



Energy Market Review

July 2002



Willis

Contents

	Page
Foreword & Introduction	3
Market Overview	6
Market Updates	
– Onshore Property	10
– Upstream Energy	16
– Power Generation Utilities	22
– Onshore Construction	27
– International Liability	30
– North American Casualty	35
– Terrorism	36
Lloyd's	40
Bermuda	44
OIL/sEnergy	48
People & Places	54
Summary	56



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Foreword & Introduction

When it seems the world today is far too complicated, it helps to focus for a moment on elements that have remained much the same across the span of time. For example, while the marketplaces of "the information age" embody technical, economic and financial interdependencies that would have been unimaginable at the turn of the last century, they rest upon a fundamental premise that has been constant through time: markets function most efficiently when there is a foundation of liquidity, stability and predictability.

Insurance, an important mechanism in securing this foundation, has been, in one form or another, the underpinning of trade, commerce and the accumulation of wealth from antiquity. Some of the earliest references to suretyship are found in the Code of Hammurabi, the visionary monarch who reigned in the 18th century BC. The body of laws that he established provided legal and financial certainty and fostered the growth of Babylon, the world's first metropolis. Reciprocal arrangements, precursors of modern forms of insurance, have sustained tribes, guilds and city-states through the centuries, and they continue to this day. A fresh and relevant example is mutual insurer sEnergy Insurance Ltd., newly formed to address the need for excess property damage and

business interruption coverage for the Energy industry.

A truly different marketplace

There is always a market for insurance, but the marketplace itself fluctuates over time. If we had to name the defining characteristic of today's marketplace, it would be the persistence of uncertainty in the minds and hearts of underwriters. Undoubtedly, arising out of the World Trade Center attack, there is some concern regarding the ultimate cost to be borne, by insurers and reinsurers alike. Because of the interdependencies mentioned above, the uncertainty stems not only from insurance-related issues, but from global financial concerns and energy industry upheaval as well.

Questions include:

- What role, if any, will the US government take in respect of a Terrorism insurance or financing facility?
- How can we get a reliable fix on business interruption and contingent business interruption exposures? Ditto for MFLs.
- Are loss reserves adequate?
- What will the next round of reinsurance treaty renewals be like?
- Where is the global economy going and when will it get there?
- Will equity prices recover, and when?

Insurance buyers have their own questions, including how can they best measure and fund for the loss expectancies associated with newly-imposed higher retentions and newly-excluded or sub-limited perils, and how will they know when they have obtained the best deal possible.

How much is enough?

Most believe that the current hard market started in late 2000 and was jettisoned forward in terms of depth, breadth and tenacity by the events of September 11. Insurers have now had more than eight months since the disaster in which to take

stock of anticipated losses, tailor their respective capacities, collect more premium for lesser limits attaching at higher retentions, and begin the process of rebuilding surplus. New capital, capacity and underwriting facilities have come into the marketplace. Many reinsurance treaties have been renewed. The peril of terrorism has been driven out of virtually all onshore property and liability insurance contracts. Why then do we perceive that the pendulum is not yet ready to swing back, and that liquidity, stability and predictability are still beyond our line of sight?

The Energy market is subject to the same broad conditions that have shaped the general insurance marketplace, but it is also subject to its own experience, where premium shortfalls have been acutely exacerbated by both the frequency and severity of losses in the past few years. Even with dramatically increased retentions that are expected to reduce attritional losses going forward, underwriters remain concerned about loss frequencies, catastrophe loss scenarios and the ongoing impact of other factors related to the energy industry itself. Most recently, there are headlines almost daily announcing questionable financial practices by Energy

companies and their impact on company/ industry stability. While this involves an extremely small portion of the Energy universe – and it is completely unfair to tar the whole universe with the same brush – the barrage of negative news cannot help but impact underwriters' concerns about the industry and its ability to bring about the changes necessary for a return to the "softer" market to begin.

Thus, uncertainty persists and contributes to the lack of stability and liquidity in the marketplace, leading to inefficient operation. It may take the balance of this year, allowing for the renewal of the next cycle of reinsurance treaties and the further rebuilding of surpluses and entrepreneurial spirit, before we can pronounce the marketplace to be recovered and reasonably efficient.

Strategy and Balance

At Willis we are not content to simply wait it out; it is not in our nature to be passive spectators. Our strategy has always been to achieve for our clients the optimal balance between risks retained, risks transferred, breadth of coverage, limits of liability and cost of risk. Though the terms of trade have worsened, our strategy remains the same.

Knowing the position and span of the trading range comes first, what are the terms for transfer of risk for onshore property, upstream energy, power generation and other Energy market segments? How can a given client's risk profile be differentiated to address underwriter sensitivities, to secure greater capacity and relatively preferred pricing? Is there something we can do, or work with our clients to do, that will help assuage the uncertainty and move the recovery process forward more quickly?

Beyond knowledge, we must rely on discipline, global teamwork and unflagging perseverance. On a daily basis we track marketplace developments – new capacity, successful placements and personnel changes. We know where the trading ranges are, how to differentiate our clients' risk profiles, and how to produce the best set of terms.

We offer leadership and creativity to an underwriting community hungry for both, and we believe that we can influence the direction and quality of the marketplace for the benefit of all.

AW 'Sandy' Vietor

Head of Energy



Market Overview

Not out of the woods yet

The casual observer of the market could be forgiven for thinking that it must be a good time to be an energy underwriter: sky-rocketing rates, tightening of terms and conditions, the withdrawal of weaker competitors and a tricky treaty renewal season successfully concluded would all seem to point to a market now back on track for a speedy recovery from the horrors of the past few years.



Indeed, as so often happens in a hard market, the most important element of all – luck – is now going the market's way as well. Up to the beginning of May there had only been 3 losses in 2002 excess of US\$50 million of which we are aware:

	Estimated US\$ million
gas plant fire, Kuwait	150
refinery fire, Japan	75
power station flood, Washington State	70

For the same period last year there were six incidents, five of which were in the US\$100 million+ range. An updated comparison table similar to that contained in the November 2001 issue is as follows:

Claims excess of US\$ 50 million for January – April¹

Year	Number	Total US\$
1998	2	110,000,000
1999	7	950,000,000
2000	3	440,000,000
2001	6	1,350,000,000
2002	3	300,000,000 ²

¹not including third party liability

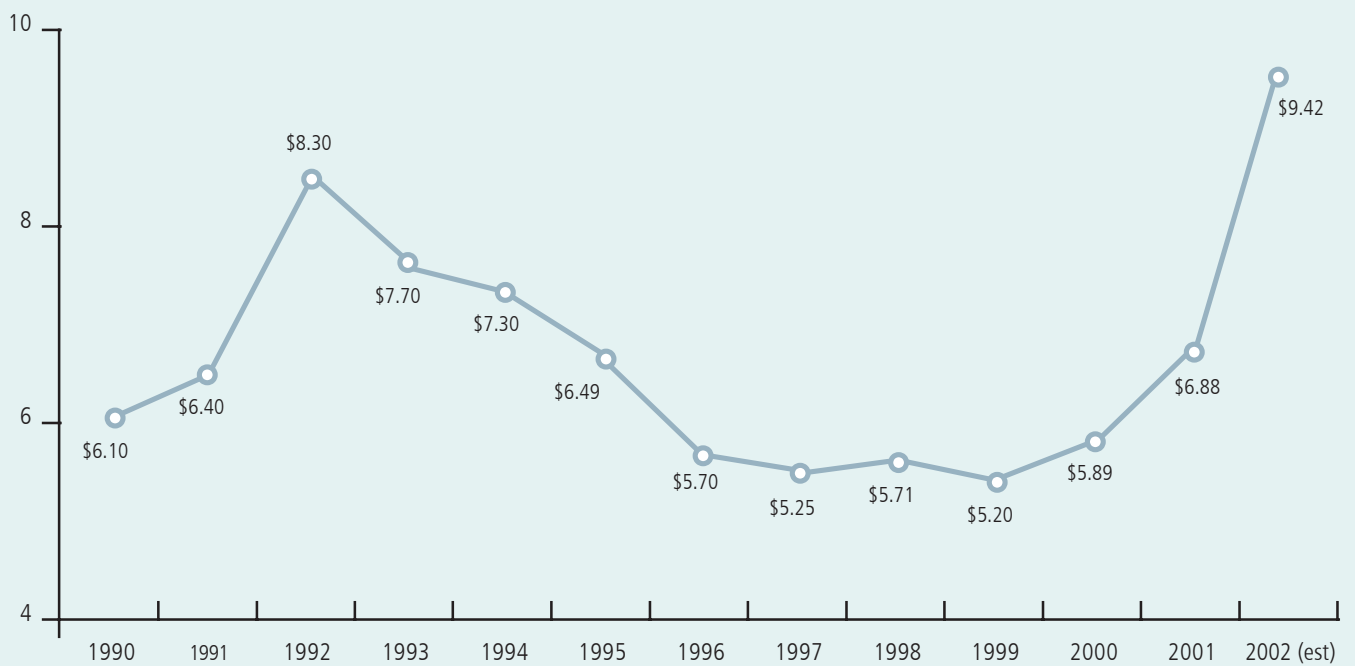
²initial estimates

Source: **Willis Energy Loss Database**

In 2001 there were a total of 11 property losses in excess of US\$50 million, currently reserved at US\$2.669 billion (although on a combined property and liability basis the Toulouse loss alone is estimated to be in excess of US\$2 billion, of which an estimated US\$1.5 billion is third party liability, half of which is uninsured).



Cost of risk per \$1,000 revenues



Source: 2000 RIMS Benchmark Survey; Prudential Securities estimates

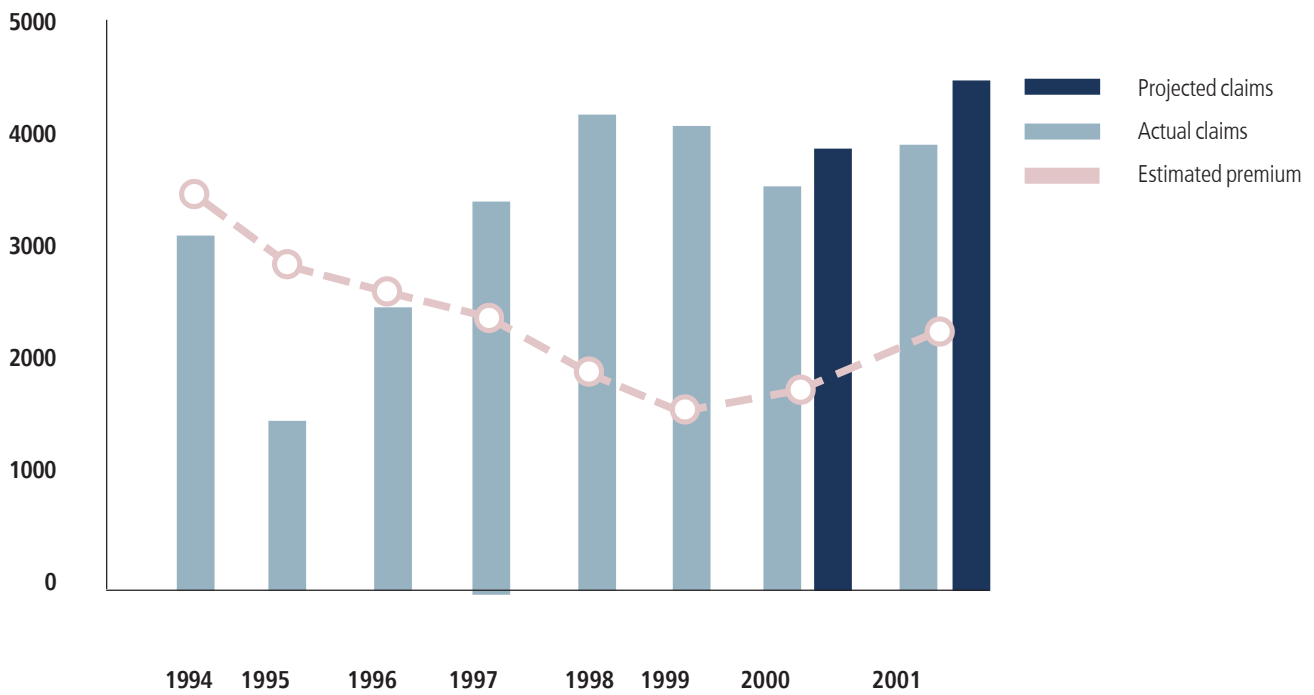
The general view among loss adjusters now is that there is a reduction in the number of claims being reported, and this is probably a reflection of generally increased levels of self-insured retention forced on insureds by the market.

With underwriters benefiting both from luck (reduced severity) and the re-underwriting of their book (reduced frequency) there would seem to be cause for at least a degree of satisfaction, if not for outright celebration.

Why then are there so many worried faces in the market?

The following graphic goes some way to providing an explanation:

Energy Losses 1994 – 2001 + Estimated Global Energy Premium
US\$ billion



Source of actual claims data: **Willis Energy Loss Database** – as at 7 May 2002

As can be seen, despite rapidly increasing rates throughout 2001, estimated premium for the year is unlikely to cover more than 50 per cent of final losses. Whilst this does not reflect the effect of rate and self-insured retention increases since the beginning of 2002 it is clear that, if the loss record this year takes a sudden turn for the worse, despite increased rates and retentions, 2002 could easily be another unprofitable year. In 2001 there was an exceptional frequency of catastrophically large losses, where increased retentions would have had little effect on overall insured losses. For many established energy underwriters this is their final chance to get it right, and further loss will not be tolerated by their capital providers.

But this is only part of a worrying picture emerging for established energy underwriters. As will be seen in the following sections of this Review, new capacity has poured into the market, both into new insurers, particularly in Bermuda, and also into traditional areas such as Lloyd's, thus providing unwelcome competition at a time when the cost of capital has meant that every risk written must be justified to management by the underwriter. In addition to this the establishment on May 1, 2002 of the Oil Insurance Limited sister mutual sEnergy may well prove to be hugely significant in determining the future of the energy market. The combination of OIL and sEnergy providing both physical damage and business interruption coverage means that for the first time a complete mutual alternative to the commercial market is a reality, and, this being the case, many traditional energy insurers may find the way out of the woods blocked for good.



Market Updates >> Onshore Property

“Did I blink and miss the hard market?”

Recent exclamation from an onshore underwriter, astonished that the risk could be placed for less than he was quoting, and without his capacity.

With four dire years of losses behind it there were few people willing to bet in December 2001 that the onshore market would be anything but hard for a considerable time to come, and certainly for most of 2002. But since the end of April there has been a feeling of change – not necessarily that a traditional softening of the market is taking place, but that the underwriting strait-jacket so painfully worn is being loosened in places, if not removed.

For the first time for many months some programs are being over-placed and the market is being signed down. Brokers are being called up by underwriters, rather than vice versa, to ensure that they get their share of the risk, whilst excess layers are "going home", and more usually being placed without shortfalls. However, the spectre of previous years losses is never far away and premiums still continue to move upwards unless the order is restricted.

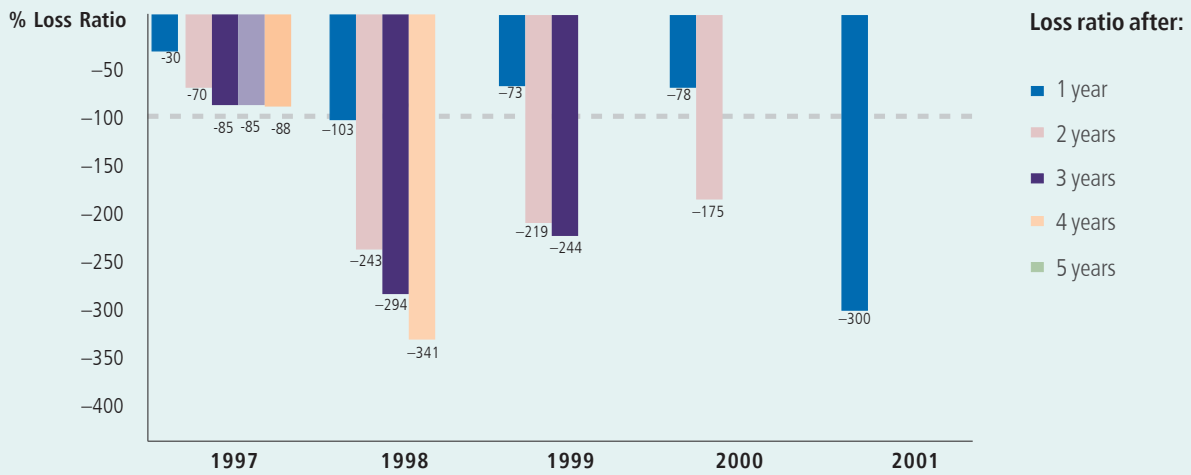
Undoubtedly the onshore market is hard in comparison to one year ago, but can it really be considered "hard" in the traditional sense? Premiums are not so high and terms and conditions are not so restrictive as ten years ago when the last hard market was experienced. For the big petrochemical and refining risks "utilisable" capacity is probably now more plentiful, though it is concentrated in fewer hands. What would appear to have happened is that there has been a technical correction – albeit a major one – and the uneven process of adjustment is continuing.

Capacity

- There has been a significant increase in utilisable capacity since the beginning of the year, and particularly since the nadir for capacity in November 2001. By "utilisable" we mean capacity that is economically viable to use, being considerably less than the sum total of the published capacity of worldwide insurers.
- We estimate utilisable global onshore capacity for US refining and petrochemical risks to be in the region of US\$900 million and US\$1.2 billion for international risks. This is exclusive of OIL and sEnergy which add another US\$250 million physical damage and US\$200 million business interruption respectively.
- Capacity of at least US\$700 million excess of the above is possible, but at a price.



Onshore Energy Physical Damage: loss ratio development



Source: Lloyd's

NB: Loss ratio is expressed before underwriting expenses



- The face of the market is changing rapidly as old players disappear and new capital makes its entrance (see sections on Lloyd's and Bermuda elsewhere in this Review)
- Fewer players control more capacity. This means less choice for buyers.
- To maximise capacity it is often necessary to carefully structure programs by combining quota share limits with layers.

Cost

- Rates have continued to increase throughout the year and, whilst the rate of increase has slowed somewhat, show no signs of levelling out. This is quite understandable given that loss levels of recent years indicate that rates still have a long way to go, unless there is a dramatic improvement in loss frequency and greater focus on preventative maintenance. The higher retentions being imposed should help here.
- There has been considerable variation in approach to pricing between the two main sectors of the onshore market. "Technical" insurers are concerned that the technical rate for the risk is achieved, but "commodity" underwriters will auction their capacity to the highest bidder. Single site risks in particular have seen radical rate increases.
- Underwriters do not expect to realise all the necessary rate increase at once, and recognise that too much too quickly will lead to the better business looking for alternative solutions. Therefore, in order to avoid attritional losses, there has been a concerted effort to raise deductibles. The normal minimum waiting period for business interruption is now 45 days, and for larger risks it is as high as 60.
- Business interruption valuation has emerged as a key issue, particularly with regard to refining risks where recent losses in 2001 showed BI values to be seriously under-reported. However, attempts by some insurers to impose average daily value caps, or similar, to restrict coverage to the values reported have been, by and large, successfully rebuffed.

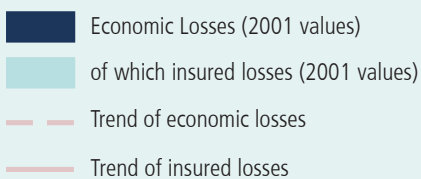
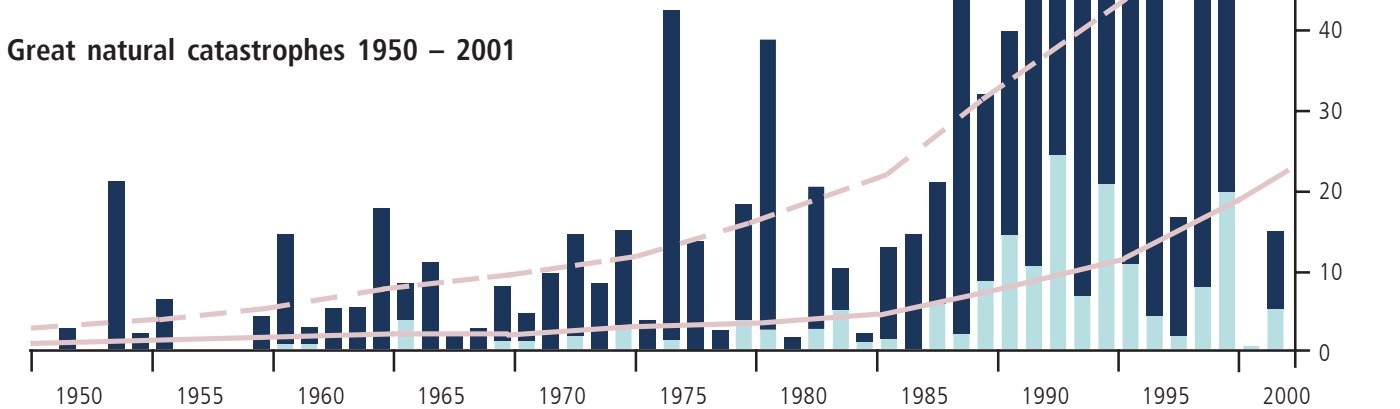
Coverage

All areas of coverage are under intense scrutiny by underwriters. Forms continue to be reviewed in depth, and it is more difficult to get manuscript wordings agreed. The following problem areas remain as in 2001:

- There is scant capacity for natural catastrophe. Texas windstorm has emerged as being of as great a concern to underwriters as earthquake in California or Japan.
- Clarification of coverage intent is universally required for cyber risks.
- Contingent business interruption is a big concern. Unnamed customer and supplier sublimits are at best much reduced and in many cases not available.

- Construction sublimits are also much reduced, and advance loss of profits/delay in start-up (ALOP) is generally excluded.
- Some underwriters now require a sublimit for boiler explosion and machinery breakdown coverage.
- Terrorism is universally excluded. A specialised but vibrant market has emerged offering stand-alone terrorism coverage, and this is described in a separate market update section of this Review.

Great natural catastrophes 1950 – 2001



Source: **Munich Re**

Competition

To the headings of Capacity, Cost and Coverage we can perhaps add one more: Competition to the commercial market from the combination of the oil industry mutuals OIL and sEnergy providing physical damage and business interruption coverage could change the face of the market:

- sEnergy responds to a need which the market has been unable to address adequately. Not only can it provide US\$200 million of business interruption but it also includes other time element coverages such as contingent business interruption and terrorism without sublimit.
- Mutuals provide transparency of pricing. The OIL formula is for this reason very attractive to many clients, though sEnergy's use of a similar formula for rating business interruption on modified gross assets is certainly a radical departure from generally accepted underwriting norms, and it will be interesting to see how it works.
- Fear of the competition from these mutuals has meant that some underwriters have threatened not to write OIL wrap-arounds, or will give no credit for OIL as underlying coverage. Many more do not want to be seen to be supporting sEnergy in its infancy. It should be noted, however, that sEnergy wrap-around and excess programs have already been placed in the commercial market including participation from all major onshore insurers.
- Although sEnergy is not the immediate threat that the market feared (there are only 12 founding members) it is already adding a new dynamic to placing risks in the onshore market. The leverage provided by this alternative market may well curb the excesses of the "commodity" underwriters by reducing orders to the commercial market and thereby restricting participation to those insurers who take a technical (and more logical, and therefore more acceptable) approach to underwriting. OIL is already well established, but if sEnergy is also successful then there is a very real threat to the future of some sectors of the onshore market.

A fuller update of OIL and sEnergy is contained in a separate section of this Review.

Outlook

Much depends on the onshore sector's loss record in 2002. Earlier this year we predicted that in the absence of further losses there may be some residual hardening of the market; with moderate losses there will be continued meaningful hardening; and with dramatic losses there is a possibility of severely reduced capacity. We believe that this view still holds true. But what is perhaps more significant is the distribution of those losses, and the critical importance of this in determining the future size and shape of the onshore energy market. The market is changing and the arrival of new competition means that established onshore insurers must adapt or withdraw from the energy sector altogether. As the comments of the astonished underwriter dramatically show, there is no room for either arrogance or complacency.



Market Updates >> Upstream Energy

Our last review in November 2001 was prepared at a time of great uncertainty for the industry as a whole and for Upstream Energy in particular. The market place was still reeling from the World Trade Center disaster and there was apprehension regarding the January 1 reinsurance renewals. Many underwriters were concerned about their future. Even those that felt reasonably secure were unsure whether they would have a reinsurance program behind them and if they did, what the terms would be. Against this difficult backdrop we sought to be informative and predictive for our readers and we are pleased that our forward view at that time has proven accurate.

Today, on the face of it, the general insurance environment would appear to be more stable and less uncertain. Underwriters have largely reacted in a more measured fashion than in the last hard market. Generally, we have seen a more rational approach to the application of rate rises. Underwriters have paid closer attention to classes of business such as Control of Well and CAR than last time around, when blanket rate increases were imposed on all types of risk whatever the class. The marketplace has changed however, and many losses that have been incurred have yet to be paid. The resilience of underwriters and their financial backers is yet to be truly tested.

A saving grace for the industry is the fact that oil prices have remained at relatively high levels. This, along with a general recognition that rates had to rise, has led to a level of resilience to increased premiums among upstream clients. It has also led to a sustained drilling and construction boom which continues to fuel the market with premium, thereby improving liquidity.

The market cannot be complacent though as clients are responding to increased premiums in various ways in order to stabilise both cost and coverage. The best illustration of this is that as we write, membership of OIL stands at 74 companies. Of this number no less than 37 have signed up since January 2001.

Whilst many of the new members are not upstream clients, this should, nevertheless, be a disturbing statistic for underwriters. In a volatile risk class the last thing the market needs is a reducing customer base as this can only exacerbate the boom bust cycle of the class.

The success of OIL in conjunction with the merger mania of the past few years may yet become the biggest challenge faced by the market.

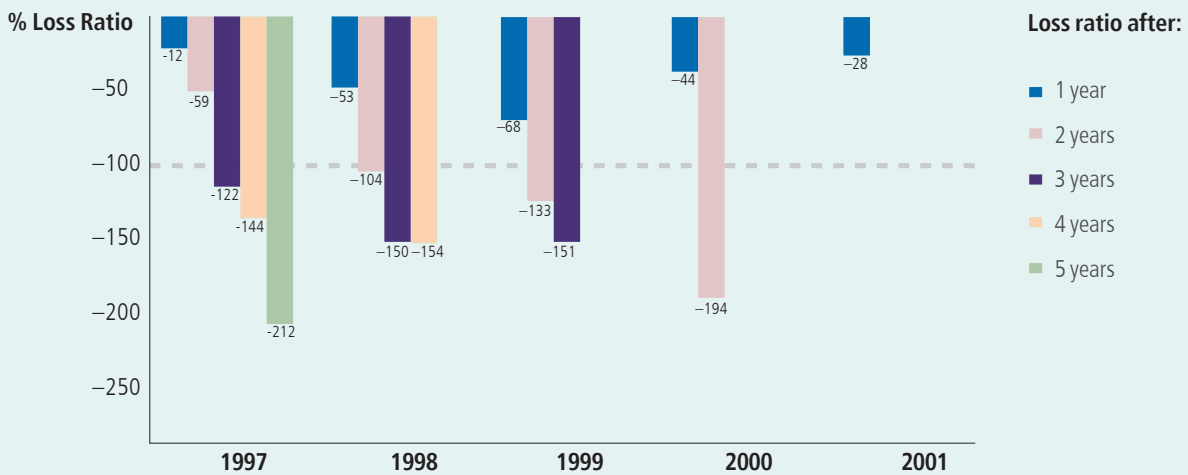
As in any economic equation the fundamentals are simple. The market is built to support the largest risks (which may exceed US\$2 billion) yet the average risk may only be US\$20 million. The consequent supply and demand imbalance makes it impossible for the market to write a balanced portfolio.



Take away a significant proportion of the client base through merger, self insurance or OIL membership and the result can only be increased volatility.

On the next page, we have produced a capacity schematic after interviewing all underwriters concerned. Capacity is of course price elastic and other underwriters may be attracted to certain risks either through pricing or for other reasons such as the domicile of a risk.

Offshore Energy Physical Damage: Loss ratio development



Source: Lloyd's

NB: Loss ratio is expressed before underwriting expenses

By and large, the pre-September 11 market place has continued intact in this sector although some insurers' capacities have reduced. In addition, we have some welcome additions to Upstream Energy market capacity in the form of Ascot, Axis, and the increased profile of Brit and MAP.

However, Axis apart, the new Bermudian capacity is not writing Upstream business and has therefore yet to make an impact in the market. As with the onshore market there is also "commodity" capacity that has not been included in our review of normal market capacities.

Lloyds	2002 (US\$)	2001 (US\$)
ACE	75,000,000	150,000,000
AEGIS	50,000,000	75,000,000
TAL	25,000,000	50,000,000
AML	25,000,000	25,000,000
BRT	20,000,000	10,000,000
BRM	75,000,000	100,000,000
COP	60,000,000	60,000,000
CRH	30,000,000	30,000,000
EUCL	10,000,000	30,000,000
HAY	40,000,000	50,000,000
HIS	50,000,000	100,000,000
KLN	40,000,000	40,000,000
MAP *	15,000,000	Unknown
MEB	50,000,000	180,000,000
MED	30,000,000	25,000,000
MKL	20,000,000	56,000,000
MLM	15,000,000	20,000,000
Nissan	5,000,000	3,000,000
PJG	50,000,000	165,000,000
Ascot	30,000,000	Nil
SJC	60,000,000	75,000,000
SPM	40,000,000	40,000,000
WEL *	100,000,000	150,000,000
WTK	60,000,000	60,000,000
Cotesworth	Nil	100,000,000
Newmarket	Nil	50,000,000
Total	975,000,000	1,644,000,000

Companies	2002 (US\$)	2001 (US\$)
AIG	110,000,000	110,000,000
Allianz	50,000,000	50,000,000
Frankona	35,000,000	35,000,000
Generali	Nil	50,000,000
Gerling	Nil	75,000,000
HCC	30,000,000	30,000,000
Navigators	40,000,000	40,000,000
Royal SunAlliance	50,000,000	50,000,000
Zurich	110,000,000	110,000,000
CCR	Nil	15,000,000
Axa	30,000,000	80,000,000
Gard	150,000,000	150,000,000
Swiss Re	80,000,000	80,000,000
Liberty	50,000,000	50,000,000
Hannover	50,000,000	50,000,000
Munich Re	50,000,000	50,000,000
Adnic*	5,000,000	5,000,000
MMO*	10,000,000	10,000,000
Commonwealth	30,000,000	50,000,000
Scor	100,000,000	130,000,000
Partner Re*	30,000,000	70,000,000
AGF	Nil	75,000,000
Trygg Baltica	Nil	25,000,000
XL Brockbank	50,000,000	50,000,000
Axis	100,000,000	Nil
Sirius*	15,000,000	15,000,000
Total	1,175,000,000	1,455,000,000
Grand Total	2,150,000,000	3,099,000,000

*Willis Estimates

The various classes of the Upstream Energy sector merit individual commentary.

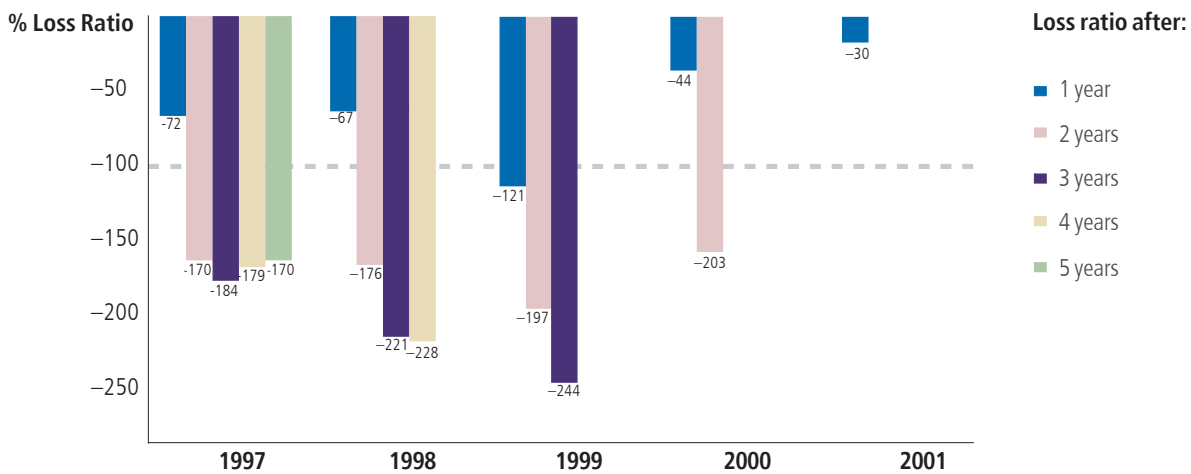
Operating Risks

Those accounts yet to go through a post September 11 renewal are likely to see increases. Having said this, rumours (hotly disputed by leading underwriters) of the first rate reduction are rife in the market. As in the onshore market, "signing" is becoming a serious issue. It seems that

once the market collectively recognise that a placement will get home, everybody wants to write it. Whilst on the face of it this would not appear to be an issue, it may leave clients feeling they have overpaid. Also, when underwriters are either left off the risk or signed down, it can lead to extremely strained relations between the underwriter and the broker.

Absent losses, those accounts that have already had a post September 11 renewal

Energy Control of Well: Loss ratio development



Source: Lloyd's

NB: Loss ratio is expressed before underwriting expenses

are unlikely to witness further significant change. Indeed, there are underwriters who would venture privately that some of the early renewals may have seen an overreaction owing to the general level of uncertainty leading up to their own treaty renewals. The jury is out on treatment of these programs as they come up for renewal.

Stand alone Control of Well can be ringfenced from these comments and remains a difficult and unpopular class, as are some smaller contractor programs.

Construction Risks (CAR)

We could fill the entire section of this Review with comments on what can best be described as an emotional class. Whilst a few more underwriters are beginning to write construction, the predominance of capacity remains in Lloyd's and the sheer volume of business has unbalanced a number of underwriters' portfolios. We are already witnessing a scaling back of lines due to premium income issues and we fully expect this trend to continue in the latter part of the year.

The news of Berkshire Hathaway's significant investment in Wellington for the year 2002, in the form of both a qualifying quota share and establishment of a Corporate Parallel Syndicate, was a welcome boost for the market. Others are looking for similar partnerships or for further

capital from their backers, but we still expect premium income to be a significant factor in new placements between now and the year-end.

Another issue yet to really bite is the impact of Lloyd's Chairman's Strategy Group - Franchise Proposals Update. Buried in a much larger document is the following statement:

"Multi-year policies

- Non-cancellable policies covering a period of greater than 18 months should *be recorded as multi-year policies**
- Multi-year policies should *either have matching reinsurance cover or be written within the net line of the syndicate's business**"

*our italics.

Whilst these are only proposals, if implemented they would have a dramatic effect on Lloyd's ability to commit capacity to anything but the shortest of projects.

More generally, whilst a few projects have been placed with alternative leads, the majority of CAR business remains led by Wellington. Rates, and more particularly deductibles, continue to rise. Whilst many orders are often for less than 100 per cent, where 100 per cent coverage is required, deductibles have to rise significantly to achieve completion of the placement.

For larger projects there is a move/necessity to restrict the Schedule 'A' amount to achieve 100 per cent coverage. We are also witnessing a shift from normal practice with a move away from Full Value policies to loss limits with the sum insured based upon a probable maximum loss.

The underwriting community should be concerned by the progressive change in contracting philosophy. As more clients have become familiar with the WELCAR policy form (which is gaining general acceptance amongst underwriters), the more restrictive coverage it provides compared to the old forms has necessitated a change in the contracting stance of the industry, particularly with respect to quality assurance/quality control provisions.

Some companies such as BP (and consequently their partners) have gone further and effectively de-linked the necessity for provision of insurance cover from their contracts by electing to self-insure. This factor along with increased deductibles has led to an ever-increasing number of buyers (particularly OIL members) to question the need to purchase CAR cover at all. A similar picture is true for CAR liabilities where a combination of cover and cost issues are driving more clients to rely upon their corporate liability programs. When the

requirement to insure was built into the construction contracts, the corporate liability program could not be relied upon because corporate programs could not provide coverage for often lengthy contract periods. Now that the contracts are being written without requirement for insurance, the picture has changed, possibly for good. Whilst the loss record for CAR liabilities remains excellent, the premium cost for one project can on occasions exceed that of the entire corporate liability program, and disquiet amongst buyers is growing.

Summary

The Upstream market is largely alive and well and is buoyed by premium income from rate rises, increased drilling activity and the offshore construction sector. However, with merger activity and more clients seeking alternative solutions, both through OIL and self-insurance, the risk population is declining, thereby leading to less spread and potentially greater volatility in the commercial market. We all have to keep an eye on the future, and some of the greatest challenges to the commercial market and consequently to its clients remain ahead of us. These comments apply almost regardless of the sector's combined loss ratio, as a fall in the oil price will change the landscape completely.

Market Updates >> Power Generation Utilities

The property and casualty market for utility risks continues to be in disarray, although it is showing signs of consolidation since the beginning of the year and the conclusion of the January 1, 2002 Treaty Reinsurance season. It should be noted that the market for utility risks consists mainly of underwriters who also write a broad onshore energy book, and this means that the hard market is having a similar effect on risks in the utility sector as on those in the onshore energy sector, as detailed in the onshore energy update of this Review.

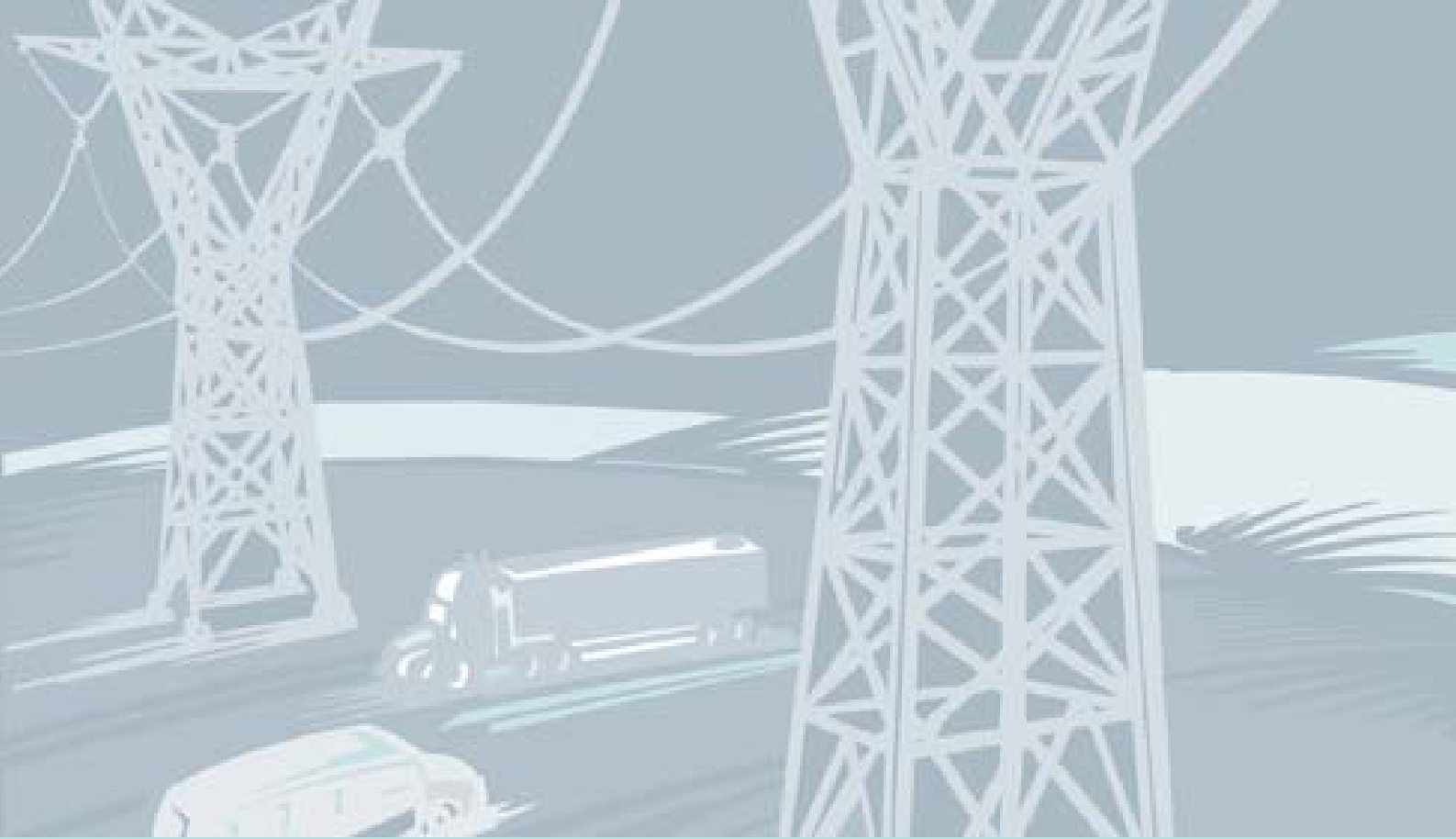
Property Insurance Pricing

Prices continue to increase, albeit at a reduced rate for those risks that suffered significant price increases last year. The range of rate increases is from 20% to 100%. However, there is a growing split between North American insurers and their counterparts in London and Europe in terms of rating, although the scope of coverage being granted and the level of deductibles continue to be comparable. An example of this pricing differential can be seen in the recent property renewal of a vertically integrated utility with proven thermal generation technology and modest catastrophe peril exposure. In this case the US Domestic market charged 25% less than the London and European market.



Property Capacity

Utilized capacity in the US Domestic market is approximately US\$400 million excluding FM Global, so if all underwriters are keen to write a particular risk a reasonable amount of capacity can be generated. FM Global can still provide substantial limits depending on their perception of the risk, and currently have quotes outstanding for programs with limits of between US\$1 billion and US\$2 billion. The difference between the past and today's market is that this additional capacity comes at a price, and is not "thrown in" as it was in the soft market. In contrast to this the utilized capacity in the London and European markets is around US\$800 million excluding FM Global, who to date have been concentrating more on US domiciled risks.



Catastrophe Peril Capacity

Catastrophe peril capacity has become more restricted and sub-limits are the order of the day. The size of the sub-limit will vary depending on the perceived exposure, usually after making a thorough engineering analysis. Available capacity averages between US\$100 million to US\$250 million for windstorm, depending on geographic location, and US\$100 million for flood and earthquake. If a risk is catastrophe exposed we now recommend that a formal analysis be completed before the program is taken to market to ensure the most favourable capacity and terms are secured.

Catastrophe Peril Deductibles

In addition to capacity restrictions we are seeing a move back to deductibles based on a percentage of the Total Insured Value (TIV), particularly in the USA and the Caribbean. This percentage can range from 2% to as much as 5% depending on the catastrophe peril exposure and the geographical location of the risk, and is almost always subject to a minimum retention of between US\$2 million and US\$5 million. The bigger issue is that percentage deductibles are applied to the TIV per location, which for utility buyers can add up to a substantial self-insured retention. Utilities with large generation plants are typically having to retain US\$2 million to as much as \$5 million on a plant with a US\$250 million value. Some markets will allow a per occurrence cap on the self-insured retention, but this comes at a price.





Sabotage & Terrorism

Sabotage and Terrorism is now an absolute exclusion under most insurers' treaties, and any sub-limit granted will be retained net by the insurer. The largest sub-limit we are aware of is provided by FM Global who can offer up to US\$5 million. There are various S&T markets providing combined limits up to US\$350 million, such as ACE, AIG, Berkshire Hathaway, Chubb and Hiscox. Specifically with regard to utilities AEGIS is currently looking to provide US\$50 million of limit to its members. However, this is subject to at least 60 members buying into the program and the limit being shared in the event of a loss affecting more than one member. Pricing varies depending on the exposure and location of the assets.

Business Interruption

This remains an area where underwriters are paying close attention to sums insured and scope of coverage. Many actual loss sustained policies now have the indemnity they provide capped either on a weekly or monthly basis. The basis of calculation of the sum insured is critical and most insurers are looking for supporting work sheets. Some markets will give business interruption cover to independent or merchant power plant operators but not to

regulated utilities. Replacement power coverage or extra expense is still available; however, the basis of calculation is subject to the same scrutiny as above. Some insurers will look at agreed value programs but full disclosure of how the per diem limits are calculated will need to be shown.

The market for multi-trigger generation outage programs is still available with pricing actually showing a decrease in recent months. Capacity is readily available and some markets are now willing to look at providing blended products that include an element of finite insurance. In these cases multi year deals are achievable. Stand alone business interruption has not been readily available over the last few months but several insurers will now consider providing this in excess of underlying dual trigger programs.

Primary Insurance Capacity

With the increase in rates and deductibles we are beginning to see markets move back into the primary area by offering insurance layers of up to US\$20 million. This can allow competitive programs to be structured, with pricing concessions being achieved by moving the more expensive capacity away from the expected loss zone.

Counter Party Credit

Following the collapse of Enron, many insureds have become increasingly aware of their counter party credit exposure. Most utilities have strong risk management procedures that protect them against this exposure, but more companies are beginning to design insurance programs that protect them in the event that their risk management procedures fail. There is a fair amount of risk transfer insurance capacity available, with \$100 million per counter party generally being available, and this is supplemented with finite insurance.

Cyber Risk

Insureds are becoming more aware of the various exposures associated with the electronic aspects of their businesses. Much of the physical damage coverage that was afforded under property policies is now being excluded and separate programs are being placed to cover this exposure. In addition, utilities are becoming more aware of the third party exposures that exist under their electronically based systems, and new insurance products are being developed to protect them from these exposures.

Directors and Officers Insurance

This is another area that has been directly impacted by the Enron collapse. However, many insureds had experienced significant losses prior to Enron's failure, particularly in the telecommunications industry. This has led to large rate increases for renewals in the international D&O market. In the US the majority of companies are insured under AEGIS and EIM mutual programs, so the rate increases have been somewhat mitigated, but nonetheless US insureds are experiencing general rate increases as well.

General Liability

Primary: Capacity is still very much available, but rate increases are now being sought by almost every insurer. Liberty still has an affiliation with AEGIS to coordinate programs where primary or fronting capacity is needed. Fronting is becoming a more prevalent issue for many utilities as they continue to expand their non-regulated businesses which must meet contractual requirements with other parties. In addition, insurers are increasing fronting fees and becoming tougher on reinsurance security criteria.



Excess: AEGIS and EIM remain the principal excess markets and premium increases are being achieved, albeit at less than commercial market averages. AEGIS often require higher self insured retentions for the larger utilities than they did during the soft market, when these insureds retained relatively little risk.

For high excess limits, Bermuda and London continue to provide useful capacity.

Professional Liability

As more utilities expand into non-core areas that have professional exposures (e.g. engineers, computer services, R&D, design, etc.) there is an increasing need to provide evidence of insurance, and therefore to obtain adequate insurance protection. Markets are available, but detailed information is needed. AEGIS and AIG are the principal insurers.

Surety Bonds

The Enron collapse put the final nail in the coffin of the bond market which had been experiencing significant losses over the last couple of years. Performance bonds and financial guarantees are very difficult to arrange, particularly if it is to enable a merchant plant deal to be structured.

Also difficult to place are self insurance workers compensation bonds and long term supply bonds. These bonds now often require substantial letters of credit to be posted to secure them, thus making letters of credit the preferred tool to secure a deal. In some instances finite programs are being structured, but these usually tend to be too expensive unless the deal is substantial in size.

Captives

There has been a significant surge in interest among utilities in captives, with many utilizing the various rent-a-captive facilities that are open to them. There has also been a renewed interest in single parent captives, and many insureds are moving in this direction. Captives are being used for a variety of risks, in particular for property, given the significant increases in both rates and deductibles being forced on utilities by the market. In parallel with this, fronting is becoming more difficult to arrange, with both an increase in the security demands of insurers willing to front and the requirement to post large letters of credit.

Market Updates >> Onshore Construction

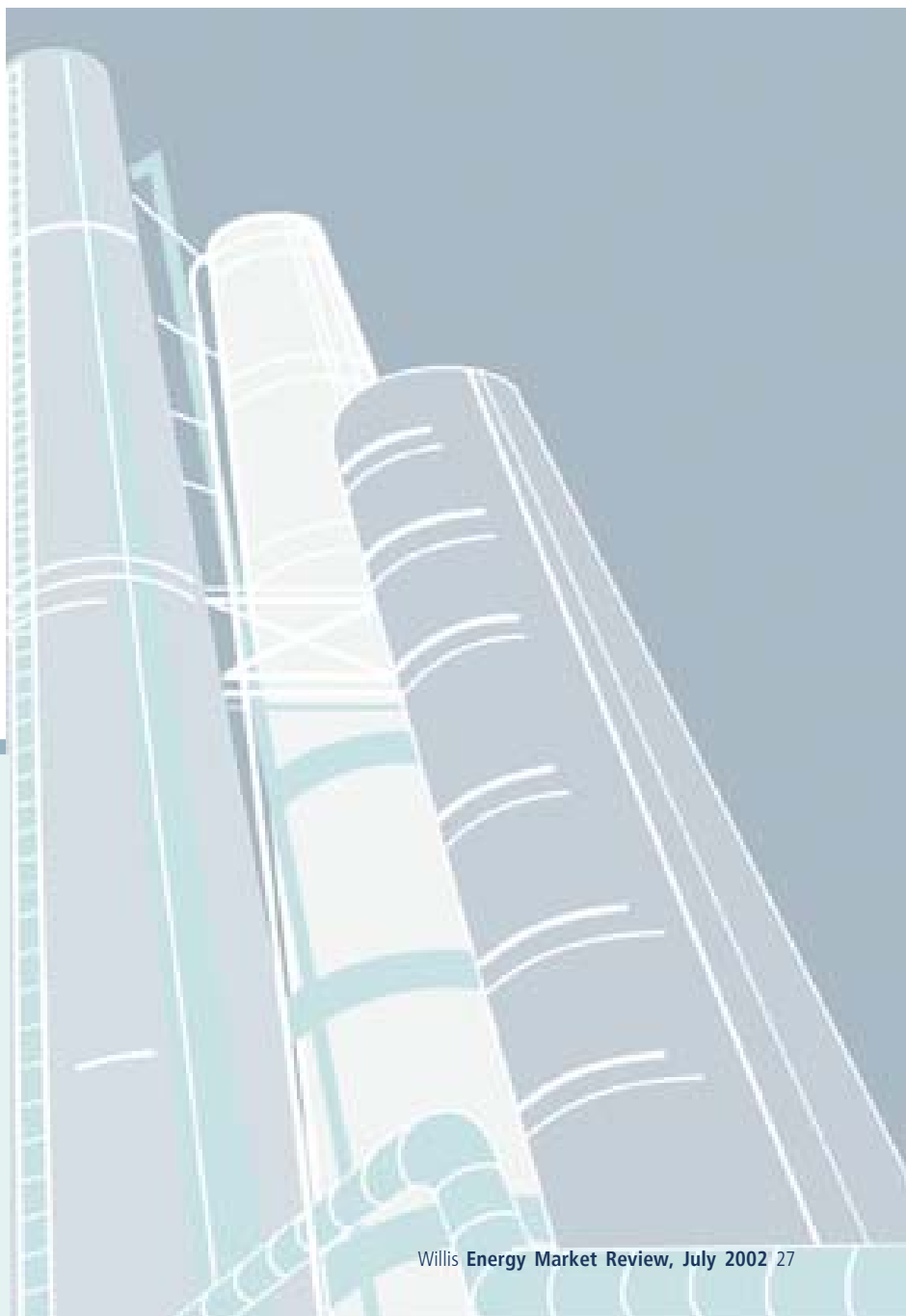
Challenging Times for the Onshore Construction Industry

In the difficult period following September 11 the construction press woke up to the importance of having a reliable insurance industry to absorb risk. "Insurance availability is having a definite impact on getting projects off the ground" reported Engineering News Record. "Insurance is the primary mechanism for dealing with risks in the industry."

"The first thing we have to do is decide how we address each of the risks " said Malcolm Eckersall, Balfour Beatty group MD and "that (insurance availability) is changing so dramatically that whether it's at home or overseas, it will affect how we trade, and it's a very important first question."

The market, which had been on a roller coaster in the immediate aftermath of September 11, eventually stabilized. Treaty renewals were finally concluded; some insurers withdrew from the sector whilst others moved forward with lower capacity. There was an all round resolve among insurers to be selective in risks written, to charge higher rates and manage the level of cover given.

"Insurance is now playing such a dramatic role in new projects, even the feasibility of new projects" – Luis Rocha, CEO for US operations of Odebrecht.



Stability Restored

A few months on, with tough conditions prevailing, the situation remains challenging. Large risks can however be placed for the required limits, though brokers have to work harder. Knowledge of the market and daily interaction with the underwriters within it are the key elements to getting the best deal for the client in any given situation.

Significant capacity is available, but only if the approach to the market is right. For instance, whilst it is generally held that the maximum available capacity for earthquake cover in California is approximately US\$100 million, for one recent project no less than \$400 million of California earthquake coverage was obtained.

Rate increases vary but for some types of risk are up by as much as 75% on this time last year, when hardening was already underway.



Deductible levels have increased sharply. Also some types of cover are no longer so easy to come by, for example:

- insurers are increasingly reluctant to give Guarantee Maintenance
- an inner limit may need to be applied to Additional Cost of Working cover
- coverage for transit risks and risk at suppliers premises is being restricted
- as with onshore property, terrorism is generally excluded, though some markets – notably Munich Re and AIG – are prepared to offer write-back endorsements, often on lesser limits or for limited coverage, but generally for the full term of the contract.

Meeting the requirements of lenders can be of paramount importance. Often lenders will only give the go-ahead to a project if, according to their own criteria, adequate insurance cover has been placed. Without the lenders there would be fewer construction projects, so maximizing the coverage and capacity of the insurance market has become crucial to the construction industry.

Getting Best Results

So what is the right approach to get the best results from reluctant insurers?

With construction projects there are many areas of concern to underwriters and the trick is to preempt those concerns. As with all other sectors of the energy market quality information is vital. Specifically for construction risks the following are, in addition to a full knowledge of the global marketplace, examples of what is required to get the best from the market:

- details of the parties involved, particularly the contractor and his track record
- the method of carrying out the work and how risks which arise will be managed
- fire protection methods
- means of handling possible unforeseen ground conditions
- natural perils exposure. The more information that can be provided the better underwriters will be able to manage their catastrophe exposures and accumulations
- prototype equipment is always of concern to underwriters and having full details can help to counter insurers' arguments for applying restrictive terms or can at least ensure that restrictions are isolated to specific parts only. In the area of gas turbine technology this is such a big issue that Willis commissions an expert report, regularly updated so that we have the information immediately to hand
- each risk and client is different, and it is imperative to establish what is the most important area of coverage for the client, and to focus on this. Be prepared to trade off less important coverage to achieve one's goal
- delay in Start up cover is often essential and careful analysis of the exposure is necessary to produce the best outcome.



Market Updates >> International Liability

In November 2001 in the aftermath of September 11 we predicted turmoil in the liability market with a rush to limit exposure and accelerate the already hardening market. We take little pleasure in the accuracy of our crystal ball. The treaty renewal process was very challenging with serious negotiation not starting before late November. The result was that many direct writers did not reach agreement on either capacity or the details of treaty exclusions in some cases until well into the New Year.

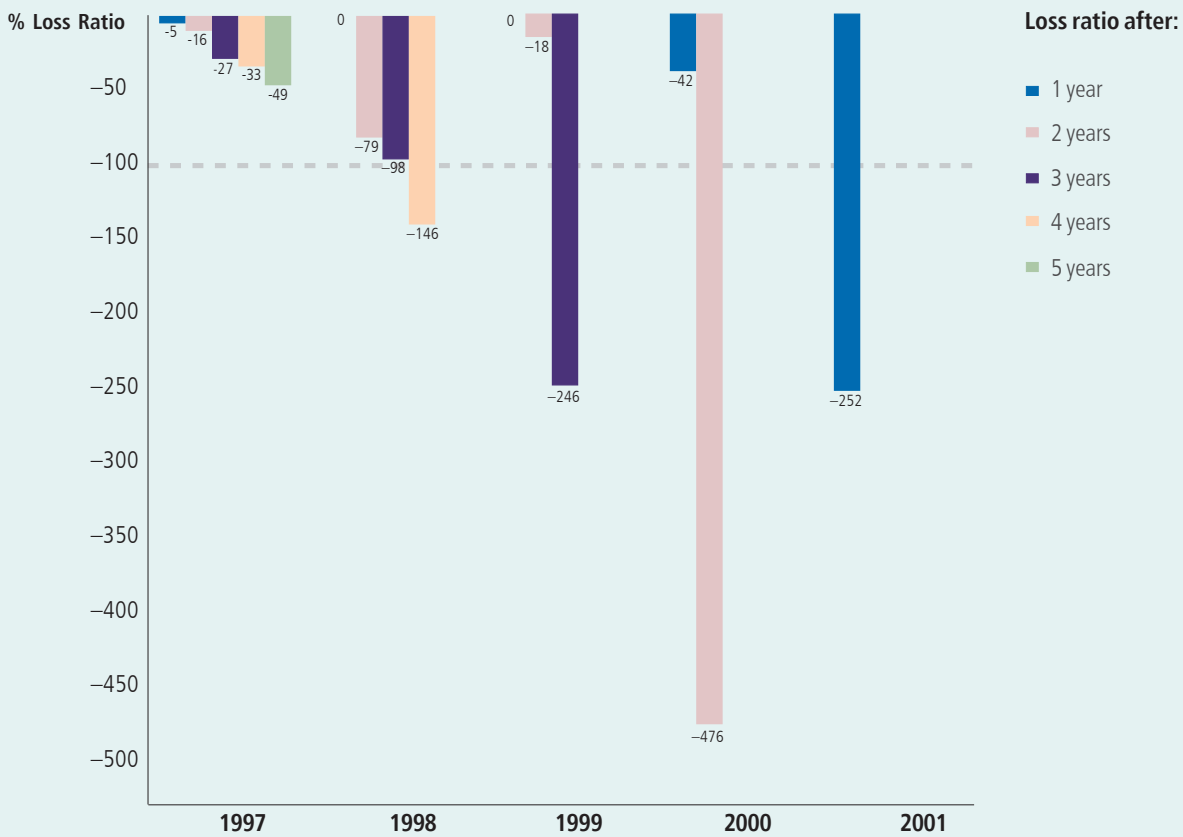


The consequence of this is that buyers of insurance have been faced with steep price increases, a trend which continues as we approach the middle of the year. Perhaps more difficult to swallow is removal of cover with very little notice. In the light of the financial performance over time of insurers' liability accounts and the events of last year it probably has to be accepted that the price rises were essential. The alternative would have been a much more rapid flight of capital from the market than we have in fact seen. It is in our view much less acceptable to withdraw significant areas of cover with little or no warning.

Terrorism is the clearest example of the market behaving in an incoherent and ill thought out way. The issue in relation to liability insurance is quite different from that with property. The exposure in most cases is not direct and the accumulation risk is not the same. There is room for discussion about this issue and there may be changes in wordings and underwriting approaches that prove to be necessary to maintain a stable market. However insurers need to demonstrate to their clients that the course they are taking is based on a rational assessment of the issues. It is also necessary to allow time to properly structure and explain necessary changes and develop viable alternative approaches to providing essential cover. Thirty days or less notice of exclusions with either no proposed wording or a poorly drafted one was simply unacceptable and damaged the industry in the eyes of its clients.



Onshore Energy Liability Claims Made: Loss ratio development



Source: Lloyd's

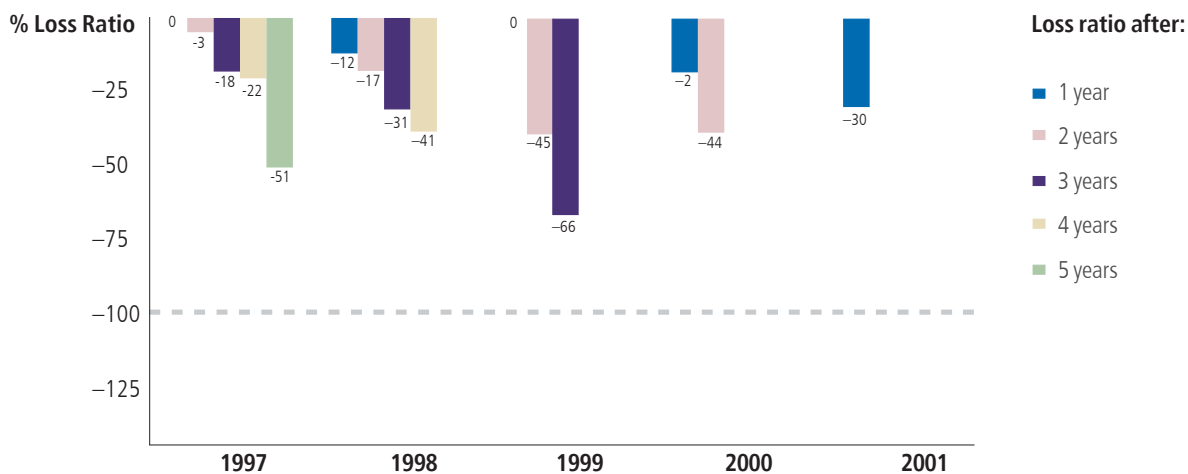
NB: Loss ratio is expressed before underwriting expenses

Subsequently, when under pressure, there has been a more reasonable approach to continuing to provide cover depending on risk exposure and territory. It remains unclear whether the reinsurers who are driving this issue are regrouping for a renewed assault or will engage in constructive discussion on long term solutions.

Treaty Reinsurers have also made attempts to require many more referrals of programs for large clients in industry

sectors they perceive to be higher risk. This is both a sign of a desire to have much closer control of the underwriting process and to monitor accumulations. For obvious reasons the direct market has been resisting this demand with some success. Clearly if this trend gains any momentum it would call into question the current structure of the market and at the very least would build more inefficiency into an industry that needs to concentrate on improving service to its clients.

Onshore Energy Liability All Other: Loss ratio development



Source: Lloyd's

NB: Loss ratio is expressed before underwriting expenses

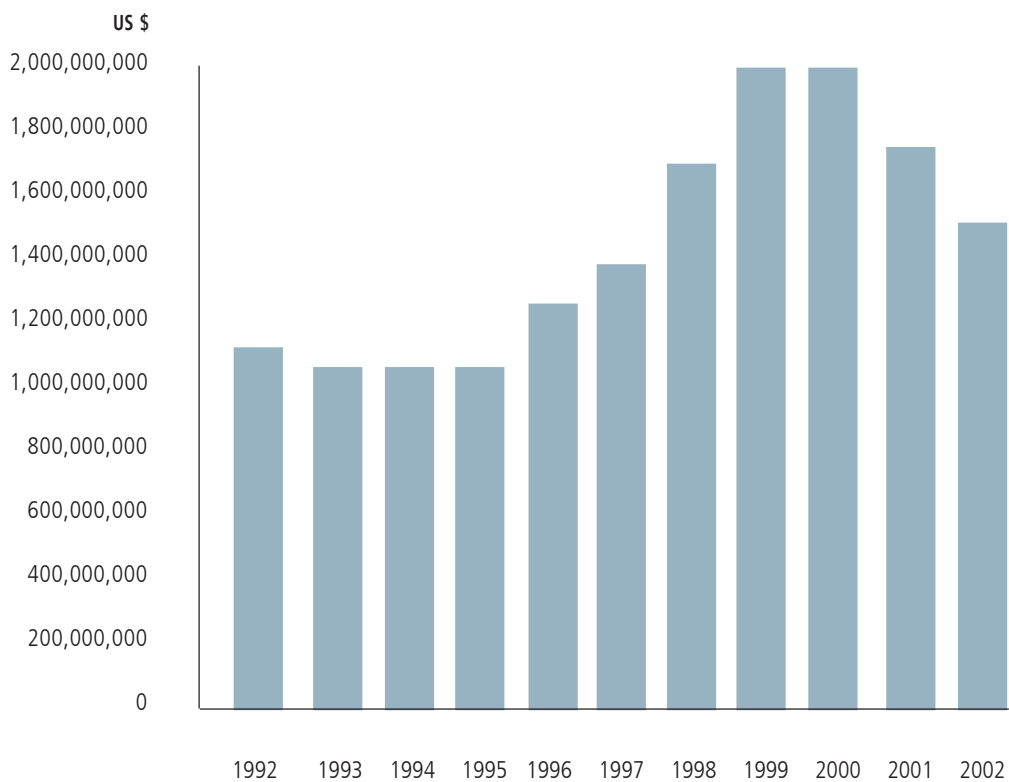
Key Market Features

In assessing the likely impact of market conditions on programs renewing through the remainder of 2002 the following need to be taken into account:

- There has been a significant market contraction due to closure of some markets and reduced capacity available of a number of existing players.



The global capacity change is illustrated below:



Source: Willis estimates



These figures represent a theoretical maximum. Actual outcome could be very much lower depending on risk profile experience and willingness to pay the prices demanded by insurers to attract the maximum capacity.

- There are a small number of new liability market entrants, most notably from Bermuda, as detailed in the market news section below. This capacity however is generally looking to capitalise on, rather than compete against existing rating levels.
- Underwriters are less willing to commit capacity to poor risks, even at high premium levels.
- Many insurers are no longer willing to write 100% of a Primary layer.
- Rate increases are the norm on all business with average rate increases, on "clean" renewals, currently running at 30% - 40%. This is expected to increase throughout 2002.
- Increases are significantly more where existing rating is considered low, loss record is poor or exposure is perceived as being unduly high (e.g: up by anything from 200% – 800% on some accounts).
- Restrictions in coverage are commonplace as underwriters try to

retreat to core coverages and standard London market wordings where possible. Pure financial loss and professional indemnity extensions are becoming harder to obtain.

- Long-term deals are no longer available as a means to lock in premiums and conditions.

Conclusion

There was no meltdown of the insurance market over 2001/2002-renewal period, as some doom merchants feared. There was considerable dislocation for a period and we are left with an unsatisfactory situation in relation to some aspects of coverage in the liability market. As the events of 2001 recede we have some optimism that there will in the future be a more considered approach to changes in terms. There is some evidence that insurers recognise that the clients of the industry deserve to be served better and involved in discussions over a reasonable period of time when fundamental changes appear necessary.

It is clear however that a more rigorous underwriting discipline has returned to the market. Underwriters are returning to their legitimate task of differentiating good risks from bad. The importance of maintaining long-term relationships and differentiating an account by profiling it correctly cannot be underestimated.

Market Updates >> North American Casualty

The casualty market has hardened considerably since our last Review. Insurers are applying strong pressure to increase deductibles, retentions and attachment points, as well as premiums, and this is proving difficult to resist. However, coverage and capacity are available, albeit at a price, and the market, whilst undeniably hard, is nowhere near reaching the crisis point it reached in the mid-1980's.

Today, insureds are most concerned about the mechanics of placing a risk. Insurers are not releasing quotes until 30 days prior to expiration, and excess underwriters will not quote until renewal terms and conditions have been firmed up in the underlying layers. This is causing a logistical nightmare, making it difficult to complete programs prior to inception date.

Workers Compensation

- There has been a severe reduction in reinsurance capacity available to insurers and this has led to higher prices and increased deductibles.
- Reinsurers may apply terrorism exclusions which the primary insurer cannot legally pass on to the insured, so some primary insurers are imposing per claimant deductibles (as opposed to per occurrence), thereby greatly increasing insureds' potential retentions.
- Insurers are now required by their treaty reinsurers to provide information on maximum concentrations of workers in any one place at any one time. It is therefore necessary for insureds to calculate the estimated maximum loss, and this is adding greatly to the lead time required for renewals.

Primary

- Premium increases are generally in the range of 35–100%.
- Terrorism exclusions are common, however exceptions are negotiable.
- Mold & mildew are being excluded by many insurers.
- Limited pollution liability coverage continues to be difficult to obtain, and many insurers are imposing absolute pollution exclusions.
- Allocated Loss Adjustment Expense coverage (Defense Costs) is becoming a significant issue.
- Professional liability coverage is being restricted.

Excess

- Average premium increases range from 65% to 100% or more.
- There are few insurers prepared to write the first excess layer (normally US\$25 million), and the market is particularly expensive for big energy risks. New capacity is looking to write excess of this layer.
- Other coverage restrictions are similar to Primary.



Market Updates >> The Peril of Terrorism

In the pre-September 11 world, scenario-building for the peril of terrorism historically addressed the questions of how, where, how much and whether. Anecdotal evidence for a disaster on a fraction of the scale of the World Trade Center attacks simply did not exist. In the UK and a few continental European countries, special terrorism facilities offered coverage based upon a foundation of countries having experienced repeated acts of terrorism (bombings for the most part) in their homelands. Outside of these countries, there had been little to guide mainstream property and liability underwriters in respect of pricing the peril of terrorism as part of the overall package of perils and coverages offered in the insurance contract. Understandably, underwriters' collective inability to truly conceive of answering the "whether" question in the affirmative – whether it could really happen in such a fashion and to the degree sustained on September 11 – translated into their charging nothing or at most a nominal sum for terrorism coverage.

Assumptions, perceptions, expectations and underwriting and pricing behavior have all undergone a radical transformation. Traditional property insurers have for the most part excluded the peril of terrorism from their policies. (Exceptions are FM Global and AIG, who offer small sublimits and buy-backs, respectively.) Today, terrorism coverage can be obtained through special terrorism underwriting facilities. Collectively, the seven facilities offering stand-alone terrorism coverage represent a combined capacity of approximately \$1 billion. Coverage is expensive, and underwriting focuses on location, attractiveness as a potential target, proximity to other potential targets, and values at risk.

The Onshore Energy Market: Developments from September 11 to today

In the immediate aftermath of September 11, traditional Onshore energy market insurers stopped writing new business altogether in order to assess their accumulation issues; when they recommenced, terrorism coverage was for the most part excluded.

Specialist terrorism underwriting facilities also had to reassess the catastrophe implications now presented by this class of business. Nuclear risk had long been excluded, but quickly added to uninsurable risks were Biological, Chemical and Cyber Terrorism and Hoax, as the financial consequences were now



perceived as too immense for insurers to cope with. The scope of coverage offered was extremely narrow, and only small limits were being purchased.

January 1, 2002 saw the continued elimination of terrorism coverage from property policies as new treaty exclusions came into effect, further stimulating demand for stand-alone coverage. Large numbers of insureds with high perceptions of threat needed to replace lost coverage, as did those insureds whose lenders insisted that they purchase whatever coverage might be available, often regardless of cost.

Over the course of the first half of this year, attracted by high demand and the prospect of entrepreneurial profits, special terrorism facilities and their combined capacity have continued to grow. As we go to press, there are seven carriers, each offering property (property damage and business interruption) limits that may range from \$50 million to \$200 million:

- ACE USA
- AIG
- AXIS Specialty
- Berkshire Hathaway
- Endurance Specialty
- Lloyd's of London (select syndicates)
- Renaissance Reinsurance

Underwriters focus on the risk's relative attractiveness as a target and its proximity to other potential targets. Energy risks are regarded as having higher loss potential and have therefore been rated accordingly. Premiums have, however, fallen as underwriters' post-September 11 apprehension has receded. Insureds' responses to marketplace developments have varied, depending upon a number of factors including perceived risk, ability to retain risk, OIL membership, lender requirements and limits provided within original programs.

A Forward View

There are many factors that will determine the shape of the terrorism insurance market in the future. Clearly, another enormous insured loss could cause the immediate and wholesale withdrawal of underwriters from the terrorism marketplace. Barring that, future developments will be a function of the following:

- The number of new insurers and capacity attracted by commercial opportunity.

- The availability of reinsurance to support terrorism underwriters and increase their capacities.
- Whether, when and how Energy insurers and reinsurers resume offering terrorism as part of property coverage and to what extent. (More property insurers may come to see that offering some degree of terrorism cover is a competitive advantage.)
- Enhanced, sophisticated modeling of terrorism exposures by underwriters may lead to greater confidence in their ability to underwrite and price risk appropriately.
- The amount of worldwide governmental support given to the insurance industry (e.g., whether the US Congress passes legislation creating a Federal terrorism facility).
- The ultimate impact of statutory rulings on how insurers may or may not amend policies to exclude or limit terrorism coverage.

- The nature of demand: who wants to buy how much and where? Will demand be widespread over large geographical areas or continue as at present with high demand from insureds with perceived greater exposure, concentrated in high accumulation metropolitan areas, and/or where lenders insist that terrorism coverage be carried?

Although the terrorism market will continue to develop, we see a continuation of current conditions in the near-term. Program solutions will be driven by available capacity and the cost associated with obtaining it. Pressure by the insurance industry and by key commercial interests for US government intervention is expected to result in some form of federal backing for the peril of terrorism. As and when such a facility may be created, US property insurers would be able to dovetail terms and limits for terrorism and provide an expanded platform for the coverage.



Lloyd's >> The Process of Reform Accelerates

Despite a net loss currently estimated at US\$1.98 billion arising out of September 11, confidence in Lloyd's remains strong: premium income capacity for 2002 is a record high of £12.3 billion (US\$17.5 billion). But there is a keen awareness that reforms are urgently required to maintain the market's appeal to investors, and with this in mind the Chairman's Strategy Group was formed to drive the process of modernisation forward.

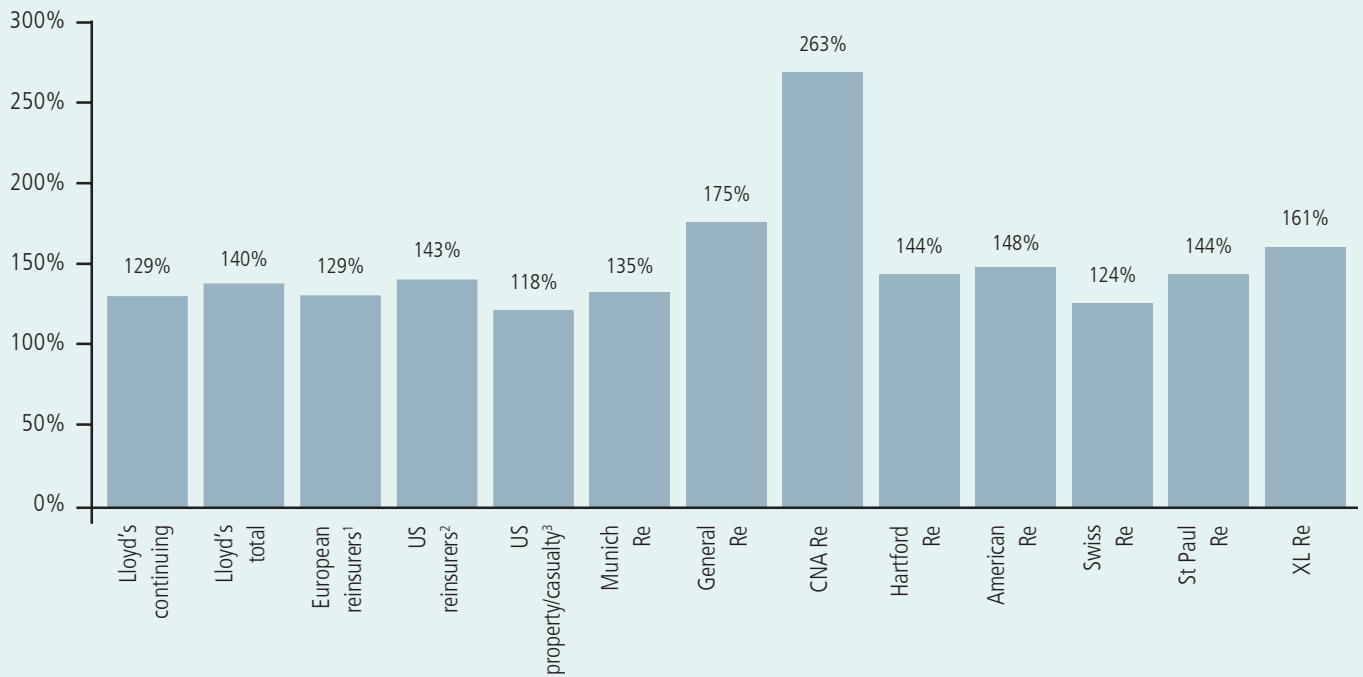
In a recent speech to the Association of Lloyd's Members Sax Riley, Chairman of Lloyd's, set out the goal: a return to sustained profitability whilst becoming more efficient and transparent to the outside world. Amongst the most radical proposals he put forward is the formalisation of a Lloyd's franchise – not a franchise of a product but of a business model, with built-in safeguards to ensure best underwriting practice. The introduction of a new business planning and monitoring service is designed to prevent financial under-

performance rather than deal with it after the event, as happens now. In addition, the Lloyd's Market Board and Regulatory Board will be replaced with a single Franchise Board, constituted to ensure best corporate governance practice, and a new position of Director of Underwriting will be created to enhance quality control. Mr Riley also maintained that there is still a role for private capital but there is also a commitment to phase out unlimited liability, and no new unlimited liability members will be admitted from 2003.





Lloyd's versus industry 2001 combined ratios



Sources: Reactions, May 2002 - 1: HSBC 2: Reinsurance Association of America 3: Insurance Information Institute

How Lloyd's is changing

The following chart shows how overall premium income capacity has increased in recent years whilst the number of

syndicates has greatly decreased. This is typical of what is happening in the wider insurance world, and provides a good example of how ongoing consolidation is,

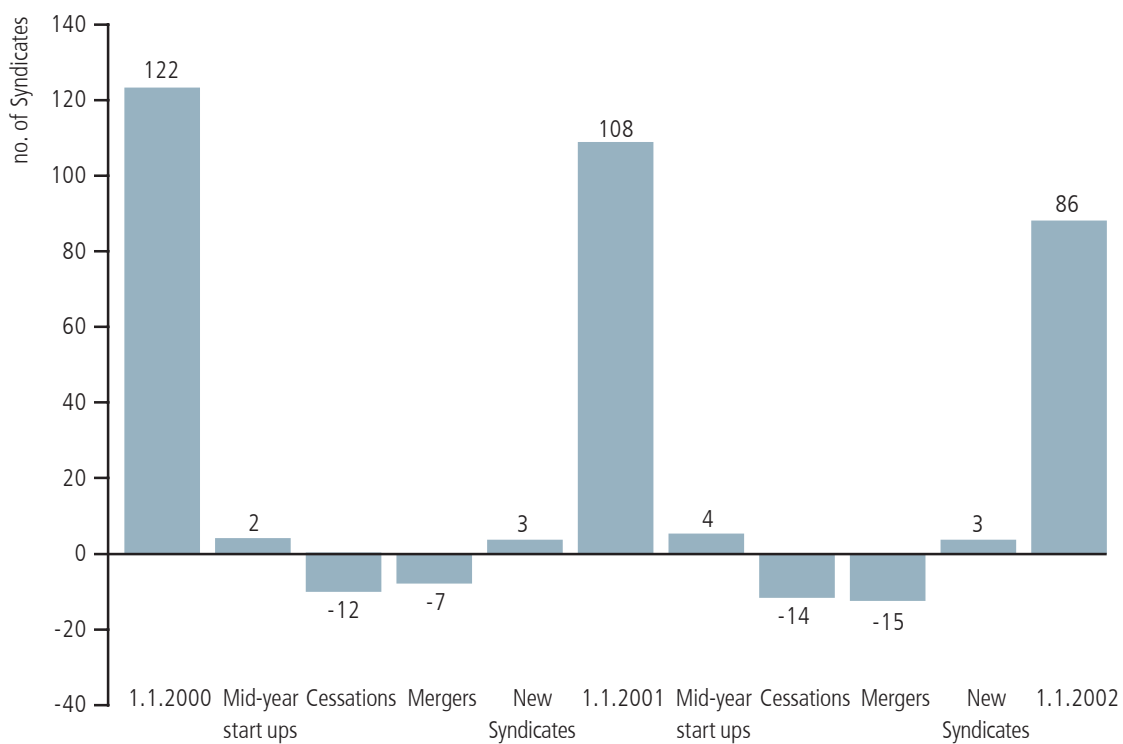
Capacity and Syndicate Trends 1998 – 2002



Source: Lloyd's

whilst providing secure capacity, giving energy companies less choice over who they buy their insurance from.

Change in No. of Syndicates 1999 - 2001



Source: Lloyd's

Bermuda

The Bermuda market has certainly grabbed the headlines over the last few months. In the last few years, its importance grew significantly for many Energy companies seeking substantial excess Casualty limits. But in just six months, it has become a key centre where Property capacity can be found on a Quota-Share, Primary or excess of loss basis and where Casualty capacity is available just above the Primary level. We provide here an update on the now numerous carriers open for business in Bermuda:

Axis: With a capitalisation of US\$1.7 billion, this is the biggest of the newcomers. Under the leadership of John Charman, Axis has clearly identified Energy as a preferred class and with up to US\$100 million of capacity, has become a major player straight away. Now that the whole team is in place we can expect Axis to be significantly involved across all aspects of the Energy business, Upstream and Downstream, excess or quota-share. In addition to John Charman, key Energy focused underwriters include Jack Gressier, Joe Battle, Cliff Easton, Richard Fricker and Luan Nott.

Endurance: US\$1.2 billion of capital was raised for this new venture, with key investors being Aon and Zurich.

Prepared to play quota-share or excess, with an Onshore Property capacity of up to US\$30 million, we expect Endurance to be very active. Endurance will also be developing its Casualty capacity, both for General Liability and Management Liability.

Under the leadership of Louis Adiano (Property CUO) the key Energy focused underwriters include Jim Polisen and Lucy Machado.

We do expect, however, that Endurance's geographic focus will be towards North America with little appetite for International business.

AWAC: It is difficult to describe Allied World Assurance as a 'start-up' when the Chairman of the Board is Hank Greenberg, Walter Kiehoff is a director and the key investors are AIG, Goldman Sachs, Chubb and Swiss Re. The capital raised to create AWAC was US\$1.6 billion, with a clear mandate to seize the opportunity of the hard market.

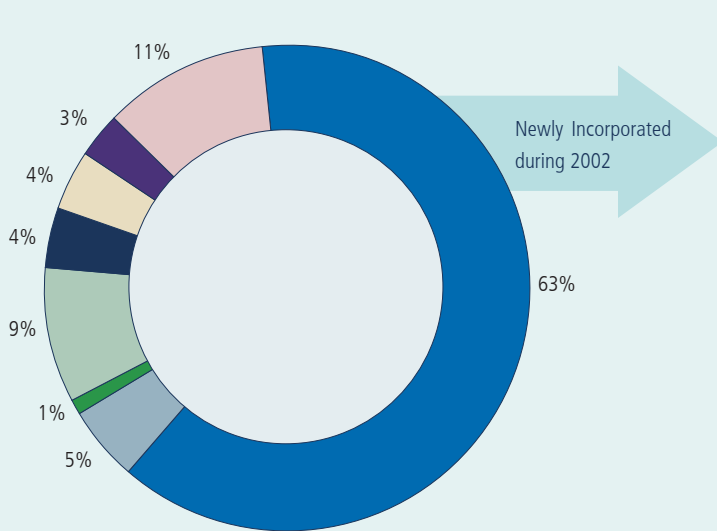
Their initial focus was general Property and Casualty, but they have recruited some key Energy insurance market figures to build an Onshore driven portfolio.

We can expect to see them playing at the bottom end of programs (first US\$100 million with capacities of US\$5–10 million on Property and US\$25 million for Casualty).

Their key Energy focused underwriters include John Holthusen, Carla Greeves and Luis Prato.

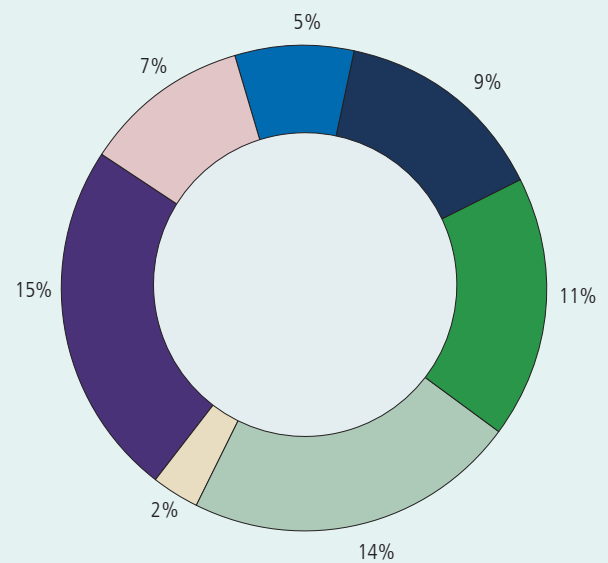


New Capital in 2001



Total: \$10.7 billion
Incorporated prior to 2001

- ACE Limited
- Alea (Bermuda) Ltd
- IPC Holdings, Ltd
- Max Re Ltd
- PartnerRe Ltd
- Renaissance Re Holdings Ltd
- XL Capital Ltd



Total: \$6.8 billion
Newly Incorporated during 2001

- Allied World Assurance Company Ltd
- Arch Capital Group
- AXIS Specialty Limited
- DaVinci Reinsurance Co. Ltd
- Endurance Specialty Insurance Ltd
- Grand Central Re Ltd
- Montpelier Reinsurance Ltd

Source: "Bermudian Business"



Montpelier Re: Created by White Mountains, Montpelier Re raised close to US\$1 billion to create this new venture led by Tony Taylor (ex Wellington). They have also just announced plans for an IPO in the near future.

Initially focused on Treaty business only, Montpelier hired two Property underwriters in April (Richard Chattock and Malcolm Graham-Taylor) and created a new capacity of US\$50 million.

Not focused on Energy business per se, we expect these Property excess underwriters to play at the very top of the largest programmes.

Montpelier Re does not have any plans today to develop a Casualty capacity.

Arch: Arch Re, which was created also in the wake of September 11, was purely focused on Treaty business.

During the first quarter of 2002, they decided to create an insurance company to write single risk Property and Casualty business. Whilst Energy is not a focus on their Property side, we expect Arch to play on the Casualty side with Terry Pimental leading their General Liability book and Tony Hay their D&O portfolio.

Ace: Headquartered in Bermuda, Ace has given the responsibility for the development of their Energy book (both Upstream and Downstream) to Ace Global Markets in Lloyd's.

Their direct insurance company in London, Ace Europe, has also a specific mandate to write their Power book, both Construction and Operational.

There is however further capacity (up to US\$50 million) available in Bermuda for high Onshore Property excesses.

On the Casualty side, Ace Bermuda remains a key market for high excess capacity.

XL: With the hiring of specialists in XL Winterthur in London (Paul Dowling for Utilities and Paul O'Neil for Oil and Petrochemicals) XL has decided on a geographical split. The team led by Jose Torres in Bermuda has taken responsibility for the Americas (North and South) whilst London will be underwriting 'the rest of the world'.

The Upstream book will still be underwritten in the newly-named XL London Market syndicate in Lloyd's (aka XL Brockbank).

The Casualty underwriting for high excess layers will of course continue to be based in Bermuda.

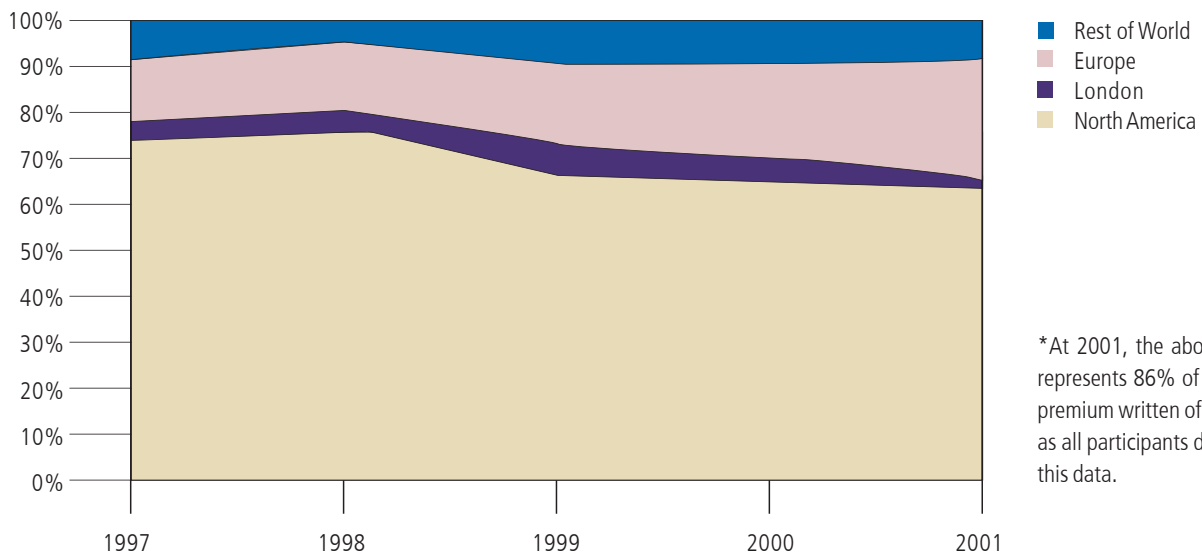
With significant capacity dedicated to the Energy market and with teams now clearly identified, we can expect XL to play a major role in this market going forward.

Other developments

The situation remains very dynamic in Bermuda and it is anticipated that other capital providers will be entering into the fray over the next few months.

Everest Re have just announced a new Bermuda vehicle whilst St Paul Re are spinning off their reinsurance operation into a new Bermuda-based reinsurer to be called 'Platinum'. It is unclear and too early to gauge whether these entities will enter the Energy market, but as Bermuda continues to develop as a major centre of excellence for both Property and Casualty for Energy companies, this becomes a real possibility.

Gross Premium written by Geographic Region



*At 2001, the above graph represents 86% of the gross premium written of all participants, as all participants did not report this data.

Source: "Bermudian Business"

Oil Insurance Limited and sEnergy >> A Remarkable Year

The year 2001 was undoubtedly an extraordinary year in the life of OIL, a year of massive change in profile and expansion of membership coinciding with the worst underwriting results in the history of the company.

The coincidence of increased demand, increased growth in membership (and exposure), low rates, high loss levels and negative investment returns experienced by OIL challenged the model as at no time before.

How OIL reacted to these circumstances is detailed below and to a large extent sets it apart from the general underwriting community.

History Repeated

It is interesting to recall that OIL was conceived as an industry mutual in 1971 (and started writing business in 1972) in direct response to the Petroleum (Oil) Industry's desperate need for capacity at a time when the commercial market either could not or was unwilling to fulfil such requirements. Three decades later history has repeated itself. During 2001 OIL experienced massive expansion in terms of membership, together with the conception of a new mutual company, sEnergy, to provide Business Interruption coverage and which started writing business on May 1, 2002. Once again, this was in direct response to the needs of the

industry at a time of renewed crisis in terms of the availability of insurance capacity and coverage for the catastrophe risks. It is against this background that the performance of the company in 2001 should be examined.

Financial Performance

During 2001, OIL suffered from the extraordinary levels of losses affecting the petrochemical industry much in the same way as the commercial market, but without the impact of the heavy BI losses. Despite this, the net underwriting loss for the year was still US\$438million which included the first full limits loss of US\$250 million for many years. This coupled with



an investment loss of US\$75 million contributed to a consolidated net loss for the year of US\$521 million. Despite this, the level of OIL's shareholders' equity was still approximately US\$1.3 billion at year end with total assets in excess of US\$2.8 billion. This financial strength, coupled with OIL's unique ability to regenerate capital through its retrospective rating & premium plan (which provides that the losses experienced in 2001 will be refunded over a period of five years), led OIL's management to come out very strongly with a "business as usual" reaction to the events of 2001. To quote Doug Kline in his message to shareholders at the March 2002 AGM "no withdrawal of coverage, no reductions of limits and no [additional] policy restrictions".



However, despite this strong statement of intent, the losses suffered in 2001 have had a marked impact on the capital management process, as there will be no extraordinary dividends paid in 2002 (compared with the US\$800 million declared over the last four years), and on the rating levels for 2002 which have increased significantly from the extremely low rates of the past few years.

Rating Impact

OIL's rates in any given year are generated as a function of loss experience over the preceding five years and insured assets. The low levels of losses experienced by OIL in the period leading up to 2001 meant that in 2001 the provisionally calculated OIL rates were once more set at historically low levels of:

Standard Rate	(Pool A):	3.19 cents
Flat Premium Rate	(Pool B):	2.37 cents

As a result of the losses suffered in 2001, coupled with a suspension of their policy of rate subsidies, the rates for 2002 have increased to:

Standard Rate	(Pool A)	5.73 cents	(+80%)
Flat Premium Rate	(Pool B)	4.03 cents	(+70%)

These increases feed directly into the long term capital regeneration process mentioned above which provides an environment in which OIL is not only able to maintain its policy limits but also to expand its scope across a wider range of membership.



Limits

In 2001, OIL increased its per occurrence limit to US\$250 million (from US\$225 million) and its single event aggregation limit increased to \$1 billion (from \$750 million). These limits have been maintained for 2002.

Growth in Membership

The above results come at a time of record breaking expansion, both in terms of membership and assets insured. By way of comparison between 2000 and 2001:

Year End:	2000	2001
Shareholders	48	63
Insured Assets	\$930bn	\$1,300bn

As of June 2002 the number of shareholders has grown to 74 with insured assets in excess of US\$1,500 billion. The growth in membership has largely resulted from the decision in 2001 by OIL to broaden its eligibility requirements to encompass a wider "Energy" definition. This is in marked contrast to the previous qualification for "Petroleum" companies, and has expanded the potential membership across the full spectrum of

integrated "energy" companies, from power generation through exploration & production to mining and chemicals. The re-definition was largely in response to the changing landscape of the energy industry, reflecting the mergers and diversification that has produced companies which now span the boundaries of previously distinct industries. It is also true that membership has increased at a time of hardening rates and conditions in the commercial market which, taken in conjunction with the broader eligibility criteria, have fuelled the rapid expansion in membership as companies take advantage of the competitive rates and broad insuring form offered by OIL.

Insuring Conditions

OIL have not amended their policy form in the light of recent events and continues to offer terrorism coverage. The breadth of coverage afforded by the OIL policy therefore remains unamended despite the wider membership, apart from the introduction of a T&D exclusion in respect of above ground power lines.

sEnergy

Responding to the wishes often expressed by certain of its members, OIL evaluated at length, during the course of 2001, the feasibility of providing Business Interruption coverage to its members. Ultimately a decision was taken, in conjunction with OCIL, to launch a separate company to provide coverage options for excess physical damage and business interruption (or a combination of the two). The company, sEnergy, is separately capitalised through a combination of member contributions and funding by OIL and OCIL. The eligibility for membership was thrown open to all existing OIL or OCIL members or those companies who were committed to join OIL. Of the original 35 respondents who showed an initial interest in joining, 19 companies actually progressed to the subscription stage at April 5 having deposited US\$5 million against their potential capital contribution obligations.

Following a redetermination of capital and premium requirements agreement was reached on May 1 between 12 founding members to formally launch the company, with the first two policies being issued on the same day.

Members are required to contribute not only their US\$5 million initial deposit (to purchase a common share) but also a further capital levy (in the form of preference shares) calculated as a proportion of initial premiums, together with a premium supplement for the first five years in order to raise capital to the minimum level required to support sEnergy's capital adequacy criteria.

sEnergy provides a limit of US\$200 million per occurrence and is subject to joint venture and single event aggregation limits equal to the per occurrence limit. The imposition of not only the joint venture limit in particular, but also the event limit aggregation as well, means that some potential members will have the difficult

task of evaluating exactly how much coverage is available to them, and how much may ultimately be available if others join.

However, the provision of Business Interruption insurance attaching excess of the greater of US\$50 million or 30 days waiting period coupled with a broad insuring form (without sublimits for contingent coverages) will remain an attractive alternative to many.

Elsewhere in this report we have provided our estimates of worldwide capacity for risks within the various sectors of the energy market. In conclusion it is clear that OIL, together with sEnergy, now represents a significant proportion of the total capacity available, and perhaps in some cases almost the entire capacity available. OIL and sEnergy therefore have an important part to play in the insurance planning and strategy decision making process for any company operating in the energy field.



People & Places >> News in Brief

The Energy market is constantly changing, as witnessed by both the Bermuda Market section of this Review and the following examples of significant market developments since our last Review in November, 2001:

- [David Hope](#) has joined Navigators Group in London where he is responsible for global marine and energy including the Group's US operations, UK branch and Lloyd's operations.
- Scor: A lot of change in personnel has taken place over the last few months with [Emmanuel Brule](#) leaving for AIG Paris whilst [Didier Robin](#) has been appointed head of energy underwriting.
- [Christophe Briot](#), energy liability underwriter at Scor Paris has recruited a new deputy, [Sophie Caillaud](#).
- Allianz US has relocated to New York from Los Angeles.
- [Paul O'Neill](#) has left GE Frankona Re and joined XL Winterthur in London.
- [Ian Morgan](#) has been appointed head of all onshore and offshore energy underwriting at GE Frankona Re.
- [Martin Baines](#) has been appointed Head of Energy Global at Allianz.
- [Dan Glaser](#) is relocating to the UK to head up AIG operations in the UK and Ireland.
- [Ralph Mucerino](#) has been appointed head of AIG Global Energy.
- [John Lambert](#) is joining Laurent Hoquet at Partner Re, Paris.
- Aegis: [Matthew Newman](#), deputy liability underwriter recently resigned from this leading energy syndicate to return to the broking community. [Chris Terry](#), the casualty underwriter, remains in place and is currently recruiting a new deputy.
- Zurich: [David Fazan](#) was appointed Casualty Manager for Zurich Energy, London, following [David Dixey's](#) move to Zurich head office.
- [Tom Kaiser](#) has left Zurich Corporate Solutions to join Arch in the USA.
- Swiss Re, having dropped its New Markets designation last year, has now been renamed Swiss Re Risk Solutions.
- [Andrew Pembroke](#) has joined BRIT to underwrite their energy account.
- [Clive Magnus](#) has joined the Catlin Group as an underwriting board director with a broad range of responsibilities to include the audit of internal business processes and project management to the development and marketing of new products.
- [Huw Jones](#) has resigned from Royal SunAlliance to take up a position with the energy team at the Catlin Syndicate at Lloyd's.



- [Neil Copping](#) is retiring as active underwriter of Limit Syndicate 1036. [Colin O'Farrel](#) becomes the active underwriter, and [Sam Harrison](#) becomes the energy underwriter.
- [Stephen Tresadern](#) is leaving Hannover Re to join AIG in London.
- [Lars Hylander](#) is now in charge of both the onshore and offshore energy facultative portfolios at Hannover Re, and [Henning Förster](#) has joined as his deputy.
- Gerling announced at the beginning of 2002 its exit from the Energy market following a number of years of poor results.
- Liberty Mutual: announced its exit from the London market. This does not affect the activities of Liberty International, another part of the Liberty Mutual group, which remains focused on Energy.
- [Richard Pursey](#) has joined Liberty International from Gerling and will underwrite an upstream Energy account.
- [Mike Robertson](#) is also joining Liberty International.
- [Paul Hazel](#) (ex National Vulcan) has joined Alex Wimmer's team at MARP.
- [Nick Rnjak](#) has joined the Energy team at Ace Global Markets.
- QBE Paris: QBE has decided to stop writing International business out of their Paris office which will now focus on French domestic business. QBE remains a player on the International side but through their London operations writing essentially excess of loss business.
- Gard Services: Gard announced at the end of 2001 their effective withdrawal from the Onshore Energy sector. Their interest remains in Upstream business, writing Downstream assets only as part of a package. As a consequence of this decision both [Julia Aasberg](#) and [Olav Strugstad](#) have left the company.
- Cox: The Cox syndicate at Lloyd's has withdrawn from the energy sector.
- Copenhagen Re: following the WTC tragedy, Copenhagen Re decided to effectively put the company into run-off.
- ARIG: Due to the uncertainty about their financial stability, ARIG Re has had their ratings withdrawn.
- [Simon Matson](#) is joining Willis in July 2002 to head up the Upstream Energy broking team.
- [Jane Oliver](#) is leaving Aon to join Willis Upstream Energy team.

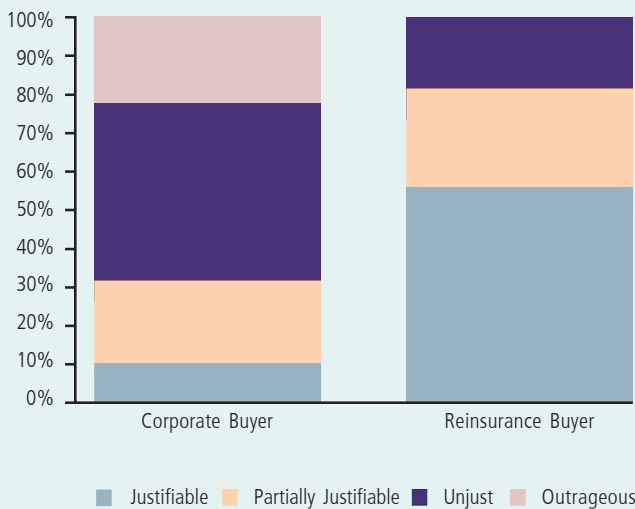
Summary

Nine months after September 11, and some eighteen months after the start of a hard market for the energy industry, market conditions have begun to stabilise. It seems that the energy industry has been "kinder" to the insurance market in the last six months, and nature has certainly been kinder to the insurance industry since the beginning of 2002, all leading to healthier loss ratios for insurers – clearly boosted by the massive increases in premiums and deductibles that we have all experienced.

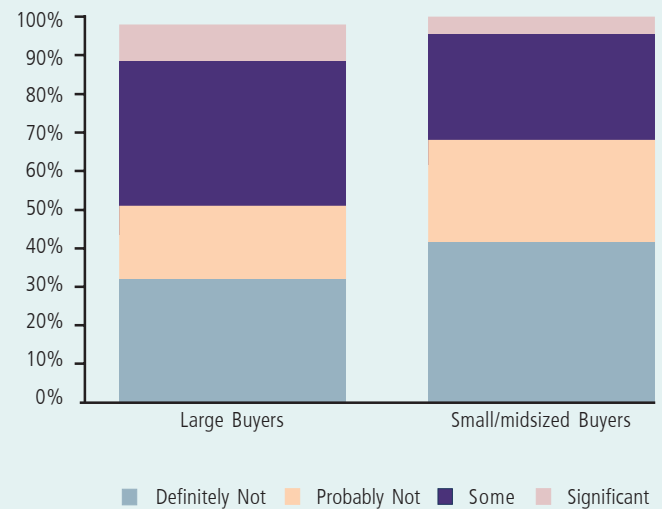
There appears to have been only a degree of understanding by corporate insurance buyers that prices needed to rise, as demonstrated by the results of a UBS Warburg/McTavish survey conducted a few months ago:

The same survey clearly shows the willingness of many major corporations to investigate alternative risk transfer mechanisms.

Buyers' perceptions of recent round of rate increases



Planned move to alternative risk retentions over next 12 months



Source: UBS Warburg/McTavish



In the energy field, sEnergy is the first demonstration of this willingness. At the same time, many clients have also been growing their own captive retention capabilities. Overall, we are expecting a return to some form of competition as insurers' and reinsurers' results improve, with concurrent growth in capacity.

This does not mean that we should expect the kind of cut-throat competition that we witnessed in the second half of the 1990s, nor do we expect a return to market share underwriting in the near future.

There have been fundamental structural changes in the marketplace, and all the pointers tell us that these changes are here to stay.

Many have estimated that the size of the capital destroyed in 2001 was in excess of \$100 billion. Events other than the World Trade Center tragedy also contributed to that loss of capital: tropical storm Alison in the US, the AZF Toulouse explosion, the Petrobras loss and the massive D&O claims stemming from Enron, to name a few.

The influx of capital since September 11 has replaced less than 35 percent of the \$100 billion capital loss. At the same time, we appear to have entered into a period of significant uncertainty in the Equity and Bond markets. The environment for financial investment returns is not favourable to insurers and capital providers.

The nature of information technology is also changing the shape of the insurance market. Much of the data contained in this review would simply not have been available a few years ago, and we can expect today that the executive management of insurers and reinsurers know much more quickly than ever before the results of their various businesses.

Therefore, they are able to take remedial measures much more quickly and decisively than ever before.



Finally, the expectations of shareholders and capital providers of insurance and reinsurance carriers have totally changed their requirements for growth and profitability. The drive for immediate returns is much more aggressive today, and shareholders are increasingly vocal.

Over the course of the past eighteen months, we have witnessed the most dramatic shift in our industry that many of us have ever experienced. It is within this totally changed environment that Energy underwriters and their customers must navigate.

Guy Bessis

Deputy Chairman
Global Risk Solutions

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

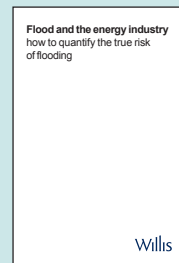


Environmental Insurance Market Review 2002

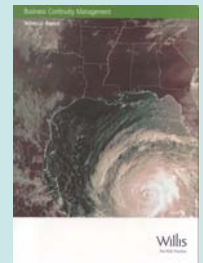


MarineMarket Review 2002

Willis also publishes regular technical reports and analysis such as these examples below:



Flood and the energy industry how to quantify the true risk of flooding



Business Continuity Management



An Insight to Warehouse Fires

All of the above are available at www.willis.com or through your Willis contact.

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