Transportation and Linkage

INTRODUCTION

The proposed Magadh OCP is located in a green field area and at present there is no arrangement for coal evacuation from this OCP. The coal production of 20.0 MTY from Magadh OCP is proposed, out of which 10.0 MTY of coal to be linked to Tandwa STPS of NTPC, located at a distance of about 10 Km from the mine site and rest coal (about10.0 MTY) will be linked for other consumer. Hence, for the transportation of coal from this mine have been envisaged with two MGR off-take of coal with rapid loadout system alongwith coal handling plant.

One off-take system is proposed by Tandwa STPS having a railway siding with MGR loop which is to be constructed and commissioned by NTPC, will be a dedicated and cost will be borne by NTPC.

Other siding will also be MGR loading which will cater the need of other consumers of central coalfields limited and such cost of only this siding has been considered.

The siding would take-off from Bukuru station of the Proposed Arterial (Tori-Shivpur-Hazaribagh) Railway Siding at a distance of about 26 Km from Tori Station. The length of the proposed alignment taking off from Bukuru station of main Arterial railway siding line to the Magadh OCP is about 12 Km. which includes link portion and yard portion with MGR bulb from proposed Bukuru Railway station to Magadh.

An emergency provision will be made to inter-link both MGR system so that loading of rakes will be made by both silos & RLS to any consumer wagons for loading and despatching of coal from this project.

Daily requirement of Box/N wagons and no. of trains are as below for other consumer:

Daily volume of loading in tonne	Daily requirement of No. of Box/N wagons	Daily No. of trains to be run	
		In single unit of 58 Box/N rake	In long unit of 116 Box/N rake
34000	580	10	5

Yard Layout

A yard has been planned suitable for long unit train of 116 Box/N. One loading point has been provided to load the wagons by flood loading system @ 5000/6000 TPH.

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Magadh OCP

Characteristics of Railway Siding

a) One empty receiving line of full rake length of 58 / 116 Box -N.
b) One MGR bulb of suitable size along with curvature.
c) One after load line of full rake of 58 / 116 Box -N through MGR bulb.
The bulb arrangement would provide for the movement of the train without detaching the engine with provision of creep control during the loading at 0.8 Km/hr.
d) Two small spur to facilitate the store siding .
e) Provision of in-motion electronic weigh-bridge for weighing both empties and loaded wagons The opening of the SILO for loading the wagons would be electronically coupled to weigh bridge.

Sequence of operation with Box/N wagons

Empty rake would be brought by railway LOCO, for loading the rake, from terminal station i.e. Tori. Wagons would be placed on the receiving line below SILO. Rake would remain attached to the pilot and halt an hour / two hours for getting the wagons loaded as per the rake size . After loading the wagons, the pilot would move through MGR bulb for achieving quick turn round and avoiding reversal of the locomotive and would take the rake to Tori.

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