CVT Calibration

Scope:

Below are short instructions for recalibration of CVT measurement of Schneider Recloser/ Sectionaliser using WSOS5 software.

Memory in SCEM card stores:

- Switchgear data: serial number, date of manufacturer, contact loves, operation counters,..
- CVT data: These are unique figures for each combination of switchgear and SCEM. They are obtained by the calibration process. If SCEM card is replaced the original CVT data is no longer genuine and the new switchgear-SCEM pair is expected to be re-calibrated to give correct voltage readings.

This document can be used to

1/ Reload a calibration file (eg. original cal file) into Schneider recloser/ LBS ;

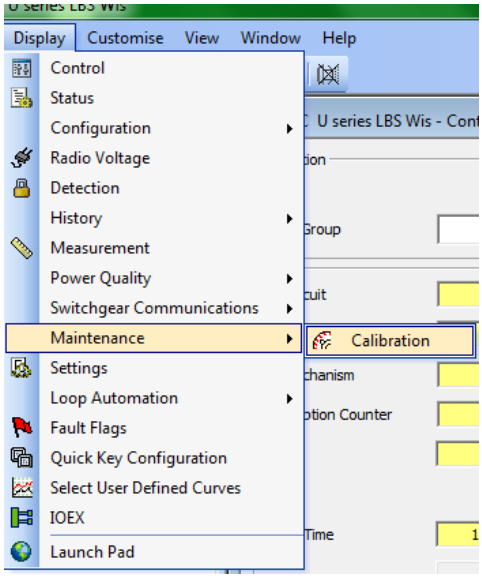
2/Correct voltage readings due to wrong CVT data in the switchgear or after a SCEM card replacement.

1. **Introduction of Calibration Screen in WSOS5:**

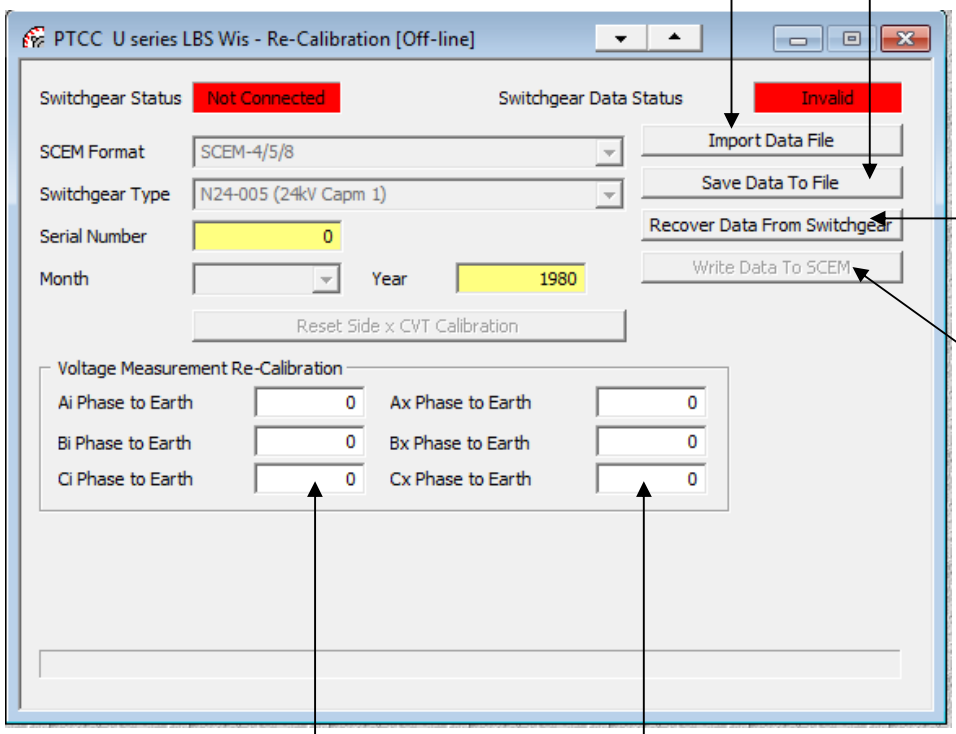
   Making sure the controller is connecting with a switchgear or TTS and all data is valid.

   Go ONLINE with controller using WSOS5 software

   Open Calibration menu



Calibration screen



This is to import cal file saved in PC into WSOS and make it ready to be written into SCEM

This is to populate the existing on-line SCEM data into a cal file and save in PC

This is to recover SCEM data saved in controller in case SCEM data is corrupted

This is to write the existing or imported data to SCEM. It is only active while Online

6 Instantaneous voltages fields. While Online, enter the correct voltages in each of them. Controller will recalculate the respective CVT data each time a new voltage is entered

2. CVT Calibration procedure:

2.1 If the SCEM is fresh (not having record matching switchgear), eg. After being replaced , you will see switchgear serial, date of manufacture,.. displayed on the panel screen not matching the actual ones.
In this case, you need to click **Import Data File** to import SCEM data from a cal file. Cal files can be obtained from our service web site or from us.

Once the cal file is imported, use "**Write Data To SCEM**" to update correct data to SCEM.

2.2 In case the SCEM already has correct switchgear data but voltage readings are wrong or after step 2.1 voltage readings are incorrect, using below CVT re-calibration steps:

- Go online
- Make sure voltage is live (at least 5000V phase- earth) is required on switchgear primary terminals before proceeding calibration.
- Enter correct PRIMARY voltages into the voltage reading fields. Every time you enter a new value, the controller will take a few seconds to recalculate CVT calibration data. You may have to enter correct voltages on each fields a few times until voltages are correctly displayed.

  Note: For U series without external CVTs, only I side voltage entries are needed.

- Once voltage readings all are correct, click "Write Data To SCEM" to update SCEM data.

2.3 Double check voltage readings after the procedure and quit the window to finish.