

# UPSTREAM INSURANCE



# Agenda

- **Upstream Insurance – general overview**
- **Upstream insurance market – March 2010**
- **Magnitude of Loss**
- **Oil Spill Financial Responsibility “OSFR”**
- **Current Upstream market update**

# UPSTREAM INSURANCE

## GENERAL OVERVIEW



# OPERATIONAL

## Control of Well (COW), Physical Damage, Business Interruption

- Limit requirement \$100MM +
- Syndicated risks
- Relatively small group of leaders set the terms
- Following Markets support lead terms
- Limits scale to insurable interest
- Combined Single Limit (COW)
  - ✓ Control of Well
  - ✓ Redrill / Restoration
  - ✓ Pollution



# OPERATIONAL

## Control of Well (COW), Physical Damage, Business Interruption

### Sample of underwriting data:

- Well Schedules / Projected Activity to include location, water depth, total depth, insurable interest, dry-hole cost, contract
- Valuations: Replacement Cost Valuation / Actual Cash Value / Agreed Valuation
- Latitudes / Longitudes / Air Gap
- Schedule of revenues required
- Contingent Business Interruption:  
Schedule of potential 3<sup>rd</sup> party property triggers
- Loss History

## Third Party Liability

- Limit requirement \$100MM +
- Primary Liabilities principally placed with US markets
- Excess capacity supplied by US, Bermuda & London markets
- Limits: 'For Interest' (vs) 'Scaled to Interest'
- Sudden & Accidental Pollution (reporting requirements)

## Third Party Liability

### Sample of underwriting data:

- No. of years experience
- Gross Revenue
- Well Count (operator vs non-operator)
- Owned vessels / Chartered vessels
- Owned aircraft / Chartered aircraft
- Employees
- Master Service Agreements
- Loss History

# CONSTRUCTION “ALL RISKS” (CAR)

## Offshore CAR

- First & Third Party
- Limit requirement: range into the USD billions
- Syndicated risks
- Relatively small group of leaders set the terms
- Following Markets support lead terms
- Limits reduce to insurable interest
- Additional Assured status extends to Contractor parties
- Marine Warranty Surveyor – Scope of Works





# CONSTRUCTION “ALL RISKS” (CAR)

## Offshore CAR

### Sample of underwriting data:

- Project Timeline
- Detailed Project Description
- Estimated Contract Value
- Detailed breakdown of recurring costs
- Contractors
- Contractual Indemnities
- Existing Property
- Loss History

Operational & CAR: the vast majority of insurers rely heavily on reinsurance.

**MARKET OVERVIEW**  
**AS OF**  
**MARCH 2010**

# WILLIS ENERGY MARKET REVIEW

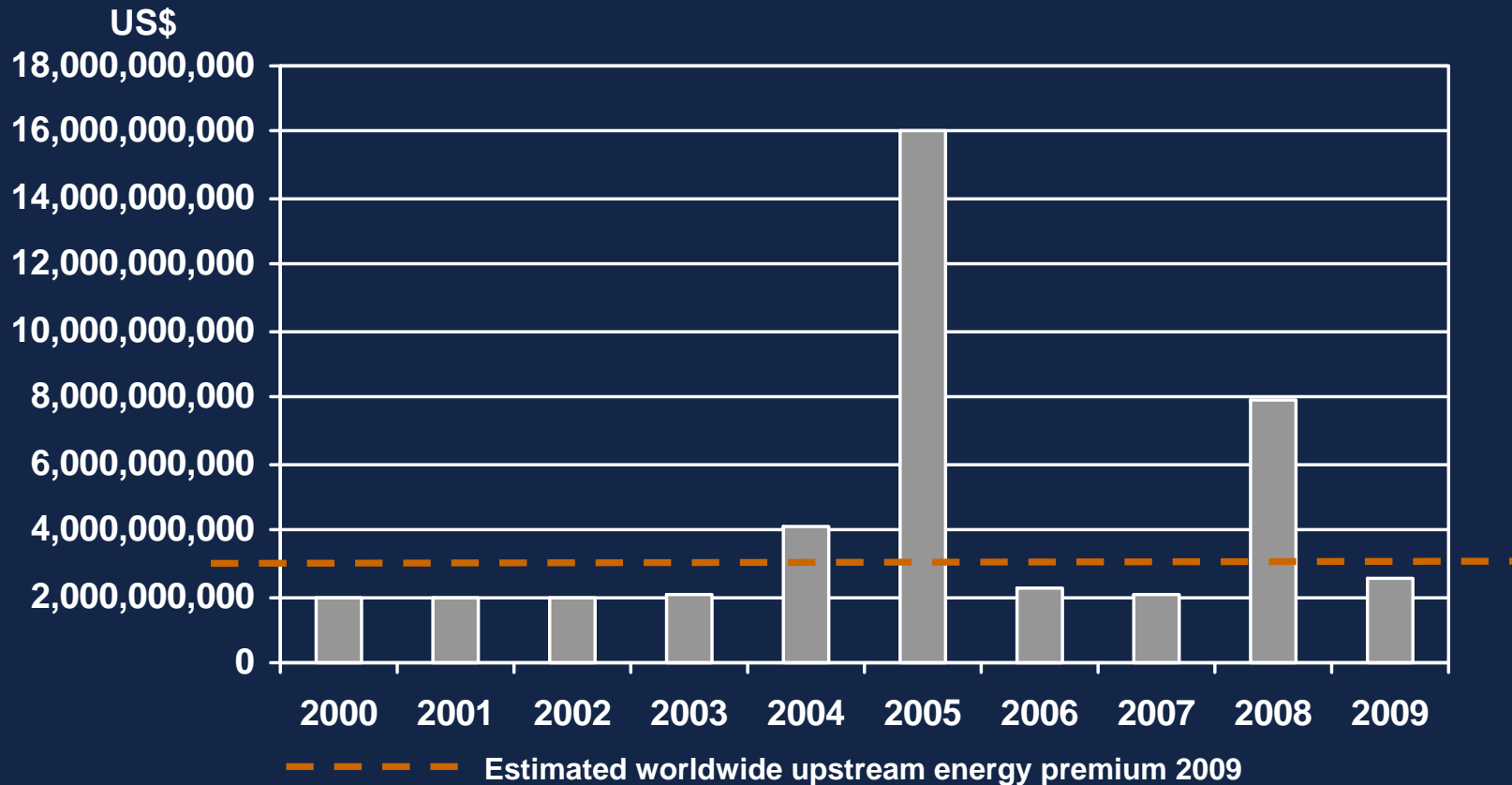
## March 2010 - Upstream

- “Softening pressure mount despite recent losses”
- “Highly probable that rates will continue to fall during 2010 and indeed beyond”
- “Gloves come off as underwriters prepare to do battle”

**WHY?**

# REASON NUMBER ONE – UNREMARKABLE LOSS YEAR

Worldwide upstream losses excess of US\$1MM 2000-2009  
(adjusted for inflation)

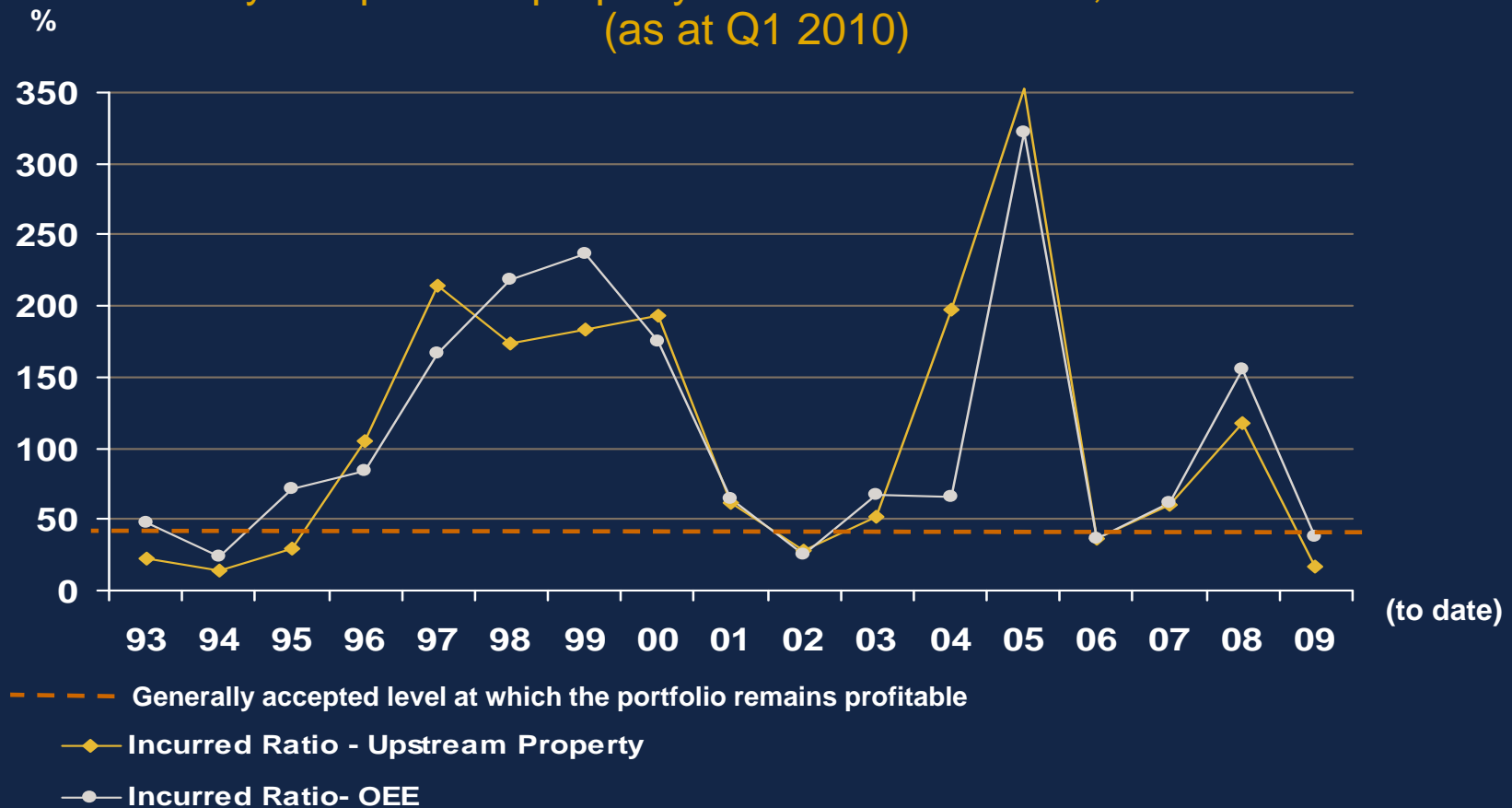


While hardly benign, 2009 was by no means an unusual year from an upstream loss perspective.

Source: Willis Energy Loss Database as at March 12 2010 (figures include both insured and uninsured losses)

# REASON NUMBER TWO – INCREASED PROFITABILITY

Lloyd's upstream property/OEE incurred ratios, 1993-2009  
(as at Q1 2010)

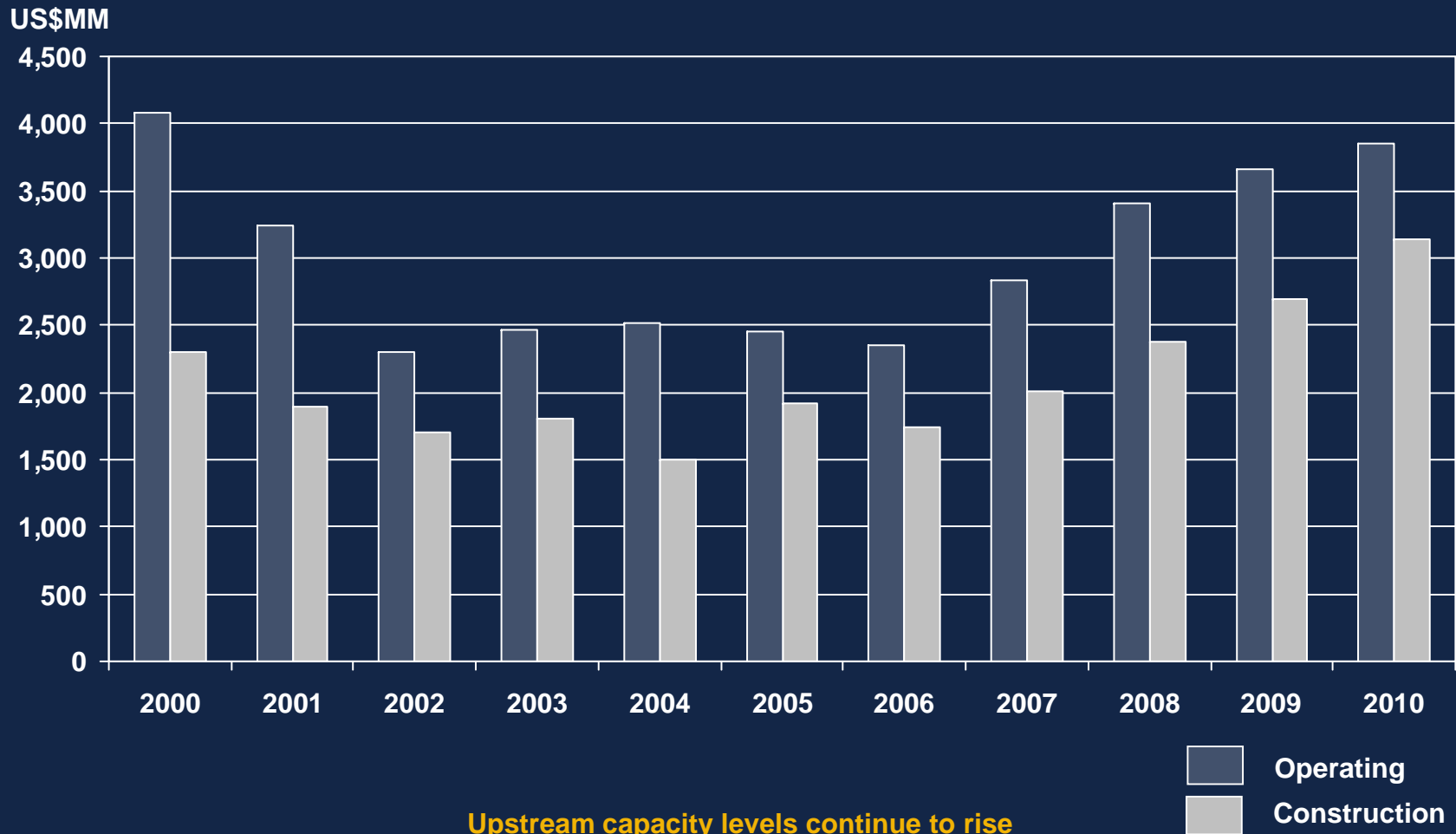


Lloyd's upstream insurers looked to have had a profitable 2009

Source: Lloyd's

# REASON NUMBER THREE – INCREASED CAPACITY

## Upstream Insurer Capacities 2000-2010 (Excluding Gulf of Mexico Windstorm)



Source: Willis

# THE BOTTOM LINE

(Post 2009)

- Increased premiums
- No catastrophe losses
- Additional capacity

Could have only meant...

- A softening market environment







# DEEPWATER HORIZON / MACONDO LOSS

## SUMMARY

- D/O/L: April 20, 2010
- 52 miles SE of Venice, LA
- Approximately 5,000 feet of water
- Explosion & fire on Deepwater Horizon (\$560MM)
- 11 employees killed
- ~4.1 million barrels of crude oil (estimate per US Gov)
- Eclipsed Exxon Valdez
- BP is Designated Operator



# BP IS SELF INSURED

A large portion of the loss will NOT hit the insurance industry...

it could have been worse!



# RANKING

- The BP disaster is likely to be the second-biggest operating energy insurance loss based on current estimates.
- The most expensive loss for energy insurers was a July 1988 explosion aboard the Piper Alpha oil platform in the North Sea, which killed 167 people and cost insurers \$2.27 B\* in 2009 dollars.

\* COW / PD only



*Rigzone: ROV camera footage on morning of June 2nd*

# COMMERCIAL INSURANCE

Insurance coverage of companies involved in the Macondo oil spill, including operators extra expense (OEE) coverage and general liability coverage (**public information**).

<u>Company</u>	<u>Available Insurance (USD)</u>
BP	\$ 0.0 MM
Anadarko Petroleum	\$177.5 MM
Mitsui Oil Exploration	\$ 45.0 MM
Transocean	\$700.0 + \$950.0 MM TPL
Halliburton	\$600.0 MM (TPL)
Cameron International	\$500.0 MM (TPL)
<b>Total:</b>	<b>~\$3.0 B *</b>

\* of which approx. \$2.0 B – TPL

# CONTROL OF WELL AND CLEAN-UP THE REAL COST?



Estimated insured loss:  
**\$1.5 - 3.0 B**



Conservative estimate  
of final cost: **\$20.0 B**

*(Not to scale)*

## NOT JUST TODAY BUT FOR YEARS TO COME:

- More difficult political environment
- More complex and intrusive regulatory regime
- More stringent industry operating standards and practices



## IN THE NEAR TERM:

- Financial consequences of the deepwater drilling moratorium
- Uncertainty with respect to other offshore activities
- Regulatory delays



## ***FAR REACHING...***

What were the effects of the drilling moratorium and potential extended regulatory delays on the company's rights under its offshore leases, farm out and farm in agreements, operating agreements and on the drawdown periods under its credit agreements?

# OIL SPILL FINANCIAL RESPONSIBILITY

## “OSFR”



# OSFRC REQUIREMENTS – OFFSHORE FACILITIES

Based on worse case discharge “wcd”

Facilities with wcd < 1,001’ bbl	\$ 0.0 MM *
Facilities with wcd <35,001’ bbl	\$ 35.0 MM
Facilities with wcd <75,001’ bbl	\$ 70.0 MM
Facilities with wcd <105,001 bbl	\$105.0 MM
Facilities with wcd >105,000 bbl	\$150.0 MM

\* Operations involving drilling, completion, workover rig, or removal of surface safety equipment require minimal wcd of 1,000 bbl

# CERTIFICATION OPTIONS

- Commercial Insurance Certificate
- Self Insurance (subject to acceptable balance sheet)
- Surety Bond
- Letter of Credit



# COMMERCIAL INSURANCE

## OSFR

- Guarantor Certification: MMS' Form 1019 allows direct action against insurers
- Insurers are then subject to indemnification by the Insured for all losses deemed broader than policy terms & conditions.
- Insured would look to their COW & Liability policies to respond first and then internally.
- Extremely limited no. of markets willing to act as OSFRC guarantors

## *Willis Market Update*

“The impact of any future US legislation on control of well and liability policy limits will likely force companies operating in the Gulf of Mexico to carry much higher levels of insurance.”



# HISTORICAL DATA

## Largest Oil-Spill Events To Date

Type	Description	Year	Barrels
Onshore well	Lakeview Gusher (CA)	1910	9.0 MM
Offshore well	Macondo Well (GOM-USA)	2010	4.1 MM
Offshore well	Ixtoc Well (GOM-Mexico)	1979	3.4 MM
Vessel	Atlantic Express (T&T)	1979	2.1 MM
Onshore well	Fergana Valley (Uzbekistan)	1992	2.1 MM
Platform struck by vessel	Nowruz Field Platform (Iran)	1983	1.9 MM
Vessel	ABT Summer (Angola)	1991	1.9 MM
Vessel	Castillo de Bellver (S Africa)	1983	1.8 MM
Vessel	Amoco Cadiz (France)	1978	1.6 MM
Vessel	MT Haven (Italy)	1991	1.0 MM
Offshore well	Odyssey (Nova Scotia)	1988	1.0 MM
Vessel	Sea Star (Iran)	1972	.8 MM
Vessel	Irenes Serenade (Greece)	1980	.7 MM
Vessel	Urquiola (Spain)	1976	.7 MM
Vessel	Torrey Canyon (UK)	1967	.6 MM

# LARGEST OIL-SPILL EVENTS TO DATE

## Summary

<u>Type</u>	<u>Total Barrels</u>	<u>Allocation</u>
Onshore wells (2)	11.1 MM	33.95%
Offshore wells (3)	8.5 MM	25.99%
Vessel (10)	13.1 MM	37.86%
	Total: 32.7 MM	100.00%

# LARGEST OIL-SPILL EVENTS TO DATE

**Conclusion:** 600,000 bbl and greater

- > “3” times as many incidents by vessels
- Vessels have spilled 4.6 MM barrels more than all offshore well incidents combined

# CURRENT MARKET OVERVIEW





## *Dominick Hoare – Watkins Syndicate (Lloyds)*

“Insureds and brokers stress to carriers that one loss, however tragic, should not necessarily tighten the global market.

But Hoare notes simple arithmetic. "The estimated worldwide offshore premium is about \$3 billion. The insurance estimates for this one loss range from \$1.5 billion to \$3.5 billion.

Even the best-case scenario is half the premium volume.

The basic underwriting metrics are not sound. The price base is inadequate. That is where the market is right now."



# UPDATE: UPSTREAM INSURANCE MARKET

## The Macondo well has now defined the 'Possible Maximum Loss' for the Gulf of Mexico

- No market withdrawals to date
- Same panel of lead underwriters
- Influence of Lloyds Franchise Board on the Lloyds syndicates
- Stricter underwriting guidelines
  - ✓ Risk differentiation
  - ✓ Risk accumulations
  - ✓ Clash considerations
  - ✓ Rate increases – all classes of offshore insurance
- Renewed confidence that higher rates will result in firm orders
- Assureds seeking higher OEE and Liability limits

# THE REALITY...

## Those who will be affected LEAST:

- Not involved in deep water drilling activities
- Present little or no natural catastrophe exposure
- Good loss record
- Positive relationships with key lead underwriters
- Relatively low policy limits

# THE REALITY...

## Those who will be affected MOST:

- Exposed to significant natural catastrophe risks
- Poor loss record
- Deep water drilling activities
- Artificially cheap programs
- Capacity risks

# UPSTREAM COVERAGE & WW CAPACITY

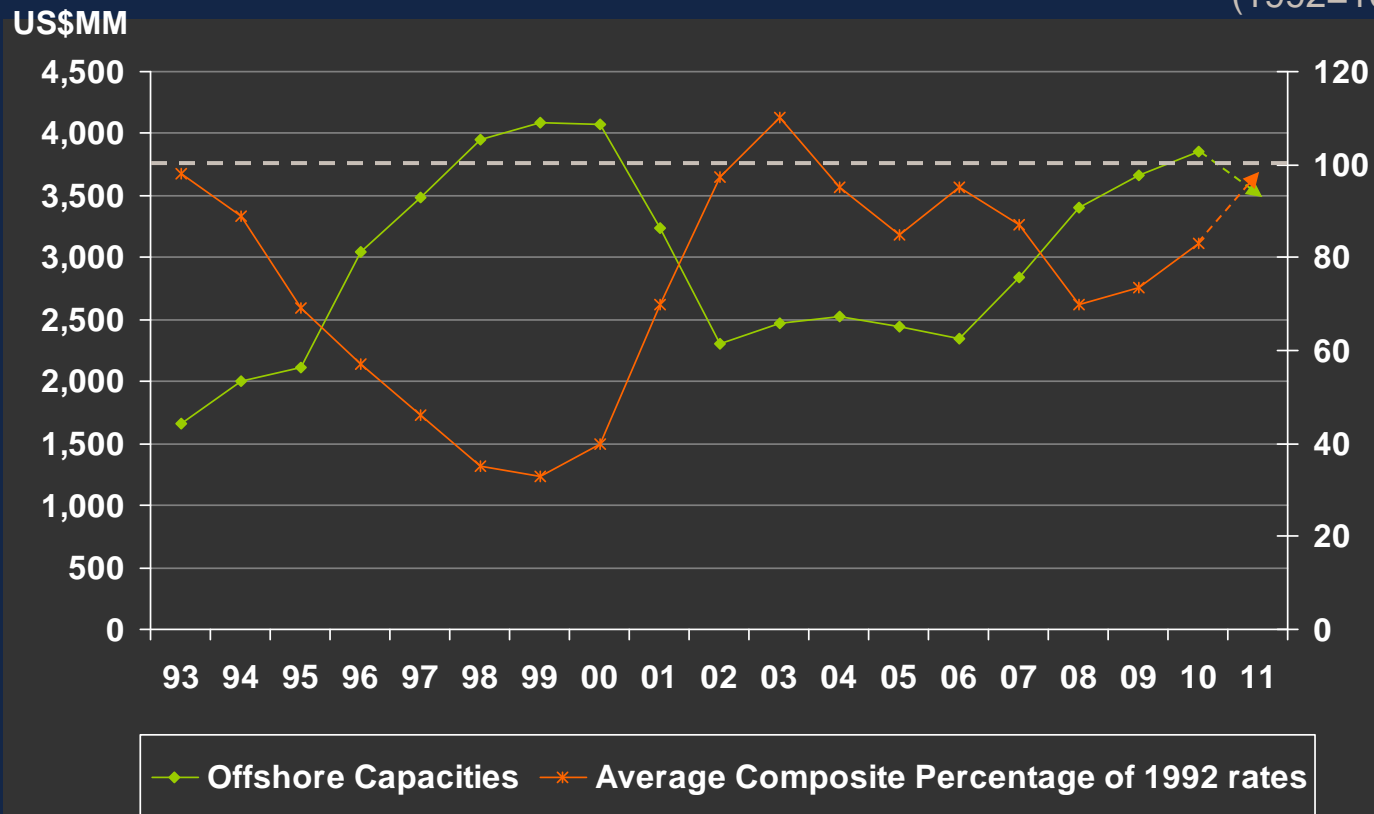
- **Control of Well / EED Insurance:** \$600.0 MM to \$750.0 MM \*
- **Third Party Liability:** \$1.25B to \$1.5B \*
- **OSFR Certification:** \$150.0 MM to \$200.0 MM

\* 100% (scales to interest)

# MARKET CYCLE HISTORY

Energy Insurer Capacities and Average Rating Levels, 1993-2010  
(Excluding Gulf of Mexico Windstorm)

Estimated  
Average  
Rate Index  
(1992=100)



If significant capacity withdraws at January 1 2011, the upstream market will harden more acutely

Source: Willis

# LLOYD'S FRANCHISE BOARD



Tom Bolt  
Performance Management Director  
March 12, 2010

“Lloyd’s is a lead market in the area of offshore energy but whether one looks... over a 5, 10 or 15 year period the results have been severely loss making.”

Decisions to be made to reduce capacity offered or even to withdraw altogether...

# LIFE AFTER MACONDO

## Insurance outlook still fluid:

- 2010 Wind Season fairly benign thus far
- Insurance capacity has NOT contracted as feared
- January 1<sup>st</sup> Reinsurance Treaty renewals – TBD
- Increases in insurance cost
  - market reaction much more subdued than post 9/11 or H. Katrina
- Outcome of Litigation
- Oil Pollution Legislation in limbo



