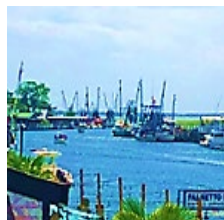




Quarterly Newsletter from Energy Insurance Services, Inc., Volume 6, Issue 4

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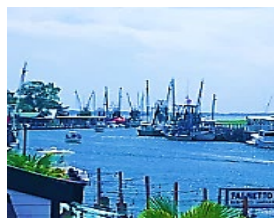


Captive Optima



Operational
Considerations

View on the Creek



Thank you to all our participants, prospects, and service partners that attended the 2022 PAC conference in Kiawah Island, SC. We had a busy week of meetings, educational presentations, and networking. We were delighted to see so many familiar faces again and meet some of our new colleagues. We enjoyed a 30th anniversary dinner to celebrate EIS's continued growth and success and to thank all our colleagues and business partners for their continued support.

We held 13 PAC meetings throughout the week along with several other prospect and operational meetings.

Our general session kicked off with an update from the EIS/ECM team on the current state of the Company and captive trends. Dr Chuck Nyce, professor at Florida State University, gave a wonderful presentation on Catastrophe Loss Analytics. The presentation included a basic understanding of the cat loss prediction process, key sources of uncertainty with cat models, and the differences between the various financial loss perspectives. This is discussed further in our Captive Optima section below. We were honored to have key members of the South Carolina Department of Insurance attend the conference. Michael Wise, Acting Director of Insurance, Joseph McDonald, Director of Captives, and Dan Morris, Deputy Director, Financial Regulation & Solvency attended the anniversary dinner and spoke about the current insurance market in South Carolina and captives in the state. Our auditors & tax advisors, Johnson & Lambert, presented the 2022 financial audit plan, 2022 SOC 1 Type 2 report, and tax update.

Save the Date! The 2023 EIS PAC conference will be October 23-26 at the Charleston Harbor Resort.

Captive Optima – Catastrophe Loss Modeling and Analytics



Hurricane Ian is expected to become the second most expensive hurricane ever for the US property and casualty insurance industry, behind Hurricane Katrina. This latest catastrophe is hitting an already tough property market, which is likely to have repercussions both domestically and internationally. The impact of Ian and other catastrophic events on reinsurers is likely to create a difficult environment ahead of Jan 1 renewal negotiations. Insurance carriers and the reinsurance market rely on catastrophe models for future coverage. How are catastrophe loss models developed to predict losses and then utilized by the insurance market?

A catastrophe model (or “cat” model) is a computerized process that simulates potential catastrophic events and estimates the amount of loss due to the events. Catastrophe models have been rapidly evolving since their introduction in the 1980s. The models are designed to quantify the financial impact of a range of potential future disasters and are intended to inform users on where future events are likely to occur and how intense they are likely to be. Based on the estimated probability of loss, they can estimate a range of direct, indirect, and residual losses. Catastrophe modeling allows insurers and reinsurers to evaluate and manage natural and man-made catastrophe risk from events ranging from earthquakes and hurricanes to floods and wildfires. Catastrophe modeling is a tool for both underwriting and pricing. Models are used to assess the risk in a portfolio of exposures.

The National Association of Insurance Commissioners (NAIC) has posted information in its Center for Insurance Policy Research. The NAIC has formed a Catastrophe Insurance Working Group that serves as a forum for discussing issues and resolutions related to catastrophe models. There are four basic modules to all cat models, regardless of the risk being modeled, as included in the NAIC’s research center.

- **Stochastic Events Module:** This module generates thousands of possible random event scenarios based on historical data and simulated events. The model may include events that will never happen or may miss events that will happen.
- **Hazard or Intensity Module:** This module determines the level of physical hazard specific to geographical locations and will vary by type of event (hurricane, earthquake, etc). The module compares what we think will happen versus what actually occurred at a specific location.
- **Vulnerability Module:** This module quantifies the expected damage from an event conditioned upon the exposure characteristics and event intensity. The exact same event can generate different damage estimates at the same locations.
- **Financial Module:** This module measures monetary loss from the damage estimates. Insured loss estimates are generated for different policy conditions, such as deductibles, limits, and attachment points. Finance models report ground up estimated losses (before the application of insurance or reinsurance structures), gross estimated losses (after insurance limits and deductibles are applied) and net estimated losses (after reinsurance)



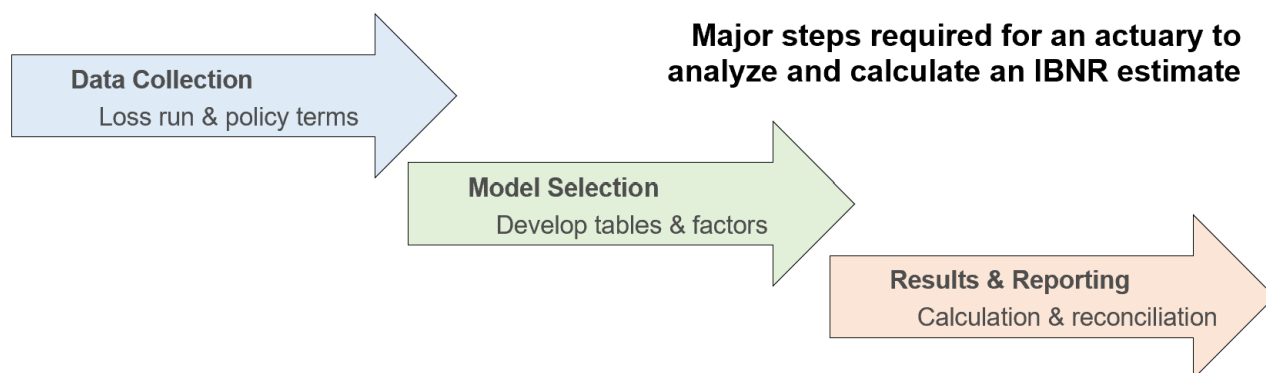
Catastrophe Models continue to rapidly evolve due to technological advancements and enhanced exposure data. As these advancements continue, more accurate risk assessments and loss estimates will continue to provide better information to the insurance market. Cat Models have a wide range of applicability and are used to analyze events other coverages beyond just property, including cyber, terrorism and product liability. These models will continue to develop and remain the prominent tool for pricing of insurance in the commercial market and reinsurance programs. EIS participants will be dependent on these models when structuring the insurance program and determining coverages and terms to be written in the cell.

Operational Considerations – Case Reserves and IBNR



When risk is retained in an insurance company or captive insurance cell, claims and losses must be evaluated to determine the required liability that must be recorded to cover the estimated value of the losses. There are requirements for reserving under accounting, regulatory and IRS statutes. These requirements also apply to EIS participants retaining risk in their cell.

There are two types of reserves: reserves for claims incurred but not reported (IBNR) and case reserves. IBNR is an actuarial estimate of future payments on claims that have occurred but have not yet been reported. In addition to this provision for late reported claims, we also estimate and make a provision for case reserves on known claims that may develop further for additional payments on closed claims. IBNR reserves apply to the entire body of claims arising from a specific time period or policy period, rather than a specific claim. Case reserves are the value assigned to a specific claim by an adjuster or internal claims department based upon an investigation and information known of an incident. The estimated value of the claim may be revised as more information is discovered. Some claims, like fire losses, are easily estimated and quickly settled. But others, such as general liability and workers compensation claims, may be settled long after the policy has expired. IBNR is the most difficult reserve to assess.



Case reserves and IBNR for most EIS cells are reviewed on a monthly or quarterly basis, depending on the frequency of claim payments and preparation of financial statements. At least annually, IBNR should be reviewed and adjusted based on the actuary's most recent estimate.

EIS has in-house tools and resources to assist members in calculating IBNR. Some EIS participants have engaged a third-party actuary to prepare the IBNR estimate and issue a report.

Please let the ECM team know if you have any questions so we can schedule a meeting to discuss further.