The continued exploration licensing, drilling, and farm-in activity taking place in deepwater India, demonstrates the investment and effort that national and private Indian companies, as well as an increasing number of IOCs are making to bring deepwater India to reality. With early discoveries, in water depths of 500 to 3000m, showing the makings of a major new oil and gas region, there are opportunities here which will bring development and production much like the Gulf of Mexico in the early 1960s, North Sea in the early 1970s and Campos basin, offshore Brazil, in the early 1990s.

From 19 to 21 of October in Mumbai, SPE will hold the fourth annual applied technology workshop (ATW) on deepwater technology. The workshop will expand and update on the technology themes set-out in the previous workshops and explore the positive way forward in the development of deepwater opportunities in Indian waters and beyond. Entitled “Going Deep to Get Ahead”, the workshop will provide an environment to meet, discuss, and gather lessons from existing developments around the world, review emerging technologies, and look at deepwater HSSE management in a post-Macondo world.

This ATW will review and discuss, in ten sessions over three days, deepwater case histories, exploration/appraisal and development concepts, drilling and completion technologies, subsea and surface facilities designs, production and surveillance methods, and HSSE imperatives. It will conclude with a panel discussion on what technologies are still needed to speed offshore deepwater development in India.
Deepwater: Going Deep to Get Ahead

Supporting the Event
Supporting the event helps offset the cost of producing them and allows SPE to keep the attendance price within reach of operations-level individuals, those who benefit most from these technical workshops.

Supporters benefit both directly and indirectly by having their names associated with a specific workshop.

While SPE prohibits any type of commercialism within the conference hall itself, the society recognises that sponsoring companies offer valuable information to attendees outside the technical sessions.

Supporter Categories
Supporters are offered on a first come basis. Please contact SPE to verify the availability of a particular category. Existing supporters have the opportunity to renew the same level of support for annual workshops.

Supporter packages remaining are as follows:
- Platinum Supporter
- Gold Supporter
- Silver Supporter
- Bronze Supporter
- Gala Dinner Entertainment Supporter
- Speaker Gifts Supporter
- Lanyards Supporter
- Coffee Breaks Supporter—Per Day
- Luncheons Supporter—Per Day
- Audio-Visual Equipment Supporter

Supporter Benefits
In addition to onsite recognition; SPE will recognise supporters on the SPE website and in all printed material for the workshop. Based on the category selected, supporting companies can also receive a selected number of complimentary local registrations.

For More Information
For a detailed list of available categories, including benefits and pricing, contact Loreen Nisha, at lnisha@spe.org.

Schedule

Wednesday, 19 October 2011

1700–1800 hours  Steering Committee Meeting
1800–1900 hours  Session Chairmen/Speakers Meeting
1800–1900 hours  SPE Registration and Badge Collection
1900–2000 hours  Workshop Inauguration and Keynote Speech
2000–2230 hours  Gala Dinner

Thursday, 20 October 2011

0900–1030 hours  Session 1: Case Histories
1030–1045 hours  Coffee Break
1045–1215 hours  Session 2: Exploration and Appraisal
1215–1230 hours  Refresher Break
1230–1400 hours  Session 3: Drilling and Completions
1400–1445 hours  Luncheon
1445–1615 hours  Session 4: Surface Facilities
1615–1630 hours  Coffee Break

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Getting hydrocarbon reserves from deepwater reservoirs has been a boundless challenge. Industry has come up with robust solutions to meet the challenges as well–from state-of-the-art flow assurance programmes to installing complex pipelines in challenging operating conditions and subsea processing systems to ensure efficient evacuation of hydrocarbons to desired location. With increased activities in deepwater and discovery of multiple fields with wide variance in reservoir properties in terms of temperature, pressure, fluid properties, etc., the transportation of hydrocarbon through common pipeline infrastructure becomes more challenging. Furthermore, the high pressure/high temperature (HPHT) reservoirs will need insulated/heated pipelines to ensure safe evacuation of produced fluids to surface. In addition the seabed bathymetry also poses its own challenges like steep slopes, sand liquefaction, low temperatures, etc.

The subsea facilities session is dedicated to understand the latest developments in subsea facilities offered by the industry including subsea processing (subsea separation, subsea boosting, etc.), HIPPS, insulation methods (including PIP, DEH), pipeline stabilisation techniques in steep slopes, etc. along with references on the application of such new technology in other parts of the world.

**1830–1930 hours**  Networking Cocktail Hour and Posters

**Friday, 21 October 2011**

**0900–1030 hours**  Session 6: Production Operations

With development going deeper, codes and integrity management systems have to continuously adapt to the new environment. The latest evolutions will be presented here. In deepwater, subsea, and far from shore, new projects face constraints in term of field maintenance. Difficulty of access to subsea facilities makes every intervention activity costly. Solutions such as ROV friendly intervention, line recovery systems, and new concepts for equipment maintainability will be required to reduce costs and improve reliability. The maintenance philosophy of assets has become a key factor at design stage as the maintenance costs are a key lifecycle cost driver. The session will present the latest findings within the industry. Operation and maintenance of stability/buoyancy systems and floating facilities can be transported from one field to the other to harvest smaller deepwater fields.

**1030–1045 hours**  Coffee Break

**1045–1215 hours**  Session 7: Well Re-Entry, Repairs, and Controls

This session will cover the important areas of well re-entry, repair, and control in a deepwater environment. Relief well intervention has become a more viable option to be considered for well control intervention. New technologies for design and implementation make the mechanics of relief well drilling easier and improve the reliability of the well intercept. Re-entry to any subsea, producing well is difficult. Intervention is especially challenging for deepwater operations and may not always be possible given the restrictions of some existing systems and the lack of availability of others. This session will address these challenges and the potential cost-effective solutions that help extend the life of the well.

**1215–1230 hours**  Refresher Break

**1230–1400 hours**  Session 8: Emerging Technologies

In today’s context, the industry is looking for safer, better, cheaper, and faster methods by continuously pushing the technical boundaries. As can be seen in the previous sessions, the technical challenges involved in deepwater projects are numerous and require solutions that are innovative and deliver improved safety and integrity. This session aims to discuss and share the advancement of research and developments in the lifecycle of deepwater projects–deep sea drilling systems, subsea production systems, pipelines, FPSO’s, and components involved in deep and deeper offshore fields.

**1400–1445 hours**  Luncheon

**1445–1615 hours**  Session 9: HSSE–Changes in Regulatory Framework–Post Macondo

The quest for hydrocarbons in deep and ultra-deep waters bears several HSE risks and challenges that are unique and new to the general oil and gas industry. Undoubtedly the industry is excited about these new projects face constraints in term of field maintenance. Difficulty of access to subsea facilities makes every intervention activity costly. Solutions such as ROV friendly intervention, line recovery systems, and new concepts for equipment maintainability will be required to reduce costs and improve reliability. The maintenance philosophy of assets has become a key factor at design stage as the maintenance costs are a key lifecycle cost driver. The session will present the latest findings within the industry. Operation and maintenance of stability/buoyancy systems and floating facilities can be transported from one field to the other to harvest smaller deepwater fields.

**1615–1630 hours**  Coffee Break

**1630–1800 hours**  Session 10: Panel Session “Beyond 2015”

This high level panel session will conclude the workshop with presentations by eminent industry experts/bureaucrats/policy makers. It will focus on deepwater developments beyond 2015 and the new technologies to manage the risks and uncertainties.

This session will finish with workshop concluding remarks by the steering committee chairperson.

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**Workshop Venue**

Hyatt Regency Mumbai
Sahar Airport Road
Mumbai, India 400 099
Tel: +91.22.6696.1234
Fax: +91.22.6696.1235
Website: www.mumbai.regency.hyatt.com

**Workshop Guidelines**

**Format**

Two and half days of informal discussions prompted by selected keynote presentations and discussions with experts. Workshops maximise the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practice. The majority of the presentations are in the form of case studies, highlighting engineering achievements, and lessons learnt. In order to stimulate free discussion, no proceedings are published and the press is not invited to attend.

**Documentation**

- Proceedings will not be published; therefore, formal papers, and handouts are not expected.
- Work in progress, new ideas and interesting projects are sought.
- Professional standards and visual aids are not required; handwritten view graphs are entirely acceptable.
- Note-taking by participants is encouraged.

**Poster Session**

The Steering Committee encourages registrations from professionals who are able to prepare and present a poster on a relevant project. For further details kindly contact Kushbu Rajwani, senior event assistant at krajwani@spe.org.

**Attendance**

Registrations will be accepted on a first-come, first-serve basis. The Steering Committee encourages attendance from those who can contribute to the workshop most effectively either in discussions or with posters. A mix of attendees in terms of geographic origin, companies, and disciplines will be encouraged.

**Workshop Deliverables**

- The Steering Committee will appoint a “scribe” to record the discussions and to produce the full workshop report for SPE.
- This report will then be available to all attendees as the workshop deliverable within 4–6 weeks following the workshop.
- The copyright of the report is with SPE.
- PowerPoint presentations and materials by the speakers will signify their permission for SPE to do so.

**Commercialism**

In keeping with ATW objectives and the SPE mission, commercialism in posters or presentations will not be permitted. Company logos must be removed from the title slide and used only to indicate the affiliation of the presenter and others involved in the work.

**Attendance Certificate**

All attendees will receive an attendance certificate attesting to their participation in the workshop. This certificate will be provided in exchange for a completed Workshop Questionnaire.

**Continuing Education Units**

Attendees at this workshop qualify for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the workshop.

Please use inside form for registration.