



CASE STUDY: PACIFIC STEEL HIGH VOLTAGE MAINTENANCE CONTRACT

Pacific Steel is one of New Zealand's largest steel manufacturers, supplying 85 per cent of the domestic market with reinforcing steel. Its steelmaking plant at Otahuhu in South Auckland is the city's largest power consumer being supplied at 110kV and has its own, on-site 11 kV High Voltage (HV) network.

PROJECT SCOPE

In 2009 Northpower was awarded the contract to provide maintenance and upgrade services to Pacific Steel's HV network. Due to the plant's around the clock operations and intensive power usage, maintenance needs are constant and ongoing. The contract is for the provision of end to end maintenance services for the entire on-site 11kV network and includes a 24-hour faults call-out service.

A major portion of the contract included the development of a planned maintenance schedule to ensure that the network operates efficiently and safely at all times, and continues to meet all statutory and insurance requirements.

CHALLENGES

The major challenge for Northpower lay in developing a proactive maintenance schedule that would take into account the ongoing and power-intensive nature of the plant. It was essential to design a schedule that would ensure the plant keeps operating at full capacity, avoiding expensive shutdowns as well as meeting all production requirements.



SOLUTIONS

In its approach to this project the Northpower team was able to draw on its extensive experience of network maintenance, much of this gained through the company's long history as a lines network operator, and service provider to major industrial customers including Affco, Fonterra and Balance.

Employing a highly risk-averse approach, the team developed a comprehensive and documented maintenance process using detailed check sheets for each individual function. This was then used to design a maintenance schedule covering each function, with each part of the network receiving consistent maintenance and testing on a two, four, six or eight week cycle.

Northpower established a 24-hour faults line specifically for Pacific Steel with an 0800 number routed via the Northpower Network Control Centre. This has enabled Pacific Steel staff to log faults easily and assured them of a response within one hour from a qualified Northpower technician.

RESULTS

To date, Northpower's systematic, customer focused approach and the quality of its maintenance work has ensured that the Pacific Steel plant has operated at optimal capacity. The 0800 faults number has been well received and given the client a level of assurance that its essential maintenance needs will be met on a 24-hour basis.

"My experience with Northpower has been really good. They handled every aspect of the Pacific Steel maintenance contract with utter professionalism, from tendering through to getting the work done. The way they complete maintenance tasks is impressive, they always manage to do more than required."

Sarel Marais, High Voltage Engineer, Pacific Steel Group.