

Nexus Selected to Conduct a Fleetwide Arc Flash Assessment for Power Generating Client



Breaker Testing

Nexus has been selected to work with one of America's premier power generating companies which operates more than 75 generating stations, with nearly 26,000 megawatts of capacity, in 16 states and Canada. Nexus Engineering Group has been identified as their supplier of choice to perform arc flash and coordination studies at its plants in accordance with plant

operating standards, which are based on IEEE 1584-2018. With a growing and evolving fleet of generating systems, it is necessary to keep the electrical distribution systems documentation up to date and the protection schemes in place.

challenge

With a diverse portfolio of generating stations, including geothermal and natural gas, Nexus has been asked to analyze arc flash incident energies and boundaries of the auxiliary equipment and communicate the information to plant personnel via reports and arc flash labels. Nexus has also been tasked with performing protection coordination reviews of the electrical protective devices in order to minimize electrical outages when faults occur.

Nexus will participate in other engineering support efforts such as substation upgrades, lightning protection reviews, specification and electrical safety program reviews, analyzing tripping situations, adding plant load, motor starting and assisting with the design for the modification of the auxiliary electrical system.

solution

Engineers from Nexus will visit each site and work with the plant personnel to validate their electrical system models, run calculations and develop a punch list of information required. Once punch list items have been implemented, Nexus will develop setting changes where high incident energy can be reduced, provide proper label guidance, update models and issue a final report.

client name

Major Power Generation Company

location

Continental United States

services

- Power System Studies
- Arc Flash Analysis
- System Upgrades
- Troubleshooting
- Electrical Safety Consulting
- Owner's Engineer
- On Call Engineering Support
- Data Gathering – Protective Devices
- Equipment and Software Validation

specifications

- Client Electrical and Safety Standards
- Regional Utility Requirements
- Local Codes and Regulations