



An effective power system study and protection audit ensures confidence in the performance of business-critical electrical systems, which are often subjected to a wide range of different operating conditions. Such a study is essential during the initial design of any system, and can also provide whole-life benefits throughout its operation and maintenance. Power system and protection studies are particularly important during periods of change, for example when electrical demands are increasing, or the system needs to be temporarily or permanently reconfigured.

ERA Technology's team of experienced engineers has an extensive understanding of how to achieve the best performance from power systems through the application of studies and protection audits using specialised power system modelling software. An ERA power system study reviews existing installations as well as new or conceptual designs and produces recommendations on how to design or re-configure the system to perform safely and efficiently under defined operating conditions.



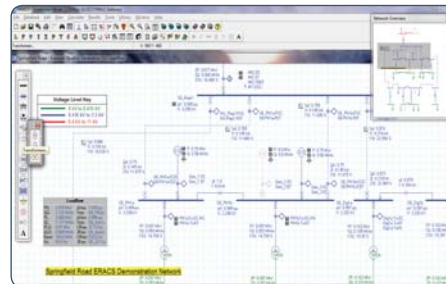
In addition ERA can help clients minimise the impact that a failure could have on their business by regularly reviewing the protection co-ordination of their power system. Protection equipment that fails to operate or discriminate correctly under fault conditions can have serious implications for the power system and could result in increased supply disruption, system damage, or even injury or death.



Benefits

By carrying out power system studies and protection audits ERA helps clients to:

- Optimise the performance, stability and reliability of their power systems
- Improve safety
- Decrease outages
- Reduce the risk of system damage.
- Calculation of voltage profiles
- Calculation of fault levels
- Interpretation of results
- System performance studies and analysis such as:
 - transient stability
 - motor starting
 - calculation of harmonic penetration
 - assessment of harmonic loading
 - grading of protection devices
- Recommendations to improve system performance
- Fully documented results in a format that can be updated in the future
- Training of client's own staff in the effective application of ERACS
- Delivery of networks for retention by the client.

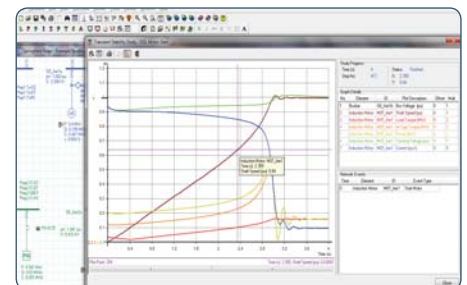


ERA's approach

ERA's engineers conduct power system studies and protection audits that are specifically tailored to meet clients' requirements. Advanced software and analytical techniques are employed, including ERACS, a sophisticated power system modelling package developed by ERA.

A typical power system study includes:

- Site surveys
 - determination of line, cable, plant and equipment ratings
 - determination of protective devices and their settings covering intake from the regional electricity company to the individual switch board feeders
- Inventory of components



For further information please contact:

ERA Technology Ltd
 Cleeve Road,
 Leatherhead,
 Surrey KT22 7SA UK
 Tel: +44 (0)1372 367007
 Fax: +44 (0)1372 367359
 Email: info@era.co.uk
 Web: www.era.co.uk

