

April 1, 2024

Jamie Walker
Deputy Commissioner
Financial Regulation
Texas Department of Insurance
1601 Congress Avenue
Austin, TX 78701

Dear Ms. Walker:

We enclose information responsive to the requirements set forth in Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160 relating to the association's determination of the amount equal to the probable maximum loss for the association for a catastrophe year with a probability of one in 100 and the association's method for determining that probable maximum loss.

The Board of Directors determined the PML for 2024 to be \$6,500,000,000, using models developed by RMS and AIR given 75% and 25% weight, respectively, based on long-term frequency assumptions, and including an amount for loss adjustment expense.

Please contact me with any questions or requests for additional information.

Sincerely,

James Murphy
Chief Actuary | Vice President, Enterprise Analytics

Texas Windstorm Insurance Association 2024 Catastrophe Year Disclosure to the Commissioner Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160

Disclosure Requirement		Model #1	Model #2
§5.4160(d)(1)	The hurricane model or models the Association relied on, including the model vendors, the model names, and the versions of each model;	Model Vendor: Risk Management Solutions, Inc. (RMS) Model Name: North Atlantic Windstorm Model Model Version: RMS RiskLink 23.0 Windstorm/Hurricane and Convective Storm (WS/CS)	Model Vendor: Verisk Corporation Model Name: Verisk Tropical Cyclone Model for the United States Model Version: Verisk Touchstone 10.0 Tropical Cyclone (TC) and Severe Thunderstorm (ST)
§5.4160(d)(2)	The in-force date and the total amount of direct exposures in force for the policy data used as the input for each hurricane model the association relied on;	In-force Date: 11/30/2023 Direct Exposures: Total Insured Values (TIV): \$113,543,081,019 Total Policy Limits: \$104,780,129,508 Risk Count: 256,479	In-force Date: 11/30/2023 Direct Exposures: Total Insured Values (TIV): \$113,543,081,019 Total Policy Limits: \$104,780,129,508 Risk Count: 256,479
§5.4160(d)(3)	All user-selected hurricane model input assumptions used with each hurricane model the association relied on;	Assumptions: - All Perils (Windstorm/Hurricane and Severe Convective Storms). - Aggregate Annual Loss estimate. - Windstorm frequency –RMS 2023 Historical (Long Term) Event Rates. - Severe Convective Storm frequency –RMS 2013 Stochastic Event Rates (High and Low frequency). - With post-event loss amplification (PLA) ("Demand Surge") for Windstorm /Hurricane; Severe Convective Storm excludes loss amplification. - Without Storm Surge.	Assumptions: - All Perils (Tropical Cyclone - Wind and Severe Thunderstorm). - Aggregate Annual Loss estimate. - Tropical Cyclone frequency - 10K US AP (2022) Standard (Std) event set. - Severe Thunderstorm frequency - 10K US AP (2022) – Standard. - With Demand Surge for Tropical Cyclone - Wind and Severe Thunderstorm. - Without Storm Surge.
§5.4160(d)(4)	The one-in-100-year probable maximum loss model output produced by each hurricane model the Association relied on;	One-in-100-year PML: \$5,331,030,216	One-in-100-year PML: \$6,690,067,070
§5.4160(d)(5)	If the association relied on more than one hurricane model, the methodology the association used to blend or average the hurricane model outputs, including all weighting factors used;	Blending methodology: The aggregate annual loss output from each of the two models described herein were combined using a weighting of 75% RMS / 25% Verisk to produce a combined, rounded one-in-100-year aggregate loss estimate of \$5,670,000,000 excluding any provision for estimated loss adjustment expenses.	Blending methodology: The aggregate annual loss output from each of the two models described herein were combined using a weighting of 75% RMS / 25% Verisk to produce a combined, rounded one-in-100-year aggregate loss estimate of \$5,670,000,000 excluding any provision for estimated loss adjustment expenses.
§5.4160(d)(6)	Any adjustments the association or another party made to the one-in-100-year probable maximum loss model outputs or the blended or averaged output, including any adjustments to include loss adjustment expenses.	Adjustments: The combined, rounded one-in-100-year aggregate loss estimate described in §5.4160(d)(5) was increased by \$830,000 (a factor of 14.6%) to account for estimated loss adjustment expenses to yield the one-in-100-year probable maximum loss for the calendar year 2024 of \$6,500,000,000.	Adjustments: The combined, rounded one-in-100-year aggregate loss estimate described in §5.4160(d)(5) was increased by \$830,000 (a factor of 14.6%) to account for estimated loss adjustment expenses to yield the one-in-100-year probable maximum loss for the calendar year 2024 of \$6,500,000,000.

Texas Windstorm Insurance Association 2024 Catastrophe Year Disclosure to the Commissioner Section 2210.453 of the Texas Insurance Code and 28 Texas Administrative Code §5.4160

Disclosure Requirement		Model #3	Model #4
§5.4160(d)(1)	The hurricane model or models the Association relied on, including the model vendors, the model names, and the versions of each model; The in-force date and the total amount of direct exposures in force	Model Vendor: Impact Forecasting Model Name: Atlantic Tropical Cyclone and Severe Convective Storm Models Model Version: Impact Forecasting ELEMENTS 18.0 Atlantic Tropical Cyclone and Severe Convective Storm In-force Date: 11/30/2023 Direct Exposures:	Model Vendor: CoreLogic Model Name: CoreLogic North Atlantic Hurricane and Severe Convective Storm Models Model Version: CoreLogic Risk Quantification & Engineering (RQE) v23 North Atlantic Hurricane (HU) and Severe Convective Storm (SCS) In-force Date: 11/30/2023
	for the policy data used as the input for each hurricane model the association relied on;	Total Insured Values (TIV): \$113,543,081,019 Total Policy Limits: \$104,780,129,508 Risk Count: 256,479	Direct Exposures: Total Insured Values (TIV): \$113,543,081,019 Total Policy Limits: \$104,780,129,508 Risk Count: 256,479
§5.4160(d)(3)	All user-selected hurricane model input assumptions used with each hurricane model the association relied on;	Assumptions: - All Perils (Atlantic Tropical Cyclone - Wind and Severe Convective Storms). - Aggregate Annual Loss estimate. - Atlantic Tropical Cyclone v3.0 – Wind Only Historical (Long Term) Event Rates. - 48-State Severe Convective Storm v1.0 – All subperils. - With Demand Surge for Tropical Cyclone and Severe Convective Storm. - Without Storm Surge.	Assumptions: - All Perils (North Atlantic Hurricane and Severe Convective Storm). - Aggregate Annual Loss estimate. - North Atlantic Hurricane v23 – Wind Only 300k Historical (Long Term) Event Set. - Severe Thunderstorm frequency - Standard. - With Demand Surge for North Atlantic Hurricane and Severe Convective Storm. - Without Storm Surge.
§5.4160(d)(4)	The one-in-100-year probable maximum loss model output produced by each hurricane model the Association relied on;	One-in-100-year PML: \$4,580,814,760	One-in-100-year PML: \$5,023,391,036
§5.4160(d)(5)	If the association relied on more than one hurricane model, the methodology the association used to blend or average the hurricane model outputs, including all weighting factors used;	The Board did not use this model in their determination of the one-in-100-year PML.	The Board did not use this model in their determination of the one-in-100-year PML.
§5.4160(d)(6)	Any adjustments the association or another party made to the one-in-100-year probable maximum loss model outputs or the blended or averaged output, including any adjustments to include loss adjustment expenses.	The Board did not use this model in their determination of the one-in-100-year PML.	The Board did not use this model in their determination of the one-in-100-year PML.