

# Energy Market Review

October 2004



Willis

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## Foreword

Although there are many niche insurance markets for energy risks, the lion's share of underwriting capacity resides in the commercial insurance marketplace – a marketplace that comprises two distinct types of risk: single-site and aggregation. 'Single-site risk' virtually defines itself: value-at-risk at one location for a given insured. 'Aggregation risk' includes:

- Concentrations of exposures (people and/or physical assets), within a defined geographical area, that may be subject to such 'nat cat' perils as flood, wind or earthquake, or to an act of terrorism.
- Accumulation over time of liability arising from specific perils, products or operations.

Cost, availability and terms of risk transfer for energy risks, as well as the long-term future of the marketplace, depend upon the behaviour of these types of risk. To better understand the forces at work, we need to take a brief historical perspective.

### Perspective

For over a generation, cyclical forces, natural catastrophes and shock losses have shaped, battered and transformed the commercial insurance marketplace. We weathered the capacity crunch and extreme premium inflation of the late 1970s for primary and excess casualty lines. Particularly hard hit were buyers of products liability, medical malpractice and other long-tail liability risk. We recall the lack of capacity for North Sea platforms in the early 1980s, the widespread hard market of the mid-1980s, and the nat cat losses of the late 1980s and early 1990s, as Hurricanes Hugo and Andrew and the Northridge Earthquake captured the headlines. Already in 2004, the US sustained multiple punches from Hurricanes Charley, Frances, Ivan, and most recently Jeanne, midway

through a predicted active hurricane season. In the energy sector, large losses occurred in clusters from the late 1980s onward. The new millennium witnessed the beginning of a string of revelations of corporate fraud and malfeasance on a grand scale. Then came 9/11.

Throughout this period of time, carriers around the world were forced to deal with enormous losses generated by products and exposures for which little or no premium had been collected – because their exposures were undervalued or they were not intended to be covered in the first place. Examples include asbestos, silicone breast implants, certain pharmaceutical products, mould and environmental claims.

Despite these daunting events and losses, the marketplace managed to right itself after each crisis, to soldier through and stabilize – although with fewer insurers and reinsurers and with notable and persistent changes. We experienced the advent and growth of large retentions, captives and other risk funding and special purpose vehicles, claims made and occurrence reported forms, tighter policy wordings, catastrophe risk modelling and revamped underwriting regimens.

### Anatomy of a Cycle

All parties – insurers, insurance buyers, brokers, bankers and everyday consumers of products and services – have been directly and indirectly impacted by the evolving marketplace, and their respective responses have changed the way we do business, the cost of doing business, and how we manage and finance risk.

In many ways, however, the basic behaviour of the insurance business remains the same. When post-'crisis' returns are

perceived to be attractive, fresh capital pours in to take advantage of growing and cresting premium rates, thereby rebuilding capacity. The 1980s, 1990s and 2000s have given birth to ACE, XL, Mid-Ocean, Axis, Partner Re, Arch, AWAC and many others. Meanwhile, many of the older, established 'legacy' companies enter receivership, merge, or reinvent themselves (e.g. Lloyd's and Equitas). The cycle is reborn, and until the next crisis, it's a new chapter of 'business as usual'.

We see nothing on the horizon to indicate that the next 10 years will see anything different in the fundamental behaviour of the life cycle of the marketplace. Yes, the names of the companies will change and the underwriters will change and the pundits will change, but the inherent nature of the process will remain the same. Forces that create financial travail for some create opportunity for others, and a new generation of capitalists will be attracted by the prospect of entrepreneurial rewards in the property/casualty arena. The question each time will be: can they get it right?

### **Change, Challenge and the Future**

The two types of risk defined above – single-site and aggregation – are becoming ever more divergent.

Remarkably, and with a few exceptions (LNG Plants, silicon chip manufacturers, certain high rise buildings, etc.), the peak single-site property exposures in real terms are lower today than 20 years ago. In the energy sector, clients are buying similar limits, and there is little pressure on capacity. As respects third party liability, although limits purchased are somewhat higher, only a few companies in a few industries are pushing for more capacity. Single-site risk therefore does not pose a problem for the marketplace.

For aggregation risk, however, growth of exposures will continue to accelerate, far outpacing inflation and the ability of today's insurers to fund for them.

If the marketplace today were to sustain a new round of catastrophe losses, would it be able to stabilize, as it has after every crisis over the last 25 years? Would it be able to continue to cover aggregation exposures on the basis it does today?

As the lines of single-site and aggregation risk exposures continue to diverge, and obtaining sufficient funding for aggregation risk becomes more difficult or simply impossible for the commercial insurance marketplace, where will insurance buyers find coverage or contingent capital for their aggregation risk? Can we reasonably expect to see new generations of venture capitalists, growth of private sector mutual insurance arrangements and stepped-up government intervention? Do the growth of aggregation risk, heightened interdependencies and other risk-concentrating phenomena create 'natural monopoly' conditions for funding aggregation risk? Will government take on an expanded role as the insurer of last resort? Will tort reform be enacted to limit historical and/or going-forward exposures?

For energy risks, it is safe to assume that between the commercial marketplace and the mutual pools, the single-site business will continue as before, and supply and demand forces will continue to drive a cyclical marketplace. For aggregation risk, the marketplace will continue to lose ground. As that happens, affirmative answers will be reached for many of the questions posed above, and solutions will necessarily be achieved.

Those firms that recognize the inevitable incapability of the marketplace to handle aggregation risk will lead the way in developing and promoting alternative risk funding strategies.

**A W Vietor**  
**Head of Energy**

## Introduction

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We have kept to the format of previous issues of the Energy Market Review by including a general market overview and update on the various sectors of the market, whilst expanding on areas of particular interest. This time we have added a separate section for construction, and also include an update on Equitas.

The intense hurricane activity of the past few weeks presented us with a publication deadline dilemma, in that we have been receiving daily updates of the extent of the damage and the final loss picture is still by no means clear. We hope, however, that this issue gives an indication of the effect these windstorms may have on the energy market as a whole, and in particular on the upstream sector, where a change in market sentiment is already apparent.



# Market Overview

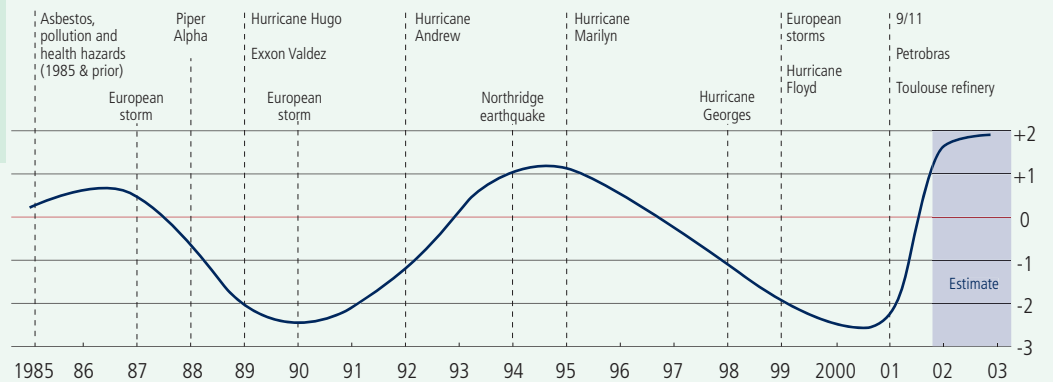
## Softening Trend, Underlying Fragility

The energy sector continued to produce excellent results for insurers in 2003. Despite distinct signs of softening, particularly in the second half of the year when there was an acceleration in the rate of premium reductions being achieved, energy business has shown itself to be highly profitable. As evidence of this, energy was the best performing sector in Lloyd's in what was by any standards an excellent year for most insurance classes.

While energy has performed very well overall, the principal classes within the sector (onshore property, upstream exploration & production (E&P) and liability) are now at different points in their respective market cycles. In the second quarter of 2004 it seemed that upstream and onshore were beginning to track each other as, after the short-lived moratorium on rate reductions in the onshore market following three major losses in January, rate reductions started to be seen again, and by mid-year these were running in the order of 20%. Since then, however, the rate of decline in the onshore market has accelerated, and today reductions of as much as 30-40% are becoming possible. The upstream market has been patchier; a few big reductions of 20% or more were seen earlier in the year for insureds prepared to switch markets, but some renewals

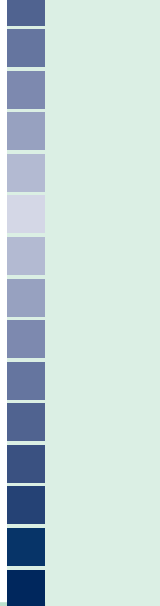
### Riding the Waves

Lloyd's pre-tax profit/loss\*, £bn



Source: Lloyd's/The Economist

\*Three year accounting basis



recently have been granted 10-15% reductions, some have had no rate reductions at all, and there are rumours of difficulties in completing several placements at the prices quoted. Most significantly, the recent hurricanes in the US would initially appear to have had a far more devastating effect on upstream operations than on onshore property and, as we demonstrate in the upstream section of this Review, may seriously impact not only the 2004 result but 2003 as well. The cycles for onshore and upstream have clearly diverged.

Liability is different again, its cycle traditionally lagging behind the other classes. Here, prices are just coming off the top, and the market is still difficult. There are, though, other drivers in this class. The product is to an extent evolving, as changes in law are making international exposures increasingly resemble those in the USA. With international clients starting to purchase much higher limits than before there are signs that liability is moving out from under the shadow of property, whose poor relation it has historically been perceived to be. As the premium volume for international liability grows regardless of some softening in rates there are clearly opportunities for new participants, and the development of this class over the next year or two is likely to prove fascinating.

The reason for the acceleration in price reductions in the onshore property market is principally due to an over-supply of capacity at a time of continuing stellar underwriting conditions. Deductibles are at 25-year highs, coverage restrictions remain in force, there is a feeling that 9/11 and the bad loss record of the late '90s through the early years of this century have now been paid for, and over all underwriting discipline is being maintained.

Added to this there has been an unusual lack of catastrophic loss, and what major losses there have been were unevenly distributed, to the extent that the January losses caused little pain to many energy underwriters. Those that did suffer drew in their horns, with a review of all insurance lines. For instance, in April AIG, one of the insurers to have had a big share of the January losses, was reported to have rejected US\$325 million in business that it considered unprofitable. However, few others were in such a position, and most insurers still see opportunities for profit even at considerably reduced premium rates.

More recently there have been two potentially large losses, one offshore Egypt in August, and one onshore South Africa in September. While the quantum of these losses is to be established, yet again it would appear that the commercial market will mostly escape: both risks are primarily insured in the mutuals, OIL and sEnergy. Furthermore, despite the damage in the Caribbean and Southern coastal regions of the USA, the recent flurry of hurricanes appears to have had little effect on onshore energy risks, though the cost of the damage caused by Ivan in the Gulf of Mexico is mounting.

There is possibly more discipline in the upstream than the onshore property sector. The market is tighter and less internationally spread, centred as it is in London, and this may account for the sector's growing resistance to general price reductions. There may also be a difference in treaty reinsurance conditions for onshore and upstream underwriters. Certainly for onshore property, excess of loss treaties have enjoyed increased capacity, the market has allowed price reductions, and there is no feeling that there is a difficult renewal season on the horizon. Upstream underwriters on the other hand tend to be more circumspect

## Market Overviewcontinued

about the treaty reinsurance season, and as we move into the last quarter may be keen to demonstrate to reinsurers that they are maintaining stricter underwriting discipline. With significant losses from Ivan they will be even more focussed on doing so.

For the onshore sector there is no sign of the current rate reductions abating. The question therefore being asked is, how far will it go? Has a line in the sand been drawn? Given that the business is still profitable the market cannot be described as truly soft. Right now rates are more in a state of controlled descent rather than freefall, although whether the market goes into freefall may be missing the point. For as one senior energy underwriter recently observed, it's not a question of how far the market will go down but at what point does one pull out one's capital. Wherever that point happens to be, that underwriter will not be the only one who cuts his capacity. And a few big losses could change everything tomorrow.

There are also the continuing legacy issues of historic under-reserving, particularly in the face of US liabilities. Standard & Poor's (S&P) recently warned that the global insurance industry remains short of "tens of billions" of dollars of reserves to cover US liability business in particular. According to S&P, provisions to correct historic miscalculations for

liability loss reserves have effectively cut US\$35 billion from the pre-tax earnings and capital base of US insurers in the past three years.

Further, whilst interest rates have started to move up, the increases to date are not enough to have the effect on bottom lines that they had in the past; in other words, there is still an overwhelming requirement for insurers to make underwriting profits.

This, then, is the rub; energy insurance is an inherently unstable and volatile business because, unlike the general property and liability sector, it lacks critical mass, encompassing as it does some of the very biggest risks in the world but with a global premium volume hardly sufficient to pay for one major catastrophe. It is a market that will always be fragile, and it would be a brave person who says with any degree of confidence that the current softening necessarily indicates a long term trend.

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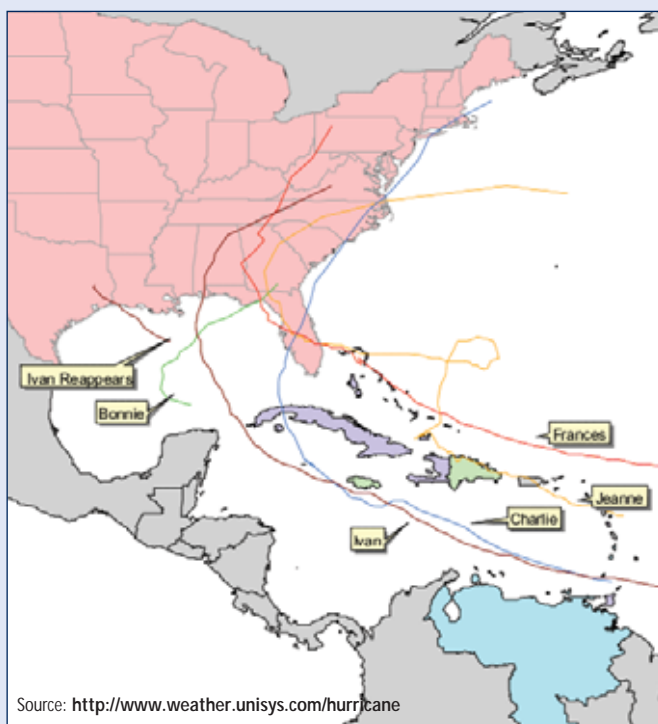
The following three pages show loss detail and analysis from the Willis Energy Loss Database and other sources, and provide the reader with some of the data we have used for this Market Review.

## Market Overview – Energy Loss Detail

### Hurricane Ivan

Reported losses arising out of Hurricane Ivan continue to mount. At the time of writing estimates range from around US\$750 million to in excess of US\$900 million, but we are not yet in a position to verify any figures. It would appear however from an energy perspective that most of the loss arising out of the hurricane relates to offshore assets, and that total losses would seem to be heading towards the billion dollar mark. The following report dated 22 September by The Minerals Management Service\* gives an idea of the extent of the damage:

### Storm Tracks as at 28 September 2004



### “Offshore Oil and Gas Operators Report Preliminary Damage from Hurricane Ivan

In the aftermath of Hurricane Ivan, industry continues to assess the damage to oil and gas infrastructure on the Outer Continental Shelf of the Gulf of Mexico.

Preliminary reports show that few of the 4,000 platforms or the 117 rigs working in the Gulf sustained major damage. Of the 33,000 miles of pipeline, only three leaks have been reported, and most of the 25,000 to 30,000 workers involved in the production of offshore oil and natural gas are back at work.

Preliminary assessments of major damage reported by industry indicate the following:

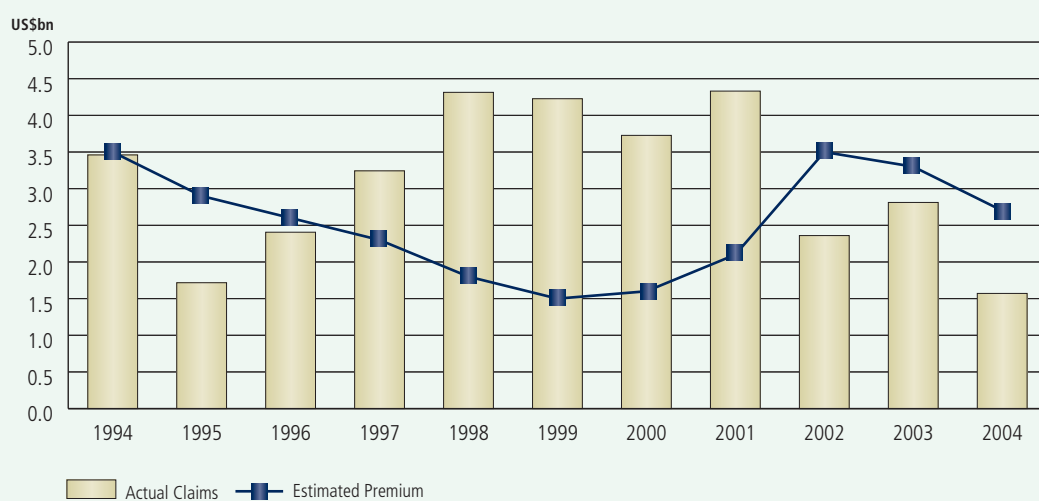
- 5 Mobile Offshore Drilling Units (MODU) were adrift. All have been located. One MODU was reported to be leaning about 3 degrees. Companies are in the process of reoccupying these facilities to assess the damage onsite.
- 4 Fixed platforms are reported missing (presumed sunk).
- 1 Fixed platform is reported as leaning.
- 1 Rig installed on a SPAR is missing.
- 1 Platform rig derrick was seen leaning over the edge of the SPAR on which it was installed.
- 1 Spar with extensive topside damage.
- 1 MODU with extensive damage.
- 1 Platform with extensive topside damage
- 3 Pipeline leaks were reported – 1 resulted in a fire which is now burned out.

Damage inspections will continue, including underwater searches, which may reveal additional impacts. We have no reports of any injuries, fatalities or significant pollution to date.”

\* The Minerals Management Service is the federal agency in the U.S. Department of the Interior that manages the nation's oil, natural gas, and other mineral resources on the Outer Continental Shelf in Federal offshore waters.

## Energy Loss Detail continued

### Energy losses 1994 - 2004 + estimated global energy premium



Source: Willis Energy Loss Database. Figures as at 7 September 2004. NOT including Hurricane Ivan

### Major losses in 2004 excess of US\$100 million

Date	Incident	Location	Total Claim US\$
19/01/2004	Explosion and fire in LNG tank	Skikda, Algeria	470,000,000
01/01/2004	Explosion & fire at natural gas plant	South Australia	243,800,000
10/08/2004	Blowout & fire of rig and platform	Offshore Egypt	200,000,000
23/04/2004	Explosion at plastics plant	Illinois, USA	180,000,000

As at September 01 2004

## Energy losses excess of US\$1m

	Refinery/Petrochem/Chem		Refineries		Petrochemical		Chemical	
	Incidents	Tot Act US\$	Incidents	Tot Act US\$	Incidents	Tot Act US\$	Incidents	Tot Act US\$
1990	77	1,733,639,981	45	745,089,103	17	542,239,687	15	446,311,191
1991	53	1,380,361,875	33	675,669,325	14	585,192,550	6	119,500,000
1992	46	1,913,013,469	25	990,854,770	13	551,000,000	8	371,158,699
1993	90	1,035,887,569	51	518,318,127	17	281,563,000	22	236,006,442
1994	60	1,651,456,707	29	453,167,457	16	672,646,555	15	525,642,695
1995	57	679,678,504	26	330,215,672	20	174,853,998	11	174,608,834
1996	74	892,754,043	36	382,089,649	17	266,995,808	21	243,668,586
1997	85	1,403,755,350	37	672,233,482	24	415,117,960	24	316,403,908
1998	52	893,914,098	22	622,762,093	17	157,118,490	13	114,033,515
1999	88	1,607,046,144	37	1,067,646,184	20	187,165,839	31	352,234,121
2000	72	1,495,691,006	32	846,565,737	14	122,279,000	26	526,846,269
2001	49	2,391,214,272	25	1,609,083,976	13	585,789,493	11	196,340,803
2002	17	471,920,180	8	279,814,210	3	70,000,000	6	122,105,970
2003	19	475,484,592	12	440,663,102	0	0	7	34,821,490
2004	13	371,600,000	7	103,800,000	3	10,600,000	3	257,200,000
	<b>852</b>	<b>18,397,417,790</b>	<b>425</b>	<b>9,737,972,887</b>	<b>208</b>	<b>4,622,562,380</b>	<b>219</b>	<b>4,036,882,523</b>

	Earthquake		Flood		Heavy Weather		Ice/snow/freeze		Windstorm	
	Incidents	Tot Act US\$	Incidents	Tot Act US\$	Incidents	Tot Act US\$	Incidents	Tot Act US\$	Incidents	Tot Act US\$
1990	1	3,920,072	1	1,941,832	10	84,527,772	2	11,235,719	3	5,384,200
1991			3	24,206,000	4	16,758,884			4	97,820,416
1992			3	14,021,726	3	21,999,689	1	21,364,000	26	960,564,215
1993			12	152,947,835	9	27,428,975			4	37,021,196
1994	8	219,785,600	9	520,481,713	8	86,580,844	1	16,000,000	2	54,000,000
1995			3	24,615,000	11	63,308,050			5	44,050,000
1996			3	11,912,878	9	76,820,839	2	3,000,000	14	90,154,824
1997			7	116,192,200	9	30,353,764	3	42,517,080	8	25,454,906
1998			8	38,830,755	17	87,944,599	2	6,500,510	43	560,473,192
1999	4	94,613,300	4	163,000,000	12	35,562,409	3	6,500,000	11	153,424,520
2000	1	5,446,000	1	1,000,000	4	13,920,807	6	38,839,000	5	27,924,500
2001	2	54,000,000	5	9,025,000	8	49,800,960	1	1,800,000	4	23,639,321
2002			2	76,300,000	7	43,790,000			44	472,359,832
2003	1	90,000,000	4	112,351,500	3	6,751,000			4	22,260,000
2004					4	24,100,000	1	1,000,000		
	<b>17</b>	<b>467,764,972</b>	<b>65</b>	<b>1,266,826,439</b>	<b>118</b>	<b>669,648,592</b>	<b>22</b>	<b>148,756,309</b>	<b>177</b>	<b>2,574,531,122</b>

As at 25 August 2004. Not including Hurricane Ivan losses.

Source: Willis Energy Loss Database

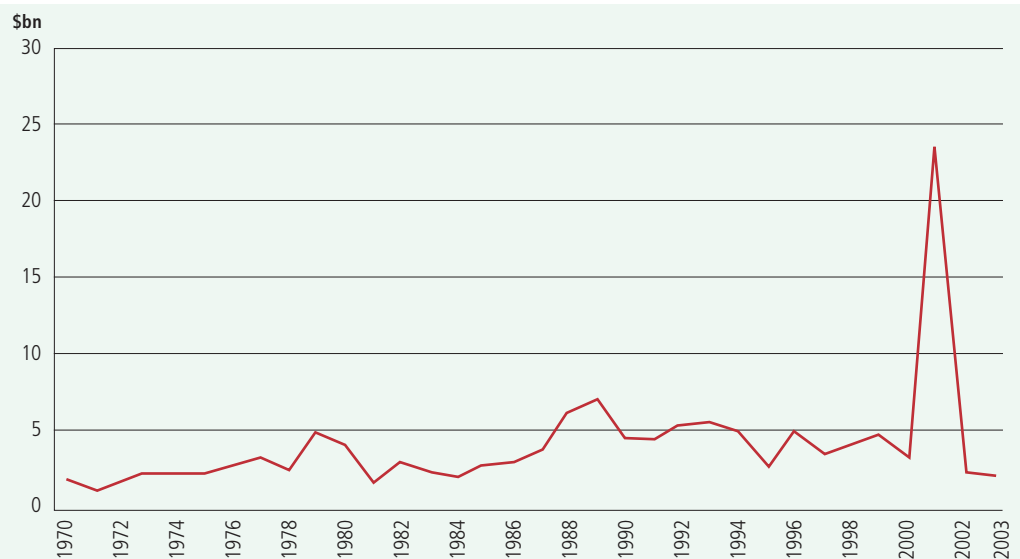
## Market Updates **Onshore Property**

Once again the market has demonstrated its volatility. In our March Review we predicted that hard market conditions would prevail in 2004, but a few months on the question is not how hard conditions are, but whether the market can now be described as truly soft.

All the signs would seem to indicate that the market is, if not already there, then at least headed that way. The freeze on rate reductions following the large losses in January did not last long, principally because of their uneven distribution across the market, and by April/May we were seeing rate reductions in the order of 10-20% led by insurers who had

substantially avoided those losses. Capacity is more than sufficient to cover the great majority of risks and, with a continued absence of significant losses, the slide in rates has continued inexorably, with up to 30-40% reductions now possible, and no end in sight. These levels of reduction are all the more significant coming as they do on top of reductions of up to 20% that were beginning to be achieved this time last year. However, those risks with renewals early in the year have had little or no relief in rating since the peak of the hard market two years ago, and as we predicted in March the possibility of significant rating inequality is becoming a reality. With those clients due some major rating corrections early next year the prospects for the onshore property market appear, on the face of it, decidedly soft.

### Man-made catastrophes (excluding liability and life losses)



Source: Swiss Re

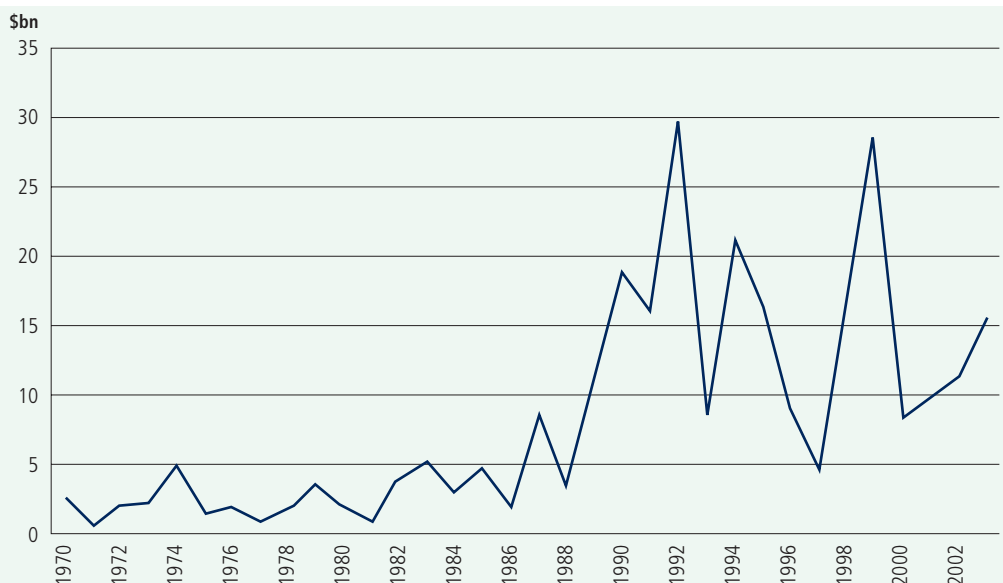


But against this one has to look at the results: onshore energy business is still highly profitable, only a few insurers were hit hard by the January losses, and there is probably some fat left in the rates even after the significant reductions that we are now seeing. Also, clients' concentration is still primarily fixed on price rather than on coverage and deductibles, and whilst both the latter are now starting to come under some pressure (e.g. the increasing of sub-limits, and correction of deductible levels, for some risks which were seen to be overly and unnecessarily punished in the hard market) very little has materially changed here, and coverage is generally narrower, and sub-limits much lower, than afforded in the last soft market. So what we have in effect is a stampede for market share by insurers who see onshore property as a business that is still profitable and

that has maintained underwriting discipline. On this basis one would have to say that we are not in a soft market yet.

The interesting question is what will be the end result of continued competition: what happens when all the fat is pared away? Will there be overwhelming pressure to reduce deductibles? Will the market put up the white flag on coverage issues like contingent business interruption? The answer almost certainly comes down to the level of loss incidence, for the onshore property market is fragile and always will be. It will not take much to put the market into reverse, and while the recent hurricanes would appear to have had a negligible effect on the onshore property sector, the effect of increased refinery margins on medium/large loss frequency could be much more telling. Undoubtedly the

## Natural catastrophes



Source: Swiss Re

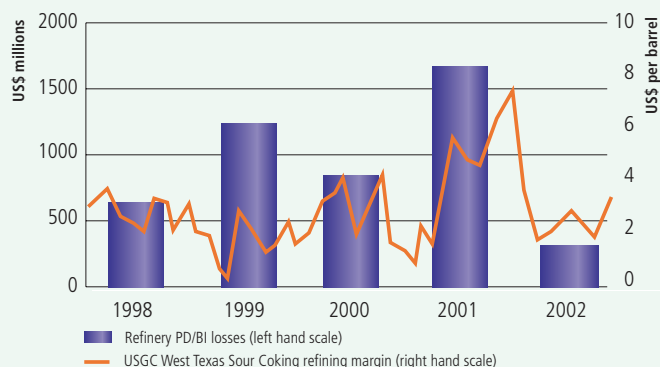
## Onshore Property<sup>continued</sup>

running of refineries at levels above design capacity and the postponing of scheduled turnarounds to take advantage of suddenly expanded margins was the cause of the severe spate of refinery losses in 2001 that heralded the end of the long-lived soft market, spectacularly brought to a close by 9/11. But whether a repeat of such frequency translates into a significant amount of insured loss may depend very much on business interruption waiting periods. In 2001 most refinery waiting periods ranged from a week or less up to a maximum of 30 days for the very biggest and most difficult risks. Today you won't find many refineries with waiting periods of less than 60 days. If the average waiting period falls to, say, 45 days will this seriously jeopardise the market's profitability? Valid arguments can be made for doing this, in that the 60 days level could generally be shown to be an over-correction, and that insurers should be able to accept 45 days without being irresponsible. Conversely, will such a reduction make much difference if there is a sudden frequency of catastrophic losses?

Today, conditions are very different to those that applied in the 1990s, when the soft market was sustained by a combination of long term deals based on cheap reinsurance and loose control of underwriting by managers who were far more focussed on investment return than on making an underwriting profit. The need to make underwriting profits in the face of a depressed investment environment, and pressure from ratings agencies and shareholders, is today overwhelming. Further, with much improved management information systems insurers can make decisions on moving capital away from unprofitable lines far quicker than ever. All this is likely to lead to much shorter market cycles than the onshore property sector has up to now experienced.

In the absence of significant loss it is highly likely that the market will continue to soften as competition for market share becomes increasingly desperate, but the one thing that one can bet on with certainty is that if the market suddenly plunges into the red the stampede will reverse direction, as insurers head towards the exit, taking their onshore capacity with them.

Last July we pointed to a possible correlation between refinery losses and margins (see chart). With refinery margins better now than for some years it will be interesting to plot the continuation of this chart once the data is available, hopefully by the time of the next issue of the Energy Market Review.



Source: Willis Energy Loss Database/BP statistical review of world energy 2003

## Market Updates **Upstream**

In our last review of the Upstream sector we described the market as "boring". We reasoned that not much had changed and that market reductions, whilst commonplace, were in the region of ten to fifteen per cent and usually achieved by some form of continuity or loss sensitive credit.

Until early September we would have had difficulty coming up with a more inspiring review. Little had changed from a capacity perspective and the attritional loss picture was not materially altered. The one significant loss that did occur was a blowout and total loss of the Global Santa Fe Adriatic IV rig including serious damage to a platform offshore Egypt. The jack up rig is reportedly valued at US\$50 million and this, plus removal of debris up to US\$12.5 million, will be paid by the commercial market along with any OIL wraparound exposure. This, however, is the smaller part of the overall loss. The platform and control of well is predominantly insured in OIL. Whilst at this stage the final

cost is unclear, there are some concerns in the commercial market that the final figure may exceed the OIL limit of US\$250 million.

Regardless of the final share for the upstream market, the Egypt loss together with all other losses known or reported at 1 September 2004 meant that the commercial market was on course for another very good year. At this point we should explain that most of the upstream market operates on what is referred to as a "year of account" basis. That is to say, the year 2003 is not mature until risks attaching during 2003 are complete and the loss picture known. Clearly, then, at 1 September 2004 the 2003 year was looking exceptional for underwriters, and already there was optimism about 2004.

Unbeknown to anyone, in late August 2004 a storm was brewing that possibly even had its birth on the very same day as its infamous namesake Ivan the Terrible, the ferocious 16th century ruler of Russia. On 2 September 2004 weather services identified Tropical Depression Nine which became known as "Hurricane Ivan".

### Estimated global energy market capacity\*

Offshore/Upstream vs Onshore Property

	Offshore/Upstream		Onshore Property	
	\$Millions	%	\$Millions	%
Lloyd's	895	42	525	26
Companies	1255	58	1475	74
<b>Total</b>	<b>2150</b>	<b>100</b>	<b>2000</b>	<b>100</b>

\*estimate of economically viable capacity. Theoretical maximum is considerably higher.

Note: OIL and sEnergy add a further US\$250 million and US\$200 million for PD & BI respectively to the above totals.

Source: Willis estimates

## Upstreamcontinued

In its early stages Hurricane Ivan looked to be heading east of most significant energy assets but as its path developed it progressively worked its way west, finally making landfall in the USA near Gulf Shores Alabama at around 2am on 16 September.

Transacting business in Lloyds during the week commencing 13 September 2004 was a strange experience. All underwriters had the same image of the predicted path of Hurricane Ivan on their computer screens, downloaded from one of the many weather sites. It was almost as if Lloyd's had given them all the same screensaver. At one stage the path looked to be veering towards Louisiana where the concentration of assets is particularly high. It became virtually impossible to get decisions on other business as all eyes were on Ivan, and underwriters constantly recalculated their exposures with every slightest change in its direction.

By popular consensus the actual path could have been much worse for underwriters had it been further west. Despite this, current estimates of loss to the upstream market (including OIL) range from US\$750 million to US\$900 million. At this stage these estimates are far from certain, but based upon what is known of the four or five largest losses, the overall

number of notifications to date and the tendency of loss estimates to escalate the final number is unlikely to fall below this range. Whilst it is still very early OIL is likely to take a significant share of this loss, and one member in particular is likely to post a loss to OIL in the hundreds of millions.

By contrast overall market premiums (including OIL) attributable to the Gulf of Mexico are not recorded but at current rates these can be estimated in the US\$250 million to US\$300 million range, so it would appear that some three years specific premium has been exhausted in this single incident.

### Market Leadership

During September QBE announced a restructuring of their European operations. As a part of this it was decided that the O'Farrell and Gargrave syndicates would be merged with effect from 1st January 2005. The changes involve the O'Farrell syndicate 1036 becoming a subset of the overall Limit corporate syndicate 2999.

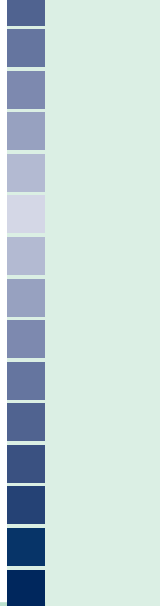
O'Farrell are established and respected leaders of energy business and their position in the market in this respect is only likely to get stronger. While they are expected to trade

## Hurricane Ivan

<b>Formed:</b>	September 2, 2004 as Tropical Depression Nine
<b>Highest Wind Speed:</b>	165 mph (270 km/h) on September 11, 2004
<b>Highest Category:</b>	Five

<b>Territories affected:</b>	<ul style="list-style-type: none"><li>• The Windward Islands, especially Grenada.</li><li>• Jamaica.</li><li>• Grand Cayman.</li><li>• Cuba.</li><li>• Alabama, Florida, and much of the eastern United States.</li><li>• After rebirth, Texas and Louisiana.</li></ul>
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Source: [http://en.wikipedia.org/wiki/Hurricane\\_Ivan\\_\(2004\)](http://en.wikipedia.org/wiki/Hurricane_Ivan_(2004))



forward with a larger capacity, our experience indicates that in these instances it is unusual for overall stamp capacity to grow. We therefore predict that there will be a net loss of capacity to the market as a result of these changes.

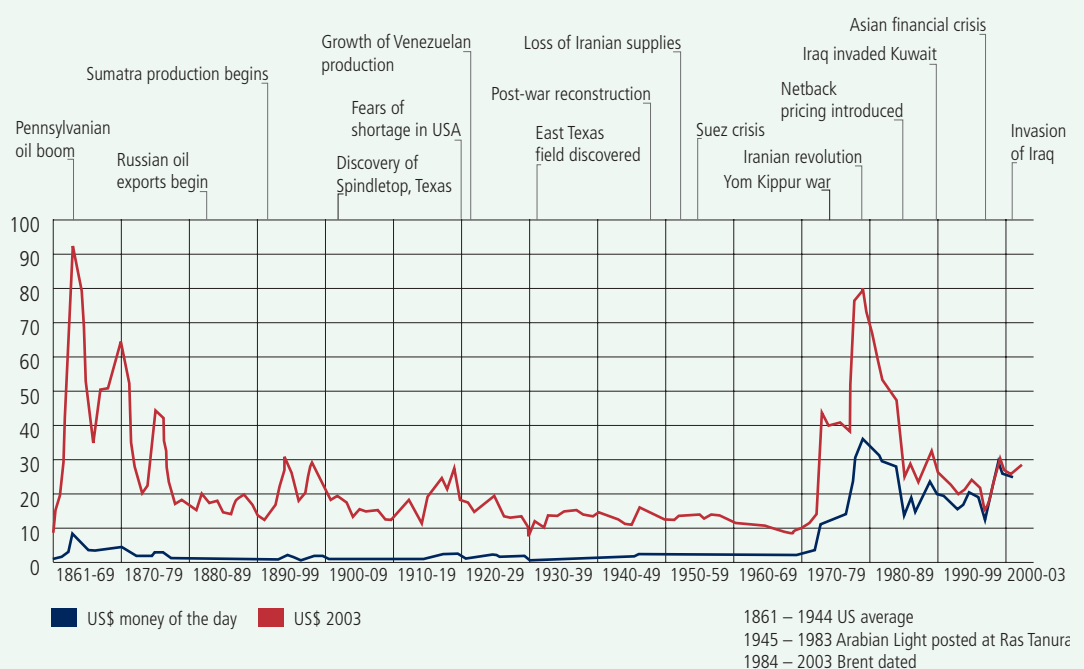
The loss of separate upstream leadership in the form of Stephen Gargrave and Steve Warren, however, is a blow to both brokers and clients, and it would be encouraging to see them find a new home soon. With the withdrawal of BRM earlier in the year it is clear that for some classes/clients leadership choice within Lloyd's has become increasingly limited. In particular, contractor and construction risks were often led or co-led by these two underwriters. Whilst other leaders are emerging we foresee increasing pressure on some of the existing leaders of these classes.

Non-Lloyd's leadership and capacity have remained fairly constant. AIG, ACE, Axa and Zurich all continue to maintain

a high profile and will no doubt be poised to pick up business if they feel attractive accounts are swept up in a market-wide upwards re-rating exercise. HCC, Liberty, Arch and GE Frankona are also prepared to take leadership positions but tend to be more a part of the subscription market and are therefore usually more closely identified with Lloyd's. The "alpine reinsurers" such as Swiss Re and Munich Re are not necessarily mainstream players in the facultative upstream market, and tend to have a much narrower account base, writing a more selective net line book.

The arrival of Aspen in the upstream sector is eagerly awaited. John Henderson starts his new job as we write, and we look forward to seeing the expansion of his team to include hopefully both upstream and downstream property.

## Crude oil prices since 1861



### Construction

Construction rates have more or less held during the period since the last review but it is realistic to suggest a softening of the market has occurred, as completion of orders has been simpler and faster owing to increased market appetite. Rates were beginning to fall and deductibles were easing slightly prior to September but the combination of loss of leadership and real capacity outlined above, in conjunction with the effects of Ivan, may serve to temper this in the near term.

### Underwriter results and the future

As mentioned above, the majority of the market works on a "year of account" basis. This has some interesting implications for the Ivan loss in particular. Even at this early stage it is clear that there are four or five large losses and a series of "notifications" that may result in claims. The distribution of these losses in the market, and the distribution between the 2003 and 2004 year of account, is going to throw up some odd and disparate results.

At least one of the large losses affects a risk that was in the process of renewal. The interesting point here is that because the risk had not renewed at the date of loss it falls under underwriters' 2003 year of account. The underwriters affected are therefore now facing a substantial loss that will impact their 2003 gross figures that were looking so good a matter of weeks ago. Underwriters, however, that missed this particular risk may yet produce a fairly stunning gross result. The disparity between different underwriters' results may therefore be quite significant for the 2003 year.

Most of the other Hurricane Ivan losses fall into the 2004 year of account which clearly has a long way to go (notably another hurricane season) before it is seen as being mature. Based upon this hurricane season it is likely that

underwriters will be cautious about forecasting their 2004 result until the year is truly over.

Another factor that will impact disparity in underwriters' results is that certain underwriters have either a known affinity for, or aversion to, Gulf of Mexico risks. AIG, for example, is known to have a small Gulf of Mexico book that bears no relation to their overall market position.

The reinsurance renewals at 1st January 2005 are going to be a key determinant as to where the direct market moves from here. Clearly, with losses affecting the direct energy book as well as the general catastrophe book, the reinsurance market can be expected to tighten. Whether it is up front reinsurance cost, reinstatement cost or retentions something is going to give, and this will impact the front end renewals as it will directly affect underwriters' bottom line result.

For certain, we do not expect the immediate future to be "boring". We might expect (and the market needs) some underwriters to step forward as leaders; we might expect, at least in the short term, resistance to reductions; we might expect selected account pressure for rises; we might expect underwriters to seek to focus much more closely on Gulf of Mexico aggregation and pricing; we might expect construction to become a fraction tougher again.

With fewer leaders and players in the game, we might reasonably expect the market to hold; but fundamentally, as mentioned in the foreword to this Review, there remains too much capacity for most risks, other than for natural catastrophe accumulations and the odd specific risk. We can certainly therefore continue to expect upstream energy to remain a boom-to-bust market.

## Market Updates Onshore Construction

During almost a decade of softening terms and conditions through the 1990s, the market's ability to offer what seemed like an endless supply of risk transfer solutions to customers resulted in an overflow of capacity. This capacity was competing for limited amounts of business. The result was that business placed in the market was aggressively tendered, thereby forcing premium rates and policy deductibles down and generally broadening policy wordings to levels which were not sustainable.

As with other insurance classes heavy losses throughout the industry culminating in the World Trade Center catastrophe forced a complete re-evaluation of underwriting approach. Some key developments followed:

- The withdrawal from this class of business by several significant reinsurance treaty capacity providers, such as Royal & SunAlliance and Württembergerische Versicherung, which has impacted upon conventional capacity providers.
- Treaty reinsurers imposed restrictions to the way in which probable maximum loss (PML) figures were to be calculated, forcing underwriters to re-visit the manner in which their risk assessment calculations were undertaken. The outcome has been that higher PML scenarios are now being assumed, the resulting effect being to force market capacity volumes downwards.
- Many insurance companies' treaties throughout 2002/2003 switched to excess of loss treaty protections following the general demise of reinsurance capacity. The background to this was not only the shortage of reinsurance capacity available, but the cost of buying that capacity dramatically increased. These costs, to some extent, are being passed on to the customer through increased premiums.
- Insurance carriers have been forced to carry greater net retentions, which has pushed capacity downwards. This, together with increased management pressures to return to profitability, has generally forced insurance providers to push and drive prices upwards.
- Further reductions occurred in the facultative capacity market with the withdrawal of Gerling, QBE, CTR, Reliance National, Independent Insurance, Copenhagen Re, Hiscox, Cox Power, Wellington and ARIG. We estimate that approximately US\$175 million in PML capacity has been lost from the construction market between 2001 and 2004.

The above consolidation of market capacity, and the pressure to deliver profitability, has resulted in insurers not having to underwrite business simply to compete for market share, and a degree of risk selection has become clearly apparent through 2004. A more consistent approach to providing lead terms and capacity has been seen from the construction market over the past six months.

## Onshore Constructioncontinued

### Current market conditions

We are, however, now seeing some new capacity and risk appetite entering the construction market. Within the last few weeks there have been a number of significant moves. Whilst there are no obvious effects being seen just yet, we anticipate that there will be some softening as competitive forces come into play.

- The Beazley Syndicate in Lloyd's has recently hired a team of four specialist onshore construction underwriters from GE Frankona. This team comes with an impressive pedigree and reputation as leading underwriters. With meaningful capacity and an appetite to support its property portfolio, we expect Beazley to make an impact when this team begins trading.
- GE Frankona has confirmed that it intends to maintain a high profile in this market segment. The company retains the services of two experienced construction underwriters and will be seeking to recruit more resources.
- The Catlin Syndicate in Lloyd's has recently recruited a dedicated onshore construction underwriter. This will complement their reputation in the marine and energy markets. Whilst Catlin has not been active as yet, we

anticipate that they will provide valuable support and niche capacity.

- Tokio Marine and Fire have now a dedicated construction presence in the London market. They have been writing this class from their head office in Tokyo to date. Favourable results and their desire to increase their London market penetration have driven this move. Whilst this does not represent "new" capacity it does provide a new presence in the London market.

Markets have become more insistent on the provision of comprehensive underwriting submissions, and it is important that high quality underwriting submissions are provided at the earliest possible stage in the renewal process to ensure that the project is given the attention it deserves by insurers.

In the current market the emphasis is not just on negotiating the optimum lead terms and conditions but also on negotiating lead terms that are supportable by the follow market. A sign of the fundamental change that has taken place in the onshore construction sector is that the follow market's capacity is now deemed just as important as the lead market's.

## Market Updates **Power Generation Utilities**

As predicted in our last Review, with more property underwriters now prepared to write utility business, partly as a result of the sector's continuing good claims experience over the last couple of years, the market has continued to soften.

This softening is principally manifesting itself through lower rates, although there is some downward pressure on deductibles. We are certainly not seeing prices descend to the low levels experienced in the late nineties: rates for risks with good risk management and good claims experience are down no more than 15% to 20%. Larger reductions have been seen for risks where there was an over-correction in the past.

The downward movement on deductibles mainly concerns property damage and is dependent on type and size of machinery. In general terms, for large frame gas turbines, deductibles of between US\$750,000 and US\$1,000,000 for machinery breakdown have in some cases reduced to between US\$500,000 and US\$750,000 for proven technology; for other smaller frame turbines reductions from

around US\$500,000 to as low as US\$250,000 have been achieved. Deductibles remain higher for unproven technology, especially where defects cover is provided. Fire deductibles have moved from around US\$250,000 to as low as US\$100,000 in some cases. For gas turbines, business interruption waiting periods are holding firmer at 60 days for machinery breakdown whereas for fire the deductible has reduced in some cases to 30 days.

Despite these examples deductibles are not reducing across the board, and we believe that underwriters will try to maintain current deductible levels as long as possible as they attempt to avoid the attritional losses seen in the past. Also, there is now a much greater understanding of the risks involved with turbines, and as a result underwriters are taking a more technical approach. They realize, for example, that it can take an outage in excess of 30 days purely to open and close a turbine that is experiencing problems. For this reason, a return to machinery breakdown business interruption deductibles of 30 days (or less) appears unlikely.

The market is tending to be firmer with respect to extent of coverage. The normal exclusions such as mould and transmission and distribution lines continue to apply,



## Power Generation Utilitiescontinued

although there has been a hint that the standard extent of cover for the latter may be increased from 1000 feet. Cover for customers and suppliers is still, for most insureds, being limited to fire and named perils, with the customers and suppliers having to be specified on the policy. Underwriters are continuing to apply daily, monthly or MW-based Business Interruption indemnity limits to cap their potential short-/medium-term liability on merchant power plant risks.

On the positive side, it is possible to achieve higher sub-limits than only a few months ago. There has also been some movement in the application of defect clauses. Power utilities, in particular CCGTs, are underwritten based on the make, model and specific characteristics of turbines, such as firing temperature and whether modifications have been made. Underwriters review the operating history of each model before deciding whether a particular model can be considered to be "proven", and also consider whether modifications have the effect of turning a previously proven model into an unproven one. This determines which defect clause to apply. Whereas previously the most restrictive LEG 1 defect exclusion clause (excludes all losses due to defects) tended to be strictly applied to all un proven units (i.e. those with less than 8000 hours of trouble free operation

achieved by at least three units) underwriters will now be less dogmatic, and apply the less restrictive LEG 2 defect exclusion clause (provides cover for consequences of defects) to certain unproven units, depending on their degree of comfort with the make and model involved. They will examine the nature of any modification to a proven model, and may continue to treat it as proven if the modification is considered to be relatively minor. FM Global, a major player in the utilities market, tends not to apply a LEG defects clause at all, relying on the latent defect exclusion in its standard policy form, which sits somewhere between LEG 2 and LEG 3.

There is increased competition for all classes of utility risk, but hydro, coal and oil plants are now being targeted by the traditional property market, leaving the more complex gas turbine risks to the specialist carriers, or to those who profile themselves as industry specialists.

## Market Updates **Liability**

The global liability market peaked in the first quarter of 2004 with rate increases rapidly falling away. Since the middle of the year competition has returned. Underwriters are finding in many cases that actual revenue is falling short of their ambitious budgets which show increases on last year's record revenue.

The outlook for the end of 2004 and the longer term is by no means clear. This is particularly so in the energy sector where pricing has remained somewhat firmer than for general industrial risks.

The liability market is engaged in a long term relationship with risk. Cover written today may result in liability in many years time. This perhaps obvious point is one that insurers have been forced to recognise as the problems of the past, ranging from asbestos to pharmaceutical product claims to pollution, have caused serious balance sheet damage.

Whether the market as a whole has recognised and reserved for the full extent of past problems remains an unanswered question. The latest developments at Convergium demonstrate that not all the bad news from the market has been out in the open.

A critical issue is whether capital providers can be persuaded that the industry now has the knowledge, expertise and management ability to maintain profitability over the market

cycle. The need to constantly adjust reserves for past liability business creates difficulties for legacy markets and undermines confidence in future performance. These insurers have to manage the impact on balance sheets of past exposures, and at the same time compete with newer markets that are able to focus their attention on the future.

The capital that stayed in the business during the worst of the hard market insisted on underwriting discipline and much higher prices.

Potential new capital providers were at first slow to be persuaded that there was a new and disciplined approach to underwriting, at least not until prices rose to the point that clear short term profit opportunities were apparent.

There has, however, been a sharp focus on terms and conditions as well as price by all underwriters, whether legacy insurers or new entrants. Investors in the insurance industry want to know that lessons have been learned and that this knowledge will be applied to future underwriting in the medium and long term regardless of shorter term competitive pressures.

In assessing the current state of the market we have to consider on the one hand the competing forces of the long term increase in liability exposure as a result of aggressive legal systems, technological advance or changes in society's attitude to risk, and on the other the pressure on underwriters to meet business targets. The way in which the balance between these forces is managed is vital to long term underwriting success and will have a major impact on the volatility of the liability insurance cycle.

### Short Term Market Influences

Short term influences which accelerated the hard market included the investment climate and the major catastrophe losses which hit in the early 2000's, including of course 9/11. This overlaid the long term issue of reserving for the past. Prices were already beginning to rise ahead of the property market in response to underlying concerns about the health of the market. The overall impact on buyers was dramatic with prices rising over a two to three year period by a hundred or more percent, more restrictive terms for some risks being applied and a lack of capacity for risks requiring larger limits.

Now we are in the phase of the market cycle where short term forces are pushing the other way. Capacity is again competing for market share, and insurers are having to work harder to meet revenue targets.

### Current Market Conditions

It is very apparent that insurers are having difficulty meeting their aggressive 2004 revenue targets. There is growing evidence of an increased hunger for business with more price flexibility. However, it is the case that up to this point the softening in market conditions is largely a correction to some of the more obvious excesses of 2002/2003. It remains to be seen how firmly underwriting discipline will be maintained through the remainder of 2004 and into 2005. There has been much talk in Monte Carlo this year of cycle management. The test is this: are insurers prepared to miss their 2004 revenue targets and reduce their expectations for 2005 in pursuit of longer term stability?

There are a number of sectors of the liability market that remain more difficult. For example, rates have stabilised for pharmaceutical manufacturers but it remains difficult to obtain adequate cover for some major product lines. In this sector insurers are also seeking much more information.

The energy sector has remained relatively firm. A number of losses, including the Skikda gas plant explosion in Algeria, the gas plant explosion in New South Wales and the natural gas well blow out in south west China, all of which occurred in January 2004, have contributed to pricing stability. Whilst the immediate financial impact on the liability market of these losses has not been great they have been a salutary reminder of the potential exposures.

Premium reductions have nevertheless been seen both in the USA and internationally. These have to be fought for, and presentation of the risk and differentiation from the pack are vital. Poor risks in difficult territories may still attract increases or at best remain flat.

For risks that have exceptional records and can demonstrate a firm grip of risk management rate reductions of 5% to 10% may be achievable. It is certainly possible that this trend will continue during the second half of 2004.

Recently longer term deals have re-emerged as an option. These are as yet few in number and often come with significant restrictions. Their return at this point may be an attempt by insurers to stabilise rates in what they recognise is a falling market.



Whether the deals on offer make sense is very much an individual decision; however in general it may not make sense to lock into a deal now until the market trend becomes clearer over the next few months. Where it may be valuable is where cover can be locked in, for example in the pharmaceutical sector.

### Longer Term Outlook

The current market conditions reflect the short term trends in the cycle. The long term element remains. If rates fall away this year and in 2005, and we see further adverse adjustment to reserves, the resolution of capital providers will be tested. A deterioration of results in 2005 if it occurs can be predicted to have an effect in halting the soft market.

The market remains in our view very volatile. A series of man made catastrophes or a shock in the macro economic

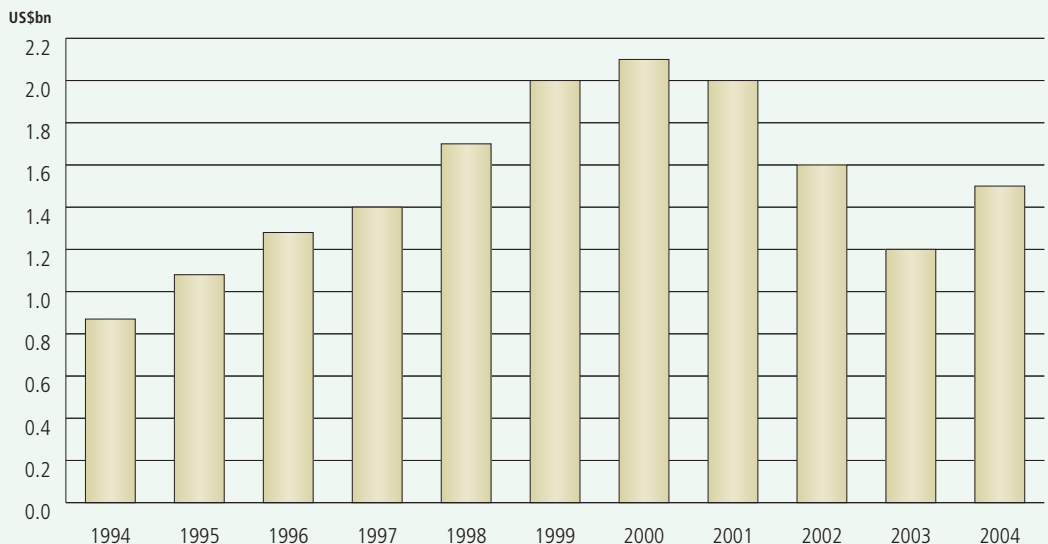
climate would be likely to have a rapid effect in arresting the potential decline in rates. The energy sector in particular is vulnerable to an incident that produces major liability claims.

### Capacity

Global capacity, although significantly reduced from the 2000 peak, remains at a level at least in nominal terms that meets most needs, as illustrated in the graph below. Losses following market withdrawals by some carriers have been partially compensated by entrants such as AWAC, Arch, Endurance and Max Re. In 2004 we estimate capacity up on 2003 at USD 1.5 billion.

It should also be noted that following mergers and acquisitions, total capacity is now concentrated in the hands of a smaller number of markets. At the primary level in

## Global liability capacity



Source: Willis estimates

## Liability continued

particular the number of available players has declined significantly over the past three years, leading to reduced competition and shrinkage in the size of the average primary limit. There are other factors addressed below that mean for some exposed sectors capacity is still in short supply.

A key issue is the relatively small number of truly global primary carriers with the capability to service clients with substantial numbers of locations. These include AIG, Zurich and XL. Other carriers have some capability but have limitations in global coverage or the type of client they wish to underwrite.

Limits of around US\$300m are available on an occurrence follow form basis. Where there is a significant chemical exposure it may be necessary to accept a claims made form. Above this level it is usually necessary to use the occurrence reported form market on a stand alone basis. Competitive pressures are influencing this segment of the insurance

market, producing a more flexible approach to pricing than has traditionally been the case.

It is worth noting that a number of markets who normally write on an occurrence reported form such as Starr and AWAC will on some risks follow form. On some risks they are seeking to attach lower and hence gain a bigger share of a static or diminishing premium pot.

OCIL continues to be a significant player in the segment with US\$150 million of capacity targeted at the medium to high excess attachment point. This provides competition not available to sector outside energy, petrochemical and utility risks. OCIL's unique structure does not mutualise risk beyond payment of the premium and purchase of a share. The insurer can therefore be routinely considered when structuring higher level programmes and is proving competitive on many risks.



## Coverage

Downward pressure on pricing may be a feature of the current market, but flexibility on cover is less so. Under pressure from treaty reinsurers markets are increasingly having to apply additional exclusions. These may relate to issues such as terrorism where the immediate scale of exposure is too big or uncertain, or to exposures such as asbestos where the long term cumulative impact on insurers is the main concern. An example is the increasing application of MTBE exclusions (see box)

The softening of the market may however allow brokers and insureds to resist the imposition of best terms clauses. These clauses which have seen widespread use particularly by Bermudian markets seek to attract the most restrictive cover and most advantageous pricing to the layer concerned. They introduce uncertainty into cover and unnecessary complication into the structure of programmes.

### Terrorism

Terrorism continues to be excluded in many liability policies. The lack of coverage is an obvious problem for clients who are responsible for the security of large numbers of people (such as in shopping malls and stadiums), however third party damage and injuries resulting from an attack in the energy industry could be catastrophic and the resulting costs of defending civil actions could impact severely on profits and capital. A significant concern in this sector is pollution from tanks and pipelines where the operator may be liable under legislation even in the absence of negligence.

The terrorists are unlikely to find themselves as defendants in a civil trial as they may be dead or otherwise beyond the reach of the civil courts. It is quite probable that plaintiffs and their lawyers will seek recompense against third party

defendants whose liability is at best tenuous but who are perceived to have the financial resources to compensate victims of terrorist attacks. This is starkly illustrated by the numerous actions following 9/11.

The insurance market has responded to the challenge by providing a stand alone terrorism liability product with capacity of up to US\$200,000,000 (depending on the risk). Whilst this product is in its infancy the market is already improving pricing and has a flexible approach to coverage as clients' needs are better understood. An example is the availability of an element of sudden and unintended pollution cover for some risks.

### D&O Market in 2004

The Directors & Officers liability market has seen major changes over the past two and half years. This has been mostly due to the corporate scandals in the USA and because of a number of high profile actions against the Directors of UK and European companies (Vodafone, Cable and Wireless, ICI, Marconi, Wickes, SSL, Royal Ahold, Alcatel, Deutsche Telecom, Daimler Chrysler, Parmalat, Royal Dutch Shell to name a few). This has led to some insurers withdrawing from the market, some reducing their capacity and others entering the market for the first time.

These new Insurers (AXIS, Arch Capital, Catlin, Novae, Allianz (UK) and Navigator Pro) are pushing pricing down, as they are able to compete for market share without the burden of legacy issues of exposure and reserving. By the end of 2003 many insurers believed that the repair work they had undertaken in the preceding twenty four months to return their books to a profitable level was enough, and that premiums could be allowed to plateau. A consequent leveling-off in pricing has occurred, and from about March this year rates started to reduce.

## Liability continued

We are now seeing average rate reductions of between 10% and 15%, and even more in selected cases where the market took advantage of distressed business in what has been the toughest market conditions seen for many years. However, the recent claims in Europe have maintained the sensitivity of the market, and any new litigation could lead to premium increases, though with new capacity entering the fray existing insurers have been forced to compete in order to protect their premium income.

Not only are we seeing a reduction in premiums but some of the harsher conditions imposed by insurers are being removed, this has not extended to the removal or amendment of the Insured v Insured exclusion.

The market in 2004 is good news for the insurance buyer and we anticipate that premiums will continue to reduce into next year.

### Why MTBE is an insurance problem

Methyl-Tertiary Butyl Ether or MTBE as it is more commonly known is the latest example of a substance in widespread use that the liability insurance market is increasingly unwilling to insure. Exclusions have been introduced by most key insurers in the energy liability market. It is a paradox that a substance introduced principally to mitigate one environmental problem (air pollution caused by exhaust emissions) now stands accused of causing water pollution.

MTBE is an additive to petrol (gasoline) originally designed to replace lead as an anti-knock agent. These and related substances are now seen as having a wider role in reducing harmful emissions from vehicles. They provide additional oxygen in the combustion process reducing the proportion of unburnt hydrocarbons in the exhaust. The use of MTBEs has been increasing worldwide, but particularly in the United States where fiscal incentives encouraged increased use for environmental reasons.

There are however characteristics of MTBEs which appear less environmentally friendly. They are highly soluble in water

and very mobile once in groundwater. There is also controversy about the health impact of MTBE. Some animal studies show links to some types of cancer, however there appears to be no strong evidence up to now that there is a significant long term human health exposure.

The concern in relation to MTBE has arisen following the identification of widespread groundwater pollution in areas where its use has been most extensive, particularly the US. This has led to a reversal of policies encouraging the use of MTBE. The state of California will be phasing out its use. In Europe MTBE has not been used so extensively, but here there are also groundwater issues and heightened concern from the regulators.

From the point of view of liability insurers it is the potential for long term health effects which gives rise to concern. The groundwater problems themselves are in any case subject to existing pollution exclusions. This illustrates the (perhaps understandable) sensitivity of reinsurers and ultimate capital providers to any exposure that could be the "next asbestos". There is little evidence that MTBE will fall into that category, but on this subject caution still reigns.

## Market Updates **Terrorism**

Following the steep reduction in premium rates in late 2003/early 2004, underwriters are now offering more modest reductions in the region of 10%. We expect this trend to continue in the absence of a major insured event.

Premium rates in major aggregation areas have held up, as well as in the more difficult territories. Where capacity is not an issue, however, there is now a healthy degree of competition in a market that is showing a sense of confidence born out of increasing experience and knowledge of the risks involved.

We anticipate that capacity in the new year will grow, but as a result of an increase in the line sizes of existing players as opposed to an influx of capital from new entrants. Global capacity currently stands at around US\$650 million, and we expect this to rise to at least US\$700 million by the end of the year.

Underwriters are prepared to be more imaginative in meeting clients' needs. They are more able to tailor solutions to individual clients, and can provide longer periods. For example, a tailor-made package with individual DSU wording for a construction project in the middle east was recently placed for a three year period.

Global demand for terrorism cover remains strong. As premium rates reduce many more clients are purchasing the cover as it becomes more economically viable. Additionally, many of those clients are seeking to purchase larger limits than before.

For US clients the medium term prospects are uncertain. TRIA, the Terrorism Risk Insurance Act set up in the wake of 9/11 to provide the insurance industry with government funded reinsurance protection against catastrophic loss, expires at the end of 2005. This Act was always intended to be a temporary measure, and it is by no means certain that it will be extended. In the absence of such extension, or satisfactory replacement with some other pooling arrangement, there is likely to be a capacity crisis: a broad industry coalition has recently warned that without an immediate two-year extension insurers will no longer be able to provide terrorism coverage.

Many countries around the world have developed government-backed schemes to respond to physical damage losses caused by terrorism:

- |                      |  |
|----------------------|--|
| • <b>FRANCE</b>      | GAREAT   |
| • <b>UK</b>          | Pool Re  |
| • <b>USA</b>         | TRIA   |
| • <b>Austria</b>     | Osterreichischer Versicherungspool zur Deckung von Terrorrisiken |
| • <b>Germany</b>     | Extremus   |
| • <b>Netherlands</b> | NHT  |
| • <b>Spain</b>       | Consorcio  |
| • <b>Australia</b>   | ATP  |

Note: For commentary on liability terrorism please refer to the preceding liability section of these market updates.

Lloyd's recorded a profit in 2003 of £1,892 million on an annual accounting basis, an increase of 126.9% over 2002, while the combined loss ratio reduced from 98.6% to 90.7%.

By the start of 2004 investor confidence was sky high as opening capacity reached a record £15 billion, representing an increase of 33% since 2001.

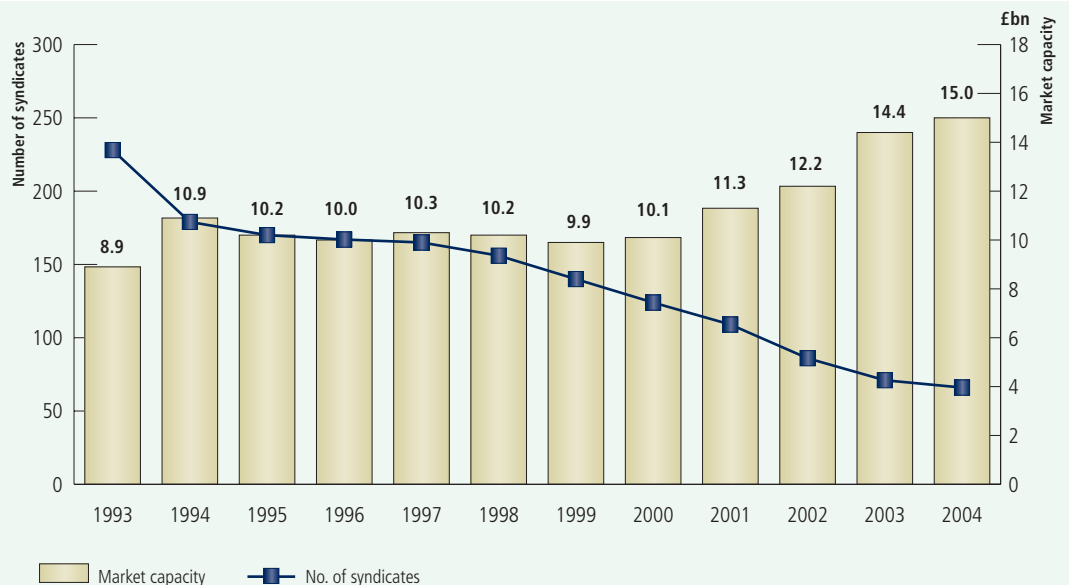
The market reforms of the last few years, and particularly the establishment of the Franchise Board, have publicly demonstrated Lloyd's determination to maintain tighter underwriting discipline as rates decline from their peak. Clearly the message has reached the ratings agencies, with

Standard & Poor's confirming their Lloyd's Market rating of 'A' (Strong) with a stable outlook, and AM Best recently upgrading Lloyd's to 'A' (Excellent), with the rating also assigned a stable outlook. This is all the more significant in that since April 2002, AM Best has downgraded seven of the ten largest reinsurance groups. Lloyd's is the only one of the largest twenty global reinsurance groups to have achieved an upgrade during the same period.

### The Lloyd's energy sector

If results in 2003 were good for Lloyd's overall, those of the relatively small but high profile energy sector were exceptional, returning a combined loss ratio of only 83.4%. These results were a direct result of hard market conditions combined with a generally low incidence of loss.

### Lloyd's syndicates and market capacity: 1993 – 2004



Source: Lloyd's

Early 2004, however, saw a number of significant energy losses reported. Lloyd's, in its 2003 Annual Report, recognises that energy is a highly volatile and competitive sector, and concludes that "a number of industry players are faced with substantial losses and how they respond, in terms of their approach to pricing and market share, will be crucial to the level of profitability in this sector".

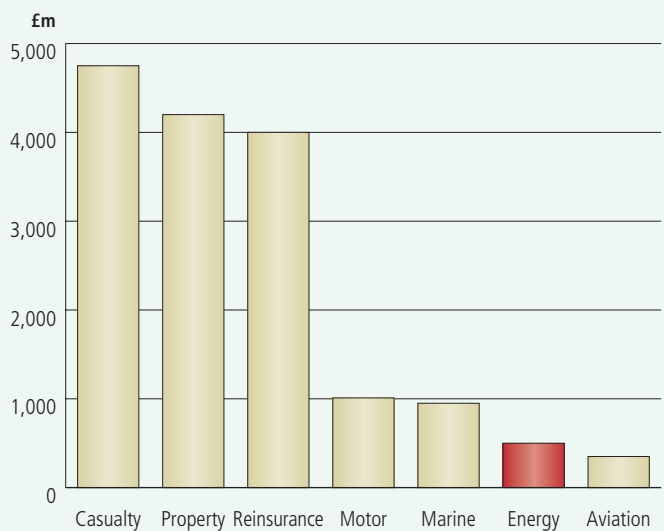
Since these words were written the global energy market, as we have reported elsewhere in this Review, has accelerated the pace of rate reductions. Lloyd's response, mindful of its tighter underwriting discipline, is to reduce capacity.

"Capacity at Lloyd's should shrink in 2005, with pricing coming under pressure", said Lloyd's chairman Lord Levene recently. He added that the market would see a good result for 2004, reporting profits almost twice as high as in 2003. He noted that Lloyd's was keeping "a close eye" on its 66 syndicates to make sure that their risk remained limited and that they did not lower prices too much. We therefore think it likely that further consolidation in the number of syndicates will take place towards the end of this year and into 2005.

At the time of writing rating agency Standard & Poor's has just upgraded the whole global reinsurance sector to stable from negative. It said that the stable outlook stemmed partly from reinsurers' resolve to keep prices at technically sound levels, but also the recent spate of hurricanes could help sustain those rates.

If the latter is the case it will be interesting to see how the energy sector, and Lloyd's underwriters in particular, respond.

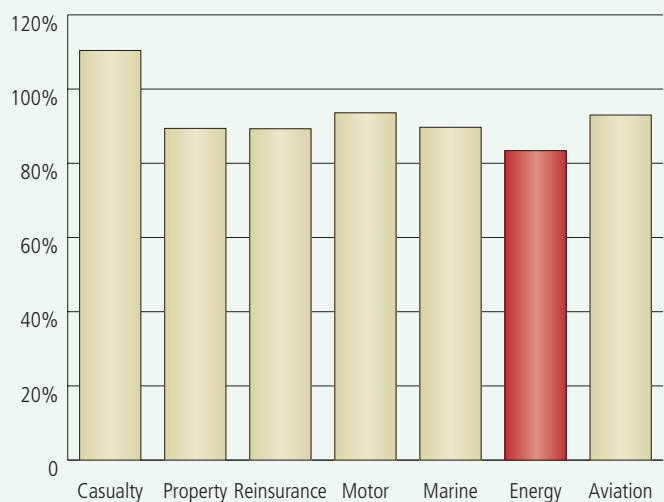
### Lloyd's 2003 Gross written premium



Source: Lloyd's

### Lloyd's performance by class of business

2003 Calendar year combined ratios



Source: Lloyd's

## Lloyd's continued

### Equitas

Lloyd's is currently enjoying a renaissance, with excellent profits and record levels of investment. None of this would have been possible, however, without the establishment of Equitas without which Lloyd's would not have survived.

Equitas is a reinsurance vehicle specifically set up by Lloyd's in 1996 to reinsure the liabilities of all Lloyd's syndicates in respect of 1992 and prior business (other than life business).

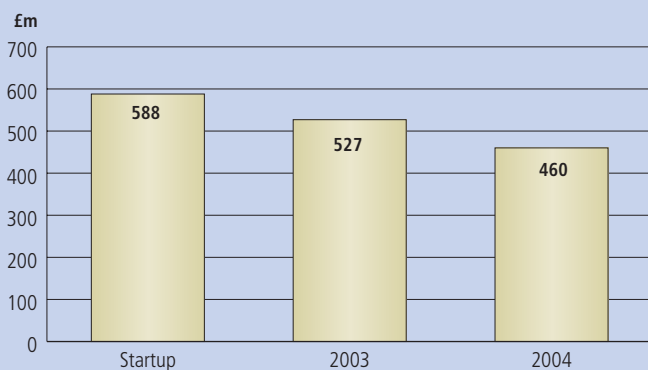
At the time greeted with scepticism in many quarters Equitas has proved its value, and is now viewed with considerable envy by many insurers saddled with the legacy of asbestosis

and other liabilities. Its effectiveness has been demonstrated by completing a number of major commutations, most notably Halliburton Company (Equitas' largest direct exposure) and Travelers Property & Casualty Company (Equitas' largest reinsurance exposure).

Accumulated surplus:	£460 million
Solvency margin:	9.8%
Total claims reserves:	£5.4 billion (gross discounted)
Total asbestos reserves:	£2.8 billion (gross discounted)
Asbestos reserve movement:	+ £296 million (gross discounted)
Reinsurance asset:	£1.1 billion (down from £1.6 billion)
Claims paid since inception:	£15 billion

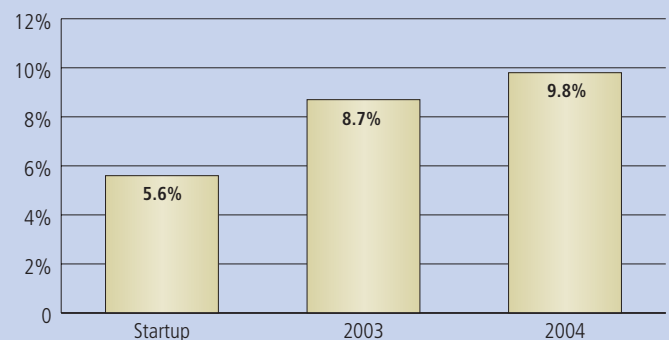
Source: Equitas

### Accumulated surplus



Source: Equitas

### Solvency margin



Source: Equitas

# OIL and sEnergy Update

## OIL

2004 had the makings of a watershed year in the history of OIL. At its Annual General Meeting in March this year OIL surprised many with its announcement that the Board of Directors was giving consideration to prospectively amending the pollution coverage and restricting it to a sudden and accidental basis.

It is worth noting that the power to make such a change in coverage now rests almost exclusively in the hands of the Board of Directors (rather than in the hands of the wider membership) following a rule change passed by the membership at the 2003 AGM. However, before implementing any such change in pollution coverage, the OIL board elected to seek the views of its membership and invited comment by the end of April. In order to assist members in identifying some of the potential issues to be considered in the decision making process, Willis issued a paper that month discussing the proposed amendment. The prospective change was discussed as planned at the 14 July OIL Board meeting with a view to implementing the change in time for the inception of the 1 January 2005 policy year, however the Directors elected to defer a final decision until the March 2005 Board meeting. Any change in coverage will now not be implemented until 1 January 2006 at the earliest.

## Other Highlights of 2004

- Minimum premium for 2005 will increase to US\$750,000 (currently US\$500,000).
- Seven members (ExxonMobil, BP, OGE Energy Corp, Ocean Energy, Cleco Corporation, NSTAR and Energy-Koch LP) withdrew at 1 January 2004.
- There have been three new members during 2004 (XTO Energy Inc, Yara International ASA and Electricité de France).
- Membership currently stands at 84 with approximately US\$1.8 trillion of gross assets insured.
- Of the 84 members, 76 are on the Flat Premium basis with only six on the individual Retro and two on the Minimum Entry option.
- The largest membership proportion by headquarter location is still the USA at 57%, but this is a decreasing proportion as membership becomes more diverse. Europe is second at 20% of the total number of members, closely followed by Canada at 14%.
- Utility members remain the largest industry group by number at 18, but still only account for 7% of weighted gross (premium generating) assets (the largest sector still being Offshore E&P at 36% closely followed by R&M/Petrochem at 32%).
- In 2003 OIL's total written premiums were US\$428 million (compared to US\$185 million in 2002) an increase of 130% and total estimated losses were US\$337 million (compared to US\$278 million in 2002).

## OIL and sEnergy Update continued

- In March 2004 OIL revised its 2004 rates (downwards) from the preliminary rates they had set in December 2003. The adjusted rates were:

- a) Pool A (Standard Rate – paid by all members): 8.34 cents (0.0834%)
- b) Pool B (Flat Premium Rate – additionally paid by Pool B members): 8.67 cents (0.0867%)

These rates are subject to final adjustment in the 4th quarter of 2004.

- As of the end of July, the anticipated losses for 2004 were in the region of US\$430 million. Since then OIL has suffered several further losses including possible losses arising from the recent hurricanes.
- These losses feed directly into the rating calculation for 2005 (together with the actual losses of the past 4 years) and based on the losses known at 27 July OIL announced their preliminary rates for 2005 as follows:
  - a) Pool A (Preliminary Standard Rate – paid by all members): 9.22 cents (0.0922%) – previously 8.34 cents as above (0.0834%) or plus 10%
  - b) Pool B (Provisional Flat Premium Rate – additionally paid by Pool B members): 9.07 cents (0.0907%) - previously 8.67 cents as above (0.0867%) or plus 4.5%.

These rates will be used for 1st quarter billing but will change during 2005 once a) the actual 2004 losses become known and b) once the actual weighted gross (premium generating) assets for 2004 have been determined. The rates could very well increase further in light of the recent loss events.

- In the past six months OIL have executed two capital market transactions raising US\$800 million in statutory capital. Standard & Poor's financial strength rating remains at A+ and Moody's rating is currently at A1.


## sEnergy

Last year we reported that the "growth in sEnergy membership has been less than spectacular" and, despite concerted marketing efforts and rating reductions, this position has largely remained unchanged.

### Highlights of 2004

- Membership increased to 16 as at 1 June 1 2004 i.e. one new member (Koch Industries, April 2004) since our last update.
- Since its formation, sEnergy has had three incidents reported for potential claims, but all fell below the deductible. Currently sEnergy carries a US\$7 million IBNR.
- 2005 written premiums amounted to US\$66 million.
- The Fusion Capital facility was re-financed in June 2004 and has been extended to 2011 (originally only had a four year term) on more beneficial terms. The facility provides US\$400 million of capital (available to pay claims) and is now a revolving line of credit which can be replenished (re-funded) following a loss.
- sEnergy has just closed on an additional US\$300 million capital markets transaction. Of the funds raised US\$100 million will be used to redeem preference shares and pay accrued dividends with US\$200 million strengthening the balance sheet, which will take sEnergy's capital base to more than US\$800 million (sEnergy is A rated by Moody's).
- The Excess PD only option is being marketed quite heavily. Presently the minimum premium for PD only (at US\$255 million attachment point) is US\$375,000 (or an absolute minimum of US\$250,000 for quota share or high excess). To this is added the New Entrant

Premium Supplement (NEPS) of up to US\$1,750,000 for three years. The NEPS can be discounted by as much as US\$1million per year for the 'perfect' risk. Whilst the minimum premiums will still apply sEnergy have indicated that they will discount the NEPS heavily for PD only, possibly even by more than the current US\$1million annual maximum discount. Furthermore they have reduced their PD rates by as much as 35% following a re-forecast of expected losses. As ever the only way of testing this is to seek a quote, but however good the risk, at the US\$255 million attachment point the excess PD only option is still likely to cost a minimum of US\$375,000 plus perhaps up to US\$750,000 NEPS for three years (or whatever this is discounted to) for a limit of US\$200 million excess of US\$255 million.



**sEnergy**  
INSURANCE LTD

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**IMPORTANT ANNOUNCEMENT**

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Hamilton, Bermuda – September 9, 2004

sEnergy Insurance, Ltd. (sEnergy) today announced the closing of a Subordinated Notes offering which raised \$300 million. The transaction was a private placement managed by Lehman Brothers Inc. The term of the offering is 30 years with a 10 year non-call provision and the proceeds will be used to support the capital base of the company, pay accumulated Preferred Share dividends and to redeem a block of Preferred Shares. As a part of the transaction the Preferred Shareholders agreed to a reduction in the Preferred Share dividend rate from 9% to 3.5%.

Roger Paschke, CFO of sEnergy, said: "This offering was very well received by the capital markets, with 10 institutional investors ultimately participating in the offering. The notes were structured with a 30 year final maturity and a 10 year non-call provision, which resulted in pricing of the notes at a spread above the 10 year U.S. Treasury Note. Simultaneous with the close of the transaction, the fixed rate was swapped to a floating interest rate for the next 5 years representing a substantial annual savings for the Company. This transaction is a further endorsement of the strength of sEnergy's business model and its commitment to the energy industry."

W. Rudd Marlowe, Senior Vice President and COO of sEnergy, said "This new financing is another step in meeting our Founders' objectives. They have been paid their accumulated Preferred Share Dividends and reduced the operating costs of the company by redeeming a portion of the outstanding Preferred Shares and reducing the ongoing dividend rate. In addition, the added funds further strengthen sEnergy's capital position. The duration of this offering is reflective of our long-term view of providing the Business Interruption, Excess Property Damage and Pollution Liability insurance needed by the energy industry. Our existing and prospective policyholders can take comfort that sEnergy is an established and secure long-term solution to their insurance needs."

## People & Places/News in Brief

- **Ed Duffy** has resigned from Liberty and is moving to ACE Houston.
- **Nik Rnjak** (Chief Power Utility Underwriter) has left ACE and has joined Aegis Energy Syndicate 1225.
- ACE have appointed **Ian Green**, formerly of AIG as Power & Utility Underwriter.
- **Chris Allison** has joined Aegis Energy Syndicate 1225.
- **Peter Coleman** has left Reith syndicate.
- **Richard Wood** has left Catlin syndicate and will join Cathedral Syndicate 2010 in January 2005.
- **Kurk Falk** of Swiss Re has returned to Zurich from New York
- **Duncan (Archie) Gemmel** (ex RSA) has joined Reinsurance Strategy Consultancy, part of the Donald MacDonald Partnership.
- **Richard Mander** is leaving Millennium syndicate to write liabilities at BRIT, working with Andrew Pembroke.
- **Paul Clarke** has left SCOR Underwriting to head up the engineering team at Zurich Global Energy.
- **Jane Hayes** has been appointed Head of Zurich Corporate Underwriting and **Martin Clark** has taken over as Head of Zurich Global Energy, London.
- **Paul Traboulay** of RMS in Trinidad is leaving to take up the position of Managing Director of one of their regional composite insurers.
- **Nick Metcalf** has left XL Brockbank to join ARCH as Chief Executive Officer in London.
- **Bob Smith** has retired from Commonwealth in Vancouver.
- **Tom Carty** has retired from Swiss Re Energy in London.
- **John Bryce**, also of Swiss Re Energy in London, celebrated 40 years in the Insurance Market.
- **Victor Peignet** has been promoted to MD of Scor Business Solutions.

- BRM Syndicate - Berkshire Hathaway has closed down the Energy, Liability and Cargo sections of their BRM operation at Lloyd's. **Gareth Rees** and **John Henderson** have left to join Aspen Re.
- **Matt Stubbings** also left BRM syndicate and has joined Zurich as part of the Energy team.
- LIMIT confirmed the merger of Marine and Energy Syndicates 1036 (O'Farrell) and 2724 (Gargrave). **Steve Gargrave**, **Steve Warren** and a number of senior staff have been made redundant. **Colin O'Farrell** is to lead the integrated team and **Daryl Ewer** will continue as syndicate deputy. **Sam Harrison** will be the offshore energy underwriter, **Steve Saunders** and **Andrew Raven** and will write the onshore energy account.
- sEnergy at their recent Annual General Meeting have elected **Jeffery Triplette** of Duke Energy Corporation as Chairman of the Board of Directors and **James Hughes** of ConocoPhillips Company was elected Deputy Chairman of the Board.
- **Tony Judd**, after many years as a leading energy underwriter in the Lloyd's market, decided to take early retirement from the Chaucer Syndicate (CSL) in April of this year. **Chris White**, who was deputy energy underwriter to Tony, has accepted the position of Energy Underwriter for CSL Syndicate 1084.
- Swiss Re: **Stuart Rae** started at Swiss Re London as Energy & Oil liability underwriter in August 2004 having resigned from AWAC
- Zurich Global Energy: **Glenn McCubbin** has been promoted to Casualty underwriting manager and has now been joined by new deputy **Oliver Brown**.
- MARP: **David Fazan**, formerly liability underwriter at Zurich Global Energy, has recently joined MARP along with **Darrin Tasker** formerly of Gen Re.



## Summary

Within the macro context of a generally declining market, this issue of the Energy Market Review is a tale of many different markets.

Indeed, the pace of change and decline is increasingly differentiated between the various specialties within the energy sector. Whilst downstream/onshore property is facing sharp price competition, upstream business is more stable, and liability is just coming off its peak.

It is probably time for all the players in the energy market to accept that energy insurance is not only a cyclical business, but also shows a tendency to exaggerate the cycles that affect the overall insurance industry.

Within the underwriting community energy has been a star performer in 2002 and 2003 and, despite the increased incidence of losses in 2004 coupled with the declining rating environment, energy is still expected to produce above average results for most insurers.

This in turn means that competition is likely to continue to increase, boding well for energy insurance buyers going forward.

At the time of writing there is significant speculation as to the impact of the hurricane seasons on the reinsurance market.

Whilst Charley and Frances did not seem to change any of the trends, the succession of four hurricanes hitting the Caribbean and the Southern US coast appears to have created a situation where the reinsurance market is looking to try to hold premium rates.

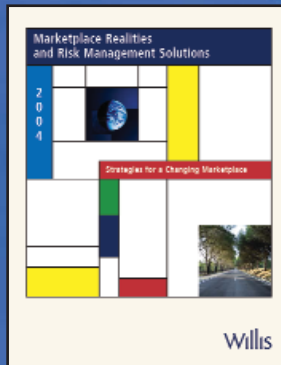
Furthermore, Hurricane Ivan seems to have significantly affected the upstream energy market, but it is still too early to gauge the impact on the commercial market and the impact on OIL.

We have no doubt that the carriers will want to use the damage caused by the recent succession of hurricanes as a lever to try to stabilise pricing, and in part they may succeed.

However, whilst the downwards trend in the market appears more disciplined than in previous cycles, it seems clear that this trend will continue for the foreseeable future.



Willis specialists have recently published other market reviews which might be of interest to you:

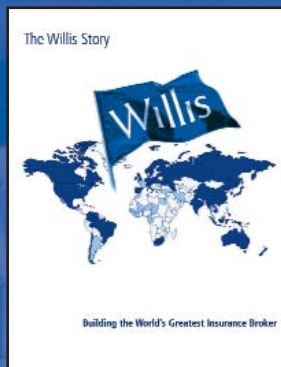


Marketplace Realities 2004

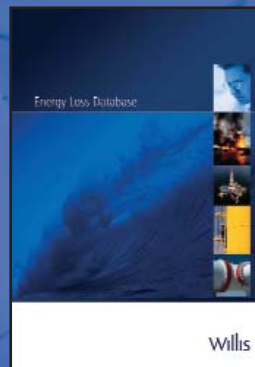


Lloyd's Review 2004

Other recent publications include:



The Willis Story



Energy Loss Database

All of the above are available at [www.willis.com](http://www.willis.com) or through your Willis contact.

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