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GP 43-13

Pipeline Cost Estimate and Schedule Reporting

Group Practice

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This issue of Engineering Technical Practice (ETP) BP GP 43-13 incorporates:

- a. Legal costs into Tables 1 and 2 for onshore and offshore pipelines respectively.
- b. Formal cost review and Cost Risk Analysis into the Select project stage in Table 5.

This Group Practice (GP) is newly created and is not based on heritage documents from the merged BP companies.

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Introduction

This GP provides a basis for pipeline projects to format their cost estimates and final Execute cost data to facilitate accurate cost comparisons and true benchmarking between pipeline projects.

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1. Scope

This GP describes the framework for reporting of cost and schedule data. It seeks to have projects provide consistent baseline schedule information and matching cost estimates from the earliest stages of a pipeline project through to the Execute as-built data. This GP is not a detailed description of how to carry out the actual estimates, but does give links to current BP methodologies and recent project examples. The framework describes the preferred way for costs of a pipeline project to be broken down.

The reason behind the requirements of this document is to substantially improve the integrity and usefulness of project cost and schedule data for use in cost reporting and benchmarking of future projects via e-projects.

2. Normative references

None.

3. Terms and definitions

MPCP

Major projects capital process

NPV

Net present value

PUL

Performance unit leaders

UAP

Unallocated provision

4. Document outline

This document describes the key components into which cost data should be separated and reported for a pipeline project.

- a. This GP shall be read by PULs, Project managers, Engineering managers, Service managers, cost and schedule engineers, and Contract and Procurement managers for all stages of CVP and especially before drawing up invitations to bid at any stage of a project.
- b. The requirements of this document should be made known to bidders so that they are aware of these BP reporting requirements and can thereby facilitate this GP objective.

The document is intended to ensure that projects construct their cost estimates and report outturn cost data in a standard format, as described later, to facilitate cost comparisons. The ability to compare like with like greatly improves the accuracy and reliability of future cost estimates. Furthermore, it makes a contribution to future project success.

The following issues are considered in this document:

- *Generation and use of cost data through the different phases of the project.*
- *Required key components of cost data.*
- *Terminology for describing the pipeline.*



- Tools available for cost estimating.
- Definitions of estimate classes and related schedules.
- E-projects data reporting system.

5. Nature of document

This document does not provide detailed methods statement of how to make cost estimates, but does give indications of suitable tools.

- The requirements of this document shall be applied from the early-stage pipeline concept evaluation (Appraise) onwards through to completion of construction in Execute, by those involved in undertaking cost estimates, whether within BP or in consultants and contractors.
- Cost estimates should follow the same reporting structure.
- Final outturn costs should also be reported following this structure.

This document does contain specific directions and requirements. These could well generate realignment of how cost data has been previously reported, especially by consultants or contractors.

6. Business significance

BP owns and has access to data on project costs from a large number of BP operated and non-operated pipeline systems. Most of this data is contained within the e-projects data reporting system. However, the bases on which these data sets have been reported have varied, meaning that a like for like comparison is often difficult. This substantially reduces the value of the data for benchmarking. For example, lump sum contracts are often in place for pipeline projects, thereby creating a difficult environment to access and understand costs.

- From the onset of the project, effort shall be made to strategically overcome this data access problem, as far as contractually possible.

The initiative required by this document is aimed at standardising the data reporting, so that the data retained is of much greater value and more easily utilised.

Often, at Appraise, the initial estimates that are developed are based on data and experience that may go unchallenged in sufficient detail. These can then go forward into the subsequent CVP stage and create false expectations. Commercially important decisions are made in the front end CVP stages using, for example, Appraise capital estimates for early economics. To have the best estimate accuracy available, correctly benchmarked, is key to try to avoid later cost surprises. By having accurate historical cost estimate data at Appraise, fully described and understood, prepared and reported on a like for like basis, becomes a positive step to improving economic decisions and establishing commercial agreements with value protected for BP.

- Data from prior projects used to assist cost estimate preparation for the present project shall be confirmed to be accurate and from valid sources.

7. Generation of cost data through the pipeline project

- Cost estimates shall be produced to satisfy the requirements of the BP Cost and Schedule Estimate Classifications at the various stages of a pipeline project.

