

CONSTRUCTION CONTRACT METHODS

Traditional or EPC?

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Legal Framework

- • Form of Contract
- • Law of the Contract
- • Contract Language
- • Location for Dispute Resolution
- • Bonds and Guarantees
- • Warranties
- • Payment Terms



Success Factors

- One single organization responsible for execution.
- Dedicated project teams.
- Work processes, systems and procedures.
- Efficient Contract Administration
- Quality Assurance



Functional factors

- Well-defined concept at time of decision
- Successful selection of contractors
- Interface management
- Sound risk management
- Active stakeholder management

There will be changes!

- A typical well planned project will experience increases in costs because of Changes.
- A poorly planned project will experience many changes.

Contracting Methods

EPC or ePC??



Procurement and Funding Strategies

- Traditional
- Design and Build
- Turn Key EPC



Traditional

- Owner has working knowledge of project
- Engineering done independently of construction
- Material purchased by Owner
- Construction contractor provided drawings
- Each contractor responsible for its work
- Owner has overall responsibility



Risk Management: Traditional Contracting

- Multiple contracts to manage
- Best control over design
- Better control over construction outcomes
- More prone to “claims” by construction contractor
- More sensitive to material delivery commitments
- Allows earlier project completion



Risk Management: EPC Contracting

- Fewer contracts to manage
- More difficult to control design
- Less control over construction outcomes
- Best coordination of material delivery
 - [IF EPC contractor buys materials]
- Better for resolving construction delays
- Design can't start until EPC contract let.
 - [Preliminary design completed as part of EPC Bid docs]



Engineering for EPC

- Engineering by EPC Contractor –BUT BEFORE BID!!
 1. Environmental and Permitting Work Requires a Maximum Effort
 - Modern Computer Design Tools Allow Agencies to Demand Much More
 - In Some Instances, Soil Borings Require an AE
 2. Plan & Profile Preliminaries
 3. Access Roads Require Extensive Work Before Bid

