

Powering change

Fast-paced technological developments in the energy field are presenting challenges for insurers but, as **Neil Clutterbuck** explains, the industry is finding ways to stay ahead of the game.

NEW TECHNOLOGIES such as solar and wind power might offer huge potential, but the fact they are yet to be extensively proven and might also be subject to new risks creates a stream of challenges for insurers. Consequently, renewable energy was high on the agenda at this year's annual conference of the International Association of Engineering Insurers (IMIA).

A good example is wind power. Wind turbines are in a period of rapid development: figures from the World Wind Energy Association show that, worldwide, capacity for energy generation from turbines was 159 213 MW at the end of 2009 — of which 38 312 MW were added that year. Furthermore, estimates suggest that capacity will exceed 200 000 MW by the end of this year and 1 900 000 MW by 2020.

To enable this growth, recent developments have included gearless wind turbines and a move towards high-speed, horizontal-axis turbines with direct-drive generators, though with only limited success in the latter case. Offshore wind turbines are also becoming more common.

This fast pace of change carries several challenges for insurers. Unlike other areas, the speed with which these technologies are developing means it is virtually impossible to rely on loss experience when assessing risk.

Underwriting factors

Instead, when looking to insure fast-developing technologies, underwriters consider factors such as how mature different elements of the risk are, including the technology; the individual item of property; the plant technology; and the building procedure. This means that the decision to accept a risk often comes down to the underwriter's technical expertise in that particular technological field.

There are a number of ways this technical expertise can be kept up to date, such as through in-house intelligence departments providing underwriters with the most up-to-date technical papers on the technologies involved; the promotion of in-house cross-communication between property and construction underwriters to share knowledge; and setting up review panels to assess new technologies.

Over and above this, more information could be provided by the technology developers. Some already offer special briefings for insurers — the gas turbine industry has been active in this area — and this is a practice that should certainly be encouraged. It might also be necessary for insurers to become involved earlier in the process of developing technology so that issues relating to insurability can be resolved.

In addition to improving technical expertise, a range of underwriting strategies can be used to enable cover to be put in place that simultaneously safeguards insurers' interests. Although they are rarely used on general engineering risks, both mid-term re-underwriting and exercising review and break clauses could become more common for these developing technologies.

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It might also be necessary to put more controls in place around repair costs because of their ability to spiral where a technology has become obsolete or there is only one manufacturer, or repairer, of the components. Insurers could request contingency plans from insureds to ensure that these potential costs are assessed more accurately pre-loss. Similarly, establishing a repair cost index, such as that used in the motor insurance industry, could help to stem this problem.

The nature of these technologies can also cause problems when claims arise. The pace of technology development means that it can quickly become obsolete, creating problems when replacements need to be sourced. Long waiting times for new parts are not uncommon and, in some cases, it could be necessary to approach the original manufacturer to remake the part, which will clearly carry cost implications.

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Clutterbuck: underwriting strategies can be employed to safeguard insurers' interests.

Even where parts are still in production, their high cost can stimulate a black market for fake or stolen parts. This creates issues for insurers both in terms of the authenticity of replacements and the increased exposure concerning stolen components.

Additionally, often due to patent rights, there might only be one manufacturer of the equipment or parts. This can make it difficult to determine a fair price for a replacement and increase the potential for the insurer to be trapped in a situation in which the service provider and manufacturer join forces in a monopolistic way.

Further complications can arise because the pool of experts and loss adjusters with experience in some areas is limited. This creates problems when assessing a claim — for instance the decision on whether to repair or replace — and can leave an insurer exposed to experts' high fees.

Knowledge sharing

Insurance trade organisations and international associations such as the IMIA have an important role to play in the future of this market. The IMIA boasts members from 25 countries and, by sharing knowledge and understanding of the risks inherent in these developments, the industry will be able to continue to underwrite successfully.

Having such a broad membership is hugely beneficial because different countries are at different stages when it comes to technological development. By way of an example, Europe — Germany in particular — is more advanced in innovating solutions to managing climate change. Consequently, Europe remains a vital source of information for insurers from other parts of the world.

To help share information and experience, the IMIA pulls together project groups, usually made up of between five and 10 people, to explore a particular topic. They work with delegates at the annual conference to gather technical knowledge and experience on their topic before using this, and further research, to develop best practice.

Keeping abreast of such technological developments is essential for all parties. Not only will it enable insurers to underwrite successfully — and thereby protect their reserves — but also, without insurance, many of the research and development projects that lead to significant and highly beneficial technological advances would be unable to attract the necessary investment. **POST**

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