

July 7, 2016

Lori Medders, 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 Atlantic Tropical Cyclone Model Version 15.0.2 as Implemented in Touchstone Version 4.0.0

Dear Dr. Medders:

AIR has recently released a software update to Touchstone, which does not change the underlying Atlantic Tropical Cyclone Wind Model or result in any changes to Florida wind loss costs or probable maximum loss levels. AIR would like to submit this version of the model and software under Report of Activities, Section VI.G. as an interim software update.

This software release contains new or updated models primarily for countries outside of the United States, as well as targeted enhancements to improve the overall user experience within the software. For your convenience, we include a list of the updates to models around the world, descriptions of the updates that are related to the storm surge component of the model, and other user interface improvements in the list below:

- Release of the AIR Earthquake Model for India
- Update to the AIR Tropical Cyclone Model for India
- Update to the AIR Earthquake Model for Southeast Asia
- Update to the AIR Typhoon Model for Southeast Asia
- Update to the AIR Terrorism Model
- Minor update to AIR Earthquake Model for the U.S.
- Updates to the default values: oil and gas prices as well as severity rates and payroll data. Oil and gas
  prices are only used in analyses for exposure with offshore assets; the severity rates and payroll data are
  only utilized for workers' compensation analyses.
- Update to address analysis failure for storm surge due to an incompatible construction type, steel with
  moment-resisting frames (steel MRF), in the exposure data. If an exposure data contains risks coded with
  construction type as steel MRF, a storm surge analysis would not be completed in the prior version and no
  loss would be generated for the entire book. Please note that this construction type is not valid for
  hurricane analyses.
- Update to storm surge losses for risks with no basement. This update adjusts the vulnerability factor applies when "no basement" has been selected for the secondary characteristic, foundation type. This update will only affect the storm surge losses for risks without basement.

- Update to address analysis failure for risks with non-engineered primary structures and engineered appurtenant structures. For example, a risk with primary construction type as wood frame and appurtenant construction type as steel would lead to analysis failure in the prior version. The same analysis will be able to complete in Touchstone 4.0.0.
- Other changes to the software that target work flow improvements and other non-model related enhancements. For example, improved import logs, enhanced functionality for replicating exposure data within the software for sensitivity tests and streamlined exposure and result export functionalities.

Please note that because the enhancements in this software release introduce the potential for storm surge losses to change, a change in model version as instructed by the AIR internal versioning policy. Recall that the Atlantic Tropical Cyclone Model contains two separate components, one for wind and the other for storm surge. Because both components share the same model version, changes to either module can lead to a need to increment the model version. In all other respects, the Atlantic Tropical Cyclone Model version 15.0.2 is the same as the Atlantic Tropical Cyclone Model version 15.0.1.

In accordance with the Report of Activities, Section VI.G., we have prepared the following forms for the Commission's review:

- Form A-1 (Zero Deductible Personal Residential Loss Costs by ZIP Code)
- Form A-4B (Output Ranges, 2012 FHCF Exposure Data)
- Form A-8 (Probable Maximum Loss for Florida)
- Form S-5 Part B (Average Annual Statewide Loss Costs Historical versus Model, 2012 FHCF Exposure Data)

The forms have been provided for the current model and the updated/revised version of the model, and a percentage change comparison that demonstrates no change.

AIR would like to request that the same consideration be given to Touchstone 4.0.0 as has been given to other past interim software releases. We ask that the Commission confirm that the Atlantic Tropical Cyclone model v15.0.2 as implemented in Touchstone 4.0.0 is considered as equivalent to the Atlantic Tropical Cyclone model v15.0.1 as implemented in Touchstone 3.0.0 and accepted under the 2013 Standards.

Best regards,

Brandie Andrews, CCM

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Vice President, Regulation and Rating Agency