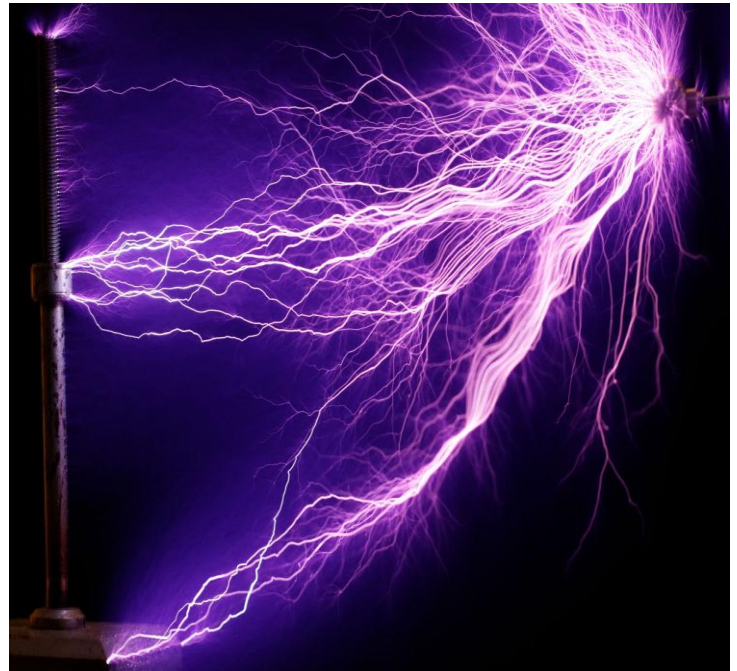


Impressed Voltage Update

WHAT HAS HAPPENED?

- Several events have occurred both internal and external to National Grid as a direct result of failure to adequately manage Impressed Voltage (IV) over recent years.
- Although fatalities are rare, failure to recognise and manage IV adequately has been at the root cause of fatalities over recent years both in the UK and worldwide.
- On Friday 3rd July 2015 a WPD Engineer, was fatally injured and although the cause has not been confirmed by WPD there is a strong indication that the incident was due to a failure to adequately manage the IV hazard.



KEY LEARNING POINTS:

- The correct management of IV must always be considered and control measures must be put in place when working on or near to high voltage Equipment.
- Where works are carried out “off-rules” that may be subject to IV, (ie not subject to the NG Electricity Transmission Safety Rules) the potential for IV must always be considered and adequate control measures must be put in place.

Remember where IV conditions are present:

- All persons must be competent and hold all relevant authorisations to undertake the work
- A safe system of work, including management of IV must be developed and communicated to all staff
- Application and removal of drain earths must be completed as per the earthing schedule by trained competent persons
- Sensible monitoring of activities must be carried out and recorded

What we are doing:

- A comprehensive IV assurance programme was completed in Q1, 2015 and a further Assurance programme is now underway through Q4, 2015.
- TP 234 ‘Management of Impressed Voltage & Methods of Control’ has been updated and was re-issued in July.
- A review of all appropriate procedures has been completed to ensure clear signposting of requirements to highlight and manage IV.
- A review of our contract tendering process has been completed and the process has been enhanced to highlight the need to evaluate understanding, knowledge and ability to manage IV.
- Mandatory IV awareness e-learning training is now in place as part of Persons and Competent Persons authorisations.
- A more advanced e-learning training for SAPs will be available from October and training will be completed by the end of 2015
- Construction Interface Engineers (CIEs), and Project Engineers will attend an IV classroom based training course, this will be available from October and will be complete by the end of the year
- All our NSIs will be reviewed in Q4 to highlight any areas where IV guidance needs enhancing.