

## High voltage instrument transformer testing – information for customers

This fact sheet is for customers with high voltage (HV) instrument transformers to help understand the legislative requirements for electricity meter testing and reasons for periodic testing of metering installations. An HV metering installation generally comprises measurement elements, recording and display equipment in addition to any communications interface, instrument transformers or processes required to collect energy data for a metering point.

### High voltage instrument transformers

Instrument transformers are high accuracy class electrical devices used to measure current or voltage. HV instrument transformers are designed to transform the voltages or currents to lower values that can be used by metering devices. The National Electricity Rules (NER) define 'high voltage' as a voltage greater than 1 kilovolt.

### How to determine if a metering installation is high voltage

HV metering installations are typically located in facilities that have high electricity usage, such as factories and areas of commercial operations. If you're not sure whether your installation is high voltage, contact your Financially Responsible Market Participant (FRMP) – which is usually your retailer.

### Testing requirements for HV instrument transformers

Under the NER, instrument transformers forming part of an HV metering installation must be tested by a registered Metering Coordinator every 10 years unless an alternative test plan is approved by the Australian Energy Market Operator (AEMO).

### Importance of HV instrument transformer testing

The NER requires HV instrument transformers to be tested at least once every 10 years. Periodic testing can determine whether an instrument transformer is providing accurate readings. Any issues with the accuracy of an instrument transformer can lead to overall inaccuracy of the metering installation. This could result in adverse financial outcomes because costs incurred due to inaccurate metering are billed to retailers, who ultimately recover these costs from customers.

Beyond this, given the considerable volumes of electricity consumed through these metering installations, it is critical to wholesale electricity market settlement to have ongoing assurance of the accuracy of HV instrument transformers. Testing could also identify when an instrument transformer is faulty or otherwise damaged.

### Expectation for customers with HV instrument transformers

Under the NER, your Metering Coordinator is responsible for ensuring that instrument transformers are tested within certain time frames. However, we expect customers to cooperate with their Metering Coordinator to ensure that required testing time frames are met.

We understand that committing to having your HV instrument transformer tested can be difficult, given the potential need to disconnect the installation from the grid. We recommend you proactively engage with your Metering Coordinator early. This will allow you and your Metering Coordinator to develop a plan for testing to be performed at a convenient time (such as during public holidays or scheduled site shutdowns) within the mandated time frames mandated. The contract with your retailer and network business may include terms about access to metering installations for testing.

The AER monitors compliance with NER testing obligations.

## **Metering Coordinators**

The FRMP is responsible for appointing a Metering Coordinator, although a large customer can appoint their own Metering Coordinator. You can contact your retailer directly to find out who your appointed Metering Coordinator is.

More information on the role of a Metering Coordinator can be found in AEMO's [Role of the Metering Coordinator Factsheet](#).

## **Contact**

If you have any questions about this fact sheet, please email [aercompliance@aer.gov.au](mailto:aercompliance@aer.gov.au).

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