APPLICATION NOTE

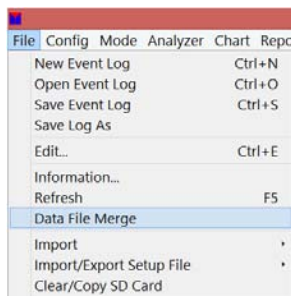**Merging MPQ Data Files**

Adding, removing or changing a piece of equipment in a facility can have significant impacts on the power quality and energy requirements. Introduced power quality phenomenon can cause equipment to trip off line. This can represent significant losses in revenue. Added equipment can create high peak loads or increased reactive currents that can lead to penalties.

In order to determine the impact of these changes a power quality and demand study should be performed prior to the change and after the change. This creates 2 separate data files that can be time consuming to analyze.

The Megger PQ PC software allows for multiple files to be merged together into 1 data file. This makes analysis simple and fast.
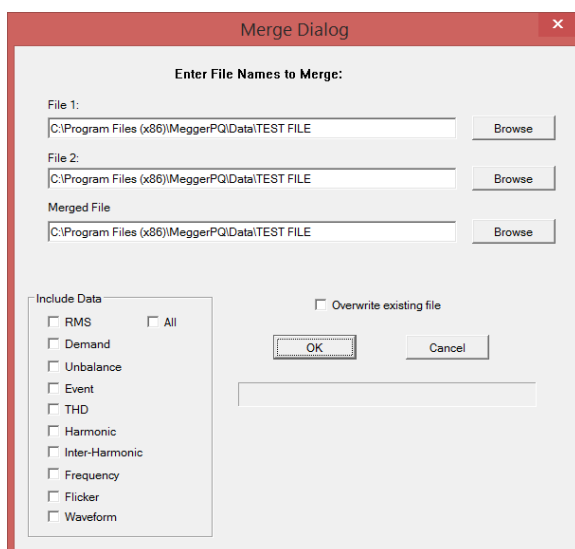
To merge the files click on FILE then MERGE FILES

Select the files to merge. (File 1 and File 2)
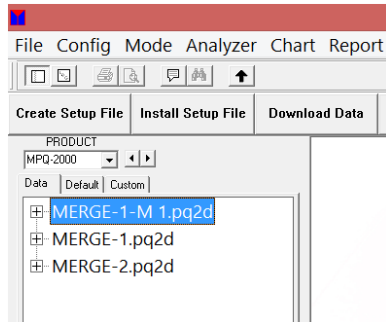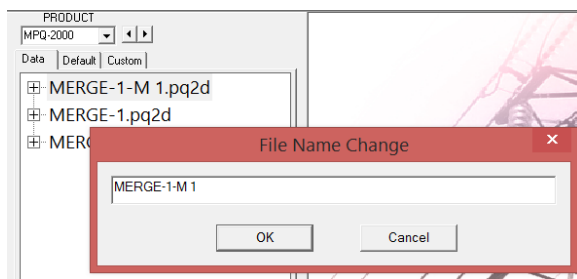Select the data you would like to merge. Merge just select data or merge it all.
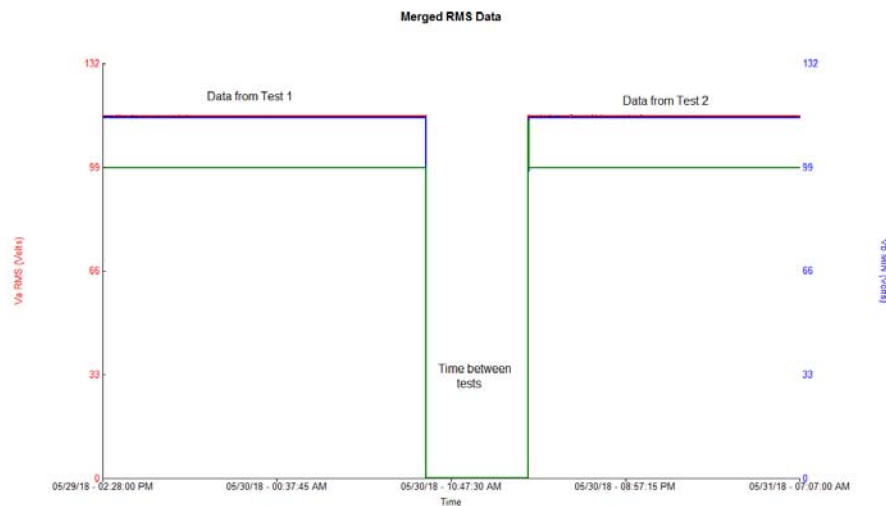Then click OK

Merging MPQ Data Files

The new data file will now be displayed in the data files bar.

Right click on the data file to rename it, if desired.

All the test data prior and after a change to your system can be viewed on the same chart. Create RMS charts to view increases in the quantity and severity of dips and swells. This can be a sign that the source is no longer adequate. This can lead to equipment tripping off line. The new equipment may need a dedicated circuit.
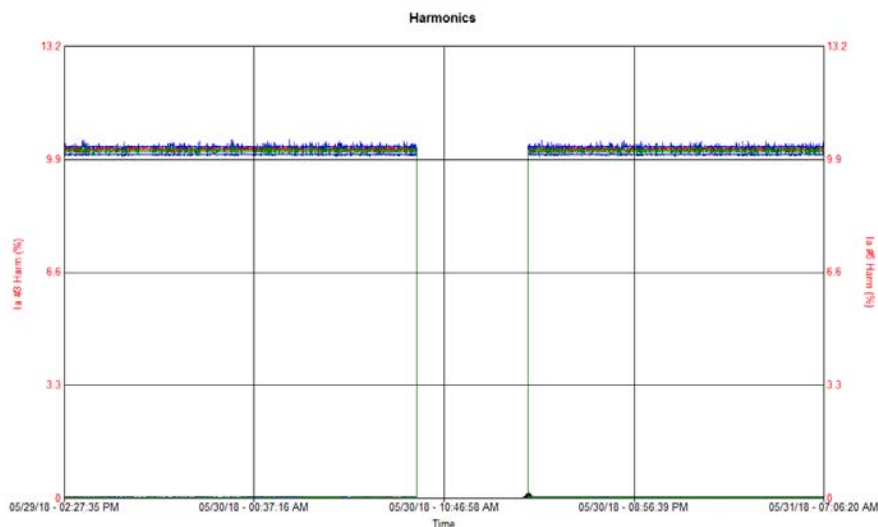
Merging MPQ Data Files

Create demand charts to view the active energy, reactive energy and power factor before and after the change. Added inductance will increase reactive energy usage lowering power factors. Low power factors not only limit the amount of available active energy but can lead to penalties.
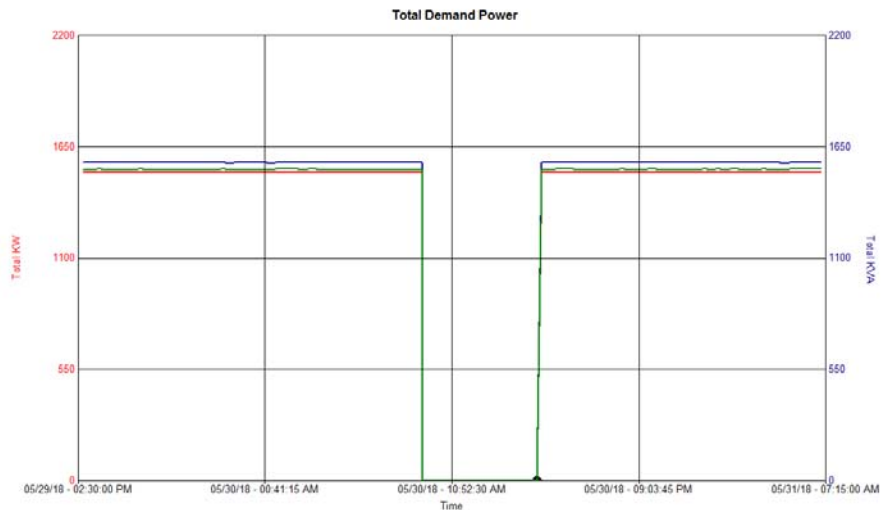

Create harmonic charts to view the impact the changes may have on waveform distortion. Added harmonics can create additional heating effects and losses. The higher the harmonic order the worse these effects can become. Zero sequence harmonics can cause high neutral currents. Negative sequence harmonics can setup counter rotational forces in motors leading inefficiency and vibration.

Merging MPQ Data Files

Create unbalance charts to view the impact the changes had. Single phase loads can contribute significantly to unbalance. This can lead to high neutral currents.
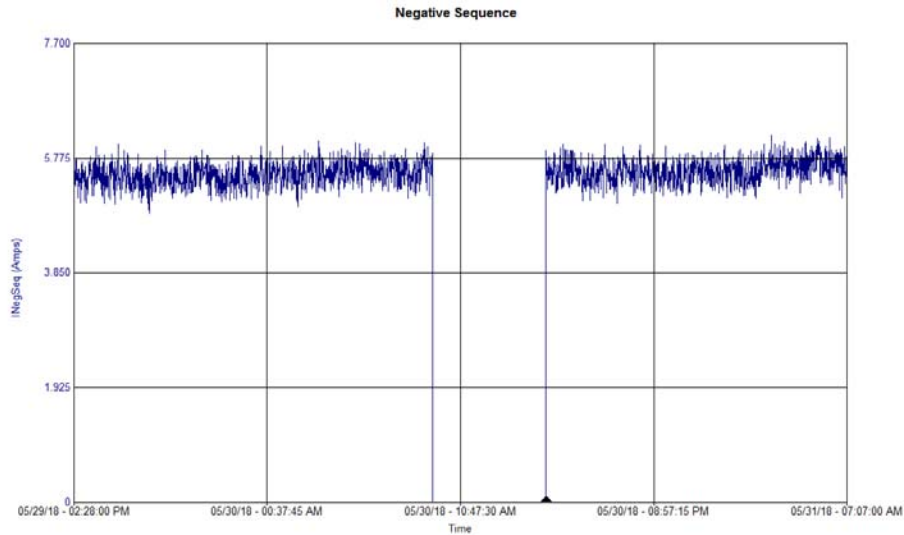
Merging of data files makes a before and after analysis a simple task.