TEXAS WINDSTORM INSURANCE ASSOCIATION
RESIDENTIAL PROPERTY RATE LEVEL REVIEW
2013

June 2013

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INTRODUCTION

The Texas Windstorm Insurance Association (TWIA) has completed studies sufficient to support rate level indications for its residential 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 residential 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 12/31/12. 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 residential wind/hail coverage. The actual costs of providing residential 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 residential 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	+32%
Actual Industry Experience	+22%
Hurricane Simulation Models	+42%

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 49 years of actual insurance industry premiums and losses and 162 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 4% more than the corresponding indication from the prior TWIA residential rate study. A 5% rate increase, effective January 1, 2013, was offset by increases in catastrophe and non-catastrophe loss provisions.

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 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 and to retain the savings resulting from the decision not to purchase catastrophe reinsurance.

The provision for reinsurance expense is 15.6% 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 residential 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 permissible loss, LAE and fixed expense ratio.

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

Earned Premium at Current Rates

Historical industry and TWIA earned premium is adjusted to TWIA's current rate level. 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 TWIA rates. Industry earned premium was provided by TDI/TICO. Historical TWIA written premium is adjusted to the current rate level and adjusted to an earned basis based on a uniform monthly earning assumption.

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 0.132 is equal to the weighted average of the nine hurricane years included in the analysis. For non-hurricane losses, the indicated ratio of 0.181 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 these loss ratios is described in the following two 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 industry non-hurricane loss for accident years 2003-2012 to the earned premium at current TWIA rates for the same years. The indicated ultimate non-hurricane loss for each year is based on actual industry paid loss as of

9/30/12, 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.

Paid loss development factors are selected based on the current average of all available years and prior selections. 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 2003-2012 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 2003-2012 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 residential book of business due to the growth, this weighting may be more appropriate than a non-weighted average across all years.

The all-territory indicated loss and LAE ratio is then calculated as the weighted average of the territory loss and LAE ratios. TWIA 2012 written premium is used in the weighted average calculation.

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 49 and 162 years, respectively. The other method is based on hurricane simulation models. The "49/162-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 49-year period is insufficient to measure long-term hurricane intensity.
- A 49-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 residential 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 double-counting or understatement of expected future losses resulting from the use of 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 49/162-Year Industry Hurricane Experience

In Exhibit 6, Texas insurance industry seacoast dwelling extended coverage experience for the 1964-2012 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 (1980-2012), 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 49 years of loss ratios by separating the 49 years into the thirteen hurricane years and thirty-six non-hurricane years. The 36 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 thirteen hurricane years. An average hurricane loss ratio for hurricane years is calculated as the average of the thirteen hurricane loss ratios: 114.8%.

The 49-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 49-year period is 0.286, while the annual frequency during the most recent 162-year period is 0.389. The 49-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 49-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 162-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 40.5%.

Hurricane Simulation Models

This projected hurricane loss ratio is determined based on the average result of two different hurricane simulation models. The models are AIR CLASIC/2 v14.0 and RMS RiskLink v11.0. Both models were run using exposure data provided by TWIA as of 12/31/2012. 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 4,743 and 9,284 unique events, respectively, with the following distribution of intensity ratings in Texas:

Saffir-Simpson Category	AIR	RMS
Category 0	0%	4.9%
Category 1	40.9%	29.5%
Category 2	26.3%	16.0%
Category 3	22.7%	19.7%
Category 4	8.9%	23.8%
Category 5	1.2%	6.0%

The intensity at first landfall is shown for AIR and RMS events. 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 55.2% and 47.6%. The average of these loss ratios is 51.4%.

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 20.2% 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 62.0%.

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 15.6% 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 shows a reconciliation of the premium data provided by TWIA to TWIA's annual statement data. This reconciliation shows the differences between the two data sources. Differences of less than 1% exist for each year except 2010.

Key Differences Versus Prior Indications
The indicated rate changes shown in this report are 4% higher those shown in the prior (2012) 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
Previous Rate Indication (Combined Method)		+28%
TWIA Rate Level	-6%	
Change in Experience Period	+10%	
Current Rate Indication (Combined Method)		+32%

These reasons are discussed below:

TWIA Rate Level

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

Change in experience Period

The indicated rate change increased approximately 10% as a result of increased in both the actual industry experience and hurricane model estimates for catastrophe loss. The change in actual industry experience also included an adjustment to the on-level factors applied to industry premiums supplied by TICO.

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 close to high end of the range of estimated costs. Current and proposed rate levels should result in sufficient net required premium to issue the entire $1 billion of Class 1 public securities.

SUMMARY OF EXHIBITS

Exhibit Number	Exhibit Title or Purpose
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 – 45/158-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

Exhibit 1

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

Hurricane Projection Method	Indicated Loss & LAE Ratio				Variable Permissible LLAE Ratio	Indicated Rate Change	Proposed Rate Change
	Hurricane	Non-Hurricane	Fixed Expenses	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Using Experience and Models	52.0%	9.4%	20.2%	81.6%	62.0%	+32%	+5.0%
Using Actual Industry Experience	45.8%	9.4%	20.2%	75.4%	62.0%	+22%	
Using Hurricane Models	58.2%	9.4%	20.2%	87.8%	62.0%	+42%	

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

Exhibit 2
Sheet 1

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss & LAE Ratio
All Territory Weighted Average

| Territory | 2012 Written Premium | | Indicated Non-Hurricane Loss & LAE Ratio |
| | Amount | Share | |
(1)	(2)	(3)	(4)
Tier 1 - Territory 8	103,486,342	31.1%	4.0%
Tier 1 - Territory 9	55,367,354	16.7%	13.2%
Tier 1 - Territory 10	169,785,643	51.1%	11.5%
Tier 2	3,645,085	1.1%	8.9%
Total / Average	332,284,424	100.0%	9.4%

Notes:
(2) TWIA data
(3) = (2) / (2) Total
(4) Exhibit 2, Sheet 2a - Sheet 2d

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss & LAE Ratio
Tier 1 -- Territory 8 (Galveston County)

Exhibit 2
Sheet 2a

Accident Year Ending 9/30/xx	Ultimate Non-Hurricane Loss	LAE Factor	Net Trend Factor	Projected Non-Hurricane Loss & LAE	Earned Premium at Current TWIA Rate Level	Indicated Non-Hurricane Loss & LAE Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	1,548,430	0.181	1.064	1,945,732	41,413,014	4.7%
2004	565,137	0.181	1.005	670,764	44,342,599	1.5%
2005	4,891,222	0.181	0.965	5,574,355	54,070,659	10.3%
2006	684,266	0.181	0.978	790,340	64,209,297	1.2%
2007	1,296,626	0.181	1.053	1,612,475	81,729,008	2.0%
2008	433,975	0.181	1.067	546,864	102,037,281	0.5%
2009	3,412,893	0.181	1.063	4,284,556	105,098,849	4.1%
2010	1,304,712	0.181	1.054	1,624,072	102,565,352	1.6%
2011	1,299,609	0.181	1.034	1,587,023	101,746,904	1.6%
2012	11,008,387	0.181	1.020	13,260,923	103,535,627	12.8%
Total	26,445,257			31,897,104	800,748,590	4.0%

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

Exhibit 2
Sheet 2b

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss & LAE Ratio
Tier 1 -- Territory 9 (Nueces County)

Accident Year Ending 9/30/xx	Ultimate Non-Hurricane Loss	LAE Factor	Net Trend Factor	Projected Non-Hurricane Loss & LAE	Earned Premium at Current TWIA Rate Level	Indicated Non-Hurricane Loss & LAE Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	1,702,974	0.181	1.064	2,139,930	17,358,762	12.3%
2004	425,169	0.181	1.005	504,635	18,139,460	2.8%
2005	544,286	0.181	0.965	620,304	21,227,908	2.9%
2006	432,666	0.181	0.978	499,737	24,892,717	2.0%
2007	488,564	0.181	1.053	607,575	37,541,104	1.6%
2008	464,475	0.181	1.067	585,297	53,733,759	1.1%
2009	499,481	0.181	1.063	627,050	57,170,811	1.1%
2010	3,263,602	0.181	1.054	4,062,447	56,780,255	7.2%
2011	19,114,723	0.181	1.034	23,342,020	55,728,400	41.9%
2012	16,205,585	0.181	1.020	19,521,572	56,533,848	34.5%
Total	43,141,525			52,510,567	399,107,024	13.2%

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

Exhibit 2
Sheet 2c

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss & LAE Ratio
Tier 1 -- Territory 10 (Other Tier 1)

Accident Year Ending 9/30/xx	Ultimate Non-Hurricane Loss	LAE Factor	Net Trend Factor	Projected Non-Hurricane Loss & LAE	Earned Premium at Current TWIA Rate Level	Indicated Non-Hurricane Loss & LAE Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	2,396,387	0.181	1.064	3,011,262	23,635,393	12.7%
2004	434,303	0.181	1.005	515,476	27,172,466	1.9%
2005	930,112	0.181	0.965	1,060,016	32,297,853	3.3%
2006	814,136	0.181	0.978	940,342	38,812,379	2.4%
2007	3,254,832	0.181	1.053	4,047,686	81,168,952	5.0%
2008	1,393,758	0.181	1.067	1,756,312	137,873,165	1.3%
2009	1,884,108	0.181	1.063	2,365,315	151,519,064	1.6%
2010	6,206,733	0.181	1.054	7,725,980	152,435,242	5.1%
2011	55,057,080	0.181	1.034	67,233,173	155,035,381	43.4%
2012	19,142,021	0.181	1.020	23,058,861	168,032,718	13.7%
Total	91,513,470			111,714,423	967,982,613	11.5%

Notes:

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

Exhibit 2
Sheet 2d

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss & LAE Ratio
Tier 2 -- (Territories 1 and 11)

Accident Year Ending 9/30/xx	Ultimate Non-Hurricane Loss	LAE Factor	Net Trend Factor	Projected Non-Hurricane Loss & LAE	Earned Premium at Current TWIA Rate Level	Indicated Non-Hurricane Loss & LAE Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	67,712	0.181	1.064	85,086	700,323	12.1%
2004	2,836	0.181	1.005	3,366	904,761	0.4%
2005	34,018	0.181	0.965	38,769	1,463,636	2.6%
2006	31,341	0.181	0.978	36,199	1,759,159	2.1%
2007	65,180	0.181	1.053	81,057	2,221,214	3.6%
2008	487,174	0.181	1.067	613,901	2,691,774	22.8%
2009	559,426	0.181	1.063	702,305	2,883,907	24.4%
2010	188,541	0.181	1.054	234,691	2,966,214	7.9%
2011	57,155	0.181	1.034	69,795	3,114,973	2.2%
2012	91,118	0.181	1.020	109,763	3,458,776	3.2%
Total	1,584,501			1,974,932	22,164,737	8.9%

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

Exhibit 2
Sheet 3a

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss
Tier 1 -- Territory 8 (Galveston County)

Accident Year	Industry Non-Hurricane Paid Loss	Development Factor	Ultimate Non-Hurricane Loss
(1)	(2)	(3)	(4)
2003	1,548,430	1.000	1,548,430
2004	565,137	1.000	565,137
2005	4,891,222	1.000	4,891,222
2006	684,266	1.000	684,266
2007	1,295,331	1.001	1,296,626
2008	433,109	1.002	433,975
2009	3,365,772	1.014	3,412,893
2010	1,265,482	1.031	1,304,712
2011	1,236,545	1.051	1,299,609
2012	9,313,356	1.182	11,008,387
Total	24,598,650		26,445,257

Notes:
   (2) Exhibit 2, Sheet 4a, as of 12/31/12
   (3) Exhibit 3, Sheet 1
   (4) = (2) * (3)

Exhibit 2
Sheet 3b

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss
Tier 1 -- Territory 9 (Nueces County)

Accident Year	Industry Non-Hurricane Paid Loss	Development Factor	Ultimate Non-Hurricane Loss
(1)	(2)	(3)	(4)
2003	1,702,974	1.000	1,702,974
2004	425,169	1.000	425,169
2005	544,286	1.000	544,286
2006	432,666	1.000	432,666
2007	488,076	1.001	488,564
2008	463,548	1.002	464,475
2009	492,585	1.014	499,481
2010	3,165,472	1.031	3,263,602
2011	18,187,177	1.051	19,114,723
2012	13,710,309	1.182	16,205,585
Total	39,612,262		43,141,525

Notes:
 (2) Exhibit 2, Sheet 4b, as of 12/31/12
 (3) Exhibit 3, Sheet 1
 (4) = (2) * (3)

Exhibit 2
Sheet 3c

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss
Tier 1 -- Territory 10 (Other Tier 1)

Accident Year	Industry Non-Hurricane Paid Loss	Development Factor	Ultimate Non-Hurricane Loss
(1)	(2)	(3)	(4)
2003	2,396,387	1.000	2,396,387
2004	434,303	1.000	434,303
2005	930,112	1.000	930,112
2006	814,136	1.000	814,136
2007	3,251,580	1.001	3,254,832
2008	1,390,976	1.002	1,393,758
2009	1,858,095	1.014	1,884,108
2010	6,020,110	1.031	6,206,733
2011	52,385,423	1.051	55,057,080
2012	16,194,603	1.182	19,142,021
Total	85,675,725		91,513,470

Notes:
  (2) Exhibit 2, Sheet 4c, as of 12/31/12
  (3) Exhibit 3, Sheet 1
  (4) = (2) * (3)

Exhibit 2
Sheet 3d

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Projected Ultimate Non-Hurricane Loss
Tier 2 -- (Territories 1 and 11)

Accident Year	Industry Non-Hurricane Paid Loss	Development Factor	Ultimate Non-Hurricane Loss
(1)	(2)	(3)	(4)
2003	67,712	1.000	67,712
2004	2,836	1.000	2,836
2005	34,018	1.000	34,018
2006	31,341	1.000	31,341
2007	65,115	1.001	65,180
2008	486,202	1.002	487,174
2009	551,702	1.014	559,426
2010	182,872	1.031	188,541
2011	54,382	1.051	57,155
2012	77,088	1.182	91,118
Total	1,553,268		1,584,501

Notes:
(2) Exhibit 2, Sheet 4d, as of 12/31/12
(3) Exhibit 3, Sheet 1
(4) = (2) * (3)

Exhibit 2
Sheet 4a

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Summary of Industry Historical Paid Loss as of 12/31/12
Tier 1 -- Territory 8 (Galveston County)

Accident	Paid Loss Excluding Expense		
Year	Non-Hurricane	Hurricane	Total
(1)	(2)	(3)	(4)
2003	1,548,430	1,000,369	2,548,799
2004	565,137	0	565,137
2005	4,891,222	29,517,493	34,408,715
2006	684,266	0	684,266
2007	1,295,331	1,287,873	2,583,204
2008	433,109	971,750,613	972,183,722
2009	3,365,772	0	3,365,772
2010	1,265,482	0	1,265,482
2011	1,236,545	0	1,236,545
2012	9,313,356	0	9,313,356
Total	24,598,650	1,003,556,348	1,028,154,998

Notes:
  (2) Provided by TDI. Accident years ending 9/30/xx
  (4) = (2) + (3)

Exhibit 2
Sheet 4b

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Summary of Industry Historical Paid Loss as of 12/31/12
Tier 1 -- Territory 9 (Nueces County)

Accident Year	Paid Loss Excluding Expense Non-Hurricane	Hurricane	Total
(1)	(2)	(3)	(4)
2003	1,702,974	0	1,702,974
2004	425,169	68,887	494,056
2005	544,286	0	544,286
2006	432,666	119,899	552,565
2007	488,076	0	488,076
2008	463,548	0	463,548
2009	492,585	833,633	1,326,218
2010	3,165,472	0	3,165,472
2011	18,187,177	192,655	18,379,832
2012	13,710,309	0	13,710,309
Total	39,612,262	1,215,074	40,827,336

Notes:
(2) Provided by TDI. Accident years ending 9/30/xx
(4) = (2) + (3)

Exhibit 2
Sheet 4c

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Summary of Industry Historical Paid Loss as of 12/31/12
Tier 1 -- Territory 10 (Other Tier 1)

	Paid Loss Excluding Expense		
Accident Year	Non-Hurricane	Hurricane	Total
(1)	(2)	(3)	(4)
2003	2,396,387	9,193,796	11,590,183
2004	434,303	0	434,303
2005	930,112	113,102,544	114,032,656
2006	814,136	0	814,136
2007	3,251,580	5,550,321	8,801,901
2008	1,390,976	666,723,711	668,114,687
2009	1,858,095	0	1,858,095
2010	6,020,110	1,085,344	7,105,454
2011	52,385,423	0	52,385,423
2012	16,194,603	0	16,194,603
Total	85,675,725	795,655,716	881,331,441

Notes:
(2) Provided by TDI. Accident years ending 9/30/xx
(4) = (2) + (3)

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Summary of Industry Historical Paid Loss as of 12/31/12
Tier 2 -- (Territories 1 and 11)

Exhibit 2
Sheet 4d

	Paid Loss Excluding Expense		
Accident Year	Non-Hurricane	Hurricane	Total
(1)	(2)	(3)	(4)
2003	67,712	2,883,350	2,951,062
2004	2,836	0	2,836
2005	34,018	30,359,672	30,393,690
2006	31,341	0	31,341
2007	65,115	328,111	393,226
2008	486,202	431,550,566	432,036,768
2009	551,702	0	551,702
2010	182,872	176,694	359,566
2011	54,382	0	54,382
2012	77,088	0	77,088
Total	1,553,268	465,298,393	466,851,661

Notes:
(2) Provided by TDI. Accident years ending 9/30/xx
(4) = (2) + (3)

Exhibit 2
Sheet 5

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

Year / Quarter	Average EPPR
(1)	(2)
2005 / 3	1,153.50
2006 / 3	1,229.99
2007 / 3	1,386.57
2008 / 3	1,431.06
2009 / 3	1,440.27
2010 / 3	1,446.85
2011 / 3	1,419.35
2012 / 3	1,409.04
2012 / 4	1,408.58

(3) Current Average Earned Date	7/1/2012
(4) Current Average Accident Date	4/1/2012
(5) Prospective Average Earned / Accident Date	1/1/2015
(6) Premium Trend Length	2.500
(7) Loss Trend Length	2.750
(8) Selected Premium Trend	0.1%
(9) Selected Loss Trend	0.8%

Accident Year	Current Premium Trend	Current Loss Trend	Prospective Premium Trend	Prospective Loss Trend	Net Trend Factor
(10)	(11)	(12)	(13)	(14)	(15)
2003	1.223	1.276	1.002	1.022	1.064
2004	1.222	1.204	1.002	1.022	1.005
2005	1.221	1.155	1.002	1.022	0.965
2006	1.145	1.098	1.002	1.022	0.978
2007	1.016	1.049	1.002	1.022	1.053
2008	0.984	1.030	1.002	1.022	1.067
2009	0.978	1.019	1.002	1.022	1.063
2010	0.974	1.006	1.002	1.022	1.054
2011	0.992	1.006	1.002	1.022	1.034
2012	1.000	1.000	1.002	1.022	1.020

Notes:
(2) Exhibit 3, Sheet 2 (9)
(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 2012 / 3
(12) Exhibit 3, Sheet 3a
(13) = [1 + (8)] ^ (6)
(14) = [1 + (9)] ^ (7)
(15) = [(12) * (14)] / [(11) * (13)]

Exhibit 3
Sheet 1

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Paid Loss Development Factors
Statewide Industry Extended Coverage Dwelling Paid Loss

Months of Development

Accident Year	15	27	39	51	63	75	87	99	111
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2003	82,086	88,066	88,446	88,704	89,022	89,082	89,097	89,109	89,111
2004	30,571	32,466	32,708	33,429	33,493	33,527	33,575	33,579	33,581
2005	125,113	152,899	155,841	160,133	163,221	163,331	163,442	163,505	
2006	49,335	53,120	53,492	53,624	53,755	53,820	53,845		
2007	53,874	59,731	61,175	61,738	61,853	61,978			
2008	435,381	557,638	625,922	688,372	756,380				
2009	114,845	136,583	139,262	140,625					
2010	63,706	70,824	72,515						
2011	137,269	154,021							
2012	163,115								

Development Factors

Accident Year	15 - 27	27 - 39	39 - 51	51 - 63	63 - 75	75 - 87	87 - 99	99 - 111	111 - Ult
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2003	1.073	1.004	1.003	1.004	1.001	1.000	1.000	1.000	
2004	1.062	1.007	1.022	1.002	1.001	1.001	1.000	1.000	
2005	1.222	1.019	1.028	1.019	1.001	1.001	1.000		
2006	1.077	1.007	1.002	1.002	1.001	1.000			
2007	1.109	1.024	1.009	1.002	1.002				
2008	1.281	1.122	1.100	1.099					
2009	1.189	1.020	1.010						
2010	1.112	1.024							
2011	1.122								
Average	1.138	1.029	1.025	1.021	1.001	1.001	1.000	1.000	
Avg 5 Year	1.163	1.039	1.030	1.025	1.001	1.001	1.000	1.000	
Prior	1.111	1.011	1.008	1.003	1.001	1.001	1.000	1.000	1.000
Selected	1.125	1.020	1.016	1.012	1.001	1.001	1.000	1.000	1.000
Cumulative	1.182	1.051	1.031	1.014	1.002	1.001	1.000	1.000	1.000

Notes:
  Provided by TICO. Accident years ending 9/30/xx

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

Exhibit 3
Sheet 2

Year / Quarter	Policies In-Force	Annualized Earned In-Force	Written Premium	On-Level Factors	Premium at Present Rates Written	Earned	Earned Premium at Present Rates Annualized	Average	Exponential Fitted Trends All-Year	5-Year	4-Year	3-Year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2004 / 2	90,026		19,533,071	1.511	29,516,974	25,199,358						
2004 / 3	92,889		22,935,131	1.511	34,657,922	25,969,323						
2004 / 4	94,103		15,411,121	1.511	23,288,179	26,655,147						
2005 / 1	95,514		14,585,888	1.511	22,041,146	27,177,076	105,000,904					
2005 / 2	95,480	93,815	20,801,454	1.511	31,433,663	27,628,993	107,430,539	1,145.13	1,233.32			
2005 / 3	98,519	95,200	25,464,039	1.511	38,479,426	28,351,962	109,813,178	1,153.50	1,241.58			
2005 / 4	99,741	96,609	17,243,077	1.511	26,056,499	29,236,915	112,394,946	1,163.40	1,249.89			
2006 / 1	100,819	97,977	17,187,974	1.511	25,973,232	29,974,889	115,192,759	1,175.72	1,258.26			
2006 / 2	107,426	100,133	31,107,333	1.511	47,007,167	31,987,624	119,551,390	1,193.93	1,266.68			
2006 / 3	119,972	104,308	40,282,453	1.497	60,311,525	37,098,040	128,297,468	1,229.99	1,275.16			
2006 / 4	131,781	110,995	31,080,816	1.466	45,554,895	42,017,690	141,078,243	1,271.04	1,283.70			
2007 / 1	147,831	120,876	37,520,115	1.407	52,776,316	47,822,116	158,925,470	1,314.78	1,292.29			
2007 / 2	168,519	134,389	57,350,584	1.407	80,670,130	55,579,976	182,517,821	1,358.12	1,300.94			
2007 / 3	192,867	151,138	66,527,259	1.407	93,578,169	64,143,707	209,563,488	1,386.57	1,309.65			
2007 / 4	201,251	168,933	42,163,238	1.407	59,307,398	70,348,582	237,894,381	1,408.22	1,318.42			
2008 / 1	204,043	184,644	43,831,073	1.332	58,370,518	72,313,428	262,385,693	1,421.04	1,327.25	1,441.12		
2008 / 2	207,335	196,522	66,980,792	1.300	87,075,892	73,825,983	280,631,701	1,427.99	1,336.13	1,439.83		
2008 / 3	214,272	204,050	77,031,575	1.300	100,142,039	75,519,611	292,007,606	1,431.06	1,345.08	1,438.55		
2008 / 4	212,579	208,141	45,077,819	1.300	58,601,745	76,098,388	297,757,411	1,430.55	1,354.08	1,437.27		
2009 / 1	212,647	210,633	50,763,638	1.198	60,817,059	76,316,070	301,760,053	1,432.64	1,363.15	1,435.99	1,449.64	
2009 / 2	213,310	212,455	78,390,421	1.158	90,746,711	77,017,929	304,951,998	1,435.37	1,372.28	1,434.71	1,446.91	
2009 / 3	214,654	213,250	86,983,368	1.158	100,694,121	77,705,836	307,138,223	1,440.27	1,381.46	1,433.44	1,444.19	
2009 / 4	214,898	213,587	53,398,560	1.158	61,815,508	78,058,710	309,098,545	1,447.18	1,390.71	1,432.16	1,441.47	
2010 / 1	215,151	214,190	51,747,346	1.158	59,904,021	78,260,854	311,043,329	1,452.18	1,400.02	1,430.89	1,438.76	1,450.71
2010 / 2	218,546	215,158	80,792,227	1.158	93,527,102	78,520,747	312,546,147	1,452.64	1,409.40	1,429.61	1,436.05	1,446.21
2010 / 3	225,653	217,187	89,415,866	1.158	103,510,042	79,396,650	314,236,961	1,446.85	1,418.83	1,428.34	1,433.35	1,441.73
2010 / 4	227,922	220,190	56,161,564	1.158	65,014,031	80,120,129	316,298,380	1,436.48	1,428.33	1,427.07	1,430.65	1,437.26
2011 / 1	228,987	223,548	57,880,211	1.103	63,812,933	80,967,779	319,005,305	1,427.01	1,437.89	1,425.80	1,427.96	1,432.80
2011 / 2	230,885	226,819	89,007,580	1.103	98,130,857	81,921,610	322,406,167	1,421.42	1,447.52	1,424.53	1,425.28	1,428.36
2011 / 3	237,407	229,831	96,546,975	1.103	106,443,040	83,200,729	326,210,246	1,419.35	1,457.21	1,423.26	1,422.59	1,423.93
2011 / 4	241,386	232,983	64,055,335	1.103	70,621,007	83,945,077	330,035,194	1,416.56	1,466.97	1,421.99	1,419.92	1,419.51
2012 / 1	244,491	236,604	66,339,712	1.050	69,656,698	85,288,188	334,355,604	1,413.14	1,476.79	1,420.73	1,417.25	1,415.11
2012 / 2	243,397	240,106	93,957,754	1.050	98,655,641	86,470,309	338,904,302	1,411.48	1,486.68	1,419.46	1,414.58	1,410.72
2012 / 3	252,590	243,568	109,188,970	1.050	114,648,419	87,494,035	343,197,609	1,409.04	1,496.63	1,418.20	1,411.92	1,406.35
2012 / 4	252,715	246,882	66,408,705	1.050	69,729,140	88,500,971	347,753,503	1,408.58	1,506.65	1,416.94	1,409.26	1,401.99

(14) Average Annual Change									2.7%	-0.4%	-0.8%	-1.2%
(15) Correlation Coefficient									59.0%	28.9%	67.3%	92.2%
(16) Selected Premium Trend												0.1%

Notes:
(2) Provided by TWIA
(3) Calculated from (2) using uniform quarterly earning assumption
(4) Provided by TWIA
(5) Cumulative effect of annual rate changes
(6) = (4) * (5) Indexed to 2011 / 4
(7) Calculated from (6) using uniform quarterly earning assumption
(8) = Sum of (7) for prior 4 quarters
(9) = (8) / (3)
(10) - (13) = (9) fitted to an exponential distribution
(14) Fitted average annual change
(15) Evaluates the predictability of the fitted curve
(16) Selected based on judgment

Exhibit 3
Sheet 3a

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

Calendar Year Ending 9/30/xx	Statewide Boeckh	Coastal Boeckh	Modified CPI	Weighted Average
(1)	(2)	(3)	(4)	(5)
2003	1.346	1.328	1.121	1.276
2004	1.316	1.238	1.100	1.204
2005	1.304	1.179	1.082	1.155
2006	1.219	1.111	1.057	1.098
2007	1.162	1.054	1.035	1.049
2008	1.100	1.034	1.019	1.030
2009	1.044	1.016	1.029	1.019
2010	1.027	0.997	1.033	1.006
2011	1.014	1.001	1.022	1.006
2012	1.000	1.000	1.000	1.000

Factors to Adjust For Prospective Loss Costs

(6)	Fitted Trend	2.4%	0.9%	0.4%	0.8%
(7)	Cost Factor	1.067	1.025	1.011	1.022

Notes:
    (2) = Exhibit 3, Sheet 3b trended forward to 9/30/2012
    (3) = Exhibit 3, Sheet 3c trended forward to 9/30/2012
    (4) = Exhibit 3, Sheet 3d
    (5) = 25% CPI and 75% Boeckh (most appropriate available by year)
    (6) = (2) - (5) fitted to an exponential curve using 5 years' data
    (7) = [1 + (6)] ^ 2.75 (trended from 4/1/2012 to 1/1/2015)

Exhibit 3
Sheet 3b

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

Calendar Year Ending	Texas Statewide Index	Fitted Trends All Years Linear	Exponential	5 Years Linear	Exponential	4 Years Linear	Exponential	3 Years Linear	Exponential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3/31/2003	1503.33	1464.95	1481.18						
6/30/2003	1510.93	1481.69	1495.22						
9/30/2003	1521.69	1498.42	1509.39						
12/31/2003	1534.91	1515.15	1523.70						
3/31/2004	1545.25	1531.89	1538.14						
6/30/2004	1552.90	1548.62	1552.72						
9/30/2004	1556.45	1565.35	1567.44						
12/31/2004	1553.48	1582.09	1582.30						
3/31/2005	1552.38	1598.82	1597.30						
6/30/2005	1558.58	1615.55	1612.44						
9/30/2005	1571.41	1632.29	1627.72						
12/31/2005	1595.89	1649.02	1643.15						
3/31/2006	1625.56	1665.75	1658.72						
6/30/2006	1652.06	1682.48	1674.45						
9/30/2006	1680.19	1699.22	1690.32						
12/31/2006	1705.73	1715.95	1706.34						
3/31/2007	1728.03	1732.68	1722.51						
6/30/2007	1748.11	1749.42	1738.84						
9/30/2007	1762.69	1766.15	1755.32						
12/31/2007	1780.52	1782.88	1771.96						
3/31/2008	1803.56	1799.62	1788.76	1860.20	1860.68				
6/30/2008	1829.79	1816.35	1805.71	1871.81	1871.82				
9/30/2008	1862.05	1833.08	1822.83	1883.42	1883.01				
12/31/2008	1896.38	1849.82	1840.11	1895.03	1894.28				
3/31/2009	1923.66	1866.55	1857.55	1906.64	1905.61	1942.38	1942.76		
6/30/2009	1945.15	1883.28	1875.16	1918.25	1917.02	1950.21	1950.40		
9/30/2009	1962.77	1900.02	1892.93	1929.86	1928.49	1958.05	1958.07		
12/31/2009	1973.20	1916.75	1910.88	1941.47	1940.02	1965.88	1965.77		
3/31/2010	1980.60	1933.48	1928.99	1953.08	1951.63	1973.72	1973.50	1980.00	1980.20
6/30/2010	1990.82	1950.22	1947.27	1964.69	1963.31	1981.55	1981.26	1986.87	1986.96
9/30/2010	1994.53	1966.95	1965.73	1976.30	1975.06	1989.38	1989.05	1993.74	1993.73
12/31/2010	1996.51	1983.68	1984.36	1987.91	1986.87	1997.22	1996.87	2000.61	2000.53
3/31/2011	2002.14	2000.42	2003.17	1999.52	1998.76	2005.05	2004.72	2007.48	2007.36
6/30/2011	2008.57	2017.15	2022.16	2011.13	2010.72	2012.88	2012.60	2014.35	2014.20
9/30/2011	2020.12	2033.88	2041.33	2022.74	2022.75	2020.72	2020.52	2021.21	2021.07
12/31/2011	2031.85	2050.61	2060.68	2034.35	2034.85	2028.55	2028.46	2028.08	2027.96
3/31/2012	2043.58	2067.35	2080.21	2045.96	2047.03	2036.39	2036.44	2034.95	2034.88
6/30/2012	2049.82	2084.08	2099.93	2057.57	2059.27	2044.22	2044.44	2041.82	2041.82
9/30/2012	2048.71	2100.81	2119.83	2069.18	2071.60	2052.05	2052.48	2048.69	2048.78
12/31/2012	2046.11	2117.55	2139.93	2080.79	2083.99	2059.89	2060.55	2055.56	2055.77
Annual Trend		3.2%	3.8%	2.2%	2.4%	1.5%	1.6%	1.3%	1.4%
R-Squared		0.967	0.963	0.881	0.870	0.957	0.955	0.952	0.953

Notes:
   (2) = Average Index for Austin, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, Odessa, and San Antonio
   (3) - (10) = (2) fitted to linear and exponential distributions

Calendar Year Ending	Texas Coastal Index	Fitted Trends All Years Linear	Exponential	5 Years Linear	Exponential	4 Years Linear	Exponential	3 Years Linear	Exponential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3/31/2003	1543.29	1614.75	1619.80						
6/30/2003	1547.99	1629.48	1632.80						
9/30/2003	1559.86	1644.22	1645.91						
12/31/2003	1584.94	1658.95	1659.12						
3/31/2004	1616.44	1673.69	1672.44						
6/30/2004	1644.67	1688.42	1685.86						
9/30/2004	1672.98	1703.15	1699.40						
12/31/2004	1698.09	1717.89	1713.04						
3/31/2005	1720.35	1732.62	1726.79						
6/30/2005	1740.42	1747.35	1740.65						
9/30/2005	1756.55	1762.09	1754.62						
12/31/2005	1776.85	1776.82	1768.71						
3/31/2006	1803.22	1791.55	1782.91						
6/30/2006	1831.27	1806.29	1797.22						
9/30/2006	1865.04	1821.02	1811.65						
12/31/2006	1900.04	1835.75	1826.19						
3/31/2007	1925.97	1850.49	1840.85						
6/30/2007	1947.53	1865.22	1855.63						
9/30/2007	1966.27	1879.95	1870.52						
12/31/2007	1977.64	1894.69	1885.54						
3/31/2008	1985.12	1909.42	1900.68	2006.87	2006.84				
6/30/2008	1998.87	1924.16	1915.93	2011.42	2011.33				
9/30/2008	2004.56	1938.89	1931.31	2015.98	2015.83				
12/31/2008	2009.10	1953.62	1946.82	2020.53	2020.34				
3/31/2009	2018.95	1968.36	1962.44	2025.09	2024.86	2041.62	2041.52		
6/30/2009	2026.06	1983.09	1978.20	2029.64	2029.40	2044.45	2044.33		
9/30/2009	2039.05	1997.82	1994.08	2034.20	2033.94	2047.27	2047.15		
12/31/2009	2052.25	2012.56	2010.09	2038.75	2038.49	2050.10	2049.98		
3/31/2010	2065.45	2027.29	2026.22	2043.31	2043.05	2052.93	2052.81	2072.98	2072.98
6/30/2010	2074.59	2042.02	2042.49	2047.86	2047.62	2055.75	2055.64	2072.88	2072.87
9/30/2010	2078.31	2056.76	2058.88	2052.42	2052.21	2058.58	2058.48	2072.77	2072.77
12/31/2010	2078.47	2071.49	2075.41	2056.97	2056.80	2061.41	2061.32	2072.67	2072.66
3/31/2011	2072.91	2086.22	2092.07	2061.53	2061.40	2064.23	2064.16	2072.56	2072.56
6/30/2011	2070.64	2100.96	2108.87	2066.08	2066.01	2067.06	2067.01	2072.45	2072.45
9/30/2011	2070.32	2115.69	2125.79	2070.64	2070.64	2069.89	2069.87	2072.35	2072.35
12/31/2011	2069.83	2130.42	2142.86	2075.19	2075.27	2072.71	2072.72	2072.24	2072.24
3/31/2012	2071.85	2145.16	2160.06	2079.75	2079.91	2075.54	2075.58	2072.14	2072.14
6/30/2012	2071.41	2159.89	2177.40	2084.30	2084.57	2078.37	2078.45	2072.03	2072.03
9/30/2012	2071.74	2174.63	2194.88	2088.86	2089.23	2081.19	2081.32	2071.93	2071.93
12/31/2012	2073.30	2189.36	2212.50	2093.41	2093.91	2084.02	2084.19	2071.82	2071.82
Annual Trend		2.7%	3.2%	0.9%	0.9%	0.5%	0.6%	0.0%	0.0%
R-Squared		0.893	0.878	0.750	0.750	0.523	0.523	0.011	0.011

Notes:
    (2) = Average Index for Corpus Christi and Houston
    (5) - (10) = (2) fitted to linear and exponential distributions

Exhibit 3
Sheet 3d

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

Calendar Year Ending	Modified CPI	Fitted Trends All Years Linear	Exponential	5 Years Linear	Exponential	4 Years Linear	Exponential	3 Years Linear	Exponential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
9/30/2002	165.32	165.18	165.28						
12/31/2002	165.32	165.67	165.75						
3/31/2003	164.94	166.16	166.22						
6/30/2003	164.84	166.65	166.69						
9/30/2003	164.70	167.14	167.16						
12/31/2003	164.88	167.63	167.64						
3/31/2004	165.75	168.13	168.11						
6/30/2004	166.66	168.62	168.59						
9/30/2004	167.76	169.11	169.06						
12/31/2004	168.68	169.60	169.54						
3/31/2005	170.03	170.09	170.02						
6/30/2005	170.63	170.58	170.50						
9/30/2005	170.66	171.08	170.98						
12/31/2005	171.45	171.57	171.47						
3/31/2006	171.94	172.06	171.95						
6/30/2006	172.99	172.55	172.44						
9/30/2006	174.54	173.04	172.93						
12/31/2006	175.48	173.53	173.42						
3/31/2007	176.25	174.03	173.91						
6/30/2007	177.33	174.52	174.40						
9/30/2007	178.34	175.01	174.89						
12/31/2007	179.24	175.50	175.39						
3/31/2008	180.31	175.99	175.88	178.92	178.94				
6/30/2008	180.58	176.48	176.38	179.11	179.12				
9/30/2008	181.04	176.97	176.88	179.29	179.29				
12/31/2008	181.06	177.47	177.38	179.47	179.47				
3/31/2009	180.55	177.96	177.88	179.65	179.65	177.90	177.93		
6/30/2009	180.07	178.45	178.38	179.83	179.83	178.27	178.28		
9/30/2009	179.30	178.94	178.89	180.01	180.01	178.63	178.64		
12/31/2009	178.80	179.43	179.39	180.19	180.19	178.99	178.99		
3/31/2010	178.46	179.92	179.90	180.37	180.37	179.35	179.35	177.24	177.27
6/30/2010	178.56	180.42	180.41	180.56	180.55	179.72	179.71	177.91	177.93
9/30/2010	178.59	180.91	180.92	180.74	180.73	180.08	180.07	178.58	178.59
12/31/2010	178.72	181.40	181.43	180.92	180.91	180.44	180.43	179.26	179.25
3/31/2011	178.97	181.89	181.95	181.10	181.09	180.80	180.79	179.93	179.92
6/30/2011	179.61	182.38	182.46	181.28	181.27	181.17	181.15	180.60	180.58
9/30/2011	180.52	182.87	182.98	181.46	181.45	181.53	181.51	181.27	181.26
12/31/2011	181.55	183.36	183.49	181.64	181.63	181.89	181.87	181.94	181.93
3/31/2012	182.78	183.86	184.01	181.83	181.81	182.25	182.24	182.62	182.60
6/30/2012	183.87	184.35	184.53	182.01	181.99	182.62	182.60	183.29	183.28
9/30/2012	184.57	184.84	185.06	182.19	182.17	182.98	182.97	183.96	183.96
12/31/2012	185.03	185.33	185.58	182.37	182.35	183.34	183.33	184.63	184.65
Annual Trend		1.1%	1.1%	0.4%	0.4%	0.8%	0.8%	1.5%	1.5%
R-Squared		0.885	0.882	0.283	0.280	0.581	0.580	0.919	0.920

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

Exhibit 4
Sheet 1

Texas Windstorm Insurance Association
Residential 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	24,605	1,880	0.076	
2002	5,167	5,226	1.011	
2003	155,001	5,122	0.033	H
2004	4,276	1,471	0.344	
2005	15,750	20,235	1.285	H
2006	4,276	1,110	0.260	
2007	15,750	4,951	0.314	H
2008	2,672,456	354,587	0.133	H
2009	10,947	2,380	0.217	
2010	18,627	4,383	0.235	
2011	103,270	14,948	0.145	
2012	71,754	14,208	0.198	
All Years Total	3,337,069	464,111	0.139	
Hurricane Years Total	3,042,817	401,761	0.132	
Non-Hurricane Years Total	294,252	62,350	0.212	
10 Year	213,150	38,500	0.181	

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

Exhibit 4
Sheet 2

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

Accident Year	Incurred Loss at 12/31/12	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			24,605
2002			5,167
2003			155,001
2004			4,276
2005			15,750
2006	4,276	1.000	4,276
2007	15,750	1.000	15,750
2008	2,680,497	0.997	2,672,456
2009	10,732	1.020	10,947
2010	18,173	1.025	18,627
2011	96,967	1.065	103,270
2012	62,722	1.144	71,754

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

Exhibit 4
Sheet 3

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

Months of Development

Accident Year	12	24	36	48	60	72	84
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2003	25,109	25,512	24,099	24,490	24,605	24,606	24,605
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	155,001
2006	4,471	4,616	4,507	4,279	4,365	4,284	4,276
2007	16,446	15,813	15,537	15,834	15,867	15,750	
2008	1,902,481	1,774,393	2,273,398	2,384,020	2,680,497		
2009	8,267	10,825	10,581	10,732			
2010	15,215	18,166	18,173				
2011	94,870	96,967					
2012	62,722						

Development Factors

Accident Year	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - Ult
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
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	1.001	
2006	1.032	0.976	0.949	1.020	0.981	0.998	
2007	0.962	0.983	1.019	1.002	0.993		
2008	0.933	1.281	1.049	1.124			
2009	1.309	0.977	1.014				
2010	1.194	1.000					
2011	1.022						
Average	1.061	1.010	1.008	1.026	0.995	1.000	
Avg x hi / lo	1.044	0.976	1.011	1.008	0.997	1.000	
Avg 3 Year	1.175	1.086	1.027	1.049	0.992	1.000	
Avg 5 Year	1.084	1.044	1.008	1.031	0.995	1.000	
Prior	1.006	1.080	0.970	0.998	1.004	0.999	1.000
Selected	1.074	1.039	1.005	1.023	0.997	1.000	1.000
Cumulative	1.144	1.065	1.025	1.020	0.997	1.000	1.000

Exhibit 4
Sheet 4

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

Accident Year	Incurred ALAE at 12/31/12	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	3,239	1.000	3,239	1,883	5,122
2004	844	1.000	844	627	1,471
2005	15,229	1.000	15,229	5,006	20,235
2006	860	1	860	250	1,110
2007	2,490	0.998	2,485	2,466	4,951
2008	120,296	0.997	119,935	234,652	354,587
2009	231	1.001	231	2,149	2,380
2010	322	0.972	313	4,070	4,383
2011	592	0.898	532	14,416	14,948
2012	516	0.823	425	13,783	14,208

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

Exhibit 4
Sheet 5

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

Months of Development

Accident Year	12	24	36	48	60	72	84
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2003	2,882	3,017	3,133	3,235	3,254	3,255	3,239
2004	814	837	839	844	847	845	844
2005	12,902	16,742	18,549	16,151	15,253	15,243	15,229
2006	704	891	899	879	867	860	860
2007	2,660	3,107	2,921	2,519	2,497	2,490	
2008	167,316	139,787	106,761	111,632	120,296		
2009	7,335	359	226	231			
2010	391	312	322				
2011	515	592					
2012	516						

Development Factors

Accident Year	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - Ult
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2003	1.047	1.038	1.033	1.006	1.000	0.995	
2004	1.028	1.002	1.006	1.004	0.998	0.999	
2005	1.298	1.108	0.871	0.944	0.999	0.999	
2006	1.266	1.009	0.978	0.986	0.992	1.000	
2007	1.168	0.940	0.862	0.991	0.997		
2008	0.835	0.764	1.046	1.078			
2009	0.049	0.630	1.022				
2010	0.798	1.032					
2011	1.150						
Average	0.960	0.940	0.974	1.002	0.997	0.998	
Avg x hi / lo	1.042	0.964	0.982	0.997	0.998	0.999	
Avg 3 Year	0.665	0.808	0.977	1.018	0.996	0.999	
Avg 5 Year	0.800	0.875	0.956	1.001	0.997	0.998	
Prior	1.118	1.030	0.968	1.005	1.007	0.997	1.000
Selected	0.917	0.924	0.971	1.004	0.999	0.998	1.000
Cumulative	0.823	0.898	0.972	1.001	0.997	0.998	1.000

Exhibit 5

Texas Windstorm Insurance Association
Residential 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	40.5%	0.132	45.8%
Hurricane Models			
AIR Model	55.2%	0.132	62.5%
RMS Model	47.6%	0.132	53.9%
Average of Models	51.4%	0.132	58.2%

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

Exhibit 6
Sheet 1

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Industry Experience -- Residential Extended Coverage
1964 - 2012 -- Hurricane Years Only

Accident Year	Earned Premium at Current TWIA Rate Level	Incurred Loss Ratio
(1)	(2)	(3)
1968	27,951,818	40.0%
1970	28,513,822	72.9%
1971	28,415,580	80.0%
1980	48,262,946	74.8%
1983	61,976,760	489.4%
1986	78,957,725	12.4%
1989	89,878,653	8.5%
1990	86,947,171	19.9%
1999	137,280,444	11.5%
2003	185,826,470	26.4%
2005	204,577,926	147.0%
2007	309,334,525	6.7%
2008	407,296,579	502.6%

(4) Simple Average Loss Ratio for Hurricane Years   114.8%

(5) Selected Non-Hurricane Loss Ratio   10.7%

(6) Average Hurricane Loss Ratio for Hurricane Years   104.1%

(7) Historical Hurricane Frequency
   (a) 49-Year (13/1/1963 - 12/31/2012)   0.286 (1 Hurricane Every 3.5 years)
   (a) 162-Year (1/1/1851 - 12/31/2012)   0.389 (1 Hurricane Every 2.6 years)

   Selected Frequency   0.389 (1 Hurricane Every 2.6 years)

(8) Indicated Hurricane Loss Ratio   40.5%

Notes:
   (2) Exhibit 6, Sheet 2. Accident years ending 9/30/xx
   (3) Exhibit 6, Sheet 2. 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

Exhibit 6
Sheet 2

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Industry Experience -- Residential Extended Coverage
1964 - 2012

Accident Year	Earned Premium	Earned Premium at CMR	Earned Premium at Current TWIA Rate Level	Incurred Losses	Incurred Loss Ratio	Hurricane Indicator
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1964		8,694,859	18,720,031	1,278,741	6.8%	
1965		12,141,513	26,140,677	944,410	3.6%	
1966		13,011,528	28,013,820	1,178,131	4.2%	
1967		13,130,860	28,270,742	663,024	2.3%	
1968		12,982,730	27,951,818	11,171,683	40.0%	H
1969		12,499,176	26,910,726	3,218,757	12.0%	
1970		13,243,763	28,513,822	20,786,468	72.9%	H
1971	10,640,335	13,198,133	28,415,580	22,731,206	80.0%	H
1972	12,302,040	13,902,740	29,932,599	2,242,093	7.5%	
1973	12,935,382	12,724,690	27,396,258	4,933,261	18.0%	
1974	12,794,652	11,637,700	25,055,968	2,293,219	9.2%	
1975	13,633,616	12,392,309	26,680,641	3,062,897	11.5%	
1976	17,088,846	13,884,831	29,894,041	1,522,489	5.1%	
1977	23,643,216	17,474,220	37,621,996	972,383	2.6%	
1978	28,157,329	19,320,941	41,597,986	1,449,823	3.5%	
1979	32,867,536	21,563,567	46,426,360	3,940,899	8.5%	
1980	32,179,994	22,416,603	48,262,946		74.8%	H
1981	30,817,037	29,693,419	66,349,080		3.4%	
1982	28,140,159	32,398,474	60,585,762		2.5%	
1983	28,786,234	39,817,626	61,976,760		489.4%	H
1984	20,078,668	34,626,400	43,229,373		15.8%	
1985	30,043,452	53,801,222	64,683,552		6.5%	
1986	36,673,352		78,957,725		12.4%	H
1987	41,598,709		89,562,020		3.0%	
1988	45,044,392		96,980,574		13.0%	
1989	41,745,774		89,878,653		8.5%	H
1990	40,384,195		86,947,171		19.9%	H
1991	46,237,137		99,548,556		89.2%	
1992	44,512,572		95,835,569		7.8%	
1993	50,741,120		109,245,631		12.2%	
1994	57,584,585		123,979,612		6.1%	
1995	60,740,049		130,773,328		8.4%	
1996	71,865,572		154,726,577		4.3%	
1997	79,154,547		170,419,740		5.5%	
1998	80,238,260		155,084,874		26.7%	
1999	71,026,552		137,280,444		11.5%	H
2000	75,114,174		147,418,538		6.9%	
2001	74,726,401		123,761,601		9.1%	
2002	86,289,350		142,912,116		20.7%	
2003	112,200,741		185,826,470		26.4%	H
2004	123,050,217		185,944,648		2.2%	
2005	135,380,924		204,577,926		147.0%	H
2006	154,699,767		233,771,174		2.5%	
2007	219,914,305		309,334,525		6.7%	H
2008	289,558,186		407,296,579		502.6%	H
2009	327,305,758		425,501,699		2.2%	
2010	355,219,215		411,210,644		4.6%	
2011	370,875,863		408,890,639		23.9%	
2012	407,005,530		427,355,806		13.2%	
Total / Average	3,055,114,350	434,557,304	5,219,406,933		38.3%	
Average of Non-Hurricane Years					10.7%	
Selected					10.7%	

Notes: (2), (3) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
        (4) 1980 - 2004: Sum of Exhibit 6, Sheet 4 - Sheet 7, (5); 1971 - 1979: (3) * 2.2
        (5) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
        (6) 1980 - 2004: Exhibit 6, Sheet 3; 1964 - 1979: (5) / (4)
        (7) "H" indicates occurrence of hurricane(s) during the time period (years ending 9/30/xx)

Exhibit 6
Sheet 3

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

Loss Ratios by Territory / Tier

Accident Year	Territory 8	Territory 9	Territory 10	Tier 2	Weighted Loss Ratio
(1)	(2)	(3)	(4)	(5)	(6)
1981	5.2%	2.0%	2.8%	5.2%	3.4%
1982	1.8%	2.3%	2.9%	4.0%	2.5%
1983	1279.0%	7.5%	173.2%	176.5%	489.4%
1984	3.9%	7.1%	25.3%	40.2%	15.8%
1985	2.0%	8.7%	8.4%	13.4%	6.5%
1986	1.3%	3.0%	22.2%	14.8%	12.4%
1987	0.7%	4.3%	3.8%	7.7%	3.0%
1988	5.9%	7.3%	19.3%	7.8%	13.0%
1989	6.6%	6.9%	10.0%	18.6%	8.5%
1990	35.1%	12.6%	12.9%	25.9%	19.9%
1991	71.1%	15.6%	125.8%	18.7%	89.2%
1992	1.4%	13.9%	9.4%	21.2%	7.8%
1993	15.1%	13.4%	9.8%	26.1%	12.2%
1994	2.8%	7.0%	7.8%	9.2%	6.1%
1995	3.4%	10.4%	10.4%	27.4%	8.4%
1996	1.6%	5.8%	5.3%	11.0%	4.3%
1997	2.1%	4.9%	7.6%	9.3%	5.5%
1998	23.8%	13.5%	33.0%	12.6%	26.7%
1999	2.7%	23.1%	13.1%	13.2%	11.5%
2000	1.0%	2.9%	11.7%	13.3%	6.9%
2001	6.6%	9.5%	9.7%	43.2%	9.1%
2002	29.6%	7.0%	20.0%	12.8%	20.7%
2003	6.2%	10.0%	44.4%	12.5%	26.4%
2004	1.6%	2.4%	2.4%	5.0%	2.2%
2005	62.1%	3.3%	247.8%	45.2%	147.0%
2006	1.2%	2.1%	3.3%	5.9%	2.5%
2007	3.3%	2.0%	10.3%	6.1%	6.7%
2008	864.7%	2.6%	446.0%	488.3%	502.6%
2009	3.4%	1.1%	1.6%	10.8%	2.2%
2010	1.4%	6.9%	5.7%	13.1%	4.6%
2011	1.4%	33.8%	34.8%	7.3%	23.9%
2012	9.9%	26.0%	10.5%	38.2%	13.2%
Average	76.8%	8.7%	42.2%	36.4%	47.3%

TWIA 2012 Written Premium by Territory / Tier

		Territory 8	Territory 9	Territory 10	Tier 2	Total
(7)	Amount	103,486,342	55,367,354	169,785,643	3,645,085	332,284,424
(8)	% Share	31.1%	16.7%	51.1%	1.1%	100.0%

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

Exhibit 6
Sheet 4

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

Accident Year	Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current TWIA Rate Level	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(4)	(5)	(6)	(7)
1981	3,358,441	2.153	7,230,723	373,017	5.2%
1982	2,947,993	2.153	6,347,029	117,400	1.8%
1983	4,317,605	2.153	9,295,804	118,889,570	1279.0%
1984	3,512,853	2.153	7,563,173	292,543	3.9%
1985	6,066,870	2.153	13,061,971	265,705	2.0%
1986	6,846,710	2.153	14,740,967	187,218	1.3%
1987	7,738,740	2.153	16,661,507	111,242	0.7%
1988	8,043,378	2.153	17,317,393	1,026,666	5.9%
1989	8,149,957	2.153	17,546,857	1,163,813	6.6%
1990	7,816,199	2.153	16,828,276	5,908,943	35.1%
1991	8,645,208	2.153	18,613,133	13,225,287	71.1%
1992	5,826,467	2.153	12,544,383	180,484	1.4%
1993	5,825,916	2.153	12,543,197	1,900,088	15.1%
1994	6,996,874	2.153	15,064,270	420,038	2.8%
1995	8,737,576	2.153	18,812,001	644,169	3.4%
1996	11,652,672	2.153	25,088,203	406,004	1.6%
1997	12,573,252	2.153	27,070,212	573,343	2.1%
1998	13,838,930	1.933	26,747,947	6,371,206	23.8%
1999	14,103,814	1.933	27,259,916	742,130	2.7%
2000	15,784,218	1.963	30,977,993	324,948	1.0%
2001	17,776,666	1.656	29,441,651	1,947,817	6.6%
2002	20,514,469	1.656	33,975,991	10,059,284	29.6%
2003	25,868,450	1.656	42,843,235	2,672,918	6.2%
2004	30,357,860	1.511	45,874,617	731,759	1.6%
2005	36,780,457	1.511	55,579,984	34,528,680	62.1%
2006	43,562,211	1.511	65,828,084	813,430	1.2%
2007	59,282,257	1.407	83,387,249	2,757,645	3.3%
2008	73,789,694	1.407	103,793,612	897,543,576	864.7%
2009	81,999,709	1.300	106,600,677	3,591,563	3.4%
2010	89,665,314	1.158	103,798,809	1,452,308	1.4%
2011	93,230,854	1.103	102,787,017	1,396,089	1.4%
2012	99,627,188	1.050	104,608,547	10,335,781	9.9%
Total	828,932,368		1,219,834,428	1,120,954,664	91.9%

Notes:
  (2) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
   Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
  (4) Provided by TDI
  (5) = * (4)
  (6) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
  (7) = (6) / (5)

Exhibit 6
Sheet 5

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Industry Experience -- Residential Extended Coverage
Tier 1 -- Territory 9 (Nueces County)

Accident Year	Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current TWIA Rate Level	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(4)	(5)	(6)	(7)
1981	2,545,487	2.153	5,480,434	109,799	2.0%
1982	2,223,376	2.153	4,786,929	111,420	2.3%
1983	2,331,938	2.153	5,020,663	377,010	7.5%
1984	1,632,317	2.153	3,514,379	249,086	7.1%
1985	2,505,564	2.153	5,394,479	467,721	8.7%
1986	2,977,992	2.153	6,411,617	189,449	3.0%
1987	3,639,667	2.153	7,836,203	335,212	4.3%
1988	3,971,251	2.153	8,550,103	626,491	7.3%
1989	3,702,536	2.153	7,971,560	550,215	6.9%
1990	3,519,306	2.153	7,577,066	955,271	12.6%
1991	4,065,190	2.153	8,752,354	1,367,254	15.6%
1992	3,907,712	2.153	8,413,304	1,170,578	13.9%
1993	4,552,395	2.153	9,801,306	1,312,776	13.4%
1994	5,710,806	2.153	12,295,365	856,369	7.0%
1995	6,908,552	2.153	14,874,112	1,552,987	10.4%
1996	8,568,168	2.153	18,447,266	1,061,115	5.8%
1997	8,425,344	2.153	18,139,766	882,561	4.9%
1998	8,803,621	1.933	17,015,679	2,289,890	13.5%
1999	8,465,256	1.933	16,361,686	3,778,386	23.1%
2000	8,437,094	1.963	16,558,580	485,581	2.9%
2001	8,894,552	1.656	14,731,126	1,394,445	9.5%
2002	10,534,795	1.656	17,447,690	1,227,528	7.0%
2003	13,881,847	1.656	22,991,066	2,295,803	10.0%
2004	15,458,506	1.511	23,359,784	569,877	2.4%
2005	17,471,646	1.511	26,401,896	872,451	3.3%
2006	19,888,512	1.511	30,054,091	621,501	2.1%
2007	29,704,042	1.407	41,782,119	832,164	2.0%
2008	40,565,108	1.407	57,059,446	1,476,028	2.6%
2009	46,363,445	1.300	60,273,075	641,308	1.1%
2010	51,529,115	1.158	59,651,392	4,113,028	6.9%
2011	52,931,755	1.103	58,357,260	19,740,404	33.8%
2012	56,336,109	1.050	59,152,914	15,398,034	26.0%
Total	460,453,004		674,464,708	67,911,742	10.1%

Notes:
(2) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
(4) Provided by TDI
(5) = * (4)
(6) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
(7) = (6) / (5)

Exhibit 6
Sheet 6

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Industry Experience -- Residential Extended Coverage
Tier 1 -- Territory 10 (Other Tier 1)

Accident Year	Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current TWIA Rate Level	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(4)	(5)	(6)	(7)
1981	6,414,566	2.153	13,810,561	383,360	2.8%
1982	5,695,062	2.153	12,261,468	361,294	2.9%
1983	5,888,781	2.153	12,678,545	21,953,626	173.2%
1984	3,924,651	2.153	8,449,774	2,135,063	25.3%
1985	5,808,825	2.153	12,506,400	1,055,065	8.4%
1986	6,993,722	2.153	15,057,483	3,338,312	22.2%
1987	7,677,374	2.153	16,529,386	634,637	3.8%
1988	8,284,768	2.153	17,837,106	3,434,130	19.3%
1989	7,733,295	2.153	16,649,784	1,670,422	10.0%
1990	7,568,146	2.153	16,294,218	2,095,151	12.9%
1991	8,287,605	2.153	17,843,214	22,444,044	125.8%
1992	8,059,407	2.153	17,351,903	1,625,108	9.4%
1993	8,448,603	2.153	18,189,842	1,776,572	9.8%
1994	9,743,293	2.153	20,977,310	1,637,915	7.8%
1995	10,745,995	2.153	23,136,127	2,416,675	10.4%
1996	13,294,968	2.153	28,624,066	1,520,229	5.3%
1997	15,708,220	2.153	33,819,798	2,569,544	7.6%
1998	16,168,136	1.933	31,249,847	10,312,506	33.0%
1999	14,452,667	1.933	27,934,181	3,655,754	13.1%
2000	14,453,385	1.963	28,366,109	3,332,580	11.7%
2001	15,173,521	1.656	25,130,332	2,426,814	9.7%
2002	17,843,905	1.656	29,553,012	5,925,066	20.0%
2003	23,423,208	1.656	38,793,434	17,213,668	44.4%
2004	27,306,202	1.511	41,263,171	990,613	2.4%
2005	31,012,304	1.511	46,863,566	116,132,821	247.8%
2006	36,545,725	1.511	55,225,274	1,842,548	3.3%
2007	69,945,120	1.407	98,385,780	10,108,222	10.3%
2008	110,187,567	1.407	154,991,367	691,230,735	446.0%
2009	128,275,387	1.300	166,759,655	2,609,407	1.6%
2010	143,236,007	1.158	165,813,583	9,495,495	5.7%
2011	151,387,931	1.103	166,905,194	58,098,848	34.8%
2012	170,164,685	1.050	178,672,919	18,806,265	10.5%
Total	1,109,853,031		1,557,924,410	1,023,232,489	65.7%

Notes:
    (2) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    (4) Provided by TDI
    (5) = * (4)
    (6) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    (7) = (6) / (5)

Exhibit 6
Sheet 7

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Industry Experience -- Residential Extended Coverage
Tier 2 -- (Territories 1 and 11)

Accident Year	Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current TWIA Rate Level	Incurred Loss	Incurred Loss Ratio
(1)	(2)	(4)	(5)	(6)	(7)
1981	18,498,543	2.153	39,827,363	2,055,581	5.2%
1982	17,273,728	2.153	37,190,336	1,472,069	4.0%
1983	16,247,909	2.153	34,981,748	61,752,490	176.5%
1984	11,008,847	2.153	23,702,048	9,535,536	40.2%
1985	15,662,193	2.153	33,720,702	4,532,749	13.4%
1986	19,854,927	2.153	42,747,658	6,306,903	14.8%
1987	22,542,928	2.153	48,534,924	3,739,010	7.7%
1988	24,744,994	2.153	53,275,972	4,139,098	7.8%
1989	22,159,987	2.153	47,710,452	8,884,751	18.6%
1990	21,480,544	2.153	46,247,611	11,997,188	25.9%
1991	25,239,134	2.153	54,339,856	10,178,608	18.7%
1992	26,718,987	2.153	57,525,979	12,221,034	21.2%
1993	31,914,206	2.153	68,711,286	17,910,197	26.1%
1994	35,133,612	2.153	75,642,667	6,968,697	9.2%
1995	34,347,927	2.153	73,951,087	20,240,594	27.4%
1996	38,349,764	2.153	82,567,042	9,046,495	11.0%
1997	42,447,731	2.153	91,389,965	8,514,675	9.3%
1998	41,427,572	1.933	80,071,401	10,127,907	12.6%
1999	34,004,815	1.933	65,724,662	8,680,187	13.2%
2000	36,439,477	1.963	71,515,855	9,518,422	13.3%
2001	32,881,662	1.656	54,458,492	23,547,404	43.2%
2002	37,396,181	1.656	61,935,423	7,950,367	12.8%
2003	49,027,236	1.656	81,198,735	10,177,909	12.5%
2004	49,927,649	1.511	75,447,076	3,738,542	5.0%
2005	50,116,517	1.511	75,732,480	34,201,898	45.2%
2006	54,703,319	1.511	82,663,726	4,907,133	5.9%
2007	60,982,886	1.407	85,779,377	5,242,698	6.1%
2008	65,015,817	1.407	91,452,154	446,566,499	488.3%
2009	70,667,217	1.300	91,868,292	9,962,922	10.8%
2010	70,788,779	1.158	81,946,860	10,724,107	13.1%
2011	73,325,323	1.103	80,841,169	5,871,880	7.3%
2012	80,877,548	1.050	84,921,425	32,450,556	38.2%
Total	1,150,330,411		1,992,702,396	790,713,550	39.7%

Notes:
    (2) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    (4) Provided by TDI
    (5) = * (4)
    (6) Provided by TDI. Accident years ending 9/30/xx as of 12/31/2012
    (7) = (6) / (5)

Exhibit 7
Sheet 1

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

County	TWIA Insured Values (000s) as of 12/31/12	Modeled Loss Cost	Expected Annual Hurricane Loss
(1)	(2)	(3)	(4)
Aransas	1,957,576	3.899	7,632,589
Brazoria	14,788,458	1.548	22,892,533
Calhoun	753,540	3.618	2,726,308
Cameron	3,350,232	1.799	6,027,067
Chambers	1,672,519	1.674	2,799,797
Galveston	20,989,592	3.992	83,790,451
Harris	1,271,864	4.305	5,475,375
Jefferson	8,514,743	2.028	17,267,899
Kenedy	6,929	1.340	9,285
Kleberg	261,024	1.186	309,574
Matagorda	1,138,150	2.921	3,324,536
Nueces	11,240,947	3.006	33,790,287
Refugio	89,242	1.858	165,812
San Patricio	2,239,909	2.466	5,523,616
Willacy	99,483	2.477	246,419
Total	68,374,208	2.808	191,981,548

(5)	2012 Earned Premium at Present Rates	347,753,503
(6)	Indicated Hurricane Loss Ratio	55.2%

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

Exhibit 7
Sheet 2

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

County	TWIA Insured Values (000s) as of 12/31/12	Average Annual Modeled Loss	Provision for Storm Surge	Modeled Loss Cost
(1)	(2)	(3)	(4)	(5)
Aransas	1,957,576	7,601,353	1.004	3.899
Brazoria	14,788,458	22,805,170	1.004	1.548
Calhoun	753,540	2,715,292	1.004	3.618
Cameron	3,350,232	6,002,272	1.004	1.799
Chambers	1,672,519	2,788,118	1.004	1.674
Galveston	20,989,592	83,461,128	1.004	3.992
Harris	1,271,864	5,453,850	1.004	4.305
Jefferson	8,514,743	17,201,263	1.004	2.028
Kenedy	6,929	9,250	1.004	1.340
Kleberg	261,024	308,389	1.004	1.186
Matagorda	1,138,150	3,311,651	1.004	2.921
Nueces	11,240,947	33,658,040	1.004	3.006
Refugio	89,242	165,191	1.004	1.858
San Patricio	2,239,909	5,502,643	1.004	2.466
Willacy	99,483	245,414	1.004	2.477
Total	68,374,208	191,229,024	1.004	2.808

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)

Exhibit 8
Sheet 1

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

County	TWIA Insured Values (000s) as of 12/31/12	Modeled Loss Cost	Expected Annual Hurricane Loss
(1)	(2)	(3)	(4)
Aransas	1,949,681	2.738	5,338,227
Brazoria	14,772,046	1.670	24,669,317
Calhoun	849,758	4.117	3,498,454
Cameron	3,350,232	1.985	6,650,211
Chambers	1,820,696	1.887	3,435,653
Galveston	20,993,897	3.220	67,600,348
Harris	1,114,192	3.106	3,460,680
Jefferson	8,535,003	2.021	17,249,241
Kenedy	6,929	2.551	17,676
Kleberg	261,024	1.620	422,859
Matagorda	1,135,882	3.036	3,448,538
Nueces	11,274,309	2.203	24,837,303
Refugio	87,518	2.459	215,207
San Patricio	2,123,559	2.027	4,304,454
Willacy	99,483	2.803	278,851
Total	68,374,209	2.419	165,427,019

(5) 2012 Earned Premium at Present Rates   347,753,503
(6) Indicated Hurricane Loss Ratio   47.6%

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

Exhibit 8
Sheet 2

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

County	TWIA Insured Values (000s) as of 12/31/12	Average Annual Modeled Loss	Provision for Storm Surge	Modeled Loss Cost
(1)	(2)	(3)	(4)	(5)
Aransas	1,949,681	5,243,844	1.018	2.738
Brazoria	14,772,046	24,237,803	1.018	1.670
Calhoun	849,758	3,436,660	1.018	4.117
Cameron	3,350,232	6,533,254	1.018	1.985
Chambers	1,820,696	3,375,590	1.018	1.887
Galveston	20,993,897	66,403,219	1.018	3.220
Harris	1,114,192	3,399,246	1.018	3.106
Jefferson	8,535,003	16,947,982	1.018	2.021
Kenedy	6,929	17,363	1.018	2.551
Kleberg	261,024	415,270	1.018	1.620
Matagorda	1,135,882	3,387,792	1.018	3.036
Nueces	11,274,309	24,397,170	1.018	2.203
Refugio	87,518	211,410	1.018	2.459
San Patricio	2,123,559	4,228,117	1.018	2.027
Willacy	99,483	273,964	1.018	2.803
Total	68,374,209	162,508,684	1.018	2.420

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)

Exhibit 9

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Texas Hurricanes 1850 - 2012

Landfall				Landfall		
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
49-Year	13/1/1963 - 12/31/2012	14	49	0.286
162-Year	1/1/1851 - 12/31/2012	63	162	0.389

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

Exhibit 10
Sheet 1a

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Calculation of Industry Earned Premium at Present Rate Level
Tier 1 -- Territory 8 (Galveston County)

Year		Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current Rate Level
	(1)	(2)	(3)	(4)
2003		25,004,892	1.656	41,413,014
2004		29,344,036	1.511	44,342,599
2005		35,781,650	1.511	54,070,659
2006		42,490,967	1.511	64,209,297
2007		58,103,369	1.407	81,729,008
2008		72,541,071	1.407	102,037,281
2009		80,844,468	1.300	105,098,849
2010		88,599,807	1.158	102,565,352
2011		92,287,441	1.103	101,746,904
2012		98,605,359	1.050	103,535,627
Total		623,603,060		800,748,590

Notes:
(2) Provided by TDI
(3) Provided by TDI
(4) = (2) * (3)

Exhibit 10
Sheet 1b

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Calculation of Industry Earned Premium at Present Rate Level
Tier 1 -- Territory 9 (Nueces County)

Year		Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current Rate Level
	(1)	(2)	(3)	(4)
2003		10,481,101	1.656	17,358,762
2004		12,003,919	1.511	18,139,460
2005		14,047,722	1.511	21,227,908
2006		16,472,936	1.511	24,892,717
2007		26,688,989	1.407	37,541,104
2008		38,200,787	1.407	53,733,759
2009		43,977,111	1.300	57,170,811
2010		49,048,919	1.158	56,780,255
2011		50,547,302	1.103	55,728,400
2012		53,841,760	1.050	56,533,848
Total		315,310,546		399,107,024

Notes:
(2) Provided by TDI
(3) Provided by TDI
(4) = (2) * (3)

Exhibit 10
Sheet 1c

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Calculation of Industry Earned Premium at Present Rate Level
Tier 1 -- Territory 10 (Other Tier 1)

Year		Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current Rate Level
	(1)	(2)	(3)	(4)
2003		14,270,887	1.656	23,635,393
2004		17,981,576	1.511	27,172,466
2005		21,373,338	1.511	32,297,853
2006		25,684,373	1.511	38,812,379
2007		57,705,210	1.407	81,168,952
2008		98,017,773	1.407	137,873,165
2009		116,551,972	1.300	151,519,064
2010		131,679,293	1.158	152,435,242
2011		140,621,661	1.103	155,035,381
2012		160,031,160	1.050	168,032,718
Total		783,917,243		967,982,613

Notes:
(2) Provided by TDI
(3) Provided by TDI
(4) = (2) * (3)

Exhibit 10
Sheet 1d

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Calculation of Industry Earned Premium at Present Rate Level
Tier 2 -- (Territories 1 and 11)

Year		Earned Premium	Factor to TWIA Rate Level	Earned Premium at Current Rate Level
	(1)	(2)	(3)	(4)
2003		422,850	1.656	700,323
2004		598,732	1.511	904,761
2005		968,572	1.511	1,463,636
2006		1,164,136	1.511	1,759,159
2007		1,579,121	1.407	2,221,214
2008		1,913,655	1.407	2,691,774
2009		2,218,368	1.300	2,883,907
2010		2,562,327	1.158	2,966,214
2011		2,825,372	1.103	3,114,973
2012		3,294,072	1.050	3,458,776
Total		17,547,205		22,164,737

Notes:
(2) Provided by TDI
(3) Provided by TDI
(4) = (2) * (3)

Exhibit 10
Sheet 2

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

Year		Earned Premium at Current Manual Rates	Factor to TWIA Rate Level	Earned Premium at Current Rate Level
	(1)	(2)	(3)	(4)
2003		53,717,050	1.656	88,965,988
2004		64,780,484	1.579	102,305,140
2005		74,378,169	1.511	112,394,946
2006		93,584,144	1.508	141,078,243
2007		165,328,751	1.439	237,894,381
2008		219,410,898	1.357	297,757,411
2009		250,690,606	1.233	309,098,545
2010		273,156,582	1.158	316,298,380
2011		292,237,884	1.129	330,035,194
2012		323,317,435	1.076	347,753,503
Total		1,810,602,003		2,283,581,731

Notes:

(2) Provided by TWIA

(3) Based on historical rate changes

(4) = (2) * (3)

Exhibit 11
Sheet 1

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

	Expense Category	2010	2011	2012	Selected
(1)	Direct Written Premium	$385,549,581	$403,748,164	$443,479,701	
(2)	Direct Earned Premium	383,424,000	385,000,000	429,594,000	
(3)	Commission				
	$ Amount	60,842,277	65,568,074	70,927,902	
	% of DWP	15.8%	16.2%	16.0%	16.0%
(4)	Other Acquisition				
	$ Amount	$0	$0	$0	
	% of DWP	0.0%	0.0%	0.0%	0.0%
(5)	General Expense				
	Unadjusted $ Amount	$17,146,560	$17,349,588	$22,296,934	
	Adjustments				
	Contribution to Statutory Fund	0	0	0	
	Adjusted $ Amount	17,146,560	17,349,588	22,296,934	
	% of DWP	4.4%	4.3%	5.0%	4.6%
(6)	Taxes, Licenses & Fees				
	$ Amount	$7,609,234	$7,851,260	$8,635,152	
	% of DWP	2.0%	1.9%	1.9%	2.0%
(7)	Reinsurance Expense				15.6%
(8)	Total Fixed Expenses				20.2%
(9)	Total Variable Expenses				18.0%
(10)	Fund Contribution				20.0%
(11)	Variable Permissible Loss & LAE Ratio				62.0%

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)

Exhibit 11
Sheet 2

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

(1)	2013 - 2014 Reinsurance Premium	106,024,000
(2a)	Average Annual Loss by Reinsurance Layer (AIR)	
	100% of $1000M XS $1700M	27,174,975
	Total	27,174,975
(2b)	Average Annual Loss by Reinsurance Layer (RMS)	
	100% of $1000M XS $1700M	28,148,552
	Total	28,148,552
(2c)	Selected Total Average Annual Loss	27,661,764
(3)	Annual Exposure Growth	5.0%
(4)	Prospective Average Annual Loss	28,927,470
(5)	Net Cost of Reinsurance	77,096,530
(6)	TWIA 2012 Earned Premium at Present Rates	461,074,107
(7)	2013 - 2014 TWIA Prospective Earned Premium at Present Rates	493,854,627
(8)	Indicated Reinsurance Expense %	15.6%

Notes:

(1) From TWIA reinsurance contract effective 6/1/2013 through 5/31/2014

(2a) Provided by Guy Carpenter, based on AIR model using TWIA exposures as of 12/31/2012 and adjusted for ALAE

(2b) Provided by Guy Carpenter, based on RMS model using TWIA exposures as of 12/31/2012 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 7/1/2012 to 12/1/2013)

(8) = (5) / (7)

Exhibit 12

Texas Windstorm Insurance Association
Residential 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	Residential	Total		
(1)	(2)	(3)	(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	17,544,251	36,220,623	53,764,874	54,630,727	(865,853)
2002	24,087,525	48,856,422	72,943,947	72,967,831	(23,884)
2003	29,220,514	58,573,191	87,793,705	87,987,279	(193,574)
2004	31,009,323	71,292,702	102,302,025	102,384,351	(82,326)
2005	35,740,174	78,094,458	113,834,632	113,927,701	(93,069)
2006	76,847,840	119,658,576	196,506,416	196,833,235	(326,819)
2007	110,951,718	203,561,196	314,512,914	315,139,307	(626,393)
2008	98,037,185	232,921,259	330,958,444	331,057,645	(99,201)
2009	111,269,480	269,535,987	380,805,467	382,342,402	(1,536,935)
2010	102,171,553	278,117,003	380,288,556	385,549,582	(5,261,026)
2011	100,011,848	307,490,101	407,501,949	403,748,164	3,753,785
2012	110,883,954	335,895,141	446,779,094	443,479,701	3,299,393
Total	766,502,641	1,595,523,014	2,362,025,655	2,372,952,128	(10,926,473)

Notes:
    (2), (3) Provided by TWIA, as of 12/31/2012
    (4) = (2) + (3)
    (5) Based on TWIA Annual Statements
    (6) = (4) - (5)

Exhibit 13

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

Premiums and Rate Components	TWIA Indications at Current Rates			TWIA Indications at Proposed Rates		
	Commercial	Residential	Total	Commercial	Residential	Total
(1) 2012 Written Premium	132,628,165	392,705,220	525,333,385	139,259,573	412,340,481	551,600,054
(2) 2012 Earned Premium	124,763,257	385,476,539	510,239,796	127,882,339	395,113,452	522,995,791
(3) Non-Hurricane Loss & LAE Ratio	6.9%	9.4%	8.8%	6.7%	9.2%	8.6%
(4) General Expenses	4.6%	4.6%	4.6%	4.4%	4.4%	4.4%
(5) Reinsurance	20.2%	20.2%	20.2%	19.2%	19.2%	19.2%
(6) Commission	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
(7) Taxes, Licenses, & Fees	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
(8) Total Non-Catastrophe Expenses	65,349,953	204,242,851	269,592,804	66,543,607	207,777,198	274,320,805
(9) Net Premium Income			240,646,992			248,674,986

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

Texas Windstorm Insurance Association
Residential Property - Wind & Hail
Rate Level Review
Current and Proposed Rates

Addendum R1
Page 1

Territorial Multipliers for Dwellings

Construction	Territory 1			Territories 8, 9, 10		
	Current	Proposed	Change	Current	Proposed	Change
Frame	2.333	2.449	4.972%	3.667	3.850	4.990%
Brick Veneer	2.396	2.515	4.967%	3.828	4.019	4.990%
Brick	1.988	2.087	4.980%	3.178	3.336	4.972%

Territorial Multipliers for Personal Property

Construction	Territory 1			Territories 8, 9, 10		
	Current	Proposed	Change	Current	Proposed	Change
Frame	2.389	2.508	4.981%	3.757	3.944	4.977%
Brick Veneer	2.302	2.417	4.996%	3.771	3.959	4.985%
Brick	1.945	2.042	4.987%	3.103	3.258	4.995%

Territorial Multipliers for Farm and Ranch Dwellings

Construction	Territory 1			Territories 8, 9, 10		
	Current	Proposed	Change	Current	Proposed	Change
Frame	2.333	2.449	4.972%	3.667	3.850	4.990%
Brick Veneer	2.396	2.515	4.967%	3.828	4.019	4.990%
Brick	1.988	2.087	4.980%	3.178	3.336	4.972%

Territorial Multipliers for Farm and Ranch Personal Property

Construction	Territory 1			Territories 8, 9, 10		
	Current	Proposed	Change	Current	Proposed	Change
Frame	2.389	2.508	4.981%	3.757	3.944	4.977%
Brick Veneer	2.302	2.417	4.996%	3.771	3.959	4.985%
Brick	1.945	2.042	4.987%	3.103	3.258	4.995%

Modified EC Rates are calculated by multiplying promulgated base rates by a 130% flex factor and the appropriate territorial multiplier
All interim calculations are rounded down where applicable