JOURNEY INTO UNCHARTED TERRITORIES

How are owners, contractors and suppliers adapting to successfully execute projects and reposition their businesses in the ever evolving project environment?

REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES
Adapting the Way we Contract and Manage Risk for Major Projects

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Trends in Contracting Approaches – tackling head on the contractual and legal issues

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JOURNEY INTO UNCHARTED TERRITORIES
Contracting Forum

REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES
Owners Perspective on Contracting Domestic Projects

- Projects have become larger and more complicated.
  - Take advantage of the Economy of Scale in the commodity markets.
  - Increased instrumentation due to Process Safety Management.

- Perception that only large EPC contractors can manage a Mega Project

- Owner Project management staffs have reduced their capabilities over during the 1980s and 1990s.
  - Attempting to rebuild staff for the control of projects.
  - Reliant on EPC Contractors.
Owners Perspective on Contracting Domestic Projects

- Mitigating Contracting Risk
  - Development of a detail Front End Engineering Design (FEED) (FEL3)
    - Should be reimbursable during scope development phase.
    - Specifications and standard drawings development.
    - Contracting development plan.
  - Contract scope of work to match the FEED
  - Estimates must match the construction execution plan.
  - Assign Risk to the entity best able to control the risk outcome.
  - The owner must be involved and drive the project outcome
    - Home office presence to provide quick responses to contractors.
    - Field involvement in remove site restrictions.
    - The owners personnel must understand and be trained in the contract.
    - Differing contracts dictate owner staffing requirements.
Owners Perspective on Contracting Domestic Projects

• Contract Types
  – Lump Sum EPC preferred by the owners
    • Clear and well defined scope
    • Clear and unrestricted worksite
    • A minimum of three interested bidders
    • Provides cost surety to the owner and reduces risk
    • Requires maximum upfront development
  – Reimbursable engineering and construction management with lump sum construction.
    • Local construction contractors are familiar with the conditions and are able to take on short term labor risk
    • Provides cost surety for the construction risk
    • The location and size of the project may restrict the use of this strategy.
Owners Perspective on Contracting Domestic Projects

• Contract Types
  – Reimbursable engineering and construction management and construction.
    • Requires the coordination of multiple contractors.
    • If managed correctly can reduce the lump premium included in a project.
  – Reimbursable engineering with a general contractor managing construction.
    • Construction is managed by a contractor with construction experience and expertise.
  – Total reimbursable contracting strategy
    • Most difficult to control and require a high level of owner involvement
    • Should utilize local subcontractors and not direct hire by the EPC.
Owners Perspective on Contracting Domestic Projects

• Mega Projects are different, but still require project discipline.
  – Contracts must build in the logistical constrains of the site and area.
  – Require a different level of joint planning between the owner, engineer and contractor to succeed.
  – Normally exceed the limits of the local labor pool to provide productive craft workforce.
  – Early up front involvement of the contractors in the planning efforts to verify estimating mythology and planning efforts, yields better results.
Owners Perspective on Contracting
Domestic Projects
Bonus Comments

– The owner needs to be directly involved in the establishment of the contracting strategy.
  • Can not be reliant on EPCs that have a financial benefit in a selected strategy.
– Local contractors usually perform better than national contractors.
  • Can not exceed the management span of the local contractor.
  • Include the contractor in the planning efforts.
– The use of Lump Sum construction is preferred.
  • Shifts productivity risk to the people in the best place to control the outcome.
  • Still requires up front owner involvement in the vetting of the contractor capabilities and planning efforts.