

January 29, 2018 Floyd Yager, Chair Florida Commission on Hurricane Loss Projection Methodology c/o Donna Sirmons Florida State Board of Administration 1801 Hermitage Boulevard, Suite 100 Tallahassee, Florida 32308

Re: AIR Hurricane Model for the United States Version 16.1.0 as Implemented in Touchstone Version 5.1.4

Dear Mr. Yager:

AIR has recently released an updated software platform, Touchstone Version 5.1.4, that contains the AIR Hurricane Model for the United States (the U.S. Hurricane Model) Version 16.1.0. Please note that due to an update to our model files for a new Fast Underwriting Loss Analysis (FUWLA), as explained below, our model version has been incremented. This update does not result in any changes to Florida loss costs or probable maximum loss (PML) levels, but was necessary based on our internal model versioning scheme. AIR would like to submit the AIR Hurricane Model for the United States Version 16.1.0 as Implemented in Touchstone Version 5.1.4 under Report of Activities, Section VI.G. as an interim software update.

Touchstone Version 5.1.4 contains updates to some U.S. models, non-U.S. models and to the software platform. There is no impact to Florida hurricane modeled loss costs or PMLs from these updates. For your convenience, we have listed all updates pertinent to the U.S. models, non-U.S. models and Touchstone software separately below.

## Updates to U.S. Models

- Introduce Fast Underwriting Loss Analysis capability for the Earthquake and Hurricane Models for the United States. FUWLA provides enhanced speed for small-batch (less than 100 locations) underwriting analyses.
- Update to injury rate distributions and employee shift percentages in the Workers' Compensation Model for the United States, which is a component of the US Earthquake Model.
- Updated to the Workers' Compensation Model for Hawaii Earthquake and Alaska Earthquake Model to preserve original occupancy code for locations entered with unknown construction and unknown occupancy; formerly the occupancy was remapped to general commercial.
- Update to first floor heights and base elevation heights to account for variation in loss among different heights in the United States Inland Flood Model. This change does not impact the US Hurricane or Storm Surge models.
- Updates to correct layer and sublimit loss calculation with respect to the fire following and other sub-perils for the United States Earthquake Model.

## Updates to non-U.S. Models

- Update to damage functions in the AIR Severe Thunderstorm Model for Australia
- Updates to damage functions for the Singapore Earthquake Model
- Updates to secondary modifiers, event intensities and Coverage D damage functions for Japan models

## Updates to Touchstone Software

- Various updates to the Touchstone user interface, and software to improve functionality and user experience
- Updates to geocode status code that gets stored in SQL tables when locations are imported with geocodes and then submitted for re-geocoding
- Analyze Re integration and enhancements, allowing for use of Touchstone results in the Analyze Re platform (Analyze Re is a subsidiary of AIR providing analytics for reinsurance transactions direct from Touchstone results)
- Update to geospatial analysis functionality to allow application of layer level facultative reinsurance terms
- Various API (Application Interface Program) updates/enhancements
- Update to Touchstone license file configurations

In accordance with the 2015 Report of Activities, Section VI.G., we have prepared the following forms with results from the currently acceptable version, 4.1.0, and the updated version, 5.1.4, as well as a percentage change that demonstrates no change for the Commission's review:

- Form A-1 (Zero Deductible Personal Residential Loss Costs by ZIP Code)
- Form A-4 (Output Ranges)
- Form A-8 (Probable Maximum Loss for Florida)
- Form S-5 (Average Annual Zero Deductible Statewide Loss Costs Historical versus Modeled)

AIR would like to request that the same consideration be given to Touchstone 5.1.4 as has been given to other past interim software releases. We ask that the Commission confirm that the AIR Hurricane Model for the United States v16.1.0 as implemented in Touchstone 5.1.4 is considered as equivalent to the AIR Hurricane Model for the United States v16.0.0 as implemented in Touchstone 4.1.0 and accepted under the 2015 Standards.

Best regards,

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Brandie Andrews, CCM Vice President, Regulatory and Rating Agency Client Services