



June 2010

## 2010 Hurricane Season Begins Knowing, Understanding and Better Managing the Risks

The 2010 hurricane season kicked-off on June 1 and the meteorological forces wasted no time in getting down to business. Tropical storm Agatha slammed into Central America, killing at least 101 people. The hurricane season kick-off and the storm occurred as backdrops to the wrap up of the June 1, 2010 reinsurance renewals, traditionally centered on the Florida property marketplace.

### Reinsurance Renewal: Price Declines Continue

This year, commentary and guidance on risk transfer approaches from ratings agencies and Florida regulators, combined with the unique economic turmoil of Florida, brought additional challenges.

In the renewal, which ran late this year, Guy Carpenter & Company, LLC saw the trend of price declines continue. On a risk adjusted basis, prices dropped year over year by 10 percent to 12 percent on average. This drop returns pricing to a level close to that seen in 2008, particularly in upper layers.

Reinsurers writing Florida business tend to view metrics for this exposure within a very narrow band, more so than other catastrophe exposed regions. Variation in average quotes ranged from declines of 3 percent to increases of 3 percent, which is similar to those seen in the Florida renewals of 2009. The forecasts of higher than historical average rates of storm activity this year, while weighing on minds, did not directly impact prices.

Concerns over Florida primary insurer credit quality affected reinsurance rates as well. In 2009, five primary insurers came under supervision of the Florida Office of Insurance Regulation (OIR) or ceased operations completely, leaving some reinsurers unpaid. Where there were concerns over primary insurer creditworthiness, surcharges on pricing were seen. Alternatively, insurers with better quality financials received larger reductions on pricing.

Capacity in this market is plentiful this year. Early in the 2009 Florida renewal there was a perceived imbalance of excess demand chasing limited capacity, driving prices higher. As the renewal reached completion, however, the market saw capacity ultimately exceeding demand by 15 percent to 20 percent. This year, capacity needs of clients have remained stable with retentions and limits remaining essentially the same as last year. Reinsurers, with their balance sheets largely improved, have excess capacity available.

## Regulatory Initiatives

OIR released a memorandum stating that companies should not necessarily focus on purchasing to the one in 100 year event as this would not be an OIR requirement, but they should also evaluate giving equal weight to protecting surplus from multiple storms of smaller magnitude. This did not have an impact on some companies that chose to purchase less limit on top in order to place other coverages providing protection such as second or third event structures.

The OIR has also indicated that they want to work with companies on the utilization of alternative products to help them achieve more efficient reinsurance pricing, further driving growth for alternative products in the Florida marketplace. Among the options for alternative risk financing products in Florida, catastrophe bonds have not formed a substantial part of primary insurers' catastrophe programs.

## Florida Hurricane Catastrophe Fund

One of the critical components in the majority of Florida contracts renewing at June 1 is the structure of the Florida Hurricane Catastrophe Fund (FHCF). While factors influencing the FHCF structure overall were dealt with earlier than in prior years, there remained questions regarding the viability of the TICL layer and rating agencies' treatment of TICL within the reinsurance structure. In 2009 there was considerable concern regarding the viability of this upper layer of coverage due to the impact of the financial crisis on the municipal bond market, which the FHCF utilizes to pay post event claims above their available cash on hand. Statutorily, the legislature reduced coverage offered by USD2 billion to USD10 billion last year. Due in part to companies' concerns regarding the timing of payments received from TICL, only USD5.56 billion was taken up. Of this, approximately 65 percent was selected by Citizens Property Insurance Corporation (Citizens).

This year, the FHCF TICL layer was further reduced to USD8 billion and in light of last year's take-up rate and Citizens' decision not to purchase coverage, the FHCF is estimating a take-up of USD2.72 billion of TICL coverage. In addition to companies' own concerns regarding the timing of payments from TICL, Demotech specifically provided criteria in 2010 that companies would have to meet in order to utilize the TICL layer within their reinsurance structure and maintain an A rating or better. These criteria include a liquidity ratio greater than 1.0, a ratio of total liabilities to policyholders' surplus of 3.0 or less and favorable one and two year reported loss development.

The FHCF has recently released their May bonding estimates and as expected the financial markets' continued improvement has had a positive impact on the FHCF, as well. Total possible FHCF obligations in 2010 are USD25.461 billion, assuming USD8 billion of TICL coverage. The new capacity estimates cover the full USD25.461 billion at an estimated 5 percent post-event assessment, assuming current financial market conditions. This includes the projected Fund balance of USD6.02 billion, USD3.50 billion of pre-event notes and just under USD16 billion of bonding.

### Innovative Products

Guy Carpenter offers a suite of proprietary products for the Florida marketplace. Those that offer multi-year covers, multiple limits over multiple years and the associated pricing benefits have demonstrated broad appeal. Also, index-linked risk transfer instruments (industry loss warranties, insurance-linked derivatives, catastrophe bonds\*, etc.) continue to play an increasing role in meeting the capacity needs of catastrophe-exposed insurers. While these instruments offer many advantages, they expose insurers to varying degrees of basis risk, i.e., the risk that actual losses will deviate from the loss payments provided by the contract. To address this shortcoming, Guy Carpenter developed the County Weighted Industry Loss (CWIL), a PCS index-based trigger that allows risk to be hedged at the more granular county level and is designed to materially lower basis risk. The lowering of basis risk is particularly important in Florida where the potential for a large loss is great.

### 2010 Hurricane Forecast

To coincide with the start of the hurricane season, Guy Carpenter has summarized the various forecasters' predictions for the 2010 season. Several meteorologists have released forecasts for the forthcoming hurricane season and there seems to be a general consensus that 2010 will see unusually high activity. If this prediction proves to be true, the 2010 hurricane season will stand in sharp contrast to the relatively quiet 2009 season.

To help (re)insurers prepare for the hurricane season, Guy Carpenter and WSI (Weather Services International) Inc. have developed a pre-season regional forecast of landfall rates for different regions in the United States (Gulf, Florida, Southeast and Northeast). According to the May GC ForeCat™ update, the Northeast region is most vulnerable to tropical cyclones coming ashore in the United States in 2010. The rate of 0.62 for the Northeast represents the mean number of landfalling tropical cyclones in that region for the 2010 season, more than double the 1951-2007 average landfall rate of 0.29. The landfall rate for Florida is also significantly above-average:

**Table 1: GC ForeCat Landfall Rates**

Region	May 2010 Forecast Landfall Rate	1951-2007 Average Landfall Rate
<b>Gulf</b> (coastline from Texas to Alabama-Florida border)	0.59	0.66
<b>Florida</b> (entire Florida coastline)	0.60	0.49
<b>Southeast</b> (coastline from Atlantic Florida-Georgia border to Cape Hatteras)	0.22	0.41
<b>Northeast</b> (coastline from Cape Hatteras to Maine)	0.62	0.29

Several other forecasters, including AccuWeather, the Colorado State University (CSU) and NOAA have issued Atlantic basin predictions for 2010 season. WSI have also released a basin-wide forecast. Their most recent predictions are outlined in the table below:

**Table 2: Summary of Hurricane Forecasts for 2010**

	Total Named Storms (>39 mph)	Hurricanes (>74 mph)	Major Hurricanes (>111 mph)
Average storm development (based on data from 1950 – 2009)	10	6	3
AccuWeather (released May 24)	16-18	-	-
CSU (released June 2)	18	10	5
NOAA released (May 27)	14-23	8-14	3-7
WSI (released May 26)	18	10	5

When announcing its 2010 hurricane prediction, NOAA said the season “could be one of the more active on record” if the upper end of its predicted range (23 tropical storms, 14 hurricanes and 7 major hurricanes) is realized. NOAA said the intensity of the hurricane season will very much depend on whether current El Niño-neutral conditions persist or if there will be a transition to La Niña during the summer. El Niño, a phenomenon marked by a warming of sea surface temperatures (SSTs) in the equatorial Pacific, tends to suppress the development of hurricanes (as demonstrated in 2009). Conversely, La Niña cools SSTs in the Pacific and typically enhances Atlantic basin activity. NOAA said conditions are becoming increasingly favorable for La Niña to develop during 2010.

In its May forecast, WSI said the 2010 Atlantic hurricane season could be the most active since the record breaking year of 2005. WSI, AccuWeather and the CSU say more than 16 storms could develop in 2010. To put that in perspective, AccuWeather said only eight years in the 160 years of records have had 16 or more storms in a season.

AccuWeather also warned that seven storms could impact the United States coastline during the forthcoming season, five as hurricanes and two or three as major hurricanes. The CSU, meanwhile, said there is a 76 percent probability of a major hurricane making landfall along the entire U.S. coastline, compared with an average of 52 percent. The U.S. East Coast has a 51 percent landfall probability, while there is also a 51 percent chance of a major hurricane hitting the Gulf Coast, the CSU added. The team also predicted a 65 percent chance of a major hurricane tracking through the Caribbean, compared with the long-term average of 42 percent.

All forecasters agree that the factors driving their above-average predictions include a rapidly weakening El Niño weather phenomenon (or even the possible emergence of La Niña) and warming SSTs. In fact, NOAA has observed that SSTs in the Atlantic are currently up to four degrees Fahrenheit above-average while WSI said SSTs are currently at record warm levels for May. WSI said such conditions have reaffirmed its view that the 2010 season “will at least approach the record 2005 levels of activity.”

## Tools for Understanding and Managing Risk

Guy Carpenter offers the solutions to help (re)insurers manage the risks associated with hurricane exposures and preparedness through our forward looking hazard forecasting tools. Assessing the impact and potential loss damage of hurricane activity on a risk portfolio can now be accomplished with more detailed information than ever before.

### GC ForeCat™ and GC LiveCat™

Developed in coordination with WSI Corporation, these new Hazard Forecast Tools consist of GC ForeCat (a detailed monthly pre-season windstorm forecast from December through April prior to the upcoming hurricane season) and GC LiveCat (a live hurricane forecast, including uncertainty estimates). Predicated upon state-of-the-art meteorological models to predict the track and intensity of hurricanes, these unique forecasts contain features previously unavailable to the marketplace, including hurricane predictions up to 10 days prior to landfall - several days earlier than what is currently provided by the National Hurricane Center (NHC) and other tropical forecasting organizations.

### CAT-i

Guy Carpenter established its CAT-i service to provide internal and external clients real-time information on major natural catastrophes (hurricanes, windstorms, earthquakes, major floods) that have the potential to impact the (re)insurance industry. The service provides concise reports summarizing information sourced from the public domain and includes information on the type of event, location, event parameters and where available, economic/insured loss information. The reports are updated as soon as the information becomes available. CAT-i subscribers receive the reports in real-time as they are published. Additionally, CAT-i reports are available, along with additional Guy Carpenter industry-leading intellectual capital, without charge, from GC Capital Ideas, Guy Carpenter's (re)insurance industry blog.

### i-aXs®

Guy Carpenter's i-aXs helps users better understand their data. The award-winning data management platform provides a full suite of web-enabled tools designed to help users translate data instantly, allowing for faster and better informed decisions.

As part of the i-aXs platform, RealCat<sup>ix</sup> reports assist in monitoring and assessing potential losses to a portfolio as an event is unfolding. By combining satellite imagery with streaming radar that indicates precipitation bands, wind speeds and other related details, users track the potential impact of an event on the portfolio's locations. The RealCat<sup>ix</sup> reports automatically calculate the portfolio's exposure to current, forecast or observed wind fields. Users can drill down to view individual locations and all related policy details, ensuring knowledge in minutes whether a wind storm has affected (or is forecasted to affect) a given portfolio. Additionally, by accessing the platform's real-time hazard layers, users can gain a full view of a weather-related event - where it has been, where it is forecasted to go - regardless of where the exposures are dispersed.

## Conclusion

Guy Carpenter's outstanding knowledge of the Florida (re)insurance marketplace and our tools and solutions for hurricane preparedness and catastrophe risk management will help companies make educated and informed decisions on the efficient use of capital.

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## Guy Carpenter Briefing

Guy Carpenter & Company, LLC is the world's leading risk and reinsurance specialist and a part of the Marsh & McLennan Companies. With over 50 offices worldwide, Guy Carpenter creates and executes reinsurance solutions and delivers capital market solutions\* for clients across the globe. The firm's full breadth of services includes line of business expertise in Agriculture; Aviation; Casualty Clash; Construction and Engineering; Excess and Umbrella; Life, Accident and Health; Marine; Medical Professional Liability; Political Risk and Trade Credit; Professional Liability; Property; Retrocessional Reinsurance; Surety; Terrorism and Workers Compensation. GCFac® is Guy Carpenter's dedicated global facultative reinsurance unit that provides placement strategies, timely market access and centralized management of facultative reinsurance solutions. In addition, Guy Carpenter's Instrat® unit utilizes industry-leading quantitative skills and modeling tools that optimize the reinsurance decision-making process and help make the firm's clients more successful. Guy Carpenter's website address is [www.guycarp.com](http://www.guycarp.com).

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