

# SYLLABUS

## MANAGING INTERNATIONAL EPC CONTRACTS AGENDA

## Managing International EPC Contracts in the Global Power Industry Masterclass

Localised(values={})

### COURSE OUTLINE

#### Scoping EPC projects

- Choice of power plant – nuclear, coal, alternative (wind, tidal, solar)
- Getting the focus right – what is included and what is excluded; for example commissioning or simply delivery of an operational facility?
- Checking the scope against the project business case
- Considering resource requirements
- The importance of effective ‘trade-off’ decision-making processes and identifying opportunity cost
- **Case study – Crescent Dune Project**

#### Some key features of consideration of EPC contracts

- Single-point ownership – ramifications, advantages and disadvantages
- Time constraints
- The fixed-price basis – advantages and disadvantages
- Procurement responsibilities – ramifications
- Achieving/matching specification – quality and ‘fit for purpose’, what guarantees have been given?
- **Case study – The Gorgon LNG Project**

#### Some pertinent and relevant contractual provisions of central importance

- Governing law
- Establishing the rights, duties and obligations of the parties to the contract
- Understanding the ramifications of indemnity, insurance and liability (suppliers’ and buyers’) provisions
- Provisions relating to risk and performance
- Warranties and guarantees
- Termination clauses
- Damages – LDC’s
- Renegotiation clauses and review mechanisms
- Price escalation clauses
- Consequential loss exclusion clauses
- Dealing with breach of contract
- Assignment and novation of contract
- Force majeure provisions
- Intellectual property provisions
- Time bar and prescriptive (limitation) periods

#### Effective risk management

- Environmental analysis – understanding the commercial environment where you are operating
- Competitor analysis – assessing competitors against what you are doing
- Performing due diligence – knowing who the stakeholders are, what their interests are and thinking in ‘scenarios’
- Understanding the classifications of risk that might impact upon an EPC contract – i.e., financial risk, the risk to the organisation (reputation, commitment of resources, etc.), the risk of non-performance (risk of contractor/subcontractor non-performance), the risk associated with regulatory compliance (i.e., local content provisions – what are the ramifications of these; HSE policies and compliance – issues involved; political risk – instablisation, nationalisation, etc. (consider force majeure above), organisational bias towards pricing bids and

tenders, uncertainties/inconsistencies within FEED impacting price

- Establishing effective and realistic mitigation strategies
- **Case studies – Chernobyl and Fukushima nuclear power plants**

#### Procurement and purchasing management

- How do we make purchasing decisions?
- An examination of the statement of requirement (SOR)/request for proposal (RFP)
- The tendering cycle
- Developing purchasing specifications
- Some key tips
- Key criteria that should be contained within a purchasing specification
- Sources of information to utilise in development
- Some types of common specification
- Some common contents of purchasing specifications
- **Class exercise – Examining the concept of ‘strategic procurement’ for EPC projects**

#### Supplier selection

- What is meant by ‘supplier selection?’
- Selecting new suppliers
- Consequences of non-performance by suppliers
- ‘Qualifying’ new suppliers
- A suggested process for ‘screening’ new potential suppliers
- Key parameters of supplier selection
- Some disadvantages of the supplier-selection process
- Creating an ‘approved vendor’ base
- Key issues in evaluating suppliers

#### Commercial performance management

- Knowledge about vendor qualification, pre-qualification and post-qualification requirements and processes
- Understanding the ITT process
- Technological capability
- Track record – personnel, equipment, operational capability, logistics
- Procurement processes
- Identification and inclusion of KPIs
- Evaluation against established KPIs
- Evaluate and control documentation
- Claims management
- HSE
- Environmental policies

#### Managing change orders

- Change orders and the project scope
- Understanding the reasoning behind a change order – Is it applicable or appropriate?
- The 3 common reasons for change orders – client specification changes, poor ‘scoping’ (errors and omissions), changes in the environment
- Establishing the audit trail
- The importance of price escalation clauses
- Change orders and contractual breach – a significant issue?
- Change orders and Liquidated Damage Clauses (LDC’s) – a direct relationship?
- Change orders and force majeure
- **Class exercise: Efficiency in managing change orders**

#### Stakeholder and project interface management

- The problem with stakeholder agendas
- Stakeholder power and influence – a shifting dynamic over a project’s life cycle?
- Stakeholder identification and assessment – ‘stakeholder mapping’
- **Class exercise – stakeholder mapping**
- **Scenario 7: Dealing with stakeholder agendas**
- The variable interface between the different parties to the power contract – the long-term relationship perspective of the project company, the government and the system operator vs. the short-term perspective of the EPC contractor; managing this crucial complex dynamic
- Managing the grid access interface – a key issue for project completion and a potential source of dispute
- The commissioning and testing interface – ensuring consistency and compatibility between EPC contractual specifications and the PPA, an important concern for financiers
- The fuel specification issue – ensuring consistency between EPC contractual provisions, PPA and/or tolling arrangements
- Establishing/re-establishing constructive engagement with stakeholder groupings
- Monitoring and control mechanisms – the guardians of the project interfaces?
- Ownership, accountability and reporting structures – the source of the most crucially important interfaces for project success
- Dealing with local content and corporate social responsibilities (CSR)
- **Case study – Stakeholder engagement strategy in the Trans Adriatic Pipeline**

#### Managing strategic lead times

- The aims of managing strategic lead times
- Common faults
- The 3 parts of ‘lead time’
- From the supplier’s perspective
- Some additional benefits from managing strategic lead times
- **Class exercise – examining and understanding the components of critical lead time managing**