World Class Perspectives from the Offshore Drilling Industry on the Federal Government's Response to the Macondo Blowout and Oil Spill

February 18, 2011
A Brief History of Offshore Drilling in Gulf of Mexico
A Brief History of Offshore Drilling

- **1930’s** – Texaco and Shell deployed moveable barges to drilling South Louisiana marshes

- **1938** – Pure Oil and Superior Oil along with Brown & Root built first freestanding structure offshore Gulf of Mexico in 14 ft. of water

- **March 1938**
  - Mexico nationalized its oil industry, establishing the precedent that would dominate the modern oil and gas industry
  - Standard Oil of California (later Chevron) completed first discovery well in Saudi Arabia
    - Still greatest oil find ever
  - First production of offshore oil in Gulf of Mexico
A Brief History of Offshore Drilling (Cont’d.)

- **August 14, 1945** – day after Japanese surrender in W.W.II, U.S. lifted oil and gasoline rations

- **Post-W.W. II** – conversion of war-surplus landing crafts converted to drilling tenders, supply and crewboats

- **1948** – Kerr-McGee Oil Industries – drilled first productive “out-of-sight-of land” well on platform in 18 ft. of water
  - Kerr-McGee 16 platform – converted war-surplus tender barge

- **1948** – Humble Oil (later Exxon) introduced forerunner of modern platform design

- **Early 1950’s** – Zapata Offshore (formed by George H.W. Bush) experimented with “jackup” rigs
A Brief History of Offshore Drilling (Cont’d.)

- 1954 – First OCS lease sale
- 1957 – 446 production platforms
- **January 28, 1969** – Union Oil platform blowout in Santa Barbara Channel, 80,000-100,000 barrels spilled
  - Led to passage of National Environmental Policy Act
  - Nixon administration issues moratorium on drilling in California
  - Amended OCS orders establishing requirements for plans and equipment for prevention of pollution and blowouts
- 1981 – Shell produces first platform in 1,000 feet of water
- 1982 – Minerals Management Service created
- 1994 - Shell’s production in 2,860 feet of water using tension-leg platform
- 1996 – First production from deepwater spar
- 1999 – BP’s Thunder House produces in 6,000 feet of water
A Brief History of Offshore Drilling (Cont’d.)

- 46,011 wells drilled in less than 1,000 feet of water since 1949
- BOEM records 11,070 wells drilled in less than 500 feet of water in last 15 years\(^1\)
  - BOEM Records: Total of 15 barrels of oil spilled in last 15 years\(^1\)
  - Actual worst case spill – March 8, 2003 spill offshore Louisiana resulting in 10 barrels of oil spilled

(1) Source: BOEM; http://www.gomr.mms.gov – see appendix.
Shallow Water and Deep Water Drilling

- Drilling in less than 500 feet of water
- Smaller, mature reservoirs with well-documented geology
- Proven rigs and technology
- Produces mostly natural gas
- Low-risk, safe, predictable
- Blowout preventers (BOP) are above water's surface and easily accessible
- BOP constantly inspected and maintained
- BOP can be operated manually or remotely
Floating Factories
According to the Bureau of Labor Statistics, oil & gas extraction has a lower injury rate than 89% of the total 134 million working Americans based on industry groups.

Source: Bureau of Labor Statistics - 2008 incidence rates of nonfatal occupational injuries and illnesses
• Since 2001, approximately 78 Jackups have left the U.S. Gulf of Mexico – leaving 44 available shallow water rigs

• Since the moratorium began on May 6, 2010, five jackup rigs have announced they will leave the Gulf of Mexico.
  • 14 total rigs (Shallow and Deep) have left, and many others have been mothballed

Others:
- Canada: 2
- Europe: 1
- Med./Black Sea: 9
- Mid East: 29
- SE Asia: 4
- S. Amer: 5
- W Africa: 5
- India: 4
- Mexico / C. Amer: 14
OCS – Dominated By Independents

- 284 Independent operators accounted for 73% of total production on Gulf of Mexico shelf in 2009
- 293 companies produced 234 MMBOE on the GOM shelf (<500’) during 2009

### Percentage of Total Production in US GOM shelf (<500ft)

- 73% Independents
- 27% Majors
“Big Oil” Operators Not Dependent on U.S. GOM

- Major operators can redirect investment to large existing assets outside of GOM
- Smaller independent GOM operators have a large majority of their assets in the US, and many have 100% of assets in US Gulf of Mexico
Offshore Leasing Activity

From 2001 through 2009, the U.S. Gulf of Mexico has generated a total of $75 billion in federal royalty revenue and lease sale proceeds:

- $60 billion in federal royalty payments
- That’s equivalent to the economy of Nebraska
- $15 billion in proceeds from offshore lease sales

The lack of lease sales and royalty revenue is costing taxpayers money and adding to the national debt.

- Crude oil and retail gasoline prices are at their highest levels in over 2 years
HERCULES Offshore

The Post-Macondo World
• The United States already imports oil from a host of nations whose governments or people are hostile to our interests or unstable – or both.

• Recently, Cuba announced plans to drill 7 test wells in the Gulf of Mexico, with drilling assistance from China.

• China’s national oil company has invested approximately $1.8B to acquire interests in 1.4M acres in Texas, Wyoming, and Colorado.

• Intensifying instability in the Middle East threatening supply.

<table>
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<tr>
<th>Oil-Producing Nations outside of North America</th>
<th>US Crude Oil Imports November 2010 (1000 bpd)</th>
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<td>Saudi Arabia</td>
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<td>Angola</td>
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- Over 48% of U.S. crude oil imports come from OPEC countries
Post Macondo Timeline

• April 20, 2010: Tragedy at Macondo well

• May 6, 2010: U.S. Department of Interior (DOI) declared a moratorium on all new drilling permits

• May 7, 2010: Shallow Water Energy Security Coalition (SWESC) led by Hercules Offshore was created to educate policymakers on differences between shallow and deepwater drilling

• May 19, 2010: MMS is replaced with Bureau of Ocean Energy Management, Regulations and Enforcement (BOEM), Bureau of Ocean Energy Management and Office of Natural Resources Revenue. Director of the MMS resigns.

• May 21, 2010: SWESC obtained signatures from 66 members of Congress urging DOI Secretary Salazar to lift moratorium on shallow water drilling operations

• May 26, 2010: SWESC met with DOI Secretary Salazar

• May 28, 2010: Shallow water drilling moratorium is lifted, but deepwater drilling moratorium extended for six months

• May 31, 2010: BOEM confirmed approval of two shallow water drilling permits, both of which were revoked shortly thereafter

• June 8, 2010: NTL 05 issued by the BOEM outlining the first round of new safety regulations including CEO certification of equipment and third-party verification and reviews

• June 18, 2010: NTL 06 issued by the BOEM requiring operators to include blowout scenarios in all new drilling permit applications

• September 30, 2010: DOI announces “new” Drilling Safety Rule and Workplace Safety Rule

• November 8, 2010: NTL 2010-N10 issued by BOEM for subsea BOP or surface BOP’s on floating facilities

• February, 2011: Only 31 permits have been approved for the drilling of new wells¹

¹. BOEM as of February 16, 2011
Shallow Water Permitting Activity: the *de facto* Moratorium

- The number of approved drilling permits is down by roughly half since imposition of new regulations in June 2010
- Only 12 permits issued in Year-to-Date through mid-February 2011

(1) Source: Bureau of Ocean Energy Management, Regulation and Enforcement as of February 14, 2011
Administration Response: Arbitrary and Capricious

- Overly broad, economically devastating moratorium imposed
  - No economic impact analyses conducted
  - No evaluation of energy security
  - No scientific or expert support for need or advisability of moratorium

Secretary Salazar:

“. . . The recommendations contained in this report have been peer-reviewed by seven experts identified by the National Academy of Engineering.”

May 27, 2010 Report of Secretary Ken Salazar to President Obama

Judge Feldman, E.D. of LA:

“. . . This statement was misleading.” “Factually incorrect.”
Administration Response: Arbitrary and Capricious (Cont’d.)

- Administration failed to consider the “irreparable harm” that would result
  - Economic
  - Cultural
- Administration failed to explain reason for sweeping scope of moratorium
- Violated OCSLA
  - Mandates consideration of the “economic, social, and environmental values of the renewable and nonrenewable resources of the Outer Continental Shelf . . .” 43 U.S.C. § 1344(a)(1)
  - Allows Secretary of Interior to suspend activity “if there is a threat of serious, irreparable, or immediate harm or damage to life (including fish or other aquatic life), to property, to any mineral deposits . . . or to the marine, coastal, or human environment . . .” 46 U.S.C. § 1334(a)(1).
- Judge Feldman: “The defendants have failed to cogently reflect the decision to issue a blanket, generic, indeed punitive, moratorium with the facts developed … The plaintiffs have established … that the Administration acted arbitrarily and capriciously in issuing the moratorium.”
Administration’s Usurpation of Legislative Power


- June 8, 2010 – Dept. of Interior issues Notice to Lessee 2010-N.05 (“NTL 05”)
  - Requires lessees and operators to obtain 5 separate 3rd-party verifications and certifications
  - “Must” have independent 3rd-party conduct detailed physical inspection of BOP’s
  - Imposes new requirements on remote operated vehicles
  - Mandates new equipment
    - Secondary control system with remote operated vehicle capabilities

- October 19, 2010 – Federal court invalidates NTL-05 due to failure of Dept. of Interior to follow notice and comment procedures
  - Agency attempted to make law - *by fiat*
Administration’s Defiance of Judicial Authority

- May 28, 2010 – Moratorium imposed
- June 22, 2010 – Federal Court enjoins Dept. of Interior from enforcing moratorium
- June 22, 2010 – Secretary Salazar issues press release stating his decision to “impose a moratorium on deepwater drilling was and is the right decision.”
- July 8, 2010 – U.S. Ct. of Appeals for 5th Circuit rejected government’s plea to stay enforcement of District Court’s injunction
- July 12, 2010 – Secretary Salazar “rescinds” moratorium and issues new, identical moratorium
- October 12, 2010 – Second moratorium lifted
- February 2, 2011 – Federal Court holds Secretary Salazar in contempt, orders payment of attorneys fees
How Has World Changed?

1st – Change in tone

CEO Certifications of regulatory compliance
Investigations and review unit at BOEMRE
“Boot on neck” – Secretary Salazar
“Someone’s ass to kick” – President Obama

2nd – Dynamic - *and not so dynamic* - regulatory environment

Drilling safety rule
*De facto* moratorium/slow permitting
Workplace safety rule
Cancelled/suspended lease sales
Priorities:

“...in one of my first acts as Director, I created a new investigations and review unit within BOEM that will help us...rein in companies that attempt to game the system.” – Director Michael Bromwich

On the investigations and review unit:

“A team of professionals, with law enforcement backgrounds...” BOEM Website

On CEO Certifications:

“This brings a new level of personal, executive accountability to the deepwater drilling industry.” – Director Michael Bromwich

On de facto moratorium:

“[de facto moratorium]...is code used by some segments of ... industry for the added time it takes to ensure compliance with tougher safety rules...” – Director Michael Bromwich
What Do We Want?

- Collaborative, respective relationship between industry and regulators
- Risk-based, fact-based, science-based regulations and treatment
- Industry voice on development of regulations – “trust, but verify”
- Regulatory certainty and coherent and fair process for development of new rules and regulations – *due process of law*
- Apolitical regulatory approach
What We Need To Do As An Industry?

- Continued industry-wide, collaborative efforts to address well control and oil spill containment and cleanup
  - Marine Well Containment Corporation – model
- Continued advancement of behavioral-based safety training programs
- Continued engagement with administration and lawmakers
- Represent the industry in media – tell our story
- Advocate for comprehensive energy policy
- Identify ways to strengthen regulatory community or establish intra-industry regulatory approach