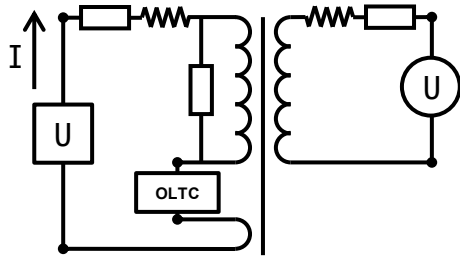


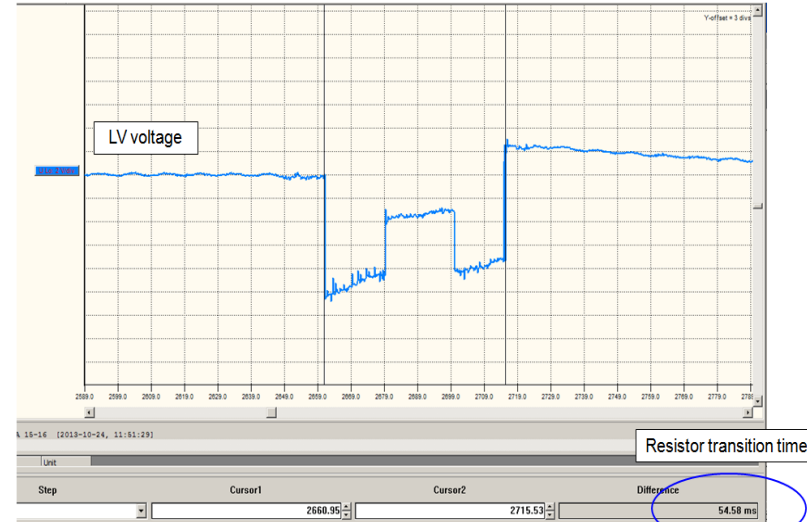
OLTC, DRM **(Dynamic Resistance/Recording Measurements)**

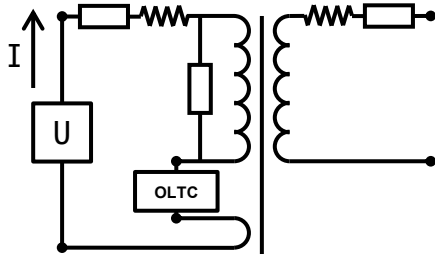
Roya Nikjoo & Peter Werelius, Megger



OLTC - Dynamic voltage

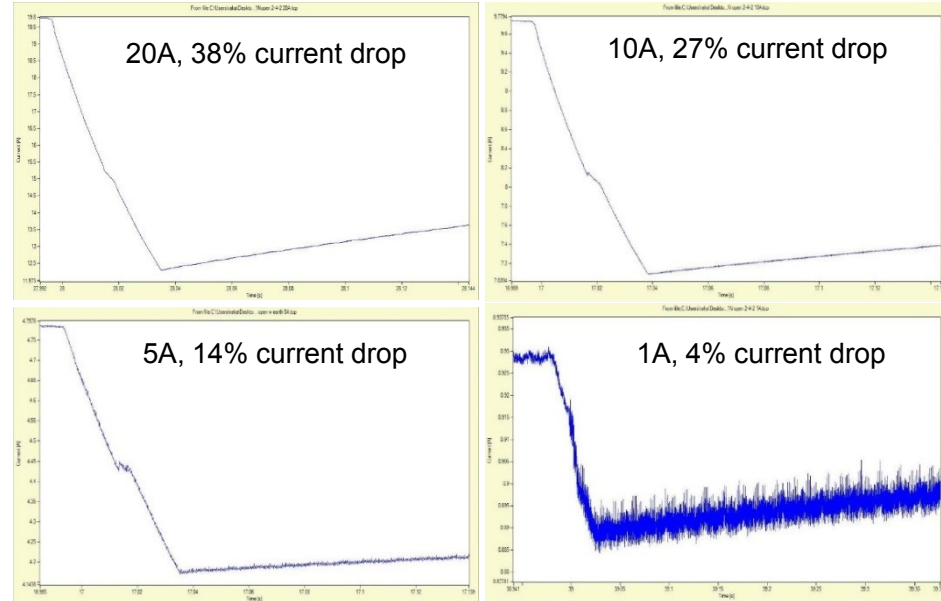
- Open LV
- Voltage measurement on LV
- Timing measurement can easily be performed
- In Sweden, a large Swedish service provider has commonly used an Oscillomink

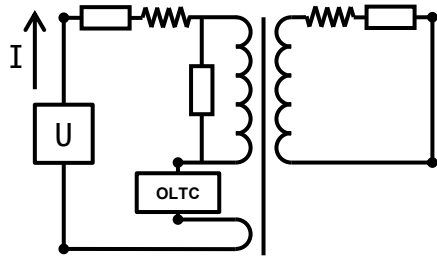




- Open LV
- Slope & ripple
- Ripple depends on test current
- Current level affects results
- Simultaneous WRM possible

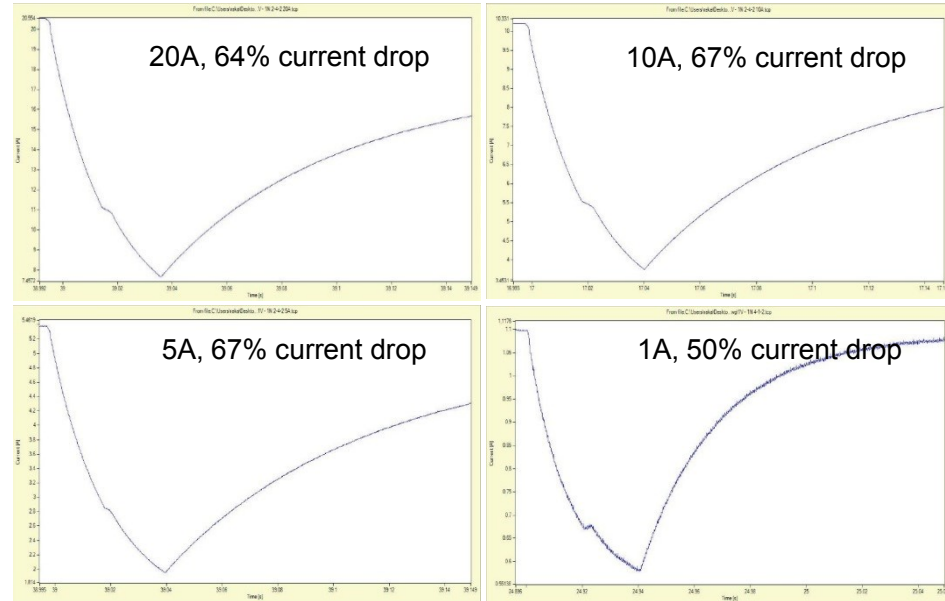
OLTC – Dynamic current

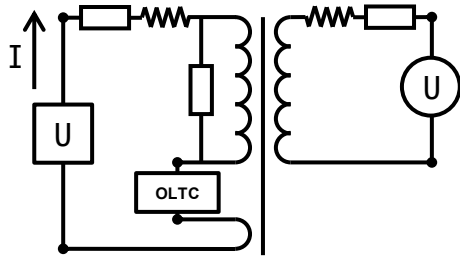




- Shorted LV
- Slope & ripple
- Short circuit replaces inductance by short-circuit impedance
- Changes in current more prominent
- Simultaneous WRM not possible

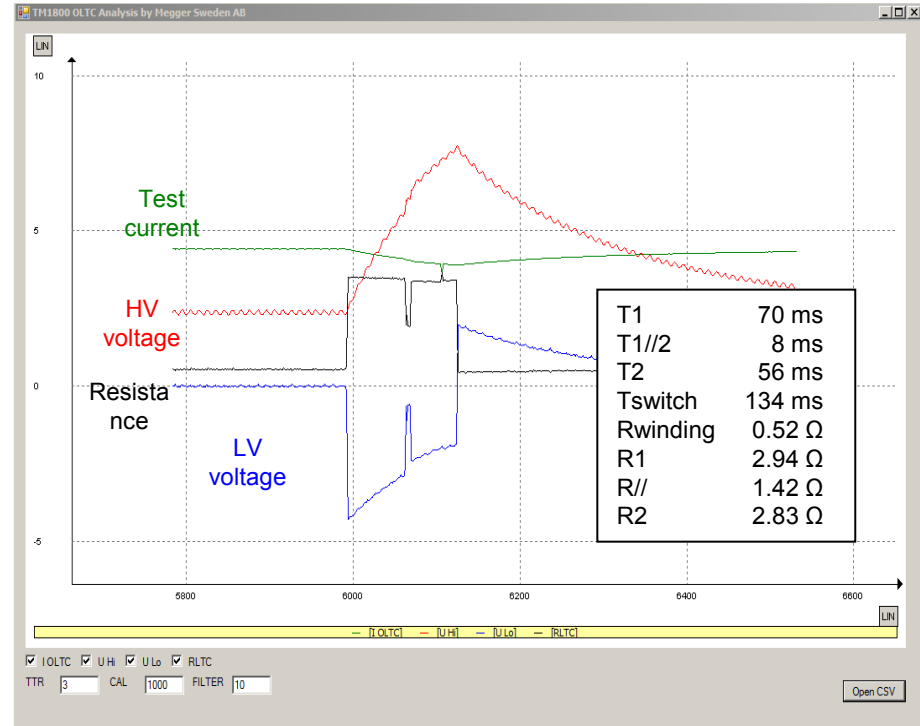
OLTC – Dynamic current

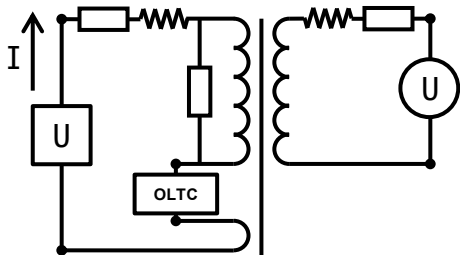




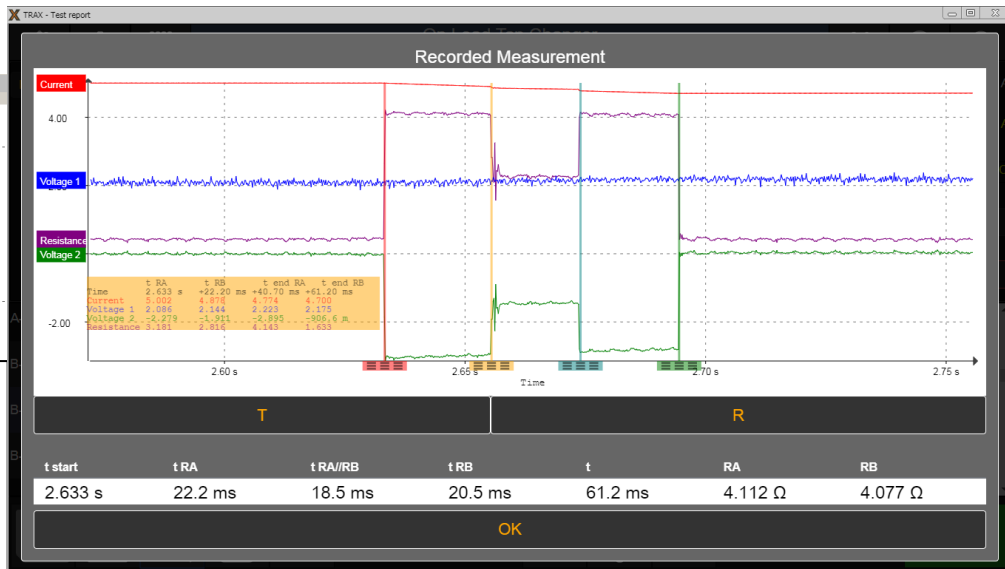
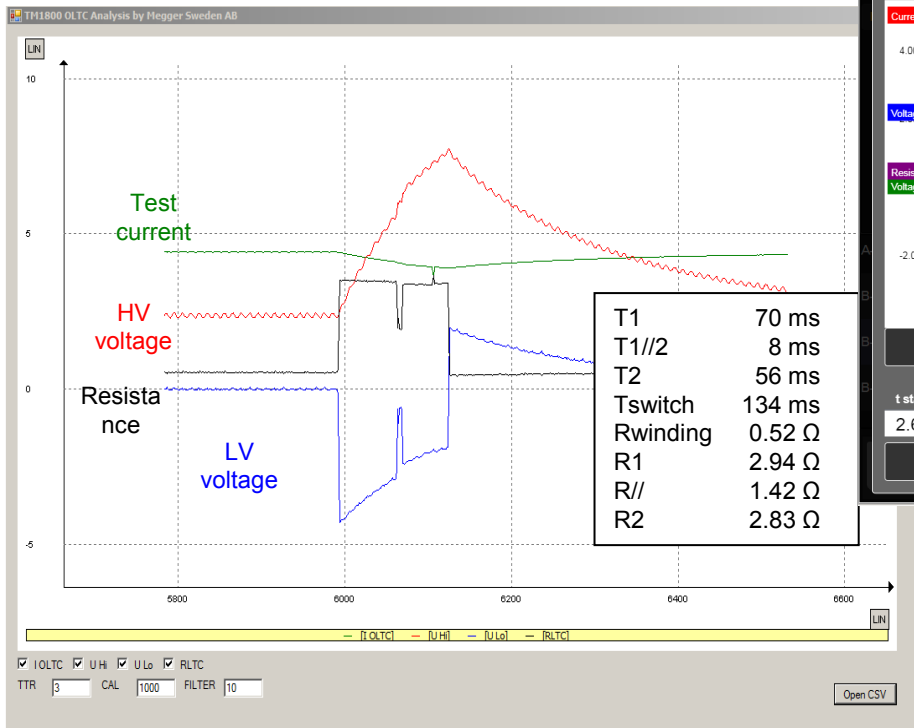
OLTC - Dynamic resistance

- Open LV
- Voltage measurement on LV
- Timing measurement can easily be performed
- Resistor values can easily be calculated by voltage transformation from LV to HV side
- Simultaneous WRM possible





DRM – Source impedance influence



Why a guide is needed?

- Dynamic measurements used for long time using different methods.
- Common terminology needed.
- Explanation of methods and their strengths and their limitations.
- Guidance of application on different types of LTC, and when not to use.