DEEPWATER JOA

AGENDA

❖ JOA Evolution
  ➢ Early Drivers
  ➢ 2007 Changes
  ➢ New Post Macondo Issues

❖ Why worry about the Older Models Now?
  ➢ Older Agreements Are Undergoing Due Diligence Reviews
  ➢ Pressure to Use Engineering Processes vs. Funding/AFE Points
  ➢ Prepare to Review New Form

❖ DISCLAIMER: The materials provided as part of this presentation are intended to encourage discussion of the topics presented. Neither the materials provided or the statements of the presenter are intended to represent the view of his employer.
Early Drivers
- Default to Action – Parties may move ahead
- Manage Financial Exposure
- Length of Time to First Production (Cost of Capital)
- Technology sharing
- Competition/Correlative Rights

Concerns
- Multi Block Prospects
- Immense Non-Consent Penalties
- Operations Driven by Minority Interest Owners
- Appraisal – When to cease and move to Development
- Protection of Subsurface Proprietary Techniques/Programs
- Capturing Research & Development Costs Upfront
- Capturing Affiliate Costs
- Additional Research, Design & Fabrication
- Protection of Previous Investment
- Upfront Recovery of Non-Consent Costs
- Conducting Operations During Late Field Life
- Planning
# Evolution of Issues

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<th>1990’s</th>
<th>2007</th>
<th>Post Micondo</th>
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| Multi Block Prospects  
Traditionally Shelf JOA’s cover individual blocks, elections as to individual blocks  
Prospect wide JOA coverage so that elections applied to entire prospect | • “Phase Gate” for Development – The first generation of Contract Areas are reaching “Phase” 2 or 3.  
• Engineering Concepts being proposed for tracking Development Phases  
• Included reference to Enhanced Recovery and/or Pressure Maintenance Programs | • Standards of Care, Emergency Response  
• Permitting – timing, scope of changes, cost escalation  
• Well Containment Services  
• Anti-Corruption Practices |
| Immense Non-Consent Penalties  
Initial exploration well & Fab AFE requires forfeiture (“assign-out”) penalty | • The question of how to handle the proposal of a disposal well when opposed by co-venture parties (not subject to N-C). | • SEMS I & II  
• HSSE Process  
• Well Planning & AFE Procedure  
• Execution  
• Force Majeure and Emergency |
| Operations Driven by Minority Interest Owners  
Utilizing thresholds of working interest percentages and ratios of partners (i.e. General Matter Approvals) | • WI definition: “appurtenances owned by Participating Parties” added to JOA. Note that the Parties may own pipelines off the contract area and it may be appropriate to keep the ownership in the JOA ownership regime rather than a separate asset. | • Well Information  
• Pre Drill well proposals & operating well info |
## JOA EVOLUTION MITIGATION

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| Protection of Subsurface Proprietary Techniques/Programs  
Subsurface vs. Surface IPTs, shadow teams are not addressed | • Geophysical operations become more popular  
• Substitute and Successor operator terms revised | • Remote Operating Centers  
• Batch Set Well Proposals  
• How long can a party sit on location (billing partners) waiting on permits? Required to move after ???? days. |
| • Capturing Research & Development Costs Upfront - Shelf operators traditionally underwrite and own 100% of R&D until production system AFE. | Better definition of when a rig is on location  
Feasibility Team Proposal – this should be permitted as soon after a successful Exploratory well as possible. | • Ensure that GN/WM is determined by appropriate legal determination, not simply a declaration of a non-operator. |
| Approval of Dev Plan - If not approved by a Vote - This provision is included so as to force the adoption of a Development Plan in the event the Parties are unable to approve one under the Voting process. In order to fill in the blanks you will need to understand the working interest ownership in the JV. As you read the provision you will see that it is geared towards the Operator, and rightfully so. The Operator has probably spent more staff time than the remaining Parties studying the issues. | • Experience that a Feasibility Stage should last a short as 18 months and perhaps as long as 24 months.  
• Facilities Usage – Ullage and use by less than all parties | • Post Macondo Committee is not provided for in JOA - “Costs” beyond those contemplated by current JOA.  
• How to handle requirements to do things that the operator might believe to be ill-advised, due to demand to act prematurely with potential additional liability. |
**ORIGINAL DEVELOPMENT PROCESS TO FAB AFE APPROVAL**

- **Conclusion of Appraisal Operations**
  - Article 11.7

- 6 or 12 months
  - Operator exclusive to submit IPT AFE

- 30-120 days to respond

- 12 or 18 months
  - exclusive to submit Development Plan

- 4 mos.
  - to gain UA of OP's Plan

- 4 mos.
  - to gain UA of any Plan

- 12 months
  - to gain GM approval

- 6 mos.
  - to submit final design AFE

- 90 days to respond

- 12 months to submit FAB AFE

- 120 days to respond

- Operator fails to submit IPT AFE. Any Party may submit.

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INTEGRATED PROJECT TEAM

Composition (from Participating Parties)
- Management
- Supervisory
- Technical & Support Personnel

Primary Objective
- To pool the talents of the Parties (Two brains are better than one)

Work Scope (Assist Operator with)
- Preparing feasibility studies prior to development operations
- Preparing Development Plan
- Planning, designing, engineering, fabricating, transporting & installing Production System

Participation
- Party may participate up to its Working Interest

Costs
- Charged to Joint Account
- Each Participant responsible for its Participating Interest

Receipt of Confidential Work Product
- Each Participating Party entitled to receive full reports of all technical studies, detail reports, general conclusions, etc.

Use of Confidential Work Product/Background Technology
- Each Participating Party may use for its own account (free of cost) all information received or developed by IPT
JOA ACTIVITIES
E&P LIFE CYCLE

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<tr>
<th>Identify</th>
<th>Assess</th>
<th>Select</th>
<th>Define</th>
<th>Execute</th>
<th>Operate</th>
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Development Plan

Exploration
- Well Proposals
- Non-consent/Forfeiture Penalties
- Conclusion

Appraisal
- Subsurface Team
- Well Proposals
- Non-consent/Penalties
- Deeper Drilling
- Feasibility Study
- System Selection
- Integrated Project Team
- Development Plan Proposal
- Conclusion
- Audits

Development
- Development Plan Approval
- Final Design AFE
- Detailed Engineering (DBD)
- Fabrication AFE/Forfeiture Penalties
- Fabrication
- Installation
- Supplemental AFE/ Penalties
- Development Plan Modification
- Development Plan Termination
- Audits

Production
- Well Proposals
- Non-consent Penalties
- Deeper Drilling
- Other Proposals
- PHA’s
- Audits
- Subsequent Dev. Phases

Development Plan Execution
DEEPWATER JOA SUMMARY
Use of Facilities

- Use of Facilities - Hierarchical Priority
  - Lower priority production sources are at risk of interruption
  - Difficulty in defining excess capacity – moving target
  - Low flexibility to deal with unexpected events
  - Terms and conditions of facility usage provisions undeveloped

- Mutual Agreement with Partition
  - Undermines parties incentive to reach mutual agreement
  - Promotes competition within Joint Venture
  - Subsequent sources of production are at risk of interruption
  - Difficulty in defining excess capacity – moving target
  - Terms and conditions of facility usage provisions undeveloped

- General Matter Vote
  - Delivers unanimous agreement PHA if approved as a General Matter
  - Commitment clearly defined
  - General Matter approval threshold is modified based upon satellite field equity ownership
  - Potential for tension in the Joint Venture
DEEPWATER JOA
TOPIC ANALYSIS

TOPIC:
Use of Excess Facility Capacity

PROBLEM/PITFALL:
Joint owners of Deepwater Production Systems do not have an efficient contractual structure/mechanism to govern the use of excess facility capacity.

DEEPWATER JOA SUMMARY
Current deepwater JOA’s incorporate provisions that address the use of excess facility capacity in the following manner:

◆ Unanimous Agreement
◆ Hierarchical Priority
◆ Mutual Agreement with Partition
◆ General Matter Vote
USE OF EXCESS FACILITY CAPACITY

ARTICLE 14.4 (AAPL 810-2000)

Processing Hydrocarbon Production from Outside the Contract Area

If processing capacity beyond the requirements of an approved Development Plan is available in the Facilities associated with a Development System, the Participating Parties may unanimously agree to use the Facilities for handling hydrocarbon production from outside the Contract Area. That use of excess processing capacity in the Development System is subject to the following priority of usage:

(a) First priority to hydrocarbon production from outside the Contract Area that is owned by all Participating Parties in the Development System;
(b) Second priority to hydrocarbon production from outside the Contract Area that is owned by one or more Participating Parties in the Development System, but not by all of them; and
(c) Third priority to hydrocarbon production owned by third parties coming from outside the Contract Area.

All hydrocarbon production that comes from outside the Contract Area and uses a Development System shall be processed under a Facilities Use and Production Handling Agreement unanimously agreed to by the Participating Parties in the Fabrication AFE for the Development System.
DEEPWATER JOA
CONCLUSION

- Flexible document that has proven record of enabling large investment projects to proceed.

- The AAPL Model Form is under going revisions in light of current operating and regulatory environment.

- There may be divergent thinking for the time being as users look for solutions to the current conditions.