DOE Order 413.3B
“Program and Project Management (PM) for the Acquisition of Capital Assets”
Significant Changes to the Order

Paul Bosco, PE, PMP, LEED-AP
Director, Office of Engineering and Construction Management (OECM)
PM Process & Critical Decisions (CD’s)

- Request PED Funds
- Independent Review to Validate PB
- EIR for Major System Projects

**Initiation**
- Operating Funds

**Definition**
- PED Funds

**Execution**
- Construction Funds

**Closeout**
- Operating Funds

**CRITICAL DECISIONS**

**CD-0**
- Approve Mission Need

**CD-1**
- Approve Alternative Selection and Cost Range

**CD-2**
- Approve Performance Baseline (PB)

**CD-3**
- Approve Start of Construction or Execution

**CD-4**
- Approve Start of Operations or Project Completion

Projects Report Earned Value $\geq 20M$

PARS II Reporting for Projects $\geq 10M$

Acquisition Executive

By (AE)
• Why Revise the Order:
  – 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

Why Revise the Order?
# Order Review Committee

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- D. Lehman (SC)
- J. Eschenberg (EM)
- B. Berkowitz (OCFO)
- P. Bosco (OECM)

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- J. Krupnick (LBNL) co-chair
- J. Smith (ORNL)
- M. Sueksdorf (LLNL)
- R. Jones (Richland)

## Support Staff
- K. Chao (SC)
- J. Glascock (OECM)
- A. Gursahani (LBNL)
• **Project Success:**
  
  (For “Capital Asset Projects”)

  – Project completed within the ORIGINAL approved scope baseline, and within 110% of the ORIGINAL approved cost baseline at project completion (Critical Decision-4, (CD-4)), unless otherwise impacted by a directed change.

• **Portfolio Success:**

  – Ninety percent (90%) of all projects meet project success criteria.

  

  **Project Success**
**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

*CD-2 - Approve Performance Baseline

*CD-4 - Approve Project Completion

Documenting Project Success

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

DOE O 413.3B – PROJECT MANAGEMENT FOR CAPITAL ASSET PROJECTS
FRONT-END PLANNING

- DOE O 413.3B requires:
  - Design sufficiently mature prior to Critical Decision (CD-2) – see figure
  - Enhanced External Independent Review procedures (projects >$100M); incorporated industry standard practice
  - Project Definition Rating Index
  - Technology Readiness Assessment and Technology Maturation Plan
  - GAO’s 12-step cost estimating process
  - Nuclear Facilities: Code of Record

Significant Improvements
DOE O 413.3B requires:
- Decision to break up large projects made at CD-1 (Alternative Selection); document
- Each smaller project must have its own distinct performance baseline

- Distinguished program (“large project”) 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

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

### Construction Cost ($M)

<table>
<thead>
<tr>
<th></th>
<th>CD-0 or CD-1 (Cost Range - $M)</th>
<th>TPC ($M)</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
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</thead>
<tbody>
<tr>
<td>Project A</td>
<td>-</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Project B</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>50</td>
<td>20</td>
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<tr>
<td>Project C</td>
<td>100-300</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>150</td>
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<tr>
<td>Project D</td>
<td>600-1000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>150</td>
</tr>
<tr>
<td>TOTAL</td>
<td>750-1500</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>175</td>
<td>320</td>
</tr>
</tbody>
</table>

Example shows an initial budget request for construction
Projects A & B: Obtained CD-2 (Performance Baseline) approval
Projects C & D: Progressing towards CD-2 approval.

**Significant Improvements**
INCREASED THRESHOLDS

- Applies to Projects $50M (vice $20M) or Greater
  - All Projects $10M or Greater – Report in PARS II (Project Assessment and Reporting System)
  - Submit CD & Baseline Change Proposal (BCP) Documents (or Equiv.) to OECM

- Before Memorial Day:
  - Reaching a new Critical Decision (CD) -- Use 413.3A

- After Memorial Day: Comply with DOE Order 413.3B

Significant Improvements

THRESHOLDS & APPLICABILITY
INCREASED THRESHOLDS

• Performance Baseline Deviations
  – Original TPC (Total Project Cost) Increase of $100M or 50%, (lesser of)
  – Change in Scope/Performance or Project Exec. Plan (PEP)
  – No Schedule Trip-wire

• EVMS (Earned Value Management System) Certifications
  – Greater than $100M – OECM Certifies
  – $50M to $100M – Project Management Support Office (PMSO) Certifies
  – $20M to $50M – Contractor Self-Certifies

Significant Improvements

THRESHOLDS & APPLICABILITY
<table>
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<tr>
<th>Critical Decision Authority</th>
<th>Total Project Cost Thresholds</th>
<th>Life Cycle Clean-up Project Cost Thresholds</th>
<th>Total Project Cost Threshold</th>
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</thead>
<tbody>
<tr>
<td>Secretarial Acquisition Executive</td>
<td>$750M</td>
<td>$1B</td>
<td>$750M</td>
</tr>
<tr>
<td>Under Secretaries</td>
<td>$100M and &lt;$750M</td>
<td>Not Applicable</td>
<td>$100M and &lt;$750M</td>
</tr>
<tr>
<td>Program Secretarial Officer (PSO)</td>
<td>$20M and &lt;$100M</td>
<td>$1B</td>
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Secretarial: ≥ $750M
No Delegation Authority (or any project on an exception basis)

Acquisition Executive: $750M

Delegation authority to Program Secretarial Office on an exception basis

Further Delegation is allowed.

Significant Improvements

CRITICAL DECISION (CD) AUTHORITY – BOLSTERED RESPONSIBILITY
### Significant Improvements

**CRITICAL DECISION (CD) AUTHORITY — BOLSTERED RESPONSIBILITY**

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<td>≥ $1B Delegation authority to Program Secretarial Office on an exception basis</td>
<td>≥ $750M Further Delegation is allowed. (or any project on an exception basis)</td>
</tr>
<tr>
<td>Under Secretaries</td>
<td>≥$100M and &lt;$750M Delegation authority to PSO for projects &lt; $400M</td>
<td>Not Applicable</td>
<td>≥$100M and &lt;$750M Further Delegation is allowed.</td>
</tr>
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</table>

| Program Secretarial Officer (PSO) | ≥$20M and <$100M Delegation authority to PM. CD-0 may not be delegated below the PSO. | <$1B Delegation authority to HQ or field Senior Executive Service manager. CD-0 may not be delegated below the PSO. | ≥$50M and <$100M Further Delegation is allowed. |

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**Critical Decision Authority**

- **DOE O 413.3A**
- **DOE O 413.3B**

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FUNDING STABILITY

• Construction Budget Request Prior to CD-2 *(App A, Sec 4.c.(2))*
  – If CD-2 (Performance Baseline) approval obtained within one year of OMB budget submission

• Full Funding *(App C, Sec 15.a.)*
  – Projects (not MIE*) <$20M will request all construction funds within the same appropriation year of start
  – Projects <$50M should request funds within the same appropriation year, if feasible (w/ execution schedule < 2 YRS)

(* MIE: Major Items of Equipment)

Significant Improvements
FUNDING STABILITY

• Funding Profiles (App C, Sec 5.)
  – Acquisition Execute (AE) must endorse any changes to
    the approved funding profile that negatively impacts the
    project

• Reassess CD-1 (Alternative Selection) (App A, Sec 4.b.)
  – If CD-1 cost range grows by 50% as the project proceeds
    toward CD-2 (Approval of Performance Baseline)

Significant Improvements
INCREASED PROJECT REVIEWS

• **Cost Reviews** *(App C, Sec 18.)*
  - For projects > $750M, OECM conducts ICR prior to CD-0
  - For projects > $100M, OECM must conduct:
    ✓ Prior to CD-1, ICE and/or ICR *(Independent Cost Review)*
    ✓ Prior to CD-2, ICE *(Independent Cost Estimate)*
    ✓ Prior to CD-3, ICE (if warranted)

• **Staffing Reviews** *(App C, Sec 7.)*
  - Qualified staff (including contractors) must be available
  - Programs must use a methodology to determine the appropriate project team size and required skill sets

**Significant Improvements**

*REVIEWS*
INCREASED PROJECT REVIEWS

• Project Peer Reviews (App C, Sec 23.)
  – Conduct peer review for projects ≥ $100M at least annually
  – More frequent for complex projects or those experiencing performance challenges
  – May supplement or replace Independent Project Reviews (IPRs)
  – Typical Format of Review; Five Part (Tailor Appropriately)
    1. Scope – Technical
    2. Cost, Schedule and Risk
    3. Management
    4. Environment, Safety, Health, and Quality Assurance
    5. Startup and Commissioning

Significant Improvements
• Augmented project reviews and enhanced staffing
• Project performance data uploaded directly into PARS II (Project Assessment and Reporting System) from contractor’s system
• Project status reporting by Federal Project Director (FPD), Program Manager and (OECM)
• OECM central repository and compliance office; retain all critical decision and performance baseline change documents
• Submission of contractor evaluation
MANAGEMENT AND OVERSIGHT

• Contract management and project management alignment – “Aligning Success”
  – Contracting Officer more prominent role; member of FPD’s integrated project team
  – Senior Procurement Executive now member of Secretarial Acquisition Executive’s advisory board
  – More to follow…Contract and Project Management Summit Actions

Significant Improvements
• Sound (realistic) performance baselines are essential
• Mature design and technology before CD-2 (Baseline)
• Stable funding is critical – It must be Affordable
• Assign Quality Leaders and Team Members: Align Responsibility, Authority and Accountability
• Don’t hesitate to look outside the project team for solutions...leverage the Department...Use Peer Reviews

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

Final Thoughts