

Chapter – II

MARKETABILITY & JUSTIFICATION

2.1 DEMAND AND SUPPLY SCENARIO

The demand for coal is gradually increasing, necessitating an enhancement in UG coal production. Government of India has generated wide spread interests for private and public sector investments in power generation and other industrial development due to Liberalization of power sector. As such, there is an appreciable increase in the number of upcoming new power projects in both private and public sectors.

The availability and demand from CCL is given below. (Please refer Table on “Demand and Supply of Coal”)

The demand for coal is gradually increasing, necessitating an enhancement in UG coal production. Government of India has generated wide spread interests for private and public sector investments in power generation and other industrial development due to Liberalization of power sector. As such, there is an appreciable increase in the number of upcoming new power projects in both private and public sectors.

Coal India Limited (CIL) has projected to achieve one billion tonnes of coal in the year 28-29. CCL is playing a crucial role in producing non-coking coal. It is expected to produce 3.5 Million Tonnes (Mt) by 2026-27. Since substantial increase in coal production is expected between short term and long term periods, attempt has been made to bring as many blocks of CIL into production as possible. Several of these new / virgin blocks will need exploration and Geological Report (GR) preparation before commencing the projectization and production activities.

The subsidiary-wise year-wise breakup of the production projection is as given in the Table -2.0 (Figures in Mt)



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Comp	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
ECL	59	60	61	63	64	67	71	73	78	81
BCCL	46	47	50	52	54	56	60	62	63	65
CCL	110	120	130	140	150	160	170	209	233	252
NCL	140	140	140	140	140	133	130	121	114	108
WCL	69	70	70	70	70	70	70	70	70	70
SECL	212	228	240	250	260	270	280	285	290	293
MCL	239	250	265	285	305	315	330	335	348	358
CIL	875	915	956	1000	1043	1071	1111	1155	1196	1227

UG Vision Document was prepared to enhance UG production about 100 Mt by 2034-35 and reach from the current levels of 25.44 Mt for the FY 2024-25. In UG Vision, subsidiary wise production plan, indicating the projects to be taken up, timelines of such identification, projectization and approval for implementation etc. have been chalk out properly.

Production Projection from UG Mining of CCL and CIL (in MT)

Company	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
ECL	12.0	13.5	14.3	16.5	19.0	19.4	20.8	22.1	22.6	23.5
BCCL	3.3	5.0	9.5	11.5	14.0	14.8	14.8	15.0	15.0	15.0
CCL	2.0	3.5	5.1	6.3	6.8	7.9	8.2	8.2	8.2	10.0
NCL	0.0	0.0	0.0	0.0	0.0	1.8	4.0	5.5	7.0	8.0
WCL	4.7	5.5	5.5	7.0	10.0	10.4	10.5	11.3	11.9	11.1
SECL	15.3	18.1	20.5	22.1	25.7	26.8	26.6	27.1	27.8	28.3
MCL	0.5	0.7	0.7	1.5	2.3	2.4	3.0	3.9	4.4	4.4
CIL	37.8	46.3	55.6	64.9	77.8	83.5	87.9	93.1	96.9	100.3

The projected production table reflects this growing demand. The Churi Benti UG mine, with an expected production of 1.0 Mte, will contribute significantly to CCL's output and support CIL in achieving its ambitious 100 Mty UG coal production target.

2.2 UTILITY OR MARKET FOR THE COAL FROM PROJECT

Liberalisation of power, steel & other sector by Govt. of India has generated wide spread interests for Private and Public sector investments in these sectors. As such, there is an appreciable increase in the number of upcoming industries in both Private and Public Sectors. This has resulted increase in the demand of coal in CCL. RPR of Churi Benti UG Mine (1.0 MTY), CCL is therefore, proposed with a view to partially fulfil the above indicated growth in demand

2.3 AVAILABLE LINKAGE OR FIRM FUEL SUPPLY AGREEMENT (FSA)

Churi Benti UG mine is a Brownfield project. There is no linkage of coal exists as on date. The Coal will be transported to Dakra Siding with a lead distance of 6-7 KM and would be sold to miscellaneous consumers as basket linkage of coal. From below table, it appears that there is a need of enhancing production capacity to bridge the gap in demand. Churi Benti UG mine has been identified for enhancement of production in CCL.

Demand and Supply of Coal

Particulars		2023-24		2024-25		2025-26	
		(A)	(B)	(A)	(B)	(A)	(B)
1	Production (As per prov. Production Plan)	98.63	98.63	106.02	106.02	113.98	113.98
2A	FSA commitment for Pre-2009 TPPs (Trigger level- 90%)	32.81	29.53	32.81	29.53	32.81	29.53
2B	FSA commitment for Post-2009 TPPs for PPA backed capacity (Trigger level 75%)	33.52	25.14	33.52	25.14	33.52	25.14
2C	FSA Commitments under A (i) of SHAKTI-Pending LOAs beyond PD (Trigger level 75%)	28.55	21.41	28.55	21.41	28.55	21.41
2D	FSA Commitments under B (i) of SHAKTI -New Linkages granted to CGS/SGS by GOVT (Trigger level 75%) (*)	2.63	1.97	2.63	1.97	2.63	1.97
2	Total FSA Commitment for Power Utility PPA backed	97.51	78.05	97.51	78.05	97.51	78.05
3	Commitment through SHAKTI B-II (Trigger level 75%) (**)	6.77	5.08	6.77	5.08	6.77	5.08
4	Total FSA Commitment for Power Utility	104.28	83.13	104.28	83.13	104.28	83.13
5A	Existing Operative FSA for Non-Power Sectors (Trigger level 60%)	1.77	1.06	1.77	1.06	1.77	1.06
5B	Commitment through linkage auction of NRS (Trigger Level-75%)	3.58	2.69	3.58	2.69	3.58	2.69

Particulars		2023-24		2024-25		2025-26	
		(A)	(B)	(A)	(B)	(A)	(B)
5C	Coking Coal for Steel Sector ((in raw coal terms as per Co Projections for Coking Coal Meeting on 19.12.2016) (#)	3.74	3.74	3.74	3.74	3.74	3.74
5D	Commitment for State Nominated Agencies	1.9	1.9	1.9	1.9	1.9	1.9
5E	Likely commitment under Linkage Auction NRS (##)	18.12	13.59	21.2	15.9	24.42	18.32
5	Commitment Under Non-regulated sector	29.11	22.98	32.19	25.29	35.41	27.7
6	E-auction commitment at 15% of Production (10% Normal +5% Spl. Forward)	14.79	14.79	15.9	15.9	17.1	17.1
7	Bridge Linkage Commitment (~)	0	0	0	0	0	0
8	Total FSA/LOA & other commitments (2+3+5+6+7)	148.18	120.9	152.37	124.32	156.78	127.93
9	Offer sent under SHAKTI B(iii)	5.23	3.92	5.23	3.92	5.23	3.92
10	Total existing and Likely commitments	153.41	124.82	157.6	128.24	162.01	131.85
11	Net coal Availability/coal balance (1-10)	-54.78	-26.19	-51.58	-22.22	-48.03	-17.87

Remarks:

(A) Supply Commitment at 100% level.

(B) Supply Commitment at Trigger level (assured level).

(*) LOA quantity of NTPC Unchahar -IV under SHAKTI B (i) is included for which FSA execution is under process.

(**) Bid quantity of all the successful bidders under SHAKTI B (ii) is included, however, FSAs for the quantity 0.97 MT in respect of 2 bidders has not yet been executed due to non-submission of required documents.

(#) Quantity for Steel sector and State Nominated Agencies has been considered based on provisioning done by CIL.

(##) Likely commitment under Linkage Auction NRS as shown at 5E (from 2019-20 onwards) are inclusive of offer sent for Tranche-IV and ACQ of expiring FSAs along with 25% of incremental production.

(~) Bridge Linkage Quantity excludes 1MT account Mejia transferred by CIL from CCL to BCCL. FSA Commitments under A (i) of SHAKTI-Pending LOAs beyond PD at Row 2C has been considered as per CIL as commissioning status of these plants is not available at CCL. However, total quantity of this category as per information available with CCL is 27.94 MT which needs to be updated by CIL from 2022-23 onwards, a quantity of 4.976 MT has been added under this category (On account of SJVN Buxar) based on approved CLOA recommendation communicated by CIL.

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Chapter - III

3 PROJECT SITE INFORMATION

3.1 LOCATION

The Churi-Benti U/G project is located in the South-central part of North Karanpura coalfield between the latitudes 23°40'27" and 23°42'51" and the longitudes 85°01'48" and 85°03'37" covering a leasehold area of about 7.65 sq.kms. in Ranchi district of Jharkhand state. It is covered by topo sheet Nos. 73E/2 and 73A/14 (Scale 1"=1 mile) of Survey of India. Saphi River forms the south-eastern boundary and arbitrary line beyond Fault F11A and along the fault plane of F11A of Benti Block forms the western boundary of the project. Ray Bachra colliery and Ashok OCP of Piparwar area is situated to the North / North-east and Manki colliery (now exhausted) to the south/south- west of Churi project.

3.2 ACCESSIBILITY & COMMUNICATION

Churi-Benti UG project is situated at a distance of 8 km on fair weather road connecting Khalari and Ray railway stations on the Gomoh-Dehri-on-Sone loop line of the East Central Railway. An all weathered 25 km long road links Khalari with Bijupara village on the state highway connecting Ranchi and Daltonganj. The P.W.D. road connecting Khalari and Barkagaon in Hazaribagh district also passes through the Churi block. CCL Hq. at Ranchi is situated at a distance of about 73km from Churi UG project.

3.3 PHYSIOGRAPHY AND DRAINAGE

The Benti block is characterized by more or less flat terrain with gentle undulations. In general, the ground slopes towards the south and east of the block. Maximum elevation of 458m is noticed in the north western corner of the block near borehole No. NNKA-332. The minimum elevation of 407m is noticed in the eastern part of the block near borehole No. NNKP-13 and NNKA-59. Because of the outcrop of soft rocks as well as- thick alluvium covers, gullies have developed at places leading to adverse land forms. This is more pronounced in the south western part of the block.