

General Information

The Goonyella System is located in Central Queensland between the latitudes 21°18' S and 23°09' S and longitudes 147°31' E and 149°17' E.

The system services the Bowen Basin in Central Queensland and carries product to the ports at Hay Point and other destinations by way of connections to the North Coast Line at Yukan and the Central Line via Gregory to Burngrove (see Blackwater System Information Pack).

Description of the Railway

The track (1067 mm gauge) on the main trunk route from Hay Point to North Goonyella is generally 60 kg/m rail with concrete sleepers.

Bridges allow the passage of 106 t (26.5 tal) wagons at 80 km/h.

Based on the improved asset intelligence provided as a result of the Network Asset Management System, the following new totals are provided for this system. The linear data is accurate to sub-meter distances.

The Port of Hay Point consists of two separate coal terminals, the Dalrymple Bay Coal Terminal and the Hay Point Coal Terminal. Dual unloading balloons are located at Hay Point and Triple unloading balloons at Dalrymple Bay.

The Goonyella System is bi-directional duplicated track with crossovers between Dalrymple Junction (7.966 km) and Wotonga (174.021km) with the remainder of the track being duplication between Coppabella and Ingsan. The junction for the Peak Downs, Saraji, Norwich Park, Lake Vermont, German Creek and Oaky Creek line is at Coppabella (145.551 km), whilst the

junction for the Blair Athol line is at Wotonga (174.020 km).

Balloon loops are located at Goonyella, Riverside, North Goonyella, Moorvale, Millennium, Carborough Downs and Isaac Plains.

There is a single line connection from Oaky Creek to Gregory linking the Goonyella System with the Blackwater System. Access from the Goonyella System to the North Coast Line occurs at Yukan enabling product to travel to other destinations within the State.

Asset Type	Length / Total
Total Track	1021.319 km (Includes yards, sidings & passing loops)
Duplicated Track	182.773 km
Passing Loops	35.506 km (15 Passing Loops)
Sidings	10.535 km (34 Sidings)
Electrified Track	1014.842 km (Includes yards, sidings & passing loops)
Access Roads	669.079 km (Including Left and Right side of track)
Level Crossings	275 Crossings
Lubricators	33 Sites
Crew Change Facilities	130 Sites
Turnouts	424 Turnouts (Mainline & Yards)



Overhead Line Equipment

The Goonyella System is electrified by an autotransformer system with the overhead line equipment operating at 25 000 volts, 50 Hertz, alternating supply (25 kV, 50 Hz, ac).

Distribution is via a contact wire suspended from a catenary wire and these two wires are held in place by supporting structures to maintain ideal pantograph/contact wire interaction.

Typically, the autotransformer system also uses a 25 kV AC feeder wire run on the back of the supporting structure which is used for voltage support throughout the electrified network.

The dual wire distribution system is automatically tensioned to maintain a constant wire tension and requires a pantograph uplift force of 80 N 3 10 N for smooth sparkless current collection.

The contact wire height may vary from 4400 mm to 5850 mm above rail level Typically in the Goonyella System, the traction system uses both rails for return current.

Operational Systems and Train Control

The Goonyella system is operated by Remote Control Signalling (RCS), with train movements controlled from Rockhampton.

