



### TCC Curve Shift

Adjust TCC curves by a specified percentage to account for parallel branches or fuse pre-loading. To shift, right-click a protective device curve in a TCC and choose **Shift Curve → Modify**.

### Harmonics Enhancements

- Support individual utility harmonic impedances for the frequency scan and system network model. This information is entered in the **Utility Data** dialog, **Harmonics** tab.
- For frequency scans, support plot of angle, Rpu, and Xpu for buses.

### MCC

- Display row '*Equipment Name*' rather than '*Row #*' when identifying an MCC row in arc flash labels, database reports and TCC plots.
- Add 2 columns to the cable section of the spreadsheet: "Neutral Size" and "Neutral Num". These columns are also available in panel spreadsheets.

### One-line

- Allow cable data text to move. To enable, activate the **Options → Text Visibility** dialog and set *Line Data Text Location* to "*With ID Name*".
- When pasting new one-line equipment using the right-mouse context menu, the location defaults to the current mouse location.
- Enhance the **Edit Find** dialog for greater ease-of-use.

### Database Report

- The new-style database report has improved fit-to-page printing capability.
- Buses show connected, demand, code, and design VA and amp values.

### Equipment Status

Equipment dialogs allow **Data Status** to be specified as *Verified*, *Estimated*, or *Incomplete* in the **Comments** tab. Equipment can be queried (selected) based on **Data Status** using the **Query** function. **Query** is accessed via the **Find/Select** dropdown in the **Home** ribbon. Using Query, equipment can be colored based on **Data Status**.

### Bug Fix

Several weeks ago, we found a bug where the relay breaker opening time in the arc flash calculations could use the wrong system frequency to calc time. This happened if a user switched between 50Hz and 60Hz in a file. For a breaker opening time of 5 cycles, we should use 0.083s @ 60Hz for the breaker opening time. But, sometimes it incorrectly calculated as 0.1s based on 50Hz when it should have been 0.083s.

This problem is fixed in 9.0.3. The workaround in 9.0.2 was to ensure the user default frequency matched the file-saved frequency. This could be done by "re-OKing" the Options dialog after opening a file.

The problem is minor but could change the arc flash incident energy by 0.3 - 0.4cal. If you have a file that has had the frequency changed, we recommend that you verify your results.