Four philosophical goals of the DOE O413.3B

1) Promote project success through process and procedures.

    i.   Programs that have sustained project success can be eligible for exemption. Exemption takes affirmative action from DepSec.

    ii.   Program criteria for exemption.

- Over 10 active projects at post-CD2 (SC, NNSA and EM are eligible programs)
- Rolling 3-year timeline for projects completed with 90% or better success (based on original scope and within 110% of original cost baseline)
- Dedicated PMSO with adequate processes and procedures (at present only eligible program is Science which has adopted the 413.3B practices)

    iii.   Exemption allows oversight and responsibility to program with conditions:

- Report projects in PARS II
- Submit CD and BCP documents to OECM
- OECM lead ICEs and ICRs

2) Order emphasizes up-front planning

    i.   Design maturity

    ii.   CII standards for PDRI for all projects >$100M

    iii.   TRA for projects >$750M

    iv.   Disaggregating (chunking of work) large projects—long term, high dollar projects sub-divided to bite-size short term projects.

Overview

- **Background**
  - Why Revise the Order?

- **Significant Changes to Order**

- **Final Thoughts**

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More from slide 1

3) Funding

     i.   Small (<$50M) are to be fully funded, if feasible

    ii.   Execute project within two years

   iii.   At CD-2, AE presented with funding profile associated with cost baseline and funding profile is locked in.

4) Document, document, document

     i.   Provide required documentation at each CD and BCP to OECM

    ii.   OECM is central repository for all project documentation

Why Revise the Order?

- **To include the following:**
  - Primarily, Root Cause Analysis (RCA) and Corrective Action Plan (CAP) Initiatives
  - Deputy Secretary Project Management Policies
  - Solutions to Government Accountability Office (GAO) and Office of Management and Budget (OMB) criticisms
  - Congressional Requirements
  - Improvements to contract and project management

Primary justification to DRB when requesting approval to update the Order was to institute CAP initiatives.

Project Success

- **Project Success: (For "Capital Asset Projects")**
  - Project completed within the ORIGINAL approved scope baseline, and within 10% of the ORIGINAL approved cost baseline at project completion (Critical Decision-4), unless otherwise impacted by a directed change.
- **Portfolio Success:**
  - Ninety percent (90%) of all projects meet project success criteria.

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OMB believes DOE has sustainable policies and procedures in place to affect positive change in project management and we are no longer "High-Risk."

However, GAO feels DOE's decision-making track record has not been stellar. So, GAO is awaiting a positive outcome from our project success metrics. Hence, the jury is still out as to the removal of DOE from GAO's High-Risk List.

Documenting Project Success
TEMPLATES ONLINE & OECM REVIEW DRAFT MEMOS

CD-2 ➡ Commitment

- Scope
- Minimum Key Performance Parameters
- Total Project Cost
- CD-4 Date (Month/Year)
- Signed by Acquisition Executive

CD-4 ➡ Auditable

- Scope Accomplished
- Key Performance Parameters Met
- Total Project Cost
- Completion Date (Month/Year)
- Signed by Acquisition Executive

If a tree falls in the forest and no one is there to hear it, does it make a sound?

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- PARS II in place – mandated that all project data is reported in PARS II
- Data loaded directly from contractor's project management systems. ALL parties are looking at same data.
- TPC, CD-4 date, scope in all project docs CD-2, BCP and CD-4
- Submit performance baseline (commitment) at CD-2
- If it is not documented, we cannot support claims of project successes

Significant Changes to DOE O 413.3
PROJECT MANAGEMENT FOR CAPITAL ASSET PROJECTS

- Matured front-end planning
- Clarified project size and structure; program versus project management
- Increased thresholds
- Transformed commitment to funding, budgeting
- Introduced new exemptions
- Bolstered responsibilities
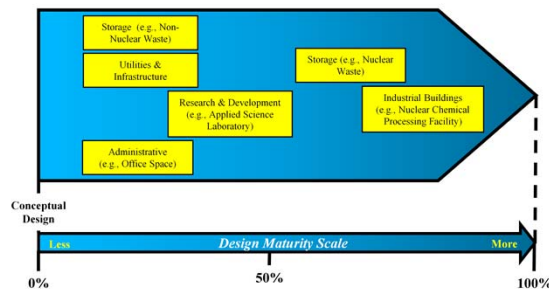- Increased project reviews
- Enhanced management and oversight

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There are many other changes to the Order, but these reflect the more significant enhancements.

•Design maturity – design for admin facility less mature than nuclear facility

•Currently writing ICE and ICR procedures and will publish an SOP

•Looking at preparation before developing an ICE; project needs to have sufficient design and technology maturity; adapting PDRI as scoring methodology for design maturity

•Trigger for cost growth was negotiated to 50%; GAO thought DOE should use 25% (best practice used by DoD and NASA)

•Funding profile must be approved by AE as well as any subsequent changes

•ICR at CD-0 requested by DepSec…at minimum bound the potential alternatives and ensure range has the right number of zeroes ($M or $B)

•GAO wanted ICEs at CD-1, CD-2 and CD3 for projects >$100M; DOE accepted this, but only if warranted at CD-3

Significant Changes
PROJECT SIZE AND STRUCTURE

- **DOE O 413.3B requires:**
  - Decision to break up large projects made at CD-1; must be documented
    - Independent Cost Estimate (ICE) and/or Cost Review (ICR) prior to CD-1
  - AE must determine that funding profile is affordable and executable within budget
  - Each smaller project must have its own distinct performance baseline (CD-2)

- **Distinguished program and project management**

- **Useable segments for intended purpose…reduce risk and focus scope, funding and span of control**

- **Collectively support one mission need; one project data sheet for full cost visibility**

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•Hardest thing was getting consensus on what it meant when we say 'project' versus 'program'

•Cultural history at DOE is that program means SC, NNSA, EM, etc

•Key is useable segments—discrete components of work that have scope, cost and baseline defined.

Significant Changes
PROJECT SIZE AND STRUCTURE

- **Multiple projects on one Project Data Sheet** (App C, Sec 22.b.)
  - Projects meet the same mission need and provides full cost visibility
  - Independent Cost Estimate at CD-1 for entire program

	Construction Cost ($M)						
	CD-0 or CD-1 (TPC Cost Range)	TPC	FY11	FY12	FY13	FY14	FY15
Project A	-	40	-	-	40	-	-
Project B	-	80	-	-	10	50	20
Project C	100-200	200	-	-	-	100	100
Project D	75-150	150	-	-	-	25	125
TOTAL	245-500	470	0	0	50	175	245

Example shows an initial budget request for construction in which Projects A & B are with CD-2 approval and Projects C & D are absent of CD-2 approval.

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- Projects <$50M consider fully funding, if feasible
  - Project A, TPC = $40M, so request all construction funds within the same appropriation year as the start of construction
- Ability to request construction budget prior to obtaining CD-2 approval, but there are stipulations
  - Project C & D, TPC of $200M and $150M respectively, must budget for top-end of CD-1 cost range until CD-2 is approved

Significant Changes
THRESHOLDS

Requirements	DOE O 413.3A	DOE O 413.3B
Applicability (Sec 3.a.)	• $20M or greater	• $50M or greater ✓Adhere to principles ✓Report in PARS II ✓Submit CD & BCP documents
Critical Decision Authority (App A, Sec 3., Table 1)	• SAE ≥ $750M • US ≥ $100M and < $750M • PSO ≥ $20M and < $100M • CIO > $5M and < $750M • Limited delegation allowed	• SAE ≥ $750M • US ≥ $100M and < $750M • PSO ≥ $50M and < $100M • Further delegation allowed
Performance Baseline Deviation (App A, Sec 6.b.)	• TPC increase of $25M or 25% • Delay of 6 months or greater • Change in scope	• TPC increase of $100M or 50% • Change in scope and/or performance
EVMS Certification (App C, Sec 5.)	• OECM certifies > $50M • Contractor self-certifies between $20M and $50M	• OECM certifies > $100M • PMSO certifies between $50M and $100M • Contractor self-certifies between $20M and $50M

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- Applicability
  - ❖ Still report project data and status in PARS II
  - ❖ OECM is central repository
  - ❖ Adhere to project management principles in Appendix C
- CD Authority
  - ❖ Delegation authority might be problematic under new Order since there are no restrictions to further delegation
- Performance baseline deviation
  - ❖ Change in scope, minimum KPPs and cost baseline will drive BCP
  - ❖ Change in schedule baseline no longer drives BCP
- EVMS Certification and Surveillance
  - ❖ Thresholds for OECM, PMSO and Contractor
  - ❖ If not timely, then OECM will conduct certification or surveillance

Significant Changes
FUNDING

Requirements	DOE O 413.3A	DOE O 413.3B
Construction Budget Request Prior to CD-2 (App A, Sec 4.c.(2))	• Yes, if design period less than 18 months	• Yes, if CD-2 approval obtained within one year of OMB budget submission
Full Funding (App C, Sec 15.a.)	• No	• Yes, projects (excluding MIE) <$20M will request all construction funds within the same appropriation year of start • Yes, projects < $50M should request funds within the same appropriation year, if feasible
Funding Profiles (App C, Sec 5.)	• No	• Yes, AE must endorse any changes to the approved funding profile that negatively impacts the project
Reassess CD-1 (App A, Sec 4.b.)	• No	• Yes, if CD-1 cost range grows by 50% as the project proceeds toward CD-2

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- Construction Budget Request: possible with stipulations (not all inclusive, see Order)
    - ❖ CD-2 approval obtained within one year following OMB budget submission to Congress
    - ❖ TPC will be established at top-end of CD-1 cost range
    - ❖ Breach TPC when baselining or CD-2 not approved within one year, must be approved by SAE through ESAAB
- Full Funding:
    - ❖ Projects <$20M will be fully funded
    - ❖ Projects <$50M consider fully funding, if feasible (smaller Programs would find this difficult)
    - ❖ Excludes MIE projects
- Funding Profiles:
    - ❖ Approved by AE…affordable and executable
    - ❖ Profile changes that negatively impact the project after CD-2 must be approved by the AE
    - ❖ Notify CFO and OECM of profile changes
- Reassess CD-1:
    - ❖ Top-end of cost range grows by more than 50%, reassess alternative selection
    - ❖ Identify new alternative or reaffirm selected alternative
    - ❖ GAO wanted a cost growth trigger of 25% (DoD and NASA best practice)
    - ❖ DoD routinely reaffirms the selected alternative
    - ❖ Bottom line: get it right prior to baselining

Significant Changes
EXEMPTIONS

Requirements	DOE O 413.3A	DOE O 413.3B
IT Projects (App A, Sec 4.c.(2))	• Yes, IT projects greater than $5M are governed by the Order	• No, IT projects are not governed by the Order
PSO Exemption (Sec 3.c.(3))	• No	• Yes, PSO may be excluded from most Order requirements if: ✓ An established PMSO with adequate project management requirements, processes and procedures; ✓ A set of active capital asset projects, post CD-2, of over 10 projects at any time during the current FY; ✓ Completed 90% of projects across a rolling 3-year average, not to exceed by more than 10% of the original cost baseline for the original approved scope at CD-2 with a TPC ≥ $10M

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- IT Projects:
  - ❖ Not governed by Order
  - ❖ CIO to publish guidance for IT capital asset projects
- PSO Exemption:
  - ❖ DepSec must take Affirmative action with OECM concurrence
  - ❖ Shift CD authority to PSO and activities normally carried out by OECM to the PMSO
  - ❖ Must have an established PMSO
  - ❖ Must have an active portfolio of projects post CD-2
  - ❖ Must meet the Department's definition of project success
  - ❖ Not exempt from PMCDP certification requirements
  - ❖ Still required to:
    - ❖ Report in PARS II
    - ❖ Submit CD and BCP documents
    - ❖ OECM lead ICRs and ICEs

Significant Changes
RESPONSIBILITIES

Requirements	DOE O 413.3A	DOE O 413.3B
Acquisition Executive (App B, Sec 6.c.)	• Approves appointment of FPD	• Approves appointment of FPD • Interviews proposed FPD • SAE endorses appointment of FPD, if contractor or Intergovernmental Personnel Act (IPA) Agreement
Senior Procurement Executive (App B, Sec 9.)	• No	• Principal procurement advisor to the SAE, AE, and Chief Procurement Officer
Contracting Officer (App B, Sec 10.)	• No	• Principal procurement advisor to the FPD
Project Management Governance Board (App B, Sec 16.)	• No	• Evaluate project management issues and provide resolution to PMSOs and Program Managers

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- Acquisition Executive:
  - ❖ AE to interview proposed FPD; obtain perspective beyond the resume
  - ❖ SAE approve IPA appointment
- Senior Procurement Executive:
  - ❖ Aligned AE with the SPE
  - ❖ Now standing member of ESAAB
  - ❖ AE approve CD, but SPE facilitate contract alignment
- Contracting Officer
  - ❖ Aligned FPD with CO
  - ❖ FPD deemed COTR
  - ❖ Align contract with project
- Project Management Governance Board
  - ❖ Interpret or clarify Order requirements (intent)
  - ❖ Resolve 413.3-Series Guide issues

Significant Changes
REVIEWS

Requirements	DOE O 413.3A	DOE O 413.3B
Design Reviews (App C, Sec 18.)	• Conduct conceptual, preliminary and final design reviews • Reviews conducted by reviewers external to the project	• Conduct conceptual, preliminary and final design reviews • Reviews conducted by reviewers external to the project • Design sufficiently mature prior to baselining
Cost Reviews (App C, Sec 18.)	• For projects > $750M, OECM must conduct: ✓ Prior to CD-2, ICE or ICR	• For projects > $750M, OECM must conduct ICR prior to CD-0 • For projects > $100M, OECM must conduct: ✓ Prior to CD-1, ICE and/or ICR ✓ Prior to CD-2, ICE ✓ Prior to CD-3, ICE (if warranted)
Staffing Reviews (App C, Sec 7.)	• No	• Qualified staff (including contractors) must be available • Programs must use a methodology to determine the appropriate project team size and required skill sets

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- Design Reviews:
  - ❖ Sufficiently mature prior to establishing the PB
  - ❖ Recognize difference between design rigor for admin and nuclear facilities
  - ❖ Developing process to validate A-E claim of design completion percentage
- Cost Reviews:
  - ❖ Cost Estimating Guide under review
  - ❖ Cost Estimating SOP (prepare ICE and conduct ICR) under development
- Staffing Reviews:
  - ❖ Reviewed by EIR team
  - ❖ Programs must use methodology to determine project team size, composition and skills

Significant Changes
REVIEWS

Requirements	DOE O 413.3A	DOE O 413.3B
PDRI (App C, Sec 13.)	• No	• Conduct PDRI Analysis, as appropriate, for projects > $100M • Conducted by FPD prior to CD-2
TRA (App C, Sec 23.)	• No	• For projects > $750M: ✓ Prior to CD-2, complete TRA and develop TMP ✓ Prior to CD-3, complete TRA (if CTE modification occurs)
Project Peer Reviews (App C, Sec 23.)	• No	• Conduct project peer review for projects ≥ $100M at least annually • More frequent for complex projects or those experiencing performance challenges • May supplement or replace IPRs at the discretion of the Program Office

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- PDRI:
  - ❖ Determines project definition readiness for baselining
  - ❖ Used on projects >$100M
  - ❖ FPD runs analysis; compare to EIR team analysis
  - ❖ PDRI score must be >800 (high score is 1000) prior to CD-2 approval
- TRA:
  - ❖ Determines technology readiness for baselining
  - ❖ Used on major systems projects, >$750M
  - ❖ OECM will now have access to TRAs and TMPs
  - ❖ GAO/Congress recommends TRL-7; our requirement is TRL 6
  - ❖ TRA levels: 1-9 (1 is lowest; 9 is fully mature). TRL-7 indicates prototyped to full scale in desired—relevant—environment. At TRL-6, experimental scale in relevant environment
  - ❖ EIR team looking for TRL-6 for critical technology elements

Project Peer Reviews:
  - ❖ Lack of funding is no excuse to conducting this review
  - ❖ EM conducts CPRs; NNSA conducts IPRs
  - ❖ Projects >$100M annually starting at CD-2 and continuing through CD-4
  - ❖ Takes years to infuse into culture; recommendations to be viewed as mandatory
  - ❖ Promotes continuity of review team

Significant Changes
MANAGEMENT AND OVERSIGHT

- Augmented project reviews and enhanced staffing
- DOE O 413.3B requires:
  - Project Assessment and Reporting System (PARS II) enhanced
    - Project performance data uploaded directly into PARS II from contractor's system
    - Project status reporting by Federal Project Director (FPD), Program Manager and the Office of Engineering and Construction Management (OECM)
  - OECM central repository and compliance office; retain all critical decision and performance baseline change documents
  - Submission of contractor evaluation documents
- Deputy Secretary-led "deep dives," or in-depth reviews, on projects, programs and contracts
- Contract management strengthened
  - Contracting Officer more prominent role; member of FPD's integrated project team
  - Senior Procurement Executive now member of Secretarial Acquisition Executive's advisory board

GAO Criteria: Monitor and Independently Validate

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- PARS II has been fully deployed
  - For the first time, we're all talking about the same set of data from the field to Program Office to HQ
  - Each level able to make their own judgment as to what the data means
- OECM is central repository and compliance office
  - Collect all project data and score compliance with Order
- DepSec "deep dives" have helped in changing culture of program, project and contract management

Final Thoughts

- Sound performance baselines are important
- Mature design and technology
- Stable funding is critical
- Maintain a realistic versus optimistic view
- Don't hesitate to look outside the project team for solutions...leverage the Department

PROJECT SUCCESS IS THE KEY!
Management ... Management ... Management!
Document... Document... Document!

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•Success depends on our ability to "nail down" the PB

•If design and technology are not ready, do not proceed with baselining; in the past, we've baselined too early and it got us into trouble

•Everyone wants their project to be successful, but let's be realistic about it

•Use tools available to benefit the project

•FPD has key leadership role in managing the project and achieving project success

•Look outside your project and Program for help

•If it isn't documented, it didn't happen; need documentation to support claims

Any questions?