RPSEA Program

Ultra-Deepwater Program

Secure Energy for America
RPSEA Ultra-Deepwater Technology Conference

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Who is RPSEA?

• RPSEA is a 501(c)3, not for profit organization that manages research

• We have 170 member organizations
  – Commercial companies both large and small
  – 26 Universities
  – Trade organizations
  – State and Federal agencies

• We now have nearly 100 research projects ongoing with another round of RFPs soon
Our Current Research Portfolio

• The Energy Policy Act of 2005 included significant funding for accelerated R&D in the oil & gas industry

• The current projects focus on
  – Reducing the cost of exploration and production of ultra-deepwater and unconventional natural gas;
  – Expanding the nation's gas resource base; and
  – Mitigating the environmental impacts of energy production in these regions.
UDW Program Approach

UDW Program Flowchart

UDW Projects
- Well Construction Cost Reduction
  - Completion Cost Reduction
  - Intervention (down-hole) Services
- Reservoir Characterization and Appraisal
  - Improve Recovery
- Subsea Processing and Boosting
  - Power Generation, Transmission and Distribution
  - Stabilization Flow
  - Intervention (in-water)
- Dry Trees/Direct Well Intervention
  - Risers
- Innovative/Novel Concepts
  - Emerging Tech/Grad Students
- Health, Safety and Environment Concerns with Emerging Facilities

1. Drilling, Completion and Intervention Breakthroughs
2. Appraisal and Development Geoscience and Reservoir Engineering
3. Significantly Extend Satellite Well Tie-Back/Host Elimination
4. Dry Trees and Risers in 10,000 foot water depth
5. Continuous Improvement and Innovation
6. Health, Safety and Environment Concerns

Program Needs

UDW Resources to Reserves with New Technologies

Program Goal

Initiatives
Our World Has Changed

• With the blowout in the GOM, RPSEA must re-focus on safety and environmental issues, especially in deep water
• To stay economically viable, RPSEA needs to streamline its management structure
• To meet the needs of our country, RPSEA must look to expand its research outside of the federal funding areas
RPSEA is Ideal for the Situation

• We are truly a public – private partnership
• We have government, academia and industry working smoothly to provide solutions to very difficult problems
• We can change quickly and look at
  – Deep water safety and environmental issues
  – The Global endowment of unconventional gas
  – How to best use CO$_2$ for Enhanced Oil Recovery
RPSEA Deep Water Forum
June 22, 23

• Update 42 on-going and newly started projects
  – Impressive Portfolio of Projects
• DeepStar Consortium model of using industry led projects to insure applicability
• Easy to join, easy to get involved, easy to get information on each project.
Summary

DEA Members - We all have common drivers:

• *It costs too much money to develop deepwater marginal fields*
• *Safety is most important*
• *Protection of our environment is a priority*
• Technology plays an increasing role in performance and profits
  – Driven by needs and initiative
  – Deepwater exploration and development are **very expensive with high risks**
  – **Incentives for the application and demonstration of new technologies is critical to speed the commercialization**
• Cooperation is the key
  – Suppliers; Clients; Industry; Consortia; Academia; Government,
• To gain access to more areas, the Public expects assurances our land and seas will be drilled in an environmentally responsible manner
• Bigger is not necessarily better
  – Development and early application of technological advances can be a very sound investment
Summary

• Our world changed April 20, 2010
• RPSEA is the ideal organization to define and administer the R&D needed
  – to increase oil and gas production
  – to improve safety and environmental issues
  – to coordinate other thrusts such as CO₂ mitigation and enhanced oil recovery