

## We asked Dongsheng Guo, from National Grid's Network Engineering team: is earthing really a problem and how is National Grid contributing towards this debate?

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Earthing is often classified as a dark art, even amongst electrical engineering communities. Without earthing, the operation and performance of many systems would be impacted, possibly endangering people's lives.

Therefore, National Grid aim to mitigate such risks through considering and applying an increased focus on:

- power system fault studies
- protection configurations
- soil property analysis
- interconnected electrodes
- third party/utility supplies
- ground surface finish i.e. stone chipping, tarmac or bare soil
- Using field analysis tools to solve the simulation problems.

The UK Health Safety Executive interacts with industrial and academic representatives on a legislation level. Around the globe, many organisations such as CIGRE, IEC/CENELEC and IEEE and domestically, BSI and ENA are proactively working in this area. I myself am involved in a number of these groups.

Playing an immense role in electricity transmission, National Grid is proud to be part of all the above bodies, not only to be compliant but also to realise greater cost efficiency for the customers.

Our actions don't stop at world leading research and development, efforts are also invested in collaborating with stakeholders to understand and deal with any possible issues.

National Grid is capable of carrying out the whole suite of earthing work, particularly in relation to technical information on existing system, studies and policy consultancy.

If you wish to discuss any aspect of earthing, please contact the Commercial Engineering Services (CES) team on: +44 (0)800 783 9228 or email: [ces@nationalgrid.com](mailto:ces@nationalgrid.com).