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Comparative Risk Analysis of Deepwater Production Systems

The Minerals Management Service announces the availability of the Comparative Risk Analysis performed on the relative risks of a floating production, storage, and offloading (FPSO) system and three other deepwater oil and gas development systems: a fixed platform production hub, a spar, and a tension leg platform. All except the FPSO are in current use in deepwater development projects in the U.S. Gulf of Mexico. Transportation methods used for each of these systems were included in the study.

The FPSO used in the risk analysis was the same as the base-case system studied in the environmental impact statement prepared to investigate the proposed use of FPSO's on the Gulf of Mexico Outer Continental Shelf. The overall intent of the Comparative Risk Analysis was to provide Minerals Management Service (MMS) the basis on which to put FPSO risks in proper perspective, and to play a part in MMS's decision regarding the use of FPSO's in the Gulf of Mexico.

The MMS evaluated and analyzed three risks measures for each production system on the basis of a 20-year production life. These measures were the total volume of oil spilled (chronic environmental risk), the maximum volume spilled in a single incident (acute environmental risk), and the total number of fatalities (human safety risk). The agency called upon expertise from all facets of offshore oil and gas development, including operators, contractors, classification societies, and regulatory agencies.

The study concludes that "the expected risks associated with the FPSO are comparable to those for already accepted alternatives for deep-water production, including a Spar, a TLP [tension leg platform], and a shallow-water jacket serving as a hub and a host to deep-water production."

The Comparative Risk Analysis final report is posted on the MMS website website at **http://www.gomr.mms.gov/homepg/offshore/fpso/fpso.html**.

The MMS performed the study under contract to the Offshore Technology Research Center, with technical support from EQE International and the industry consortium DeepStar.

The MMS, a bureau in the U.S. Department of the Interior, is the federal agency that manages the nation's natural gas, oil and other mineral resources on the outer continental shelf. The agency also collects, accounts for and **disburses more than $5 billion per year in revenues** from federal offshore mineral leases and from onshore mineral leases on federal and Indian lands.

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