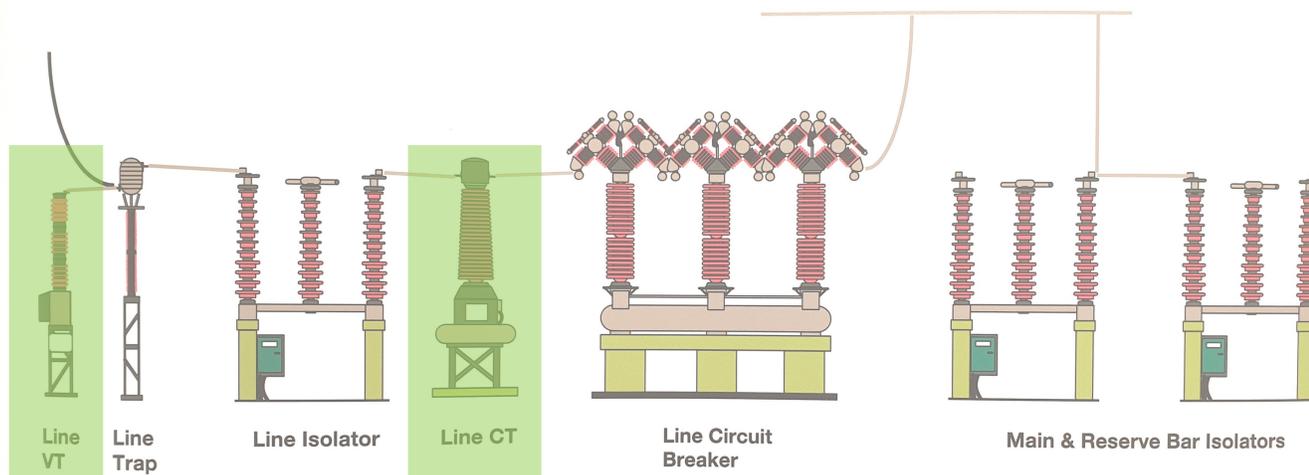


# Instrument Transformers



**Instrument Transformers (ITs)** are typically used on the Electricity Transmission System for **fault detection & protection operation**, but also for **accurate metering purposes**

National Grid has circa **20,000 Instrument transformers** installed on the electricity transmission system



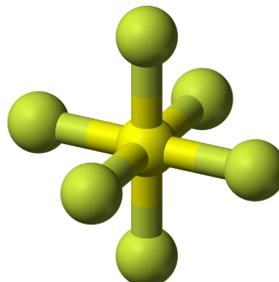
Current Transformer (CTs)

Voltage Transformers, either a Wound Voltage Transformer (WVT) or a Capacitor Voltage Transformer

High Accuracy Metering (HAM) units

Types of insulation include:

SF<sub>6</sub>



Oil

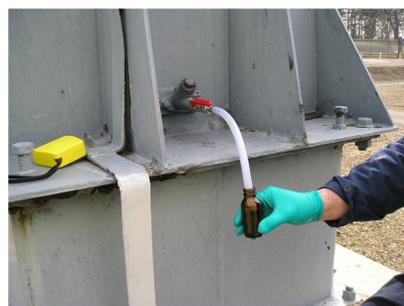


## Our Approach

### Condition Monitoring Surveys (CMS)



### Oil Sampling



Factors such as PCB contamination and SF<sub>6</sub> leakage also drive asset replacements, which have a negative impact on safety and the environment

## Impact on Reliability

Detect a fault and trip a Circuit

Consequential—Risk Management Hazard Zones prevent work near to ITs deemed to be at risk

Catastrophic failure of Instrument Transformers