

# **Petroleum Contracts & Negotiations**

**Led by M. A. Mian**

## **Overview of Course**

This 3-day program in Petroleum Contracts & Negotiations is an extensive hands-on course. The course participants will gain familiarity with the general mechanics of the production sharing agreements and be able to fully appreciate the effects of various terms and conditions on the Government Take and Investor's profitability. This hands-on course will enable the participants to design the terms of production sharing agreements on their own and be able to defend their approach to higher management and government entities. Excel will be extensively used in order to physically see the impact of various terms and conditions on the government take and investor profitability. The objective of the course is to enable the participants design efficient fiscal systems in order to avoid renegotiation of these long-term contracts.

## **Agenda**

Each day of the course is divided in two parts (a) presenting theoretical concepts and mechanics of the tax royalty and production sharing agreements (PSA) and (b) solving a variety of problems/exercises to reinforce the theoretical concepts. All calculations will be performed using MS Excel. All participants will be required to have access to desktop computer and laptop computer with Excel installed.

## **Course Covered**

- Gain full insight into the latest advances in designing International Petroleum Agreements with emphasis on Production Sharing Agreements (PSA).
  - What the deals involve
  - Who gets what and how much
  - Expectations of the parties involved
  - The bottom-line
  - How the contract should adjust to marginal discovery and a bonanza
- Appreciate the significance of various terms used in these contracts/agreements
- Master the technical and non-technical terms and jargon applicable to the production sharing agreements
- Gain benefits that are direct, immediate and measurable

## Who Should Attend

- Planning Managers
- Oil & Gas engineers
- Project managers
- Analysts
- Commercial managers
- Economists, business analysts and business development personnel
- Government officials, legal counsels & negotiators
- Geologists
- Business advisors
- Asset managers
- E&P managers

## Summary of Topics

DAY 1	DAY 2	DAY 3
<ul style="list-style-type: none"> <li>• Fiscal Systems/Fiscal Regimes</li> <li>• Government Participation</li> <li>• Types of Contracts/Agreements</li> <li>• Designing Production Sharing Agreements</li> <li>• Contract Document</li> <li>• Problems/Exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Forms of Government Take</li> <li>• Profit Oil &amp; Cost Oil Splits</li> <li>• Treatment of Various Costs</li> <li>• Government Participation</li> <li>• Problems/Exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Effect of Various Terms on Profitability</li> <li>• Decommissioning</li> <li>• Incremental Analysis</li> <li>• The Bidding Process</li> <li>• Current Trends in Fiscal Systems</li> <li>• Case Study</li> <li>• Problems/Exercises</li> </ul>

## Detailed Course Outline

DAY 1	DAY 2	DAY 3
<p><b>Fiscal Regimes/Fiscal Systems</b></p> <ul style="list-style-type: none"> <li>• International agreements</li> <li>• Parties to Production Sharing Agreement (PSA)</li> <li>• Ideal fiscal system for government</li> <li>• Ideal fiscal system for contractor</li> <li>• Oil and gas resources ownership</li> <li>• The need for collaboration</li> </ul> <p><b>Government Participation</b></p> <ul style="list-style-type: none"> <li>• Crafting fiscal terms - what to look for?</li> <li>• Government participation</li> <li>• Key aspects of government participation</li> <li>• Do contractors prefer government participation</li> <li>• Commerciality</li> </ul> <p><b>Types of Contracts/Agreement</b></p> <ul style="list-style-type: none"> <li>• Contractual arrangements</li> <li>• Main differences between PSA and Royalty/Tax system</li> <li>• PSA cash-flow distribution</li> <li>• PSA numerical example</li> <li>• PSA sample cash-flow</li> <li>• Effect of HG take on contractor economics</li> </ul> <p><b>Designing Production Sharing Agreements</b></p> <ul style="list-style-type: none"> <li>• Key questions in designing PSA</li> <li>• Efficient PSA?</li> <li>• Protecting the foreign investment</li> <li>• Contract duration and extensions</li> <li>• Minimum work program commitment (MWPC)</li> <li>• Each PSA is unique</li> </ul> <p><b>Contract Documents</b></p> <ul style="list-style-type: none"> <li>• Upstream project agreement</li> <li>• Other agreements</li> <li>• Relinquishment</li> </ul> <p><b>Problems/Exercises</b></p>	<p><b>Forms of Government Take</b></p> <ul style="list-style-type: none"> <li>• Government take</li> <li>• Nature of government take</li> <li>• Bonuses</li> <li>• Signature bonus through bidding</li> <li>• Signature bonus through negotiation</li> <li>• Production bonuses</li> <li>• Examples of production bonuses</li> <li>• Rentals/surface fees</li> <li>• Sliding scale tranches</li> <li>• Royalties</li> <li>• Royalties - two dimensional link</li> <li>• Royalties - other types of sliding scale</li> <li>• S-curves for tax and royalties</li> </ul> <p><b>Profit Oil (PO) &amp; Cost Oil Splits in PSAs</b></p> <ul style="list-style-type: none"> <li>• Petroleum costs</li> <li>• Fixed profit oil split</li> <li>• Progressive profit oil split</li> <li>• Some examples of profit oil splits</li> <li>• Profit oil splits based on cumulative production</li> <li>• Cost recovery (CR) - two dimensional link</li> <li>• S-curves for CR and PO</li> </ul> <p><b>Treatment of Various Costs</b></p> <ul style="list-style-type: none"> <li>• Corporate income tax (CIT)</li> <li>• Treatment of bonuses</li> <li>• Operating expenditure (OPEX)</li> <li>• Capital expenditure (CAPEX)</li> <li>• Interest on Loan</li> <li>• Loss carried forward</li> <li>• Loss carried forward limits</li> <li>• Depletion allowance</li> <li>• Uplift or investment credit</li> <li>• Tax credits</li> </ul> <p><b>Government Participation</b></p> <ul style="list-style-type: none"> <li>• Back-in options</li> <li>• Payments in back-in options</li> <li>• Carried interest</li> </ul> <p><b>Problems/Exercises</b></p>	<p><b>Effect of Various Terms on Profitability</b></p> <ul style="list-style-type: none"> <li>• Effect of Various Terms on Profitability</li> <li>• Upfront bonuses and taxes (front end loading index)</li> <li>• Ring fencing</li> <li>• Effect of ring fencing on GT</li> <li>• Effect of uplift on GT</li> <li>• Effect of depreciation on GT</li> <li>• Combined effect of depreciation &amp; uplift on GT</li> <li>• Effect of loss carried forward on GT</li> </ul> <p><b>Decommissioning</b></p> <ul style="list-style-type: none"> <li>• Decommissioning plan</li> <li>• Decommissioning costs</li> <li>• Ownership and transfer of assets upon termination</li> <li>• Liability and insurance</li> </ul> <p><b>Economic Assessment of International Contracts</b></p> <ul style="list-style-type: none"> <li>• Effect of GT on contractor's economics</li> <li>• Government take (NCF versus NPV)</li> <li>• Contractor's IRR</li> <li>• Schematic of net cash-flow</li> </ul> <p><b>Incremental Analysis</b></p> <ul style="list-style-type: none"> <li>• Incremental analysis</li> <li>• Investment scenarios</li> <li>• Gold plating</li> </ul> <p><b>The Bidding Process</b></p> <ul style="list-style-type: none"> <li>• Financial capability of company</li> <li>• Technical capabilities</li> <li>• Information related to legal aspect of the company</li> <li>• Setting up data rooms</li> <li>• Sealed bids</li> </ul> <p><b>Bids' Evaluation</b></p> <p><b>Current Trends in Fiscal Systems</b></p> <p><b>Case Study</b></p> <p><b>Problems/Exercises</b></p>



## M. A. MIAN, P.E.

Mian is a Sr. Petroleum Engineering Consultant with Saudi Aramco in Dhahran, Saudi Arabia. He has previously worked with Qatar Petroleum (Doha, Qatar), ZADCO (Abu Dhabi, UAE), Euratex Corporation (Colorado, USA), Keplinger & Associates (International Energy Consultants in Colorado, USA), and as Independent Consultant in Colorado, USA. He is a registered professional Engineer in the state of Colorado, USA.

Mian has **35 years** of diversified experience in petroleum engineering, reservoir engineering, project economics and decision analysis. He had been involved in evaluating multi-billion dollar oil and gas field development, LNG, GTL, Aluminum smelter, refinery, petrochemical, power and production sharing projects.

Mian is the author of four books “Petroleum Engineering Handbook for the Practicing Engineer, Vol. I and Vol. II” and the best seller “Project Economics and Decision Analysis, Vol. I and Vol. II,” published by PennWell Books, Tulsa, Oklahoma, USA. He has also authored several papers in the Oil & Gas Journal, The Log Analyst, World Oil, SPE Journals, and Oil & Gas Financial Journal. He is also the author of three software packages (PEPAC, PEPAC2 and PEPAC3) for petroleum engineers, available from Gulf Publishing Company in USA.

Mian is one of the pioneers in working with unconventional gas resources. He has extensively dealt with reserves evaluation of tight gas and coalbed methane. Currently he is involved in applying his experience to shale gas resources. He has also served as an expert witness in US Federal court and Energy Commission hearings regarding tight gas pricing classification in the US.

He has delivered lectures in more than 25 countries around the globe. He has always received excellent feedback, as an expert presenter, from the participants of his courses.

## EDUCATION

- B.Sc Mechanical Engineering
- M.Sc Petroleum Engineering, Colorado School of Mines, Golden, CO, USA
- M.Sc Mineral Economics, Colorado School of Mines, Golden, CO, USA

## PORTFOLIO OF COURSES

- 5-Day – Project Economics, Risk & Decision Analysis
- 5-Day – Designing Efficient Oil & Gas Fiscal Systems
- 3 Day – Advanced Project Economics, Risk & Decision Analysis
- 3-Day – Economics of Production Sharing Agreements
- 3-Day – Development & Economics of Unconventional Resources
- 3-Day – Fundamentals of Oil & Gas
- 3-Day – Decline Curve Analysis, Diagnostic Methods and Performance Forecasting

## PUBLICATIONS

- Unnecessary and Avoidable Mistakes in Financial Calculations
- Comparison of Methods used to Calculate Netback Value
- Revisiting the Pitfalls and Misuse of WACC
- Custom Graphs Help Analyze Oil, Gas Operations
- Spreadsheet Programming Simplifies Drilling Calculations
- Program Quickly Solves Trial-and-Error Problems
- Creating Quality, Cost Effective Property Reports
- Predicting the Performance of Tight Gas Reservoirs

## COURSES DELIVERED IN

United Kingdom, Italy, Czech Republic, Norway, Sydney, Perth, Adelaide, Brisbane, New Zealand, Singapore, Malaysia, Hong Kong, Pakistan, South Korea, Kazakhstan, UAE, Kuwait, Qatar, Saudi Arabia, Bahrain, Bolivia, Brazil, Canada, Angola, Nigeria, Ghana, Mozambique, Algeria & South Africa.

