Impact of RMS V11 and Carrier Response

The changes to the new RMS version 11 wind model (RMS V11) were formidable, resulting in significant increases to (re)insurer’s loss estimates and their resulting probable maximum losses (PMLs). Initial market reaction was equally as strong. Questions abounded as to the impact these changes would have on market capacity and pricing. Many insurers and reinsurers hoped it would be enough to drive a market hardening. The timing and extent to which RMS V11, exposure data quality, and economic losses and conditions will influence the market is the subject of this article.

The overall projected loss increases for most carriers were driven by a small number of risks. To fully understand these drivers, insurers had to analyze the model changes by drilling down to the individual components, including geographic regions, occupancy types, and frequency versus severity. Insurers also had to evaluate both the individual and combined impact of increased hurricane frequency, stronger inland wind fields, greater property vulnerability to wind and higher levels of storm surge.

With this knowledge, insurers could further enhance their portfolio optimization strategies. For some carriers, this meant isolating individual policies that were major contributors to the overall modeled loss increase of the portfolio, a solid first step in adjusting their portfolio aggregates. In response to the impact of the new model on PMLs, some

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carriers are rebalancing their portfolios by reducing limits on renewal accounts that consume the highest amount of capital and produce the lowest returns and accepting only new business that meets their enhanced optimization criteria.

Despite these proactive approaches, many carriers are concerned that in the current economy the inherent rate increases that the new model generates may be difficult to realize with many clients, especially budget-challenged municipalities and school districts. Consequently, a number of carriers are concerned that insureds will opt not to purchase catastrophe insurance.

The Model is Only as Good as the Data

The model changes are only one component of a carrier’s PML projections, however. Without reliable exposure data, the ability to analyze a portfolio is uncertain regardless of the model employed. Data quality of exposures within the U.S. has improved over the last five years and there is a growing consensus that, based on recent events, both RMS V11 and the updated AIR model incorporate more accurate loss data for hurricanes that move inland on the Eastern Seaboard and the Gulf Coast. However, exposures for large commercial risks that are more sensitive to the changes in RMS V11 typically have more questionable data quality due to their size and complexity. These commercial accounts can require an extensive amount of effort on the part of insurers to obtain complete and correct exposure information and it can be more difficult to validate data for these accounts.

The key for carriers is to ensure that complete and accurate data is captured for all covered locations and for all covered perils. Data quality can be considerably improved by utilizing various resources such as inspection reports and secure internet sources, automating the quality assurance process, and enforcing consistent data protocols. Data quality should be quantified for each risk as part of the underwriting and modeling process.

To What Extent Did RMS V11 Affect 2011 Renewals?

The wind season renewals for commercial accounts generally run from March through July as most insureds want their coverage placed prior to wind season. While several insurance carriers began using RMS V11 immediately after its February release to study its impact to their wind portfolio, the majority of insurers delayed the installation for several months for various reasons: some carriers had already renewed their catastrophe treaties and others wanted to fully analyze the impact of the change on their portfolio prior to installation. Therefore, most accounts using RMS which renewed during the 2011 wind season were modeled using either RMS V10 or a blended approach of RMS V10 and V11.

To date, the RMS model changes have had a limited influence on market behavior. Many carriers use their own pricing methodology, others use a blended approach by running multiple models for their pricing process and portfolio.
management, and still others rely on the other prevalent model, AIR, which implemented their significant model change in June, 2010. In addition, most insurers and reinsurers have opted to calculate storm surge outside of RMS V11 using their own formulas, because they did not agree with the treatment of storm surge within the new model.

In practice, most reinsurers and insurance companies adjust their portfolios in order to supplement any modeling deficiencies. As a result of the changes provided by RMS V11, many of the deficiencies have now been addressed in the new model and it is expected that carriers will begin to lower their adjustment factors.

In general, 2011 U.S. renewals were relayered and priced with only a nominal impact from the RMS V11 model changes with most accounts being renewed at competitive prices supported by both existing and new markets.

**Expectation of a Market Hardening Unfounded**

With recent catastrophe activities in New Zealand, Australia, the U.S. and Japan along with the RMS V11 release, reinsurers and insurers were initially optimistic about a potential market adjustment with regard to the availability of capacity and an increase in catastrophe rates. This was based on historical precedent. After Hurricanes Katrina, Rita and Wilma hit in 2005, RMS released a new wind model in 2006 - RMS Version 6 (V6) - which resulted in increases in wind modeled losses. RMS V6 drove significant market increases in catastrophe rates including wind and earthquake for the following renewal cycle.

Yet, despite the total insured losses from recent catastrophe events, the current economic environment, and the RMS V11 model change, it does not appear that there will be a dramatic change in the marketplace as experienced in 2006. As of the beginning of the fourth quarter of 2011, there has not been a significant market adjustment in the amount of available capital nor appreciable rate increases.

In summary, there is a great deal of uncertainty as to the capacity and pricing approaches which reinsurers that have now reviewed and analyzed RMS V11 will apply to catastrophe treaty renewals in the coming months. Current market opinion is that rates will level off in the fourth quarter, rate decreases will be eliminated and we will start to see moderate rate increases in 2012. Without a market dislocating event, it may take several renewal cycles for rate increases to be fully integrated into market pricing and the hard market to emerge.

“Despite the total insured losses from recent catastrophe events, the current economic environment, and the RMS V11 model change, it does not appear that there will be a dramatic change in the marketplace as experienced in 2006.”
The Global “REACH” of Regulating Chemical Substances in the European Union

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Recent chemical-related losses in the European Union (EU) have established a link between certain substances found in everyday products and the harmful impact to humans and the environment. With the expansion of global trade and manufacturing, government concerns for public health and safety have made the issue of timely and accurate disclosure of chemical safety information vital. EU Regulation No. 1907/2006 concerning Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is aimed at protecting human health and the environment by bringing greater transparency of the risks of certain chemical substances before they are placed on the EU market.

As REACH obligations continue to be phased into effect and restrictions expanded, manufacturers, importers and consumer products producers must continue assessing the implications of REACH and its impact on products liability exposure. Insurers and reinsurers also should consider REACH’s impact to ensure their underwriting processes for liability (re)insurance effectively assess the risks of chemical substances within (re)insured portfolios and correlated loss trends to properly understand and underwrite these difficult and complex exposures.

Chemical Substance Losses: An Historical Perspective

Beginning in 2006, consumers in the UK and across Europe began to suffer contact dermatitis, including itching, irritation, redness, burns and respiratory troubles caused by the toxic substance dimethylfumarate (DMF), found in furniture and footwear manufactured in China and sold in the EU. DMF was contained in small sachets inserted in furniture or footwear boxes, and the DMF would evaporate into the product and protect it from mold while in transit. It took scientists nine months to determine that DMF was the problem.¹

DMF claims led to litigation against UK and European retailers and their insurers,² and included a court-approved settlement of up to £20 million.³ The EU issued Directive 2009/251/EC banning DMF-containing products in 2009. In October 2011, the EU published a draft amendment to REACH adding DMF as a restricted substance.⁴

³ See Note 1, above.
REACH Regulation

A principal aim of REACH is to protect human health and the environment by requiring transparency of the dangers presented by new and existing chemical substances placed on the EU market.

Registration with the European Chemicals Agency (ECHA) is required of all substances manufactured in the EU or imported into the EU exceeding specific quantities per year, per manufacturer/importer. All producers or importers of articles containing substances must register with ECHA if the substance in those articles exceeds specific quantities per year, per producer/importer and if the substance is intended to be released under normal or reasonably foreseeable conditions of use. Registration includes providing the ECHA with safety information. The ECHA’s evaluation helps determine if further testing is needed. Authorization ensures that risks from substances of very high concern are properly controlled and replaced with suitable alternatives. Restrictions could apply to manufacturing, use or placement into the market if the substance poses unacceptable risks to human health or the environment.

REACH, however, excludes pharmaceuticals, pesticides, food additives, flavoring in food products, agricultural feed additives, animal nutrition, waste and radioactive substances because there are several existing EU regulations governing these sectors or the use of these substances.

Regulation or legislation regarding use of chemical substances also exists in Canada, China, Japan, Switzerland and the U.S.5

REACH’s Impact on Insureds

For the majority of chemicals used in products or otherwise in circulation, public information as to the human health and environmental impact has been incomplete. As a result, the harmful effects of many substances have not been recognized publicly until years later, which often has resulted in significant costs to not only the manufacturer, but also to insurers and reinsurers. Under REACH, and legislation in other countries, latent product hazards are intended to be identified earlier to protect consumers and the environment.

The public availability of product safety data could increase product liability exposure,6 however. Claimants, public interest groups and lawyers will have easier access via ECHA’s database to information on harmful substances. This data, or subsequent product restrictions or recalls, could provide claimants’ lawyers with evidence that a substance used for years in consumer products or the workplace now poses serious health or environmental hazards not previously understood.7 Litigation against manufacturers, importers or downstream users will likely lead to further developments in product liability law to protect consumers and affirmative defenses for manufacturers and producers, such as the development risks defense, contained in the EU Product Liability Directive (85/374/EEC).8

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6 Other casualty lines affected are environmental liability and employers’ liability/workers’ compensation.
8 Article 7 provides a producer with a defense to liability if he proves the development risks defense: “the state of scientific and technical knowledge at the time when [the producer] put the product into circulation was not such as to enable the existence of the defect to be discovered….”
Impact of REACH on Underwriting

Safety and public health data gives liability underwriters a better foundation for assessing insured risks and portfolios, particularly with regard to substances not previously known to have been harmful.

Causal relationships between harmful substances and bodily, environmental and other similar injuries might now be more easily proven, potentially exposing reinsurers to greater losses on an historical and going forward basis. Additionally, widespread global use of chemical substances in many intermediate and final products previously thought to have been safe also could subject (re)insurers to greater liability risk. The extent of these risks and how they are managed will depend on portfolio composition, product liability laws and (re)insurance contract terms.

Claims-made policies could be more advantageous to (re)insurers as policy terms can be adjusted according to the changing environment. Loss-occurrence policies expose (re)insurers to long-tail liability as files usually remain open for years, and policy terms might not adequately reflect latent exposures. Historical exposure claims would have to be managed without having had the adequate risk information and (re)insurance solutions at the time of underwriting, similar to the asbestos crisis.

Underwriters would do well to evaluate potential accumulation risks in (re)insured portfolios, particularly in large portfolios consisting of small or medium-sized companies that might not have been the focus of detailed assessments in the past.

Insurer and reinsurers should maintain close dialogue about these issues with their clients as they assess the contractual terms, conditions and exclusions of their in-force and new liability reinsurance, especially with regard to the potential for loss accumulation from chemical substances. The best way to underwrite these complex risks is to avoid surprises for all parties involved.

"Widespread global use of chemical substances in many intermediate and final products previously thought to have been safe also could subject (re)insurers to greater liability risk.”
Hurricane Irene and most recently the Halloween Nor’easter illustrate how shocking and widespread these unexpected losses can be. Two important questions this scenario poses for corporate risk managers and small business owners are “Is my company prepared for this?” and “Does my carrier have the experience to guide my company through the unexpected?” In these types of situations, an insurance carrier with a seasoned environmental claims team emerges from the pack of average insurers by furnishing what is most important to the insured: superior claims service. Excellent claims services is a critical element that usually leads to a lasting partnership between the carrier and the insured who faces that unexpected environmental claim exposure.

The carrier also must offer the insured appropriate insurance coverage beyond customary commercial property and business auto coverage in contemplation of these atypical events. It is critical that commercial insureds have coverage for the expenses related to emergency cleanup, responses to regulatory agency inquiries, and third-party claims for alleged pollution-related property damage and bodily injury. While pollution cleanup is complicated in itself, it is only one facet of an environmental damage claim and only one measure of overall success. A favorable outcome will include: 1) developing recovery and subrogation strategies that recover incurred costs before available limits are exhausted by multiple claimants; 2) crafting media and public outreach to highlight the insured’s status as an injured party as well, rather than as the tortfeasor; and 3) developing expert reports and preparing witnesses for litigation before evidence is destroyed or lost due to disaster or recovery efforts.

Clearly, the quality of environmental coverage and superior claims services are equally important and will determine insureds’ success in navigating the next unexpected environmental catastrophe.
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