

**REPORT** 

## Selected List of Infrastructure Audits



| Number | Client                                  | Sector        | Location                   | Project Description   |
|--------|---|---------------|----------------------------|---|
| 1      | Singapore<br>Power                      | Utility       | SE Asia                    | EA Technology carried out a comprehensive study of Singapore Power's transmission and distribution networks and their associated maintenance and condition monitoring policies and procedures. The objective of this project was to identify risks and opportunities to improve on an already excellent system.   |
| 2      | Cristal                                 | Manufacturing | UK & Saudi<br>Arabia       | 1. Inspection of all electrical substations, motor control centres, and distribution equipment to identify immediate safety risks and potential reliability issues 2. Review of maintenance policies and procedures against industry best practice 3. Review of the electrical safety management system and electrical safety rules, work procedures, and instructions against industry best practice 4. Review of flash hazard analysis results and implementation of safe work practices to protect against identified arc flash levels; 5. Review of the protection coordination and load flow/fault level studies |
| 3      | Lansing<br>Board of<br>Water &<br>Light | Utility       | USA                        | Infrastructure audit to establish the current condition of substation assets and develop comprehensive maintenance policies and procedures, and long-term refurbishment and replacement plans in line with Industry best practices  |
| 4      | Urenco                                  | Nuclear Fuels | UK                         | 1. Failure Modes and Effects Analysis (FMEA) on three design modifications to the electricity network to cater for additional load 2. Review of network studies completed by third parties 3. Understand the network vulnerabilities  |
| 5      | Huntsman –<br>Pigments<br>Division      | Manufacturing | Spain,<br>South<br>Africa, | 1. Electrical Infrastructure Asset Audit to identify safety and reliability risks and opportunities for improvement   |

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|    |                    |                                | Malaysia,<br>France | 2. Identify critical assets associated with key manufacturing processes  |
|----|--------------------|--------------------------------|---------------------|--|
| 6  | Magnox             | Nuclear<br>Generation          | UK                  | System Studies and Protection co-<br>ordination to evaluate network<br>modifications at different phases of the<br>decommissioning of a nuclear generation<br>facility |
| 7  | BAE Systems        | Manufacturing                  | UK                  | System Studies and Protection co-<br>ordination associated with network<br>development at aerospace manufacturing<br>plant   |
| 8  | Ineos              | Petrochemicals                 | UK                  | System Studies and Protection co-<br>ordination associated with increased<br>process demand  |
| 9  | Vauxhall<br>Motors | Motor Vehicle<br>Manufacturing | UK                  | Arc flash Studies across a large vehicle manufacturing plant   |
| 10 | ESB<br>Networks    | Utility                        | Ireland             | Safety rules review against legislative requirements and international best practice for ESB Networks' distribution networks   |

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