

TRANSFORMER B OIL REPLACEMENT & NETWORK MAINTENANCE



TRANSFORMER OIL REPLACEMENT, HV/LV MAINTENANCE & PROTECTION TESTING IN A LIVE FOOD MANUFACTURING ENVIRONMENT

PROJECT OVERVIEW



Power Testing Ltd (PTL) were appointed to carry out a full oil replacement on Transformer B following a failed oil sample. During the outage, PTL identified an opportunity to complete additional planned maintenance across the HV and LV network, maximising the value of the shutdown window.

Working within a 24/7 food manufacturing facility, PTL coordinated transformer maintenance, protection testing and network switching operations while supporting temporary power arrangements.

All works were completed safely and the site was returned to service ahead of schedule.

SCOPE OF WORKS

- ✓ Transformer B oil replacement
- ✓ Transformer inspection and internal cleaning
- ✓ Transportation of 1000L of oil supply
- ✓ Safe draining and refilling with mineral oil in a food environment
- ✓ HV circuit breaker maintenance and inspection
- ✓ LV switchboard and ACB maintenance
- ✓ Protection testing across HV and LV systems
- ✓ Network switching and isolation
- ✓ Temporary generator coordination
- ✓ Recommissioning and return to service
- ✓ Final testing and operational verification

KEY PROJECT CHALLENGES



24/7 MANUFACTURING ENVIRONMENT

Works had to be completed during a tightly controlled outage window within a live food production facility.



COMPLEX OUTAGE COORDINATION

Close coordination was required between PTL engineers and external contractors providing temporary generation.



CRITICAL NETWORK RELIABILITY

All maintenance and testing activities had to be completed efficiently while ensuring the HV and LV network could be safely restored to service.

PROJECT OUTCOME



- ✓ Transformer B successfully drained, inspected and refilled
- ✓ Planned HV and LV maintenance completed during same outage
- ✓ Full protection testing completed
- ✓ Site returned to service before midday
- ✓ Zero incidents throughout project delivery

PROJECT IMAGE GALLERY



TRANSFORMER B –
OIL REPLACEMENT & MAINTENANCE WORKS



HV CIRCUIT BREAKERS –
MAINTENANCE & INSPECTION

PTL DELIVERY HIGHLIGHTS



DESIGN & PLANNING

Detailed outage planning and coordination



IN-HOUSE LABOUR

Engineers and technicians delivered all works



HEALTH & SAFETY

Safe management of HV and LV systems



PROGRAMME DELIVERY

Completed ahead of planned schedule



NETWORK EXPERTISE

HV, LV and transformer maintenance specialists

RELEVANT EXPERIENCE TO ONE STRAND PROJECT

This project demonstrates PTL's capability in delivering complex electrical maintenance programmes within critical operational environments, including:

- ✓ Transformer oil replacement
- ✓ HV circuit breaker maintenance
- ✓ LV switchboard and ACB maintenance
- ✓ Protection testing
- ✓ Planned shutdown management
- ✓ Temporary generation coordination
- ✓ Critical manufacturing environments
- ✓ Complete turnkey delivery

