



OTC 20309

Ultra-Deepwater Technology; Research, Development, Deployment and Commercialization

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Abstract

The **Research Partnership to Secure Energy for America (RPSEA)** is a non-profit (501-c-3) corporation which was competitively selected by the US Department of Energy (DOE) to administer a ten (10) year 375 million USD program of research, development, deployment and commercialization of safe, environmentally sensitive technology that can effectively deliver hydrocarbons from domestic resources to the citizens of the United States as called for under the Energy Policy Act of 2005 (EPAAct). The focus of the subject paper is the Ultra-Deepwater (UDW) portion of the RPSEA program. The EPAAct states the UDW *“shall focus on the development and demonstration of individual exploration and production technologies as well as integrated systems technologies including new architectures for production in ultra-deepwater.”* The goals of the UDW are to exploit the ultra-deepwater resource base and to convert currently identified (discovered) resources into economic recoverable (proven) reserves, while protecting the environment, thereby providing the U.S. consumer with secure and affordable petroleum supplies. These goals will be achieved by:

- Increasing the production of ultra-deepwater oil and gas resources
- Reducing the costs to find, develop, and produce such resources
- Increasing the efficiency of exploitation of such resources
- Increasing production efficiency and ultimate recovery of such resources
- Improving safety and environmental performance, by minimizing environmental impacts associated with ultra-deepwater E&P

This paper outlines RPSEA’s UDW strategies and overviews its organization, operation and direction. Some additional detail is provided regarding selection and awards under the 2007 and 2008 year Programs and plans for 2009 and beyond. With RPSEA membership including over 140 premier U.S. energy research universities, industry and independent research organizations employing well over 1 million people and virtually all of the major operators in the ultra-deepwater portion of the US Gulf of Mexico (GoM), RPSEA is well position to ensure the funding is focused on the right projects and that the results are well disseminated. For more information on RPSEA in general and the onshore and small producer portion of the program please reference a companion paper OTC 20310 and visit www.RPSEA.org.

Background

RPSEA is a non-profit (501-c-3) corporation formed by a consortium of over 140 premier U.S. energy research universities, industry and independent research organizations employing well over 1 million people (see Figure 1). RPSEA was established to help meet the nation’s growing need for hydrocarbon resources produced from reservoirs in America. RPSEA’s mission is to provide a management role in ensuring the focused research, development, deployment and commercialization of safe, environmentally sensitive technology that can effectively deliver hydrocarbons from domestic resources to the citizens of the United States. RPSEA has established and coordinated a public benefit research program to identify and develop new methods and integrating systems for exploring, producing, and transporting-to-market energy, or other derivative products from natural gas, in Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Resources. The Energy Policy Act of 2005 (EPAAct) established a research, development, demonstration and commercialization program to be funded over ten (10) years with a total program funding of 1,500,000,000 USD of which 500,000,000 USD is directly