

**TEXAS WINDSTORM INSURANCE ASSOCIATION
COMMERCIAL PROPERTY RATE LEVEL REVIEW
2012**

June 2011

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INTRODUCTION

The Texas Windstorm Insurance Association (TWIA) has completed studies sufficient to support rate level indications for its commercial coverages. This report documents the procedures and results of this analysis.

DISTRIBUTION AND USE

This report was prepared for internal use by the management of TWIA. A complete copy of the report may be submitted to the Texas Department of Insurance (TDI or Department) for use in the approval of a rate change. This report may also be provided to the TWIA actuarial committee. Use of this report for other than the stated purpose may not be proper and must be preceded by written authorization.

RELIANCE UPON DATA

The following data and information used in this analysis were prepared by TWIA and are the responsibility of TWIA's management:

- TWIA losses and loss adjustment expenses
- TWIA written and earned premiums
- History of rate changes impacting TWIA commercial premium
- TWIA's statutory annual statements and insurance expense exhibits.

At the time of this analysis, some of the data was unaudited. The data was reviewed for reasonableness and consistency, and the TWIA written premium and paid loss data provided for this analysis were reconciled to TWIA's annual statements.

In addition to TWIA's own data, we utilized insurance industry premium and loss data supplied by the TDI.

We also used the results of two different hurricane simulation models -- one prepared by Applied Insurance Research (AIR) and one model prepared by Risk Management Solutions (RMS). Both models utilized TWIA exposure data as of 12/31/10. TWIA has not directly verified the accuracy of these simulation models, but has relied on documentation provided directly by the modeling firms and submission documentation provided to the Florida Commission on Hurricane Loss Projection Methodology to comply with Actuarial Standard of Practice #38, "Using Models Outside the Actuary's Area of Expertise."

LIMITATIONS

The indicated rate level change as shown in this report represents a reasonable estimate of the rate level necessary to cover the TWIA's expected costs of providing commercial wind/hail coverage. The actual costs of providing commercial property coverage for a specific year may differ substantially from the indicated rate level range shown in this report. The possibility of this variability arises from the fact that the events covered by TWIA are inherently unpredictable from year to year. The indicated rate level is, however, our best estimate of the expected annual cost of providing commercial wind/hail coverage.

This actuarial report provides professional input and guidance to TWIA; however, the final decision regarding implementation and actual rate level change is a management decision.

The attached exhibits should be considered an integral part of this report.

EXECUTIVE SUMMARY

This section provides a brief synopsis of the key findings and recommendations contained in our study.

1. We have estimated the indicated total rate level change using a combination of two different methodologies for projecting the expected hurricane portion of the indicated rate level. The indicated total rate level changes are shown in Exhibit 1 and the following table:

Indicated Rate Change: Long Term Hurricane Methodologies

Hurricane Projection Methodology	Indicated Rate Change
Actual Experience and Models Combined	+35%
Actual Industry Experience	+34%
Hurricane Simulation Models	+35%

The indicated rate change shown is based on a combination of actual industry experience and hurricane simulation models. The indications based on each of these methodologies alone are also shown for reference. All methodologies use a long-term approach to develop the hurricane portion of the indicated rate level.

The hurricane simulation models utilized are widely used for insurance company catastrophe management and ratemaking. Versions of these simulation models have undergone verification by and been approved by the Florida Commission on Hurricane Loss Projection Methodology.

2. The indicated rate level change includes different hurricane projection methodologies. The different methods were used because the actuarial methods used to incorporate hurricane losses into rate indications are still evolving. Traditionally, actuarial methods have been based on insurance industry hurricane loss experience. More recently, actuarial methods have incorporated the results of hurricane simulation models to minimize the weaknesses of the traditional approaches.

The method using actual industry experience relies on a more traditional approach and is based on 41 years of actual insurance industry premiums and losses and 160 years of actual hurricane experience. This method possesses the advantage of finding broader regulatory acceptance in many states (including Texas). The alternate method incorporates the results of hurricane simulation models. This has the advantage of minimizing many of the theoretical weaknesses of the traditional actuarial methodologies. The overall indication assigns equal weight to these hurricane projection methodologies.

3. The current rate indication is 2% less than the corresponding indication from the prior TWIA commercial rate study. Slightly increased expected losses are offset by a 5% rate increase, resulting in a lower overall rate indication.

Details on the key differences between the current and prior rate indications are described in the Analysis section of this report.

4. The indicated rate changes presented in this report reflect a separate provision for contributions to the catastrophe reserve trust fund. The provision for the catastrophe trust fund is 20% of TWIA premium. The 20% provision is necessary to continue to rebuild the fund, which was completely depleted in order to pay losses associated with 2008 hurricanes. The provision has been increased from 15% to reflect a greater need for contributions.

The provision for reinsurance expense is 18.3% of TWIA premium. The provision for reinsurance expense reflects the estimated actual net cost of purchasing catastrophe reinsurance (reinsurance premiums paid net of the expected reduction in TWIA retained losses). Catastrophe reinsurance provides TWIA with annually renewable protection against large storm losses.

ACTUARIAL ANALYSIS

Overview of Analysis

The goal of the rate level adequacy review is to compare the current rate level to TWIA's expected costs for providing commercial property insurance coverage. This comparison is achieved by estimating the projected loss, loss adjustment expense (LAE), and fixed expense ratio for a prospective accident year and then comparing this ratio to the "permissible" loss, LAE, and fixed expense ratio. The permissible ratio is the portion of premium remaining to pay loss, LAE, and fixed expenses after payment of TWIA variable expenses. If the projected ratio is higher than the permissible ratio, then a rate increase is indicated. If the projected ratio is lower than the permissible, then a rate decrease is indicated.

The steps employed to estimate the projected loss, LAE, and fixed expense ratio are as follows:

1. Adjust historical premium to the current rate level (to facilitate calculation of historical loss ratios at current rates).
2. Determine LAE factors to add projected LAE to projected loss.
3. Estimate the projected non-hurricane loss and LAE ratio.
4. Estimate the projected hurricane loss and LAE ratio.
5. Estimate the projected fixed expense ratio.
6. Sum the projected non-hurricane and hurricane loss ratios and the projected fixed expense ratio to obtain the projected total loss, LAE, and fixed expense ratio.

The steps employed to determine the permissible loss and LAE ratio are as follows:

- (a) Analyze historical variable expense to premium ratios to estimate the projected total variable expense ratio.
- (b) Subtract the projected total variable expense ratio from 1.00 to derive the variable permissible loss and LAE ratio.

Steps 1-5 and (a)-(b) are described in more detail in the remainder of this report.

Earned Premium at Current Rates

Historical TWIA written premium is adjusted to the current rate level and adjusted to an earned basis based on a uniform monthly earning assumption. Earned premium at current rates for prior years permits the calculation of historical loss ratios at the current rate level. Exhibit 10 shows the calculation of earned premium at current rates.

Loss Adjustment Expense Factors

In Exhibit 4, the historical ratio of LAE to loss is analyzed to develop LAE factors. Separate LAE factors are developed for hurricane and non-hurricane losses. The hurricane LAE factors are developed based on the LAE to loss ratio for years with hurricanes. The non-hurricane LAE factors are developed based on the ratio for years without hurricanes. TWIA statutory annual statement incurred loss and LAE data is utilized to derive these ratios.

The indicated LAE to loss ratios are shown in Exhibit 4, Sheet 1. For hurricane losses, the indicated LAE ratio of 0.126 is equal to the weighted average of the nine hurricane years included in the analysis. For non-hurricane losses, the indicated ratio of 0.358 is equal to the weighted average of the most recent 10 non-hurricane years included in the analysis.

The development of these LAE factors is necessary to add LAE to the projected hurricane and non-hurricane loss ratios. The development of loss ratios is described in the following sections.

Projected Non-Hurricane Loss and LAE Ratio

Exhibit 2 shows the development of the projected non-hurricane loss and LAE ratio. The loss portion of this ratio is estimated by comparing the indicated ultimate non-hurricane loss for accident years 2001-2010 to the earned premium at current rates for the same ten years. The indicated ultimate non-hurricane loss for each year is based on actual paid loss as of 12/31/10 and the paid loss development method. LAE is then added to each year's ultimate loss through the non-hurricane LAE factor developed in Exhibit 4. The first quarter of 2011 was included to reflect an abnormally large non-hurricane event.

Paid loss development factors are selected based on both the current average of all available years and the prior selection. Given the positive skewness of the observed age-to-age development factors, a straight average may be more preferable than an average excluding the highest and lowest observation to avoid understating the expected development.

Each year's estimated ultimate loss and LAE is compared to the earned premium at present rates.

The resulting loss and LAE ratios are then trended forward to the expected prospective inflation level. The net trend factor is equal to a loss trend offset by a premium trend. The loss trend is calculated using industry-wide construction cost and consumer price indices. Premium trend is derived from historical changes in average earned premium at present rates. Both premiums and losses are trended to current levels by applying the actual, historical changes in the appropriate data. Future premium and loss trends are selected based on all available and relevant data. Because the selected trends are estimates of the future trend between the current and prospective earned and accident dates, and because they are not used to trend historical experience to current premium and loss levels, it may not be necessary to use experience only from periods where both premium and loss data are available.

The resulting loss and LAE ratios for each accident year from 2001-2010 and the accident quarter ending 3/31/11 form the basis for the indicated projected loss and LAE ratio. The indicated loss and LAE ratio equals the premium-weighted average ratio from the 2001-2011 accident period. This method gives greater weight to more recent years due to TWIA's growth. Given the greater credibility normally associated with more recent experience and the potentially significant change in TWIA's commercial book of business due to the growth, this weighting may be more appropriate than a non-weighted average across all years.

Projected Hurricane Loss and LAE Ratio

Two different methods are used to develop the projected hurricane loss and LAE ratios. The first method is based on insurance industry and meteorological hurricane experience for the last 41 and 160 years, respectively. The other method is based on hurricane simulation models. The "41/160-year" method is utilized because the Texas Insurance Code required until recently the consideration of a 30-year minimum experience period. The simulation method is utilized because it minimizes many of the theoretical weaknesses of the historical method. These weaknesses include:

- A 41-year period is insufficient to measure long-term hurricane intensity.
- A 41-year period of insurance industry experience includes years where land use, population densities, construction techniques and materials, engineering techniques and building codes were different than today. These differences diminish the relevance of insurance data from several decades ago in evaluating today's commercial property rates.

Differences between the two methods are the result of expected variances in the frequency and severity of hurricanes, and fundamental differences between the aggregate historical industry exposures and current TWIA exposures. Because of the readily identifiable nature of hurricanes, there should be no over- or understatement of expected losses resulting from either method.

For each method, the projected hurricane loss ratio is estimated first. LAE is added to each loss ratio using the hurricane LAE factor developed in Exhibit 4. Each method's development of the projected hurricane loss ratio is described as follows:

Actual 41/160-Year Industry Hurricane Experience

In Exhibit 6, Texas insurance industry seacoast dwelling extended coverage experience for the 1970-2010 period is used in the development of a projected hurricane loss ratio. For each year, insurance industry loss ratios at current rates are calculated using information provided by the TDI. For the years where sufficient detail is available (1980-2010), these loss ratios are adjusted to TWIA's rate level and re-weighted based on the TWIA's current premium distribution by territory within the seacoast area.

A projected hurricane loss ratio is developed from these 41 years of loss ratios by separating the 41 years into the twelve hurricane years and twenty-nine non-hurricane years. The 29 non-hurricane years are used to develop an estimated non-hurricane loss ratio.

Hurricane loss ratios are then estimated by subtracting the non-hurricane loss ratio from the total loss ratio in each of the twelve hurricane years. An average hurricane loss ratio for hurricane years is calculated as the average of the twelve hurricane loss ratios: 119.0%.

The 41-year period that underlies the selected hurricane loss ratio has experienced significantly fewer hurricanes than the long-term average. As shown in Exhibit 9, the annual hurricane frequency during this 41-year period is 0.315, while the annual frequency during the most recent 160-year period is 0.394. The 41-year period represents all years for which TWIA has been provided industry data by TDI. Because the expected frequency of hurricanes is unrelated to the availability of insurance industry data, there is no reason to use only the most recent 41-year period to estimate the expected frequency of hurricane activity. Given the relatively infrequent occurrence of hurricanes, the largest possible experience period should be considered in order to obtain the most credible result. The selected hurricane frequency is therefore set equal to the 160-year historical hurricane frequency. As shown in Exhibit 6, Sheet 1, multiplying the selected loss ratio for hurricane years by the selected hurricane frequency yields a projected hurricane loss ratio of 46.9%.

Hurricane Simulation Models

The projected hurricane loss ratio is determined by averaging two different hurricane simulation models: AIR CLASIC/2 v12.0 and RMS RiskLink v11.0. Both models were run using exposure data provided by TWIA as of 12/31/2010. This exposure data included location-level detail including physical characteristics of each risk and all relevant coverages. Both models were run using historical (long-term) event rates and both results include loss amplification (demand surge) and exclude storm surge and loss adjustment expenses. A separate provision for storm surge was included, equal to 10% of the increase in modeled average annual losses due to the inclusion of storm surge in the model output. The AIR and RMS models generated 4,741 and 9,772 unique events, respectively, with the following distribution of intensity ratings:

Saffir-Simpson Category	AIR	RMS
Category 0	709	29.2%
Category 1	1,648	14.9%
Category 2	1,060	7.0%
Category 3	914	7.5%
Category 4	361	2.6%
Category 5	49	0.3%

The intensity at first landfall is shown for AIR events. RMS event sets display multiple landfall intensities and locations and include a frequency rate for each event. The total frequency for events of each intensity is shown with the intensity most relevant to Texas exposures. Events shown as Category 0 include bypassing events and events making landfall in neighboring states or Mexico in addition to Cat 0 events that make landfall in TX.

As shown in Exhibits 7 and 8, these models yield projected hurricane loss ratios of 45.7% and 47.8%. The average of these loss ratios is 46.8%.

Fixed Expenses and Variable Permissible Loss and LAE Ratio

Exhibit 11 shows the expense assumptions used to develop the projected fixed expense ratio and the variable permissible loss and LAE ratio. Fixed expenses include general expenses and the net cost of reinsurance. The sum of these projected expenses provides for a 22.6% fixed expense ratio. Variable expenses include commission, taxes, and catastrophe trust fund contribution. Subtracting these expenses from 100% yields a variable permissible loss and LAE ratio of 62.2%.

As stated above, the expenses include a provision for an annual contribution to the catastrophe reserve trust fund and for the projected net cost of TWIA's purchasing of reinsurance. The 20% provision for the trust fund contribution is intended to permit the redevelopment of the catastrophe reserve trust fund to reduce the potential for future year surcharges on TWIA and coastal insurance policies and assessments to TWIA members. The 18.3% provision for reinsurance expense reflects the estimate net actual cost of purchasing reinsurance (reinsurance premiums net of the expected reduction in TWIA retained losses). TWIA's purchasing of reinsurance provides additional current year protection to TWIA and coastal policyholders and TWIA members.

Indicated Rate Change

Exhibit 1 summarizes the indicated rate change using a combination of the two hurricane loss ratio projection methods. The individual indications resulting from the use of each methodology are also shown for reference. The indicated rate change for each method is calculated by dividing the total projected loss, LAE, and fixed expense ratio by the variable permissible loss

and LAE ratio. This method of calculating the indicated rate change assumes that TWIA's variable expenses vary proportionally with premium while the fixed expenses do not.

Data Issues

Reconciliation of Data to TWIA's Annual Statements

Exhibit 12, Sheets 1 and 2 show a reconciliation of the TWIA premium and loss data used in this report (ratemaking data) to TWIA's annual statements. Sheet 1 reconciles paid loss data by accident year; Sheet 2 reconciles written premium data by calendar year.

The paid loss reconciliation shows small differences between the ratemaking paid loss data and the annual statement data for all accident years except 2005 and 2008 where relatively larger differences are indicated.

The written premium reconciliation shows the differences between the ratemaking written premium data and the annual statement data for calendar years 1990-2008. Differences of less than 1% exist for each year except 2010.

Key Differences Versus Prior Indications

The indicated rate change shown in this report is 2% less than the comparable indication based on the prior (August 2010) study. The reasons for the higher indications are summarized in the following table.

Reconciliation of Current vs. Prior Indications

Rate Indication/Reason for Change	Impact of Change	Rate Indication
<i>Previous Rate Indication (Combined Method)</i>		+37%
TWIA Rate Level	-7%	
Change in Experience Period	+5%	
<i>Current Rate Indication (Combined Method)</i>	-2%	+35%

These reasons are discussed below:

TWIA Rate Level

The TWIA rate level increased 5% as a result of the most recent rate filing.

Change in Experience Period

Using a more recent experience period increased the indicated rate change by 5 points. This is due to increases in both catastrophe and non-catastrophe losses and a shift in expenses from variable to fixed with the purchase of reinsurance.

FINANCIAL ANALYSIS

In recognition of recent changes to TWIA funding, a financial analysis was completed in order to determine whether projected net premium income would be sufficient to cover ongoing costs and the potentially sizable fixed premium income requirements of any public securities issued.

This analysis is shown on Exhibit 13. Projected written and earned premiums for 2012 are compared to projected ongoing costs, including non-catastrophe losses and loss adjustment expenses, general operating expenses, reinsurance, commissions, and premium taxes. This comparison is made assuming both current and proposed rate levels. The resulting net premium income is compared to current estimates of the net required premium and net debt service for \$1 billion in Class 1 public securities.

Current rate levels result in projected net premium income below the range of estimated costs. Current and proposed rate levels would result in insufficient net required premium to issue the entire \$1 billion of Class 1 public securities. Proposed rate levels would be sufficient to support between \$766 and \$951 million in Class 1 public securities.

SUMMARY OF EXHIBITS

<u>Exhibit Number</u>	<u>Exhibit Title or Purpose</u>
1	Summary of Indicated Rate Change
2	Projected Ultimate Non-Hurricane Loss & LAE Ratio
3	Paid Loss Development Factors and Premium and Loss Trend Analysis
4	Development of LAE Factor
5	Summary of Indicated Hurricane Loss & LAE Ratios
6	Development of Hurricane Loss Ratio – 39/158-Year Method
7	Hurricane Loss Ratio – AIR Model
8	Hurricane Loss Ratio – RMS Model
9	Texas Hurricanes 1899-2008
10	Earned Premium at Present Rates
11	Fixed Expenses and Variable Permissible Loss & LAE Ratios
12	Reconciliation of Premium Data to Annual Statement
13	Analysis of Current and Proposed Net Premium Income

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Summary of Indicated Rate Change
By Method for Projecting Hurricane Loss & LAE

Exhibit 1

Hurricane Projection Method	Indicated Loss & LAE Ratio			Fixed Expenses Total	Variable Permissible LLAE Ratio	Indicated Rate Change	Proposed Rate Change
	Hurricane	Non-Hurricane					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Using Experience and Models	53.1%	8.1%	22.6%	83.8%	62.2%	+35%	+5.0%
Using Actual Industry Experience	52.8%	8.1%	22.6%	83.5%	62.2%	+34%	
Using Hurricane Models	53.3%	8.1%	22.6%	84.0%	62.2%	+35%	

Notes:

- (2) Exhibit 5
- (3) Exhibit 2, Sheet 1
- (4) Exhibit 11
- (5) = (2) + (3) + (4)
- (6) Exhibit 11
- (7) = (5) / (6) - 1
- (8) Selected

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Projected Ultimate Non-Hurricane Loss & LAE Ratio

Accident Year	Ultimate Non-Hurricane Loss	LAE Factor	Net Trend Factor	Projected Non-Hurricane Loss & LAE	Earned Premium at Current Rate Level	Indicated Non-Hurricane Loss & LAE Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2001	1,042,867	0.358	0.729	1,032,420	38,156,141	2.7%
2002	8,023,090	0.358	0.794	8,650,913	43,251,253	20.0%
2003	5,948,354	0.358	0.830	6,704,628	50,653,546	13.2%
2004	619,079	0.358	0.773	649,868	52,265,493	1.2%
2005	3,357,949	0.358	0.688	3,137,345	52,536,826	6.0%
2006	1,535,595	0.358	0.784	1,634,905	80,516,404	2.0%
2007	1,260,327	0.358	1.121	1,918,618	124,593,152	1.5%
2008	1,087,304	0.358	1.086	1,603,543	130,707,150	1.2%
2009	2,426,222	0.358	0.990	3,261,861	118,837,885	2.7%
2010	7,159,891	0.358	0.961	9,343,930	112,724,160	8.3%
2011 / 1	22,044,567	0.358	0.970	29,038,426	25,811,133	112.5%
Total	54,505,245			66,976,457	830,053,143	8.1%

Notes:

- (2) Exhibit 2, Sheet 2
- (3) Exhibit 4, Sheet 1
- (4) = Exhibit 2, Sheet 4
- (5) = (2) * [1 + (3)] * (4)
- (6) Exhibit 10, Sheet 1
- (7) = (5) / (6)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Projected Ultimate Non-Hurricane Loss

Exhibit 2
 Sheet 2

Accident Year	TWIA Non-Hurricane Paid Loss	Development Factor	Ultimate Non-Hurricane Loss
(1)	(2)	(3)	(4)
2001	1,042,867	1.000	1,042,867
2002	8,023,090	1.000	8,023,090
2003	5,948,354	1.000	5,948,354
2004	619,079	1.000	619,079
2005	3,357,949	1.000	3,357,949
2006	1,517,386	1.012	1,535,595
2007	1,230,788	1.024	1,260,327
2008	1,041,479	1.044	1,087,304
2009	2,288,889	1.060	2,426,222
2010	4,488,960	1.595	7,159,891
2011 / 1	7,293,971	3.022	22,044,567
Total	36,852,812		54,505,245

Notes:

- (2) Exhibit 2, Sheet 3, as of 12/31/10
- (3) Exhibit 3, Sheet 1
- (4) = (2) * (3)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Summary of TWIA Historical Paid Loss as of 12/31/10

Accident Year	Paid Loss Excluding Expense			Total
	Non-Hurricane (1)	Hurricane (2)	Hurricane (3)	
2001	1,042,867		0	1,042,867
2002	8,023,090		0	8,023,090
2003	5,948,354		5,905,206	11,853,560
2004	619,079		0	619,079
2005	3,357,949		67,951,559	71,309,508
2006	1,517,386		0	1,517,386
2007	1,230,788		4,358,848	5,589,636
2008	1,041,479		671,608,377	672,649,856
2009	2,288,889		0	2,288,889
2010	4,488,960		0	4,488,960
2011 / 1	7,293,971		0	7,293,971
Total	36,852,812		749,823,990	786,676,802

Notes:

- (2), (3) Provided by TWIA, includes commercial and farm
- (4) = (2) + (3)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Calculation of Net Trend Factors

Year / Quarter	Average EPPR		
(1)	(2)	(3) Current Average Earned Date	7/1/2010
2003 / 4	5,464.98	(4) Current Average Accident Date	7/1/2010
2004 / 4	5,332.56	(5) Prospective Average Earned / Accident Date	1/1/2013
2005 / 4	5,037.83	(6) Premium Trend Length	2.500
2006 / 4	6,094.88	(7) Loss Trend Length	2.500
2007 / 4	9,100.86	(8) Selected Premium Trend	5.7%
2008 / 4	9,005.24	(9) Selected Loss Trend	4.0%
2009 / 4	8,464.71		
2010 / 4	8,318.33		

Accident Year	Current Premium Trend	Current Loss Trend	Prospective Premium Trend	Prospective Loss Trend	Net Trend Factor
(10)	(11)	(12)	(13)	(14)	(15)
2001	1.700	1.290	1.148	1.103	0.729
2002	1.609	1.329	1.148	1.103	0.794
2003	1.522	1.315	1.148	1.103	0.830
2004	1.560	1.255	1.148	1.103	0.773
2005	1.651	1.182	1.148	1.103	0.688
2006	1.365	1.114	1.148	1.103	0.784
2007	0.914	1.066	1.148	1.103	1.121
2008	0.924	1.044	1.148	1.103	1.086
2009	0.983	1.013	1.148	1.103	0.990
2010	1.000	1.000	1.148	1.103	0.961
2011 / 1	0.966	0.976	1.109	1.066	0.970

Notes:

- (2) Exhibit 3, Sheet 2 (10)
- (3) Latest Year / Quarter Ending Date - 6 Months
- (4) Latest Accident Year Ending Date - 6 Months
- (5) Rate Effective Date + 12 Months
- (6) = (5) - (3)
- (7) = (5) - (4)
- (8) Exhibit 3, Sheet 2
- (9) Exhibit 3, Sheet 3a
- (11) = (2) Indexed to 2010 / 4
- (12) Exhibit 3, Sheet 3a
- (13) = [1 + (8)] ^ (6)
- (14) = [1 + (9)] ^ (7)
- (15) = [(12) * (14)] / [(11) * (13)]

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Paid Loss Development Factors
TWIA Commercial Property Paid Loss

Accident Year	<u>Months of Development</u>							
	12 (1)	24 (2)	36 (3)	48 (4)	60 (5)	72 (6)	84 (7)	(8)
2001		803	1,043	1,043	1,043	1,043	1,043	1,043
2002		4,500	7,776	7,828	7,843	7,843	8,023	8,023
2003		3,841	4,824	4,917	5,548	5,948	5,948	5,948
2004		261	619	619	619	619	619	619
2005		2,400	2,965	3,122	3,122	3,123	3,358	
2006		1,208	1,517	1,517	1,517	1,517		
2007		1,095	1,225	1,231	1,231			
2008		953	1,041	1,041				
2009		706	2,289					
2010		4,489						

Accident Year	<u>Development Factors</u>							
	12 - 24 (1)	24 - 36 (2)	36 - 48 (3)	48 - 60 (4)	60 - 72 (5)	72 - 84 (6)	84 - Ult (7)	(8)
2001		1.299	1.000	1.000	1.000	1.000	1.000	
2002		1.728	1.007	1.002	1.000	1.023	1.000	
2003		1.256	1.019	1.128	1.072	1.000	1.000	
2004		2.372	1.000	1.000	1.000	1.000	1.000	
2005		1.235	1.053	1.000	1.000	1.075		
2006		1.256	1.000	1.000	1.000			
2007		1.119	1.005	1.000				
2008		1.092	1.000					
2009		3.242						
Average		1.668	1.012	1.019	1.012	1.020	1.000	
Avg x hi / lo		1.466	1.005	1.000	1.000	1.008	1.000	
Avg 3 Year		1.818	1.002	1.000	1.000	1.025	1.000	
Avg 5 Year		1.589	1.012	1.026	1.014	1.020	1.000	
Prior		1.341	1.019	1.020	1.012	1.004	1.000	1.000
Selected		1.504	1.015	1.019	1.012	1.012	1.000	1.000
Cumulative		1.595	1.060	1.044	1.024	1.012	1.000	1.000

Notes:

Provided by TWIA, includes commercial and farm,
excludes hurricanes Brett (1999), Claudette (2003), Rita (2005), Humberto (2007), Dolly (2008), and Ike (2008)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Premium Trend Analysis
TWIA Commercial Earned Premium at Present Rates

Year / Quarter	Policies In-Force	Annualized		On- Level Factors	Premium at Present Rates		Earned Premium at Present Rates		Exponential Fitted Trends			
		In-Force	Written Premium		Written	Earned	Annualized	Average	All-Year	5-Year	4-Year	3-Year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2002 / 2	8,496		6,181,405	2.002	12,377,838	10,046,138						
2002 / 3	8,985		7,087,479	2.002	14,192,189	10,497,642						
2002 / 4	9,173		6,974,464	2.002	13,965,885	11,320,965						
2003 / 1	9,099		5,004,518	1.820	9,110,185	12,190,972	44,055,717					
2003 / 2	9,293	9,038	7,547,687	1.820	13,739,749	12,654,168	46,663,747	5,163.13	4,792.98			
2003 / 3	9,750	9,233	9,496,368	1.820	17,287,113	13,164,579	49,330,684	5,342.79	4,906.29			
2003 / 4	9,685	9,393	7,171,941	1.820	13,055,744	13,321,458	51,331,177	5,464.98	5,022.27			
2004 / 1	9,741	9,537	6,062,906	1.655	10,033,514	13,468,785	52,608,990	5,516.30	5,141.00			
2004 / 2	9,920	9,696	8,567,448	1.655	14,178,286	13,599,711	53,554,534	5,523.58	5,262.53			
2004 / 3	10,414	9,857	8,856,719	1.655	14,657,001	13,346,141	53,736,095	5,451.57	5,386.94			
2004 / 4	10,224	10,007	7,522,250	1.655	12,448,585	12,950,311	53,364,948	5,332.56	5,514.29			
2005 / 1	10,081	10,117	6,935,919	1.504	10,434,786	12,861,176	52,757,339	5,214.59	5,644.64			
2005 / 2	10,246	10,201	9,692,929	1.504	14,582,587	12,826,135	51,983,762	5,096.20	5,778.08			
2005 / 3	10,774	10,286	10,442,876	1.504	15,710,850	13,177,390	51,815,011	5,037.31	5,914.68			
2005 / 4	10,612	10,380	8,668,450	1.504	13,041,304	13,426,766	52,291,467	5,037.83	6,054.50			
2006 / 1	10,934	10,535	9,902,054	1.433	14,187,816	13,791,483	53,221,775	5,051.96	6,197.63	5,718.51		
2006 / 2	11,549	10,804	17,237,202	1.433	24,697,729	15,334,143	55,729,783	5,158.08	6,344.14	5,943.22		
2006 / 3	12,793	11,220	24,440,342	1.393	34,047,590	18,866,380	61,418,773	5,474.23	6,494.11	6,176.75		
2006 / 4	13,096	11,783	25,268,242	1.327	33,522,896	23,820,882	71,812,889	6,094.88	6,647.63	6,419.46		
2007 / 1	13,411	12,403	19,686,271	1.279	25,185,536	27,874,472	85,895,878	6,925.62	6,804.78	6,671.71	8,432.05	
2007 / 2	14,304	13,057	33,066,784	1.279	42,303,831	31,240,186	101,801,921	7,796.96	6,965.65	6,933.87	8,449.64	
2007 / 3	15,538	13,744	34,446,242	1.279	44,068,634	35,328,735	118,264,275	8,604.71	7,130.32	7,206.33	8,467.26	
2007 / 4	15,183	14,348	23,752,007	1.279	30,387,016	36,136,937	130,580,330	9,100.86	7,298.88	7,489.50	8,484.92	
2008 / 1	14,702	14,770	17,918,473	1.240	22,223,662	35,611,005	138,316,864	9,364.48	7,471.42	7,783.80	8,502.61	9,321.47
2008 / 2	14,503	14,957	29,792,537	1.214	36,162,181	34,691,024	141,767,701	9,478.59	7,648.04	8,089.66	8,520.34	9,212.67
2008 / 3	15,155	14,934	31,242,113	1.214	37,921,677	32,171,119	138,610,085	9,281.74	7,828.84	8,407.54	8,538.11	9,105.15
2008 / 4	14,627	14,816	19,084,269	1.214	23,164,486	30,950,746	133,423,894	9,005.24	8,013.92	8,737.90	8,555.92	8,998.88
2009 / 1	14,095	14,671	22,603,019	1.094	24,736,494	29,943,659	127,756,548	8,708.18	8,203.37	9,081.25	8,573.76	8,893.85
2009 / 2	13,834	14,511	31,063,838	1.050	32,617,030	29,882,858	122,948,382	8,472.55	8,397.29	9,438.10	8,591.64	8,790.04
2009 / 3	14,050	14,290	34,959,552	1.050	36,707,530	29,912,515	120,689,778	8,445.97	8,595.80	9,808.96	8,609.56	8,687.45
2009 / 4	13,862	14,056	22,643,071	1.050	23,775,225	29,239,821	118,978,853	8,464.71	8,799.01	10,194.40	8,627.51	8,586.05
2010 / 1	13,510	13,887	21,743,758	1.050	22,830,946	29,157,570	118,192,764	8,510.96	9,007.02	10,594.98	8,645.50	8,485.84
2010 / 2	13,517	13,774	30,585,736	1.050	32,115,023	28,911,779	117,221,685	8,510.13	9,219.94	11,011.30	8,663.53	8,386.80
2010 / 3	13,793	13,703	30,105,285	1.050	31,610,549	27,929,293	115,238,464	8,409.96	9,437.90	11,443.99	8,681.60	8,288.91
2010 / 4	13,494	13,625	19,736,774	1.050	20,723,613	27,334,381	113,333,024	8,318.33	9,661.01	11,893.67	8,699.70	8,192.17
(14) Average Annual Change									9.8%	16.7%	0.8%	-4.6%
(15) Correlation Coefficient									72.3%	47.4%	1.7%	80.9%
(16) Selected Premium Trend												5.7%

- Notes:
- (2) Provided by TWIA
 - (3) Calculated from (2) using uniform quarterly earning assumption
 - (4) Provided by TWIA
 - (5) Factor to bring written premium to current rate level
 - (6) = (4) * (5) Indexed to 2009 / 4
 - (7) Calculated from (6) using uniform monthly earning assumption
 - (8) = Sum of (7) for prior 4 quarters
 - (9) = (8) / (3)
 - (10) - (13) = (9) fitted to an exponential distribution, excluding 2007 / 2 - 2007 / 4
 - (14) Fitted average annual change, excluding 2007 / 2 - 2007 / 4
 - (15) Evaluates the predictability of the fitted curve
 - (16) Selected based on judgment

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Loss Trend Analysis
Summary of Indices and Calculation of Prospective Loss Costs

Calendar Year Ending 12/31/xx	Commercial		Residential		Modified CPI	Weighted Average
	Statewide Boeckh	Coastal Boeckh	Statewide Boeckh	Coastal Boeckh		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2001			1.333	1.361	1.078	1.290
2002	1.386	1.411	1.317	1.344	1.081	1.329
2003	1.371	1.392	1.282	1.311	1.084	1.315
2004	1.295	1.320	1.200	1.224	1.060	1.255
2005	1.208	1.228	1.149	1.170	1.043	1.182
2006	1.129	1.146	1.079	1.094	1.019	1.114
2007	1.076	1.088	1.037	1.051	0.998	1.066
2008	1.052	1.063	1.025	1.035	0.988	1.044
2009	1.009	1.017	1.007	1.013	1.000	1.013
2010	1.000	1.000	1.000	1.000	1.000	1.000

Factors to Adjust For Prospective Loss Costs

(8) Fitted Trend	4.9%	5.1%	2.4%	2.7%	0.7%	4.0%
(9) Cost Factor	1.128	1.133	1.061	1.070	1.017	1.103

Notes:

- (2) = Exhibit 3, Sheet 3b trended forward to 12/31/2010
- (3) = Exhibit 3, Sheet 3c trended forward to 12/31/2010
- (4) = Residential Exhibit 3, Sheet 3b trended forward to 12/31/2010
- (5) = Residential Exhibit 3, Sheet 3c trended forward to 12/31/2010
- (6) = Exhibit 3, Sheet 3d
- (7) = 25% CPI and 75% Boeckh (most appropriate available by year)
- (8) = (2) - (7) fitted to an exponential curve using 5 years' data (where available)
- (9) = [1 + (8)] ^ 2.5 (trended from 7/1/2010 to 1/1/2013)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Loss Trend Analysis
Boeckh Commercial Construction Index Trend (Statewide)

Calendar Year Ending	Texas Statewide Index	Fitted Trends	
		All Years Linear	Exponential
(1)	(2)	(3)	(4)
3/31/2001			
6/30/2001			
9/30/2001			
12/31/2001			
3/31/2002			
6/30/2002			
9/30/2002			
12/31/2002	1554.85	1516.04	1533.41
3/31/2003	1558.35	1538.30	1552.01
6/30/2003	1562.12	1560.56	1570.83
9/30/2003	1565.36	1582.81	1589.89
12/31/2003	1572.48	1605.07	1609.17
3/31/2004	1582.33	1627.33	1628.69
6/30/2004	1598.22	1649.59	1648.45
9/30/2004	1625.89	1671.85	1668.44
12/31/2004	1664.08	1694.10	1688.68
3/31/2005	1702.58	1716.36	1709.16
6/30/2005	1737.67	1738.62	1729.90
9/30/2005	1763.94	1760.88	1750.88
12/31/2005	1784.92	1783.14	1772.12
3/31/2006	1809.91	1805.39	1793.61
6/30/2006	1838.89	1827.65	1815.37
9/30/2006	1872.87	1849.91	1837.39
12/31/2006	1908.61	1872.17	1859.68
3/31/2007	1939.13	1894.43	1882.23
6/30/2007	1964.32	1916.68	1905.07
9/30/2007	1986.91	1938.94	1928.17
12/31/2007	2002.86	1961.20	1951.56
3/31/2008	2014.68	1983.46	1975.23
6/30/2008	2026.83	2005.72	1999.19
9/30/2008	2036.42	2027.97	2023.44
12/31/2008	2048.86	2050.23	2047.99
3/31/2009	2067.48	2072.49	2072.83
6/30/2009	2089.43	2094.75	2097.97
9/30/2009	2113.66	2117.01	2123.42
12/31/2009	2135.53	2139.26	2149.18
3/31/2010	2157.39	2161.52	2175.25
6/30/2010	2169.76	2183.78	2201.63
9/30/2010	2169.47	2206.04	2228.34
12/31/2010	2155.75	2228.30	2255.37
Annual Trend		4.0%	4.9%
R-Squared		0.980	0.973

Notes:

- (2) = Average Index for Austin, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, Odessa, and San Antonio
- (3) - (4) = (2) fitted to linear and exponential distributions

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review

Loss Trend Analysis
 Boeckh Commercial Construction Index Trend (Coastal)

Calendar Year Ending	Texas Coastal Index	Fitted Trends	
		All Years Linear	Exponential
(1)	(2)	(3)	(4)
3/31/2001			
6/30/2001			
9/30/2001			
12/31/2001			
3/31/2002			
6/30/2002			
9/30/2002			
12/31/2002	1567.59	1522.14	1541.85
3/31/2003	1573.22	1545.58	1561.26
6/30/2003	1578.68	1569.02	1580.92
9/30/2003	1581.86	1592.46	1600.82
12/31/2003	1588.21	1615.90	1620.98
3/31/2004	1597.26	1639.33	1641.39
6/30/2004	1611.74	1662.77	1662.05
9/30/2004	1638.59	1686.21	1682.98
12/31/2004	1675.10	1709.65	1704.17
3/31/2005	1713.04	1733.08	1725.62
6/30/2005	1748.40	1756.52	1747.35
9/30/2005	1775.70	1779.96	1769.35
12/31/2005	1800.08	1803.40	1791.62
3/31/2006	1828.22	1826.83	1814.18
6/30/2006	1858.44	1850.27	1837.02
9/30/2006	1894.75	1873.71	1860.15
12/31/2006	1930.37	1897.15	1883.57
3/31/2007	1959.70	1920.58	1907.28
6/30/2007	1988.13	1944.02	1931.29
9/30/2007	2013.31	1967.46	1955.61
12/31/2007	2031.76	1990.90	1980.23
3/31/2008	2045.54	2014.33	2005.16
6/30/2008	2059.06	2037.77	2030.41
9/30/2008	2067.44	2061.21	2055.97
12/31/2008	2081.19	2084.65	2081.85
3/31/2009	2102.26	2108.09	2108.06
6/30/2009	2124.60	2131.52	2134.60
9/30/2009	2151.09	2154.96	2161.48
12/31/2009	2174.31	2178.40	2188.69
3/31/2010	2197.54	2201.84	2216.25
6/30/2010	2214.43	2225.27	2244.15
9/30/2010	2222.87	2248.71	2272.40
12/31/2010	2211.36	2272.15	2301.01
Annual Trend		4.1%	5.1%
R-Squared		0.984	0.977

Notes:
 (2) = Average Index for Corpus Christi and Houston
 (3) - (4) = (2) fitted to linear and exponential distributions

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Loss Trend Analysis
Modified Consumer Price Index - External Trend

Calendar Year Ending	Modified CPI	Fitted Trends		5 Years		4 Years		3 Years	
		All Years Linear	Exponential	Linear	Exponential	Linear	Exponential	Linear	Exponential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
9/30/2000	163.61	162.01	162.20						
12/31/2000	164.37	162.50	162.66						
3/31/2001	165.07	162.99	163.12						
6/30/2001	165.68	163.48	163.58						
9/30/2001	165.69	163.96	164.05						
12/31/2001	165.84	164.45	164.51						
3/31/2002	165.55	164.94	164.98						
6/30/2002	165.22	165.43	165.45						
9/30/2002	165.32	165.92	165.92						
12/31/2002	165.32	166.40	166.39						
3/31/2003	164.94	166.89	166.86						
6/30/2003	164.84	167.38	167.33						
9/30/2003	164.70	167.87	167.81						
12/31/2003	164.88	168.35	168.28						
3/31/2004	165.75	168.84	168.76						
6/30/2004	166.66	169.33	169.24						
9/30/2004	167.76	169.82	169.72						
12/31/2004	168.68	170.30	170.20						
3/31/2005	170.03	170.79	170.68						
6/30/2005	170.63	171.28	171.17						
9/30/2005	170.66	171.77	171.65						
12/31/2005	171.45	172.25	172.14						
3/31/2006	171.94	172.74	172.63	175.25	175.23				
6/30/2006	172.99	173.23	173.12	175.55	175.52				
9/30/2006	174.54	173.72	173.61	175.85	175.82				
12/31/2006	175.48	174.21	174.10	176.15	176.12				
3/31/2007	176.13	174.69	174.60	176.45	176.42	178.77	178.75		
6/30/2007	177.26	175.18	175.09	176.74	176.72	178.82	178.81		
9/30/2007	178.29	175.67	175.59	177.04	177.02	178.88	178.87		
12/31/2007	179.19	176.16	176.09	177.34	177.32	178.93	178.92		
3/31/2008	180.17	176.64	176.59	177.64	177.62	178.99	178.98	180.94	180.94
6/30/2008	180.49	177.13	177.09	177.94	177.92	179.04	179.03	180.71	180.71
9/30/2008	181.00	177.62	177.59	178.24	178.22	179.10	179.09	180.48	180.48
12/31/2008	181.01	178.11	178.09	178.54	178.53	179.15	179.15	180.25	180.24
3/31/2009	180.49	178.59	178.60	178.84	178.83	179.21	179.20	180.01	180.01
6/30/2009	180.08	179.08	179.11	179.14	179.13	179.26	179.26	179.78	179.78
9/30/2009	179.34	179.57	179.61	179.44	179.44	179.32	179.31	179.55	179.55
12/31/2009	178.81	180.06	180.12	179.74	179.74	179.37	179.37	179.32	179.32
3/31/2010	178.45	180.54	180.64	180.03	180.05	179.43	179.43	179.09	179.09
6/30/2010	178.66	181.03	181.15	180.33	180.35	179.48	179.48	178.85	178.85
9/30/2010	178.71	181.52	181.66	180.63	180.66	179.54	179.54	178.62	178.62
12/31/2010	178.78	182.01	182.18	180.93	180.97	179.59	179.59	178.39	178.39
Annual Trend		1.1%	1.1%	0.7%	0.7%	0.1%	0.1%	-0.5%	-0.5%
R-Squared		0.888	0.890	0.461	0.463	0.038	0.039	0.738	0.739

Notes:

- (2) = Weighted average of CPI for Lodging, Apparel, Furnishings, and Medical Care
- (3) - (10) = (2) fitted to linear and exponential distributions

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review

Development of LAE factor Using TWIA Commercial + Residential Experience

Accident Year	Projected Ultimate Loss	Projected Ultimate LAE	Ultimate LAE to Loss Ratio	Hurricane Indicator
(1)	(2)	(3)	(4)	(5)
1977		72	132	1.833
1978		129	147	1.140
1979		1,423	488	0.343
1980		12,911	1,318	0.102 H
1981		2,512	543	0.216
1982		796	565	0.710
1983		148,999	9,127	0.061 H
1984		999	324	0.324
1985		512	297	0.580
1986		881	505	0.573 H
1987		1,897	1,056	0.557
1988		1,160	357	0.308
1989		12,296	3,528	0.287 H
1990		335	225	0.672
1991		1,217	729	0.599
1992		489	554	1.133
1993		3,375	1,375	0.407
1994		679	507	0.747
1995		2,977	903	0.303
1996		1,166	582	0.499
1997		2,964	1,343	0.453
1998		22,401	4,732	0.211
1999		8,773	2,388	0.272 H
2000		6,227	1,885	0.303
2001		3,858	1,880	0.487
2002		24,746	5,226	0.211
2003		24,606	5,122	0.208 H
2004		5,167	1,471	0.285
2005		154,793	19,604	0.127 H
2006		4,348	1,115	0.256
2007		15,950	5,012	0.314 H
2008		2,393,544	303,359	0.127 H
2009		11,237	6,680	0.594
2010		15,748	10,127	0.643
All Years Total	2,889,187	393,206	0.136	
Hurricane Years Total	2,772,753	349,963	0.126	
Non-Hurricane Years				
Total	116,434	43,243	0.371	
10 Year	97,862	35,041	0.358	

Notes:

- (2) Exhibit 4, Sheet 2
- (3) Exhibit 4, Sheet 4
- (4) = (3) / (2)
- (5) "H" indicates hurricane year

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Ultimate Loss (TWIA All Lines)

Exhibit 4
Sheet 2

Accident Year	Incurred Loss at 12/31/10	Development Factor	Indicated Ultimate Loss
(1)	(2)	(3)	(4)
1977			72
1978			129
1979			1,423
1980			12,911
1981			2,512
1982			796
1983			148,999
1984			999
1985			512
1986			881
1987			1,897
1988			1,160
1989			12,296
1990			335
1991			1,217
1992			489
1993			3,375
1994			679
1995			2,977
1996			1,166
1997			2,964
1998			22,401
1999			8,773
2000			6,227
2001			3,858
2002			24,746
2003			24,606
2004	5,167	1.000	5,167
2005	154,793	1.000	154,793
2006	4,365	0.996	4,348
2007	15,855	1.006	15,950
2008	2,384,008	1.004	2,393,544
2009	11,049	1.017	11,237
2010	15,215	1.035	15,748

Notes:

- (2) Exhibit 4, Sheet 3
- (3) Exhibit 4, Sheet 3
- (4) 2002 - 2009: (2) * (3); 1977 - 2001: from prior TWIA annual statements

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Incurred Loss Development Factors
 TWIA Schedule P Incurred Loss (Including IBNR)

Accident Year	<u>Months of Development</u>							
	12 (1)	24 (2)	36 (3)	48 (4)	60 (5)	72 (6)	84 (7)	(8)
2001		5,278	4,308	3,868	3,857	3,856	3,856	3,858
2002		29,984	25,765	24,534	24,555	25,642	24,746	24,746
2003		25,109	25,512	24,099	24,490	24,605	24,606	24,606
2004		4,828	5,438	5,169	5,167	5,169	5,167	5,167
2005		164,811	157,442	152,243	153,502	154,576	154,793	
2006		4,471	4,616	4,507	4,279	4,365		
2007		16,446	15,813	15,537	15,855			
2008		1,902,481	1,774,393	2,384,008				
2009		8,267	11,049					
2010		15,215						

Accident Year	<u>Development Factors</u>							
	12 - 24 (1)	24 - 36 (2)	36 - 48 (3)	48 - 60 (4)	60 - 72 (5)	72 - 84 (6)	84 - Ult (7)	(8)
2001		0.816	0.898	0.997	1.000	1.000	1.001	
2002		0.859	0.952	1.001	1.044	0.965	1.000	
2003		1.016	0.945	1.016	1.005	1.000	1.000	
2004		1.126	0.951	1.000	1.000	1.000	1.000	
2005		0.955	0.967	1.008	1.007	1.001		
2006		1.032	0.976	0.949	1.020			
2007		0.962	0.983	1.020				
2008		0.933	1.344					
2009		1.337						
Average		1.004	1.002	0.999	1.013	0.993	1.000	
Avg x hi / lo		0.983	0.962	1.004	1.008	1.000	1.000	
Avg 3 Year		1.077	1.101	0.993	1.009	1.000	1.000	
Avg 5 Year		1.044	1.044	0.999	1.015	0.993	1.000	
Prior		0.982	0.957	0.995	1.007	0.994	0.999	1.000
Selected		1.018	1.013	0.998	1.010	0.996	1.000	1.000
Cumulative		1.035	1.017	1.004	1.006	0.996	1.000	1.000

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Ultimate LAE (TWIA All Lines)

Exhibit 4
Sheet 4

Accident Year	Incurred ALAE at 12/31/10	Development Factor	Indicated Ultimate ALAE	Incurred ULAE	Incurred LAE
(1)	(2)	(3)	(4)	(5)	(6)
1977					132
1978					147
1979					488
1980					1,318
1981					543
1982					565
1983					9,127
1984					324
1985			160	137	297
1986			270	235	505
1987			652	404	1,056
1988			235	122	357
1989			2,727	801	3,528
1990			119	106	225
1991			403	326	729
1992			270	284	554
1993			806	569	1,375
1994			192	315	507
1995			698	205	903
1996			355	227	582
1997			892	451	1,343
1998			3,920	812	4,732
1999			1,757	631	2,388
2000			1,209	676	1,885
2001			1,207	673	1,880
2002			3,643	1,583	5,226
2003			3,240	1,882	5,122
2004	845	1.000	845	626	1,471
2005	15,253	0.999	15,238	4,366	19,604
2006	879	1.003	882	233	1,115
2007	2,921	1.001	2,924	2,088	5,012
2008	201,098	0.971	195,266	108,093	303,359
2009	3,740	1.049	3,923	2,757	6,680
2010	958	1.055	1,011	9,116	10,127

Notes:

- (2) Exhibit 4, Sheet 5
- (3) Exhibit 4, Sheet 5
- (4) 2002 - 2009: (2) * (3); 1986 - 2001: from TWIA's annual statements
- (5) From TWIA's annual statements
- (6) 1986 - 2009: (4) + (5); prior years from prior TWIA annual statements

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Incurred ALAE Development Factors
 TWIA Schedule P Incurred ALAE (Including IBNR)

Accident Year	<u>Months of Development</u>							
	12 (1)	24 (2)	36 (3)	48 (4)	60 (5)	72 (6)	84 (7)	(8)
2001		1,207	1,185	1,313	1,201	1,207	1,207	1,207
2002		3,179	3,139	3,297	3,349	3,501	3,643	3,643
2003		2,882	3,017	3,133	3,235	3,254	3,255	3,240
2004		814	837	839	844	847	845	845
2005		12,902	16,742	18,549	16,151	15,253	15,253	
2006		704	891	899	879	879		
2007		2,660	3,107	2,921	2,921			
2008		167,316	139,787	201,098				
2009		7,335	3,740					
2010		958						

Accident Year	<u>Development Factors</u>							
	12 - 24 (1)	24 - 36 (2)	36 - 48 (3)	48 - 60 (4)	60 - 72 (5)	72 - 84 (6)	84 - Ult (7)	(8)
2001		0.982	1.108	0.915	1.005	1.000	1.000	
2002		0.987	1.050	1.016	1.045	1.041	1.000	
2003		1.047	1.038	1.033	1.006	1.000	0.995	
2004		1.028	1.002	1.006	1.004	0.998	1.000	
2005		1.298	1.108	0.871	0.944	1.000		
2006		1.266	1.009	0.978	1.000			
2007		1.168	0.940	1.000				
2008		0.835	1.439					
2009		0.510						
Average		1.013	1.087	0.974	1.001	1.008	0.999	
Avg x hi / lo		1.045	1.053	0.983	1.004	1.000	1.000	
Avg 3 Year		0.838	1.129	0.949	0.983	0.999	0.998	
Avg 5 Year		1.015	1.100	0.977	1.000	1.008	0.999	
Prior		1.118	1.030	0.968	1.005	1.007	0.997	1.000
Selected		1.006	1.080	0.970	0.998	1.004	0.999	1.000
Cumulative		1.055	1.049	0.971	1.001	1.003	0.999	1.000

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
 Summary of Indicated Hurricane Loss & LAE Ratios

Basis for Hurricane Loss Ratio	Indicated Loss Ratio	LAE Factor	Indicated Loss & LAE Ratio
(1)	(2)	(3)	(4)
Industry Experience	46.9%	0.126	52.8%
Hurricane Models			
AIR Model	45.9%	0.126	51.7%
RMS Model	48.7%	0.126	54.8%
Average of Models	47.3%	0.126	53.3%

Notes:

- (2) Exhibit 6 - Exhibit 8, Sheet 1
- (3) Exhibit 4, Sheet 1
- (4) = (2) * [1 + (3)]

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Industry Experience -- Commercial Extended Coverage
1970 - 2010 -- Hurricane Years Only

Accident Year	Earned Premium at Current TWIA Rate Level	Incurred Loss Ratio
(1)	(2)	(3)
1970	43,546,396	53.0%
1971	47,041,644	118.8%
1980	52,266,853	77.2%
1983	30,663,377	411.6%
1986	39,514,151	12.1%
1989	62,621,246	7.5%
1990	53,271,330	108.8%
1999	122,742,223	12.1%
2003	198,620,883	27.6%
2005	230,420,728	241.9%
2007	332,912,348	4.0%
2008	314,844,883	465.5%
(4) Simple Average Loss Ratio for Hurricane Years		128.3%
(5) Selected Non-Hurricane Loss Ratio		9.3%
(6) Average Hurricane Loss Ratio for Hurricane Years		119.0%
(7) Historical Hurricane Frequency		
(a) 41.3-Year (10/1/1969 - 12/31/2010)		0.315 (1 Hurricane Every 3.2 years)
(b) 160-Year (1/1/1851 - 12/31/2010)		0.394 (1 Hurricane Every 2.5 years)
Selected Frequency		0.394 (1 Hurricane Every 2.5 years)
(8) Indicated Hurricane Loss Ratio		46.9%

Notes:

- (2) Exhibit 6, Sheet 2. 1999 year ending 12/31/99; all other accident years ending 9/30/xx
- (3) Exhibit 6, Sheet 2. 1999 year ending 12/31/99; all other accident years ending 9/30/xx
- (4) = Average of (3)
- (5) Exhibit 6, Sheet 2
- (6) = (4) - (5)
- (7) Exhibit 9
- (8) = (6) * (7) Selected

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Industry Experience – Commercial Extended Coverage
1970 - 2010

Accident Year	Earned Premium	Earned Premium at 1992 CMR	Earned Premium at Current Rates	Incurred Losses	Incurred Loss Ratio	Hurricane Indicator
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970	10,874,210	18,835,352	43,546,396	23,092,142	53.0%	H
1971	13,340,143	20,347,170	47,041,644	55,893,676	118.8%	H
1972	18,906,678	24,314,307	56,213,468	8,704,522	15.5%	
1973	21,737,541	23,257,532	53,770,257	3,837,493	7.1%	
1974	22,348,193	22,844,661	52,815,719	2,193,087	4.2%	
1975	24,396,629	24,958,305	57,702,359	3,943,412	6.8%	
1976	26,795,934	24,109,943	55,740,988	2,218,115	4.0%	
1977	30,910,821	27,119,226	62,698,301	1,898,346	3.0%	
1978	32,709,599	26,415,338	61,070,947	2,535,872	4.2%	
1979	31,306,685	24,514,306	56,675,855	4,535,147	8.0%	
1980	28,751,765	22,607,257	52,266,853		77.2%	H
1981	24,129,384	21,398,588	49,473,536		11.1%	
1982	18,505,004	17,523,231	40,513,710		4.1%	
1983	12,680,397	13,262,706	30,663,377		411.6%	H
1984	12,736,031	14,992,627	34,662,953		10.7%	
1985	15,169,575	16,422,895	37,969,733		5.1%	
1986	21,130,682	17,090,896	39,514,151		12.1%	H
1987	31,114,529	26,771,157	61,894,915		1.9%	
1988	25,065,531	24,117,319	55,759,242		11.2%	
1989	24,167,085	27,085,314	62,621,246		7.5%	H
1990	19,677,404	23,041,233	53,271,330		108.8%	H
1991	21,794,680	25,534,881	59,036,646		79.8%	
1992	23,737,753	26,950,473	62,309,494		2.0%	
1993	21,990,182		50,841,301		7.5%	
1994	16,604,950		38,390,644		14.0%	
1995	32,374,229		74,849,218		30.7%	
1996	55,367,089		128,008,710		3.5%	
1997	53,196,024		122,989,207		5.2%	
1998	53,986,058		125,506,270		19.9%	
1999	52,435,243		122,742,223		12.1%	H
2000	41,739,697		96,007,949		11.1%	
2001	42,330,042		95,313,329		7.7%	
2002	69,156,402		152,795,942		16.8%	
2003	92,482,748		198,620,883		27.6%	H
2004	103,711,922		215,901,265		2.6%	
2005	114,488,254		230,420,728		241.9%	H
2006	141,832,411		275,456,942		2.4%	
2007	182,303,279		332,912,348		4.0%	H
2008	175,920,574		314,844,883		465.5%	H
2009	189,412,671		328,914,300		2.1%	
2010	191,441,657		328,806,364		2.4%	
Total / Average	2,142,759,685		4,420,555,626		45.0%	
Average of Non-Hurricane Years					10.5%	
Average of Non-Hurricane Years Excluding 1991 Selected					8.0%	
					9.3%	

Notes:

- (2) Provided by TDI. 1970 - 1994 are year ending 9/30/xx as of 12/31/99; 1995 - 2008 are year ending 12/31/xx as of 12/31/10
- (3) Provided by TDI (1992 MR = 1992 manual rates)
- (4) 1980 - 2008: Sum of Exhibit 6, Sheet 4 - Sheet 7, (5); 1970 - 1979: (3) * 2.312
- (5) Provided by TDI. 1980 - 1994 are year ending 9/30/xx as of 12/31/99; 1995 - 2008 are year ending 12/31/xx as of 12/31/10
- (6) 1980 - 2008: Exhibit 6, Sheet 3; 1970 - 1979: (5) / (4)
- (7) "H" indicates occurrence of hurricane(s) during the time period

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Industry Experience – Commercial Extended Coverage

<u>Loss Ratios by Territory / Tier</u>						
Accident Year	Territory 8	Territory 9	Territory 10	Tier 2	Weighted Loss Ratio	
(1)	(2)	(3)	(4)	(5)	(6)	
1981	21.0%	6.8%	6.1%	7.5%	11.1%	
1982	2.5%	4.3%	5.1%	6.8%	4.1%	
1983	1177.4%	5.1%	54.8%	197.3%	411.6%	
1984	10.1%	5.1%	12.9%	18.9%	10.7%	
1985	4.9%	3.3%	5.8%	10.6%	5.1%	
1986	3.9%	1.3%	21.3%	16.6%	12.1%	
1987	0.6%	2.2%	2.7%	4.0%	1.9%	
1988	15.4%	4.6%	10.8%	6.4%	11.2%	
1989	17.8%	2.3%	2.6%	7.3%	7.5%	
1990	315.6%	3.3%	11.8%	9.1%	108.8%	
1991	28.5%	28.2%	133.9%	6.2%	79.8%	
1992	1.0%	1.3%	2.9%	5.0%	2.0%	
1993	18.1%	2.3%	2.3%	7.6%	7.5%	
1994	0.4%	5.0%	26.3%	10.6%	14.0%	
1995	10.4%	13.8%	50.3%	27.6%	30.7%	
1996	2.0%	3.9%	4.2%	8.9%	3.5%	
1997	7.0%	2.7%	4.8%	12.1%	5.2%	
1998	27.8%	18.5%	15.4%	12.3%	19.9%	
1999	3.6%	17.0%	15.9%	12.3%	12.1%	
2000	2.8%	2.7%	18.4%	77.8%	11.1%	
2001	9.3%	4.2%	7.4%	35.7%	7.7%	
2002	15.3%	40.9%	9.2%	11.5%	16.8%	
2003	2.4%	9.0%	51.0%	29.9%	27.6%	
2004	3.8%	0.8%	2.5%	3.4%	2.6%	
2005	83.7%	2.1%	437.1%	49.3%	241.9%	
2006	2.8%	1.2%	2.6%	4.9%	2.4%	
2007	2.1%	1.3%	6.2%	8.0%	4.0%	
2008	808.2%	4.8%	407.5%	311.9%	465.5%	
2009	2.9%	3.1%	1.1%	8.6%	2.1%	
2010	0.4%	2.2%	3.8%	2.1%	2.4%	
Average	86.7%	6.8%	44.6%	31.0%	51.4%	

<u>TWIA 2010 Written Premium by Territory / Tier</u>						
	Territory 8	Territory 9	Territory 10	Tier 2	Total	
(7) Amount	89,209,947	48,549,630	134,520,604	2,677,912	274,958,093	
(8) % Share	32.44%	17.66%	48.92%	0.97%	100.00%	

Notes:

- (2) Exhibit 6, Sheet 4
- (3) Exhibit 6, Sheet 5
- (4) Exhibit 6, Sheet 6
- (5) Exhibit 6, Sheet 7
- (6) = Weighted average of (2) to (5), using (8)
- (7) Provided by TWIA
- (8) = (7) / (7) Total

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Industry Experience -- Commercial Extended Coverage
Tier 1 -- Territory 8 (Galveston County)

Accident Year	Earned Premium	Earned Premium at 1992 MR	TWIA Factor to Current Rate Level	Earned Premium at Current Rates	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981	2,387,015	2,241,676	2.312	5,182,755	1,089,270	21.0%
1982	1,604,454	1,510,804	2.312	3,492,979	88,884	2.5%
1983	913,865	968,224	2.312	2,238,534	26,357,425	1177.4%
1984	1,195,339	1,366,667	2.312	3,159,734	318,455	10.1%
1985	2,581,481	2,777,593	2.312	6,421,795	314,878	4.9%
1986	3,013,362	2,349,181	2.312	5,431,306	211,282	3.9%
1987	3,004,153	2,585,122	2.312	5,976,802	37,480	0.6%
1988	2,905,355	2,728,206	2.312	6,307,612	969,836	15.4%
1989	2,825,114	3,015,974	2.312	6,972,932	1,244,199	17.8%
1990	2,303,321	2,474,141	2.312	5,720,214	18,053,460	315.6%
1991	2,203,500	2,080,579	2.312	4,810,299	1,371,244	28.5%
1992	2,352,391	2,012,473	2.312	4,652,838	46,331	1.0%
1993	2,406,016		2.312	5,562,709	1,005,945	18.1%
1994	2,807,090		2.312	6,489,992	28,034	0.4%
1995	2,645,757		2.312	6,116,990	635,625	10.4%
1996	5,519,716		2.312	12,761,583	249,644	2.0%
1997	5,461,636		2.312	12,627,302	886,485	7.0%
1998	6,133,105		2.342	14,363,732	3,994,564	27.8%
1999	6,706,028		2.373	15,913,404	575,316	3.6%
2000	4,997,201		2.286	11,423,601	320,131	2.8%
2001	4,785,262		2.169	10,379,233	962,576	9.3%
2002	8,206,069		2.091	17,158,890	2,632,325	15.3%
2003	11,208,273		1.969	22,069,090	529,845	2.4%
2004	12,156,952		1.821	22,137,810	830,387	3.8%
2005	13,767,748		1.688	23,239,959	19,454,796	83.7%
2006	17,931,673		1.590	28,511,360	812,158	2.8%
2007	24,062,426		1.474	35,468,016	728,690	2.1%
2008	24,187,706		1.412	34,153,041	276,013,987	808.2%
2009	29,445,779		1.317	38,780,091	1,143,669	2.9%
2010	30,602,058		1.242	38,007,756	142,521	0.4%
Total	240,319,845			415,532,359	361,049,442	86.9%

Notes:

- (2) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (3) Provided by TDI (1992 MR = 1992 manual rates)
- (4) Represents 1/1/98 through 2/1/08 rate changes for TWIA; factors assume uniform earning of written premium and that TWIA premium represents 84.8% of industry data in Tier 1 -- Territory 8
- (5) = (3) * (4) for 1981 - 1993; (2) * (4) for 1994 - 2009
- (6) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (7) = (6) / (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review

Industry Experience – Commercial Extended Coverage
Tier 1 – Territory 9 (Nueces County)

Accident Year	Earned Premium	Earned Premium at 1992 MR	TWIA Factor to Current Rate Level	Earned Premium at Current Rates	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981	1,367,219	1,286,028	2.312	2,973,297	200,989	6.8%
1982	1,347,308	1,333,262	2.312	3,082,502	132,668	4.3%
1983	745,985	820,826	2.312	1,897,750	96,051	5.1%
1984	558,639	652,809	2.312	1,509,294	76,481	5.1%
1985	1,235,059	1,383,103	2.312	3,197,734	106,148	3.3%
1986	2,228,911	1,849,840	2.312	4,276,830	56,387	1.3%
1987	2,381,538	2,086,940	2.312	4,825,005	105,275	2.2%
1988	1,796,653	1,719,227	2.312	3,974,853	181,414	4.6%
1989	1,632,453	1,826,430	2.312	4,222,706	98,116	2.3%
1990	1,429,526	1,769,972	2.312	4,092,175	135,678	3.3%
1991	1,390,109	1,555,310	2.312	3,595,877	1,013,636	28.2%
1992	1,571,433	1,629,721	2.312	3,767,915	49,512	1.3%
1993	1,587,772		2.312	3,670,929	86,000	2.3%
1994	2,203,514		2.312	5,094,524	254,088	5.0%
1995	2,669,951		2.312	6,172,927	854,753	13.8%
1996	5,639,923		2.312	13,039,502	502,177	3.9%
1997	3,183,758		2.312	7,360,848	199,390	2.7%
1998	3,613,310		2.340	8,455,145	1,561,275	18.5%
1999	6,808,428		2.369	16,129,166	2,735,082	17.0%
2000	5,167,158		2.287	11,817,290	317,804	2.7%
2001	4,763,324		2.179	10,379,283	431,244	4.2%
2002	8,479,915		2.106	17,858,701	7,300,265	40.9%
2003	11,810,993		1.992	23,527,498	2,108,974	9.0%
2004	13,732,024		1.854	25,459,172	212,644	0.8%
2005	15,975,262		1.730	27,637,203	566,758	2.1%
2006	20,866,194		1.639	34,199,692	409,054	1.2%
2007	27,727,229		1.530	42,422,660	571,169	1.3%
2008	28,136,508		1.472	41,416,940	1,984,296	4.8%
2009	29,929,053		1.384	41,421,809	1,284,012	3.1%
2010	27,547,374		1.313	36,169,702	799,061	2.2%
Total	237,526,523			413,648,929	24,430,401	5.9%

Notes:

- (2) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (3) Provided by TDI (1992 MR = 1992 manual rates)
- (4) Represents 1/1/98 through 2/1/08 rate changes for TWIA; factors assume uniform earning of written premium and that TWIA premium represents 79.1% of industry data in Tier 1 -- Territory 9
- (5) = (3) * (4) for 1981 - 1993; (2) * (4) for 1994 - 2009
- (6) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (7) = (6) / (5)

**Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review**

Industry Experience -- Commercial Extended Coverage
Tier 1 -- Territory 10 (Other Tier 1)

Exhibit 6
Sheet 6

Accident Year	Earned Premium	Earned Premium at 1992 MR	TWIA Factor to Current Rate Level	Earned Premium at Current Rates	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981	4,418,649	3,950,311	2.312	9,133,119	555,175	6.1%
1982	4,012,396	3,832,674	2.312	8,861,142	453,010	5.1%
1983	3,769,988	4,139,464	2.312	9,570,441	5,242,728	54.8%
1984	4,835,650	5,883,059	2.312	13,601,632	1,759,233	12.9%
1985	3,637,366	3,997,227	2.312	9,241,589	534,724	5.8%
1986	4,787,352	3,948,102	2.312	9,128,012	1,943,819	21.3%
1987	5,996,981	5,352,970	2.312	12,376,067	338,938	2.7%
1988	5,872,305	5,768,621	2.312	13,337,052	1,442,599	10.8%
1989	5,125,436	5,918,163	2.312	13,682,793	349,413	2.6%
1990	3,842,130	4,624,825	2.312	10,692,595	1,263,817	11.8%
1991	4,253,902	4,765,878	2.312	11,018,710	14,752,702	133.9%
1992	4,034,147	4,187,015	2.312	9,680,379	276,158	2.9%
1993	4,540,606		2.312	10,497,881	245,603	2.3%
1994	5,145,260		2.312	11,895,841	3,130,886	26.3%
1995	9,324,050		2.312	21,557,204	10,852,486	50.3%
1996	15,331,047		2.312	35,445,381	1,478,175	4.2%
1997	17,116,368		2.312	39,573,043	1,911,482	4.8%
1998	17,623,413		2.335	41,150,669	6,340,723	15.4%
1999	15,019,386		2.358	35,415,712	5,614,569	15.9%
2000	11,756,138		2.292	26,945,068	4,969,254	18.4%
2001	11,140,104		2.203	24,541,649	1,824,700	7.4%
2002	20,528,832		2.143	43,993,287	4,053,342	9.2%
2003	28,443,572		2.050	58,309,323	29,757,859	51.0%
2004	30,442,420		1.938	58,997,410	1,462,655	2.5%
2005	33,785,036		1.836	62,029,326	271,128,552	437.1%
2006	45,493,996		1.761	80,114,927	2,046,226	2.6%
2007	72,281,199		1.672	120,854,165	7,510,911	6.2%
2008	66,913,739		1.625	108,734,826	443,099,635	407.5%
2009	67,603,078		1.553	104,987,580	1,205,284	1.1%
2010	64,611,047		1.495	96,593,515	3,638,908	3.8%
Total	591,685,593			1,111,960,338	829,183,566	74.6%

Notes:

- (2) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (3) Provided by TDI (1992 MR = 1992 manual rates)
- (4) Represents 1/1/98 through 2/1/08 rate changes for TWIA; factors assume uniform earning of written premium and that TWIA premium represents 64.7% of industry data in Tier 1 -- Territory 10
- (5) = (3) * (4) for 1981 - 1993; (2) * (4) for 1994 - 2009
- (6) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (7) = (6) / (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review

Industry Experience – Commercial Extended Coverage
Tier 2 (Territories 1 and 11)

AY Ending	Earned Premium	Earned Premium at 1992 MR	TWIA Factor to Current Rate Level	Earned Premium at Current Rates	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981	15,956,501	13,920,573	2.312	32,184,365	2,427,294	7.5%
1982	11,540,846	10,846,491	2.312	25,077,087	1,700,638	6.8%
1983	7,250,559	7,334,192	2.312	16,956,652	33,451,768	197.3%
1984	6,146,403	7,090,092	2.312	16,392,293	3,096,573	18.9%
1985	7,715,669	8,264,972	2.312	19,108,615	2,019,280	10.6%
1986	11,101,057	8,943,773	2.312	20,678,003	3,439,343	16.6%
1987	19,731,857	16,746,125	2.312	38,717,041	1,552,595	4.0%
1988	14,491,218	13,901,265	2.312	32,139,725	2,041,063	6.4%
1989	14,584,082	16,324,747	2.312	37,742,815	2,746,147	7.3%
1990	12,102,427	14,172,295	2.312	32,766,346	2,967,816	9.1%
1991	13,947,169	17,133,114	2.312	39,611,760	2,440,246	6.2%
1992	15,779,782	19,121,264	2.312	44,208,362	2,232,412	5.0%
1993	13,455,788		2.312	31,109,782	2,357,383	7.6%
1994	6,449,086		2.312	14,910,287	1,579,205	10.6%
1995	17,734,471		2.312	41,002,097	11,314,057	27.6%
1996	28,876,403		2.312	66,762,244	5,938,855	8.9%
1997	27,434,262		2.312	63,428,014	7,691,121	12.1%
1998	26,616,230		2.312	61,536,724	7,574,576	12.3%
1999	23,901,401		2.313	55,283,941	6,821,707	12.3%
2000	19,819,200		2.312	45,821,990	35,670,537	77.8%
2001	21,641,352		2.311	50,013,164	17,852,673	35.7%
2002	31,941,586		2.310	73,785,064	8,461,924	11.5%
2003	41,019,910		2.309	94,714,972	28,328,134	29.9%
2004	47,380,526		2.307	109,306,873	3,696,051	3.4%
2005	50,960,208		2.306	117,514,240	57,958,368	49.3%
2006	57,540,548		2.305	132,630,963	6,561,959	4.9%
2007	58,232,425		2.304	134,167,507	10,780,804	8.0%
2008	56,682,621		2.303	130,540,076	407,124,026	311.9%
2009	62,434,761		2.302	143,724,820	12,402,272	8.6%
2010	68,681,178		2.301	158,035,391	3,262,490	2.1%
Total	811,149,526			1,879,871,213	695,491,317	37.0%

Notes:

- (2) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (3) Provided by TDI (1992 MR = 1992 manual rates)
- (4) Represents 1/1/98 through 2/1/08 rate changes for TWIA; factors assume uniform earning of written premium and that TWIA premium represents 0.8% of industry data in Tier 2
- (5) = (3) * (4) for 1981 - 1993; (2) * (4) for 1994 - 2009
- (6) Provided by TDI. 1981 - 1995 are year ending 9/30/xx as of 12/31/99; 1996 - 2009 are year ending 12/31/xx as of 12/31/10
- (7) = (6) / (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Hurricane Loss Ratio – AIR Model

Exhibit 7
Sheet 1

County	TWIA Insured Values (000s) as of 6/30/10	Modeled Loss Cost	Expected Annual Hurricane Loss
(1)	(2)	(3)	(4)
Aransas	340,921	5.320	1,813,700
Brazoria	1,196,581	2.727	3,263,076
Calhoun	198,721	2.955	587,221
Cameron	2,063,329	2.852	5,884,614
Chambers	153,166	2.497	382,456
Galveston	3,456,516	7.107	24,565,459
Harris	97,168	4.081	396,543
Jefferson	1,524,595	2.256	3,439,486
Kenedy	5,817	1.072	6,236
Kleberg	187,453	1.045	195,888
Matagorda	197,557	2.846	562,247
Nueces	3,317,898	3.730	12,375,760
Refugio	43,602	1.378	60,084
San Patricio	356,676	2.748	980,146
Willacy	46,079	1.509	69,533
Total	13,186,079	4.139	54,582,449
(5) 2010 Earned Premium at Present Rates			118,837,885
(6) Indicated Hurricane Loss Ratio			45.9%

Notes:

- (2) Provided by TWIA
- (3) Exhibit 7, Sheet 2
- (4) = (2) * (3)
- (5) Exhibit 10, Sheet 1
- (6) = (4) Total / (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
AIR Simulated Hurricane Results

County	TWIA Insured Values (000s) as of 12/31/10	Average Annual Modeled Loss	Provision for Storm Surge	Modeled Loss Cost
(1)	(2)	(3)	(4)	(5)
Aransas	379,825	2,012,747	1.004	5.320
Brazoria	1,346,939	3,658,822	1.004	2.727
Calhoun	154,255	453,972	1.004	2.955
Cameron	1,888,281	5,363,428	1.004	2.852
Chambers	119,376	296,838	1.004	2.497
Galveston	3,453,388	24,445,784	1.004	7.107
Harris	132,189	537,274	1.004	4.081
Jefferson	1,526,224	3,428,845	1.004	2.256
Kenedy	6,082	6,493	1.004	1.072
Kleberg	182,313	189,839	1.004	1.045
Matagorda	210,823	597,614	1.004	2.846
Nueces	3,132,449	11,639,037	1.004	3.730
Refugio	42,932	58,925	1.004	1.378
San Patricio	399,818	1,094,515	1.004	2.748
Willacy	47,650	71,615	1.004	1.509
Total	13,022,544	53,855,748	1.004	4.152

Notes:

(2) Provided by TWIA and Geo-coded by AIR

(3) Provided by AIR

(4) = 10% of modeled storm surge increase, estimated to be 4.0%

(5) = (3) / (2) * (4)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Hurricane Loss Ratio -- RMS Model

County	TWIA Insured Values (000s) as of 6/30/10	Modeled Loss Cost	Expected Annual Hurricane Loss
(1)	(2)	(3)	(4)
Aransas	340,921	4.064	1,385,503
Brazoria	1,196,581	3.734	4,468,033
Calhoun	198,721	4.806	955,053
Cameron	2,063,329	4.083	8,424,572
Chambers	153,166	3.582	548,641
Galveston	3,456,516	6.261	21,641,247
Harris	97,168	4.634	450,277
Jefferson	1,524,595	3.092	4,714,048
Kenedy	5,817	1.962	11,413
Kleberg	187,453	2.144	401,899
Matagorda	197,557	3.876	765,731
Nueces	3,317,898	3.866	12,826,994
Refugio	43,602	2.324	101,331
San Patricio	356,676	3.029	1,080,372
Willacy	46,079	2.454	113,078
Total	13,186,079	4.390	57,888,192
(5) 2010 Earned Premium at Present Rates			118,837,885
(6) Indicated Hurricane Loss Ratio			48.7%

Notes:

- (2) Provided by TWIA
- (3) Exhibit 8, Sheet 2
- (4) = (2) * (3)
- (5) Exhibit 10, Sheet 1
- (6) = (4) Total / (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
RMS Simulated Hurricane Results

County	TWIA Insured Values (000s) as of 12/31/10	Average Annual Modeled Loss	Provision for Storm Surge	Modeled Loss Cost
(1)	(2)	(3)	(4)	(5)
Aransas	351,930	1,404,971	1.018	4.064
Brazoria	1,338,296	4,908,780	1.018	3.734
Calhoun	192,075	906,785	1.018	4.806
Cameron	1,888,281	7,572,792	1.018	4.083
Chambers	135,299	476,100	1.018	3.582
Galveston	3,461,366	21,288,234	1.018	6.261
Harris	117,242	533,698	1.018	4.634
Jefferson	1,526,516	4,637,079	1.018	3.092
Kenedy	6,082	11,723	1.018	1.962
Kleberg	182,313	384,053	1.018	2.144
Matagorda	210,823	802,735	1.018	3.876
Nueces	3,133,590	11,898,814	1.018	3.866
Refugio	42,932	98,013	1.018	2.324
San Patricio	392,824	1,168,899	1.018	3.029
Willacy	47,650	114,864	1.018	2.454
Total	13,027,219	56,207,540	1.018	4.392

Notes:

- (2) Provided by TWIA and Geo-coded by RMS
- (3) Provided by RMS
- (4) = 10% of modeled storm surge increase, estimated to be 18.0%
- (5) = (3) / (2) * (4)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Texas Hurricanes 1850 - 2010

<u>Landfall</u>			<u>Landfall</u>		
Year	Month	Name	Year	Month	Name
(1)		(2)	(1)		(2)
1851	Jun		1929	Jun	
1854	Jun		1932	Aug	"Freeport"
1854	Sep	"Matagorda"	1933	Aug	
1865	Sep	"Sabine River-Lake Calcasieu"	1933	Sep	
1866	Jul		1934	Jul	
1867	Oct	"Galveston"	1936	Jun	
1869	Aug	"Lower Texas Coast"	1940	Aug	
1875	Sep		1941	Sep	
1879	Aug		1942	Aug	
1880	Aug		1942	Aug	
1882	Sep		1943	Jul	
1886	Jun		1945	Aug	
1886	Aug	"Indianola"	1947	Aug	
1886	Sep		1949	Oct	
1886	Oct		1957	Jun	Audrey
1887	Sep		1959	Jul	Debra
1888	Jun		1961	Sep	Carla
1891	Jul		1963	Sep	Cindy
1895	Aug		1967	Sep	Beulah
1897	Sep		1970	Aug	Celia
1900	Sep	"Galveston"	1971	Sep	Fern
1909	Jun		1980	Aug	Allen
1909	Jul	"Velasco"	1983	Aug	Alicia
1909	Aug		1986	Jun	Bonnie
1910	Sep		1989	Aug	Chantal
1912	Oct		1989	Oct	Jerry
1913	Jun		1999	Aug	Bret
1915	Aug	"Galveston"	2003	Jul	Claudette
1916	Aug		2005	Sep	Rita
1919	Sep		2007	Sep	Humberto
1921	Jun		2008	Jul	Dolly
			2008	Sep	Ike

Frequency	Date Period	Hurricanes	Period	Annual Frequency
41.3-Year	10/1/1969 - 12/31/2010	13	41.3	0.315
160-Year	1/1/1851 - 12/31/2010	63	160	0.394

Notes:

(1), (2) from NOAA Technical Memorandum NWS TPC-5, updated through 2007

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Calculation of Earned Premium at Present Rate Level

Year	TWIA Written Premium	Factor to Current Rate Level	Written Premium at Current Rate Level	Earned Premium at Current Rate Level
(1)	(2)	(3)	(4)	(5)
1991	7,329,258	1.778	13,031,421	13,031,421
1992	7,048,820	2.312	16,296,872	14,664,147
1993	9,185,541	2.312	21,236,971	18,766,922
1994	10,672,677	2.312	24,675,229	22,956,100
1995	12,865,905	2.312	29,745,972	27,210,601
1996	15,640,660	2.312	36,161,206	32,953,589
1997	16,536,186	2.312	38,231,662	37,196,434
1998	16,558,977	2.383	39,460,042	38,845,852
1999	17,394,142	2.383	41,450,241	40,455,142
2000	17,332,561	2.187	37,906,311	39,678,276
2001	18,271,156	2.102	38,405,970	38,156,141
2002	24,012,249	2.003	48,096,535	43,251,253
2003	29,220,514	1.821	53,210,556	50,653,546
2004	31,009,323	1.655	51,320,430	52,265,493
2005	35,740,174	1.504	53,753,222	52,536,826
2006	76,847,840	1.396	107,279,585	80,516,404
2007	110,951,304	1.279	141,906,718	124,593,152
2008	98,037,392	1.219	119,507,581	130,707,150
2009	111,269,480	1.062	118,168,188	118,837,885
2010	102,171,553	1.050	107,280,131	112,724,160
2011 / 1	18,748,833	1.000	18,748,833	25,811,133
Total	768,095,712		1,137,124,843	1,090,000,494

Notes:

- (2) Provided by TWIA, 1992 reflects adjustment for rate change applied to in-force policies
- (3) Exhibit 10, Sheet 2
- (4) = (2) * (3) (calculated on a monthly basis)
- (5) Calculated from (4), using annual uniform earning assumption for 1999 and prior and monthly for 2000 and after

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Calculation of On-Level Premium Factors

Year	Rate Level in Effect			Cumulative Rate Level				# Months				Average Rate Level	Factor to Current Rate Level		
	Applicable Rates														
(1)	B.O.Y.	(2)	(3)	E.O.Y.	B.O.Y.	(6)	(7)	E.O.Y.	B.O.Y.	(10)	(11)	E.O.Y.	(12)	(13)	(14)
1980	Prior			8/1/1980	1.000			1.175	7.0			5.0	1.073	3.460	
1981	8/1/1980			9/1/1981	1.175			1.132	8.0			4.0	1.161	3.198	
1982	9/1/1981			9/1/1982	1.132			1.428	8.0			4.0	1.231	3.016	
1983	9/1/1982			10/10/1983	1.428			1.514	9.3			2.7	1.447	2.566	
1984	10/10/1983			10/10/1983	1.514			1.514	12.0			0.0	1.514	2.452	
1985	10/10/1983	3/1/1985	3/15/1985	11/15/1985	1.514	1.892	2.428	2.651	2.0	0.5	8.0	1.5	2.281	1.628	
1986	11/15/1985			11/15/1985	2.651			2.651	12.0			0.0	2.651	1.401	
1987	11/15/1985			7/1/1987	2.651			2.407	6.0			6.0	2.529	1.468	
1988	7/1/1987			11/1/1988	2.407			2.075	10.0			2.0	2.352	1.579	
1989	11/1/1988			11/1/1988	2.075			2.075	12.0			0.0	2.075	1.789	
1990	11/1/1988			3/1/1990	2.075			2.104	2.0			10.0	2.099	1.769	
1991	3/1/1990			4/1/1991	2.104			2.083	3.0			9.0	2.088	1.778	
1992	1/1/1992			1/1/1992	1.606			1.606	12.0			0.0	1.606	2.312	
1993	1/1/1992			10/1/1993	1.606			1.606	9.0			3.0	1.606	2.312	
1994	10/1/1993			10/1/1993	1.606			1.606	12.0			0.0	1.606	2.312	
1995	10/1/1993			10/1/1993	1.606			1.606	12.0			0.0	1.606	2.312	
1996	10/1/1993			10/1/1993	1.606			1.606	12.0			0.0	1.606	2.312	
1997	10/1/1993			10/1/1993	1.606			1.606	12.0			0.0	1.606	2.312	
1998	1/1/1998			1/1/1998	1.558			1.558	12.0			0.0	1.558	2.383	
1999	1/1/1998			1/1/1998	1.558			1.558	12.0			0.0	1.558	2.383	
2000	1/1/2000			1/1/2000	1.698			1.698	12.0			0.0	1.698	2.187	
2001	1/1/2001			1/1/2001	1.766			1.766	12.0			0.0	1.766	2.102	
2002	1/1/2002			1/1/2002	1.854			1.854	12.0			0.0	1.854	2.003	
2003	1/1/2003			1/1/2003	2.039			2.039	12.0			0.0	2.039	1.821	
2004	1/1/2004			1/1/2004	2.243			2.243	12.0			0.0	2.243	1.655	
2005	1/1/2005			1/1/2005	2.468			2.468	12.0			0.0	2.468	1.504	
2006	1/1/2006			9/1/2006	2.591			2.798	8.0			4.0	2.660	1.396	
2007	1/1/2007			1/1/2007	2.902			2.902	12.0			0.0	2.902	1.279	
2008	1/1/2007			2/1/2008	2.902			3.059	1.0			11.0	3.046	1.219	
2009	2/1/2008			2/1/2009	3.059			3.536	1.0			11.0	3.496	1.062	
2010	2/1/2009			2/1/2009	3.536			3.536	12.0			0.0	3.536	1.050	
2011	1/1/2011			1/1/2011	3.713			3.713	3.0			0.0	3.713	1.000	
Current				1/1/2011				3.713					3.713	1.000	

Notes:

- (1) - (4) Rates in effect and beginning and end of year (B.O.Y. and E.O.Y.)
For each year except 1985, 2006, and 2008 the B.O.Y. and E.O.Y. rates are the only rates applicable
For 1985, there were two additional rate changes
For 2006, there was one additional rate change
For 2008, the rate change took effect mid-year
- (5) - (8) Based on Exhibit 10, Sheet 3
- (9) - (12) Number of months that each of the rates were effective
- (13) = Weighted average of (5) - (8) using (9) - (12) as weights
- (14) = Current (13) / (13)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
History of Rate Level Changes

Effective Date	Rate Change	Cumulative Rate Level
(1)	(2)	(3)
Prior		1.000
8/1/80	17.5%	1.175
9/1/81	-3.7%	1.132
9/1/82	26.2%	1.428
10/10/83	6.0%	1.514
3/1/85	25.0%	1.892
3/15/85	28.3%	2.428
11/15/85	9.2%	2.651
7/1/87	-9.2%	2.407
11/1/88	-13.8%	2.075
3/1/90	1.4%	2.104
4/1/91	-1.0%	2.083
1/1/92	-22.9%	1.606
10/1/93	0.0%	1.606
1/1/98	-3.0%	1.558
1/1/00	9.0%	1.698
1/1/01	4.0%	1.766
1/1/02	5.0%	1.854
1/1/03	10.0%	2.039
1/1/04	10.0%	2.243
1/1/05	10.0%	2.468
1/1/06	5.0%	2.591
9/1/06	8.0%	2.798
1/1/07	3.7%	2.902
2/1/08	5.4%	3.059
2/1/09	15.6%	3.536
1/1/11	5.0%	3.713

Notes:

- (2) Provided by TWIA, excludes 1/1/92 refund on in-force policies
- (3) = Cumulation of (2)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Fixed Expenses and Variable Permissible Loss & LAE Ratios

Expense Category	2008	2009	2010	Selected
(1) Direct Written Premium	\$331,058	\$382,342	\$385,550	
(2) Direct Earned Premium	321,937	357,906	385,566	
(3) Commission				
\$ Amount	52,946	61,149	60,842	
% of DWP	16.0%	16.0%	15.8%	15.9%
(4) Other Acquisition				
\$ Amount	\$0	\$0	\$0	
% of DWP	0.0%	0.0%	0.0%	0.0%
(5) General Expense				
Unadjusted \$ Amount	\$9,330	\$20,842	\$17,905	
Adjustments				
Contribution to Statutory Fund	0	0	0	
Adjusted \$ Amount	9,330	20,842	17,905	
% of DWP	2.8%	5.5%	4.6%	4.3%
(6) Taxes, Licenses & Fees				
\$ Amount	\$6,057	\$7,090	\$7,535	
% of DWP	1.8%	1.9%	2.0%	1.9%
(7) Reinsurance Expense				18.3%
(8) Total Fixed Expenses				22.6%
(9) Total Variable Expenses				17.8%
(10) Fund Contribution				20.0%
(11) Variable Permissible Loss & LAE Ratio				62.2%

Notes:

- (1) - (6) From TWIA's Statutory Annual Statements and Insurance Expense Exhibits
- (7) Exhibit 11, Sheet 2
- (8) = (5) + (7)
- (9) = (3) + (4) + (6)
- (10) Selected judgmentally to incorporate savings from lack of reinsurance purchase
- (11) = 100% - (9) - (10)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Development of Reinsurer Expense
Using Average of AIR and RMS Hurricane Models

(1) 2011 - 2012 Reinsurance Premium	99,970,400
(2a) Average Annual Loss by Reinsurance Layer (AIR) 100% of \$636M XS \$1600M	15,161,636
Total	15,161,636
(2b) Average Annual Loss by Reinsurance Layer (RMS) 100% of \$636M XS \$1600M	16,043,806
Total	16,043,806
(2c) Selected Total Average Annual Loss	15,602,721
(3) Annual Exposure Growth	5.0%
(4) Prospective Average Annual Loss	16,316,647
(5) Net Cost of Reinsurance	83,653,753
(6) TWIA 2010 Earned Premium at Present Rates	405,730,184
(7) 2011 - 2012 TWIA Prospective Earned Premium at Present Rates	458,001,966
(8) Indicated Reinsurance Expense %	18.3%

Notes:

- (1) From TWIA reinsurance contract effective 6/1/2011 through 5/31/2012
- (2a) Provided by Guy Carpenter, based on AIR model using TWIA exposures as of 12/31/2010 and adjusted for ALAE
- (2b) Provided by Guy Carpenter, based on RMS model using TWIA exposures as of 12/31/2010 and adjusted for ALAE
- (2c) Selected equal to the average of the modeled average annual losses
- (3) Selected based on projections communicated to reinsurers
- (4) = Sum of (2a) * [(3) ^ 0.917]
- (5) = (1) - (4)
- (6) = Commercial Exhibit 10, Sheet 1 + Residential Exhibit 10, Sheet 2, calendar year ending 12/31/xx
- (7) = (6) adjusted for premium trend * [(3) ^ 1.417] (projected premium growth from 7/1/2010 to 12/1/2011)
- (8) = (5) / (7)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Reconciliation of Paid Loss Data to Schedule P

Accident Year	TWIA Provided Paid Loss			Schedule P	
	Commercial & Farm	Residential	Total	Direct & Assumed Paid Loss	Difference
(1)	(2)	(3)	(4)	(5)	(6)
2001	1,042,867	2,812,399	3,855,266	3,856,000	(734)
2002	8,023,090	16,816,422	24,839,512	24,746,000	93,512
2003	11,853,560	12,917,686	24,771,246	24,606,000	165,246
2004	619,079	4,677,400	5,296,479	5,167,000	129,479
2005	71,309,508	84,354,684	155,664,192	154,775,000	889,192
2006	1,517,386	2,735,629	4,253,015	4,242,000	11,015
2007	5,589,635	10,021,039	15,610,674	15,568,000	42,674
2008	672,649,856	1,235,594,893	1,908,244,749	1,908,990,741	(745,992)
2009	2,288,889	6,943,397	9,232,286	8,888,000	344,286
2010	4,488,960	5,960,479	10,449,439	10,449,000	439
Total	779,382,830	1,382,834,028	2,162,216,858	2,161,287,741	929,117

Notes:

- (2), (3) Provided by TWIA, as of 12/31/2010
- (4) = (2) + (3)
- (5) Based on TWIA 2010 Annual Statement
- (6) = (4) - (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Reconciliation of Premium Data to Annual Statement

Calendar Year	TWIA Provided Written Premium			Annual Statement Gross Written Premium Difference	
	Commercial (1)	Residential (3)	Total (4)	(5)	(6)
1991	7,329,258	13,133,584	20,462,842	20,503,935	(41,093)
1992	6,107,171	5,357,578	11,464,749	11,495,409	(30,660)
1993	9,185,541	10,130,170	19,315,711	19,376,959	(61,248)
1994	10,672,677	15,758,330	26,431,007	26,510,501	(79,494)
1995	12,865,905	19,259,265	32,125,170	32,419,287	(294,117)
1996	15,640,660	24,504,127	40,144,787	40,358,575	(213,788)
1997	16,536,186	25,783,455	42,319,641	42,462,844	(143,203)
1998	16,558,977	27,833,800	44,392,777	44,410,914	(18,137)
1999	17,394,142	27,168,992	44,563,134	44,581,218	(18,084)
2000	17,332,561	29,762,296	47,094,857	48,012,426	(917,569)
2001	18,271,156	36,190,118	54,461,274	54,630,727	(169,453)
2002	24,012,249	48,851,299	72,863,548	72,967,831	(104,283)
2003	29,220,514	58,572,899	87,793,413	87,987,279	(193,866)
2004	31,009,323	71,292,702	102,302,025	102,384,351	(82,326)
2005	35,740,174	78,094,276	113,834,450	113,927,701	(93,251)
2006	76,847,840	119,658,335	196,506,175	196,833,235	(327,060)
2007	110,951,304	203,561,196	314,512,500	315,139,307	(626,807)
2008	98,037,392	232,921,259	330,958,651	331,057,645	(98,994)
2009	111,269,480	269,536,289	380,805,769	382,342,402	(1,536,633)
2010	102,171,553	278,119,131	380,290,684	385,549,582	(5,258,898)
Total	767,154,063	1,595,489,101	2,362,643,164	2,372,952,128	-10,308,964

Notes:

(2), (3) Provided by TWIA, as of 12/31/2010

(4) = (2) + (3)

(5) Based on TWIA Annual Statements

(6) = (4) - (5)

Texas Windstorm Insurance Association
Commercial Property - Wind & Hail
Rate Level Review
Analysis of Current and Proposed Net Premium Income

Exhibit 13

Premiums and Rate Components	<u>TWIA Indications at Current Rates</u>			<u>TWIA Indications at Proposed Rates</u>		
	Commercial	Residential	Total	Commercial	Residential	Total
(1) 2012 Written Premium	87,000,000	333,000,000	420,000,000	91,350,000	349,650,000	441,000,000
(2) 2012 Earned Premium	90,000,000	320,000,000	410,000,000	92,250,000	328,000,000	420,250,000
(3) Non-Hurricane Loss & LAE Ratio	8.1%	9.7%	9.3%	7.9%	9.5%	9.1%
(4) General Expenses	4.3%	4.3%	4.3%	4.1%	4.1%	4.1%
(5) Reinsurance	23.8%	23.8%	23.8%	22.7%	22.7%	22.7%
(6) Commission	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%
(7) Taxes, Licenses, & Fees	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
(8) Total Non-Catastrophe Expenses	47,225,154	183,895,246	231,120,400	47,999,454	186,858,946	234,858,400
(9) Net Premium Income			178,879,600			185,391,600

Estimated Costs for \$1 Billion Class 1 Bonds

(10) Net Required Premium	195,000,000 - 242,000,000
(11) Net Debt Service	130,000,000 - 162,000,000

Notes:

- (1) projected
- (2) projected
- (3) Exhibit 2, Sheet 1
- (4) Exhibit 11, Sheet 1 (5)
- (5) Exhibit 11, Sheet 1 (7)
- (6) Exhibit 11, Sheet 1 (3)
- (7) Exhibit 11, Sheet 1 (6)
- (8) = (1) * [(4) + (6) + (7)] + (2) * (3)
- (9) = (2) - (8)
- (10) from financial analysts, assuming Class 1 bond proceeds are taxable; adjusted to 14 year term
- (11) from financial analysts, assuming Class 1 bond proceeds are taxable; adjusted to 14 year term