



Background

Project Value: R220 m | Duration: March 2010-August 2013

Approximately 6 million tons of coal is imported for use by Eskom's Tutuka Power Station per annum. This coal is transported entirely by road with a significant impact on the condition of roads and road safety.

As part of the Eskom initiative to move bulk coal transportation from road to rail, the project aims to reinstate the defunct rail facilities at Tutuka coal stockyard as well as the connection to the TFR rail network.

Key Features

The project scope includes:

Standerton Exchange Yard: Reinstatement of colour light signaling to TFR's KZN mainline | Electrification of a portion of the yard | Reinstatement of the track and turnouts | Provision of wagon maintenance facilities, mass measurement and train monitoring equipment, security and access controls.

Link Line to Tutuka Coal Stockyard: Reinstatement of the

track geometry to operational standards | Formation geotechnical tests and earthworks repair | Reinstate the service road and associated facilities | Provision of fencing, security, farm access structures and side drainage.

Coal Terminal: Design and construction of a complete Coal Terminal, commencing with containers and migrating to tipplers for coal handling.

Services Provided

The following services were provided:

- + Concept, prefeasibility, feasibility, costing and contract specification for implementation of Phase 1
- + Track layout, exchange yard and terminal modelling for short and long term train operations
- + Structural and architectural designs for wagon maintenance buildings as well as access and guardhouse facilities
- + Design and contract installation of OHTE as well as signaling interface engineering
- + Track and formation assessment, reinstatement to A-standard profile and geometry
- + Service road and causeway upgrade, formation and off-track drainage design and reinstatement under contract

Outcome

The project, determined on the basis of transport system planning, train simulation, demand assessment and railway infrastructure engineering, culminated in a phased approach to implementation:

Phase 1: A diesel locomotive operated rail service using 50

wagon (100 containers) trains. Reach stackers are used for the off-loading of coal in specialised containers.

Phase 2: A diesel locomotive operated rail service using two 60 gondola wagon unit trains (initially). Two parallel tipplers are used for off-loading of coal.

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