
Arabian Institute For Training

Cost Analysis of Plug and Abandonment Operations

INTRODUCTION

- Well Abandonment is commonly the largest area of expenditure in decommissioning oil and gas production assets and is often the area of largest cost overruns. Estimating the abandonment costs at end of well life provides some unique challenges to the engineer and the cost estimator due to the potential step change impact of technical decisions and regulatory requirements.
- The strategic nature of decommissioning, and particularly abandonment, has only recently been recognized, with the growing impact on Company balance sheets, and the potential for significant cost overruns now in the spotlight in many organisations. Lessons can be learnt from recent industry experience, with good quality estimating practices at the heart of ensuring appropriate strategies can be implemented to minimize the current and future impact on the business.

This training course on Cost Analysis of Plug and Abandonment Operations will highlight:

- The strategic importance of understanding the scale of future abandonment liabilities
- Current Good Estimation Practices and how these should be applied to well abandonment
- The relationship between data quality and accuracy
- Common risks of cost overrun in well abandonment and how to manage them
- How good practices contribute to improved cost control
- The value of Benchmarking

OBJECTIVES

- This Cost Analysis of Plug and Abandonment Operations training course provides a comprehensive grounding in cost estimation good practices, how these apply to well abandonment, and why adoption is of strategic importance in financial planning and cost control.

By the end of this training course, participants will learn to:

- Differentiate between both methods of cost estimation and Classes of estimate
- Build a comprehensive Basis of Estimate using Good Industry Practice
- Appreciate levels of accuracy and their implications
- Identify common risks of cost overrun in well abandonment and how to manage them
- Build a probabilistic estimate and compare this with a deterministic approach for the same workscope
- Utilize cost estimation as a tool for cost control

TRAINING METHODOLOGY

- This Cost Analysis of Plug and Abandonment Operations training course will be taught using short introductory lectures followed by classroom discussion and debate to draw out key learning points and ensure the application of fundamentals is well understood. The tutor will use a number of real and imaginary examples to illustrate the key points and the potential impact of both good and poor management. Coverage of each area will include a tutorial exercise which may be undertaken individually or in small groups. The answers and conclusions drawn will be discussed and compared to illustrate the impact of varying approaches.

ORGANISATIONAL IMPACT

- The strategic importance for oil and gas asset operators of managing future decommissioning and well abandonment liabilities is often overlooked. Participants will be able to knowledgeably contribute to delivering effective financial and technical management of future abandonment obligations.
- Contribute to the strategic financial planning of future well abandonment liabilities
- Provide timely and effective identification and estimation of future financial liabilities associated with well abandonment
- Provide early identification of cost reduction opportunities allowing their application and impact to be maximized
- Lead the application of good cost estimation practices through the organization

PERSONAL IMPACT

- Better manage future abandonment liabilities and forthcoming projects
- Demonstrate technical competency in cost estimation
- Position themselves for participation and increased responsibility in a growing sector
- Lead the development and implementation of Good Practices within their organization

WHO SHOULD ATTEND?

- All individuals involved in abandonment planning, cost provisioning or execution management who wish to improve or optimize their contribution to the well abandonment process will benefit from this course.

This training course is suitable to a wide range of professionals but will greatly benefit:

- Well Engineers
- Team Leaders and Managers responsible for abandonment design
- Finance and Technical Cost Estimators responsible for identifying and managing future decommissioning liabilities
- Project Execution Engineers
- Team Leaders and Managers responsible for delivering well abandonment workscopes

Course Outline

Cost Estimate Methods and their Applicability to Well Abandonment

- Types of Estimate and their Limitations
- Classes of Estimate and their Application
- Understanding Appropriate Accuracy
- Recent Industry Experience
- What Drives Abandonment costs?
- The Ideal Data Set

Basis of Estimate Good Practices

- AACE Basis of Estimate Model
- Data Gathering
- Benchmarking and Reconciliation
- Managing Risks with a Risk Register

Probabilistic Estimation

- Methodology and Good Practice
- Advantages
- Avoiding the Pitfalls
- Applicability

Cost Control and Applying Lessons Learnt

- Common Causes of Cost Overrun in Well Abandonment
- Risk Mitigation
- Project Maturation
- Record Keeping
- Potential Impact of Capturing and Applying Lessons Learnt

Consolidation

- Value and Importance of Good Cost Estimation
- Methods and their Applicability
- Key Takeaways


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