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# Responsibilities for Independent Cost Estimates

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**NATIONAL NUCLEAR SECURITY ADMINISTRATION**  
**Office of Cost Estimating and Program Evaluation**

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## **RESPONSIBILITIES FOR INDEPENDENT COST ESTIMATES**

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1. **PURPOSE.** To establish policy and responsibilities for conducting Independent Cost Estimates (ICEs) and Independent Cost Reviews (ICRs) within the U.S. Department of Energy's (DOE) National Nuclear Security Administration (NNSA).
2. **CANCELLATION.** None.
3. **APPLICABILITY.**
  - a. **Federal.** This applies to all NNSA Elements.
  - b. **Contractors.** Does not apply to contractors.
  - c. **Equivalency.** In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at 50 USC sections 2406 and 2511 and to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this Directive for activities under the Director's cognizance, as deemed appropriate.
4. **BACKGROUND.** Independent Cost Estimates and Independent Cost Reviews offer NNSA the ability to verify and validate program baseline estimates by providing unbiased and objective comparisons for, and assessments of, the reasonableness of the baseline estimate. ICE's and ICR's have been recognized as a best practice by both federal and industry organizations, including the Government Accountability Office (GAO), the Department of Defense (DoD), and the Defense Acquisition University (DAU). The GAO Cost Estimating and Assessment Guide affirms that, "A realistic cost estimate allows better decision making, in that an adequate budget can accomplish the tasks that ultimately increase a program's probability of success."

Recent legislation codified in 50 USC 2411 and 50 USC 2537 established the NNSA Office of Cost Estimating and Program Evaluation (CEPE), defined Major Atomic Energy Defense Acquisition (MAEDA) Programs, and specified when ICEs are to be performed on those programs. MAEDA programs do not fall under DOE Order 413.3.B, and its associated Guides and NNSA Business Operating Procedures, and necessitate the creation of this NAP. This NAP establishes roles and responsibilities for conducting ICEs and ICRs on acquisition programs and capital asset projects.
5. **REQUIREMENTS.** The following organizations will conduct ICEs or ICRs when required at project and program milestones, such as Critical Decision points or 6.X process phases, and at the request of the Administrator:
  - a. Acquisition and Project Management (NA-APM) will conduct the ICE and ICR for capital asset acquisition projects covered by DOE Order 413.3B (or successor order) with an estimated total project cost between \$10 million and \$100 million. For projects with an estimated total project cost greater than \$100 million, the

ICEs and ICRs will be conducted by the DOE Office defined per DOE Order 413.3B (or successor order).

- b. The appropriate Deputy Administrator or Associate Administrator will conduct the ICE or ICR for acquisition programs where the total project or program cost is less than \$500 million and are not covered by DOE Order 413.3B (or successor order). That ICE or ICR will be provided to CEPE for review and approval. When directed by the Administrator, CEPE will conduct the NNSA ICE or ICR on these programs.
- c. CEPE will conduct the NNSA ICE and ICR for programs meeting the definition for a MAEDA program where the total project or program cost is greater than \$500 million or the total lifetime cost is greater than \$1 billion. The appropriate Deputy Administrator or Associate Administrator may perform their own independent cost estimate as needed, such as for the annual Stockpile Stewardship and Management Plan (SSMP, or its successor).

## 6. RESPONSIBILITIES.

- a. Director of Cost Estimating and Program Evaluation is responsible for maintaining this NAP and establishing BOPs and instructions for its implementation.
- b. Deputy Administrators and Associate Administrators are responsible for providing to CEPE the ICEs and ICRs conducted under this policy.
- c. Associate Administrator for Acquisition and Project Management (NA-APM) is responsible for conducting ICEs and ICRs for capital asset construction and Major Items of Equipment projects in accordance with this policy and for maintaining BOPs specific to ICEs and ICRs on capital asset acquisition projects.
- d. Federal Program Managers and Federal Project Directors are responsible to provide data and documentation in support of ICEs and ICRs as requested, and coordinate schedules to accommodate ICEs and ICRs as needed, to meet milestone decisions. For programs meeting the definition of a MAEDA program, the Federal Program Manager will provide a cost analysis requirements description (CARD).

## 7. REFERENCES.

- a. Federal Laws and Regulations
  - (1) 50 United States Code Section 2411, Director for Cost Estimating and Program Evaluation
  - (2) 50 United States Code Section 2537, Selected Acquisition Reports and independent cost estimates and reviews of life extension programs and new nuclear facilities

b. DOE

DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*

c. NNSA

BOP-06.03, *Independent Cost Estimates Procedure*

d. Government Accountability Office

GAO-09-3SP, *GAO Cost Estimating and Assessment Guide*

8. DEFINITIONS/ACRONYMS.

- a. **Acquisition Program** – A defined duration, funded effort from conceptualization, initiation, design, development, test, contracting, production, deployment, logistics support, modification, and disposal to provide a new, improved, or continuing weapon and weapon systems or other product to satisfy NNSA mission requirement or capability gap, intended for use in, or in support of, NNSA missions.
- b. **Capital Asset Acquisition Project** – A project with defined start and end points required in the acquisition of capital assets. The project acquisition cost of a capital asset includes both its purchase price and all other costs incurred to bring it to form and a location suitable for its intended use. It is independent of funding type. It excludes operating expense funded activities such as repair, maintenance or alterations that are part of routine operations and maintenance functions and do not exceed the general plant project threshold.
- c. **Cost Analysis Requirements Description (CARD)** – A description of the relevant features of the acquisition program or project and of the system itself. It is the common description of the technical and programmatic features of the program that is used by the teams when preparing the ICE and/or program office cost estimates. It is intended to define the program to a sufficient level of detail such that no confusion exists between the many parties who may be concerned with estimating the program's cost.
- d. **Independent Cost Estimate (ICE)** - A cost estimate prepared by an organization independent from the government line manager's authority and the contractor organization responsible for the project or program, using the same detailed technical and procurement information to develop the program and/or project estimate in accordance with GAO best practices.
- e. **Independent Cost Review (ICR)** - An evaluation of a program's or project's cost estimate that examines the reasonableness of the estimate quality, assumptions, and risks, also prepared by an organization independent from the government line

manager's authority and the contractor organization responsible for the project or program.

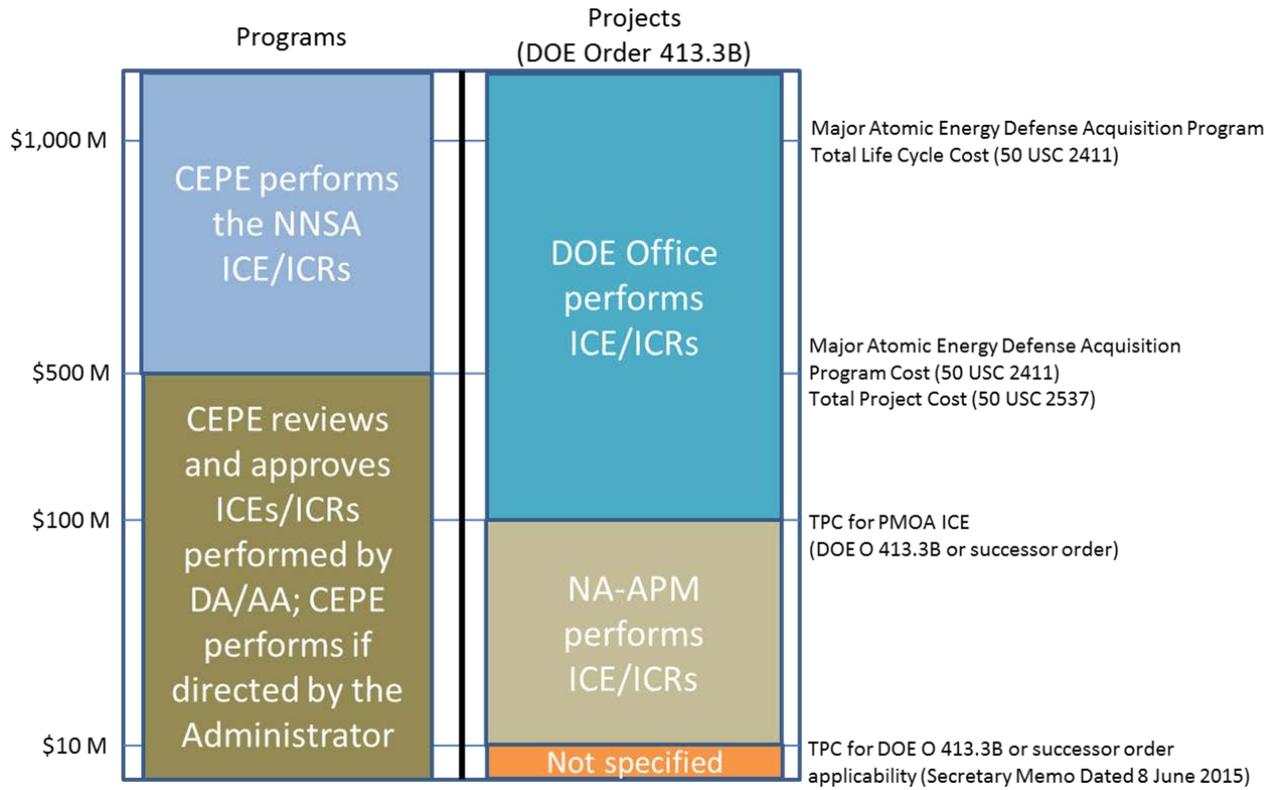
- f. **Major Atomic Energy Defense Acquisition (MAEDA) Program** – An atomic energy defense acquisition program of which the total project cost is more than \$500 million and/or the total lifetime cost is more than \$1 billion. The term 'major atomic energy defense acquisition program' does not include a project covered by DOE Order 413.3B (or a successor order) for the acquisition of capital assets for atomic energy defense activities.
  - g. **Phase 6.X Process** - Provides the framework for nuclear weapons activities (including life extension programs), such as routine maintenance, stockpile evaluation, surveillance, baselining, and annual certification.
  - h. **Total Lifetime Cost (TLC)** – Is equivalent to the lifecycle cost for projects and programs. The TLC includes the costs of conceptualization, initiation, design, development, test, contracting, production, deployment, logistics support, modification, and disposal.
  - i. **Total Project Cost / Total Program Cost (TPC)** – For projects following DOE Order 413.3B (or successor order), TPC is all costs between CD-0 and CD-4 specific to a project incurred through the startup of a facility, but prior to the operation of the facility. For programs following the 6.X process, the TPC will cover all costs from phase 6.1 through phase 6.6. For other acquisition programs, the TPC is the cost of conceptualization, initiation, design, development, test, contracting, and production prior to operation and disposal.
9. CONTACT. Office of Cost Estimating and Program Evaluation, NA-1.3, 202-586-6910, [steven.ho@nnsa.doe.gov](mailto:steven.ho@nnsa.doe.gov).

BY ORDER OF THE ADMINISTRATOR:

  
Frank G. Klotz  
Administrator

Appendix: NAP Defined ICE/ICR Responsibilities

**APPENDIX 1: NAP DEFINED ICE/ICR RESPONSIBILITIES**



**FIGURE 1. Areas of responsibilities for ICE/ICRs**