

## Training Course

Basic course for Users:

„Testing of meters and transformers with portable Reference Meters“

Regular measurements of meter installations are getting more and more important. Compact and efficient measurement devices offer a comfortable and quick check of the meter installations on-site.

ZERA not only provides the technical equipment for this field of duty, but also supports the users with professional knowledge.

### Course details:

Additionally to basic knowledge about how to handle portable Reference Meters you will be trained in special requirements for fault detection in theory and practice.

This course also includes additional comprehensive documents, catering during the day and an evening event for exchange of experiences with other participants.

There are comfortable hotels near ZERA company available. If desired ZERA can book rooms for special prices for you.

### Content:

#### Theory:

- Overview on-site installations (Designs, variations of connections)
- Inspection of circuit errors
- Error measurements at electronic / electromagnetic electricity meters
- Burden measurement for current and voltage transformers
- Instrument transformer testing
- Measurement and explanation of harmonics
- Creating test reports

#### Practice:

By using special training equipment including voltage and current transformers the following subjects using Reference Meters can be trained:

- Connecting meter under test and Reference Meter
- Reading and understanding of vector diagrams / searching of circuit errors
- Error measurements
- Burden measurements
- Transformer testing
- Measuring and understanding harmonics
- Storing of measurement results
- Read-out stored data and creating a test report