



# MASSACHUSETTS PROPERTY INSURANCE UNDERWRITING ASSOCIATION

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July 17, 2018

To: Members of the Massachusetts Property Insurance Underwriting Association

Re: 2018 Potential Hurricane Losses

This letter is written to provide the Member Companies with the potential loss estimates from hurricanes for the Massachusetts Property Insurance Underwriting Association (MPIUA) book of business as of December 31, 2017 and to provide data useful to Members when evaluating their own individual reinsurance coverage needs.

In this regard, it should be pointed out that, at the direction of the MPIUA Board of Directors, Plan Management purchased aggregate excess of loss reinsurance on the entire program, with no reinstatement, effective July 1, 2018. The reinsurance program structure is as follows:

Layer	Limit	Attachment	Placed
L1	\$100,000,000	\$100,000,000	100.00%
L2	\$100,000,000	\$200,000,000	100.00%
L3	\$275,000,000	\$300,000,000	100.00%
L4	\$300,000,000	\$575,000,000	100.00%
L5	\$525,000,000	\$875,000,000	100.00%
L6	\$300,000,000	\$1,400,000,000	100.00%
L7*	\$400,000,000	\$1,700,000,000	100.00%
<b>Total</b>	<b>\$2,000,000,000</b>	<b>\$100,000,000</b>	<b>100.00%</b>

\*Layer 7 consists of \$50 million traditional placement representing 12.50% placed and a \$350 million catastrophe bond Offering representing 87.50% placed in this layer.

The total cost for this purchase is approximately \$72.6 million, payable in quarterly installments. The cost is subject to a proportional additional premium if growth exceeds TIV estimates by more than five percent (5%) at September 30, 2018.

The Annual Maximum Occurrence Losses, shown below, have been generated by the Association's reinsurance broker, Guy Carpenter and Company, Inc. (Carpenter), through its use of model versions produced by Applied Insurance Research (AIR) and Risk Management Services (RMS) and licensed to Guy Carpenter by the respective modelers. In accordance with the signed Agreement between the Association and Carpenter, Carpenter has authorized the Association to disclose the information provided below to its Member Companies with the condition that the Association and its Member Companies acknowledge and agree that the information set forth is to be treated as strictly confidential information of Carpenter and the respective modelers and that Carpenter and/or the respective modeler own the exclusive right and title to the report, data and related materials. Finally, the Association and its Member Companies recognize that Carpenter and the respective modelers provide this information "as is" and disclaim all warranties, express and implied with respect to the information.

**Hurricane Results**  
**Gross Loss (000's)**  
**Data as of 12/31/17**  
**GC Analytics® Analysis by Guy Carpenter**

**Annual Maximum Occurrence Loss (000's)**  
**Losses Include Loss Amplification for RMS and Demand Surge for AIR**  
**Long Term View**

<b>Critical Probability</b>	<b>Return Period</b>	<b>RMS v17 (Historical)</b>	<b>AIR TSv5 (Standard)</b>	<b>RMS And AIR Average</b>	<b>Average Adjusted For TIV Growth and LAE</b>
10.00%	10	2,482	3,410	2,946	3,241
5.00%	20	99,816	102,241	101,029	111,131
2.86%	35	331,023	276,245	303,634	333,997
2.00%	50	549,750	437,111	493,431	532,905
1.33%	75	871,200	687,573	779,387	841,737
1.00%	100	1,135,298	991,349	1,063,324	1,116,490
0.67%	150	1,535,110	1,493,922	1,514,516	1,590,242
0.40%	250	2,075,507	2,102,534	2,089,021	2,193,472
0.20%	500	2,917,653	2,685,163	2,801,408	2,941,478
0.10%	1,000	3,905,286	3,981,788	3,943,537	4,140,714
<b>Average Annual Loss</b>		40,735	39,327	40,031	

Member Companies may request the Association's Catastrophe Modeling Report as produced by Guy Carpenter, using RMS and AIR models, including Results Data Model (RDM) for RMS and Company Loss File (CLF) for AIR. The RDM and CLF files can be analyzed using the respective proprietary software packages of RMS and AIR. In addition, Members will have access to the RMS and AIR Event Detail in a Microsoft Excel Spreadsheet for any use not requiring the software packages. In order to receive these files, Members will be required to sign a Nondisclosure Agreement if one was not signed in or after 2006. If you wish to obtain these files, please contact Paul Driscoll, Underwriting Product & Reinsurance Manager at [pdriscoll@mpiua.com](mailto:pdriscoll@mpiua.com) or 617-557-5594.

If you have any questions in regard to this letter or the estimated potential hurricane losses, please feel free to contact me.

Very truly yours,



Robert C. Tommasino  
 Senior Vice President & General Counsel

RCT:jd

Cc: John K. Golembeski, President