



# Kudu Gas to Power Project

## Detailed Programme/course outline

*Project Financed Construction Works in Namibia*

**Using FIDIC on Project Financed Power Projects: "KuduPower EPC/Turnkey Contracts"**

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### DAY 1

#### **Opening** [9.30-10.30am]

- Welcoming
- Opening

#### **Session 1: Introduction to the Kudu Project** [10:30-11:00]

- **The Kudu project**  
ie. a very brief outline of the Kudu project  
For example, covering:
  - what the project will achieve/produce
  - its main components (from a construction point of view), ie. (i) development of the gas field and construction of a pipeline to the power plant and gas conditioning plant adjacent to the power plant (ii) construction and operation of the power plant itself and (iii) construction of power lines from the power station to feed into the Namibian and South African power grids
- **Project structure**

- **Project participants and their various roles**

For example:

- covering NamPower, financier(s), EPC contractor and subcontractors etc
- focussing on the roles of the EPC contractor and its subcontractors in context of the project as a whole

- **Benefit of the Kudu project for local contractors**

For example:

- local jobs
- development of Namibian skills and experience in:
  - \* CCGT power stations
  - \* infrastructure of similar type and scale to the Kudu CCGT power station
  - \* international projects generally
- catalyst for further energy/infrastructure investment in local area and Namibia as a whole

## **Session 2: Overview on Project Finance and Financing Structure** [11:20-12:00]

- **Introduction to project finance as a concept**
- **Summary of what project financing brings to projects like the Kudu project**

- for example, it is the only/best means of funding the project?

- **The borrower**

For example, covering:

- the nature of an special purpose vehicle (*SPV*)
- the role of the SPV on a project financed project

- **The financing**

For example, covering:

- an explanation of limited or non-recourse lending re. repayment of debt being limited to the success of the project rather than access to the borrower's general assets

- **What role will a financier expect to have on the project?**

For example:

- influence/approval of the terms of the EPC Contract
  - notification of significant project events
  - review or consent rights regarding significant project matters
  - a role in certifying payments to the EPC contractor
  - a role in certifying completion of construction
  - step-in rights
  - direct warranties from EPC contractor and key subcontractors
- **How project financing affects the role of an SPV as employer under an EPC Contract**

For example:

- SPV has less control over certain project matters than an employer in other circumstances
- prohibition against SPV accepting risk on the project

### **Session 3: Overview of FIDIC** [12:00-13:00]

- **FIDIC**
  - ie. a very brief introduction to FIDIC, the organisation, and FIDIC, the standard form contracts
- **Contrast between the FIDIC Conditions of Contract for EPC/Turnkey Projects and other construction contracts**
  - ie. a very brief coverage intended to show what the FIDIC Conditions of Contract for EPC/Turnkey Projects are and what they are not
  - For example:
    - \* standard form –v- bespoke agreement
    - \* cf. construction only/employer design (eg. FIDIC Conditions of Contract for Construction) and design and build contracts (eg. FIDIC Conditions of Contract for Plant and Design & Build)
    - \* cf. cost plus reimbursement, unit price and measurement contract, target cost etc
- **The FIDIC Conditions of Contract for EPC/Turnkey Projects**
  - ie. a brief introduction to the FIDIC Conditions of Contract for EPC/Turnkey Projects

For example, covering:

- that it is designed for use on major international projects
- that it is:
  - \* an "EPC" or "turnkey" contract and what these terms mean
  - \* a lump sum/fixed price contract
  - \* a two-party contract (ie. there is no engineer) between "the Employer" and "the Contractor"
- consists of Articles of Agreement, Conditions of Contract, Particular Conditions and other documents including the Employer's Requirements

- **Tailoring the FIDIC Conditions of Contract for EPC/Turnkey Projects**

For example, covering:

- that the FIDIC Conditions of Contract for EPC/Turnkey Projects are only a standard form and therefore require adaptation for the specifics of any given project (principally achieved by amending the Conditions of Contract and drafting the Particular Conditions)
- that in the case of the Kudu project, the FIDIC Conditions of Contract for EPC/Turnkey Projects need amendment for reasons including the following:
  - \* to make it suited to a power plant project
  - \* to make it a performance-based contract as is typical for any EPC contract for a power plant (eg. briefly explain that the Employer's Requirements will be a performance specification and that provisions for testing and commissioning etc are required to be added)
  - \* to include project-specific obligations on the contractor (eg. training of the Employer's staff, ongoing maintenance etc)
  - \* to make the project bankable on a project financing basis (eg. limiting SPV risk)
  - \* to take account of specific lender requirements
  - \* to take account of local (and possibly international) regulatory requirements
  - \* to take account of the governing law of the contract

- **Overview of Risk Allocation**

For example, covering:

- that a key function of the EPC Contract is to allocate risks between the Employer and the Contractor

- that the "golden rule" of risk allocation is that the party who can best manage the risk should take the risk (which may lead to sharing of some risks), perhaps illustrated by the risk of protester action where the Employer may be best placed to manage the risk of protesters successfully lobbying the government for a change in law to eg. ban CCGT power plants in Namibia whereas the Contractor may be best placed to manage the risk of protesters damaging the works (eg. by installing appropriate site security)
- that the process of risk allocation will also be affected by the financier's attitude to the SPV accepting risks
- that the standard risk allocation under the FIDIC Conditions of Contract for EPC/Turnkey Projects/EPC Contracts generally is that:
  - \* Contractor takes on single-point risk of design and construction of the project
  - \* Contractor takes on single-point risk of the project meeting the performance specification
  - \* Contractor takes on single-point risk of completion and by a fixed date
  - \* Contractor takes on the risk of performance of its consultants/subcontractors/suppliers
  - \* Contractor takes on interface risk (between its various consultants/subcontractors/suppliers)
  - \* Employer takes part-risk on suitability of Employer's Requirements
  - \* Employer takes risk on Contractor insolvency
  - \* Employer takes limited other risks
- that the Contractor deals with the risk by (i) identifying and managing individual risks, (ii) passing on risk to its consultants/subcontractors/suppliers; (iii) insurance and (iv) including contingency amounts in its lump sum price

**Session 4: Focus on the FIDIC Conditions of Contract for EPC/Turnkey Projects Part 1**  
 [14:00 – 15:10]

- **Achieving the Specification**

For example, covering:

- That the goal is to achieve the performance specification stated in the Employer's Requirements
- Contractor's share in responsibility for suitability of the Employer's Requirements
- Contractor's performance-related warranties and guarantees (eg. fitness for purpose)
- The Employer's rights of inspection during construction
- Completion, testing and commissioning regime (including provision of as-builts and O&M manuals)

- Certification
- Tests after Completion
- Licensing of the plant
- Defects liability
- Performance-related liquidated damages
- Variations (including value engineering)

- **Achieving the Programme**

For example, covering:

- That the goal is to achieve the Time for Completion for the Works (and each Section)
- Other time-related obligations (eg. submitting and maintaining progress with the programme)
- Contractor's entitlement to extensions of time/delay costs
- Delay-related liquidated damages

- **Project Security**

For example, covering:

- That the aim of project security is to give the Employer and the financier security against the Contractor's ability to achieve the specification, achieve the programme and meet its other obligations
- Potential forms of security including advance payment bond, performance bond, parent company guarantee, retention etc
- Ability of the Employer to call upon security
- Return of security to the Contractor

- **Payment Regime**

For example, covering:

- Advance payment
- Payment system (ie. staged payments or payment against milestones)
- Contractor's interim applications for payment
- Assessment by Employer (and financier)
- Payment by Employer
- Arrangements regarding Final Payment

- **Insurance**

For example, covering:

- Contractor insurances
- Employer insurances

## **Session 5: Focus on the FIDIC Conditions of Contract for EPC/Turnkey Projects Part 2** [15:30 – 16:30]

- **Duties on the Employer**

For example, covering:

- Access
- Payment
- Employer's Equipment and free-issue material

- **Project Communication**

For example, covering:

- Employer's Representative
- Contractor's Representative
- Progress reports

- **Notification of Claims**

For example, covering:

- The process by which the Contractor may make claims for variations, extensions of time and other claims
- Claims by the Employer

- **Dispute Resolution Process**

For example, covering:

- The DAB
- ICC Arbitration

- **Termination**

For example, covering:

- Employer's termination rights
- Contractor's termination rights

- **Force Majeure**

For example, covering:

- Responsibility for boycotts/local strike action

- **Other**

Possible other areas include:

- Site-related matters
- Environmental issues
- Regulatory and change in law issues
- IP
- Contractor's Documents

<b>DAY 2</b>
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**Session 6: FIDIC Conditions of Contract for EPC/Turnkey Projects in Practice – the Engineer's View** [09:00 – 10:00]

- Content to be advised

**Session 7: What does the EPC Contract mean to the sub-contractor?** [10.00am-11.00am]

For example, covering:

- The roles of the Employer, Contractor and financier will generally inform the role of subcontractors
- Identity of subcontractors and the form of subcontracts may be subject to approval by the Employer under the EPC Contract and the financier
- The principles of risk allocation apply equally as between the Contractor and its subcontractors
- Subcontractors are likely to be engaged by the EPC Contract on similar terms and conditions as set out in the EPC Contract (in particular in areas such as governing law, force majeure and dispute resolution procedures)
- The concept of "back-to-back" EPC contract/subcontracts

- Subcontractors may be engaged on lump sum pricing arrangements
- Subcontractors are likely to be required to make warranties reflecting those of the Contractor under the EPC Contract (as applicable to the subcontractors' scope of works)
- Payments to subcontractors may be linked to timing and amount of payments under the EPC Contract
- Explanation of the mechanics of the cash waterfall
- Termination of the EPC Contract will entitle termination of the subcontract
- Subcontracts may contain step-in rights for the Employer under the EPC Contract and/or the financier
- Potential for joint dispute resolution procedures between the EPC Contract and subcontracts
- Obligations upon subcontractors to provide collateral warranties in favour of the Employer and the financier
- Obligations upon subcontractors to provide security for their performance
- How to source security (advance payment bonds, performance bonds etc) in the market

**Session 8: Panel Discussions** [11:20-13:00]