



## CASE STUDY >

# COMMISSIONING AND NETWORK SERVICES ON THE GAWLER RAIL ELECTRIFICATION PROJECT

## PROJECT OVERVIEW

The project consists of the delivery of the \$715 million electrification and modernisation of the Gawler rail line, along the rail corridor in North Adelaide from Gawler to Seaford.

## SCOPE OF WORK

RSGx were engaged to assist with the close out of pre-commissioning, commissioning, and network services in mid-2020. RSGx was to provide a team to integrate into the Acciona project team to commission the traction power systems. RSGx's primary responsibilities is to:

- ◆ Review the HV commissioning documentation, which details the required testing of all primary and secondary systems of the project's 25kV Switchgears, in line with the project drawings and protection study.
- ◆ Produce settings file to suit the protection study, and create the IEC61850 files within the Schneider and ABB relays.
- ◆ Work within the project team to assist and manage the subcontractor completing the energisation scope and reporting to the traction power project manager.
- ◆ Protection settings and SCADA system integration
- ◆ Generation and implementation of quality documentation for the traction power team including:
  - Inspection test plans
  - Inspection test reports
  - Relay test instructions
  - Building and implementation of High Voltage and Low Voltage permit to work procedures
  - Management of construction and commissioning subcontractors
  - Development of construction and commissioning method statements
  - Development of program for the traction power team using primavera P6
  - Overseeing the communications network projectwide
  - Assurance that project quality documentation aligns to contractual requirements

Subsequent to the commissioning scope, RSGx assisted with the fibre and network services and rail assurance.

## SOLUTION

RSGx compiled a team of High Voltage experts to integrate into the existing GREP Alliance traction power team, which at peak consisted of 14 white collar personnel, including a commissioning lead, construction manager, quality assurance manager, permit to work manager, HV authority, senior project engineers, project engineers, protection engineers, commissioning supervisor, site engineers and commissioning technicians.

## ACHIEVEMENTS TO DATE

- ◆ To date, RSGx has contributed to;
- ◆ Protection setting files created and successfully tested: 39
- ◆ Construction ITRs created: 672
- ◆ Commissioning ITRs created: 321
- ◆ Total manhours: 6,500 (to date)
- ◆ Loss Time Injuries: 0
- ◆ Successful and on time energisation of dry creek feeder station

**CLIENT**  
ACCIONA

**SERVICES PROVIDED**  
ELECTRICAL & INSTRUMENTATION  
NETWORK SERVICES

**SCOPE**  
PRECOMMISSIONING  
COMMISSIONING  
COMPLETIONS

**INDUSTRY**  
RAIL

**LOCATION**  
ADELAIDE, SOUTH AUSTRALIA

