



OTC 18410

Panel Discussion: Future of the Gulf of Mexico After Katrina and Rita

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This paper was prepared for presentation at the 2006 Offshore Technology Conference held in Houston, Texas, U.S.A., 1–4 May 2006.

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Abstract

The 2005 hurricane season will be forever remembered for the destruction delivered upon the Gulf of Mexico region. The one-two punch from Katrina and Rita battered eastern Texas to western Florida, causing massive damage and changed the course of life for millions. Due to planned evacuation of platforms in the Gulf, loss of life was avoided. However, the offshore oil and gas industry experienced the fury of these storms, with fixed and floating production structures, drilling rigs, and even pipelines suffering under the powerful winds and tall waves. The industry response was immediate in its efforts to ensure safety, bring relief to those affected in the community, and restore normalcy to the critical operations as quickly as possible. As the recovery efforts continue both onshore and offshore, the longer-term meaning of these events is beginning to be debated. Were Rita and Katrina extremely rare occurrences? Do these two hurricanes, together with Ivan in 2004, signal a need for recalibration of the design extremes? What changes are required to the way we work? Are the applicable codes, specifications, and recommended practices still appropriate? Has the risk been properly vetted in the new context of relatively few, but highly productive infrastructure points in the deepwater, and is it consistent from reservoir to refinery? Should temporarily moored rigs be better secured? The answer to these questions will significantly affect development decisions and the regulations under which work is executed in the future. A panel session is presented with members representing a broad swath of the industry to discuss the various stakeholders' response and potential changes in our characterization of the offshore Gulf of Mexico environment and the application of that new profile to the design and operation of oil and gas infrastructure.

Preface

This manuscript, while not necessarily representing the opinions of the panelists, is intended to set the stage for a panel discussion on "The Gulf under Siege, The Effects of

Katrina and Rita and the Future of the Gulf after Katrina and Rita" scheduled for Tuesday, May 2, 2006 at the Offshore Technical Conference. The panel participants will be:

- Joe Bastardi, Export Senior Forecaster, Accuweather,
- Chuck Enze, V.P. Shell International Exploration and Production Inc., Projects,
- Roger D. Leick, Marine Engineering Manager, ExxonMobil Development Company,
- Tim Juran, Division Manager-North America, Transocean Offshore Deepwater Drilling Inc.,
- Chris Oynes, Regional Director, Minerals Management Service,
- Steve Balint (Moderator), Engineering Manager, Shell International Exploration and Production Inc.

Introduction

The summer of 2005 will be remembered for the destruction delivered to the United States' Gulf Coast region by hurricanes Katrina and Rita. Before making landfall, the hurricanes' extreme characteristics were experienced by many of the offshore drilling and production platforms scattered around the continental shelf and beyond. While repairing the damage, the uniqueness of the 2005 hurricane season, with its large number of hurricanes and tropical storms, and the intensity of three of them, challenges us to re-examine the paradigm under which we view the E&P industry in the Gulf.

Were Rita and Katrina extremely rare occurrences or do they, together with Ivan in 2004, signal a new climatic period? If the latter, changes to the way we work may be required. Are the applicable codes, specifications, and recommended practices still appropriate? Has the risk been properly vetted in the new context of relatively few, but highly productive infrastructure points in the deepwater, and is it consistent from reservoir to refinery? The answer to these questions will significantly affect future development decisions and the regulations under which work is executed.

The Storms and Their Impact

Twenty-seven named storms occurred in 2005, clearly beating the previous record on 21 set in 1933. Of these, 14 developed into hurricanes, again setting a record for a single year, including 3 Category 5 storms – Wilma, Rita and Katrina which rank first, fourth and sixth as the most powerful storms ever recorded in the Atlantic basin, respectively.