Department of Energy
EVMS Operating Environment

Presentation for NDIA
September 2014

Outline

- DOE Organization Structure and Mission
- Capital Asset Sites
- DOE Strategic Plan relating to Project Mgmt
- EVMS Policies and PARS
- DOE EVMS Path Forward

DOE Organizational Structure and Mission from EVMS Perspective

Department of Energy

FY14 Budget numbers are nominal. Chart does not include Power Administrations.

Office of the Secretary

Dr. Ernest Moniz

Deputy Secretary

Daniel B. Poneman

Under Secretary for Nuclear Security

$11B Budget
- Support future military needs
- Nuclear non-proliferation
- Nuclear weapons stewardship

Under Secretary for Energy & Science

$9B Budget
- Office of Science
- Nuclear & Fossil Energy
- Energy Efficiency & Renewable
- Electricity Delivery & Reliability

Under Secretary for Management & Performance

$7B Budget
- Environmental Management
- Legacy Management
- Office of Management
- Chief Human Capital Officer
- Chief Information Officer

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Chief Acquisition Officer (Vacant)
Laurie Morman, Chief of Staff

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Marilyn Dillon, Director
Sandra Hersh, Dep. Director

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Anthony Rediger, Director
James Covey, Dep. Director

Office of Aviation Management *MA-30*
Glen Wattman, Director

Office of Administration *MA-40*
Peter O'Konski, Director
Rebecca Montoya, Dep. Director

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Pat Ferraro, Dep. Director
Jay Glascock, Senior Advisor

Office of Executive Secretariat *MA-70*
Amy Bodette, Director

Office of Information Resources *MA-90*
Kevin Hagerty, Director

Office of Administrative Management and Support *MA-42*
Mary Anderson
Director

Office of Policy *MA-61*
Berta Schreiber
Director

Office of Policy Analysis *MA-71*
Michael Coogan

Directives Program
Camille Beben

Office of Logistics and Facility Operations *MA-43*
Michael Shincovich
Director

Office of Contract Management *MA-62*
Patrick Ferraro
Director

Office of Correspondence Management *MA-72*
Brenda Mackall

FOIA Program
Chris Morris
FOIA Officer

Office of International Travel and Visitor Exchange Program *MA-45*
Umeki Thorne
Director

Office of Project Management *MA-63*
Michael Peek
Director

Administration, MIS, and Executive Commitments Group *MA-74*
Shena Kennerly

Information Technology Program
Vacant

Office of Headquarters Procurement Services *MA-64*
Mark Brady
Director

Office of History and Archives *MA-75*
Terrence Fehner

Office of Property Management *MA-65*
Carmelo Melendez
Director

Office of Federal Advisory Committee Management *MA-76*
Latanya Butler

Office of Systems & Professional Development *MA-66*
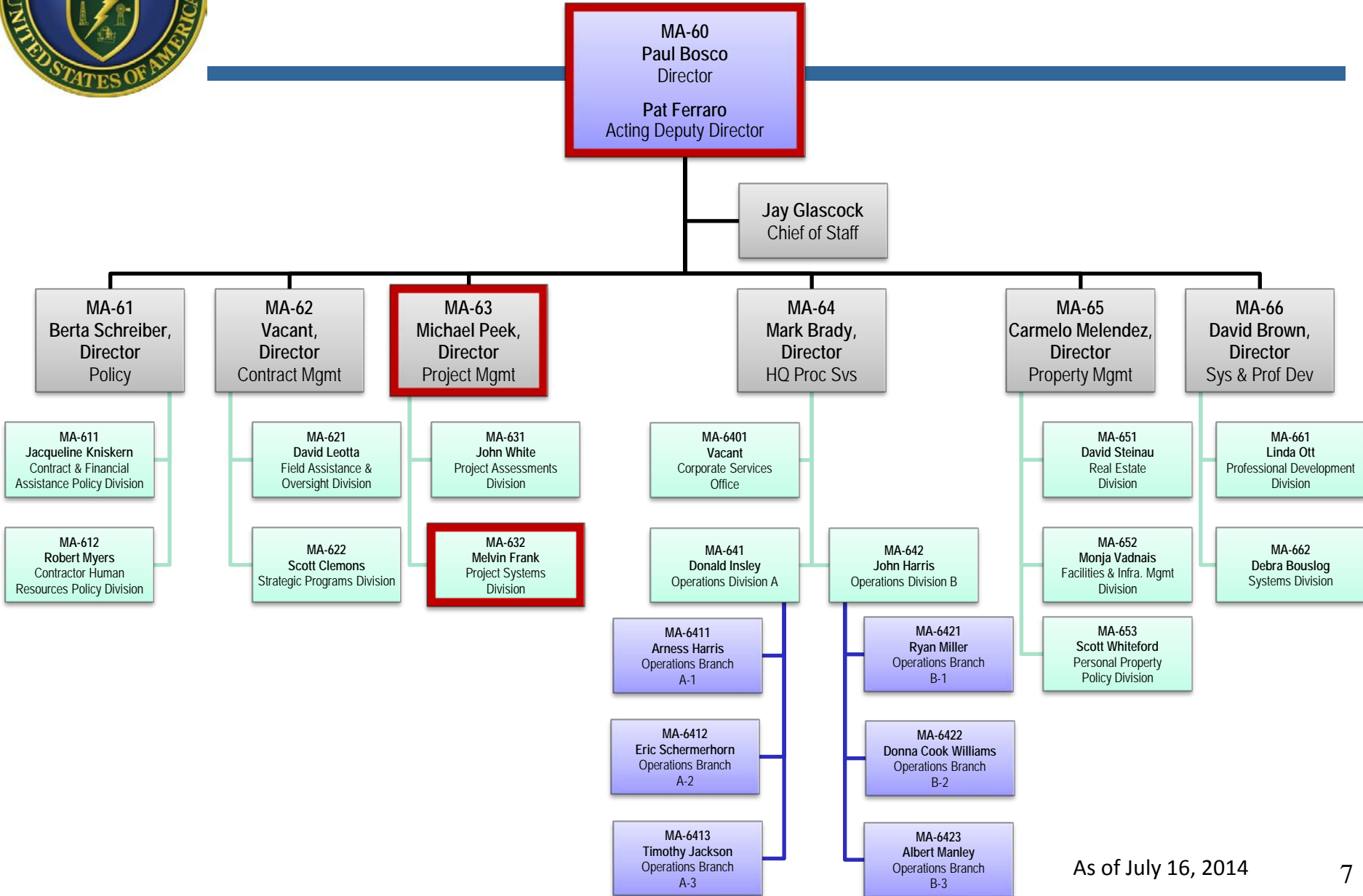Director

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OAPM Vision/Mission Statement

- ## Vision
  - Promote a culture of excellence in acquisition, property and project management

- ## Mission
  - Provide corporate oversight, managerial leadership and assist in the development and implementation of Department of Energy (DOE) wide policies, procedures, programs, and management systems pertaining to procurement and financial assistance, property management, contract and project management, professional development, and related activities to provide procurement services to Headquarters elements

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Director

Pat Ferraro
Acting Deputy Director

Jay Glascock
Chief of Staff

MA-61
Berta Schreiber,
Director
Policy

MA-62
Vacant,
Director
Contract Mgmt

MA-63
Michael Peek,
Director
Project Mgmt

MA-64
Mark Brady,
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Carmelo Melendez,
Director
Property Mgmt

MA-66
David Brown,
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Sys & Prof Dev

MA-611
Jacqueline Kniskern
Contract & Financial
Assistance Policy Division

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Resources Policy Division

MA-622
Scott Clemons
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MA-632
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Project Systems
Division

MA-641
Donald Insley
Operations Division A

MA-642
John Harris
Operations Division B

MA-652
Monja Vadnais
Facilities & Infra. Mgmt
Division

MA-662
Debra Bouslog
Systems Division

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Arness Harris
Operations Branch
A-1

MA-6421
Ryan Miller
Operations Branch
B-1

MA-653
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Personal Property
Policy Division

MA-6412
Eric Schermerhorn
Operations Branch
A-2

MA-6422
Donna Cook Williams
Operations Branch
B-2

MA-6413
Timothy Jackson
Operations Branch
A-3

MA-6423
Albert Manley
Operations Branch
B-3

As of July 16, 2014

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Office of Project Management Mission Statement

To develop and maintain Department-wide policies, directives, standards, and practices pertaining to program and project management for the acquisition of non-information technology (IT) capital assets, within the DOE, inclusive of NNSA.

The mission of the office is functionally accomplished under the direction and guidance of the Director of the Office of Acquisition and Project Management.

Office of Project Management

- Operational:
  - Policy, guidance and oversight; Programs implement
- Tactical:
  1) Institutionalize project management best practices across the complex
  2) Improve Performance Baseline credibility
  3) Enhance performance analysis and forecasting capabilities
  4) Ensure contractors' provide quality EVM data

Policy and Systems Division MA-632 Functions

Develop and interpret DOE policies, directives, standards and practices governing program and project management for the acquisition of DOE non-IT capital assets.

Interpret, supplement, and comment on:

- Proposed policies, procedures and regulations pertaining to program and project management for the acquisition of capital assets, as issued by other Federal agencies such as the Office of Management and Budget (OMB), and the General Services Administration (GSA), and oversee DOE implementation of such policies.

- Proposed orders, policies, procedures and regulations pertaining to the program and project management for the acquisition of capital assets within the Department.

Prepare agency reports as required by GSA, OMB, and GAO for project management issues related to the acquisition of capital assets.

Work in partnership with Program Offices, Sites and DOE contractors to identify and implement best practices for program and project management related to the acquisition of capital assets.
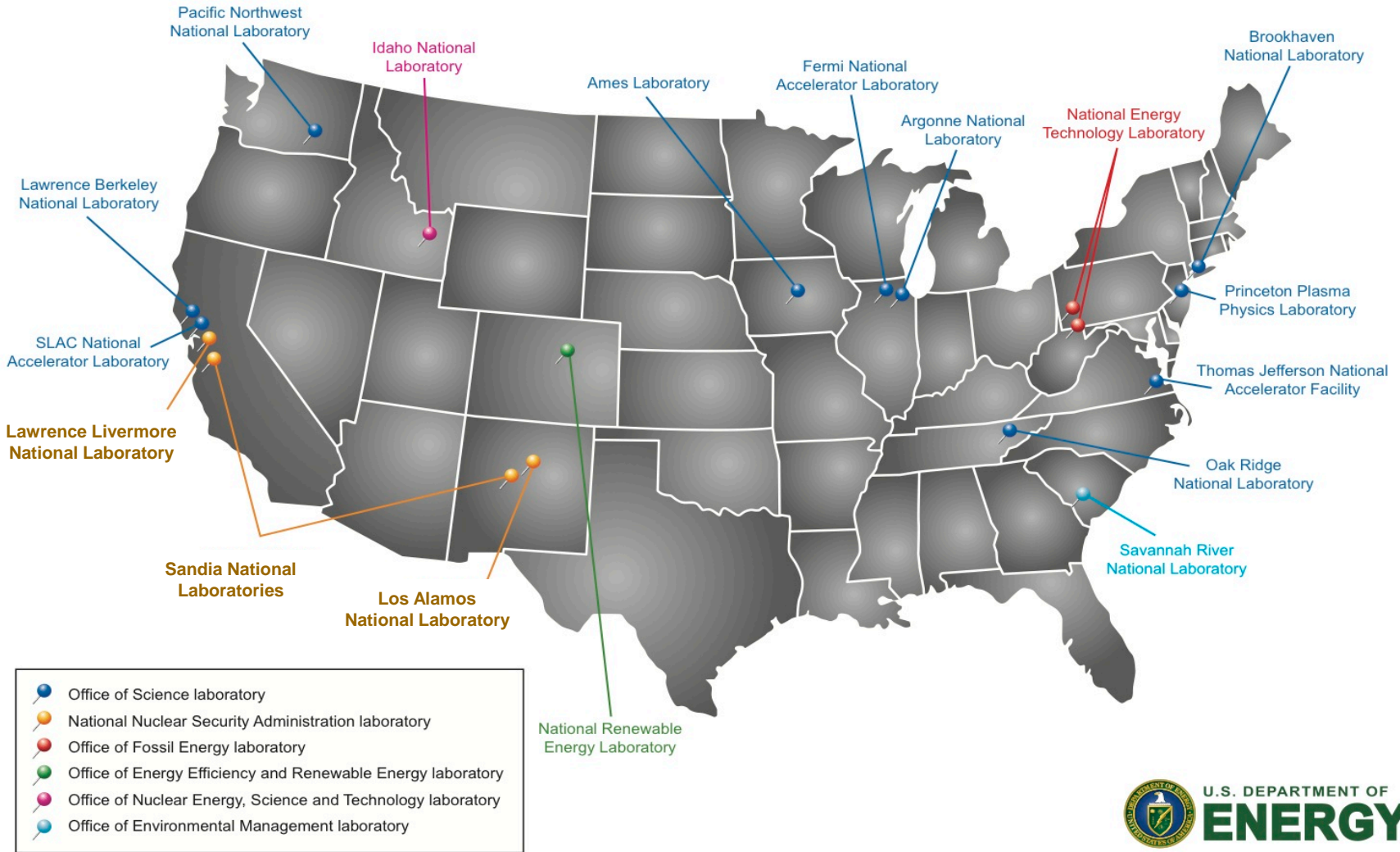
Establish, maintain and execute the Earned Value Management System (EVMS) Certification and Surveillance Review processes in accordance with established thresholds and in coordination with the Project Management Support Offices (PMSO) to ensure full compliance with applicable American National Standards Institute (ANSI), Federal Acquisition Regulation (FAR), and OMB requirements.

Develop, maintain, and administer a corporate project performance data and documentation repository and metric and assessment reporting capability via the Project Assessment and Reporting System (PARS) and other applicable information systems.
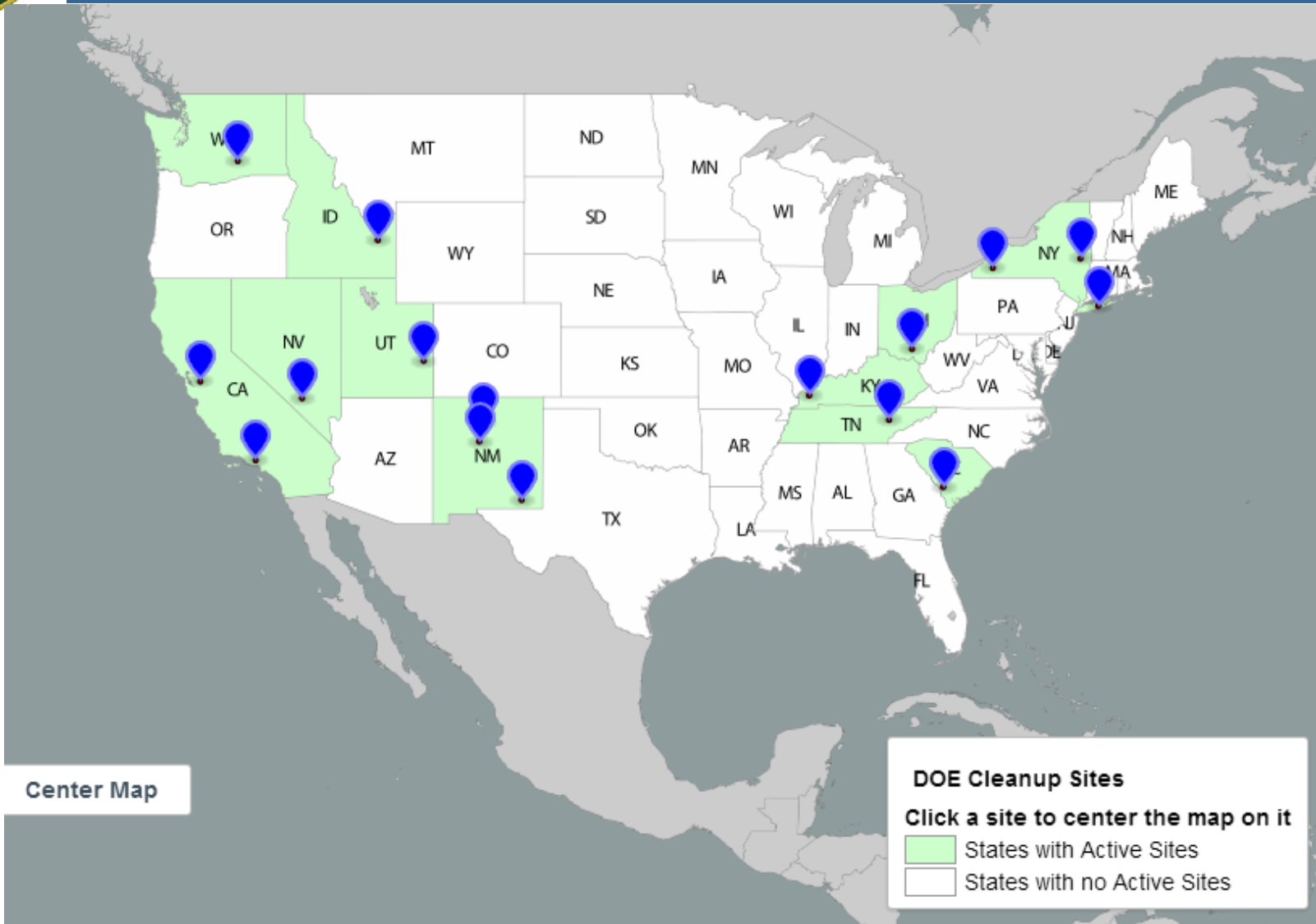
DOE Capital Asset Sites

Department of Energy National Laboratories

Pacific Northwest National Laboratory

Idaho National Laboratory

Ames Laboratory

Fermi National Accelerator Laboratory

Brookhaven National Laboratory

Lawrence Berkeley National Laboratory

Argonne National Laboratory

National Energy Technology Laboratory

SLAC National Accelerator Laboratory

Princeton Plasma Physics Laboratory

Lawrence Livermore National Laboratory

Thomas Jefferson National Accelerator Facility

Oak Ridge National Laboratory

Sandia National Laboratories

Los Alamos National Laboratory

Savannah River National Laboratory

National Renewable Energy Laboratory

Office of Science laboratory
National Nuclear Security Administration laboratory
Office of Fossil Energy laboratory
Office of Energy Efficiency and Renewable Energy laboratory
Office of Nuclear Energy, Science and Technology laboratory
Office of Environmental Management laboratory

U.S. DEPARTMENT OF
ENERGY

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DOE Environmental Cleanup Sites

DOE Cleanup Sites

Click a site to center the map on it

States with Active Sites
States with no Active Sites

Center Map

DOE Strategic Plan

DOE Strategic Plan
Management and Performance

- As DOE carries out its mission, it will **strengthen effective and cost-efficient management**, support an engaged workforce, and provide a modern, secure physical and information technology infrastructure.

- Goal 3 Management and Performance

    - Position the Department of Energy to meet the challenges of the 21st century and the nation's Manhattan Project and Cold War legacy responsibilities **by employing effective management** and refining operational and support capabilities to pursue departmental missions

Project Management (MA-63) Alignment to DOE Strategic Plan

Strategic Objective 10 – Effectively manage projects, financial assistance agreements, contracts, and contractor performance

- Improving the effectiveness and efficiency of DOE's financial assistance agreements, contract and project management performance remains a top priority.

  - These efforts are central to delivering mission critical facilities and capabilities on time and within original budget.

  - Contract provisions are being incorporated into contracts that will enhance the oversight of contractor cost and technical performance systems and ensure contractors are not rewarded unless performance standards and requirements are met.

  - Use of small business vehicles and strategic sourcing for both federal and contractor management and operating procurements will be expanded.

DOE EVMS Policies and PARS

Policy and Systems Division MA-632

- ## Policy

  - Development, review, and update of Project Management-related policies, guidance, and procedures

- ## Cost Schedule Control and Analytics

  - EVMS Certification and data-driven, risk-based Surveillance

  - Cost and Schedule estimating and analytics,

- ## Project Assessment & Reporting System (PARSIIe)

  - Maintenance and enhancement

  - Contractor uploads, dashboards, reports

Policy and Systems Division Policy Group

- ## Policy, Guidance, and Procedural Development

  - DOE Order 413.3B

  - DOE Guide 413.3-7A, Risk Management

  - DOE Guide 413.3-10A, Earned Value Management Systems

  - DOE Guide 413.3-20, Change Control Management

  - DOE Guide 413.3-21, Cost Estimating Guide

  - DOE OAPM, EVMS Surveillance Standard Operating Procedure (ESSOP)

  - DOE OAPM, EVMS & Project Analysis Standard Operating Procedure (EPASOP)

DOE Order 413.3B

- ## Objective:

  - Provide Department of Energy (DOE) including the National Nuclear Security Administration with program and project management direction for the acquisition of capital assets with the goal of delivering projects within the original performance baseline (PB), on schedule, within budget and fully capable of meeting mission performance, safeguards and security, and environmental, safety, and health requirements

- ## Earned Value Management System

  - An EVMS is required for all projects with a TPC greater than or equal to $20M. In accordance with FAR Subpart 52.234-4, a contractor's EVMS will be reviewed for compliance with ANSI/EIA-748, or as required by the contract.

DOE O 413.3B – EVM Requirements

- Use of EVMS compliant with ANSI/EIA-748 required prior to CD-2

- Certification as compliant required prior to CD-3

- Surveillance of contractor EVMS begins and is an ongoing process subsequent to implementation of compliant system

- EVMS not required for firm fixed-price contracts (prime to Govt.)

- Monthly reporting of EVM data into PARS II begins with CD-2 approval

- Earned value data reporting continues post CD-4 through completion of final closeout activities associated with tasks included in PMB

EVMS Requirements Tied to DOE's Acquisition Lifecycle
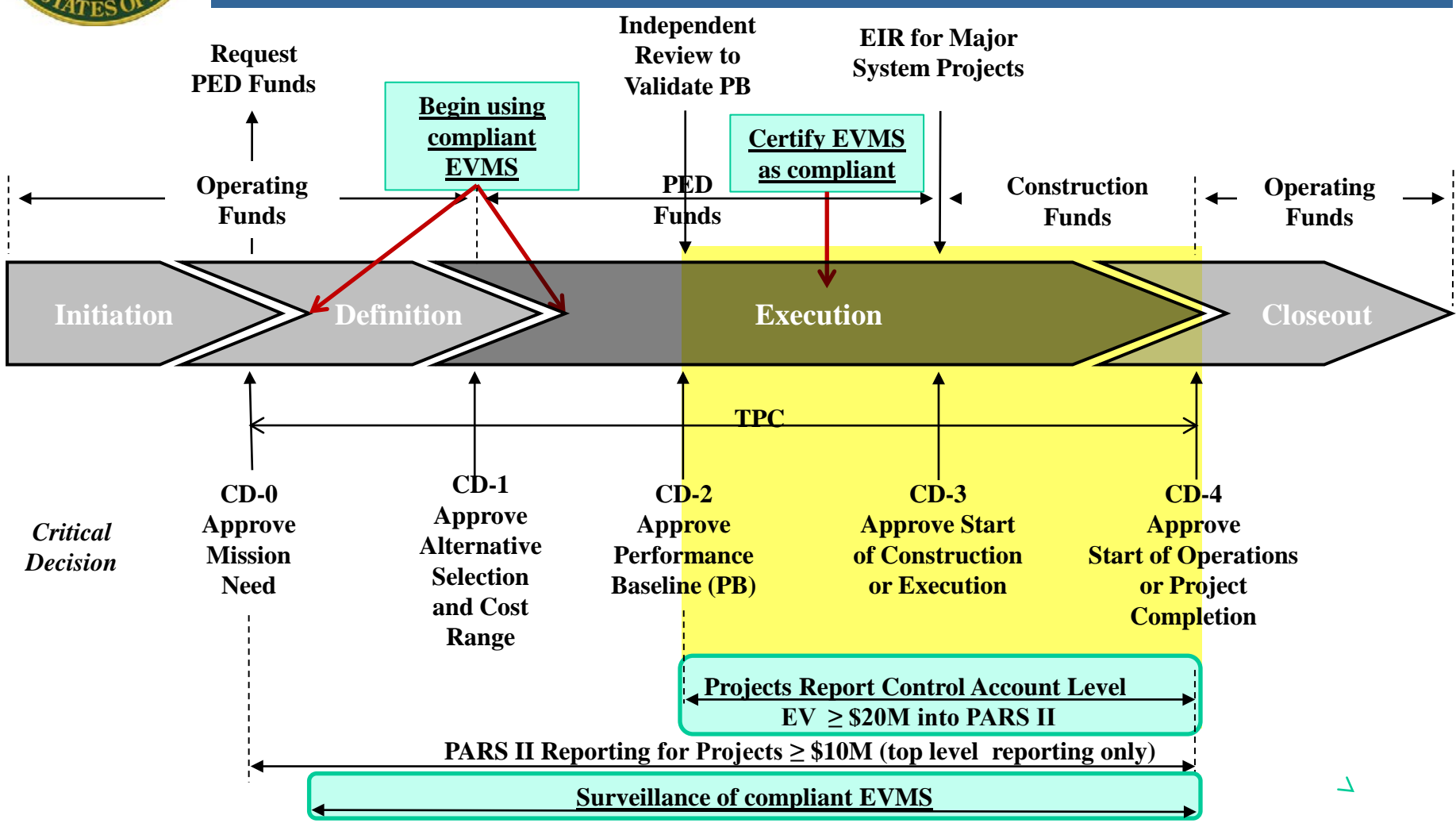
Typical DOE Acquisition Management System for Line Item Capital Asset Projects

EVMS Certification Requirements

- Certifying Authority and Thresholds (except for firm fixed-price contracts):
  - OAPM ≥ $100M;
  - Project Management Support Office (PMSO) ≥ $50M < $100M;
  - Contractor self-certification ≥ $20M < $50M
  - Certifying Authority, highest to lowest, is OAPM, PMSO and then contractor self-certification; Higher level supersedes lower level

- **Major System Project, i.e. ≥ $750M**
  - Prior to CD-3 OAPM will conduct surveillance to validate continued compliance if self-certified or PMSO-certified

EVMS Surveillance Requirements

- Conducted to ensure continued compliance of certified contractor systems

- Surveillance Authority and Thresholds
  - Consistent with Certifying Authority Thresholds
  - OAPM ≥ $100M;
  - PMSO ≥ $50M < $100M;
  - Contractor self-surveillance ≥ $20M < $50M

- Frequency:
  - Contractors must conduct annual self-surveillance of their EVMS, ideally by an entity independent of the contractor's project team.
  - OAPM or PMSO must conduct surveillance no later than the contract midpoint or every 2 years, during contract extensions, or as directed by the Acquisition Executive

Project Assessment & Reporting System (PARS IIe)

- **Purpose**
  - Central Repository and official "System of Record" for capital asset project performance information
  - Same data as maintained in our contractors' project management systems
  - Used by federal and contractor personnel across the nation to record and track the progress of capital asset projects
- **Goal**
  - Provide accurate, timely, complete, and verifiable project performance data
  - Provide greater transparency on the performance of specific projects
  - Facilitate the efforts of project analysts to analyze, track, and validate the data

EVM Based Analysis Reports in PARS IIe

- **Data Validity Check**
  - EV Data Validity (WBS Level)
  - Retroactive Change indicator (6-Mo, PMB Level)

- **Schedule Health Assessment**
  - Schedule Missing Logic (Activity Level)
  - Relationship Leads and Lags Report
  - Schedule Relationship Types (Activity Level)
  - Schedule Hard Constraints (Activity Level)
  - Schedule Total Float Analysis (Activity Level)
  - Schedule Duration Analysis (Activity Level)
  - Invalid Forecasts and Actual Dates (Activity Level)
  - Schedule Hit or Miss Report

- **Variance Analysis**
  - EV Project Summary (6-Mo, PMB Level)
  - Performance Analysis (WBS Level)
  - Variance Analysis Cumulative (WBS Level)

- **Trend Analysis**
  - Baseline Volatility – Past and Near-Term (PMB Level)
  - EV Project Summary (6-Mo, PMB Level)
  - MR Balance v. CV, VAC, & EAC Trends
  - Management Reserve (MR) Log
  - Performance Index trends (WBS Level)
  - Variance Analysis Cumulative (WBS Level)

- **EAC Reasonableness**
  - CPI vs. TCPI (PMB Level)
  - EV Data Validity (WBS Level)
  - Performance Index Trends (WBS Level)

- **Predictive Analysis**
  - Funding Status (Monthly at Project Level)
  - IEAC Analysis (WBS Level)

http://energy.gov/management/office-management/operational-management/project-management/earned-value-management

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EARNED VALUE MANAGEMENT

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Acquisition

Project Management

Earned Value

Earned Value Management (EVM) is a systematic approach to the integration and measurement of cost, schedule, and technical (scope) accomplishments on a project or task. It provides both the government and contractors the ability to examine detailed schedule information, critical program and technical milestones, and cost data.

- Earned Value Management System (EVMS) and Project Analysis Standard Operating Procedure (EPASOP) - March 2014
- EVMS Surveillance Standard Operating Procedure (ESSOP) - September 30, 2013 V2 (pdf)

- EV Guideline Assessment Templates - (MS Word)
- DOE EVMS Cross Reference Checklist - (pdf)
- DOE EVMS Risk Assessment Matrix - (MS Word)

- Formulas and Terminology "Gold Card" - Sep 2011 (pdf)
- APM Road Show Presentation Slides: Earned Value (EV) Analysis and Project Assessment & Reporting System (PARS II)
- DOE Work Breakdown Structure (WBS) Handbook - 16 Aug 2012 (pdf)
- DOE G 413.3-10A - Mar 13, 2012 (pdf)
- DI-MGMT-81861 IPMR DOE Version (Integrated Program Management Report 20140211)
  - DI-MGMT-81861 DOE Changes Version

EVM TUTORIALS

DOE EVMS Path Forward

OAPM Project Management Goals

- **Reinforce leadership's Acquisition direction**
  - Change contracting culture; shift focus to fixed-price contracting
  - Establish credible performance baselines
  - Align contract incentives
  - Influence Program Office and Contractor accountability
- **Develop and Enhance IT tools**
  - Acquisition intranet initiative
  - PARS II: schedule ("critical path") capabilities/indices
- **Establish "business systems" H-clause(s) – initiate DEAR clause(s)**
  - Completed for non M&O; pending for M&O contractors

Project & Systems Division
EVMS Focus

- Policy on use of EVMS indices and metrics with regard to fee determinations

- EVMS Compliance SOP (ECSOP)

- EVMS Corrective Action SOP (ECASOP)

- Training:
  - Roadshow (on-site training for Federal and Contractor staff)
    - Conducted in FY2013 with excellent feedback; Planned for FY2015
    - MR/contingency, Baseline Change Control, Authorized Unpriced Work

- Improve analytics skills, tools, processes

- EVM Snippet deployment
  - 34 online modules, 5 to 20 minutes each, variety of EVM-topics

EVM Contact Information

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