



Business Interruption Considerations in Hurricane Claims: A Complex Calculation for Adjusters

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An obvious sign of an impending hurricane is the appearance of plywood being nailed over plate glass windows on Main Street businesses. Inside supermarkets and home-improvement stores appear long lines of anxious shoppers. Transportation out of the area becomes a major goal.

Behind the scenes in corporate offices, bank employees back up data to off-site locations and power company officials dispatch emergency crews and issue orders to secure facilities. At manufacturing operations, raw materials are lashed down and finished goods are trucked away, while production and deliveries are halted or re-routed to alternate, safer locations.

All the preparation happens for something that might never occur: a direct hit of winds that can gust to destructive, 150 mile-per-hour force; a storm surge that might inundate low-lying areas and cascade through all but the most secure barriers; or torrents of rain that would lash at properties, driven by those forceful winds and drenching anything accessible. The community holds its breath while the powerful natural disaster takes its course.

As the wind and water subside, business people begin to assess the damage, and insurance adjusters are dispatched by carriers to calculate the losses. How those business claims are calculated can impact the livelihood of many people and the economic vitality of a stricken area. This paper, created in the wake of the most incredible hurricane season the insurance industry has ever experienced, outlines the major elements of business interruption claims arising from hurricanes and suggests ways to gather information and evaluate each claim's unique situation.

2005: Like No Other

Although the hurricane response process has been played out dozens of times over more than a century, never has the insurance industry seen anything like the devastation wreaked on the Gulf

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EXCELLENCE IN EVERYTHING WE TOUCHSM

Coast in 2005. The resulting losses and insurance claims will require the best efforts of insurance professionals for quite some time to come, and a thorough understanding of what is being faced in business interruption losses is required for the claims-handling work to proceed.

The three most devastating hurricanes of 2005 – in a year that saw more named storms and greater damage estimates than any other on record – accounted for an estimated \$50 to \$79 billion in insured losses, not counting federal flood coverage^{1,2,3}. Katrina, which made landfall in Florida on Aug. 25 and in New Orleans on Aug. 29, surpassed all natural catastrophes in scope and estimated losses. Then the region was hit two more times: by Rita, which threatened the massive Houston area and then made landfall in southwest Louisiana on Sept. 24, and by Wilma – the strongest hurricane ever registered in the Atlantic – which made landfall in southwestern Florida on Oct. 24^{4,5,6,7}.

Getting out of harm's way was a paramount concern for many residents, and government entities escalated their warnings about the impending storms to, in some cases, issuing mandatory evacuation orders.

In Katrina's path, for instance, five Mississippi counties issued mandatory evacuation orders on or before Aug. 28 for specific areas most at risk. The governor of Alabama also was asked by local officials to issue a mandatory evacuation order on Aug. 28⁸.

Local officials in and around New Orleans, which had potentially the most to lose, did not universally issue mandatory orders. While Plaquemines Parish, which adjoins New Orleans to the southeast, declared a mandatory evacuation on Aug. 27, Jefferson Parish – the other major component of metropolitan New Orleans – never did issue such an order⁹. On Sunday morning, Aug. 29, about 19 hours before expected landfall, the mayor of New Orleans issued a mandatory evacuation order. News outlets the previous day reported that the mayor was discussing with city lawyers the possible legal liability to businesses for lost revenue if an evacuation order was given. Evacuation of residents from Katrina's path was criticized by some as "too little, too late," because of the many thousands of people who had to be rescued after the storm, so a massive shutdown occurred in the Houston area just a month later, as Rita threatened the Texas coastline. Many displaced Katrina residents who had been evacuated to Houston found themselves on the run again.

When Katrina came ashore in Louisiana, maximum winds of 121 miles per hour were recorded, while in Mississippi, wind speeds up to 135 mph were measured¹⁰. In Louisiana,



41 of the 64 parishes (a local designation for counties) received damage. Winds tore windows out of New Orleans high-rises, and partially ripped the cladding from the Superdome roof, beneath which huddled an estimated 30,000 displaced residents.

Along with damage from such severe winds came a storm surge of destructive proportions. Alabama's coast was hit with a 13.5-foot wave surge that swamped Dauphin Island and sent Mobile Bay spilling into downtown Mobile, which flooded large sections of that city. In Mississippi, communities along the coastline were obliterated, and one county recorded a surge as high as 27 feet. It was estimated that the waves penetrated up to six miles inland, and 12 miles up bays and rivers¹¹.

As devastating as was the storm surge, an even greater blow was caused by breaches in the New Orleans levees, which were built to protect the below-sea-level city from flooding. Three hours after landfall on Aug. 29, a breach was reported in the Lower 9th Ward Levee. One day later, a second levee broke, and water covered the city. In some areas, flooding reportedly reached 20 feet. By Aug. 31, flood waters reached equilibrium with adjacent Lake Ponchartrain, although an additional canal was breached. It would be a week before the U.S. Corps of Engineers could begin draining flood waters out of the city¹², and multiple weeks before residents and business owners could begin returning to some parts of the devastated region. Months after the disaster, the causes of the levee breach were still being investigated and debated.

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As Katrina swirled over the region, power companies took their generating facilities off-line or had them knocked out by the storm, causing power outages that typically lasted for weeks and stretched into months in the hardest-hit areas. Even emergency facilities in many places were without power for at least 24 hours. As havoc was being wreaked on the infrastructure, explosions and fires brought even more devastation, some burning unchecked because of inaccessibility or lack of response resources.

Business, Industry Crippled

The enormous scope of the storms and response by government, business and residents must be considered in order to understand the issues at stake for the business communities in the hurricane-affected areas. Reviewing the loss of business and opportunity, it is easy to see why thorough claims adjusting is vital to the process of rebuilding.



In the New Orleans area and offshore in the Gulf of Mexico, for instance, the petroleum and petrochemical industries are major economic drivers. Health care, tourism and shipping also contribute greatly. All these industries were disrupted by the hurricanes, and some will take many months, if not years, to recover to pre-catastrophe status.

Offshore oil rigs, pipelines and on-shore refineries all were in the path of the hurricanes and saw significant damage. The U.S. Department of Energy (DOE) reported 46 drilling platforms destroyed by Katrina, and 69 destroyed by Rita. The storms damaged more than 50 other platforms, and nearly 200 pipelines. At the end of January, a Texas refinery remained shut down due to Rita, as was one in Louisiana that was damaged by Katrina, while others were on reduced runs. DOE and the Louisiana Department of Natural Resources reported that both oil and natural gas production were reduced significantly by the storms. "Every segment of the production chain was affected," said the DOE in a recovery report¹³.

Tourism, business conventions and events brought \$5 billion into the economy of New Orleans in 2004, representing half of the state's tourism income. Mississippi's coastline was booming with the presence of a number of floating casinos. These industries were hurt not only by the immediate damage or destruction of property from the hurricanes, but also by the long-term effects of the devastation that is predicted to result in reduced tourism activity¹⁴.

The Adjuster's Evaluation

How do all these factors – multiple storms, evacuations, power outages, inaccessibility, infrastructure losses – contribute to the adjuster's monumental task of assessing a hurricane-related loss?

Before discussing adjusting issues, evaluation tools and methods used by adjusters when investigating business interruption claims, it must be made clear that each claim represents a unique situation, and it is not possible to universally apply the generalities presented here. Nor do the set of concerns presented here represent all potential issues that an adjuster may face because, again, each case is unique and must be addressed on its own facts and merits.

Coverage

All claims require the adjuster to determine whether business interruption coverage exists. There are generally two broad categories of coverage available: business interruption and contingent business interruption; the former occurs due to a loss on a covered property, while the latter results from a loss to a third-party's property that is connected to the business bringing the claim. In both cases, coverage language often stipulates that a physical loss caused by a covered peril occurred to a covered property.

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Overlapping Coverage

In some instances, such as areas where flooding had occurred, the adjuster may need to review the potential for overlapping coverages and, if damage was caused by both a covered and non-covered loss, may need to complete a process of segregating claims and apportioning the loss costs appropriately. This is sometimes seen in hurricanes where, for example, wind-driven rain causes damage to the upper floor of a business while rising flood waters cause damage to the lower floor.

Cause of Loss

Some losses are caused by multiple factors. In the case of Hurricane Katrina, a factor in some cases may be the floods resulting from the levee breaches. In other cases, a subsequent fire, looting or vandalism may be factors. Official reports of events, as well as site evaluations, physical evidence and insured's reports may be necessary.

Sue and Labor

When a big storm is on the way, most people will do what they can to protect their property. In the case of a business owner, a common task is erecting plywood over plate glass windows, or emptying their coolers if a power interruption is likely. Such activities may qualify for coverage under the Sue and Labor clause, and a business may be compensated for the cost of taking such precautions.

Extra Expense

Business interruption policies often stipulate that the insured has a duty to mitigate damages after the loss occurs, and this often also must be calculated by the adjuster. A common step taken to mitigate damage would be moving operations to another location to resume business more quickly.

Actual Loss Sustained

When a covered business interruption claim is accepted, calculations of the actual loss sustained must be completed. Utilizing company books and records, and other financial information, a determination is sought as to the ultimate loss suffered by the business as a result of the hurricane. Offsetting the total lost revenue in some cases might be non-continuing expenses — such as employee wages which are temporarily not being incurred or lower utility usage — or makeup sales being experienced. While a chain retailer might have closed all its stores in the metropolitan New Orleans area after Katrina, it may have experienced increased sales in other nearby locations that could be attributed to displaced customers; those sales may be considered offsetting to the total loss.

Period of Restoration

Coverage language will define the period of restoration,

and the adjustment will require determining when restoration begins and ends. This often entails working from a timeline of significant events, such as when the loss occurred and when subsequent actions by the insured began. It is possible for this period to continue after a business has been partially reopened. As with many other tasks facing the business interruption adjustment, each unique case must be calculated on its own particulars.

Many factors concerning Hurricane Katrina has made the task of calculating the period of restoration more complex. Additionally, the vast need for cleanup and restoration work and limitations on such necessities as labor, materials and infrastructure services has slowed the recovery process much more than in previous events. Further, governmental rebuilding decisions threaten to tie the hands of businesses even as they become ready to rebuild. A change in building codes, or mandates to test and remediate for environmental hazards, are only some of the rebuilding issues with the potential to affect the period of restoration.



Extended Period of Indemnity

After the business has been repaired and fully reopened, it is often not expected to immediately resume business as if no loss had occurred. In many cases, business builds slowly after a hurricane, as the region returns to its normal activity level. Extended period of indemnity coverage is designed to pay the difference between a business' actual sales after reopening and sales it would have expected to receive had no loss occurred. Calculations for the period typically begin at the close of the period of restoration. Generally, this coverage has a time limit, anywhere from 30 days for a basic policy to a year for a more comprehensive one.

In the case of Katrina, the ramp-up period for many businesses will truly be extended, based on the level of infrastructure destruction and the long-term, possibly

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permanent, absence of many area residents. Nearly six months after the hurricane, less than half of the residents of New Orleans had returned¹⁵, and industries such as tourism were operating marginally.

Other Claim Elements

Business interruption claims calculations also require other facts, such as the date of suspension and resumption of operations, and the historical value of sales or production that could be used to calculate expected revenue during that suspended period. The company's books and records may be accessed, or other documentation sought if those records are destroyed or unavailable.

Additional elements to an adjuster's claim calculation might include factoring in a waiting period that is stipulated by the policy, what deductibles might apply, whether events causing losses must be treated as multiple occurrences, and whether the hurricane caused total or partial suspension of the insured's business, among others.

Contingent Business Interruption

Income loss because of damage to a third-party's property can cause a "contingent" loss to an insured. This type of coverage is often manuscripted, making each claim situation ultimately unique.

The adjuster may need to determine whether the third-party's property was a dependent property for the insured, such as a contributing location, a recipient location, a manufacturing location or a leader location. An interdependent property, such as a subsidiary of the insured, also might be considered under this type of coverage.

Policies generally stipulate that the cause and type of damage to the dependent property needs to be the same as would be necessary to cause a covered loss on the insured's own property. Also, that damage must typically cause a suspension of the insured's operations. If a refinery's supplier of crude oil experiences a covered loss due to hurricane damage, the refinery may present a claim for lost business, even if its own property was not damaged.

Similarly, contingent extra expense can follow along with contingent business interruption. If a covered property incurs expenses while getting a dependent property back in business more quickly, those costs are sometimes presented for consideration as an extra expense claim. If a covered property incurs expenses during the dependent property's period of restoration that would not have been incurred but for the loss to the dependent property, that too might be part of an extra expense claim under contingent business interruption. As with all other elements to these type of claims, coverage determinations hinge on the facts of each case.

Service Interruption, Civil Authority, & Ingress / Egress

Situations arising from the hurricanes of 2005 provide multiple challenges for the adjustment of business interruption claims. Three situations include: charting the effects of a utility's service interruption, calculating business closures based on orders to evacuate by civil authorities, and assessing the ability of business people and their customers to gain ingress or egress from the insured location.

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Service interruption claim evaluation arises if there was an interruption of utility service – such as water, gas, electricity or telecommunications – that prevents the insured’s business from operating. In some cases, a reduction in utility supply could trigger such a claim.

The adjuster will often begin investigation by determining if the type of utility meets the requirements of the policy language. The claim typically must arise from the service interruption being caused by a covered peril resulting in damages to the described utility service property.

Civil Authority coverage might be claimed if an insured was ordered to evacuate by the government, as happened in some parts of Louisiana due to the imminent danger being perceived from Hurricane Katrina, and in the Houston area as Rita approached.

The order typically must prohibit access to an insured’s property, and the action must be triggered by a covered cause of loss, and result in direct physical damage. Questions sometimes arise over how “prohibition” to the property is defined, and whether the order was mandatory or simply advisory. Finally, the adjuster may be asked to calculate a claim based on civil authority that resulted in prohibition of customers to the insured’s business, rather than preventing the insured from keeping its business operational.

Civil authority coverage often is an extension of the standard business interruption policy, although it may have

a stated time limit and a stated monetary sub-limit. Policy language sometimes varies as to the definition of property and the relationship of the damage to the order.

Ingress/Egress poses perhaps more direct questions of whether the insured business owner, workers at the business, suppliers or customers can access the business to keep it operational. It does not hinge on actions by civil authority, but directly addresses the question of physical access. As with civil authority coverage, policies often stipulate that there must be direct physical loss or damage resulting from a covered cause of loss in order for an ingress/egress loss to be claimed. Also similar to typical civil authority language, it may have a time limit and a monetary sub-limit stipulated in the policy.

Unique Issues

The Southeast hurricanes of 2005 challenged the insurance industry in many ways, but perhaps the most significant is the potential barrier to timely reconstruction due to the enormity of need. Those funding and overseeing the rebuilding efforts are facing significant demand surge and the complications that arise from contract nesting and subcontracting. Adjusters may need to factor these conditions into restoration timelines and costs when evaluating the time element issues of each claim.

Demand surge has become a recognized effect after any catastrophe of significant size, and becomes an even more significant factor when multiple catastrophes occur in the same region in a short period of time, making the hurricane season of 2005 indeed the “perfect storm” for this effect. In short, it is identified as the confluence of factors that combine to increase the overall cost of responding to a catastrophe. In the context of insurance claims, it can be seen both within and external to the industry.

When a large number of businesses sustain loss simultaneously, one result is a longer time to complete restoration. Problems such as availability of restoration workers, necessary services and building supplies are compounded exponentially. Adjusting the claim may take longer, as the adjuster needs to surmount hurdles such as reviewing incomplete records, securing estimates and scheduling repairs. Delays are experienced when seeking needed services, from utility work to inspections.

Restoration issues arising from demand surge may have an effect on business interruption coverage as well. Calculation of the period of restoration will at times involve extended restoration time and delays in material shipments. This may also impact the extra expense costs, as insureds

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may be forced to take additional measures to mitigate the loss over a greater period of time. Extra time at an alternate location or until business can fully resume operations may result in increased extra expense.

In order to tackle such large rebuilding needs – Hurricane Katrina alone is estimated to be the cause of 1.6 million claims¹⁶ – restoration companies large and small are working together to get the job done, and contracts between those firms sometimes increases the cost exponentially. Due to the practice of “contract nesting,” where one firm sub-contracts services to another firm, prices rise and administrative costs proliferate. In one widely reported situation after Hurricane Katrina, installing a blue tarp as a temporary roof was being billed at \$175 per

“square” by the contractor, while the fifth-tier subcontractor actually doing the work was being paid as little as \$30 per square or less for the job¹⁷.

Conclusion

While the insurance adjuster’s task of evaluating a business interruption claim is complex on just one case, the volume and complexity of the cases realized from the 2005 hurricanes presented a new level of challenge. Clear communication among all parties and thorough investigation are vital to successful execution of the insurance contract. ■



About Crawford & Company

Based in Atlanta, Georgia, Crawford & Company is the world’s largest independent provider of claims management solutions to insurance companies, and self-insured entities, with a global network of more than 700 offices in 63 countries. Major service lines include property and casualty claims management, integrated claims and medical management for workers’ compensation, legal settlement administration, including class action and warranty inspections, and risk management information services. The Company’s shares are traded on the NYSE under the symbols CRDA and CRDB.

For information on Crawford’s Business Interruption Services, contact 800.241.2541.



Business Interruption Considerations in Hurricane Claims

Below is a partial list of tools and investigation steps that could be taken by adjusters handling hurricane claims for businesses that might include an element of business interruption. This is not intended to be a comprehensive or exclusive list, and all elements might not apply to all claims.

| Coverage | | |
|--------------------------------|--|---|
| Adjusting Issue | Evaluation Tools | Investigation Elements |
| Business Interruption coverage | <ul style="list-style-type: none"> - Insured's current - Insured's proof of loss. - Company books and records. | <ul style="list-style-type: none"> - Review policy language. - Confirm physical loss to covered property by covered peril. - Record date/time of notice. - Confirm suspension (and resumption) of operations. - Review potential for overlapping coverages; segregate claims if appropriate. - Audit financials |
| Contingent BI coverage | <ul style="list-style-type: none"> - Insured's report of damage to a dependent property. - Insured's proof of loss. - Company books and records | <ul style="list-style-type: none"> - Review policy language for coverage and waiting period. - Determine status as dependent property. - Confirm damage to property. - Audit financials. |
| Extra expense coverage | <ul style="list-style-type: none"> - Site evaluation. - Insured's proof of loss. - Insured's report of actions | <ul style="list-style-type: none"> - Review policy language. - Review property status and actions proposed or taken to mitigate damage and decrease period of interruption. |
| Cause of loss | <ul style="list-style-type: none"> - Site evaluation. - Official reports of event | <ul style="list-style-type: none"> - Determine whether wind or flood caused damage. - Determine date/time of hurricane, levee breach, fire, looting, vandalism. - Consider causation: issues, facts, policy language (if any), state precedent (if any). |
| Actual loss sustained | <ul style="list-style-type: none"> - Company books and records. - Sales and expenses from historic and post-event periods | <ul style="list-style-type: none"> - Review policy language. - Request proof of loss from insured. - Audit financials. - Review makeup sales and non-continuing expenses that may offset losses. |
| Occurrence | <ul style="list-style-type: none"> - Site evaluation. - Official reports of event | <ul style="list-style-type: none"> - Review policy language and client instructions. - Consider laws of jurisdiction. - Consider individual situation. |
| Deductible | <ul style="list-style-type: none"> - Insured's current policy | <ul style="list-style-type: none"> - Consider number of occurrences to determine per cause of loss. |

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| Policy Elements | | |
|-----------------------|---|--|
| Adjusting Issue | Evaluation Tools | Investigation Elements |
| Civil authority | <ul style="list-style-type: none"> - Insured's report of evacuation and return to property. - Official notices by civil authority | <ul style="list-style-type: none"> - Review policy for scope and triggers of loss. - Verify evacuation orders and dates when given and rescinded. - Determine if access prohibited, caused by covered peril, direct physical loss/damage occurred. - Calculate waiting period based on evacuation order. - Calculate extra expense based on limits and status of each location. |
| Ingress/Egress | <ul style="list-style-type: none"> - Insured's report of loss of access and return to property. - Site inspections. - Public or news records | <ul style="list-style-type: none"> - Review policy language for locations, extent of access loss, limits and monetary sub-limits (if any). - Determine if access was prevented, direct physical damage occurred, caused by covered peril. - Determine whether access was insured's or customer's or both. |
| Service interruption | <ul style="list-style-type: none"> - Official reports of power shutoff and restoration | <ul style="list-style-type: none"> - Review policy language. - Determine if it was a covered utility, caused by covered peril, off insured premises. |
| Sue & Labor | <ul style="list-style-type: none"> - Insured's report of actions taken | <ul style="list-style-type: none"> - Review insured's actions taken to mitigate potential damage. - Audit financials. |
| Period of Restoration | <ul style="list-style-type: none"> - Timeline of significant events, such as occurrence of covered loss, subsequent actions by insured | <ul style="list-style-type: none"> - Review policy to determine scope and limits. - Consider extenuating circumstances that may affect restoration work or ability to fully resume business. |

Endnotes:

¹ “Property/Casualty Insurers Expected To Pay Wilma Victims \$6.1 Billion — Insured Catastrophe Losses Now At Record \$50.3 Billion, Says ISO’s Property Claim Services,” http://www.iso.com/press_releases/2005/11_28_05.html, accessed May 1, 2006

² “Great New Orleans Flood to Contribute Additional \$15-\$25 Billion in Private Sector Insured Losses for Hurricane Katrina, Bringing Estimated Insured Losses to \$40-\$60 Billion,” http://www.rms.com/NewsPress/PR_090205_HUKatrina_insured_update.asp, Risk Management Services, accessed May 1, 2006

³ “Hurricane Katrina: Profile of a Super Cat,” http://www.rms.com/publications/katrinareport_Lessonsandimplications.pdf, Risk Management Services, accessed May 1, 2006

⁴ <http://www.weather.gov/storms/wilma/>, report TCR-AL242005_Wilma.pdf, National Weather Service, accessed Feb. 17, 2006

⁵ <http://www.nhc.noaa.gov/2005atlan.shtml>, report TCR-LA122005_Katrina.pdf, National Weather Service, accessed Feb. 17, 2006

⁶ Research Project: Hurricane Rita, National Weather Service, <http://www.srh.noaa.gov/hgx/projects/rita05.htm>, accessed Feb. 17, 2006

⁷ Topics Geo Annual Review: Natural catastrophes 2005, 302-04772, Angelika Wirtz, Munich Re Group. Munich, Germany

⁸ A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, U.S. House of Representatives, Feb. 15, 2006

⁹ *ibid.*

¹⁰ *ibid.*

¹¹ <http://www.weather.gov/storms/wilma/>, report TCR-AL242005_Wilma.pdf, National Weather Service, accessed Feb. 17, 2006

¹² *ibid.*

¹³ Final Gulf Coast Hurricanes Situation Report (#46), www.electricity.doe.gov/documents/gulfcoast_report_012706.pdf, Jan. 26, 2006, accessed Feb. 1, 2006

¹⁴ Topics Geo Annual Review: Natural catastrophes 2005, 302-04772, Angelika Wirtz, Munich Re Group. Munich, Germany

¹⁵ “Mardi Gras Set for City Stripped of All but Pride,” <http://www.nytimes.com/2006/17/national/nationalspecial/17orleans.html>, The New York Times, Feb. 17, 2006, accessed Feb. 27, 2006

¹⁶ Topics Geo Annual Review: Natural catastrophes 2005, 302-04772, Angelika Wirtz, Munich Re Group. Munich, Germany

¹⁷ “Reconstruction efforts use ‘trickle-down’ approach,” Gordon Russell and James Varney,