NAME OF THE PACAKGE: DEVELOPMENT AND OPERATION OF BADAM COAL MINING BLOCK

These Salient Technical Features are mentioned only to facilitate the prospective bidders to prima-facie understand the requirements under the tender and shall not in any way limit or alter the scope of work and technical features/specification of equipment/ systems/ services covered in the Bidding Documents. Detailed provisions in regard of scope of work and technical features/ specification of equipment/ systems/ services, contained in the Bidding Documents shall be final and binding.

SALIENT TECHNICAL FEATURES

INTRODUCTION

Badam Coal Block has been transferred to NTPC after acquisition of Barauni power plant by NTPC from Bihar SPGCL (Bihar State Power Generation Power Company Limited). Badam, the linked mine, was also transferred to NTPC Limited.

It is located in the northeastern part of the North Karanpura Coalfield and lies in Hazaribagh district of Jharkhand

The block is about 10 km. east from Barkagaon on Hazaribagh -Tandwa road and 35 km from Hazaribag. The nearest Railway station is Bes Station (Approximately 8 km from the block).

Badam Coal Block shows rugged topography with high hills in the eastern part and river .The Badmahi River, flowing southerly through the western part controls the main drainage.

The Mining Plan and Mine Closure Plan of Badam Coal Block is already approved by Ministry of Coal for a targeted capacity of 3 MTPA. The environment clearance has been granted by MoEF. Stage-I Forest clearance has also been granted by MoEF.

GEOLOGY

Geological report for Badam coal block covering an area of 3.27 sq.km has been prepared by CMPDI. The strike of the strata is generally north west- south east with local variation. The dip varies from 7° to 9° towards south west. The block is less disturbed from geological structure point of view and 5 faults have been interpreted in the block.

Five numbers of standard coal horizon viz. seam- I to V in Barakar Formation occur in this block. In addition, few split sections/local seams also occur in the block. Altogether 13 numbers of coal seams are present within Lower Permian strata. Of the 13 numbers of seams, 8 numbers of seams viz. I, II, III Top, III Bottom, IV, IVB, IVD and V are economically potential.

The most potential coal seams of the block from thickness point of view are Seam I (12.8m), Seam II (11.75m), Seam IVD (7.26m) and Seam III Top (5.73m). The

remaining potential coal seams namely Seam II Bottom, Seam IV, IV B and Seam V (Local) are having generally 2m to 4m thickness.

The total Mineable reserve within the block is 90.50 Million tones with river diversion and the total corresponding overburden/ Interburden is estimated as 166.20 million cubic meters with an average stripping ratio of 1.84cum/t.

BROAD MDO SCOPE OF WORK

The MDO shall plan, design, engineer, finance, construct, develop, operate and maintain the Badam Coal Block (for which Mining Plan and Mine closure Plan has been approved by MoC) to deliver coal of specified quantity and quality to NTPC. It includes excavation of overburden/Interburden by mechanized means, loading, transportation, dumping at designated sites, dozing, leveling at OB dumping site to ensure progressive mine closure, mining of coal by mechanized means, supply of coal of (-) 100 mm size, loading, transportation, loading into railway wagons, etc. The mine development shall interalia involve land acquisition and R&R related activities such as interaction with PAPs, State Government and other agencies, physical possession of land, etc. It also includes development of infrastructures facilities like equipment workshop, electrical substations, pumping arrangements, haul road maintenance, diversion of Badmahi river, construction of internal roads, construction, operation and maintenance of coal transport road from mine end to Bes Railway siding etc., and discharge of coal to delivery point and compliance to all statutory rules, regulation and laws as applicable.