Release Notes for RISATower Version 5.1

February 18, 2008

This document describes Version 5.1 update for RISATower. Please install this update at your earliest convenience.

Stand Alone Installation Instructions.pdf and *Network Installation Instructions.pdf* files are available from the <u>http://www.risatech.com/s_download.asp</u> page.

Documentation

RISATower manual will be installed in the \Program Files\RISA\RISATower\Manuals directory. Hard copies will be made available to those who request them.

New Features and Bug Fixes

- The Effective Projected Area of feed line clusters is now based on the orientation of cluster faces to wind directions associated with individual load cases. Previously, the greatest EPA was conservatively assumed for all wind directions.
- Feed line bundle definition has been enhanced by adding Feed Line Cluster Treatment option on the input spreadsheet. The users may now choose the way a group of feed lined should be treated by the program. The available choices are: Individual Lines, Rectangular Appurtenance, and Round Appurtenance. The Rectangular Appurtenance specification produces EPA values that are wind direction-dependent. EPA calculations of feed line groups entered as Individual Lines or Round Appurtenance are not sensitive to wind directions.
- Wind Pressure Multiplier has been added on the Advanced input page. Any nonnegative value (including zero) may be specified. The Multiplier modifies pressures applied to all tower components within a section(s) for which it is defined. For the User Forces and Antenna Pole input categories, the multiplier modifies the EPA-derived forces only (i.e., "CaAc Shear" and "Pole CaAa", respectively).
- New Databases have been added for structural member and bolt materials, allowing users to define their own material properties.
- Calculations of flexural strength for round tubular members have been updated to reflect 4.7.2 of TIA-222-G.

- Opening of the default (built-in) RISATower model in RISA-3D has been corrected. Previously tower widths did not match between both programs.
- Resistance factor for compression has been changed from 0.85 to 0.9 (TIA-222-G, Addendum No. 1).
- Fixed display bug for certain torque arm configurations guys were not shown when the reaction display option was on.
- Compatibility of the program display with different screen resolutions has been improved to eliminate instances of cropping of the main input window on some systems.
- > Miscellaneous GUI enhancements and bug fixes have been added.