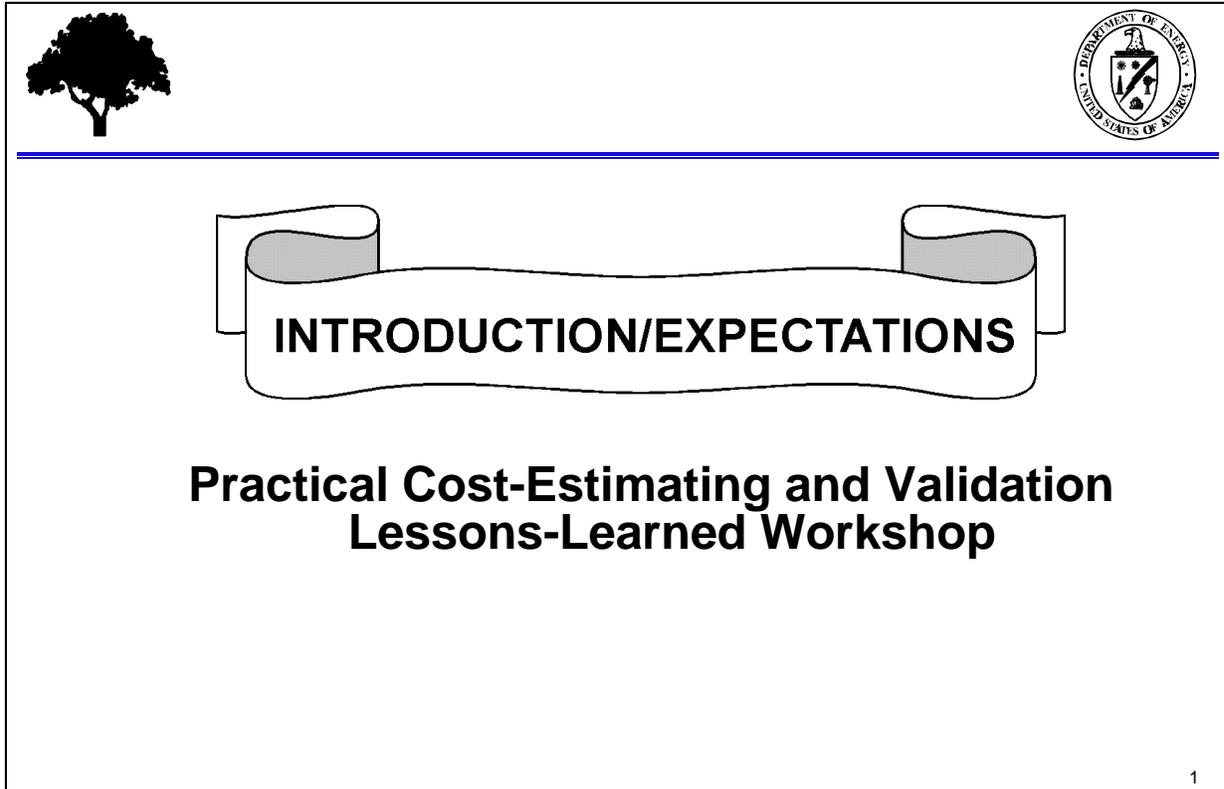


Introduction/Expectations



**INTRODUCTION/EXPECTATIONS**

**Practical Cost-Estimating and Validation  
Lessons-Learned Workshop**

1

***Discussion Leader/Facilitator Notes: Emphasize that this is a lessons-learned workshop. It is not a training course; rather, it is a sharing of lessons learned and “tricks of the trade” developed from the execution of real-life DOE cleanup projects.***

Introduction/Expectations



# The Need for Broader, Improved Cost-Estimating Knowledge



- **Congress and others have directed/advised DOE to strengthen federal project management functions and controls.**
- **We have improved, but we must continue to improve.**
- **Cost estimating is a key element of cost control.**

2

- Office of Environmental Management projects have been scrutinized by internal and external oversight organizations. In many cases, DOE has been criticized for not having sufficient control of costs.
- Congressional hearings, General Accounting Office (GAO) reports, Inspector General reports, Office of Management and Budget (OMB) reports, and letters from external stakeholders and both houses of Congress have directed/advised DOE to strengthen federal management functions to gain greater control of costs.
- In testimony before the House Subcommittee on Energy and Environment, GAO criticized DOE for a high rate of cost overruns and schedule slippage. One of the four key factors underlying these problems was a lack of sufficient DOE personnel with appropriate skills to oversee operations effectively.
- If we ever fail as an organization, it will probably be because we did not address this single issue adequately.
- The project manager is responsible to manage cost control. Accurate cost-estimating and validation is essential for this purpose.



# Workshop Objectives



**Enable Field/HQ staff to manage and control ER projects better through:**

- **Improved understanding of cost-estimating and validation practices**
- **Sharing of lessons learned**



3

Field and Headquarters program managers, project managers, scientists, and engineers can manage and control ER projects better with an improved understanding of cost-estimating and validation principles and practices. This improved understanding will lead to leaner, more defensible baselines and tighter change control. The workshop will provide improved understanding through the review of cost-estimating and validation concepts, principles, and practices and a focus on related lessons learned from DOE cleanup projects.

Introduction/Expectations



# Why is Cost Estimating Important to You?



- **This knowledge is critical to scientists, engineers, and project/program managers because cost estimates:**
  - **Are a key element in defining and controlling ER projects**
  - **Provide the basis for requesting project funding**
- **Unless you master the cost-estimating process, you can't ask the right questions to ensure fiscal responsibility and control of project costs.**

4

- Cost estimates help define and control ER projects by providing:
  - further definition of the approved work scope in the estimate basis,
  - detailed description of resources required to complete the approved work scope, and
  - prices of the resources required to complete the approved work scope.
- Cost estimates provide the basis for requesting project funding and for developing the baseline that is used to measure project performance.
- If you don't understand the cost-estimating process, you don't have the basis from which to formulate the right questions to ask the project team. If you don't ask the right questions, you have little assurance that the estimate is sound and little hope of maintaining control of project costs.

Introduction/Expectations



## Workshop Sponsor - Applied Cost- Engineering Team

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**This workshop is sponsored by the ACE Team:**

- **Joint Field/HQ Team**
- **Established to address cost-estimating, validation, and integration needs**
- **Promotes continuous cost-engineering improvements and use of:**
  - **consistent cost-engineering tools**
  - **best practices, methods, techniques**
  - **lessons learned, documentation, and communications**

5

The ACE Team Mission, Membership, Goals, and Objectives are presented in the Overview section.



# Why This Workshop?



**ER program/project managers have identified cost-estimating and validation process knowledge as a critical need.**



6

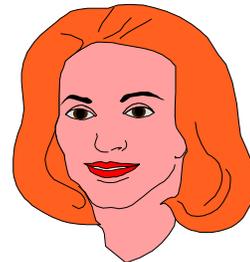
- In a cross-complex survey performed by the ACE Team in 1996, many of the project and program managers polled identified improved knowledge of the cost-estimating and validation process as a critical need.
- This workshop was developed in response to the expressed need.



# Roles of Workshop Participants



- **Discussion Leaders/Facilitator – To guide and lead discussions**
- **Attendees – To seek knowledge**
- **Everyone – To share personal knowledge and experience**



7

**Discussion Leader/Facilitator Notes:** *Point out that participants include discussion leaders, facilitators, and attendees.*

- Discussion Leaders/Facilitators
  - present workshop materials, instruct, and advise
  - demonstrate concepts through exercises using DOE examples
  - share experiences, recommendations, and approaches
  - facilitate the sharing of experiences by interacting with all participants to encourage active discussions
  - facilitate by focusing discussions and question/answer sessions
- Attendees assume responsibility for self-development
  - enter with an "open" perspective
  - expand personal networks and knowledge
  - identify issues for further discussion and personal research
  - participate actively
  - seek new information through questions and action items
  - pursue active discussions with facilitators, discussion leaders, and other participants
  - share experiences
- Everyone share personal knowledge and experience with the group



# Workshop Benefits



**Increased knowledge of sound cost-estimating and validation practices results in**

- **Pragmatic, defensible project cost estimates**
- **Well-documented, effective baseline change control**
- **Increased managerial and fiscal control**
- **Cost efficiency/cost reduction**



# ACE Team Followup



- The ACE Team will document lessons learned and innovative ideas identified in the workshop.
- Ideas will be evaluated for complex-wide applicability.
- Ideas with broad applicability will be disseminated across the complex.

9

**Discussion Leader/Facilitator Notes:** Use this page again at the beginning of the first section following the Cost-Estimating Concepts section to stimulate active participation. The Notes/Discussion Points/Lessons-Learned lines at the bottom of each page are available for participants to record ideas or lessons learned.

- A designated ACE Team member will be responsible for documenting lessons learned and innovative ideas that are contributed by participants (discussion leaders, facilitators, and attendees) during the course of the workshop.
- The ACE Team (as a whole or through chartered subteams) will evaluate lessons learned and ideas for complex-wide applicability, ease of implementation, etc.
- Noncontroversial lessons and ideas will be disseminated across the complex immediately. The rest will be analyzed further, and field and headquarters management will be briefed to reach a consensus regarding which idea(s) or lessons learned should be pursued.
- Identify an individual to document the lessons learned and the innovative ideas for the class.

(Continued on next page)

**Introduction/Expectations**

- Items with management consensus will be disseminated across the complex through normal channels or, if the idea is significant enough, as a policy statement. If a consensus cannot be reached but some management support exists for an idea, it will be disseminated with a caveat that the idea may not be appropriate for implementation at all sites. Management consensus that an idea is "bad" will result in it being dropped from consideration, and proponents of the idea will be notified.
- Normal dissemination channels include memoranda, direct contact by ACE Team members, the ACE Team home page/bulletin board (<http://www.em.doe.gov/aceteam/>), ACE Team newsletters, inclusion in Lessons-Learned Workshop presentation materials, and other means as appropriate.

**Workshop Logistics**



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# **WORKSHOP LOGISTICS**

## **Practical Cost-Estimating and Validation Lessons-Learned Workshop**





# I ntroductions



- Discussion Leaders/Facilitators
- Who are You?



2

**Discussion Leader/Facilitator Notes:** Have large, blank poster pages available. Write down class expectations regarding this workshop. During the workshop, refer to these expectations as they arise.

- Discussion Leaders/Facilitators
  - Background
  - Experience/specialty
  - Current position
- Who Are You?
  - Participant's name
  - Where from
  - Current position
  - Expectations for this workshop



# Workshop Operations



- **Discussion leaders will review concepts.**
- **Discussion leaders will walk the group through real-life DOE examples.**
- **You will note discussion points and lessons learned for further exploration.**
- **The group will discuss results, lessons learned, and innovative ideas.**

3

- The discussion leaders will review the basic concepts relevant to each example to be presented.
- Discussion leaders with expertise in selected, illustrative subelements of real-life DOE examples will walk the entire group through the subelement examples, drawing heavily from real projects and conveying lessons learned based on their experience.
- Discussion leaders will describe what attendees are seeking, why it is important, etc. Attendees will be working from a completed copy of the example that shows how the "right" answer was obtained.
- If you would like to discuss some points further or want to share lessons learned from your experience, note these in the space provided on each notebook page as concepts are being reviewed or examples are being worked through.
- The group will then, in open forum, discuss results of the example problem and related issues of interest and share lessons learned. Attendees, discussion leaders, and facilitators may be able to identify specific cost-reduction proposal processes in these discussions.
- Consensus will be reached on lessons learned to be documented for later publication and distribution by the ACE Team.

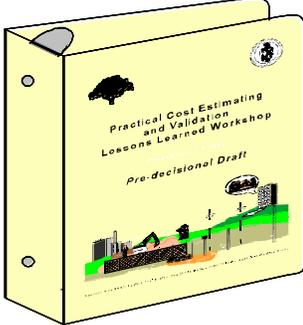
Workshop Logistics



# Instructional Materials



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## Workshop Notebook

4

**Workshop Materials**

Notebook, Practical Cost-Estimating and Validation Lessons-Learned Workshop

- An overview of principles and practices used in cost estimating and validation
- An in-depth examination of cost-estimating methods and techniques using examples and exercises
- A notebook that is yours to keep at the end of the workshop

Workshop Logistics

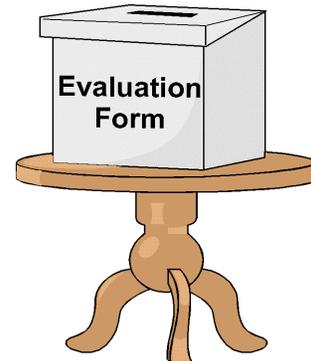


# Evaluation Form



**An evaluation form is included.**

- **Evaluate each discussion section as completed.**
- **Turn in the form at the end of the workshop.**
- **Your comments are needed.**



5

- Turn in the evaluation form at the end of the workshop.
- We need your comments to improve the content and ensure the success of future workshops.

Workshop Logistics



# Facility Logistics



- **Fire escape and collection points**
- **Restrooms**
- **Scheduled breaks and lunches**
- **Location of message board and phones**