

# ASPEN OneLiner Version 11.5 Update

Please find enclosed the installation CD for *ASPEN OneLiner*<sup>™</sup> version 11.5. This maintenance release contains fixes for all known bugs to date. If you have a license for the *Breaker Rating Module*<sup>™</sup>, this update contains also an improved Check Circuit Breaker Short Circuit Rating command. Version 11.5 is Windows 7 compatible.

You can run `\11pf\setup.exe` on this CD to create a new installation or to update an existing installation.

Please write ([support@aspeninc.com](mailto:support@aspeninc.com) in English or [scayres@aspeninc.com](mailto:scayres@aspeninc.com) in Spanish or Portuguese) or call (650-347-3997) us if you have questions.

## New Features and Improvements

- **New Arc-flash hazard calculator command options:** The ‘Manual’ option lets you enter the fault clearing time. The ‘Ignore 2 second rule’ allows calculation of incident energy for clearing time longer than two seconds.
- **New fault report option:** Bus Fault Summary and Line End/Out Fault Summary commands report can now be created in per-unit.
- **Special handling of boundary equivalent sources in the ground-mat current calculator:** When boundary equivalent generator is encountered during ground current calculation, the program asks the user if he wants to exclude the generator ground current from the total.
- **New PowerScript functions and parameters:**
  - **DoVS()** and **GetVSVoltage():** functions to run voltage drop study.
  - **FT\_dXRANSI:** GetData parameter for ANSI X/R ratio.
- **Export button in relay group dialog box:** User can use this button to export setting of a single relay to a text file.
- **Updated the formula for calculating the commutation-transformer impedance in PSS/E file import/export logic.** PSS/E gives the commutation-transformer impedance in ohms. For a converter with two or more bridges, the new formula converts the impedance to per-unit using the combined MVA rating of all the commutation transformers. Previous formula used the MVA rating of only a single commutation transformer. We applied the same change to the Export command in *OneLiner* and to the PSS/E data conversion program.
- **Improved support for communication-assisted protection scheme data:** This data category is now part of the Data browser, the Relay import/export commands. The Case Comparison Program has been updated to compare these data also.
- **Improved breaker rating check logic:**
  - The program can now handle cases where some elements of the breaker protected equipment group are out of service or are located at a different bus.
  - Run time is reduced by a factor of 4 compared with previous version-11 releases.

- Run time can be reduced further by using a new checking-report option that allows the program to skip over breakers that are obvious operating below their ratings.
- **Improved MOV iteration logic** to reduce run time in network with over 10 MOV protected series capacitors.
- **New command line options** to facilitate unattended installation of the *OneLiner* software:
  - /s: This will cause the Setup program to run with no user interaction.
  - /NODRIVER: This will cause the Setup program to skip over the HASP device driver installation step.
  - /NOCFG: This will cause the Setup program to skip over the *OneLiner* Configuration step.

### **New Overcurrent Relay Curves**

- **New SIBA.RLY:** New file for Siba High Voltage fuse links German DIN standard.
- **In GE.RLY:** Added SR469 motor management relay.
- **In ABB.RLY:** Added Expulsion Fuses type CXP fuse link type K.

### **Bug Fixes Since Version 11.3**

- Fixed error in the 'Copy equipment in region to clipboard' command. Executing this command resulted in lost of protection scheme data records in the OLR file.
- Fixed typos in setting labels of distance relay type SEL-321P\_\_, SEL-311P\_\_ and SEL-421P\_\_.
- Fixed error in implementation of SEL 32G ground directional logic and fault-phase selection logic FIDS that caused the program to report incorrect relay operation in fault.
- The Delete Recloser command in the relay-group properties dialog and the Display Recloser table in the Data Browser caused the program to crash.
- Transformer damage curve linked to a relay curve did not display correctly when the relay current is zero.
- The Copy command did not capture relay group parameters: memo, tags and breaker interrupting time.
- The case comparison program failed when reading OLR files that contains large number of buses.
- The Instantaneous relay setting 'Always flat' did not work in some cases, which led to incorrect relay operation time report.
- Moving bus symbol on the 1-L diagram caused the program to crash.
- Open binary file command caused the program crashed when the OLR file contain legacy links to the relay database.
- PowerScript PostData did not work correctly for lines in mutual group.
- Recloser curves in library Hubbel.rly were entered with wrong pickup current.
- The Export network command did not include in the DXT file some breaker data and memo text.

- The Case Comparison Program and Distance Relay Editor did not run on some PCs with Window XP and Vista.
- The Case Comparison Program did not include in the change file additional outage items in breaker's protected equipment list.
- The Case Comparison Program generated change files with incorrect tags field in distance relay data records.
- The Case Comparison Program reports differences in transformers and breakers that are in fact identical.
- The Check | Primary Backup coordination command TTY report contains lines of text with unrelated content.
- The Import Relay command did not process relay-group memo fields correctly when the text contains new line, quotes and other special characters.
- The line-selection dialog box in the Fault Locator command did not show all the lines in the vicinity of the selected relay group.
- The link to ASPEN Relay Database command did not function correctly for some relay types.
- The 'Merge Bus with Same Name and kV' option in Merge File command did not work correctly for all the buses being merged.
- The PowerScript function DoVS() did not process the vdFltOpt array correctly.
- The program crashed when Data Browser commands Zero Sequence Mutual|Edit and Line|Edit are executed in succession.
- The program did not calculate ANSI X/R ratio correctly when the Fault | X/R Ratio Parameter | Compute ANSI X/R Ratio flag is turned from Off to On.
- The program did not open the OLR file when user double-clicked on the file name in Window Explorer.
- The program did not update the shunt symbol on the one-line diagram immediately after the shunt impedance is changed.
- The program sometime crashed when a bus with invisible neighbors is moved.
- The Relay | ASPEN Relay Database | Retrieve relay settings command reported error when none existed.
- The Show Relay Time on 1-L command caused the program to crash when RAZOA and REAL316 distance relay types are present.
- The Tools | Run Distance Relay Editor command did not work.
- The Check | Breaker Short Circuit Rating command caused the program to crash when OLR file contain large number of breakers.
- Fault simulation and breaker rating reports in CSV format did not format correctly for PCs where the decimal separator is not a dot.
- In the multiple user-defined stepped-event analysis logic, the user-defined events sometimes have no effect on subsequent relay tripping.
- PT and CT ratios in data browser CSV reports were shown in Excel as Date when the values were in the format: XX/YY.
- The program showed incorrect operating time on the 1-line for distance relay type 7SA611.
- The case comparison program failed when reading OLR files that contains large number of buses.