measure of performance meaningful to the decision makers are installed in the PMB from the Accomplishments and Criteria for the detailed work activities. This approach makes the Integrated Master Schedule IMS clearer by showing what DONE looks like in terms of deliverables and the criteria for success of those deliverables embedded in the IMS. The connection of the performance of work efforts to the Criteria, Accomplishments, and Project Events is the Earned Value Management EVM System. The EVM System defines the measures of progress to plan at the work performance level. These measures are used to define progress for each Criteria and Accomplishment. This provides Project Management with direct measures of physical percent complete for each deliverable from the project. Figure 1 shows the programmatic structure needed to improve the probability of project success, using the Integrated Master Schedule paradigm, with Accomplishments, and Criteria as measures of project performance based on MoE, MoP, and TPMs. Figure 2 shows how each of these measures is related to produce visibility to the performance of the project. How the Department of Defense Measures Maturity of the Project's

OutcomesDOE O 413.

3b mentions maturity 14 times in the context of design, procurement, and technology readiness assessment. KPPs have a threshold or objective value. These measures assess the design process, define compliance to performance requirements, and identify technical risk, including projected performance. The TPMs are limited to critical thresholds. 6 Allow start of conceptual design. Justification of Acquisition Preliminary Update project Operational mission need. plan. design. execution Plan and readiness Performance Baseline review. Acquisition strategy. Conceptual Review of design. contractor project. Final design and Project transition. Independent cost authorization and design estimate. Project data documentation. Preliminary sheet for hazard construction. Execution readiness analysis report. The documents that define the processes and content of many of these deliverables do not directly speak to the increasing maturity of the project's outcome. The terms "preliminary, draft, approved verified, and final," are used but the Significant Accomplishments and the Accomplishment Criteria needed assessment the maturity of the project at each of these reviews is not defined. 8 The mission need is independent of a particular within operational scenarios. Connect the capabilities to system requirements facility, technological solution, or physical end item using some visual modeling notation. 413.3A. Define Measures of Effectiveness MoE and. The focus for Technology Assessment, at this stage, Measures of Performance MoP. Identification of the preferred technological. Assign costs to each system element using a value alternative, preparation of a conceptual design, and flow model. Assure risk, probabilistic cost and benefit performance attributes are defined. Use cost, schedule and technical performance probabilistic models to forecast potential risks to project performance. Completion of preliminary design, development of a.

Decompose scope into work packages performance baseline that contains a detailed scope. Assign responsibility for deliverables schedule, and cost estimate. Arrange work packages in a logical order. The process of technology development, in accordance with the approved TMP should support all. Develop BCWS for work packages CTEs reaching TRL 6; attainment of TRL 6 is. Assign work package measures of performance preferable and indicates that the technology is ready. Set Performance Measurement Baseline for insertion into detailed design. Completion of essentially all design and engineering. Performance authorized work and beginning of construction, implementation. Accumulate and report work package information procurement, or fabrication. A TRA is only required if there is significant technology modification as detailed. Analyze work package performance design work progresses. Take corrective management action. If substantial modification of a technology occurs, the. The description of this paradigm provides an understanding of this concept, the benefits to the project management, and the processes needed to deliver these benefits. In many cases, the horizontal schedules are the starting point for the project. This occurs for several reasons. The project started without an IMP or a real IMS. They first built a horizontal schedule in the manner of "shop floor" schedule. This is usually for the Period of Performance of the Program. The project was inherited from a higher or lower level process. Either as a subcontractor or a part of an IPT team, the schedule is focused on the functional aspects of the project. In many cases, the conversion from horizontal to vertical planning is required or desired. The effort to do this conversion involves several steps. Identify the Program Events and where in the schedule these events take place. Identify which work in the schedule "lands" on which event.

If there is work that crosses an Event boundary, then it will need to be "broken" into two 2 parts. When all the activities are completed, the criteria satisfied, and the accomplishments completed then a measurement of "maturity" can take place. This approach is not described in the DOE O 413 series of guidance. Developing the mission implementation strategy. Define these in units of performance, effectiveness, and technical compliance. Integrated Master Plan logical "Value" flow, showing how each outcome from the work efforts satisfies the Accomplishment Criteria in units of Measures of.

Preliminary project Effectiveness MoE and Measures of Performance MoP measured against the execution plan planned MoE and MoP. Verification of mission. Preliminary design review. Review project management system. PDR and other reviews assess planned and actual maturity of Significant. Final project execution Accomplishments SA and the Accomplishment Criteria AC. Independent cost and AC. Final design review. Execution readiness. Now customize the name of a clipboard to store your clips. Consistent Approach for Assessing Technology Readiness to Help Avoid Cost Increases and Delays 27MAR07, GAO07336. Because of DOEs We examined 12 DOE major Consistent Approach for Assessing Technology Readiness to Help Avoid Cost Increases and Delays Agencies, Committee on Appropriations, House of Representatives. United States Government Accountability Office Technology Readiness to Help Avoid Cost Increases and Delays Letter 1. Results in Brief 4. Background 7. Most Major Projects Have Exceeded Original Costs and Are Years Late. Principally Because of Ineffective DOE Project Oversight and Contractor Management 9. DOE Does Not Consistently Measure Technology Readiness to Ensure That Critical Technologies Will Work as Intended before Construction Begins 18. Conclusions 26. Recommendations for Executive Action 27. Agency Comments and Our Evaluation 28. Appendix I Scope and Methodology 31.

Appendix II Information on the 12 Department of Energy Major Projects. Reviewed 34. Appendix III Independent Studies Reviewed 36. Appendix IV Survey Results for Primary Factors Affecting Cost and Schedule Appendix V Definitions of Technology Readiness Levels 44. Appendix VI Comparison of DODs Product Development Process with DOEs. Project Management Process 47. Appendix VII Comments from the Department of Energy 48. Appendix VIII GAO Contact and Staff Acknowledgments 50. Tables. Table 1 Changes in Estimated Total Project Cost for DOE Major Construction Projects 10. Table 2 Changes in Estimated Project Schedules for DOE Major Construction. Projects 11. Table 3 Reasons for Cost Increases and Schedule Delays 12. Abbreviations. DOD Department of Defense. DOE Department of Energy. EM Office of Environmental Management. ITP InTank Precipitation. NASA National Aeronautics and Space Administration. NNSA National Nuclear Security Administration. PDRI Product Definition Rating Index. TPC total project cost. TRL technology readiness level. This is a work of the U.S. government and is not subject to copyright. It may be reproduced and distributed in However, because this United States Government Accountability Office. Washington, DC 20548. March 27, 2007. The Honorable Peter J. Visclosky. Chairman. The Honorable David L. Hobson. Ranking Member. Subcommittee on Energy and Water Development, and Related Agencies. Committee on Appropriations. House of Representatives.

The Department of Energy DOE spends billions of dollars on major DOE oversees the construction of facilities primarily at government owned. In July 2006, DOE revised DOE project directors are In doing so, Among these are DOE The protocols require DOE Two of the decisions made before For example, We conducted site visits and analyzed During the course of our The project director based this method We had previously reported on the use of a In addition, we spoke with We performed our work between December Appendix I contains a detailed For all 9 projects Project oversight problems included Eight of the 9 major projects For example, the These estimates were used to establish a However, these estimates often Consequently, DOE Only one of the five Lack of technology readiness For example, We revised our DOE suggested that our report is We also incorporated Many of these complex, We reported in 1997 that Projects were late or never finished; According to the National Research To guide these reforms, the department On the basis of our analysis of Prior to 2000, these estimates were After 2000, DOE For projects beginning For additional details on our Nevertheless, we Problems Have Led to Higher Costs, Construction Delays, and Safety July 30, 1999; Defense Acquisitions Assessments of Selected Major. Defense Acquisitions Space Based Radar Effort Needs Additional Knowledge Research Assessment of Project Management Factors Affecting Department of. Energy Project Success Washington, D.C July 12, 2004. D.C. Apr. 30, 1997. Sciences

to advise the federal government on matters related to science Department of Energy Washington, D.C. July 1999. Success Washington, D.C. July 12, 2004. Dollars in millions Mixed Oxide Fuel Fabrication. Waste Treatment and Immobilization Plant 4,350 12,263 143. Highly Enriched Uranium. Materials Facility 251 549 102. Pit Disassembly and Conversion. Tritium Extraction Facility 384 506 15. Spallation Neutron Source 1,333 1,412 2. Depleted Uranium Hexafluoride 6. Conversion Facility 346 346 0.

Chemistry and Metallurgy. Research Facility Replacement 837 837 0. Microsystems and Engineering. Sciences Applications 518 518 0. Linac Coherent Light Source 379 379 0. Projects Project approved date estimate date estimate February 2007. Conversion Facility months. Fabrication months. Facility. Immobilization months. Plant. Facility months. Hexafluoride 6 months. Conversion. Processing Facility months. Facility month. Uranium Materials months. Source. Metallurgy Research applicable. Replacement. Engineering applicable. Sciences. Applications. Light Source applicable. Source GAO analysis of DOE data. According to the DOE project Transition to operations has begun. As table 3 shows, ineffective DOE project oversight and poor contractor Project officials, in commenting on our draft report, were concerned that Nevertheless, to clarify our Table 3 Reasons for Cost Increases and Schedule Delays Depleted Uranium Hexafluoride 6. Conversion Facility X X X. Highly Enriched Uranium Materials. Facility X X X. Mixed Oxide Fuel Fabrication. National Ignition Facility X X. Salt Waste Processing Facility X X. Spallation Neutron Source X X. Tritium Extraction Facility X X X. Waste Treatment and Immobilization. Plant X X X. Total 9 8 7. Source GAO analysis of independent project studies and interviews with.

<http://www.bouwdata.net/evenement/corolla-ascent-2005-owners-manual>