

# Projects Status Report परियोजना स्थिति प्रतिवेदन

February-2020/ फरवरी-२०२०



**Projects Directorate**  
**SAIL, New Delhi**

**परियोजना निदेशालय**  
**सेल, नई दिल्ली**

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**Summary of Projects at a Glance during 2019-20**

एक दृष्टि में परियोजनाओं का सारांश 2019-20

**A. Details of Capital Projects**

(Value in Rs Cr)

Sl. No.	Plants/Units	Investment Proposals (Gross)		Projects Operationalized Including Exp. Pkgs.	Expenditure 2019-20			
		Approved Final	Approved In-principle		2019-20 RE	Outlay (Apr-Feb) RE	Actual (19-20)	Actual in Feb'20
1.	BSP (Value) (No.)	168.74 3	171.32 1		1140.58	1030.85	1141.36	47.36
2.	DSP (Value) (No.)		37.46 1	30.19 1	167.13	156.51	133.30	13.99
3.	RSP (Value) (No.)	59.50 1	1693.35 3	3421.96 1	1134.23	1079.86	1120.54	137.27
4.	BSL (Value) (No.)		282.01 4	660.41 3	930.52	860.19	899.75	80.11
5.	ISP (Value) (No.)				190.19	166.15	196.30	6.42
6.	ASP (Value) (No.)				3.00	2.76	2.09	0.00
7.	SSP (Value) (No.)				5.00	4.59	3.30	0.18
8.	VISP (Value) (No.)				4.00	3.72	1.30	0.04
9.	RMD (Value) (No.)				383.36	332.93	359.38	11.29
10.	RDCIS (Value) (No.)				14.00	12.01	10.07	0.96
11.	CMO (Value) (No.)				6.00	5.51	3.13	0.00
12.	CET (Value) (No.)				0.10	0.24	0.00	0.00
13.	CO (Value) (No.)				6.41	5.66	1.32	0.00
14.	CFP (Value) (No.)				3.50	3.30	2.57	0.00
15.	CO (JV) (Value) (No.)				12.00	10.72	2.34	0.00
	<b>Total (Value) (No.)</b>	<b>228.24 4</b>	<b>2184.14 9</b>	<b>4112.56 5</b>	<b>4000.00</b>	<b>3675.01</b>	<b>3876.76</b>	<b>297.62</b>

# **Investment Proposals**

**निवेश प्रस्ताव**

**PROJECTS/ FACILITIES APPROVED 'Stage-II' During 2019-20 (>Rs. 20 Cr.)****अनुमोदित परियोजनायें 'निर्णायक' 2019-20****A. AMR Schemes:**

Sl. No.	Plant	Scheme	Approved Cost-Net of ITC In Rs Cr (ITC value)	In-principle approval	Final approval	Approved Schedule (months)
1.	BSP	Treatment & Recycling of Waste water of Outlet-C at Bhilai Steel Plant	42.20 (7.00)	Dec'16	May'19	14
2.	RSP	Power evacuation at 220 kV from NSPCL to MSDS-IV	51.28 (8.22)	Mar'19	Nov'19	17
		<b>Total of AMR Schemes (Net of ITC)</b>	<b>93.48</b>			
		<b>Total of AMR Schemes (Gross)</b>	<b>108.70</b>			

**B. Expansion Plan:**

Sl. No.	Plant	Scheme	Approved Cost- Net of ITC In Rs Cr (ITC Value)	In-principle approval	Final approval	Approved Schedule (months)
1	<b>BSP</b>	Quality Assurance and Quality Control Facility	72.59 (11.85)	Apr'07	Apr'19	18
2	<b>BSP</b>	Construction of Road and Storm Water Drainage Network for SMS-III & BRM area	35.10	Apr'07	Jun'19	24
		<b>Total of Expansion Schemes (ITC)</b>	<b>107.69</b>			
		<b>Total of Expansion Schemes (Gross)</b>	<b>119.54</b>			

**Note:** RCE for MODEX of BSP at Rs. 19,857 cr. (NoC/ITC); Gross Rs.21,344 cr. has been approved in Apr'19.

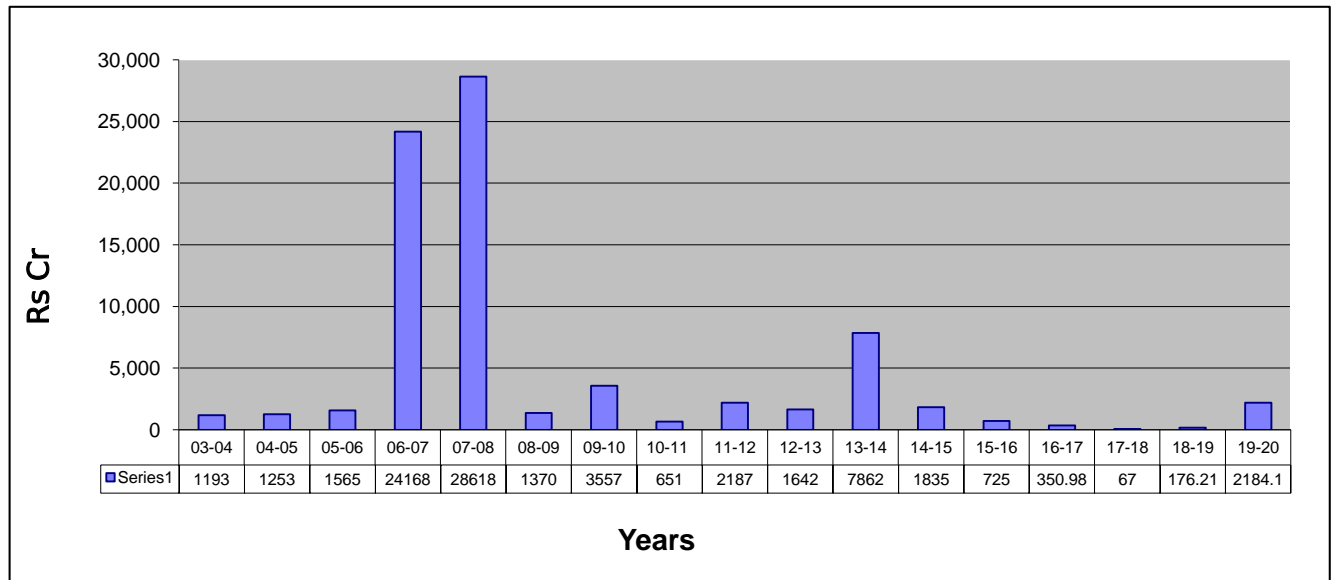
**Grand Total (AMR+Expn. Plan) – Rs.201.17 Cr. (Net of ITC)**

**Grand Total (AMR+Expn. Plan) – Rs.228.24 Cr. (Gross)**



**INVESTMENT PROPOSALS APPROVED "IN-PRINCIPLE" DURING 2019-20**

Sl. No.	Plant	Scheme	Cost Rs. Cr.	
			Indicative Cost (ITC value)	Approved "In-principle" in
1	BSP	Modification in the Washing Circuit of CSW Plant of Dalli Mines	153.87 (17.45)	Dec'19
2	DSP	Installation of 4th stove in BF-4	32.91 (4.55)	Nov'19
3	RSP	Installation of 4th Caster along with Ladle Furnace at SMS-II	745.82 (91.18)	May'19
4	RSP	Rebuilding of COB-2 along with augmentation of Coke handling and gas handling facility	356.31 (45.71)	May'19
5	RSP	Up-gradation of Effluent Treatment Plant (ETP) of CO&CCD area for Zero Liquid Discharge (ZLD)	447.37 (6.96)	Feb'20
6	BSL	Installation of 2000 TPD Oxygen Plant on BOO basis	-	May'19
7	BSL	Up gradation of Automation System of Finishing Mill of HSM	171.91 (28.00)	May'19
8	BSL	Up gradation of Looper 1 & 2 of Pickling Line-1 of CRM	25.50 (4.04)	Jun'19
9	BSL	Power Supply arrangement for proposed 2000 TPD Oxygen Plant	46.24 (6.23)	Feb'20
<b>Total (Net of ITC)</b>			<b>1,979.93</b>	
<b>Total (Gross)</b>			<b>2,184.14</b>	

**SUMMARY In-Principle Approvals (Rs. Cr.)**

Investment Proposals Approved "In-Principle" -Under Tendering  
**Bhilai Steel Plant**

As on 29.02.2020

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/ extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC/ITC) Name of Party (Quoted Price-NoC/ITC)	Negotiation, if any Receipt at CO	Remarks
<b>Bhilai Steel Plant</b>								
1	Rebuilding of COB-7 & 8  29.05.15 Rs.588.15 Crore							<p>CoD meeting for prioritisation of proposal was held on 18.01.18. CoD had recommended the proposal for stage-II approval. Meanwhile, as desired by Projects Committee of SAIL Board (PCSB) in its meeting dt.29.05.17, proposal needs to be revalidated for Stage-II approval if it is delayed beyond 1 year of Stage-I approval. Accordingly, the instant proposal was put up for revalidation to PCSB. PCSB in its meeting held on 09.03.18 has revalidated the proposal of 'Rebuilding of COB-7 &amp; 8' for stage-II approval.</p> <p>Revised proposal with updated capital cost of Rs.486.85 Crore (net of input tax credit of Rs.71.13 Cr.) was received from BSP on 25.05.18. Agenda note for PAG meeting was circulated to PAG members on 29.05.18 for observations. Further, as desired by Operation Directorate, details of proposal was sent by e-mail on 02.07.18 for further scrutiny at their end.</p> <p>Proposal returned to BSP as per letter by GM (Projects)/CO dt.10.08.18 vide email dt.14.08.18.</p> <p>Proposal was again discussed in CoD meeting held on 13.11.18, in which CoD advised BSP to expedite the submission of revised proposal along with appropriate validity of Battery Proper (Package-1), Oven Machines (Package-2) and By-Product Plant Equipment (Package-3). Further, the provision of expense for the subject proposal also needs to be incorporated in RE of 2018-19, as it was not included in BE 2018-19.</p> <p><b>BSP vide mail dt. 03.12.18 informed that several attempts were made with the L-1 bidder (M/ BEC) to extend the validity but the party has submitted regret letter regarding the validity of their offer for Battery Proper (Package-1) &amp; Oven Machines (Package-2). Subsequently, M/s BEC extended the validity of Oven Machines (Package-2) till Jan'20.</b></p> <p><b>Proposal for Stage-II approval after re-tendering of Package-1 &amp; 3 and with firmed up cost of Rs.542.24 Crore (net of ITC) was received from BSP on 16.12.19.</b></p> <p><b>The proposal was again put up for revalidation by PCSB in its 22<sup>nd</sup> meeting dated 18.12.19. PCSB deliberated on the proposal and it was decided that further clarification is needed before the proposal can be revalidated for processing for Stage-II approval. It was decided that the revalidation of Stage-1 shall be discussed further in the ensuing meeting of PCSB.</b></p> <p><b>Current status of packages are as under:</b></p>
1a	Battery Proper (Pkg-1)	05.04.19	09.05.19/ 20.05.19  3 bidders	24-28.06.19	TER-02.07.19	Estimate- Rs.271.25 Crore 1. BEC Ltd., Bhilai 2. <b>MECON Ltd., Ranchi (L-1, Rs.298.20 Crore)</b> 3. Consortium of M/s Beekay Engg. Corp., Bhilai with M/s Paul Wurth India Pvt. Ltd., Gurgaon		<p>PLTC meeting held on 22.12.18 and recommended for cancellation of tender of Battery Proper; recommendation approved by management on 03.01.2019.</p> <p>CET has issued revised TS (R9) vide email dtd.06.02.19. Tender uploaded on SAIL's website on 05.04.2019 with due date of bid submission as 09.05.19. Pre-bid meeting held on 24.04.19. Corrigendum to pre-bid queries uploaded on SAIL Tenders website on 08.05.19 and due date of bid submission was extended upto 20.05.19.</p> <p>On extended due date, 3 parties namely M/s MECON, M/s BEC and Consortium of M/s PW &amp; Beekay have submitted their bid. Techno-commercial offers of 3 bidders opened on 20.05.19 and sent to CET. Technical comments sent to bidders by CET on 04.06.19. Technical discussions held with bidders at CET, Ranchi during 24-26.06.19. Commercial discussion with bidders held on 28.06.19 at Bhilai. CET has issued TER vide email dtd.02.07.19.</p> <p>CBEC meeting held on 12.07.19. PLTC meeting held and discussed about the</p>

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								<p>status of BOQ and revalidation of Stage-I approval for the scheme. Addendum to TBEC received on 22.07.19 with regard to acceptance of BOM issued by CET. PLTC held on 08.08.19. Reverse Auction (RA) launched twice on 23.08.19 &amp; 26.08.19 but no bids has been received.</p> <p>PLTC meeting held on 27.08.19 for obtaining decremental price bids from the all three bidders. Letters issued to all the 3 bidders for submitting decrement price bid w.r.t original price bid latest by 06.09.19. Decremental price bid of all bidders received were received on 06.09.19 and sent to CET for scrutiny.</p> <p>CET submitted price evaluation report on 07.09.19, in which M/s MECON Ltd. emerged as L-1 bidder with price Rs.299.0 Crore which is 10.23% higher than the CET's estimate of Rs.271.25 Crore.</p> <p>Price negotiation meeting held with L-1 bidder on 18/19.09.19; however M/s MECON Ltd. vide letter dtd.25.09.19 regretted to offer any discount.</p> <p><b>Second round of Price Negotiation Meeting held with M/s MECON Ltd. on 15.10.2019. M/s MECON Ltd. vide email dtd.21.10.2019 offered reduced price of Rs.298.20 Crores.</b></p> <p><b>PLTC meeting held on 31.10.19 for award of work to M/s MECON Ltd. at a price of Rs.298.20 Crs; recommendation was approved by management.</b></p> <p><b>The validity of offer is till 30.04.2020.</b></p>
1b	Oven Machines (Pkg-2)	22.06.15	30.07.15/ 13.08.15/  5 Offers	19-23.09.15	TER- 23.10.15 / RA- 20.02.17	<p>Estimate- Rs.90.32 Crore</p> <p><b>1. BEC, Bhilai (L-1, Rs.87.97 Crore NOC)</b></p> <p>2. Taiyuan Heavy Industry Co. Ltd. - Associated Industrial Furnaces (P) Ltd (L-2, Rs.88.15 Crore NOC)</p> <p>3. Beekay Engg. Corpn., Bhilai- GosaFom, Serbia (Not eligible)</p> <p>4. Graduate Agro &amp; Mechanical Engineers, Bhilai (Not eligible)</p> <p>5. Paulwurth Italia SpA - Paulwurth India - L&amp;T Ltd(Not eligible)</p>		<p>Revised proposal with updated capital cost of Rs.85.84 Crore (net of input tax credit benefit of Rs.15.45 Cr.) received from BSP on 25.05.18.</p> <p>TC meeting held on 04.01.19 and recommended for cancellation of tender of Oven Machines, however, as advised by CEO Office, matter was taken up with L-1 bidder for validity extension. M/s BEC Ltd., Bhilai vide letter dtd.04.02.2019 have extended the validity of their offer up to 30.11.2019.</p> <p><b>M/s BEC Ltd. vide letter dtd.20.11.19 extended the validity of their offer up to 31.03.2020.</b></p>
1c	Replacement of By-Product Plant Equipment (Pkg-3)	14.06.19	15.07.19/ 29.07.19/ 08.08.19			<p>Estimate- Rs.52.08 Crore</p> <p>1. Consortium of M/s Graduate Agro &amp; Mechanical Engineers, Bhilai (leader) with M/s Sri Lakshmi Prabha Engg. Industries Pvt. Ltd., Visakhapatnam and M/s LLC "Mykolaiv Enterprise Energomash", Ukraine</p> <p>2. Consortium of M/s Oriental EPC Pvt. Ltd., Ahmedabad (leader) with M/s Boldrocchi S.r.l, Italy</p>		<p>TC meeting held on 11.03.19 for quashing of tender. Tender has been quashed as per management approval dt.19.03.19 due to non-extension of validity by L-1 bidder.</p> <p>NIT for fresh tender was finalised. Note was processed on 10.05.19 for uploading of tender; note approval on 14.06.19.</p> <p>NIT uploaded on 14.06.19, with last date for tender submission on 15.07.2019.</p> <p>The pre-bid meeting held on 29.06.19. Corrigendum in respect of pre-bid queries issued on 17.07.19. Due date of bid submission extended up to 29.07.19 &amp; further extended upto 08.08.19. On extended due date, Techno-commercial bids of five bidders opened &amp; sent to CET, Zone &amp; Shop for</p>

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						and M/s Boldrocchi India Pvt. Ltd, Tamilnadu 3. Consortium of Sterling & Wilson Pvt. Ltd., Mumbai (leader) with M/s Hutni Projekt Frydek-Misteka.s, Czech Republic 4. Consortium of M/s MECON Ltd., Ranchi (leader) along with M/s SBW Electro Mechanics Import & Export Corporation, China 5. M/s BTL EPC Ltd., Kolkata		scrutiny. Technical discussion held with bidders at CET Ranchi during 26.08.19 to 29.08.19. Commercial comments sent to all the bidders on 23.08.19. TER received from CET vide email dtd.04.10.19. TC meeting held on 26.10.19 & 31.10.19 for conducting RA. <b>RA held on 25.11.19. Consortium of Oriental EPC Pvt. Ltd. (OEP) emerged as L-1 bidder with L-1 price Rs.40.89 Crore (Net of ITC) against the estimate of Rs.40.97 Crore (Net of ITC). Price evaluation report received from CET on 28.11.19.</b> <b>TC meeting held on 29.11.2019 for award of work to L-1 bidder.</b> <b>TC recommendations approved on 03.12.19.</b> <b>The validity of offer is till 24.03.2020</b>
1d	Supply of Design & Engineering Drawings, Providing Expert Supervision, Performance Guarantee and Inspection of Refractories at Supplier's premises (Pkg-4)	22.07.15	01.08.15/ 1 Offer	07.08- 08.08.15	TAR- 07.10.15 PBO- 22.12.15	Estimate- Rs.40.62 Crore <b>L1-CUI, Ukraine (Rs.52.76 Crore)</b> <b>Revised Price after negotiation Rs.38.39 Crore</b>	17.03.16 13.04.16 2/3.06.16 Discount of Rs.14.58 Crore	<b>Work is in progress.</b> <b>Revised proposal with updated capital cost of Rs.38.01Crore (net of input tax credit of Rs.6.84 Crore) received from BSP on 25.05.18.</b>
1e	Enabling Works for Battery # 7(Pkg5)	22.06.15	22.07.15/ 01.08.15/ 7 Offers	20-25.08.15	TAR- RA- 18.01.16	Estimate- Rs.14.47 Crore 1. <b>M/s N.P. Construction, Bokaro, (L1, Rs.9.24 Crore)</b> 2. M/s HSCL, Bhilai (L2, Rs.9.26 Crore) 3. M/s A.K. Dutta, (L3, Rs.9.49 Crore) 4. M/s Beekay (L4, Rs.9.75 Crore) 5. M/s West India Construction Company, Bhilai (M/s WICC), Bhilai (L5) 6. <i>M/s Rosy Enterprises Private Limited, Rourkela (not eligible)</i> 7. <i>Consortium of M/s Sanmathi Enterprises, Bhilai (as leader) &amp; M/s S. B. Construction (P) Ltd., Rourkela (not eligible)</i>		<b>Work is in progress.</b> <b>Revised proposal with updated capital cost of Rs.9.49 Crore (net of input tax credit of Rs.0.66Crore) received from BSP on 25.05.18.</b>
2	Modification in the Washing Circuit of CSW Plant of Dalli Mines	11.01.20	10.02.20 16.03.20					SAIL Board in its 467 <sup>th</sup> meeting held on 19.12.2019 has accorded Stage-I approval for the proposal of 'Modification in the Washing Circuit of Crushing, Screening and Washing (CSW) Plant of Dalli Mines' at an estimated cost of Rs.153.87 Crore (net of Input Tax Credit of Rs.17.45 Crore). Subsequently, Sanction letter issued on 21.12.2019.

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	19.12.19 Rs.153.87 Crore							<p><b>Global Tender Enquiry issued on 11.01.20 with due date of bid submission as 10.02.2020.</b></p> <p><b>Pre bid meeting held on 23.01.2020. Pre bid clarifications uploaded as corrigendum on 18.02.2020. TOD extended up to 16.03.2020.</b></p>
3	Installation of Dewatering Pumps at Caster & BOF Area and Drinking Water System for BOF <b>Part of MEP</b>	01.01.19	31.01.19/ 11.02.19/ 21.02.19/ 11.03.19/ 16.03.19/ 11.05.19/  2 offers	25.09.19- 28.11.19	16.08.19	<p><b>1. BSBK, Bhilai</b> 2. OTOKLIN Global Business Limited, Mumbai</p>		<p>Tender uploaded on 01.01.19 with due date of bid submission as 31.01.19. Pre bid meeting held on 16.01.2019. Pre-bid clarifications &amp; drawings uploaded as corrigendum in SAIL website on 18.01.19. Only One offer received on 31.01.19. Due date has been extended further up to 21.02.2019, 11.03.19 &amp; further extended upto 16.03.19. Note dtd 16.03.19 under approval for opening of available 02 offers for (X+2) deviation.</p> <p><b>Offers opened on 11.05.19 and sent to MECON for techno-commercial scrutiny. TAR received from MECON on 16.08.19. TBEC held on 26.08.19 &amp; TBEC Recommendation received on 30.08.19. Draft CBEC minutes sent to all concerned on 16.08.19. TC held for calling decremental price bid on 25.09.2019 &amp; 28.11.19. M/s BSBK has not submitted decrement price. Original price bid of only eligible bidder M/s BSBK opened on 10.12.19 and sent to MECON for price evaluation.</b></p>
4	Solid state Interlocking Signaling System <b>Part of MEP</b>	02.01.19	06.02.19/ 20.02.19/ 15.03.19/ 12.04.19/ 24.04.19  3 offers	10-12.06.19		<p>1. Picasona Entreprises, Kolkata 2. Param Entreprises, Kolkata 3. Texmaco Rail &amp; Engg, Delhi</p>		<p>Tender uploaded on 02.01.19 with due date of bid submission on 06.02.19. Pre-bid meeting held on 17.01.2019. Due date of offer submission extended up to 20.02.19, 15.03.19, 12.04.19 &amp; further extended upto 24.04.19. Offers of 3 parties opened on 13.08.19 &amp; sent to MECON for TBEC submitted their report on 20.09.19. CBEC submitted their report on 18.10.19. MECON issued revised TAR dt. 21.09.19.</p> <p><b>TC held on 26.10.19 to quash the instant tender, TC recommendation approved on 26.11.19. Vide email dt. 28.11.19 the same is informed to Utility Zone and Shop (T&amp;D). Meeting held on 29.01.2020 for discussions regarding TS &amp; EC.</b></p>
5	Installation of Drinking Water System for Caster and BOF Area <b>Part of MEP</b>	01.02.20	02.03.20					<p>Screening committee meeting held on 30.01.2020. Note for approval of NIT sent on 31.01.2020, Approval received on 01.02.20. <b>Tender uploaded on 01.02.2020, Due date of tender submission is up to 02.03.2020.</b></p>

## Durgapur Steel Plant

As on 29.02.20

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
<b>Durgapur Steel Plant</b>								
1.	Installation of 4th stove in BF-4 5.11.19, (Rs. 32.91 Cr net of ITC)	30.11.19	27.12.19 10.01.20					<ul style="list-style-type: none"> <li>Tender committee meeting held at DSP on 09.11.19</li> <li>NIT issued on 30.11.19; NIT issued on 30.11.19; Pre bid clarification meeting held on 16.12.19, TOD: 10.01.20</li> <li>3 offers received: M/s Primetals Technologies India, M/s Paul Wurth India &amp; MECON</li> <li>Tender discussion held from 04.02.2020-07.02.2020 at CET, Ranchi</li> <li>TER submitter by CET on 28.02.20</li> </ul>

## Rourkela Steel Plant

As on 04.03.2020

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
<b>Rourkela Steel Plant</b>								
1.	Installation of Static VAR Compensator at Rolling Mill-2 Sub-station and MSDS-III 27.03.19  Rs.53.82 Crore (net of ITC of Rs.7.75 Crore)  <b>Retendered</b>	30.04.19 25.05.19 (Corrigendum issued)  05.11.19	31.05.19 14.06.19 28.06.19  26.11.19 (2 offers received)  05.12.19 16.12.19 24.12.19	12-13.8.19/ 28.8.19		1.Siemens Ltd 2.GE Power Control   1. Consortium of M/s Siemens Ltd & M/s Siemens AG 2. Consortium of M/s GE Power Conversion India Pvt. Ltd & M/s GE T&D India Ltd. 3. Consortium of M/s Endoks Energy System Ltd. & M/s Quality Power Electrical Equipment Pvt. Ltd.		<p>SAIL Board in its 459<sup>th</sup> meeting held on 27.03.19 has accorded Stage-I approval. NIT was issued with TOD on 31.05.19.Pre bid meeting held on 15.05.19 (GE/ABB/Siemens participated), <b>corrigendum issued on 25.05.19</b> and TOD extended upto 14.06.19. As only one offer was received, TOD was extended till 28.06.19.</p> <p>Only two offers from M/s Siemens and GE power received till 28.06.19.</p> <p>Tender opened on 03.07.19, after taking approval from Competent Authority.</p> <p>Techno-commercial discussion with Siemens held at Rourkela on 12<sup>th</sup> and 13<sup>th</sup> August'19. GE: Commercially Not Qualified, Siemens: Major deviation in PG Parameter. Technical Discussions held with M/s GE on 27-28.08.19.</p> <p>TER received on 20.09.2019. Both the parties are not suitable TC recommended on 24.09.2019 for re-tendering with revised TS and eligibility criteria.</p> <p>Approval for re-tendering received on 05.10.2019.</p> <p>Revised TS and Eligibility Criteria received from CET.</p> <p>Package re-tendered, NIT issued on 05.11.2019 with TOD on 26.11.2019.</p> <p>Two offers received on 26.11.19 from:</p> <p>i) Consortium of M/s GE Power Conversion Ltd/ &amp; M/s GE T&amp;D Ltd</p>

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Subsmn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
								<p>ii) Consortium of M/s Siemens Ltd &amp; M/s Siemens AG TOD extended to 05.12.2019. TOD again extended to 16.12.2019 &amp; 24.12.2019. 3 offers opened on 24.12.2019. Offers received from:</p> <ol style="list-style-type: none"> <li>1. Consortium of M/s Siemens Ltd &amp; M/s Siemens AG</li> <li>2. Consortium of M/s GE Power Conversion India Pvt. Ltd. &amp; M/s GE T&amp;D India Ltd.</li> <li>3. Consortium of M/s Endoks Energy System Ltd. &amp; M/s Quality Power Electrical Equipment Pvt. Ltd.</li> </ol> <p>Techno commercial discussion with Consortium of M/s GE was completed on 10th &amp; 11th Jan'20, with M/s Siemens held on 14th &amp; 15th Jan'20 and with M/s Endoks on 23rd Jan'20. Conditional TER received from CET. TEC and CEC meetings in progress</p>
2.	<p>Installation of 4<sup>th</sup> Caster along with Ladle Furnace at SMS-II  May'19 Rs.745.82 crore (net of ITC)</p>	<p>25.06.19 05.08.19 (Corrigendum issued)</p>	<p>06.08.19 16.09.19</p>	<p>14-19.10.19 (3 bidders)  7-8.11.19 (2 bidders)</p>		<ol style="list-style-type: none"> <li>1. Consortium of M/s Mukund Ltd. &amp; CERI China.</li> <li>2. Consortium of M/s Tata Projects Ltd., Danieli Corus &amp; Danieli India</li> <li>3. Consortium of M/s MECON Ltd., POSCO &amp; NCC Ltd.</li> <li>4. Consortium of M/s SMS GMBH, SMS India &amp; SMS Tech Beijing</li> <li>5. Consortium of M/s Primetal Tech GMBH, Primetals India and L&amp;T Ltd.</li> </ol>		<p>SAIL Board in its 461<sup>st</sup> meeting held on 30.05.19 has accorded Stage-I approval. NIT issued on 25.06.19 with TOD on 06.08.19, Pre bid meeting held on 10-11.07.19. SMS/ Danieli/ TPL/ Primetal/ L&amp;T/ POSCO/ MECON participated. Corrigendum to TS issued-05.08.2019 with TOD extended to 27.8.19. TOD extended to 16.09.19. Tender opened on 16.09.19. Offers forwarded to CET on 16.09.2019 for evaluation. Technical discussion held at CET Ranchi from 14<sup>th</sup> to 19<sup>th</sup> October, 2019 with 3 bidders (TPL, SMS &amp; Primetal). Technical discussion with remaining 2 bidders (MECON, Mukund) held from 5<sup>th</sup> to 8<sup>th</sup> Nov'19 at RSP. Commercial evaluation held with the bidders as follows: Primetals : 23<sup>rd</sup> &amp; 24<sup>th</sup> Oct'19, TPL+DL : 31<sup>st</sup> Oct &amp; 1<sup>st</sup> Nov'19, SMS Siemag : 4<sup>th</sup> &amp; 5<sup>th</sup> Nov'19, MECON/POSCO/NCC : 6<sup>th</sup> &amp; 7<sup>th</sup> Nov'19, Mukund/CERI : 8<sup>th</sup> &amp; 9<sup>th</sup> Nov'19. 2nd round of discussion held from 4th – 10th Dec'19. TER received from CET on 02.01.2020.  <b>As per TER all 5 bidders are technically unsuitable - since none of the bidders has accepted time of completion of 27 months. They have asked for implementation schedule ranging from 33 months to 42 months.</b></p>

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
								TEC recommended on 18.01.2020 to re-tender the case as none of the bidders are technically suitable. TC recommended for re-tendering the case on 20.01.2020. Recommendations of TC approved by CA on 21.01.2020. CET has been requested to submit revised TS incorporating revised terms including completion schedule. CET has submitted TS on 25.2.2020. Addendum/ corrigendum to TS including Enabling Works received from CET on 27.2.2020.
3.	Rebuilding of COB-2 along with augmentation of Coke handling and gas handling facility May'19 Rs.356.31 cr.							SAIL Board in its 461 <sup>st</sup> meeting held on 30.05.19 has accorded Stage-I approval. <b>Draft Board note for Stage-II approval has been received on 12.2.2020. Proposal is being put up to next COD meeting for clearance.</b>
a	Battery Proper (Package-2)	29.06.19 29.07.19 (Corrigendum issued)	30.07.19 16.08.19 02.09.19  (2 offers received)	26-27.9.19		1. M/s MECON 2. M/s BEC		Pre bid meeting held on 15.07.19 (MECON/ BEC/ L&T/ Hutni/ Paulwirth participated).TOD extended till 16.08.19. Corrigendum to TS issued-29.07.2019, TOD extended to 16.08.2019. Again TOD extended to 02.09.2019. Tender opened on 02.09.19, two bids received. Technical discussion with bidders held at Ranchi on 26 <sup>th</sup> & 27 <sup>th</sup> Sep'19. Commercial discussion with MECON held on 18.10.2019. For BEC, commercial discussion held through correspondence. Conditional TER from CET received on 28.10.2019 Techno commercial discussions completed with bidders and Tender Evaluation Report (TER) received from CET. Soil Report received on 11.11.2019. NDT report approved by CET & the report has been shared with the agencies on 30.11.2019. TC recommended for obtaining revised price bid. Revised price bids of both the bidders was opened on 26.12.2019. M/s MECON Ltd. is L-1 bidder (Rs. 254.90 cr.), L-1 price is 8.66% higher than estimate of Rs. 234.59 cr. Price negotiation held on 07.01.2020 and no discount offered. 2nd round of negotiation scheduled to be held on 14.01.2020. The party has offered a lumpsum discount of Rs. 20 Lakhs alongwith justification of their quoted price. The same has been forwarded to CET for comments and providing reasonability of estimate. CET has provided the same on 18.01.2020.



As on 04.03.2020

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
								<p>The party was called for 3rd round of negotiation on 24.01.2020. In reply party offered final discount of 0.5% on their original quoted price.</p> <p>Price after 3rd of negotiation is 8.16% higher than the estimate</p> <p>Final discounted price offers by bidder is Rs.253.63 cr, 8.11% higher than the estimate.</p> <p>TC meeting held on 01.02.2020. TC recommendation for order placement approved on 05.02.2020.</p>
b	Oven Machines (Package-3)	29.06.19 29.07.19 (Corrigendum issued)	30.07.19 16.08.19 02.09.19 (2 offers received)	27.09.2019 18.10.2019	20.11.19	1. M/s BEC 2. M/s Graduate Agro & Mechanical Engineers Ltd.	Yes	<p>Pre- bid discussion held on 15.07.2019, 2 bidders participated (BEC &amp; Paulwurth). Corrigendum to TS issued-29.07.2019. TOD extended to 16.08.2019.</p> <p>Again TOD extended to 02.09.2019.TOD opened on 02.09.19, two bids received.</p> <p>Technical discussion with BEC held on 27.9.2019 and with GAME on 18.10.2019.</p> <p>TER received on 20.11.19.</p> <p>TEC completed on 21.11.19.</p> <p>CEC completed on 22.11.19</p> <p>TC held on 25.11.19. M/s GAME was given time to submit documents by 02.12.2019. No documents submitted by M/s GAME. TC meeting held on 03.12.19. TC recommends for opening price bid of M/s BEC Ltd. along with decrement price bid.</p> <p>Original price bids along with decrement price of single party, M/s BEC Ltd. opened on 19.12.2019. L-1 price of Rs. 55.42 Cr. is 12.8% higher than estimate of Rs. 49.13 Cr.</p> <p>Price Negotiation held with bidder on 24.12.2019.</p> <p>Party has given 1 % discount on their quoted price.</p> <p>Price bid evaluation received from CET. The discounted price of Rs. 54.87 cr. is 11.67% higher than estimate.</p> <p>2nd round of negotiation held on 07.01.2020.</p> <p>3rd round of negotiation held on 10.01.2020.</p> <p>Final discounted price is Rs. 54.18Crore which is 10.28% higher than estimate. TC meeting held on 14.01.2020. TC recommendations for placement of order were put up to CA on 17.01.2020.</p> <p>CA has recommended for re- negotiation.</p> <p>After negotiation, final discounted price is Rs.54 cr, which is 9.91% higher than the estimate.</p> <p>TC recommendations for placement of order on M/s BEC approved on 03.02.2020.</p>

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
c	Silica Bricks and Silica Mortar (Package-4)	28.06.19	19.07.19, 02.08.19 14.08.19	18-19.09.19	24.10.19 28.11.19 (PBO)	1. M/s TRL Krosaki Refractories Ltd 2. M/s Dalmia Cement (Bharat) Ltd	yes	<p>TOD extended up to 02.08.2019 based on the request of M/s TRL Krosaki &amp; M/s Dalmia OCL.</p> <p>One offer from M/s Dalmia OCL received. TOD further extended to 14.08.2019.</p> <p>Two offers received from i) M/s TRL Krosaki Refractories Ltd.ii) M/s Dalmia Cement (Bharat) Ltd.</p> <p>Two offers opened on 19.08.2019, after taking approval from CA.</p> <p>Offers sent to CET on 19.08.2019 for evaluation.</p> <p>Technical discussion with bidders held at Ranchi on 18 &amp; 19.09.2019.</p> <p>TER was received from CET on 01.10.2019 &amp; both parties were found technically not suitable.</p> <p>TEC reviewed the TER on 10.10.2019 &amp; asked CET to revise TER.</p> <p>Revised TER from CET received on 24.10.2019.</p> <p>CEC completed on 25.10.2019.</p> <p>TC completed on 05.11.2019.</p> <p>Approval received and Price bid along with decrement price opened on 28.11.19.</p> <p><b>M/s Dalmia Cement (Bharat) Ltd. emerged as L1</b></p> <p><b>The bid price is 14.56% higher than estimate.</b></p> <p>Price negotiation was held with L-1 bidder on 06.12.2019</p> <p>Party has given discounted price which is still 7.64% higher than estimate.</p> <p>After 2nd round of negotiation (17.12.2019) Party has given discounted price of Rs. 27.83 Cr., which is still 6.97% higher than estimate.</p> <p>Reply of the party alongwith justification is forwarded to CET to examine and give final recommendation.</p> <p>Basis of estimate received from CET.</p> <p>3rd round of negotiation held on 07.01.2020.</p> <p>Party has given final discounted price of Rs. 26.81 Crore which is 3.02% higher than the estimate.</p> <p>TC meeting held on 14.01.2020. TC recommendations for placement of order were put up to CA on 17.01.2020.</p> <p>CA has recommended for re- negotiation.</p> <p>In 4<sup>th</sup> round of negotiations on 1.2.2020, the party did not offer any discount. Final discounted price is Rs.26.81 cr, which is Rs.3.02 % higher than the estimate.</p> <p>TC recommendations for placement of order on M/s Dalmia Cement (Bharat) Ltd. approved on 03.02.2020.</p>

As on 04.03.2020

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
d	Soil investigation, Area survey and UG mapping (Package-1A)	22.06.19	05.07.19		15.07.19 (TER) 16.07.19 (PBO)	For Soil test (Pkg-1A) 1. M/s Creative Studio 2. M/s S S Solution (L-1) 3. M/s Arkitechno Consultant (I) Pvt. Ltd.	-	Tender opened for Soil Survey & NDT on 05.07.19 and three bids received in both the tenders. For Soil test (pkg-1A) TER from CET received on 15.07.2019. Price bids opened on 16.07.2019. Price is firmed up on M/s S S Solution, Durgapur at Rs. 8,86,119.00 which is 2% less than estimate. Order placed on M/s S S Solution, Durgapur on 29.07.2019. Job Started on 07.08.2019. Job has been completed & report was submitted by agency on 09.10.2019. CET has given observations on report on 11.10.2019. Agency has submitted compliance on 15.10.2019. CET approved the report on 11.11.2019.
e	Non-destructive testing of existing civil & structures (Package-1B)	22.06.19	05.07.19		18.07.19 (TER) 23.07.19 (PBO)	For NDT (Pkg-1B) 1. M/s Superintendence Company India Pvt. Limited (L-1) 2. M/s Cortex Construction Solutions (P) Ltd. 3. M/s Arkitechno Consultants (I) Pvt. Ltd.	-	TER from CET received on 18.07.2019. Mandate given to M/s M. Junction Service for RA on 18.07.2019. RA held on 23.07.2019. Price evaluation from CET received on 26.07.2019. M/s Superintendence is L-1 at Rs. 6.96 Lakhs net of ITC. L-1 price is 65.20% less than estimate. Order Placed on M/s Superintendence Company of India Pvt. Ltd. Kolkata, on 09.08.2019. Job Started on 02.09.2019. Job has been completed and Interim report submitted on 10.10.2019. CET has given observations on report on 12.10.2019. Agency submitted compliance on 21.10.2019 Final report also submitted on 21.10.2019 CET gave observation on the Final report on 24.10.2019 Agency submitted compliance on 02.11.2019 CET gave observation on the Final report on 14.11.2019 Agency submitted compliance on 18.11.2019 CET again gave observations & which was complied on 21.11.2019. Discussions held with party & CET in Ranchi on 25.11.19 w.r.t. compliance. . Final approved report received on 30.11.2019.
4.	Upgradation of ETP of CO & CCD area Feb'2020 Rs.44.37 crore	22.2.2020	19.3.2020					NIT issued on 22.02.2020 with TOD 19.03.2020.

## Bokaro Steel Plant

As on 29.02.2020

S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
<b>Bokaro Steel Plant</b>								
1	Installation of ESPs for Area De-dusting of Machine Building (Sinter Band # 1, #2 & #3) along with MDP of Sinter Plant Jul'17 61.68 Cr (NOC Rs. 5.31 Cr)  <b>Retendered</b>	28.09.17  11.09.18	27.10.17  4 offers  09.10.18 14.11.18 08.12.18			1.Thermax Ltd 2.Unicon Engrs with HNCPL 3. Andrew Yule		Sanction letter issued on 01.08.17. NIT Issued, 4 offers received and Tenders opened.  1 Andrew Yule, 2 Thermax, 3 Unicorn+ HN const., 4 BTL+ Elex India  Commercial discussion completed. TER received on 03.01.2018.TC held on 12.03.18 for retendering the case. Approval for retendering obtained and eligibility criteria is being reviewed.  On due date no offers received. TOD extended till 14.11.2018.2 offers received on 14.11.18. TOD extended till 08.12.18. <b>Tender opened on 08.12.18.</b>  TC held on 20.04.19 for opening the price bid of STA bidder. Under approval of STA offer of M/s Andrew Yule.
2	Installation of 2000 TPD Oxygen Plant on <b>BOO basis</b>  May'19	04.10.19	-	-	-	-	-	Sanction Letter issued on 04.06.19.  GTE NIT issued on 08.08.19 with TOD on 04.10.19. Pre-bid held on 05.09.19.  TOD extended to 15.11.19. No offers received.  TOD again extended to 20.12.19. No offers received. TOD extended till 20.02.2020. Again extended to
3	Up gradation of Automation System of HSM at BSL.  May'19 Rs.171.91 Cr (net of ITC of Rs. 28 Cr.)	29.08.19	-	-	-	-	-	NIT issued on 29.08.19 with TOD 03.10.2019. No offer recd.  TOD extended till 20.02.2020. TOD further extended till <b>07.03.2020.</b>
4	Up gradation of Looper 1 & 2 of Pickling Line-1 of CRM  Jun'19 Rs. 25.5 Cr. (net of ITC of Rs. 4.04 Cr.)	09.07.19	06.08.19	-	-	-	-	Sanction Letter issued on 03.06.19.  NIT issued on 09.07.19 with tender opening date as 06.08.19. No offers received. TOD extended to 05.09.19, 06.11.19 & 21.12.19.  Single offer received till 21.12.19. TOD again extended to 28.02.2020. 2 offers (Ms Sunag & M/s SMS Group) received till 28.02.20. Under appropriate decision.

As on 29.02.2020								
S.N	Pkg, Date ( St-I Appvl), Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submsn. of TAR/ TER, Dt. of PBO	Estimate (NoC) Name of Party (Quoted Price-NoC)	Negotiation, if any Receipt at CO	Remarks
5.	Power Supply arrangement for proposed 2000 TPD Oxygen Plant  Feb'20 Rs 46.24 Cr. (net of ITC of Rs 6.23 Cr.)	--	--	--	--	--	--	Sanction letter issued on 06.02.2020

### IISCO Steel Plant

As on 29.2.2020								
S.N	Pkg, Date ( St-I Approval) Cost	NIT Date	TOD (Original/extended) Nos. of Offers	TC discussion Start End	Date of Submission of TAR/ TER, Dt. of PBO	Estimate (Net of ITC) Name of Party (Quoted Price-Net of ITC)	Negotiation, if any (Receipt at CO)	Remarks
<b>IISCO Steel Plant</b>								
1	Construction of Covered Shed for Base Mix Bed 1 & 2 of RMHP  15.1.18 (Plant Level) Rs.19.88 crore	1 <sup>st</sup> Round 15.1.18  2 <sup>nd</sup> Round 28.2.18 With revised eligibility criteria	31.1.18 No offers Tender Cancelled  21.3.18 3 offers	12 -13.4.18	TER submission 9.5.18  RA 4.6.18 Re-launched 1)4.6.18 +5%SBP 2)5.6.18 +10%SBP 3)5.6.18 +15% SBP	Estimate - Rs.18.23 cr. L1 - M/s Bridge & Roof Co. (India) Ltd., Kolkata Quoted Price Rs.22.42 cr. Quoted Price after negotiation – Rs.22.41 cr.	Twice 15.6.18 Reduction of Rs.0.1 cr.  17.1.19 No reduction  (Recd. At CO – 10.2.19)	3 Offers i) M/s MECON Ltd., Ranchi ii) M/s Bridge & Roof Co. (India) Ltd., Kolkata iii) M/s P & Sen Construction Co. Ltd. Durgapur TER submitted by CET - 8.5.18/ Revised on 23.5.18 Plant Level PAG held on 6.7.18. Proposal received at CO on 23.8.18. Proposal returned to ISP on 24.8.18 pending approval of Revised Estimates of Annual Plan. Proposal received on 26.11.18 at CO. Proposal returned to ISP on 12.12.18 with observations. Proposal has been received with CEO's approval on Quoted price. Queries of Projects Directorate forwarded to ISP on 5.3.19. Part reply received on 20.3.19, comments on the reply forwarded to ISP on 29.3.19. Balance reply awaited. To be put up to COD for Clearance after receiving of evaluated cost. Reminder sent on 24.5.19/ 13.6.19. Intimation of extension of validity upto 31.10.19 received on 6.9.19

### Total cost of In-Principle approved Pkgs.-under tendering

Plant	BSP	DSP	RSP	BSL	ISP	ASP/ SSP	RMD	Total
Cost (NoC in Rs. Cr.)	742.02	32.91	1200.32	305.33	19.88	00	00	2300.46

**NIT:** Notice Inviting Tender/ **TOD:** Tender Opening Date/ **TC:** Tender Committee / **TAR:** Tender Appraisal Report/ **TER:** Tender Evaluation Report/ **PBO:** Price Bid Opening/ **LOA:** Letter of Acceptance

## INVESTMENT PROPOSALS UNDER CONSIDERATION AT CORPORATE OFFICE (Stage-I)

Sl. No.	Plant / Scheme	Cost (Rs. Cr.)	Receipt at CO	Status
1	<b>BSP</b>			
a)	Replacement of Hydraulic Press for Naphthalene in TDP # 1, of Coke Ovens & Coal Chemical Department of BSP	Rs.20.73 (net of ITC)	Dec'18	<p>Proposal received on 28.12.18 at Corporate Office. Proposal discussed in CoD meeting held on 15.01.19; after deliberations and considering the safety, quality and production related necessities, CoD recommended the proposal for Stage-I processing.</p> <p>Proposal circulated to PAG members on 22.01.19; PAG held on 04.02.19. PAG observation sent to BSP on 05.02.19; reply received from BSP on 27.03.19.</p> <p>File processed for approval on 08.04.19. Note marked by Director (P &amp; BP) to ED(CET), Ranchi for re-examination of Capital Cost of the proposal on 20.04.19. Reminder sent to CET on 15.05.19, 28.06.19 &amp; 04.07.19; reply received from CET on 05.07.19.</p> <p>File re-processed for approval on 06.07.19. Observations raised by Director (P &amp; BP) office sent to BSP on 06.07.19; reply received on 08.07.19.</p> <p>Proposal was discussed in CoD meeting with CEO, BSP on 24.07.19 and decided to review &amp; take up at plant level in consultation with CET.</p> <p><b>A desired, file again processed for approval on 26.07.19. Observation raised by Chairman Office sent to BSP on 01.08.19; part reply received on 30.08.19.</b></p> <p><b>Reminder sent to BSP on 16.08.19, 30.08.19, 03.09.19, 09.09.19, 21.09.19,03.10.19, 14.10.19 &amp; 06.11.19 for complete reply with approval of CEO, BSP. The status has been informed to CGM (Projects) &amp; Director (P &amp; BP) on 18.10.19 and again reminder issued on 06.11.19, 29.11.19, 13.01.20 &amp; 23.01.20.</b></p>
b)	Replacement of Converter Vessels, Trunnion Rings, support system and Installation of Secondary Emission Control System for three Converters in SMS-II	Rs.231.55 (net of ITC)	Feb'20	<p>Receipt of proposal on 06.02.2020 at Corporate Projects for Stage-I approval. Preliminary observations sent to BSP on 12.02.20; reply received from BSP on 14.02.2020.</p> <p><b>Additional observations of Corporate Finance was sent on 29.02.2020 to BSP; reply is awaited.</b></p>
c)	Replacement of existing Flash Butt Rail Welding Machine in R&SM	Rs.26.07 (net of ITC)	Feb'20	<p><b>Receipt of proposal on 12.02.2020 at Corporate Projects for Stage-I approval. Preliminary observations received from Finance and sent to BSP on 23.02.20; reply received from BSP on 26.02.2020.</b></p>
2	<b>DSP</b>			
a)	Installation of New Bar Mill	804.36 (net of ITC)	16.6.19 (soft copy)	<p>Proposal has been received via email on 16.6.19.</p> <p>Proposal circulated to Project Finance, Operations, EMD and Commercial Directorate for Observations/ comments on 17/18.6.19.</p> <p>Observations of Projects Directorate and EMD forwarded to DSP.</p> <p>COD meeting held on 19.6.19.</p> <p>DSP has forwarded the revised FR (R2) on 25.6.19.</p> <p>Revised proposal received from DSP on 31.07.19; The same has been circulated to obtain comments from Operations Directt, Finance Directt and EMD. The proposal was also referred to independent financial appraisal agency (IFCI), on 03.08.19, for appraisal of the project. Meanwhile, observations from Finance Directt. have been forwarded to plant and the replies to same are awaited. The draft report of IFCI was received on 05.11.19. The proposal processed for obtaining approval of CA on 22.11.19 after obtaining clarifications from DSP/CET of further Finance queries and receipt of Final Project Appraisal Report from IFCI on 21.11.19.</p> <p>The file was processed for the approval of the competent authority, however during the due diligence several observations were raised clarifications regarding which were sought from DSP/CET. Final replies to the observations were received on 21.02.2020. The proposal was again put up for consideration of COD in its meeting held on 06.03.2020, as directed. The COD along with Director (Commercial), SAIL deliberated over the project and asked CET to rework the input material balance considering excess 150 mm<sup>2</sup> billet from ISP, CET was also advised to prepare a comparison of costs considering the proposal on EPC , JV, BOO bases.CET to submit the reply.</p>
b)	Installation of CO gas holder	48.45 Cr (net of ITC) 53.53 Cr (earlier)	10.07.19 (soft copy) 21.02.20 (rev prop)	<p>Proposal considered by COD in its meeting held on 24.07.19 and during deliberations it was brought out that CO gas holder is a technical necessity since the existing gas holder has outlived its life. COD cleared the proposal and advised DSP to submit fresh updated proposal incorporating proper justification, for further processing of the proposal.</p> <p>DSP submitted the revised proposal on 21.02.20 (S/c). The proposal was considered by the COD in its meeting held on 06.03.2020; the proposal to be processed for PAG.</p>
c)	Installation of NDT facilities at WAP	44.08 Cr. (net of ITC)	21.12.19	<p>Proposal considered by COD in its meeting held on 30.12.19 and during deliberations it was brought out that NDT machine is a technical requirement for DSP to be in LHB market. However, during clearing and prioritizing the proposal, COD opined that though tender for both the machines may be issued but order for the second machine shall be placed only after ascertaining the performance of first machine.</p> <p>PAG considered the proposal, in its meeting held on 10.01.20 and observations of PAG sent to DSP/CET on 13.01.20, however, during signing of PAG MoM it was desired by the PAG to re-assess the requirement of machines considering their capacity and the requirement of DSP. In pursuance of this additional queries were sent to DSP on 7.03.20. DSP vide its mail dated 11.03.20 confirmed that only one machine will be sufficient for the existing requirement. Accordingly, a revised proposal shall be processed for approval of competent authority.</p>

Sl. No.	Plant / Scheme	Cost (Rs. Cr.)	Receipt at CO	Status
d)	Installation of New Stamp Charge battery	1851.92 Cr (net of ITC)	22.02.2020	The proposal was listed for the consideration of COD, in its meeting of 06.03.20. However, due to paucity of time and exigent meeting of one of the members the proposal could not be considered and has been listed for next meeting of COD.
<b>3</b>	<b>RSP</b>			
a.	Installation of a stamp charge COB-7 along with CDCP and By-product plant	2335.02 (net of ITC)  Revised cost 2272.00 (net of ITC of 282.62)  <b>Aug'19 - Revised cost 2317.64 (net of ITC of 287.05)</b>	Mar'18             Aug'19	<p>Proposal circulated to Operation, Finance, EMD, RDCIS for comments. Operations and Projects Directorate observations sent to RSP on 27.03.18, reply received from RSP on 23.04.18, forwarded to Operations on 24.04.18. Further observations sent to RSP on 27.04.18. Part reply received from RSP on 05.05.18. Observations of EMD received on 19.04.18 and forwarded to RSP, reply received on 05.05.18. Updated Agenda with cost estimate of Rs.2272.00 Cr (net of ITC of Rs.282.62 Cr) received on 31.05.18.</p> <p>Comments/ observations of RDCIS and Finance are awaited. In line with the Capex review meeting held on 10.08.18, the Proposal was returned to plant on 21.08.18. The proposal was received from RSP (after review) on 10.09.18 for reconsideration. RSP found the proposal to be essential to meet the coke requirement at RSP. <b>Proposal was considered by CoD in its meeting held on 13.11.18, after deliberations, CoD decided to put this proposal on hold. A separate meeting will be organized for discussion of setting up of new coke oven battery of all ISPs.</b></p> <p><b>Proposal was again considered by CoD in its meeting held on 22.01.19.</b> Extract of COD meeting sent to RSP on 05.02.19. Reply of COD observations received on 13.02.19. <b>Proposal was reconsidered by COD in its meeting held on 27.02.19,</b> COD's meeting extract sent to RSP on 13.03.19.</p> <p>Revised proposal received on 14.08.19 and circulated to Operations, Finance and EMD on 16.08.19. Comments from Operations, Finance &amp; EMD awaited. Observations of Projects Directorate sent to RSP on 22.08.19, reply received on 09.09.19. COD considered the proposal again on 14.10.19, COD advised that the proposal needs to be relooked and revised after incorporating observations of COD after due diligence with CET. <b>Proposal again considered by COD in its meeting held on 14.10.2019,</b> while deliberating on the proposal, COD made following observations:</p> <ul style="list-style-type: none"> <li>Installation of COB-7 is planned to start from 2024-25 i.e. more than 4 years from now. Taking 'In-Principle' approval at this stage does not seem to be justified since RSP will require to issue the tender about 1 year prior to 2024-25. Further, by taking 'in-principle' approval at this stage will require the proposal to be revalidated if it is not firmed up within 1 yr from Stage-1 approval.</li> <li>Coke shortage needs to be reworked taking into account the timing of shutdown/ major repairs of BF-5 and COB-6.</li> <li>As per RSP, parts of Coal Handling Plant of conventional tall batteries will be utilised for new COB-7 Stamp Charged Battery with some modifications. This may result in operational difficulties.</li> </ul> <p><b>COD advised that the proposal needs to be relooked and revised after incorporating all the clarifications on above mentioned issues after due diligence with CET.</b> Revised Agenda is awaited.</p>
b.	Installation of New Oxygen Plant (900 tpd) at RSP on BOO basis  <b>Revised Agenda</b>  Installation of New Oxygen Plant (1000 tpd) on Lease and O&M basis	BOO          LOM	Feb'19          Jan'2020	<p>Proposal has been considered by <b>COD in its meeting held on 27.02.19, Extract of COD's meeting sent to RSP on 13.03.19.</b> COD after deliberations advised RSP to submit revised proposal for higher capacity Oxygen Plant on BOO basis, so that ASU-I &amp; ASU-II can be closed once new unit is installed. Accordingly, EOI for 1200 tpd BOO basis plant was issued on 06.04.2019 with last date for EOI is 23.04.2019, which was subsequently extended to 30.04.2019 on request from probable bidders. Bids opened on 30.04.2019. Four bidders participated. Presentation by the bidders was held on 21.05.2019 &amp; 22.05.2019.</p> <p>Revised Agenda on LOM basis was submitted by RSP and same has been considered by <b>COD in its meeting held on 20.01.2020.</b> While deliberating on the proposal, COD made following observations:</p> <ul style="list-style-type: none"> <li>Legal opinion may be sought by RSP to clarify whether any Government Clearances/ NOC are required for opting for LOM route.</li> <li>If LOM route is possible, then RSP may look into whether the existing BOO Plant contract can be changed to LOM model, as this would be more beneficial for SAIL.</li> <li>Option of a joint venture may also be explored.</li> <li>The eligibility criteria for the new plant may be drawn up so that more vendors can participate.</li> <li>If the reason for proposing LOM is to save on power cost since the BOO plant of RSP draws power from the grid and it is felt that in the LOM basis the power can be supplied at Captive rate, then RSP may first explore the option of taking distribution license as has been taken by BSP and BSL.</li> </ul> <p>After detailed discussions, COD advised that the proposal may be relooked, revised and submitted again after incorporating clarifications on the above mentioned observations, same has been communicated to RSP on 31.01.2020,</p>
c.	Lagoon Management Work	38.29 (net of Input tax)	Dec'19	Proposal forwarded to Operations, Finance and EMD for comments/observations on 16.12.19 after receipt of TS. EMD observations received and forwarded to RSP.

Sl. No.	Plant / Scheme	Cost (Rs. Cr.)	Receipt at CO	Status
		credit of Rs.6.89 crore)		<b>Proposal has been considered by COD in its meeting held on 30.12.19.</b> COD noted that as dredging and de-silting is a non-core and regular operational activity, it cannot be considered a capital project. Accordingly, COD advised RSP to take up the work of Lagoon Management under revenue expenditure. Further, considering the criticality of implementation of ZLD in RSP, COD advised RSP that all the schemes envisaged for implementation of ZLD may be put up to it in a comprehensive manner. CODs observations have been communicated to RSP on 04.01.2020. Reply from RSP received on 10.2.2020. The proposal to be again considered by COD in its next meeting.
d.	Installation & Commissioning of New test house for R & C lab	30.34 (net of ITC of Rs. 4.33 Cr)	Jan'2020	Approval note through mail received on 25.01.2020. Complete Agenda along with Annexure and TS received from RSP on 5.2.2020. Preliminary observations of Projects Directorate sent to RSP on 28.01.2020 and reply received on 14.2.2020. Observations of Project Finance received and forwarded to RSP on 21.2.2020. Reply from RSP received at Projects Dte forwarded to Project Finance. The proposal to be considered by COD in its next meeting.
e.	Revised Cost Estimate of New HSM	3629.595 3558.02	Nov'19 Feb'2020	Projects observations sent to RSP on 21.11.19 and 29.11.19 & 06.01.2020 reply received from RSP on 23.12.19 & 10.01.2020. Observations of project Finance received and sent to RSP on 16.01.2020. Reply received on 29.2.2020. The same has been forwarded to Project Finance. Observations on the reply received, has been forwarded to RSP on 04.03.2020.
<b>4</b>	<b>BSL</b>			
a)	Installation of 0.1 Mtpa Briquetting Unit for Calcined Lime and Dolo fines near Junction house (JH) of SMS-II, BSL on BOO basis	BOO	Feb'18	Proposal sent to Operations & Corporate finance for observations / comments on 21.02.18. Observations of Corporate Projects and Operations sent to BSL on 19.03.18. In line with the Capex review meeting held on 10.08.18, the Proposal was returned to plant on 21.08.18. <b>Proposal was discussed in COD meeting held on 13.11.18. COD cleared the proposal after deliberations. Proposal was re-submitted on 17.12.18 and reply to queries sent on 18.12.18. Proposal circulated to Finance and Operations for comments / observations. PAG held on 05.02.19, replies to the queries raised by PAG received from plant on 24.02.19. Clarifications on clause 5.2 (under heading period of contract) of Agenda note regarding transfer of plant to BSL are awaited from BSL for further processing of the proposal.</b>
b)	Replacement of existing Route Relay Interlocking (RRI) system by Solid State Interlocking (SSI) system at steel works station	45.15 <b>44.08 (revised)</b>	Jun'18	The proposal was deliberated in COD meeting held on 18.03.17 wherein it was decided to keep the proposal on hold. The same was communicated to BSL on 17.04.17. In June 18, the proposal was resubmitted by BSL for Stage-1 approval with approval of ED (W) and ED (Projects) of BSL. In line with the Capex review meeting held on 10.08.18, the Proposal was returned to plant on 21.08.18. <b>COD in its meeting held on 13.11.18 decided that the proposal will be discussed in the ensuing meeting.</b> <b>Proposal was discussed in COD Meeting held on 15.01.19. Considering the observations on the existing RRI System and benefits envisaged by BSL, COD cleared the proposal for further processing. COD also directed that the cost be updated and further, benefits envisaged along with financial analysis should be presented in detail during PAG meeting. MoM of COD sent to BSL. Reply awaited from BSL.</b>
c)	Treatment & recycling of township sewage and waste water of BSL  (20 MGD capacity with associated facilities)	165.41  Nil (BOO)	Mar'17  Dec'18	It is statutory to comply with the directives of JSPCB / CPCB for "Zero liquid discharge" in plant as well as township area and adhere to provisions in the "Consent to Operate" issued by JSPCB to BSL with assurance that STP would be installed. The proposal was discussed in Mar'17 by COD wherein it was decided that the proposal be kept on hold. Further requirement of Pollution Control Board of Jharkhand to be verified. Accordingly, the requirement of the proposal has been verified by ECD, BSL and the necessity of the proposal still exists. The proposal was further discussed in the COD meeting held on 05.10.17 and it was desired to explore the option of executing the said proposal on BOO basis. Accordingly, BSL along with CET prepared the said proposal on BOO basis and also provided a comparative analysis for consideration. Revised proposal submitted on 24.12.18. Considering the Statutory nature of the proposal, COD on 15.01.19, cleared the proposal for further processing. COD also directed that the Variance analysis of cost of treated water on EPC Vs BOO on like to like basis (including O&M cost & others), should be clearly brought out during PAG meeting. MoM of COD sent to BSL. <b>Revised proposal on BOO basis received from BSL on 19.10.19.</b> Proposal sent to Operations & Corporate finance for observations / comments on 21.10.19. PAG held on 01.11.19. The observations of PAG regarding assessment and justification on capacity of proposed STP, estimated cost and payment model forwarded to BSL on 02.11.19. <b>The same are awaited from BSL.</b>



Sl. No.	Plant / Scheme	Cost (Rs. Cr.)	Receipt at CO	Status
d)	High pressure water mist spray (HPWMS) fire fighting and Fire detection alarm (FDA) system for category-I cable tunnels of BSL	37.77	Apr'19	<p>Queries regarding the proposal sent for clarification to BSL. The proposal however will be put up for consideration in next COD meeting.</p> <p>While clearing the proposal by COD in its meeting held on 24.07.19, COD advised that the relevant findings of recent fire incident at Oil Cellar of CRM-3 of BSL may also be considered and submit the revised proposal. <b>Minutes of COD along with observations of ED (Power) forwarded to BSL on 31.07.19 for submitting revised proposal.</b></p> <p><b>Revised proposal is awaited from BSL.</b></p>
e)	Revamping of Level-1 and Level -2 Automation in Reheating Furnace – 2, 3 & 4 of HSM of BSL	25.97	Dec'19	<p>Proposal sent to Operations &amp; Corporate finance for observations / comments on 17.12.2019.</p> <p>Proposal was considered by COD in its meeting held on 30.12.19. COD advised to review the mode of tendering as well as estimated cost. The observations of COD forwarded to BSL for further course of action. <b>The same is awaited from BSL.</b></p>
<b>5</b>	<b>ISP</b>			
a)	Construction of 105 nos of Quarters at Burnpur Township	42.55 Updated Cost 41.67 Base date 1 <sup>st</sup> Qtr 2019	17.04.18/ 13.11.18	<p>The proposal is for construction of 84 nos. of Quarters of non-executives and 21 nos of quarters for executives at Burnpur Township. The proposal was considered by CoD on 30.08.18. ISP to re-work the proposal as desired by CoD. The proposal was again discussed in the CoD meeting held on 13.11.18. CoD desired that ISP to rework the proposal to make it more steel intensive. ISP has been requested to give a detailed analysis of regular RCC Building/ Composite Structures/ Steel Frame Structures.</p> <p>ISP replied vide mail dated 15.12.18 wherein it was communicated that composite structure is being envisaged wherein the usage of steel comprising of both structural steel and reinforcement steel would be around 30% and that the structural steel used would be products of USM of ISP.</p> <p>Mail sent to ISP on 20.12.18 to consider Steel Fabricated Structures for SAIL Quarters</p> <p>Reply from ISP/CET regarding the type of Structural steel being used received by mail on 24.12.18</p> <p>COD in its meeting held on 22.1.19, cleared the proposal for Stage I approval and asked ISP to re-work and submit the proposal taking into account the Life Cycle Assessment (LCA) of Steel Intensive Structure w.r.t RCC Building. COD also advised that the cost of the proposal be optimized with respect to the usage of steel.</p> <p>The Extracts of MoM of COD meeting has been sent to ISP on 5.2.19.</p> <p>Life Cycle assessment has been forwarded by ISP. Updated cost along with soft copy of LCA calculations &amp; financial calculations received. Updated cost Rs.41.67 cr. (net of ITC)</p> <p>Reply to EMD observations awaited.</p> <p>PAG held on 20.3.19. PAG queries (5 nos.) sent on 20.3.19. Draft reply to 1 query received on 7.4.19, balance reply awaited. Reminder sent on 24.5.19/22.10.19. Reminder again sent on 5.02.2020.</p>
b)	Conversion of Existing Universal Section Mill (USM) to Universal Rail Cum Section Mill (URSM) at IISCO Steel Plant (ISP).	Rs. 1,491.80 crore (173.68 Cr. 4th Qtr'19) Incl FE : Rs. 493.01 cr	17.12.19 (soft Copy)	<p>The proposal is for Conversion of Existing Universal Section Mill (USM) to Universal Rail Cum Section Mill (URSM) at IISCO Steel Plant (ISP). The proposal was considered by COD on 30.12.2020. COD told ISP to settle the commercial issues of USM and close the existing contract. It was also communicated to check the performance of BSP URM before proceeding further, to rework the cost of rail, to carry out a comprehensive integrated evaluation of the throughput of upstream facilities to match the envisaged production level of finished rails and structural from the proposed URSM.</p> <p>ISP in its reply dated 03.02.2020 has communicated that ISP on request of SMS is planning for demonstration of rolling of 60 kg rail in existing USM as a replacement of Z-pile. However as finishing facility for rails is not available at USM, rail rolling can only be demonstrated up to Hot Saw of existing USM. The commercial implication for the same will be mutually settled with customer in consultation with Mecon, the consultant. Proposal shall be put up for consideration of COD.</p>

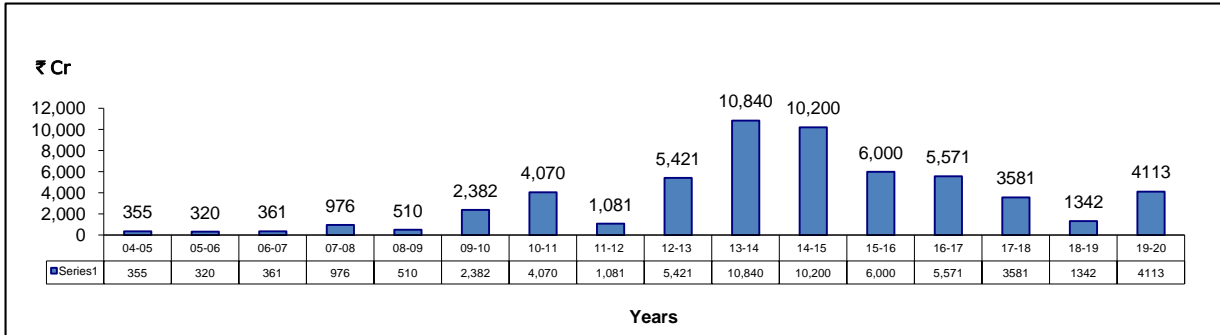
**Performance of Projects**

**परियोजनाओं का कार्य-निष्पादन**

**MAJOR OPERATIONALIZED PROJECTS / FACILITIES ( मुख्य परिचालित परियोजनायें )  
DURING 2019-20**

Sl. No.	Plant Scheme	Sanctioned cost (NoC) (Rs. Cr.)	Anticipated cost (NoC) (Rs. Cr.)	Sanctioned Schedule	Start of Operation
<b>A)</b>	<b>AMR</b>				
1	BSL Modernisation of SMS-I (BOF Portion)	444.70	444.70	Nov'17	May'19
2	DSP Installation of New Rotary Hearth Furnace	26.65	26.65	May'16	Jul'19
3	BSL Provision of Hydraulic Mudgun cum Drill Machine for BF-1	28.41	28.41	Jul'15	Jan'20
4	BSL Upgradation of Stoves of Blast Furnace No. 1	127.3	127.3	Jan'18	Jan'20
5	RSP Installation of New Hot Strip Mill	3127.3	3127.3	Apr'18	Jan'20
	<b>Total AMR (NoC)</b>	<b>3754.36</b>			
<b>B)</b>	<b>EXPANSION</b>				
	<b>Total Expansion (NoC)</b>	<b>0.00</b>			
	<b>Grand Total (AMR + Expansion)-NoC</b>	<b>3754.36</b>			
<b>Projects Completed During FY 19-20 (Gross) - Rs.4112.56 Cr. (appx)</b>					

**YEARWISE COMPLETED PROJECTS SINCE 2004-05**



**Capital Expenditure - पूँजीगत व्यय**

	9th Plan	10th Plan	11th Plan (2007-2012)															
	(1997-2002)	(2002-2007)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19		2019-20		
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	RE	Actual	RE	Outlay	Actual
																	Apr-Feb	
BSP	1373.27	1132.76	633.70	800.15	1486.90	1787.05	3020.36	3708.49	4166.68	2049.49	1917.98	1863.14	1521.70	1295.01	1443.61	1140.58	1030.85	1141.36
DSP	395.36	347.26	149.42	116.17	108.42	223.07	624.67	859.95	792.13	625.72	576.67	330.42	214.07	149.00	152.53	167.13	156.51	133.30
RSP	1470.88	704.12	256.29	1001.58	1441.22	2928.82	2963.37	2330.86	2084.45	1461.14	1276.72	1018.88	1869.48	1320.00	998.14	1134.23	1079.86	1120.54
BSL	1355.07	484.34	380.00	912.16	1330.97	1333.83	1014.74	961.15	1216.14	627.60	723.48	835.65	1186.43	1072.01	1299.79	930.52	860.19	899.75
ISP	34.91	257.75	633.07	1732.48	4712.04	4098.68	2500.85	1404.25	1316.71	1245.10	973.42	583.44	172.00	200.00	213.53	190.19	166.15	196.30
ASP	16.68	66.87	28.40	24.00	17.58	11.28	21.95	14.02	7.58	2.72	3.32	2.19	1.04	2.00	1.46	3.00	2.76	2.09
SSP	55.23	14.99	44.02	493.20	887.23	463.75	331.53	55.07	61.16	21.59	43.89	27.87	4.39	5.00	8.61	5.00	4.59	3.30
VISP	25.34	13.31	7.80	52.63	19.84	9.59	5.39	3.23	2.49	2.42	21.53	8.42	1.89	4.00	2.42	4.00	3.72	1.30
RMD	57.25	100.58	34.35	65.86	501.13	375.02	479.20	264.21	128.33	314.08	209.85	156.60	92.15	131.99	132.65	383.36	332.93	359.38
RDCIS	18	18.00	6.58	10.24	7.41	9.52	12.79	10.65	14.54	18.20	5.80	10.24	7.10	6.00	5.29	14.00	12.01	10.07
CMO	23.00	15.00	2.20	10.22	19.61	25.08	35.24	24.08	26.44	32.57	35.57	21.67	5.42	5.00	6.83	6.00	5.51	3.13
CET	1.00	2.00	1.42	0.75	0.72	2.10	0.47	0.96	0.99	0.05	1.58	0.72	0.09	0.99	0.00	0.10	0.24	0.00
CO	26.00	13.00	1.53	6.87	69.11	9.84	2.61	7.42	7.78	3.32	6.82	2.06	7.13	5.00	3.93	6.41	5.66	1.32
CFP	17.24	9.96	2.21	6.82	4.16	2.39	7.94	86.49	65.06	39.19	33.61	16.88	7.07	4.00	2.14	3.50	3.30	2.57
<b>Sub- Total</b>	<b>4869.23</b>	<b>3179.94</b>	<b>2180.99</b>	<b>5233.13</b>	<b>10606.34</b>	<b>11280.02</b>	<b>11021.11</b>	<b>9730.83</b>	<b>9890.48</b>	<b>6443.19</b>	<b>5830.24</b>	<b>4878.19</b>	<b>5089.97</b>	<b>4200.00</b>	<b>4270.93</b>	<b>3988.00</b>	<b>3664.29</b>	<b>3874.42</b>
CO (JV)								25.26		396.57	203.75	60.69	40.00	100.00	32.20	12.00	10.72	2.34
<b>TOTAL</b>	<b>4869.23</b>	<b>3179.94</b>	<b>2180.99</b>	<b>5233.13</b>	<b>10606.34</b>	<b>11280.02</b>	<b>11021.11</b>	<b>9756.09</b>	<b>9890.48</b>	<b>6839.76</b>	<b>6033.99</b>	<b>4938.88</b>	<b>5129.97</b>	<b>4300.00</b>	<b>4303.13</b>	<b>4000.00</b>	<b>3675.01</b>	<b>3876.76</b>
															<b>100.07%</b>			<b>105.49%</b>

**SAIL's**  
**Expansion Plan**  
सेल विस्तारीकरण की  
योजना

## Summary: SAIL's Modernisation & Expansion Plan

### A: Capacity installed

(Million Tonnes)

		BSP	DSP	RSP	BSL	ISP	ASP	SSP	VISL	Total
<b>Hot Metal</b>	Installed Capacity	4.08	2.09	2.00	4.59	0.85	-	-	0.22	<b>13.82</b>
	After current Expansion	7.50	2.45	4.50	5.77	2.91	-	-	0.33	<b>23.46</b>
<b>Crude Steel</b>	Installed Capacity	3.93	1.80	1.90	4.36	0.50	0.23	-	0.12	<b>12.84</b>
	After current Expansion	7.00	2.20	4.20	4.61	2.50	0.48	0.18	0.23	<b>21.40</b>
<b>Saleable Steel</b>	Installed Capacity	3.15	1.59	1.67	3.78	0.42	0.18	0.18	0.10	<b>11.07</b>
	After current Expansion	6.56	2.12	3.99	4.18	2.39	0.43	0.34	0.22	<b>20.23</b>

### B: Cost break-up (Jun'09)

Plant	Cost				
	Expansion	Value Addition/ Product-Mix improvement	Tech. Up- gradation/ Modernisation	Sustenance incl. de- bottlenecking, AMR, environment	Total
BSP	10,293	1,149	2,699	3,124	17,266
RSP	9,932	-	370	1,510	11,812
DSP	-	1,895	186	795	2,875
BSL	595	3,996	254	1,480	6,325
ISP	16,408	-	-	-	16,408
SSP	1,902	-	-	-	1,902
<b>Total</b>	<b>39,131</b>	<b>7,039</b>	<b>3,509</b>	<b>6,909</b>	<b>56,588</b>
Ongoing sustenance schemes	-	-	-	5,282	5,282
				12,191	61,870#

# Besides provision of about Rs.10,264 Cr. has been kept for development of RMD & Rowghat mines.

**C: Approved Cost & Expenditures (Rs. Cr.)**

Plant	Approved Cost@			Actual Expenditure till Feb'20 On Gross basis
	Gross	Net of Cenvat	FE Component	
BSP*	21,344	19,857	3,604	20,228
DSP%	3,366	3,169	489	3,154
RSP#	14,240	13,307	2,264	13,039
BSL	6,951	6,325	1,275	7,004
ISP \$	20,802	19,235	3,180	18,990
SSP#	2,453	2,371	690	2,378
<b>Sub-Total</b>	<b>69,156</b>	<b>64,263</b>	<b>11,502</b>	<b>64,793</b>
Rowghat	3,600	3,600	-	1,713
RMD	6,664	6,664	-	
Sustenance schemes	5,758	5,282	-	4,433
<b>Total</b>	<b>85,178</b>	<b>79,809</b>	<b>11,502</b>	<b>70,939</b>

@ Including EDC, IDC & Contingency

\*RCE for MODEX of BSP has been approved in Apr'19.

#RCE for MODEX of RSP & SSP has been approved in Aug'19.

\$ RCE for MODEX of ISP has been approved in Oct'19.

% RCE for MODEX of DSP has been approved in Dec'19.

## **BSP – Expansion of Bhilai Steel Plant**

1. **'In-Principle' Approval** :Apr'07
2. **Cost** (Rs. in crore):
  - a) Indicative cost (Apr'07) : Rs.11,262 (Net of CENVAT benefit of Rs.1203Crore)
  - b) Revised estimate (Jul'08) : Rs.21,139 (Net of CENVAT benefit of Rs.2301Crore)
  - c) Revised estimate (Jun'09) : Rs.17,265 (Net of CENVAT benefit of Rs.1581Crore)  
(FE Component: Rs.3112 Crore)
  - d) Revised estimate (Apr'19) : Rs.19,857 (Net of CENVAT/ ITC benefit of Rs.1,487Crore)  
(FE Component: Rs.3,604 Crore)
  - e) Expenditure (Till Feb'20) :**Rs.20,228.46 Crore**
3. **Approved** : Mar'13
- Actual Completion** :ModernizedPlant dedicated to nation in Jun'18.
4. **Production (MTPA)**

Item	Installed Capacity	2005-06 (Base Case)	After Expansion
Hot Metal	4.080	5.18	7.5
Crude Steel	3.930	5.00	7.0
Saleable Steel	3.153	4.28	6.56

### 5. **Techno-economic parameters**

Item	2005-06 (Base Case)	After Expansion
Coke/ Fuel Rate (Kg/thm)	497	410
BF Productivity (t/m <sup>3</sup> /d)	1.72	2.08
Specific energy (Gcal/tcs)	6.79	5.96

### 6. **Objectives:**

- Phasing out of low yield and energy intensive units viz. twin hearth furnace, ingot casting, soaking pits and blooming and billet mill
- Reduction of semis by enhancing finished steel production;
- Broadening and value addition in product-mix for higher flexibility and profitability;
- To meet requirement of Indian Railways up to 1.5Mtpa of class A heavier rails

#### Facilities envisaged in Current Phase

- New 7 meter tall coke oven battery No. 11 (0.88 Mtpa) - **Completed**
- New blast furnace of volume 4060 m<sup>3</sup> (2.8 Mtpa) - **Completed.**
- Second sinter machine in Sinter Plant-3 (3.7 Mtpa) - **Completed**
- New Steel Melting Shop (SMS-3) with complete Secondary Refining facilities and New Billet Casters/ Billet-cum-Bloom Caster, Beam Blank Caster (4.0 Mtpa), - under implementation. 1<sup>st</sup>heat from Converter-1 was tapped on 31.03.18 & treated in Ladle Furnace-1. Subsequently, heats were successfully processed in Argon Rinsing Station (ARS-1), Billet Caster-1 & 2.1<sup>st</sup> heat in Billet-cum-Bloom Caster taken successfully on 28.09.18.1<sup>st</sup>heat from Converter-2 was tapped on 27.11.18.1<sup>st</sup> heat from Converter-3 was tapped on **20.02.20.**

**Overall, all 3 Converters, 3 out of 4 Casters along with all facilities under Secondary refining have been completed. Due diligence for completion of balance 1 caster is in progress.**

- Bar & Rod Mill (0.9 Mtpa)-**Completed.**
- Universal Rail Mill (1.2 Mtpa) - **Completed**
- Augmentation of existing auxiliary and utility facilities – **under progressive completion**

### 7. **Present Status**

- Hon'ble Minister of Steel, laid the foundation stone for expansion plan of BSP at Bhilai on 10.02.08.
- After overall review of SAIL expansion plans in June'09, SAIL board decided to defer package viz. Up gradation of BF-6, Combi caster in SMS-II, Reheating furnace in Plate Mill and New Universal Beam Mill.
- Contracts have been signed for all major packages. Completed facilities include SMS-III (31.03.18, 1<sup>st</sup> heat), BF-8 (02.02.18- Blowing in), BRM (Mar'17-Bar line), Universal Rail Mill (Nov'16), Rail Welding Line



(Mar'16), COB-11 (Sep'14), 2<sup>nd</sup> Sinter Machine in SP-III (Mar'14), OHP-A (Jun'13) and 2 x 1250 tpd Oxygen Plant (BOO basis) (Mar'14). Also, some of the linked facilities that have been completed include up-gradation of Plate Mill, Compressed Air Station No.4, Lime dosing system at Sinter Plant-2, Rebuilding of Coke Oven Battery No.6 and 700 tpd ASU-4 in Oxygen Plant-II.

- Balance works of SMS-III, Ore Handling Plant Part-B and Fuel & Flux Crushing & Screening System; are in various stages of implementation.
- **On 14.06.18 Hon'ble Prime Minister dedicated the modernized & expanded Bhilai Steel Plant of SAIL to nation.**
- **Details of Shop which were shutdown/ phased out at BSP:**
  - Sinter Plant-I: May, 2011, Capacity: 2.04 MTPA
  - Blast Furnace-2: 11.10.17 (2017), Capacity: 0.37 MTPA
  - Blast Furnace-3: 17.11.18 (2018), Capacity: 0.37 MTPA

## Package-wise Details for Expansion of Bhilai Steel Plant

### Packages under Implementation:

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
1	Augmentation of Ore Handling Plant Part-A	HEC	184.74 (nil)  194.10 (nil)  Gross Cost – 213.99	190.06	09.04.08	Apr'10 (Jun'13)	<ul style="list-style-type: none"> <li>▪ Commissioning certificate (Part facility) issued on 04.04.16 w.e.f. 29.03.16.</li> <li>▪ <b>Commissioning Certificate issued on 20.03.17 w.e.f.15.03.17.</b></li> </ul>
2	OHP Part B o Issues: ❖ Inadequate deployment of manpower & resources and slow progress of work.	EPI	525.86 (nil)  570.02 (nil)  Gross Cost – 599.02	514.97	30.04.10	Apr'12 (Iron ore route of BF-8 completed) [Balance by Mar'2020]	<ul style="list-style-type: none"> <li>▪ 372780/402542 m<sup>3</sup> (93%) earthwork (Sch/ likely – Oct'11 / Dec'19) and 112988/113000 m<sup>3</sup> concreting (Sch / Likely – Oct'11 / Aug'18) completed.</li> <li>▪ 14820/16252 T (92%) bldg. str. fabricated (Sch / Likely – Aug'11 / Dec'19) and 14802/16252 T (89%) erected (Sch / Likely – Feb'12 / Dec'19). 4467/4487 T (99%) Tech. Strs. fabricated (Sch / Likely – Oct'11 / Dec'19) &amp; 4210/4487 T (94 %) erected.</li> <li>▪ All 4600 T Mech. equipment ordered &amp; supplied (Sch/ Likely – Feb'12 / Aug'17) and 4510/4600 T erected.</li> <li>▪ All 1726/1750 T Electrical equipment supplied &amp; 1598/1750 T erected.</li> <li>▪ PAC (Part facility) issued on 02.01.18.</li> <li>▪ PAC (Part facility) issued on 22.05.18 w.e.f. 10.05.18.</li> <li>▪ 3<sup>rd</sup>Part PAC issued on 28.12.19.</li> <li>▪ M/s EPI is failing continuously in their commitment.</li> <li>▪ Augmentation of ore supply from existing OHP to BF-7&amp; SMS-II (J-series route) work has been de-scoped from M/s EPIL.</li> </ul>
3	Augmentation of fuel & flux crushing facilities o ISSUES: ❖ Inadequate deployment of manpower & resources and slow progress of work.	EPI	272.65 (nil)  290.70 (nil)  Gross Cost – 307.56	256.17	15.02.11	Dec'12 (Coke route & fines for BF-8 completed)  [Balance progressively by Jun'20]	<ul style="list-style-type: none"> <li>▪ 172656/180000 m<sup>3</sup> earthwork (Sch / likely - Jun'12/ Dec'15) and 32030/32000m<sup>3</sup> concreting (Sch / likely– Apr'12/ Jun'16) completed.</li> <li>▪ 10510/11000 T structure supplied (Sch / Likely – Feb'12 / Nov'16) and 10321/11000 T erected (Sch / Likely – Apr'12 / Dec'19).</li> <li>▪ 3067/3150 T Mechanical Equipment supplied &amp; 3112/3150 T erected.</li> <li>▪ 896/910 T Elect. Eqpt. ordered, 896/910T supplied &amp; 728/910 T (80%) erected.</li> <li>▪ Coke route for supply of coke from existing batteries (KD1 route) to BF#8 has been completed. Integrated trial with coke also done and now it has been connected to coke supply route of BF-8 on 05.09.18.</li> <li>▪ The Part PAC for return sinter lines line issued w.e.f. 08.10.13.</li> <li>▪ The Part PAC for Priority route of CSP issued w.e.f. 18.10.14.</li> <li>▪ The Part PAC for Coke feeding conveyors to BF-8 stock house issued w.e.f. 29.01.18.</li> <li>▪ The Part PAC for Coke breeze and Coke evacuation route issued w.e.f. 29.01.18.</li> <li>▪ Part-PAC for Four Facilities issued on 31.05.2018.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
4	New Coal Handling Plant  o ISSUES: ❖ De-Scoping of facilities due to non-availability of front/shutdown is being considered by BSP.	HEC	463.80 (nil)  470.50 (nil)  Gross Cost – 504.98	420.37	20.09.08	Mar'11 <b>(Apr'16;</b> Priority Route, balance completed in <b>Dec'19)</b>	<ul style="list-style-type: none"> <li>▪ All 312000 m3 earthwork (Sch / Likely – Sep'10 / Aug'17) &amp; 51897/52000 m3 (99%) concreting (Sch / Likely – Sep'10 / Jun'17) completed.</li> <li>▪ 7944/8145 T bldg. strl. fabrication (Sch / Likely – Jun'10 / Dec'19) and 7823/8145 T erection (Sch / Likely – Apr'10 / Dec'19) completed.</li> <li>▪ 7493/7500 T (99%) of mechanical equipment ordered, 6796/7500 T (90%) Supplied (Sch / Likely – Oct'10 / Dec'19) &amp; 6788/7500 T (91%) erected (Sch / Likely – Dec'10 / Dec'19).</li> <li>▪ All 2500 T electrical equipment ordered and 2485/2500 T (99%) supplied (Sch / Likely – Oct'10 / Jun'17) &amp; 2340/2500 T (94%) erected (Sch / Likely – Dec'10/ Nov'18).</li> <li>▪ Part PAC issued on 19.03.15 for Dispatcher Building.</li> <li>▪ PAC issued on 27.04.16 for Priority coal route.</li> <li>▪ 3<sup>rd</sup> Part PAC issued on 17.03.18 w.e.f. 08.03.18 for SCR-5 &amp; 6, 4 nos. Silos along with 37 new conveyors.</li> <li>▪ 4<sup>th</sup> Part PAC issued on 16.02.19 w.e.f. 31.12.18 for 25 nos. augmented conveyors, 14 nos APDs of CPP-2 &amp; new WT-7 with 6 nos. associated conveyors and side arm charger.</li> <li>▪ PAC for balance facilities of CHP issued on 28.11.19 w.e.f. 22.11.19.</li> <li>▪ <b>Commissioning Certificate issued on 03.01.2020 w.e.f. 25.12.2019.</b></li> </ul>
5	New Coke Oven Battery (COB-11)  <b>Capacity- 881400 t/yr Gross Coke</b>	BEC / Giprokoks/ CUI	403.40 (Euro 8,690,000)  441.34 (Euro 8,690,000)  Gross Cost – 455.33	441.58	16.09.08	Jan'11 <b>(Sep'14)</b>	<ul style="list-style-type: none"> <li>▪ PAC issued on 05.12.14 w.e.f. 30.09.14.</li> <li>▪ Commissioning Certificate issued w.e.f. 03.10.2014.</li> <li>▪ PG certificate issued on 16.04.2018 w.e.f. 23.03.2018</li> <li>▪ <b>FAC issued on 10.01.2020 w.e.f. 19.11.2019.</b></li> </ul>
6	Oven Machines & land based Pushing Emission Control (PEC) for COB-11	BEC/ KBK, Ukraine	105.61 (Euro 30,000)  109.90 (Euro 30,000)  Gross Cost – 121.49	116.34	19.09.08	Sep'10 <b>(Sep'14)</b>	<ul style="list-style-type: none"> <li>▪ All 1776 T Mechanical equipment supplied &amp; erected.</li> <li>▪ All 232 T Electrical equipment supplied &amp; erected.</li> <li>▪ Part PAC for all Oven Machines issued on 05.12.14 w.e.f. 29.09.14.</li> <li>▪ PAC issued on 23.01.18 w.e.f. 23.11.17.</li> <li>▪ <b>Commissioning Certificate issued on 23.01.18 w.e.f. 27.12.17.</b></li> </ul>
7	Procurement of Silica bricks & Mortar for COB-11	OCL Ltd, India	43.74 (nil)  46.90 (nil)		12.07.10	July'11 <b>(May'12)</b>	<ul style="list-style-type: none"> <li>▪ All 14410 T Silica bricks and all 1700 T Mortar supplied.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
			Gross Cost – 51.03	47.28				
8	Renovation, Augmentation & modification of existing Phenolic Effluent Treatment Plant at COB-11	UEM India Ltd.	21.19 (nil) 20.40 (nil)  Gross Cost – 21.14	20.44	25.06.10	June'11 <b>(Dec'16)</b>	<ul style="list-style-type: none"> <li>▪ All 30000 m<sup>3</sup> earthwork and all 10050 m<sup>3</sup> concreting completed.</li> <li>▪ 508/509 T mech. Equip. supplied, 469 T (92%) erected.</li> <li>▪ All 190 T Structure erection completed.</li> <li>▪ All 173 T elect. Equip supplied &amp; erected.</li> <li>▪ Part PAC issued on 26.04.16 w.e.f. 27.01.16.</li> <li>▪ <b>PAC issued on 16.12.16 w.e.f. 31.10.16.</b></li> </ul>	
9	CDCP for new COB-11 <b>4 Modules of Capacity - 50 t/hr each</b>	BEC/ CUI/ Giprokoks	356.72 (Euro 7,350,000)  369.10 (Euro 7,350,000)  Gross Cost – 404.46	382.88	18.09.08	Oct'10 <b>(Oct'14)</b>	<ul style="list-style-type: none"> <li>▪ PAC issued on 26.03.15 w.e.f. 23.02.15.</li> <li>▪ <b>Commissioning Certificate issued w.e.f. 17.07.2015.</b></li> </ul>	
10	By-Product Plant for COB-11	McNally Bharat	353.52 (nil)  364.10 (nil)  Gross Cost – 392.18	339.43	20.04.11	Apr'13 <b>(Sep'14, Phase-II-) Jul'18</b>	<ul style="list-style-type: none"> <li>▪ All 84000 m3 earth work and all 30200 m3 concreting completed.</li> <li>▪ All 2400 T structural supplied and erected.</li> <li>▪ All 8200 T Mech. Eqpt. supplied and erected (Sch / Likely–Mar'13/ Jun'17).</li> <li>▪ All 1500 T Electrical equipment supplied &amp; erected.</li> <li>▪ Part Commissioning certificate (for phase-1) issued on 27.08.15 w.e.f. 20.07.15.</li> <li>▪ Part PAC for Phase-II issued on 07.07.18 w.e.f. 03.07.18.</li> <li>▪ PAC issued w.e.f. 16.08.18.</li> <li>▪ Phase–II Commissioned on 10.06.19.</li> <li>▪ Phase–III Online gas charging done during 10.06-19.06.19 and put in operation.</li> <li>▪ <b>Commissioning Certificate for complete package issued on 19.02.2020 w.e.f. 22.06.2019.</b></li> </ul>	
11	Modification of Sinter Plant – 2							
I	Cold sinter screening system & Hearth Layer feeding arrangement	Petro general Engg. Works	22.86 (nil)  22.20 (nil)  Gross Cost – 23.87	20.73	05.06.10	Dec'11 (Mar'2020)	<ul style="list-style-type: none"> <li>▪ All 7850 m3 earth work &amp; 1396/1400 m3 (99%) concreting completed.</li> <li>▪ All 383 T bldg. strl. Fabrication and 381/383 T (99%) erection completed.</li> <li>▪ All 461 T techno. Strl. fabrication and 391/461 T (85%) erection completed.</li> <li>▪ All 267 T mech. equip ordered, 266 T (99%) supplied and 227 T (85%) erected.</li> <li>▪ All 20 T electrical equip ordered, 18 T (90%) supplied &amp; 10 T (50%) erected.</li> </ul>	
II	Lime dosing system	Petro General Engg. Works	1.26 (nil)		05.06.10	Mar'11 <b>(May'11)</b>	<ul style="list-style-type: none"> <li>▪ Completed</li> </ul>	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			1.20 (nil)  Gross Cost – 1.33	1.24			
III	Electrics & Automation system	Siemens	8.63 (nil)  8.30 (nil)  Gross Cost – 8.88	8.02	19.06.10	Dec'11 <b>(Nov'14)</b>	<ul style="list-style-type: none"> <li>All 32 B.E. &amp; 72 DE drgs. completed. (Sch/likely– Jul'11/ Nov'13) under approval category submitted</li> <li>All 183 T Elec. equip supplied (Sch/likely– Jul'11/ Nov'13) and erected.</li> </ul>
IV	ESP based Plant de-dusting System – RPN issued to M/s Scintillant Projects on 23.12.14.	Enviropol Engineers Pvt. Limited	7.99 (nil)  6.60 (nil)  Gross Cost – 7.12	8.34	26.07.17	Nov'17 (Mar'2020)	<ul style="list-style-type: none"> <li>All 8 T bldg. strl. Fabrication &amp; erection completed. 60 T Tech. Strl. fabrication and 57 T (95%) erection completed.</li> <li>All 582 T mech. equip supplied and 543 T (93%) erected.</li> <li>All 19.25 T electrical equip ordered, 18.75 T (97%) supplied and 13 T (68%) erected.</li> <li><b>RPN issued to M/s Scintillant Projects on 23.12.14.</b></li> <li>Contract signed with Consortium of M/s Enviropol Engineers Pvt. Limited, Noida (Leader) &amp; M/s Enviro Care Filtration &amp; Systems, Kolkata on 26.07.17 at a total contract price of Rs.2.79Crore with completion period of 4 months.</li> <li>38/60 m<sup>3</sup> concreting completed.</li> <li>10/25 T Mechanical Equipment ordered, 10/25 T supplied &amp; 70/100 T erected.</li> <li>1/3 T Electrical Equipment ordered, 1/3 T supplied &amp; 1/3 T erected</li> </ul>
12	2 <sup>nd</sup> Sinter Machine at SP-3 (3.7 Mtpa)	L&T / Outotech	689.58 (Euro 19,361,839)  666.70 (Euro 19,361,839)  Gross Cost – 727.68	748.09	28.08.10	Dec'12 <b>(Mar'14)</b>	<ul style="list-style-type: none"> <li><b>Commissioning certificate issued w.e.f. 28.11.14.</b></li> <li>1<sup>st</sup> PG test for 2<sup>nd</sup> sinter machine done from 22.09.16 to 29.09.16.</li> <li>Average sinter production during PG test is 7045 t (rated capacity 11232 t/day).</li> <li>Production during PG Test was affected by interruptions/ stoppages in raw material supply.</li> <li><b>2<sup>nd</sup> PG test was conducted from 08.02.2019 to 15.02.2019. PG certificate issued on 25.04.19 w.e.f. 15.04.19.</b></li> </ul>
13	Boilers with Steam Turbo Blower building (3*150 tph Boilers)	Fujian Longking, China / Allied Energy Systems	282.28 (USD 17,131,000)  314.10		24.03.12	Nov'13 (Boiler-2 in <b>Oct'17</b> , Boiler-1 in <b>Aug'18</b> ,	<ul style="list-style-type: none"> <li>33560/33600 m<sup>3</sup> earthwork and 13036/13260 m<sup>3</sup> concreting completed.</li> <li>4002/4100 T bldg. strs. Fabricated &amp; 4001/4100 T erected.</li> <li>All 5402 T mech. eqpt ordered, 5398/5402 T (99%) supplied &amp; 5330/5402 T erected. All 515 T elect. eqpt. ordered, 510/515 T supplied (Sch/likely - Dec'13/Dec'19) and 488/515 T erected.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			(USD 17,131,000)  Gross Cost – 338.56	278.74		Boiler-7 by May'20)	<ul style="list-style-type: none"> <li>356/377 T (94 %) refractory erected.</li> <li>Part PAC for boiler no. # 2 issued on 05.01.18.</li> <li>Part PAC for boiler no. # 1 issued on 26.05.18.</li> <li>Commissioning Certificate (Part) for boiler no. # 2 issued on 05.03.18 w.e.f. 31.01.18.</li> <li>Boiler no.- 1 Commissioned on 01.09.18.</li> </ul>
14	Steam Turbine Generator, Back Pressure Turbine Generator, Cooling water system etc. (1*25 MW STG)	Triveni Engg.	170.50 (nil)  176.80 (nil)  Gross Cost – 192.47	168.92	19.01.12	Jul'13 (Sep'16)	<ul style="list-style-type: none"> <li>All Piling completed (340 nos.).</li> <li>All 41351 m<sup>3</sup> earthwork and all 14061 m<sup>3</sup> concreting completed.</li> <li>All 1410 T Mech. Equip supplied &amp; erected.</li> <li>All 500 T Elec. Equip supplied &amp; erected.</li> <li>PAC issued on 07.09.16w.e.f. 08.08.16.</li> <li>Power generation started from 18.07.19.</li> <li><b>Commissioning trial of 25 MW STG completed on 30.07.19. Commissioning certificate issued w.e.f. 30.07.19.</b></li> </ul>
15	3x225 m <sup>3</sup> /h DM water Plant for PBS	Techno fab / ARTES, Italy	27.75 (nil)  26.30 (nil)  Gross Cost – 27.52	26.45	25.02.12	Feb'13 (Feb'16; All 3 streams in operation)	<ul style="list-style-type: none"> <li>PAC issued on 08.11.16.</li> <li><b>Commissioning certificate issued on 17.08.17w.e.f.05.08.17.</b></li> </ul>
16	BF – 8 (2.810 Mtpa)	Paul Wurth/ L&T	1579.13 (Euro 65,668,550)  1682.80 (Euro 65,668,550)  Gross Cost – 1823.77	1717.49	30.08.10	Dec'12  (Mar'17- stove heating, Furnace "Blowing- in" done in Feb'18)	<ul style="list-style-type: none"> <li>Furnace Blowing-in on 02.02.18.</li> <li>Furnace hot metal production started from 04.02.18.</li> <li>Around 8,506 T Hot Metal produced on 25.01.20 which is the highest production from the Furnace in a day surpassing previous best of around 8,451 T Hot Metal on 22.01.20.</li> <li>Highest ever monthly production of hot Metal (2,17,278 T) from BF-8 achieved in Jan'20, surpassing previous best production (2,13,091 T).</li> <li>Hot metal production from BF-8 is as follows: <ul style="list-style-type: none"> <li>2017-18 : 1,69,882 T</li> <li>2018-19 : 18,24,811 T</li> <li>2019-2020 (till Feb'20) : 21,43,908 T</li> </ul> </li> <li>1<sup>st</sup> Part PAC issued on 06.03.17.</li> <li>2<sup>nd</sup> Part PAC issued on 23.12.17.</li> <li>3<sup>rd</sup> Part PAC issued on 05.09.18.</li> <li>PAC issued on 20.02.19.</li> <li><b>Commissioning certificate issued on 14.08.19 w.e.f. 19.07.19.</b></li> </ul>
17	Turbo Blower for BF-8 Discharge Volume-3*3650 Nm <sup>3</sup>	BHEL	256.75 (Euro		11.11.10	Feb'13 (TB-2 in Mar'17	<ul style="list-style-type: none"> <li>All 3 Turbo Blowers are ready.</li> <li>Commissioning certificate issued on 30.03.18 w.e.f. 07.02.18.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			12,275,000)  263.00 (Euro 12,275,000)  Gross Cost – 286.29	250.36		TB-3 in Sep'17&TB-1 in Jan'18)	<ul style="list-style-type: none"> <li>TB-2 &amp; TB-3, PG test completed during 19-20.03.19.</li> </ul>
18	Hot Metal Handling System	Qinhuangdao Quiney, China/ AIFL	108.20 (USD 10,272,820& Euro 318,360)  121.70 (USD 10,272,820 & Euro 318,360)  Gross Cost – 131.77	103.22	10.09.10	May'12 (Mar'18)	<ul style="list-style-type: none"> <li>All 17000 m3 earthwork (Sch/Likely - Sep'11 /Jun'17) and 5040 m3 concreting (Sch/Likely - Sep'11/Jun'17) completed. All 875 T building strl. fabricated and erected.</li> <li>All 370 T mech. Equip. (Indg.) ordered and 368/370 T supplied. All 2200 T mech. Equip (Imp) supplied. 2565/ 2570 T Mech. Eqpt erected.</li> <li>100 T elec. equip (Indg.) and all 25 T Elec. equip (Imp.) ordered; 99/100 T Elect equip (Indg.) &amp;24.5/25 T Elect eqpt (Imp) supplied. 123/ 125 T Elec. Eqpt erected.</li> <li>All 2191 T refractory supplied &amp; erected.</li> <li>All 12 PLTC are ready and being made operational as per requirement of BF-8.</li> </ul>
19	Augmentation of material handling facilities in SMS-II (75/15 T EOT crane, 180 T Transfer car, 5 T under slung crane)	Anupam Industries	8.83 (nil)  8.60 (nil)  Gross Cost – 9.45	7.52	15.03.11	Dec'11 (Mar'2020)	<ul style="list-style-type: none"> <li>Design Engg. Completed.</li> <li>All 187.3 T Mechanical equipment supplied &amp; 171 T erected.</li> <li>All 44.5 T Electrical equipment supplied &amp;43/44.5 T erected.</li> </ul>
20	Hot Metal De-sulphurisation in SMS-3 Capacity-160 T each of 2 stations	ESM, USA/ Beekay	37.73 (USD 2,775,000)  42.80 (USD 2,775,000)  Gross Cost – 49.25	34.65	06.10.08	Mar'11 (Jun'2020)	<ul style="list-style-type: none"> <li>295/300 T (98%) Mech. eqpt. (indg.)&amp;All 60 T Mech. equip (Imp) ordered. 295/300 T (98%) Mech. Equip (Indg.) (Sch / Likely – Aug'10 / Jun'17)&amp; all 15 T Mech. Equip (Imp) supplied.</li> <li>All 60 T elect equip (Indg.) ordered; 20.5 T elect equip (Indg.) supplied. All 2 T Elect equip (Imp) supplied.</li> <li>All 420 T structure fabricated.135/420 T structure erected.</li> </ul>
21	BOF shop – Technological package Production Capacity-4.13 MTPA Converter Capacity-160/180 T (3 nos.)	Siemens- VAI	1352.10 (Euro 90,640,000)		24.10.08	Aug'11 (Mar'18- Converter-1;	<ul style="list-style-type: none"> <li>All 22177 T mech. (Indg.) equip &amp; all 2426 T Mech. (Imp) equip ordered. 22108/ 22177 T (99%) Mech. (Indg.) equip (Sch / Likely – Jan'11 / Jun'17) &amp; 2412/2426 T (99%) Mech. (Imp.) equip (Sch / Likely – Jan'11 / Jun'17) supplied &amp;all 2059 T erected.</li> <li>All 349 T Electrical Imported equip supplied. 2135/2139 T Electrical Indg. Equip</li> </ul>

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	<ul style="list-style-type: none"> <li>o ISSUES: <ul style="list-style-type: none"> <li>❖ M/s EPC formerly M/s Essar Projects Ltd. has been referred to National Company Law Tribunal (NCLT) on account of which all payments is controlled by Interim Resolution Professional (IRP). IRP appointed in Apr'18.</li> </ul> </li> </ul>		<p>1377.70 (Euro 90,640,000)</p> <p>Gross Cost – 1554.01</p>	1388.95		<p><b>Nov'18-</b> Converter-2; <b>Feb'2020-</b> Converter-3)</p>	<p>ordered &amp; 2133/2139 T Elect. (Indg.) Eqpt. (Sch/ Likely – Jan'11 / Jun'17) supplied and 1362/1400 T erected.</p> <ul style="list-style-type: none"> <li>▪ 1<sup>st</sup>heat from Converter-1 was tapped on 31.03.18 and treated in Ladle Furnace-1.</li> <li>▪ First Heat taken from Converter-2 on 27.11.18.</li> <li>▪ <b>Hot trials of Converter-3 done &amp; First heat taken on 20.02.2020</b></li> <li>▪ Part PAC issued on 31.03.18 for Converter 1.</li> <li>▪ Part PAC issued on 27.11.18 for Converter 2.</li> <li>▪ <b>Commissioning test of Converter#2 done on 29.05.19. Commissioning certificate issued on 08.11.2019.</b></li> <li>▪ <b>Commissioning certificate for Converter-1 issued on 17.12.2019w.e.f. 16.11.2019.</b></li> <li>▪ <b>Preliminary Acceptance Certificate for Converter-3 issued on 19.02.2020 w.e.f. 17.02.2020.</b></li> </ul>
22	<p>CCP-technological pkg. Production Capacity-4 MTPA No. of Casters x Strands 2 x6 Billet Casters 1 x 6 Billet cum Bloom Caster 1 x 3 Beam Blank Caster</p> <ul style="list-style-type: none"> <li>o ISSUES: <ul style="list-style-type: none"> <li>❖ M/s EPC formerly M/s Essar Projects Ltd. has been referred to National Company Law Tribunal (NCLT) on account of which all payments will be controlled by Interim Resolution Professional (IRP). IRP appointed in Apr'18.</li> </ul> </li> </ul>	Siemens- VAI	<p>782.32 (Euro 51,493,469)</p> <p>789.10 (Euro 51,493,469)</p> <p>Gross Cost – 909.87</p>	754.79	18.04.09	<p>Dec'11 <b>(Mar'18-</b> Caster-1; <b>May'18-</b> Caster-2, <b>Sep'18-</b> Caster-3)</p>	<ul style="list-style-type: none"> <li>▪ 3294/3299 T (99%) Mech. (Imp.) equip and 10707/10791 T (99%) Mech. (Indg.) equip ordered. 10296/10791 T (95%) Mech. (Indg.) equipment (Sch / Likely – Dec'10/ Dec'19) and 3294/3299 T (99%) mech. (Imp.) equip (Sch / Likely – Dec'10 / Jun'17) supplied.</li> <li>▪ All 239 Elect (Imp.) equip supplied; 1830/1908 T (96%) Elect (Indg.) equip supplied (Sch / Likely – Dec'10 / Dec'19) and 933/950 T Elec. Eqpt. erected.</li> <li>▪ 1500/2200 T refractory ordered, 1480/2200 T supplied.</li> <li>▪ Hot trials taken in CK-1 on 09.04.18 and CK- 2 on 10.05.18.</li> <li>▪ <b>1<sup>st</sup> heat in CV-1 taken successfully on 28.09.18.</b></li> <li>▪ <b>CK1- Part PAC issued on 30.03.18.</b></li> <li>▪ <b>CK2- Part PAC issued on 10.05.18.</b></li> <li>▪ <b>CV1- Part PAC issued on 25.09.18.</b></li> <li>▪ <b>Commissioning certificate for CV-1 issued on 18.12.2019w.e.f. 25.10.2019.</b></li> </ul>
23	<p>Structural Work for BOF &amp; CCP</p> <ul style="list-style-type: none"> <li>o ISSUES: <ul style="list-style-type: none"> <li>❖ Contract terminated</li> </ul> </li> </ul>	Era Infra	<p>611.66- including free steel (Nil)</p> <p>588.94- including free steel (Nil)</p> <p>Gross Cost – 607.68</p>	597.65	30.09.09	<p>Sep'11 (RPN Case) (Mar'2020)</p>	<ul style="list-style-type: none"> <li>▪ 106450/106947 T steel supplied and structure fabrication 62541T in BOF area &amp;43800T in CCP area (Sch / Likely – Feb'11 / Feb'18) completed.</li> <li>▪ 105335/106000 T (99%) structures fabricated (Sch / likely - Sep'13 / Feb'18) &amp;94144/106000 T erected (Sch / Likely – Jul'11 / Feb'18).</li> <li>▪ MECON has revised the scope of work in phases from 63,000 MT to 1,13,500 MT.</li> <li>▪ RPN issued to M/s Era Infrastructure on 09.08.17and balance works split in 4 packages and order placed to alternate agencies.</li> <li>▪ <b>Contract terminated on 21.10.17.</b></li> </ul>
i.	Structural erection works including modification of critical area and finishing of already erected	M/s HSCL	<p>6.91 (Nil)</p>		09.08.17	<p>Feb'18 (Mar'2020)</p>	<ul style="list-style-type: none"> <li>▪ 3228/3365 T structure erected.</li> <li>▪ 5372/5572T erected structure finished.</li> </ul>



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	structures including supply of consumables for identified areas of BOF & CCP complex in SMS-III		6.70 (Nil)  Gross Cost –	13.85			<ul style="list-style-type: none"> <li>1349/1450 T Structure fabricated.</li> </ul>
ii	Balance Structural works including finishing of already erected structures for completion of BOF & CCP Complex in SMS- III – Block II & III of BOF Shop (High Bay) (Fabrication, Erection, Finishing as required of steel structures)	M/s Ajeet Enterprise Bhilai	11.18 (Nil)  10.90 (Nil)  Gross Cost –	19.32	23.10.17	Feb'18 (Mar'2020)	<ul style="list-style-type: none"> <li>2444/2456 T Fabricated structure erected.</li> <li>22301/25600 T erected structure finished.</li> <li>1494/1506 T structure fabricated.</li> </ul>
iii	Balance Structural works including finishing of already erected structures for completion of BOF & CCP Complex in SMS- III – Block I of BOF & CCP, Scrap & Ladle Bay including Peripheral buildings (Fabrication, Erection, Finishing as required of steel structures)	M/s EMM AAR New Delhi	7.77 (Nil)  20.90 (Nil)  Gross Cost –	12.13	23.10.17	Feb'18 (Mar'2020)	<ul style="list-style-type: none"> <li>All 1620 T Fabricated structure erected.</li> <li>33194/35350 T erected structure finished.</li> <li>727/735 T structure fabricated.</li> </ul>
iv	Balance Structural works including finishing of already erected structures for completion of BOF & CCP Complex in SMS- III – 'Block – II and III of CCP'	M/s EMM AAR New Delhi	9.47 (Nil)  25.00 (Nil)  Gross Cost –	16.73	23.10.17	Feb'18 (Mar'2020)	<ul style="list-style-type: none"> <li>2815/2840 T Fabricated structure erected.</li> <li>24442/27360 T Structure finished.</li> <li>1460/1500 T Structure fabricated.</li> </ul>
v	Balance Structural works, Claddings including finishing of already erected structures for completion of BOF & CCP Complex in SMSIII	M/s Ajeet Enterprise Bhilai	5.76 (Nil)  5.60 (Nil)  Gross Cost –	15.79	30.10.17	Feb'18 (Mar'2020)	<ul style="list-style-type: none"> <li>669/670 T Fabricated structure erected.</li> <li>1996/2300 T Structure finished.</li> <li>All 1700 T Structure fabricated &amp; 1662/1700 T erected.</li> </ul>
24	Balance Civil work for BOF, CCP o ISSUES: ❖ Scope of RCC revised	Simplex	328.85 - including free steel		28.02.13	Apr'14 (Mar'2020)	<ul style="list-style-type: none"> <li>361753/460566 m3 (78 %) earthwork (Sch / Likely – Apr'14 / Dec'19) completed.</li> <li>227487/234523 m3 (96 %) concreting (Sch / Likely – Apr'14 / Dec'19) completed.</li> </ul>

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	upward in stages.		(Nil)  332.85 - including free steel (Nil)  Gross Cost – 332.85	384.12			<ul style="list-style-type: none"> <li>▪ Earlier Contract-</li> <li>▪ Earlier contract was awarded to M/s Ratna Infra Pvt. Ltd. On 14.11.09, but due to poor performance, contract terminated on 15.12.10.</li> <li>- Fresh contract signed with M/s HSCL on 21.02.11 through Limited Tender, but due to poor performance of HSCL, an RPN was issued on 07.03.2012.</li> </ul>
25	Piling work in SMS – III	Era Infra	84.92-including Free Steel (nil)  84.76-including Free Steel (nil)  Gross Cost – 84.67	74.64	23.01.10	Oct'10 (Jul'16)	<ul style="list-style-type: none"> <li>▪ All 15450 piles (8287 for BOF &amp; 7163 for CCP) casting completed</li> <li>▪ All 239440 m<sup>3</sup> Earthwork and 3733/5000 m<sup>3</sup> (75%) concreting (Sch / Likely – Aug'10 / Dec'19) completed.</li> </ul>
26	Erection, testing and commissioning of Plant & Equipment of BOF & CCP complex. ❖ Resources, particularly manpower, to be augmented.	M/s EPC Construction India Ltd., erstwhile, M/s Essar Projects Ltd.-referred to NCLT	84.81-including free steel (nil)  82.90-including free steel (nil)  Gross Cost – 94.35	77.38	22.02.14	Apr'15 (3 Converter & 3 Casters completed)	<ul style="list-style-type: none"> <li>▪ 29623/34536 T Mech. Eqpt. Erected</li> <li>▪ 2893/2856 T Elec. Eqpt. Erected</li> <li>▪ 5957/10495 T Refractory erected</li> <li>▪ <b>A communication received by BSP from National Company Law Tribunal (NCLT) on account of which all payments to M/s ESSAR is to be controlled by Interim Resolution Professional (IRP).</b></li> <li>▪ <b>BSP and IRP are working together for completing the project.</b></li> <li>- Earlier Contract dated - 03.11.2011.</li> <li>- M/s Bridge and Roof had erected 400 T against scope of 37,323 T. Contract was short closed as M/s Bridge &amp; Roof stopped work in Feb'13.</li> <li>- Contract on M/s Essar was placed in Feb'14 with a completion period of 14 months.</li> <li>- Commissioning Certificate for Converter#2 issued on 06.01.2020 w.e.f. 28.05.19.</li> <li>- Commissioning Certificate for Converter#1 issued on 16.01.2020w.e.f. 06.11.19.</li> <li>- Commissioning Certificate for Caster CK#1 &amp; CK#2 issued on 16.01.2020 w.e.f. 20.11.19.</li> <li>- Commissioning Certificate for Caster CV#1 issued on16.01.2020 w.e.f. 25.10.19.</li> <li>-</li> </ul>
27	Installation of 7 nos. Cranes for BOF & CCP o ISSUES: ❖ Resource to be mobilized for completing balance cranes.	HEC	146.10 (nil)  152.90		29.06.09	Jun'11 (Balance one crane by March'2020)	<ul style="list-style-type: none"> <li>▪ 3610/3756 T (96%) mech. Equip., all 599 T elect equip and all 561 T DSL supplied.</li> <li>▪ 3610/3756 T (96%) mech. eqpt. Erected.</li> <li>▪ 574/599 T (96 %) Electrical equipment erected.</li> <li>▪ 519/561 T DSL erected.</li> <li>▪ Part PAC for 6 Cranes issued on 19.11.18 w.e.f. 21.08.18.</li> </ul>

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			(nil) Gross Cost – 164.84	135.36			<ul style="list-style-type: none"> <li>6 out of 7 cranes completed; balance 1 nos. under erection.</li> </ul>
28	10 nos. EOT cranes for BOF & CCP o ISSUES: ❖ Resource to be mobilized for completing balance cranes.	HEC	149.55 (nil) 155.10 (nil) Gross Cost – 170.03	159.52	12.02.11	Feb'13 (Balance one crane by March'2020)	<ul style="list-style-type: none"> <li>All 760 T DSL ordered &amp; supplied.606/760 T DSL erected.</li> <li>3236/3686 T Mech. Eqpt supply&amp;482/494 T Elect. Eqpt supply completed.</li> <li>3174/3686 T Mech. Eqpt &amp; 438/494 T Electrical equipment erected.</li> <li>No schedule submitted by HEC after MOS meeting Dt. 20.07.17</li> <li>Part PAC for 4 Cranes issued on 19.11.18 w.e.f. 21.08.18.</li> <li>Part PAC for Semi Portal Crane-1 issued on 26.12.18w.e.f.06.12.18.</li> <li>Part PAC for 1 crane issued on 05.09.19 w.e.f. 05.09.19.</li> <li>Part PAC for AB-2 &amp; AB-3 (2) cranes has been issued on 16.10.19 w.e.f. 28.08.19.</li> <li>Part PAC issued for Crane AB 1 on 25.01.20 w.e.f. 09.12.19.</li> <li>9 out of 10 cranes completed; 1 nos. cranes under erection.</li> </ul>
29	9 Nos. EOT cranes and 38 Nos. Repair trolleys for BOF & CCP	Mukand Ltd.	53.75 (nil) 54.80 (nil) Gross Cost – 61.14	51.94	08.08.12	Feb'14 (Jul'2020)	<ul style="list-style-type: none"> <li>All 704 T mechanical bought out items ordered &amp; 699/704 T (99%) supplied and 617/704 T (85%) erected</li> <li>All 329 T electrical bought out items supplied &amp; 293/329 T (89%) erected.</li> <li>Part PAC for 5 nos. EOT cranes of SMS-III issued on 19.10.19 w.e.f. 30.06.18.</li> <li>5 out of 9EOT cranes completed.</li> </ul>
30	21 Nos. of Cranes (<100T) for BOF & CCP	Mukand Ltd.	157.55 (nil) 159.70 (nil) Gross Cost – 178.24	153.12	19.06.15	Dec'16 (Mar'2020)	<ul style="list-style-type: none"> <li>RPN issued to Consortium of M/s KG Cranes, Korea and M/s Impression System &amp; Engg. Pvt. Ltd., Pune on 25.08.14.</li> <li>All 3484 T Mech. equipment &amp; all 270 T elect equip ordered.</li> <li>3459/3484 T Mech. equipment &amp; all 270 T elect equip supplied.</li> <li>1834/3484 T Mech. equipment &amp; 215/270 T elect equip erected.</li> <li>Part PAC for 5 Cranes issued on 18.06.18 w.e.f. 17.05.18.</li> <li>Part PAC for 6 Cranes issued on 26.12.18 w.e.f. 17.12.18.</li> <li>Part PAC for 1 Crane issued w.e.f. 21.06.2019.</li> </ul>
31	Secondary Refining Units, SMS III ARS:3 Nos., LF: 3 Nos., RH- degasser: 1 Nos.	Wisdri, China / Trafalgar	205.56 (USD 29,520,000) 250.20 (USD 29,520,000) Gross Cost – 284.47	274.53	08.03.10	Sep'12 (Aug'19)	<ul style="list-style-type: none"> <li>Part PAC for LF-1 issued on 10.04.18 w.e.f. 06.04.18.</li> <li>Part PAC for ARS-1 issued on 13.12.18 w.e.f. 28.08.18.</li> <li>Part PAC for RH issued on 08.10.18 w.e.f. 08.10.18.</li> <li>Part PAC for LF-2 issued on 08.03.19 w.e.f. 04.02.19.</li> <li>PAC issued for Part Facilities of Production Unit of ARS-3 on 31.05.19.ARS-3: Cold trial has been completed on 20.05.19 &amp; handed over to operations.</li> <li>Hot Trial of Ladle Furnace (LF-3) successfully done on 20.08.19.</li> <li>PAC for LF-3 issued on 27.08.19 w.e.f. 20.08.19.</li> <li>PAC for complete package issued on 20.08.19.</li> </ul>

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32	External Water system for BOF & CCP o ISSUES: ❖ RPN issued to M/s Aireff Detox on 08.02.16. ❖ Contract terminated and BGs en-cashed on 03.03.16.	Aireff Detox / Himgiri Cooling Tower/ Model infra	113.49 (nil)  -83.70 (nil)  Gross Cost – -78.81	27.75	29.06.12	Sep'13 (Contract terminated on 03.03.16)  (Mar'2020)(Water provided for startup of SMS-III)	<ul style="list-style-type: none"> <li>78412/ 104000 m3 earth work completed.</li> <li>9453/ 21235 m3 (44%) concreting completed.</li> <li>1970/3000 t Mech. Eqpt. Ordered &amp; 175/3000 t supplied.</li> <li>450/530 T Elect. Eqpt. Ordered &amp; 20 T supplied.</li> <li>Balance work (after Contract termination) has been repackaged into 5 packages including procurement package which has 11 nos. of POs</li> <li>All 5 packages finalized and order has been placed; 3 packages completed, work in progress in balance packages.</li> </ul>	
Following non-turnkey/ procurement contracts awarded (against RPN action) for balance works								
I	Balance Civil works of Essential Facilities under External Water Supply System for SMS-III	M. Mohan, Bhilai	16.07 (nil)  16.07 (nil)  Gross Cost –	15.08	25.04.16	Oct'16 (Apr'18)	<ul style="list-style-type: none"> <li>All 2100 M<sup>3</sup> Earthwork completed.</li> <li>All 6628 M<sup>3</sup> Concreting completed.</li> <li>All work completed on 24.04.18.</li> </ul>	
II	Civil Works of WTP-2 under External Water Supply System for SMS-III	HSCL	9.17 (nil)  9.17 (nil)  Gross Cost –	6.15	18.06.16	Dec'16 (May'19)	<ul style="list-style-type: none"> <li>All 24000 M<sup>3</sup> Earthwork completed.</li> <li>All 5200 M<sup>3</sup> Concreting completed.</li> </ul>	
III	Structural Works of Overhead Tank, including tank and supporting structure under External Water Supply System for SMS-III	Sanmathi Enterprises, Bhilai	5.16 (nil)  5.16 (nil)  Gross Cost –	4.42	02.06.16	Dec'16 (Jun'17)	<ul style="list-style-type: none"> <li>All 400 T Building Structure Fabricates &amp; erected.</li> <li>All 200 T Technical Structure Fabricated &amp; 200 T erected.</li> </ul>	
IV	Balance work	M/s L&T	242.14 (nil)  192.20 (nil)		15.12.16	Jan'18 (Mar'2020)	<ul style="list-style-type: none"> <li>All 69542 M<sup>3</sup> Earth work &amp; all 19000 M<sup>3</sup> Concreting completed.</li> <li>All 1800 T structure fabricated and erected.</li> <li>All 45000 T Technical structure fabricated &amp; all 43000 T erected.</li> <li>All 1950 T Mechanical equipment supplied &amp; all 2050 T erected.</li> <li>Part PAC issued on 10.07.18 w.e.f. 22.06.18.</li> </ul>	

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			Gross Cost – 209.94	208.27			<ul style="list-style-type: none"> <li>▪ PAC issued on 14.12.18.</li> <li>▪ All Units are in commissioning stage except WTP-2.</li> </ul>
V	Procurement packages o Issues: ❖ RPN Action has been initiated for Procurement of pumps		28.80 (nil)  28.80 (nil)  Gross Cost –	24.26			<ul style="list-style-type: none"> <li>▪ All 11 nos. Purchase order issued.</li> <li>▪ Subsequently RPN initiated against M/s Best &amp; Crompton for procurement of pumps; LTE issued for 3 parties.</li> <li>▪ PO placed to M/s WPIL, Kolkata for 48/56 pumps; all pumps were supplied.</li> <li>▪ Order of 5 pumps placed to M/s Mather &amp; Platt; all pumps were supplied.</li> <li>▪ For balance 3 pumps, order placed to Techno pumps &amp; Projects, Thane.</li> </ul>
33	Air conditioning and ventilation system for BOF & CCP complex. o ISSUES: ❖ Balance supplies to be expedited.	Voltas Ltd.	39.92 (nil)  41.30 (nil)  Gross Cost –	34.92	31.08.12	Mar'14 (Jun'2020)	<ul style="list-style-type: none"> <li>▪ All 885 T Mech. Eqpt. Ordered, all 885 t supplied &amp; 565/885 t erected.</li> <li>▪ All 175 T Elect. Eqpt ordered, 150/175 t supplied&amp;109/175 t erected.</li> </ul>
34	Fire Protection System for BOF & CCP o ISSUES: ❖ Balance supplies and erection to be expedited.	Unitech Machines Ltd.	11.64 (nil)  10.90 (nil)  Gross Cost –	5.43	02.04.13	Apr'14 (RPN issued)	<ul style="list-style-type: none"> <li>▪ All 661.5/696.7 T Mech. Eqpt. &amp; 4.86/5.1 T Elect. Eqpt. Ordering completed.</li> <li>▪ 630/696.7 T mech. Eqpt supplied &amp; 510/696.7 T erected.</li> <li>▪ Supply of electrical equipment not started yet.</li> </ul>
35	Pneumatic Sample Transport System for BOF & CPP Complex	Kerry Engineering	2.60 (nil)  2.50 (nil)  Gross Cost –	1.55	25.06.13	Apr'14 (Mar'2020)	<ul style="list-style-type: none"> <li>▪ Supply &amp; erection of pipes is in progress.</li> </ul>
36	Installation of Lime Calcination & Dolomite Plant at RMP-III	Shapoorji Pallonji	251.16 (Euro 3,017,000)  266.50		09.12.09	Mar'12 (Kiln- 1Jun'18,Kiln- 2 Mar'19&Kiln-	<ul style="list-style-type: none"> <li>▪ All 792 piles have been cast. All 108100 m<sup>3</sup> earthwork (Sch/ Likely – Jan'12 / Jun'17) and 21195/21195 m<sup>3</sup> concreting (Sch / Likely – Jan'12 / Jun'17) completed.</li> <li>▪ All 2750 Bldg Structure &amp;8495/ 8495 T Techno structure Supplied (Sch/Likely – Sep'11/Jun'17). 11243/11245 T structures erected.</li> <li>▪ All 1000 T Mech. eqpt (Indg.) &amp; all 21 T mechanical eqpt. (imp.) Ordered. All 2047 t</li> </ul>

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			(Euro 3,017,000)  Gross Cost – 282.19	239.45		3 Nov'19; Kiln- 4 Feb'20& Kiln- 5 Mar'20)	<p>mech. equip (Indg.) supplied (Sch / Likely – Sep'11 / Mar'15). 2066/2068 t mech. eqpt erected.</p> <ul style="list-style-type: none"> <li>▪ All 1000 T electrical equipment (Indg.) &amp; all 1.5 T electrical eqpt. (Imp.) Ordered. 999.5/1000.5 t elect. equip (Indg.) supplied (Sch / Likely – Sep'11 / Mar'15) &amp;999.5/1001.5 T erected.</li> <li>▪ All 4200 T refractory supplied &amp;erected.</li> <li>▪ <b>Part PAC for Kiln #1 issued on 23.06.18 w.e.f. 11.06.18.</b></li> <li>▪ <b>Part PAC for Kiln #2 issued on 25.03.19 w.e.f. 19.03.19.</b></li> <li>▪ Kiln 2- Hot trial (Gas firing) started on 19.03.19. Supply of calcined &amp; burnt lime from Kiln-2 to SMS # 2 &amp; 3 started.</li> <li>▪ <b>PG Testcompleted for Kiln 1&amp;2 in Jun'19.</b></li> <li>▪ Kiln -3; <b>Hot trial (Gas firing) has been started in 2<sup>nd</sup> week of Nov'19.</b></li> <li>▪ <b>PAC for Kiln-3 issued on 29.11.19 w.e.f. 16.11.19.</b></li> <li>▪ Kiln – 4;<b>Hot trial (Gas firing) has been started on 2<sup>nd</sup> 26.02.2020.</b></li> <li>▪ Kiln – 5;Automation work and commissioning work is under progress. Hot trial (Gas firing) of Kiln-4 likely to be taken in Mar'2020.</li> </ul>
37	Interplant pipe conveyor from RMP–III to RMP– II	FL Smidth	58.12 (nil)  62.20 (nil)  Gross Cost – 67.03	54.96	04.02.11	May'12 (Sep'16)	<ul style="list-style-type: none"> <li>▪ All 9700 m<sup>3</sup> earthwork and 5100 m3 concreting completed.</li> <li>▪ All 1600 T building structures supplied and all 1655 T erected.</li> <li>▪ All 558 T Mech. Equip supplied &amp; erected.</li> <li>▪ All 200 T Elec. Equip supplied &amp; erected.</li> <li>▪ <b>PAC issued on 23.07.16, w.e.f. 07.07.16.</b></li> </ul>
38	Up-gradation of Plate Mill		284.31 (nil)  326.69 (nil)  Gross Cost – 371.77	317.09			
I	Cooling Beds, Pilers, etc.	Vitkovice Heavy Machinery, Chekoslovakia / Beekay	176.54 (Euro 8,890,000)  203.01 (Euro 8,890,000)  Gross Cost – 231.39	196.98	24.07.08	Jan'10 (Mar'10)	<ul style="list-style-type: none"> <li>▪ Completed</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
II	Installation of Guillotine Shear	Danieli Wean United, Italy/ Empire Industrial Equipment, Kolkata	63.90 (Euro 8,200,000)  73.48 (Euro 8,200,000)  Gross Cost – 84.25	71.85	23.08.08	Aug'10 <b>(Oct'10)</b>	▪ Completed	
III	CNC Roll Grinding Machine	World Machining Works, Romania/ Maco Corpn	30.09 Euro 3,550,000) 34.60 Euro 3,550,000)  Gross Cost – 39.35	35.64	26.7.08	Nov'09 <b>(May'10)</b>	▪ Completed	
IV	40 T EOT Crane & 17 T Semi Portal Crane	Anupam Industries	6.91 (nil)  7.95 (nil)  Gross Cost – 8.88	6.86	13.8.08	Nov'09 <b>(Apr'10)</b>	▪ Completed	
V	Installation of Plate Edge Marking M/c & Automatic Length Measuring System	M/s Shanghai Hinner, China/ Nireco, Japan & Deepika, India	6.87 (Euro 930,000)  7.90 (Euro 930,000)  Gross Cost – 7.90	5.77	02.05.09	Nov'10 <b>(Apr'14)</b>	<ul style="list-style-type: none"> <li>▪ Commissioning test of both plate edge marking machines completed on 15.06.12.</li> <li>▪ All 14.4 T Mech. eqpt. erected</li> <li>▪ All 5.98 T elect. Eqpt. Erected.</li> </ul>	
39	New normalizing furnace at plate mill	In-house	32.23 (nil)  37.06 (nil)  Gross Cost – 39.19	24.55	-	May'10 <b>(Mar'10)</b>	▪ Completed	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
40	Universal Rail Mill Capacity-1.2 MTPA	SMS Meer / ABB	1177.40 (Euro 107,970,000)  1443.30 (Euro 107,970,000)  Gross Cost – 1562.69	1394.81	23.08.10	Jun'13, 1 <sup>st</sup> Rail- Apr'13  (Nov'16)	<ul style="list-style-type: none"> <li>• <b>Hon'ble Union Minister of Steel, inaugurated URM Complex and flagged off rake of 260m long rails (welded from URM rails) on 23.01.17 to Indian Railway.</b></li> <li>• Rail production till Mar'17- 10,741 T.</li> <li>• Rail production during 2017-2018- 2,43,933 T</li> <li>• Rail production during 2018-2019-4,34,391 T</li> <li>• Rail production during 2019-2020-5,48,639 T (Till Feb'20)</li> <li>• 333 nos. blooms were rolled on 22.01.20, which is the highest ever daily production from URM in a day (surpassing previous best of 318 blooms rolling on 09.12.19).</li> <li>• <b>Highest ever monthly production of rails (rolling- 60,910 T, Prime-54,629 T) from URM achieved in Dec'19, surpassing previous best production (rolling- 52,756 T, Prime-47,087 T) in Nov'19.</b></li> <li>• Part PAC (from Cold Charging grid up to Cooling Bed) issued on 26.10.16 w.e.f. 13.08.16.</li> <li>• <b>PAC issued on 12.04.17 w.e.f. 11.03.17.</b></li> </ul>
41	Civil work for URM	HSCL	289.51 - Inclusive free issue of steel (nil)  339.81 - Inclusive free issue of steel (nil)  Gross Cost – 329.81	271.12	15.09.10	Mar'12  (Nov'16)	<ul style="list-style-type: none"> <li>▪ All 500000 m<sup>3</sup> earthwork has been completed.</li> <li>▪ 226688/230000 m<sup>3</sup> (99%) concreting completed.</li> <li>• <b>Part PAC (Civil works pertaining to Rail Welding line area) issued on 04.03.17 w.e.f. 31.03.16.</b></li> <li>• <b>All work has been completed.</b></li> </ul>
42	Structural work for URM	HSCL	200.02 - Inclusive of free issue of steel (nil)  201.34 - Inclusive of free issue of steel (nil)  Gross Cost – 201.3402	192.46	10.12.10	Aug'12  (Nov'16)	<ul style="list-style-type: none"> <li>▪ All work completed on 31.05.18.</li> <li>▪ <b>Part PAC issued (from Block 1 to 5) on 28.12.16 w.e.f. 25.11.16.</b></li> <li>▪ <b>Part PAC-2 issued (from Block 1 to 7) on 17.02.18 w.e.f. 17.02.18.</b></li> </ul>
43	Installation of reheating furnace for URM	Gillanders Arbuthnot (MICCO) & Bricmont (now	75.81 (USD 5,700,000)		13.07.11	Apr'13  (Mar'16)	<ul style="list-style-type: none"> <li>▪ All 171 T Mech. Equip (Imp) &amp; 1799/1800 T mech. eqpt. (indig.) Supplied. Mech. Equip 1970/1971 T (99%) erected.</li> <li>▪ All 175 T Elect Equip supplied &amp; erected.</li> </ul>



Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
		Andritz)	85.20 (USD 5,700,000)  Gross Cost – 93.03	82.99			<ul style="list-style-type: none"> <li>All 1845 T Refractory supplied &amp; erected.</li> <li><b>PAC issued on 29.04.16 w.e.f. 24.03.16.</b></li> </ul>
44	Rail welding lines for long rails Capacity-1.1 MTPA	Railtech International/ MacoCorpn	263.16 (Euro 17,440,000)  323.70 (Euro 17,440,000)  Gross Cost – 350.17	323.63	18.02.11	Oct'12 (Mar'16)	<ul style="list-style-type: none"> <li><b>PAC issued on 11.05.16 w.e.f. 12.04.16.</b></li> <li><b>Rail Welding Complex has been dedicated to the Nation by the Hon'ble Minister of Steel &amp; Mines on 04.07.16.</b></li> <li><b>Commissioning Certificate issued on 04.05.17 w.e.f. 22.04.17.</b></li> </ul>
45	CNC Roll Turning Lathes for URM	Hankook/ Sanmathi	22.84 (USD 34,11,385)  22.30  Gross Cost – 22.30	25.95	21.06.13	Jun'14 (Mar'16)	<ul style="list-style-type: none"> <li>Completed</li> <li><b>PAC issued on 06.06.16 w.e.f. 13.02.16.</b></li> </ul>
46	Fire Protection System for URM & BRM	M/s Thermosystems Pvt. Ltd., Hyderabad	15.18 (nil)  15.18 (nil)  Gross Cost – 20.58	18.49	08.02.17	Feb'18 (Mar'2020)	<ul style="list-style-type: none"> <li>RPN issued to M/s Agnice Fire Protection Ltd. on 01.12.14.</li> <li>Fresh tender issued and contract awarded to M/s Thermosystems Pvt. Ltd., Hyderabad.</li> <li>Erection of eqpts. started on 13.03.18. Erection of eqpts. in BRM area started on 05.04.18.</li> <li>1020/1025 T Mech. Eqpt. Supplied &amp; 825/1025 T Mech. Eqpt. erected.</li> <li>All 25.3 T Electrical Eqpt. Supplied &amp; 22/25.3 T Electrical Eqpt. erected.</li> </ul>
47	Illumination System for URM, BRM & Rail Welding Line	Transrect Industries	11.60 (nil)  11.60 (nil)  Gross Cost – 11.10	10.56	21.05.13	Feb'14 (Mar'2020)	<ul style="list-style-type: none"> <li>519/520 T Elect. Eqpt. (Indg.) supplied &amp; 518/ 520 T erected.</li> <li>8 Nos. Lighting Transformer of BRM charged.</li> <li>All MLDBs of BRM, RWL &amp; URM area charged.</li> </ul>
48	Air Conditioning System & Ventilation System for BRM, URM	Sterling & Wilson Ltd.	47.92		25.06.13	Oct'14	<ul style="list-style-type: none"> <li>All 969 T Mech. equip (Indg.) ordered, all 969 T Mech. equip (Indg.) supplied and 968/969 T erected.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
	&Rail Welding Line		(nil)  50.10 (nil)  Gross Cost – 54.52	43.55		(Mar'2020)	<ul style="list-style-type: none"> <li>▪ All 316 T Elec. equip (Indg.) ordered, 315/316 T supplied and 315/316 T erected.</li> <li>▪ All 3 Chiller Units of BRM charged.</li> <li>▪ <b>Part PAC for works related to RWL area issued on 06.08.16 w.e.f. 15.07.16.</b></li> <li>▪ <b>Part PAC for certain facilities for URM issued on 24.11.18w.e.f. 10.05.17 &amp; Part PAC for certain facilities for BRM issued on 24.11.18 w.e.f. 19.05.18.</b></li> <li>▪ <b>Commissioning of Chiller, AHU and FCUs in URM completed in Jan'18.</b></li> </ul>
49	Bar & Rod Mill (0.9 Mtpa)	Danieli & C / Beekay	406.09 (Euro 25,250,000)  417.60 (Euro 25,250,000)  Gross Cost – 455.49	435.43	25.08.10	Aug'12 (Jul'19)	<ul style="list-style-type: none"> <li>▪ <b>Bar mill trial done in Mar'17.</b></li> <li>▪ <b>PAC issued for BRM on 14.09.18 w.e.f. 31.08.18.</b></li> <li>▪ <b>Mill is in regular operation and commercial production has also commenced.</b></li> <li>▪ <b>Commissioning of BRM done during 24.06.19 to 29.06.19.</b></li> <li>▪ <b>Around 3300 T TMT &amp; Wire rod were rolled during the Commissioning period against target production of 9300 T.</b></li> <li>▪ <b>BSP has taken over the mill for commercial production with effect from 05.07.19.</b></li> <li>▪ <b>Total 1,59,095 Ton (approx.)commercially accepted section rolled in Year 2019-20 up to Feb'2020.</b></li> </ul>
50	Civil work for BRM	HSCL	126.16 - Inclusive of free issue of steel (nil)  130.75 - Inclusive of free issue of steel (nil)  Gross Cost – 136.64	125.17	30.12.10	Aug'12 (Nov'16)	<ul style="list-style-type: none"> <li>▪ 355000/365000 m3 earthwork (Sch/likely –Sep'11/ Mar'17) and 97250/98400 m3 concreting (Sch/likely – Aug'12/ Mar'17) completed.</li> <li>▪ Major Civil work completed.</li> </ul>
51a	Structural work for BRM	HSCL	54.26 -Inclusive of free issue of steel (nil)  54.26 -Inclusive of free issue of steel (nil)  Gross Cost – 54.26	53.39	16.09.10	May'12 (Nov'16)	<ul style="list-style-type: none"> <li>▪ All 8500 T fabrication (Sch/likely – Dec'11/ Jul'14) completed.</li> <li>▪ All 8500 T erection (Sch / Likely – Jan'12 / Mar'17) completed.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
51b	Addl. Structural work for BRM	HSCL	47.11 -Inclusive of free issue of steel (nil)  47.11 -Inclusive of free issue of steel (nil)  Gross Cost – 50.09	47.43	24.11.12	May'13 (Nov'16)	<ul style="list-style-type: none"> <li>▪ 7300/7360 T structure fabricated &amp; 7256/7360 T erected.</li> <li>▪ Assembly of all 242 Crane Girders &amp; 190 columns has been completed.</li> <li>▪ Cum. 188 Columns &amp; 239 crane girders erected.</li> </ul>	
52	Reheating furnace for BRM	Fives Stein / Beekay	54.23 (Euro 2,130,000)  59.20 (Euro 2,130,000)  Gross Cost – 64.36	60.99	09.02.11	Nov'12 (Jan'17)	<ul style="list-style-type: none"> <li>▪ 1043/1048 T (99%) Mech. equip (Indg.) and all 62 T Mech. Equip (Imp) supplied &amp; 1105/1110 T (99%) erected.</li> <li>▪ All 195 T Elec. Equip (Indg.) ordered, 194/195 T (99%) supplied and 201/202 T (98%) erected.</li> <li>▪ All 190 T refractory (Imp.) and 1090 T refractory (Indg.) supplied &amp; all 1280 T erected.</li> <li>▪ <b>PAC issued on 11.03.17 w.e.f. 28.02.17.</b></li> <li>▪ <b>Commissioning of Furnace done during 24.06.19 – 29.06.19.</b></li> </ul>	
53	Hoisting and Handling facilities for BRM & URM o ISSUES: ❖ Progress of supply & erection of balance cranes is poor.	HEC	150.42 (nil)  159.40 (nil)  Gross Cost – 174.31	109.52	21.01.12	Jul'13 (URM cranes completed; Balance 2Maint. Hoist of BRM by Mar'2020)	<ul style="list-style-type: none"> <li>▪ 4634 T mech. eqpt. (Mfg) and all 464 T mech. eqpt (bought-out) ordered. 4634 T mech. eqpt supplied &amp; 4634 T erected.</li> <li>▪ All 1696 T elect eqpt. (bought out) ordered, 1696 T supplied &amp; 1688 erected.</li> <li>▪ Scope includes 39 nos. EOT cranes, 42 nos. hoists / maintenance trolleys. TILL date, <ul style="list-style-type: none"> <li>o 38 / 39 nos. EOT cranes have been made operational (22 in URM and 16 in BRM). 1 EOT crane of BRM de-scoped.</li> <li>o Erection of 40 / 42 nos. hoists has been completed (21 in URM and 19 in BRM).</li> </ul> </li> <li>▪ <b>PAC issued for 21 Cranes of URM and 12 cranes of BRM.</b></li> </ul>	
54	External water system for Mills & fire water pump house o ISSUES: ❖ RPN issued to M/s MBECL on 12.04.16.	McNally Bharat	114.30 (nil)  -18.30 (nil)  Gross Cost – -12.34	67.49	22.09.12	Dec'13 (Contract terminated on 20.05.16)  Mar'2020 (Water provided in all circuits of URM & BRM)	<ul style="list-style-type: none"> <li>▪ 84/107 BE drawings &amp; 290/413 DE drawings under approval category submitted.</li> <li>▪ 75449/87420 m<sup>3</sup> (86%) earthwork completed.</li> <li>▪ 16218/ 19785 m<sup>3</sup> (82%) concreting completed.</li> <li>▪ 250/520 T Building structure fabricated &amp; 240/520 T erected.</li> <li>▪ 620/830 T Technical structure fabricated &amp; 427/830 T erected.</li> <li>▪ 340/670 T (51%) Mech. equip ordered, 380/670 T (57%) Mech. equip supplied &amp; 230/670 T erected, 505/905 T (55%) Elec. equip ordered and 505/905 T (56%) Elec. equipment supplied &amp; 250/905 T erected.</li> <li>▪ Total 7 nos. of packages are envisaged – civil &amp; structural works (3 packages)/ mech. equipment erection / elect. Equipment erection / equipment procurement (includes 12 nos. POs) /other balance works.</li> <li>▪ All 7 packages finalized and orders placed; turnkey package of balance works finalized in Jul'17 and order placed on M/s TPL Work completed in 4 packages and under progress in balance packages.</li> </ul>	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
Following non-turnkey/ procurement contracts awarded (against RPN action) for balance works								
I	Balance Civil Works for completion of WTP-5 at BRM under external water system for Mills	Sudhanshu Brothers, Bhilai	2.23 (Nil)  2.23 (Nil)  Gross Cost – 2.78	1.27	24.06.16	Oct'16 (Jan'17)	<ul style="list-style-type: none"> <li>All 960 M3 Concreting completed</li> <li>WTP-5 completed.</li> </ul>	
II	Balance Civil Works and Structural works for completion of all WTPs in URM and BRM (except WTP-5 for BRM) and cable tunnel & pipe cum cable gallery at BRM	HSCL	7.20 (Nil)  7.20 (Nil)  Gross Cost – 8.54	6.23	12.08.16	Dec'16 (Apr'18)	<ul style="list-style-type: none"> <li>All 2650 m3 earthwork completed.</li> <li>All 2267 m3 concreting completed.</li> <li>All 200 T structural fabricated &amp; erected.</li> <li>WTP-7 cooling tower connection wall completed.</li> </ul>	
III	Erection, testing & commissioning of balance electrics for external water system for Mills	Shambhu Singh Engineers Pvt. Ltd.	0.82 (Nil)  0.82 (Nil)  Gross Cost – 0.92	0.55	20.07.16	Oct'16 (Aug'18)	<ul style="list-style-type: none"> <li>All 22 T structural fabricated &amp; erected.</li> <li>All 8070 RM cable tray laying completed.</li> <li>All 44000 RM cable laying completed.</li> <li>All work completed on 31.08.18.</li> </ul>	
IV	Erection, Testing & Commissioning of Balance Mechanical Plant & Equipment and piping Works	M/s GIMEX India, Bhilai,	1.03 (Nil)  1.03 (Nil)  Gross Cost –	0.32	08.09.16	Mar'17 (Apr'18)	<ul style="list-style-type: none"> <li>All 403 T Mechanical equipment erected.</li> <li>All 76 T Building Structure fabricated and erected.</li> <li>All 6310 T Technical structure erected.</li> </ul>	
V	Civil works of Backwash Filter Overhead tank of WTP-3 (URM)	M/s SPS Const. & Engg., Bhilai	1.57 (Nil)  1.57 (Nil)		03.11.16	Aug'17 (Sep'18)	<ul style="list-style-type: none"> <li>All 400 M3 Earth work completed.</li> <li>All 560 M3 concreting completed.</li> </ul>	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			Gross Cost – 1.91	0.90			
VI	Procurement packages	-	19.96 (nil) 19.96 (nil) Gross Cost – 22.55	17.81			<ul style="list-style-type: none"> <li>All 11 nos. Purchase order issued.</li> </ul>
VII	Balance Work of External WaterSupply to Mills & Fire Water Pump Houses	Tata Projects Ltd, Secunderabad	153.50 (nil) 153.50 (nil) Gross Cost-	149.77	14.09.17	Sep'18 (Mar'2020)	<ul style="list-style-type: none"> <li>61760/61800 M3 earthwork and 17379 M3 concreting completed.</li> <li>295/640 T structure fabricated &amp; 279/640 T erected.</li> <li>23035/24000 T Technical structure erected.</li> <li>555/560T Equipment supplied &amp; 520/560 T erected.</li> </ul>
55	New centralized Compressed Air Station (CAS) – 4	BOC	137.97 (Euro 720,000) 135.90 (Euro 720,000) Gross Cost – 155.76	149.68	21.4.08	Apr'10 (Sep'10)	<ul style="list-style-type: none"> <li>Completed</li> </ul>
56	MSDS-VII	Alstom	216.25 (Swiss Franc 2,732,400) 225.00 (Swiss Franc 2,732,400) Gross Cost – 247.56	205.04	25.09.08	Sep'10 (Dec'15)  Sep'12 (Dec'15)	<p><b>For original package</b></p> <ul style="list-style-type: none"> <li>All Electrical (2425 T) &amp; Mechanical (580 T) Equipment ordering completed.</li> <li>All 2425 T electrical equip supplied &amp; 2409/2425 T (99%) erected.</li> <li>All 580 T Mech. equip. supplied &amp; 579/580 T erected.</li> </ul> <p><b>For Change order</b></p> <ul style="list-style-type: none"> <li>All 850 m3 Earth work and all 640 m3 concreting completed.</li> <li>All 7.5 T Mech. Equip ordered, 7 T (83%) supplied &amp; 7 T (83%) erected.</li> <li>All 40.7 T Elec. Equip ordered and 39 T (96%) supplied &amp; 39 T (96%) erected.</li> <li>PAC issued on 19.03.15 w.e.f 03.02.15.</li> </ul>
57	Construction of Flyovers & road network o ISSUES: ❖ Overall progress is slow.	S P Singla	74.89 (nil) 77.60		14.07.10	July'12 RPN case	<ul style="list-style-type: none"> <li>127/344 (37%) piles cast.</li> <li>17510/26000 m3 (63%) concreting and 92210/260000 m3 (33%) earthwork completed.</li> <li>40575/65000 m2 (62%) WBM road and 3850/4450 (52%) RM road carpeting completed.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			(nil) Gross Cost – 77.60	30.63			<ul style="list-style-type: none"> <li>13/33.8 T (38%) electrical equip ordered, 13/33.8 T (38%) supplied and 7/33.9 (21%) T erected.</li> <li>10/28 (36%) T structural fabricated and 8/28 (29%) T erected.</li> </ul>
58	Inter plant fuel & industrial gas pipeline for all units	Tata Projects Ltd.	147.16 (nil) 151.90 (nil) Gross Cost – 160.29	154.56	22.01.11	Apr'12 (Aug'18, Gas provided to all units)	<ul style="list-style-type: none"> <li>PAC issued on 04.06.18 w.e.f. 19.05.18.</li> <li>All erection work completed by 31.08.18.</li> </ul>
59	Balance Railway Track Work for Plant Internal Yards o ISSUES: ❖ RPN issued to ISC Projects (P) Ltd. And contract terminated on 17.10.15 and balance work awarded to M/s Jhajharia & Arcon.	Jhajharia - Arcon	81.21 – Including free issue of steel  213.00 – Including free issue of steel  Gross Cost – 218.38	62.36	17.10.15	Jul'16 (Jun'19)	<p>M/s ISC projects:</p> <ul style="list-style-type: none"> <li>11761/13500 (83%) RM dismantling of existing track completed.</li> <li>147835/150000 m3 (98%) earthwork and 5458/5800 m3 (94%) concreting completed.</li> <li>61000/79000 m3 (77%) ballast supplied.</li> <li>15500/37300 (42%) RM railway track laid.</li> <li>RPN issued to ISC Projects (P) Ltd. And contract terminated on 17.10.15.</li> </ul> <p>M/s Jhajharia &amp; Arcon projects: Cumulative status:</p> <ul style="list-style-type: none"> <li>All 197148 M<sup>3</sup> earthwork completed.</li> <li>25915/ 26004 M<sup>3</sup> ballast supplied.</li> <li>10100/10764 TM Track dismantling completed.</li> <li>Track laying of 19950/ 20536 TM (96%) completed.</li> </ul>
60	Construction of railway siding and P-way linking of peripheral yard (095-A)	Jhajharia - Arcon	80.73 including free issue of steel (nil)  49.00 including free issue of steel (nil)  Gross Cost – 50.79	51.40	29.06.11	Feb'13 (Jun'19)	<ul style="list-style-type: none"> <li>All 1080000 m3 earthwork and 4150/6130 m3 (67%) concreting completed.</li> <li>All 75230 m3 ballast supplied.</li> <li>2330/8000 (27%) RM existing track dismantled.</li> <li>34000/41500 (82%) RM railway track laid.</li> <li>All the facility provided.</li> </ul>
61	Procurement of 13 nos. WDS-6 AD locomotives	DLW (under MOU)	27.53 + 75.87 (nil)		14.06.11	Dec'12 (Jan'13)	<ul style="list-style-type: none"> <li>Supply of all locos completed</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
			27.53 + 75.87 (nil)  Gross Cost – 30.27+83.33	30.27+79.04				
62	Construction of under bridge by box pushing below railway track	Ghai Entp (6.23)	6.52 (nil)  6.52 (nil)  Gross Cost – 7.95	6.92	07.02.12	Feb'13 <b>(Feb'14)</b>	<ul style="list-style-type: none"> <li>▪ All 2000 m3 earthwork competed</li> <li>▪ All 2000 m3 concreting completed</li> <li>▪ All 59 T strl. fabrication completed</li> <li>▪ All 64 RM Box pushing completed.</li> </ul>	
63	Installation of HT distributed sub stations	ABB	341.64 (nil)  383.30 (nil)  Gross Cost – 405.87	370.56	02.09.11	May'13 <b>(Mar'18)</b>	<ul style="list-style-type: none"> <li>▪ All 127142 m3 earthwork and 33560/33562 m3 concreting completed.</li> <li>▪ All 10442 T bldg. strs. fabricated and 10433/10442 T erected.</li> <li>▪ All 6116 T electrical equip ordered, all 6116 T supplied (Sch/ likely–Mar'13 / Octr'14) &amp; 6113/6116 T (99 %) erected.</li> <li>▪ All 128 T Mech. Equip ordered, supplied &amp; 125/128 T (97%) erected.</li> <li>▪ <b>PAC issued on 18.01.18 w.e.f. 27.12.17.</b></li> <li>▪ <b>PAC (Part facility) for HT SS No. 43 &amp; 48 issued on 26.12.14 w.e.f. 01.10.14.</b></li> <li>▪ <b>PAC (Part facility) for HT SS No. 45, 47, 56,57, 60, 64, 68 &amp; 70 issued on 18.03.16 w.e.f. 20.01.16.</b></li> <li>▪ <b>Preliminary Acceptance Certificate for Part Facility including change order of the project issued on 31.03.17 except Fire detection &amp; alarm system and lift.</b></li> <li>▪ <b>Part Commissioning certificate for HTSS 43, 56, 57, 64, 68 &amp; 70 issued on 11.08.18 w.e.f. 30.03.18.</b></li> <li>▪ <b>Commissioning certificate issued on 07.10.19 w.e.f. 19.08.19.</b></li> </ul>	
64	Augmentation of makeup water and drinking water system o ISSUES: ❖ RPN issued to M/s Vishwa Infra on 05.03.16,	Vishwa Infrastructure & Service and V Bogeshwar Rao	90.12 (nil)  19.00 (nil)  Gross Cost – 24.77	53.54	01.10.11	Dec'12 (Contract terminated on 12.04.16)  (Mar'2020)	<ul style="list-style-type: none"> <li>▪ All 44498 m3 earthwork and 9659/15000 m3 (64%) concreting completed.</li> <li>▪ 4622/6000 T (77%) Technology structures fabricated and 3283/6000 T (54%) erected.</li> <li>▪ 400/550 T (73 %) mech. eqpt. ordered. 400/550T (73 %) supplied &amp; 15/550 T erected.</li> <li>▪ 170/250 T (69%) elec. eqpt. Ordered, 168/175 T (86%) supplied &amp; 5/250 T erected.</li> <li>• In 4½ years, around 40/60 km pipeline was supplied and only around 20 km was laid</li> <li>• Work of Drinking Water Treatment Plant is not started</li> <li>• Make-up Water Pumphouse is partly constructed</li> <li>• Intake Well &amp; Drinking Water Pumphouse has been constructed.</li> <li>• Balance works being awarded; total 8 nos. packages envisaged</li> </ul>	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
							<ul style="list-style-type: none"> <li>Ordering of all 8 packages has been placed. Work completed on 6 packages and under progress in balance packages.</li> </ul>	
Following non-turnkey/ procurement contracts awarded (against RPN action) for balance works								
I	Balance Outdoor Piping works	I A DHAS, Bhilai	1.88 (nil)  1.88 (nil)  Gross Cost – 1.88	1.86	24.06.16	Nov'16 <b>(Apr'18)</b>	<ul style="list-style-type: none"> <li>All 8760 T Technical Structure Erection completed.</li> </ul>	
II	Civil works of Balance Outdoor Piping works (including cable gallery works)	I A DHAS, Bhilai	4.80 (nil) 4.80 (nil)  Gross Cost – 5.80	1.78	24.06.16	Nov'16 <b>(Apr'18)</b>	<ul style="list-style-type: none"> <li>912 M<sup>3</sup> Concreting completed.</li> </ul>	
III	Structural works of the balance outdoor piping works (including cable gallery works)	BCCI, Bhilai	3.18 (nil) 3.18 (nil)  Gross Cost – 7.48	4.20	25.06.16	Nov'16 <b>(Apr'18)</b>	<ul style="list-style-type: none"> <li>All 1000 T building structure erected.</li> <li>Fabrication and erection of trestles and girders completed. Fabrication of staircases and platforms is in progress.</li> <li>Cable gallery erection in IWPH &amp; DWPH area, completed.</li> <li>Fabrication and erection of trestles and girders completed.</li> </ul>	
IV	Balance Civil Works Of IWPH, DWPH, MWPH and ECRs	M/s. Five star Construction co., Bhilai	4.30 (nil) 4.30 (nil)  Gross Cost – 5.47	2.43	03.08.16	Jan'17 (Mar'2020)	<ul style="list-style-type: none"> <li>6200/7000 m3 earthwork completed.</li> <li>970/2935 m3 concreting completed.</li> </ul>	
V	Erection, Testing & Commissioning of Balance Mechanical plant & Equipment and piping works of Intake Well Pump House & Drinking Water Pump House	M/s M K Ansari, Bhilai,	0.10 (nil) 0.10 (nil)  Gross Cost –	-	12.09.16	Dec'16 <b>(Oct'17)</b>	<ul style="list-style-type: none"> <li>Alignment of all pumps completed. Foundation bolt grouted for all 4 pumps.</li> <li>Erection of valves completed in IWPH. Strainer &amp; sluice gate erection in progress in DWPH.</li> </ul>	



Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status	BSP
			0.13					
VI	Erection, testing & commissioning of electrics for Intake Well Pump House & Drinking Water Pump House	M/s R N Electricals, Bhilai,	0.29 (nil)  0.29 (nil)  Gross Cost – 0.31	0.12	16.09.16	Dec'16 (Oct'17)	<ul style="list-style-type: none"> <li>Total HT cable laying: 1800 RM, LT cable laying: 2000 RM, cable tray: 2200RM, Structure erection:-5 MT.</li> <li>No load trail of two HT motor in DWPH &amp; one LT motor in IWPH completed. Structure erection-1 MT.</li> </ul>	
VII	Procurement packages	-	2.44 (nil)  2.44 (nil)  Gross Cost – 3.03	2.20	-	Dec'16 (Mar'17)	<ul style="list-style-type: none"> <li>All 4 Purchase order issued &amp; supplied.</li> </ul>	
VIII	Balance Work of Makeup Water and Drinking Water System	M/s Voltas	87.23 (nil)  87.23 (nil)  Gross Cost – 93.24	71.62	23.06.17	Jun'18 (Mar'2020)	<ul style="list-style-type: none"> <li>38500/40000 M3 earthwork completed.</li> <li>4800/9125 m3 concreting completed.</li> <li>114/110 T Structure fabricated &amp; 104/110 T erected.</li> <li>2510/2950 T Equipment supplied &amp; 2257/3010 T erected.</li> </ul>	
65	Gas Mixing and Booster station	NICCO Corpn	13.62 (nil)  13.30 (nil)  Gross Cost – 14.37	14.11	06.01.12	Jan'13 (Jan'16)	<ul style="list-style-type: none"> <li>All 3300 cum earthwork and 950 m3 concreting completed.</li> <li>All 95 T tech strs. erected</li> <li>All 270 T Mech. Equip supplied &amp; erected.</li> <li>All 20 T Elect Equip supplied and erected.</li> </ul>	
66	Propane Storage & handling system	Oil & Gas Plant Engineers	9.18 (nil)  8.90 (nil)		19.04.11	Mar'12 (Jun'19)	<ul style="list-style-type: none"> <li>All 5000 m<sup>3</sup> earthwork completed.</li> <li>All 1220 T concreting completed.</li> <li>All 300 T Mechanical equipment supplied &amp; erected.</li> <li>All 50 T Electrical equipment supplied &amp; erected.</li> <li>All 50 building structure fabricated &amp; erected.</li> <li><b>PAC issued on 01.05.18 w.e.f. 09.04.18.</b></li> </ul>	

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
			Gross Cost – 9.56	8.53			<ul style="list-style-type: none"> <li>Performance guarantee certificate issued on 21.08.19.</li> </ul>
67	Energy monitoring system	Masibus Automation & Instrumentation Ltd,	3.18 (nil) 3.10 (nil) Gross Cost – 3.42	3.21	30.05.12	Jun'14 (Jun'19)	<ul style="list-style-type: none"> <li>BE completed &amp; All 22 DE drgs. under approval category submitted.</li> <li>All 4.9T Equipment ordered and All 4.9 T Equipment Supplied.</li> <li>4.8/4.9 T (98%) eqpt. erected</li> <li>Part PAC issued on 31.12.16 w.e.f. 20.12.16.</li> <li>Part commissioning certificate issued on 14.05.18 w.e.f. 01.03.18</li> </ul>
68	Installation of Interplant Telecommunication system (Server Based) through Fiber Optical Cable Network	Equant Technology services	10.44 (nil) 11.90 (nil) Gross Cost – 12.16	8.98	12.07.12	Jan'14 (Jun'19)	<ul style="list-style-type: none"> <li>PAC issued on 03.05.16.</li> <li>PG test completed 07.10.2017.</li> <li>Commissioning certificate issued on 16.01.17 w.e.f. 28.12.16.</li> <li>Phase-2 PAC issued on 19.11.18 w.e.f. 28.08.18.</li> <li>Commissioning certificate issued on 12.09.19 w.e.f. 11.08.19.</li> </ul>
69	Installation of Buffer Vessels and Pressure Reducing & Metering Station for Oxygen, Nitrogen & Argon (Pkg. 075B)	Blue Star Ltd / Bharat Heavy Plate & Vessels Limited	55.11 (nil) 49.90 (nil) Gross Cost – 54.58	53.77	07.07.12	Jul'13 (Sep'17)	<ul style="list-style-type: none"> <li>All 14050 m<sup>3</sup> earthwork completed.</li> <li>All 1673 m<sup>3</sup> concreting completed.</li> <li>All 1860 T mech. Eqpt. supplied and erected.</li> <li>All 2.2 T elect. Equip. supplied &amp; erected.</li> <li>Nitrogen blowing started on 29.09.16.</li> <li>PAC issued on 30.01.18 w.e.f. 06.12.17</li> </ul>
70	2 x 1250 TPD Oxygen Plant on BOO Basis	Praxair	(NPV-1065.18 Cr.)	-	18.03.11	Mar'13 (Apr'16)	<ul style="list-style-type: none"> <li>1<sup>st</sup> unit started on 15.3.14.</li> <li>2<sup>nd</sup> unit is in operation since 24.11.18.</li> </ul>
71	Drop Test Facility for Universal Rail Mill	M/s Pragma Equipments Pvt. Ltd., Indore	0.98 (nil) 0.98 (nil) Gross Cost – 0.98	0.66	13.09.13	Jun'14 (Feb'2020)	<ul style="list-style-type: none"> <li>All 8 BE (A) &amp; all 2 DE (A) drawing under approval category submitted</li> <li>All 33 T mech. Eqpt. Supplied&amp;erected.</li> <li>1.9/2 T elect. Eqpt. Supplied&amp; 1.9/2 T erected.</li> </ul>
72	Air Drying Plant for Universal Rail Mill and Air Drying and Filtration	M/s Mellcon Engineers Pvt.	1.34 (nil)		31.03.15	Nov'15 (Mar'2020)	<ul style="list-style-type: none"> <li>RPN issued to M/s Summits Hygronics Pvt Ltd. Coimbatore on 14.10.13.</li> <li>All 5 BE (A) drawing &amp; 23/31 DE (A) under approval category submitted.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
	Plant for BRM	Ltd, New Delhi	1.34 (nil)  Gross Cost – 1.43	1.29			<ul style="list-style-type: none"> <li>All 25.4 T Mechanical equipment supplied &amp; 25/25.4 T erected.</li> <li>0.5/1.2 T Electrical equipment supplied &amp; 0.5/1.2 T erected.</li> </ul>
73	Roll & Repair Shop Equipment for Universal Rail Mill	M/s MACO Corporation, Kolkata	23.90 (nil)  23.20 (nil)  Gross Cost – 25.01	24.73	26.09.13	Sep'14 <b>(Mar'18)</b>	<ul style="list-style-type: none"> <li>All 14 BE (A) drawing &amp; all 13 DE (A) under approval category submitted</li> <li>All 466 T mech. Eqpt supplied &amp; erected.</li> <li>All 30 T elect. Eqpt supplied &amp; erected.</li> <li><b>PAC issued on 07.02.18 w.e.f. 06.11.17.</b></li> <li><b>Commissioning Certificate issued on 07.05.18 w.e.f. 14.03.18.</b></li> </ul>
74	Illumination, Earthing & lighting protection system for SMS-3	M/s ETA Engg. Ltd., Kolkata	14.80 (nil)  15.20 (nil)  Gross Cost – 16.00	9.44	26.11.14	Feb'16 (Mar'2020)	<ul style="list-style-type: none"> <li>All 8 BE (A) drawing &amp; ALL 13 DE (A) under approval category submitted.</li> <li>320/350 T elect. Eqpt. Ordered, 320/350 T supplied &amp; 316.5/350T erected.</li> </ul>
75	Installation of Rail & Road Weigh Bridges	M/s ACME Automation	1.59 (nil)  1.60 (nil)  Gross Cost – 1.60	1.48	19.11.14	Nov'15 <b>(Nov'16)</b>	<ul style="list-style-type: none"> <li>All 9 BE (A) drawing &amp; all 7 DE (A) under approval category submitted</li> <li>All 178 M<sup>3</sup> earth work &amp; all 523 M<sup>3</sup> concreting completed</li> <li>All 60 T elect Eqpt supplied &amp; erected.</li> <li>Preliminary Acceptance Certificate issued on 15.06.18 w.e.f. 12.01.18.</li> <li><b>Commissioning certificate issued on 23.07.18 w.e.f. 27.03.18.</b></li> </ul>
76	Hot metal Rail Weigh Bridges	M/s Sartorius Mechatronics	1.80 (nil)  1.70 (nil)  Gross Cost – 1.86	1.67	14.05.14	May'15 <b>(Apr'18)</b>	<ul style="list-style-type: none"> <li>All 2 BE (A) drawing &amp; all 13 DE (A) under approval category submitted</li> <li>All 54 T Eqpt supplied &amp; erected.</li> <li>All 1600 m3 Earthwork &amp; all 660 m3 concreting completed.</li> <li><b>PAC issued on 02.05.18 w.e.f. 23.02.18.</b></li> </ul>
77	Design, Supply, Erection, Testing & Commissioning of Railway	M/s Bright Power	18.83		06.07.15	Aug'17 No response	<ul style="list-style-type: none"> <li>All 445 T Traction mast, 118 nos. (as per drawings) regulated eqpt., 47 Km/54 Km over head eqpt. and all 2 Km contact wire supplied.</li> </ul>

Sl. No.	Package	Party	Cost in Rs.Cr. Net of CENVAT (FE)	Expenditure upto Feb'2020 (Rs. Crore)	Date of Contract	Schedule (Likely/Actual)	Status BSP
	Electrification work of existing/proposed Railway Tracks Switching Post (SSP) including modification of existing 25KV AC, 50 HZ Single Phase Over-Head Equipment (OHE)	Projects Pvt. Ltd.	(nil) 18.83 (nil) Gross Cost – 21.82	11.69		from Party.	<ul style="list-style-type: none"> <li>11A1-all 1325nos. 25 KV composite bracket insulators supplied. 11A2- all 1325 nos. 25 KV composite stay insulators supplied. 4A1-all1325 nos. single bracketassembly (conventional) without insulator supply is balance.</li> <li>2A-Concrete for foundation &amp; plinth hard soil &amp; rock Scope 828 M3.</li> <li>550/2520 M3Supply of OHE mast, cables, insulators etc. are completed.</li> <li>Mast erection work, bracket fixing, done in wagon tippler-5,6, MOR &amp; MGR area is inprogress.</li> <li>The party is not responding, letter sent on 17.08.19.Discussedwith consultant RITES and Projects-Commercial for further processing.</li> <li>Party not responding. Conciliation failed. Party requested for Arbitration. After taking Management approval, letter send to party for finalizing arbitrators.</li> </ul>
78	Installation of fire fighting system for transformer installed in TDS-1	M/s Vendere sales service Pvt. Ltd.	0.45 (nil) 0.45 (nil) Gross Cost –	0.40	29.10.14	Apr'15 (Dec'16)	<ul style="list-style-type: none"> <li>Erection of Fire fighting panel &amp; Cable laying completed.</li> <li>All 3.9 T equipment erection completed on 13.12.16. Site work completed on 13.12.16.</li> <li><b>PAC &amp; commissioning certificate issued by BSP on 06.02.17.</b></li> </ul>
79	Quality Assurance and Quality Control Facility	M/s Sterling and Wilson Pvt. Ltd., Mumbai	72.59 (nil) 72.59 (nil) Gross Cost – 84.44	0.42	17.05.19	Nov'20	<ul style="list-style-type: none"> <li>Kick-off meeting held on 10.06.19 by GM I/c Projects.</li> <li>Area survey work under progress. .</li> <li>Civil foundation works of BF-8, SMS-III and RMP-III Laboratory buildings have commenced.</li> <li>Removal of over burden soil at Rolling mill area is in progress.</li> </ul>

**The Overall Physical Progress of BSP Expansion till Feb'20:**

Discipline	Unit	Total Quantity #	Work Scheduled	Work completed till date	% complete of Scheduled
Design & Engg	Nos.	56,000	56,000	58,915	105.2 *
Piling	Nos.	21,938	21,938	21,735	99.1
Civil Work	cum	15,63,000	15,63,082	13,71,984	87.8
Structural Fabrication	MT	3,52,600	3,52,600	3,39,210	96.2
Structural Erection	MT	3,52,600	3,52,600	3,32,311	94.2
Equipment supply	MT	2,15,750	2,15,750	2,15,728	100.0
Equipment erection	MT	2,15,750	2,15,750	2,10,381	97.5

\* Actual progress includes the additional drawings submission (as per MECON's report)

# Total Qty. (Scope) has been reconciled in Apr'19 based on inputs from all Zones.

## DSP – Expansion of Durgapur Steel Plant

1. **'In-Principle' Approval** : Jul'07
2. **Cost** (Rs. in crore):
  - a) Indicative cost (Jul'07) : Rs 5549 (Net of Cenvat benefit of Rs 677 crore)  
(FE – 990.2)
  - b) Revised estimates (Jul'08) : Rs 8004 (Net of Cenvat benefit of Rs 780 crore)  
(Gross Margin - 2479 Rs. Crore)
  - c) Approved Cost (Jun'09) : Rs 2875 (Net of Cenvat benefit of Rs 267 crore)  
(inclusive of EDC, IDC & Contingency of Rs. 447 Cr.)  
(Gross Margin - Rs 833. crore)
  - d) Revised Cost Estimate (Dec'19) : Rs 3168.71 (Net of Cenvat benefit of Rs 197.4 crore)  
(inclusive of EDC, IDC & Contingency of Rs. 504.03 Cr.)  
(Gross Margin - Rs 840. crore)
  - e) Cost of approved packages : Rs 2664.69 (Net of Cenvat benefit of Rs 197 crore)  
(FE – 446.53)
  - f) **Expenditure (Till Feb'20) : Rs.3153.51 Crore**
3. **Approved Schedule** : Dec'12  
Actual (Hot trial taken) : Jun'15

### 4. **Production (Mtpa)**

Item	Installed Capacity	2006-07 (Base Case)	After Expansion (Current Phase)	2016-17	2017-18	2018-19	ABP 2019-20
Hot Metal	2.088	2.064	2.45	2.318	2.282	2.515	2.64
Crude Steel	1.80	1.869	2.20	2.042	2.042	2.219	2.4
Saleable Steel	1.586	1.701	2.12	1.932	1.952	2.125	2.315

### 5. **Techno-economic parameters**

Item	2006-07	After Expansion
Coke/ Fuel Rate (Kg/thm)	525	465
BF Productivity (t/m <sup>3</sup> /d)	1.555	1.77
Specific energy (Gcal/tcs)	7.07	7.06
Manpower Productivity (tcs man/year)	196	246

### 6. **Facilities in Phase-I Expansion**

- New Medium Structural Mill (1.0 Mtpa)
- New Bloom cum Round Caster (0.75 Mtpa)
- New Ladle Furnace (125t)
- New Dolomite Plant (300tpd)
- Re-building of COB-2 with Coke Sorting Plant
- Revamping of By-Product Plant
- New Slag Yard for SMS
- Upgradation of Raw Material / Coal Handling Facilities
- Matching Infrastructure & Services facilities

### 7. **Status**

- After review of investment plan during Jul'08, SAIL board decided to defer Wheel & Axle packages (Wheel forging & Rolling Line; Axle Plant: Radial Forging Machine and CNC Machine for W&A machining).
- After overall review of SAIL's expansion plans in June'09, major facilities that have been deferred includes New Sinter plant (300 m<sup>2</sup>), Reconstruction of BF-1 (1681 m<sup>3</sup>), Upgradation of existing Billet Caster, New Wire Rod Mill (0.50 Mtpa) and New Merchant Mill (0.7 Mtpa).

## Package-wise Details for Expansion of Durgapur Steel Plant

### Packages Under Implementation:

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status	DSP
<b>RMHP</b>								
1a	Debottlenecking of RMHP	M/s Tecpro System M/s Haldia Nirman Projects	92.58 99.19	30.64	01.04.11	<b>Sep'12 (May'14) Contract terminated with M/s Tecpro on 23.05.14.</b>	<ul style="list-style-type: none"> <li>▪ RPN issued to M/s TECPRO on 26.06.13.</li> <li>▪ Contract with M/s Tecpro System was terminated on 23.5.14</li> </ul>	
1b	Balance Debottlenecking jobs of RMHP	M/s Bengal Tools	78.84 86.85	86.81	15.07.14	<b>Sep'15 (Mar'16)</b>	<ul style="list-style-type: none"> <li>▪ Order placed on M/s Bengal Tools Ltd at a firm up cost of Rs.78.84 Cr. (net of Cenvat) on 23.05.14 on Risk Purchase basis.</li> <li>▪ Preliminary Acceptance Certificate has been issued on 25.3.2016.</li> <li>▪ Commissioning Certificate has been issued on 30.05.16</li> <li>▪ Performance Guarantee test for the facility has been completed in Feb'17. 2<sup>nd</sup> phase of PG Test has been completed on 22.07.17.</li> <li>▪ PG certificate has been issued on 16.08.17 (w.e.f 22.7.17)</li> <li>▪ <b>FAC issued on 31.01.18.</b></li> </ul>	
2	Barrel type Reclaimer (01 no.) – RMHP Rated Capacity – 900/hr.	M/s Elecon Engineering Company Ltd.	14.46 16.43	15.23	27.11.08	<b>Feb'10 (Jan'12)</b>	<ul style="list-style-type: none"> <li>▪ Commissioning certificate has been issued w.e.f 06.01.2012.</li> <li>▪ Performance Guarantee (PG) test conducted successfully from 15.01.13 to 14.02.13 in five spells.</li> <li>▪ <b>Final Acceptance Certificate has been issued on 23.10.2013.</b></li> </ul>	
3	Pusher car (02 nos.) – RMHP Rated Capacity- 58 wagons / 7000t	M/s Elecon Engineering Company Ltd.	21.78 23.80	22.25	30.09.08	<b>May'10 (Sep'14)</b>	<ul style="list-style-type: none"> <li>• Pusher Car-1: Commissioning certificate has been issued on 15.09.14.</li> <li>• Pusher Car-2: Commissioning certificate has been issued on 20.06.14.</li> <li>• PG certificate for Pusher Car-1 for RMHP has been issued w.e.f 06.04.16</li> <li>• <b>Final Acceptance Certificate for both Pusher Cars has been issued w.e.f 31.5.16.</b></li> </ul>	
<b>COB-2 &amp; BPP</b>								
4	Main Works Package for COB-2 <b>(0.478 Mtpa; 78 Ovens Battery, 4.45 m tall; 96 ovens pushing / day, UV 23.8 m3)</b>	M/S GAEL-MICCO / A. K. Dutta	14.91 16.18	15.43	09.06.10	<b>Nov'12 (Nov'13)</b>	<ul style="list-style-type: none"> <li>▪ PAC has been issued on 28.11.13.</li> <li>▪ Commissioning Certificate issued on 3.12.13.</li> </ul> <p>Oven Pushing in -  <b>2015-16 – 33,015 nos.</b>  <b>2016-17 – 32,629 nos.</b>  <b>2017-18 – 30,660 nos.</b>  <b>2018-19 – 29,966 nos.</b>  <b>2019-20 (upto Dec'19) –21320 nos.</b></p>	
5	Revamping of Coke Sorting and Coal Handling Plant	M/S Bengal Tools Ltd	11.41 12.36	12.22	09.06.10	<b>Jun'12 (May'14)</b>	<ul style="list-style-type: none"> <li>▪ Job Completed.</li> <li>▪ <b>Final Acceptance Certificate has been issued on 13.04.2015</b></li> </ul>	
6	Debottlenecking of Coal Handling Plant	M/s Shriram EPC	64.24 67.99	59.25	11.12.10	<b>Oct'12 (Aug'16)</b>	<ul style="list-style-type: none"> <li>▪ Preliminary Acceptance Certificate (PAC) has been issued w.e.f 31.08.16</li> <li>▪ All 15 nos. Silos are in into operation.</li> <li>▪ Coal has been transported from new conveyors to new Silos through Tippler-2 route.</li> <li>▪ <b>FAC for balance job of de-bottle necking of RMHP issued on 31.01.18.</b></li> </ul>	
7	Coke Pusher Cars	M/s HEC	19.67 21.29	21.13	10.12.10	<b>Feb'12 (Dec'14)</b>	<ul style="list-style-type: none"> <li>▪ PAC for Pusher Car nos. 1 &amp; 2 has been issued on 1.12.13 &amp; 15.12.14 respectively.</li> <li>▪ Commissioning Certificate has been issued w.e.f 17.08.15.</li> <li>▪ <b>Final Acceptance Certificate has been issued w.e.f 02.07.16.</b></li> </ul>	

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status	DSP
8	Oven Machines							
a	Charging cars (2 nos.)	M/s BEC	12.26 13.3	13.01	28.03.11	Jul'12 (Nov'13)	<ul style="list-style-type: none"> <li>Preliminary Acceptance Certificate has been issued w.e.f 16.10.13.</li> <li>Commissioning Certificate has been issued w.e.f 10.12.13.</li> <li><b>Final Acceptance certificate (FAC) for both Charging Cars has been issued w.e.f 27.09.16.</b></li> </ul>	
b	Electric Locos (2 nos.)	M/s BEC	2.98 3.28	3.24	28.03.11	Jul'12 (Nov'13)	<ul style="list-style-type: none"> <li>Preliminary Acceptance Certificate has been issued w.e.f 21.11.13.</li> <li>Commissioning Certificate has been issued w.e.f 10.12.13</li> <li><b>Final Acceptance certificate (FAC) for 2 nos. Electric Locos has been issued on 27.09.16</b></li> </ul>	
c	Guide Cars (2 nos.)	M/s Beekay Engg / Beijing Shoungang	6.84 (5.9) 7.45	9.64	28.03.11	Jul'12 (Dec'14)	<ul style="list-style-type: none"> <li>PAC for Guide Car nos. 1 &amp; 2 has been issued on 23.12.14 &amp; 27.11.13 respectively.</li> <li>Commissioning Certificate has been issued w.e.f 06.01.15.</li> <li><b>Final Acceptance Certificate has been issued on 6.12.16.</b></li> </ul>	
9	Refractories, silica bricks & mortar – COB-2	M/s Wugang Refractory Co Ltd., China	17.86 20.82	20.52	27.11.09	Jul'10 (Jul'11)	<ul style="list-style-type: none"> <li>Manufacturing completed. (Sch – July'10, Actual –Jun'11)</li> <li>Supply Completed in Jul'11</li> </ul>	
10	Other Package of COB- 2	Various	Various				<ul style="list-style-type: none"> <li>Order placed for all 62 packages.</li> </ul>	
11	Benzol Plant (1.7t / hr.)	M/s Bengal Tools	47.64 52.64	55.51	28.12.10	Dec'12 (Jul'15)	<ul style="list-style-type: none"> <li>PAC has been issued w.e.f 19.03.15.</li> <li>Commissioning Certificate has been issued w.e.f 26.08.15.</li> <li>Performance Guarantee Certificate has been issued w.e.f 19.1.16.</li> <li><b>Final Acceptance Certificate for the facility has been issued on 14.7.16</b></li> </ul>	
<b>SMS Area</b>								
12	EOT Cranes for New Slag Yard (150t - 2 Nos., 15t – 2 nos.)	M/s HEC Ltd.	36.50 39.51	35.66	23.06.10	Aug'11 (May'16)	<ul style="list-style-type: none"> <li>PAC has been issued on 28.03.16.</li> <li><b>Commissioning Certificate for 3 Nos. EOT Crane issued on 19.05.18.</b></li> </ul>	
13	Structural works of New Slag yard	M/s R K Engg	10.85	8.27	29.06.10	Feb'12 (May'14)	<ul style="list-style-type: none"> <li>PAC has been issued on 29.4.2016.</li> <li>Commissioning certificate issued for structural works package on 16.9.16.</li> <li><b>Completion certificate for structural works package has been issued.</b></li> </ul>	
14	Civil works of New Slag yard	M/s M R Enterprise	14.80	13.64	02.07.10	Jan'12 (Nov'13)	<ul style="list-style-type: none"> <li>Piling completed. (Sch-Jan'11, Act - Feb'11)</li> <li>RCC - Completed (Sch-Dec'11, Actual –Jul'13)</li> <li>PAC for the package has been issued w.e.f 16.1.2016.</li> <li><b>Completion Certificate has been issued w.e.f 23.7.2016</b></li> </ul>	
15	Slag Pot & Slag Pot transfer Cars of New Slag Yard	M/s AMT International	14.23 15.33	13.73	28.06.10	Sep'11 (Sep'13)	<ul style="list-style-type: none"> <li>Trial run of slag pot transfer car-1 over 90° crossing with twin pots has been taken.</li> <li>PAC has been issued w.e.f 17.1.2016.</li> <li>Commissioning certificate issued on 18.4.17</li> </ul>	
16	New Ladle Furnace no. 3 Heat size -125t (nominal, 110t (min.), 130t (max.) No. of heats - 24 (avg.), 28 (max.) / day (24x320) = 7680heats/yr	M/s Eastern Metec Pvt. Ltd/ Badische Stahl Engineering GMBH	36.31 (6.76) 38.98	34.28	17.03.11	Jul'12 (Dec'13)	<ul style="list-style-type: none"> <li>25MVA Transformer charged on 22.11.13</li> <li>Coke arcing done on 22.11.13. Liquid Steel Arcing done on 14.12.13.</li> <li>PAC for facility has been issued w.e.f 15.1.15.</li> <li>Commissioning Certificate has been issued w.e.f 05.09.15</li> <li>PG test conducted from 27-31.07.17.</li> </ul>	
17	New Dolomite plant (300 tpd x 330 days) 0.099 Mtpa	M/s Qualical / Manishri Refractories	48.74 (8.76) 51.17	46.48	19.10.10	Jun'12 (Jan'15)	<ul style="list-style-type: none"> <li>PAC for the facility has been issued w.e.f 19.11.14.</li> <li>Commissioning Certificate has been issued w.e.f 28.8.2015.</li> <li>PG Test of New Dolomite Plant started on 02.08.17 and completed on 06.08.17.</li> </ul>	
18	Belt Conveyor system for transportation of Dolomite	M/s Tecpro Systems	11.09 11.54	7.96	04.05.11	Jun'12 Contract Terminated	<ul style="list-style-type: none"> <li><b>Risk Purchase Notice (RPN) issued to M/s Tecpro on 04.01.14.</b> Final TS received from MECON.</li> <li>NIT issued on 13.01.14. Offers received from M/s Indiana Conveyors, M/s Bengal</li> </ul>	

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status DSP
						on 04.01.14	Tools, M/s Techno Fab. & M/s Graduate Agro & Mechanical Engineers. ▪ <b>Contract with M/s Tecpro Systems terminated and balance work awarded to M/s Bengal Tools.</b>
18a	Balance Belt Conveyor system for transportation of Dolomite	M/s Bengal Tools Ltd.	4.98 5.74	5.06	13.03.14	Aug'14 (Jan'15)	▪ PAC for belt conveyor has been issued w.e.f 19.11.14. ▪ Commissioning certificate has been issued effective from 09.03.2015. ▪ PG test conducted for set of raw Dolo conveyors from 04.08.17 for 10 days.
<b>Bloom Cum Round Caster</b>							
19	Installation of 1x4 Strand Bloom-cum-Round Caster (Main Package) Design Production Capacity - 0.75mtpa No. of BOFs-3 (3/3 operation) Heat size - 125t (nom.), 150t (max) 24 heats / day Products: <b>Blooms - 350x240; 0.7 Mtpa (for New MSM) Rounds - 340 mm dia; 0.05 Mtpa (for WAP)</b>	M/s Danieli & C / GACL - MICCO (Danieli Italy-85.81, Danieli India - 114.17, GACL-MICCO- (19.05)	247.76 (85.81) 255.33	235.37	05.05.10	Jul'12 (Feb'15)	▪ First Heat taken from Bloom cum Round Caster on 12.2.15 (Size: 350 * 240 mm bloom) ▪ PAC issued on 04.04.15 ▪ Commissioning test conducted between 14.9.15 to 17.9.15. Total 57 heats in 7 sequences were cast. Total weight / length of bloom cast = 7040t/10895m. ▪ Commissioning Certificate has been issued on 5.10.15 w.e.f 17.09.15 ▪ Round Casting started on 8.11.2015. ▪ Performance Guarantee Test for Rounds completed on 08.09.2017. ▪ PG Test of Bloom cum Round caster for round section held from 05.09.17 to 08.09.17. ▪ PG Test for Blooms 350*240 held from 18.02.18 to 20.02.18. ▪ <b>PG certificate issued on 5.4.18 (w.e.f. 4.4.18).</b> <i>Production-</i> <b>2015-16 - 80,812 t 2016-17 -2,26,946 t 2017-18 - 3,02,821 t 2018-19 - 4,50,400 t 2019-20 (up to Feb'20) - 4,05,397t</b>
20	Main Cranes for Bloom-cum-Round Caster area (75/15t -1 No., 20t - 1 No., 25t - 2 No.)	M/s AMT International	19.69 21.63	19.91	27.08.10	Apr'12 (Apr'15)	▪ All four cranes are in operation. ▪ PAC has been issued on 15.07.2015. ▪ Commissioning Certificate has been issued on 30.6.18 w.e.f 9.6.16
21	Structural works for Bloom-cum-Round Caster area	M/s Bridge & Roof	45.74 (including free issue of steel)	21.04	31.08.10	Apr'12 (May'14)	▪ PAC for the package has been issued w.e.f 3.12.14 ▪ <b>FAC has been issued w.e.f 28.8.15.</b>
22a	Civil works for Bloom-cum-Round Caster area	M/s Jain Infra Ltd.	40.16 (including free issue of steel of 8.66)	13.50	10.09.10	May'12 (Contract terminated with M/s JIL on 20.10.12)	▪ Contract <b>terminated</b> with M/s JIL on 20.10.12. (Value of job executed-13.02 Cr + Cost of free issue of steel 5.06 Cr i.e. total 18.08 Cr.) ▪ Contract placed on M/s Bridge & Roof for remaining work on 20.10.12 on risk purchase basis
22b	Balance Civil works for Bloom-cum-Round Caster area	Bridge & Roof	49.31 (including free issue of steel of 16.56)	37.52	20.10.12	Oct'13 (Nov'14)	▪ Civil job Commenced on 25.10.12 after retendering. ▪ Preliminary Acceptance Certificate for the package has been issued w.e.f 31.10.14 ▪ <b>Final Acceptance Certificate has been issued on 11.9.15 (w.e.f 28.8.15).</b>
23	External Water Supply System for BRC & LF-3	M/s Gillanders Arbuthnot & Co. Ltd. (Unit of M/s MICCO)	34.46 36.68	32.89	15.07.11	Jul'12 (Dec'15)	▪ Water supply system for LF-3 & BRC is in operation. ▪ PAC for LF-3 system & BRC has been issued w.e.f 10.7.2015 & 31.10.2015 respectively. ▪ PAT for Lime Spray Unit-1, Spray Water System & Return Water System done from 08.12.15 to 10.12.15. ▪ Commissioning Certificate for the facility has been issued w.e.f 11.5.2016
<b>Medium Structural Mill</b>							



Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status DSP
24	Installation of New Medium Structural Mill –(Main Package) - [1 Mtpa, 3333 tpd] Angle (90-200); Channel (100-300); Beam (100-300); Round (60-120), RCS (60-120)]. NPB 200, Angle 200x16/20/24, MC 300, NPB 300, WPB 160 & MB 300 can be rolled from bloom size 350x240 produced from BRC and other smaller sections can be rolled from blooms of old caster	M/s Siemens-VAI Italy (SVIT), SVIN, & SEPC (SVIT – 381.79, SVIN – 152.72, SEPC – 98.89)	633.39 (381.79) 659.84	616.63	11.05.10	Sept'12 (Jun'15) Hot trial taken	<ul style="list-style-type: none"> <li>1<sup>st</sup> hot trial taken on 08.06.2015 and 2<sup>nd</sup> hot trial started on 23.08.2015.</li> <li>Profile of Narrow Parallel Beam (NPB) 100, Medium Beam (MB) 100, Wide Parallel Beam (WPB) 160, Medium Channel (MC) 100, Medium Channel-300, and Angle 90 during trial rolling has been achieved. Rolled products are being dispatched from Feb'16.</li> <li>PAC for the package has been issued on 17.3.16 w.e.f. 15.03.16.</li> <li>Final Acceptance Certificate (FAC) for emergency power package (M/s IEE Projects) issued on 12.05.17 (w.e.f. 29.7.16).</li> <li><b>Commissioning test started on 15.06.19 at 5.15 AM with rolling of ISMC100 which continued till 20.06.19 (5424 t rolled). Section changed to ISMB250 and rolling of ISMB250 started from 21.06.19 upto 25.6.19 C shift (7328 t rolled).</b></li> <li><b>Total rolled during commissioning from 15.06.19 to 25.06.19: 12390 t. Commissioning tests are under evaluation.</b></li> <li><b>Widening of Crop chute modification is completed. However, Bin evacuation system to be completed by Primetals Italy in Oct'19.</b></li> <li><b>Rolling of MB 300 started from 15.08.19 &amp; Contd. till 23.08.19</b></li> <li><b>Rolling of MC 100 started from 24.08.19, in progress</b></li> </ul> <p>Production– 2015-16 – 3027 t 2016-17 – 39,188 t 2017-18 – 97,371 t 2018-19 – 1,71,427 t 2019-20 (upto Feb'20) – 1,92,142 t</p>
25	Re heating furnace for MSM (220 tph) [Input Bloom-300 x 150mm & 350 x 240mm; length- 6,8,10 & 12m) Annual prodn. – 10,41,700 t/yr; 220 tph; Charging temp. - 20°C; discharge temp. - 1200-1250 °C Fuel – mixed gas (BF+CBM) or (BF+LPG) Fce. type – Front Charging & End Discharging Type Walking Beam Furnace	M/s MICCO-Bricmont (MICCO – 39.82, Bricmont USA -32.92, Bricmont India – 5.50)	78.24 (32.92) 81.47	77.92	21.04.10	Apr'12 (Jun'15) Hot trial taken along with MSM main mill	<ul style="list-style-type: none"> <li>Furnace lighted-up on 31.05.2015.</li> <li>PAC has been issued w.e.f 22.06.2015. Hot trial taken along with MSM main mill in Jun'15.</li> <li>Commissioning Certificate has been issued w.e.f 09.05.16.</li> <li>PG certificate issued on 30.11.19 w.e.f 30.08.19.</li> </ul>
26	EOT main Cranes for Medium Structural Mill (60t – 2 Nos., 30t – 2 Nos., 20t – 7 Nos. – 5 nos. in AB Bay & 2 nos. in BC bay) <u>Priority Cranes</u> AB Bay – 3x20t BC Bay – 2x20t CD Bay – 1x60t + 2x30t DE Bay – 1x60t	M/s HEC Ltd.  MOU signed on 23.02.08	49.00  52.99	48.63	23.06.10	Jun'12 (Nov'16)	<ul style="list-style-type: none"> <li>All 9 (nine) priority cranes were put in operation with minimum facilities using in-house resources.</li> <li>PAC for all 11 (eleven) number cranes have been issued on 23.8.16 w.e.f 3.9.16.</li> <li>Commissioning certificate issued on 30.06.18 w.e.f. 29.05.18</li> </ul>
27	Structural works for MSM	M/s Bridge & Roof	65.85 (including free issue of steel of	49.87	10.08.10	Apr'12 (Oct'14)	<ul style="list-style-type: none"> <li>PAC for the facility has been issued w.e.f 1.12.14.</li> <li><b>FAC for the facility has been issued w.e.f 1.6.15.</b></li> </ul>

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status	DSP
			37.53)					
28a	Civil works for MSM	M/s Jain Infra Ltd.	89.19 (including free issue of steel of 22.40)	50.52	04.11.10	Sep'12 (Contract terminated with M/s JIL on 05.02.13)	<ul style="list-style-type: none"> <li>Contract terminated with M/s JIL on 05.02.13. (Value of job executed-51.60 Cr + Cost of free issue of steel 14.86 Cr i.e. total 66.46 Cr.)</li> <li><b>Under Arbitration</b></li> <li>Contract placed on M/s Bridge &amp; Roof for remaining work on 05.02.13 on <b>Risk purchase basis.</b></li> </ul>	
28b	Balance Civil works for MSM	M/s Bridge & Roof	99.49 (including free issue of steel of 16.32)	98.92	08.02.13	Feb'14 (Feb'15)	<ul style="list-style-type: none"> <li>PAC for the facility has been issued w.e.f 17.10.15.</li> <li><b>FAC issued on 31.8.16.</b></li> </ul>	
<b>Power Distribution / Utilities / Infrastructure</b>								
29	Medium Voltage Power Distribution Package for Phase -I Facilities  <b>Group A facilities:</b> Substations for MSM, BOF, extension of MRS for LF-3 and Sajara-2.  <b>Group B facilities:</b> Substations for CO & BPP, RMHP, and conversion of outdoor to indoor substations at Punabad and Sajara.	M/s Sterling and Wilson	82.82 88.95	83.36	07.09.10	Jun'12 (Jan'17)	<ul style="list-style-type: none"> <li>Commissioning certificate issued for Group 'A' facilities on 11.12.15 w.e.f 02.12.15</li> <li>PG Certificate issued for Gr.A facilities on 12.03.16 w.e.f. 10.02.16</li> <li>PAC issued for Gr-B facilities on 14.1.17</li> <li>PAC Certificate for Group-B facilities issued on 17.12.16</li> <li>33kV Panel has been charged at Punabad substation through Sajara Punabad interconnector 1&amp;2</li> <li>Commissioning Certificate for Group-B facilities issued on 07.01.19 w.e.f 09.10.18</li> <li>PG certificate for Group B facilities issued on 18.11.19 w.e.f 29.07.19</li> </ul>	
30a	Interplant pipe line for fuel and industrial gases for Phase-I facilities	M/s Jain Infra Projects	20.86 22.96	5.47	28.04.11	Jul'12 (Contract terminated on 16.02.13)	<ul style="list-style-type: none"> <li>BE- 9/10 (0 %) submitted. DE- 54/75 (72 %) submitted.</li> <li>930/3000 cum RCC completed. All 21940 m equipment ordering completed. 2100T supplied. 477T erected</li> <li>Due to poor performance of contractor, Risk Purchase Notice was issued.</li> <li>Contract terminated. Order was placed on M/s Stewarts and Lloyds of India Ltd. on 16.02.13 on <b>Risk Purchase basis.</b></li> </ul>	
30b	Balance work of Interplant pipe line for fuel and industrial gases for Phase-I facilities	M/s Stewarts and Lloyds of India Ltd.	20.00 23.02	21.03	28.04.13	Nov'13 (Dec'15)	<ul style="list-style-type: none"> <li>PAC for completed system has been issued on 15.10.15</li> <li>Commissioning Certificate has been issued w.e.f. 03.12.15</li> </ul>	
31	1400 HP Locomotive (2 nos.)	M/s Diesel Locomotive Works, Varanasi	17.52	17.52	10.06.11	Dec'12 (Mar'13)	<ul style="list-style-type: none"> <li>LOA issued on 10.06.11</li> <li>2 nos. Locos supplied and commissioned.</li> <li>Commissioning Certificate has been issued w.e.f. 01.03.13</li> </ul>	
32	Augmentation of Railway Tracks for phase-I facilities	M/s Allied Infra, Bhartia Infra and Sahil projects	25.75 26.44	25.45	30.07.11	Jul'12 (Dec'15)	<ul style="list-style-type: none"> <li>Construction of culvert for interconnecting rail track between hot metal and slag side of BF-4 is completed &amp; laying of rail tracks in MSM, BRC, ACVS, BF#4 &amp; CCP area has been completed and put in operation.</li> <li>Commissioning Certificate for the package has been issued w.e.f 28.12.15.</li> </ul>	
33a	New Compressed Air Station for phase-1  3 units of 7500 Nm <sup>3</sup> /hr (2W+1S)	M/s Jain Infra	12.96 13.93	0.73	02.08.11	Oct'12 (Contract terminated on 29.03.13)	<ul style="list-style-type: none"> <li>Contract signed on 11.11.11; Kick of meeting held on 25.11.11</li> <li><b>RPN notice issued to M/s JIL on 09.11.12.</b> NIT issued on 09.01.13. Offers were received from i) M/s Stewarts &amp; Lloyds India Ltd., ii) M/s Blue Star Ltd., iii) M/s BOC India Ltd., iv) M/s Supreme Infrastructure India Ltd., &amp; v) M/s Ingersoll Rand.</li> <li><b>Order placed on 29.03.13 on M/s Blue Star on Risk Purchase basis.</b></li> </ul>	

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status  DSP
33b	Balance work of New Compressed Air Station for phase-1	M/s Blue star.	16.52 18.61	16.31	28.04.13	May'14 <b>(Dec'14)</b>	<ul style="list-style-type: none"> <li>▪ Trial run of 1<sup>st</sup> compressor, 2<sup>nd</sup> compressor &amp; air dryer successfully completed on 4.12.14, 10.12.14 &amp; 10.12.14 respectively.</li> <li>▪ Compressed air charged on 16.12.14</li> <li>▪ Unit is in operation.</li> <li>▪ PAC has been issued w.e.f on 29.01.15</li> <li>▪ Commissioning Certificate for the facility has been issued on 31.5.15.</li> </ul>
34	Gas mixing and boosting stations 9000Nm <sup>3</sup> /hr (min.) to 45000Nm <sup>3</sup> /hr (BF+ CO / BF+ CBM / BF + Propane)	M/s TLT Engineers India	14.44 15.31	14.84	19.10.11	Sep'12 <b>(Nov'15)</b>	<ul style="list-style-type: none"> <li>▪ PAC has been issued w.e.f on 08.12.14</li> <li>▪ Commissioning Certificate for the facility has been issued w.e.f 7.11.2015.</li> </ul>
35	Propane Storage & Handling facilities (2x200t)	M/s Globe Gas Equipment Industry (P) Ltd.	10.72 11.37	10.81	09.12.11	Dec'12 <b>(Jul'15)</b>	<ul style="list-style-type: none"> <li>▪ Final inspection of fire-fighting pump of LPG by Chief Controller of Explosives of PESO done on 21.04.15 and final license obtained on 24.04.15.</li> <li>▪ PAC has been issued w.e.f 14.4.15</li> <li>▪ Propane charged to B&amp;RC on 08.07.15.</li> <li>▪ Commissioning Certificate has been issued w.e.f 14.11.16</li> <li>▪ <b>Performance Guarantee Certificate issued w.e.f. 24.02.18.</b></li> </ul>
36	Supply of Bloom cars.	M/s Simplex Engineering & Foundry Works (P) Ltd – 22 Nos (27.7) &  M/s HEC, HMBP- 10 Nos. (12.59)	39.96 44.79	44.69	18.02.13	Mar'15 <b>(Sep'15)</b>	<p><b>M/s Simplex (Scope 22+5 Bloom Cars):</b></p> <ul style="list-style-type: none"> <li>▪ Contract signed on 07.05.13</li> <li>▪ All 22 nos. Bloom cars (covered under original contract) commissioned.</li> <li>▪ Due to poor performance of M/s HEC, 5 nos. bloom cars from scope of M/s HEC were diverted to M/s Simplex Engg. &amp; Foundry Works on 22.01.15.</li> <li>▪ PAC for 5 nos. (diverted from M/s HEC scope) has been issued.</li> <li>▪ Commissioning Certificate for these 5 nos. Bloom cars have been issued on 25.9.15.</li> <li>▪ <b>PG certificate for all 27 Bloom Cars issued on 20.4.16.</b></li> <li>▪ <b>Final Acceptance certificate for all 27 Bloom cars has been issued w.e.f 30.5.2016</b></li> </ul> <p><b>M/s HEC:</b></p> <ul style="list-style-type: none"> <li>• Due to poor performance of M/s HEC, 5 nos. bloom cars from their scope were diverted to scope of M/s Simplex Engg. &amp; Foundry Works on 22.1.15</li> <li>▪ For all 5 nos. bloom cars the following have been issued: <ul style="list-style-type: none"> <li>- PAC - 7.1.15 (3 nos.) and 24.7.15 (2 nos.)</li> <li>- Commissioning certificate – 12.9.15</li> <li>- <b>PG Certificate – 20.4.16</b></li> <li>- <b>Final Acceptance Certificate – 31.6.16.</b></li> </ul> </li> </ul>
37	Fire Fighting System	M/s WPIL	18.18 19.22	17.49	28.05.13	Jan'14 <b>(Nov'16)</b>	<ul style="list-style-type: none"> <li>▪ Equipment supply completed (458T)</li> <li>▪ LPG pump house started supply of fire water to propane plant on manual mode</li> <li>▪ MSM pump house: started supply of fire water to MSM plant on auto mode</li> <li>▪ Automation work for LPG pump house completed.</li> <li>▪ Majority of Civil jobs completed, finishing job is in progress. Mechanical &amp; electrical work is in progress</li> <li>▪ PAC certificate LPG &amp; MSM has been issued w.e.f 8.10.15.</li> <li>▪ PAC for OCHP pump house has been issued w.e.f 22.7.15.</li> <li>▪ PAC for BRC Fire Water Pump house has been issued w.e.f 3.11.16.</li> <li>▪ Commissioning certificate issued <ul style="list-style-type: none"> <li>- for LPG Fire Water Pump house on 3.8.16</li> <li>- for BRC on 6.3.17</li> <li>- for MSM &amp; CCHP on 7.3.17.</li> </ul> </li> </ul>
38	Road Network for Phase-I facilities	M/s HSCL	29.35 (excluding	27.30	24.03.16 (LOA)	Mar'17	<ul style="list-style-type: none"> <li>▪ LOA issued on 24.03.2016 to M/s HSCL.</li> <li>▪ Contract between M/s HSCL &amp; DSP signed on 13.5.2016.</li> </ul>

Sl.	Package	Party	Cost in Rs. Cr. NoC (FE) Gross	Expenditure upto Feb'2020 Rs. Cr.	Eff. Date of Contract	Contractual Schedule (Likely/ Actual)	Status	DSP
			6.2 Cr of free issue of steel)			(May'18)	<ul style="list-style-type: none"> <li>▪ HSCL placed LOA on M/s Pobi Enterprises.</li> <li>▪ Original scope completed on 31.03.18.</li> <li>▪ Amendment order issued on 14.03.18. Work has been completed</li> </ul>	
39	Laboratory Facilities for MSM	M/s Zeal India Chemicals (21.97) M/s Batliboi Limited (4.24) M/s Metal Power Pvt. Ltd M/s Mukherjee Construction (10.95)	34.67 37.17	31.45	12.3.14	(Sep'17)	<ul style="list-style-type: none"> <li>▪ All 50 equipment supplied and erected at site.</li> <li>▪ Trial taken for 48 equipment. Trials of 2 equipment balance.</li> <li>▪ Erection of lift has been completed.</li> <li>▪ PAC issued on 5.9.17.</li> </ul>	
40	ERP connectivity for New Units of Durgapur Steel Plant	M/s DG Micropronix, P Ltd (3.59) M/s J R component Enterprise Ltd. (0.7)	3.66	3.65	05.07.16	May'17 (Mar'17)	<ul style="list-style-type: none"> <li>▪ LOA placed to M/s Micropronix, P Ltd + M/s J R component Enterprise Ltd. on 10.06.16.</li> <li>▪ Kick off meeting held on 02.07.16.</li> <li>▪ PAC issued on 22.02.17.</li> <li>▪ Commissioning test of ERP system commenced from 16.03.17 and completed on 18.03.17.</li> <li>▪ Commissioning certificate issued w.e.f 18.03.17.</li> <li>▪ PG Certificate issued on 28.06.17</li> </ul>	

## RSP: Expansion of Rourkela Steel Plant

1. **'In-Principle' Approval** : May'07
2. **Cost (Rs. in crore):**
  - a) Indicative cost (May'07) : Rs.7,668 crore (Net of Cenvat benefit of Rs.924 crore)  
FE component: Rs.1220 crore
  - b) Revised estimates (Jul'08) : Rs.12,313 crore(Net of Cenvat benefit of Rs.1,369 crore)
  - c) Revised estimates (Jun'09) : Rs.11,812 crore(Net of Cenvat benefit of Rs.1,110 crore)  
FE component: Rs.1,745.00 crore
  - d) Revised Cost Estimate (Aug'19) : Rs.13,306.73 crore( Net of Cenvat of Rs.933.52 crore)  
FE component: Rs. Rs.2264.28 Crore
  - e) Expenditure (Till **Feb'2020**) : **Rs.13,039.01 crore**
3. **Approved Schedule** : Mar'13  
Actual Completion : Dec'14\*  
\* Integrated process route in operation.

### 4. **Production (Mtpa)**

Item	Installed Capacity	Base case (2006-07)	After Expansion	Present Level
Hot Metal	2.000	2.12	4.50	4.50
Crude Steel	1.900	1.99	4.20	4.20
Saleable Steel	1.671	1.94	3.99	3.99

### 5. **Techno-economic Parameters**

Item	Base case (2006-07)	After Expansion
Coke/ Fuel Rate (Kg/thm)	577	392
BF Productivity (t/m3/d)	1.37	2.14
Specific Energy Consumption (GCal/tcs)	7.98	5.40
Manpower Productivity (tcs man/year)	148	267

### 6. **Facilities**

- MECON Ltd. is the Consultant for Iron & Steel zone, MN Dastur & Co for Rolling Mill zone, CET for COB-6 & New CCD and RITES for Railway Infrastructure.
- After review of the investment plan in Jun'08, SAIL Board decided to defer packages viz. Up-gradation of BF-1; new CRNO complex; New facilities in CRM complex and Modification of Finishing Stands of Hot Strip Mill. Also, after review of Jun'09, capacity of the new Plate Mill is envisaged at 1.0 Mtpa in current phase, with provision for expansion to 1.80 Mtpa.
- All major facilities have been completed as below:
  - ✓ New Sinter Plant-3 (1 x 360m<sup>2</sup>) in Apr'12
  - ✓ Augmentation of Ore Bedding & Blending Plant (to handle additional 7.0Mtpa of raw materials) in Apr'13
  - ✓ New Coke Oven Battery-6 (7 m tall & 1x67 ovens) Complex in Apr'13
  - ✓ New Blast Furnace-5 (4060m<sup>3</sup> useful volume) & associated facilities in Aug'13
  - ✓ 3<sup>rd</sup> Slab Caster (1x1.5 Mtpa) in Jun'13, 3<sup>rd</sup> BOF convertor (150t) in Jun'14; 3<sup>rd</sup> LF in Sep'14 and RH Degasser on 20.02.16 (in SMS-II)
  - ✓ New 4.3m wide Plate Mill (1.00 Mtpa in current phase, with provision for expansion to 1.80 Mtpa): Reheating Furnace in May'14, Rolling Facility in Jun'14 and Finishing Facilities in Mar'15

Also, linked facilities like 700 tpd Oxygen Plant and Simultaneous Blowing of Converters in SMS-II have been completed.

- **On 01.04.2015, Hon'ble Prime Minister dedicated the modernized Rourkela Steel Plant (RSP) of SAIL to the Nation.**
- **Closure of existing Units:**
  1. BF- 2 ----- Sep'14
  2. BF- 3 ----- May'16
  3. COB-2 ----- Mar'16 (this is not in CPFR of MEP)

**Package-wise Details for Expansion of Rourkela Steel Plant**

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
1	<p>New OBBP &amp; Base Blending Facilities (To handle additional 7.0Mtpa of Raw Material requirement, Present requirements 5 Mtpa) <u>Change Orders</u></p> <p>a) No. 1: Rs.1.4 Cr. (net of cenvat) b) No. 2: Rs.1.1cr(net of cenvat) c) No. 3: Rs.35 cr. (net of cenvat)</p> <p><b>RPN</b></p> <ul style="list-style-type: none"> <li>▪ <u>General Civil Works, maintenance Access to Raw Material Yard on OBBP</u>- Job is completed on 09.11.2017 –Value Rs. 86,07,528.00</li> <li>▪ <u>Offline grinding machine - Automatic roll Grinding system for Roll Crusher for Turning Crusher roll</u> :Order Placed on 28.03.2017. The job is under progress - Value Euro 4,56,300 &amp; Rs.1,56,76,194</li> <li>▪ <u>Remote programming facility in Stacker Cum Reclaimer (SCR) and Anti Collision System</u> – order placed on 05.06.18 - Value .Rs. ~45 lakhs.</li> <li>▪ Maintenance Bay for barrel reclaimer- case retendered after RPN and order placed.</li> </ul>	HEC/ Shapoorji Pallonji	665.64  681.33 <u>Gross cost:</u> 726.55	686.32	12.08.08	Feb'11 (Apr'13)	<ul style="list-style-type: none"> <li>▪ <u>Certificates issued:</u> <ul style="list-style-type: none"> <li>✓ PAC (all seven P1-P7 routes): P1-P2 :07-08.08.13 P3: 30.08.13 P4 : 29.11.13 P5-P7: 16.07.14</li> <li>✓ Commissioning Certificate (P1-P4): 25.02.14</li> <li>✓ Commissioning Certificate (P5-P7): 12.03.15</li> </ul> </li> <li>▪ PG test conducted from 28.12.2015 to 29.02.2016 and PG test certificate issued on 20.06.16.</li> <li>▪ Certain supplies (Induction Heater), completion of FDA system under the package are yet to be completed by HEC&amp; consortium.</li> <li>▪ HEC/SPCL has submitted revised delay analysis in desired format, under process for approval.</li> <li>▪ Meanwhile proposal for acceptance of Corporate Guarantee (duly supported with a resolution of the Board of HEC) of Rs.4.42 crore in-lieu of BG has been accepted by SAIL</li> <li>▪ PBG amount of Rs.19.68 crore has been released in Nov'16.</li> <li>▪ Delay analysis completed and amendment letter to the contract issued to the consortium on 10.07.17.During the meeting on 16.02.2018 &amp; 17.02.2018 HEC was informed that the Delay analysis was done based on records. They did not accept the analysis and amendment order issued for time period of the contract.</li> <li>▪ To resolve the various issues, a committee has been constituted comprising members from HEC &amp; RSP.</li> </ul>
2	<p>New Coal Handling Plant <u>Additional Work</u></p> <p>a) For additional piles in CHP area change order on MBE for Rs. 2.6 crore (net of cenvat) b) Change order: 2 nos. pit-less in-motion weigh bridge on MBE for Rs. 0.8 crore (net of cenvat)</p>	McNally Bharat Engg.	306.45  319.26 <u>Gross cost:</u> 332.91	315.83	09.12.09	Dec'11 (Apr'13)	<ul style="list-style-type: none"> <li>▪ <u>Certificates issued</u> <ul style="list-style-type: none"> <li>✓ PAC : Nov'13</li> <li>✓ PG test: 12-26.05.14</li> <li>✓ <b>FAC: 24.07.18</b></li> </ul> </li> <li>▪ In Mar'14, a crack was noticed in coal silo no. E-5 (one out of total 30 nos. silos, each 42 m high and 12 m dia free-standing concrete structure, having 300 mm thick wall) located at about 14 m above the GL. Repair work completed in Oct'15.</li> </ul>
	<b>COB-6 Complex</b>						
3	<p>Installation of 7m tall New Coke Oven Battery-6 (7m tall ,67 ovens) Gross coke (dry): 0.768 Mtpa (90 ovens per day)</p>	Mecon Ltd.	373.22  392.79 <u>Gross cost:</u> 399.15	365.54	06.08.08	Feb'11 (Apr'13)	<ul style="list-style-type: none"> <li>▪ Battery under fired: 10.01.13</li> <li>▪ First oven pushed: 12.04.13.</li> <li>▪ PAC: 27.08.13</li> <li>▪ Commissioning certificate: 02.02.15 w.e.f. 14.04.2013</li> <li>▪ PG test : 21.03.18 – 27.03.18</li> <li>▪ Cumulative since inception: 2,00,486 nos., this includes:</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP																								
							<ul style="list-style-type: none"> <li>▪ Oven pushed in 2013-14: 21,889 nos.</li> <li>▪ Oven pushed in 2014-15:24,815 nos.</li> <li>▪ Oven pushed in 2015-16: 27,411nos.</li> <li>▪ Oven pushed in 2016-17: 32,078 nos.,</li> <li>▪ Oven Pushed in 2017-18: 32,220nos.</li> <li>▪ Oven pushed in 2018-19 : 32,340 nos.</li> <li>▪ Oven pushed in 2019-20 : 29,733 nos this includes(nos.) :</li> </ul> <table border="1"> <tr> <td>Apr</td> <td>2620</td> <td>Oct</td> <td>2,745</td> </tr> <tr> <td>May</td> <td>2768</td> <td>Nov</td> <td>2,726</td> </tr> <tr> <td>Jun</td> <td>2752</td> <td>Dec</td> <td>2,755</td> </tr> <tr> <td>Jul</td> <td>2,738</td> <td>Jan</td> <td>2,815</td> </tr> <tr> <td>Aug</td> <td>2,588</td> <td>Feb</td> <td>2,618</td> </tr> <tr> <td>Sep</td> <td>2,608</td> <td>Mar</td> <td></td> </tr> </table>	Apr	2620	Oct	2,745	May	2768	Nov	2,726	Jun	2752	Dec	2,755	Jul	2,738	Jan	2,815	Aug	2,588	Feb	2,618	Sep	2,608	Mar	
Apr	2620	Oct	2,745																												
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Sep	2,608	Mar																													
4	Oven Machines for COB-6 (Coke pusher cars, coke charging cars, coke transfer cars-2 each)	BEC/KBK	88.05 (0.15) <u>Gross cost:</u> 92.85 95.43	86.68	26.08.08	Aug'10 (Apr'13)	<ul style="list-style-type: none"> <li>▪ Under operation : since 12.04.13</li> <li>▪ PEC System also completed subsequently.</li> <li>▪ PAC -02.04.13</li> <li>▪ Commissioning: 05.12.14</li> <li>▪ PG : 01.08.16</li> <li>▪ <b>FAC issued: 08.04.18</b></li> </ul>																								
5	Installation of new Coke Dry Cooling Plant for COB-6 (4 Chambers (2 W+1 hot reserve + 1 repair & maintenance) Boiler Module Capacity- 50tph Coke Cooling Capacity- 100tph Cycle time- 9 minutes)	BEC/ Giprokoks/CUI	344.42 (43.15)  368.69 <u>Gross cost:</u> 385.91	385.10	26.08.08	Dec'10 (3modules: Apr'13 4 <sup>th</sup> module - Jan'14)	<ul style="list-style-type: none"> <li>▪ 3 modules: Apr'13</li> <li>▪ Module-4: 10.01.14.</li> <li>▪ In Module-3, explosion in Mar'14had damaged the pipelines and boiler. Repair job completed by May'15.</li> <li>▪ PAC -02.04.13</li> <li>▪ Commissioning: 08.06.14</li> <li>▪ PG : 24.11.16</li> <li>▪ <b>FAC: 02.05.18</b></li> </ul>																								
6	Silica Bricks for COB-6	OCL	42.52 <u>Gross cost:</u> 50.33	44.38	02.08.08	Aug'09 (Aug'11)	<ul style="list-style-type: none"> <li>▪ Total 14,711T recd.</li> </ul>																								
7	Fire Clay and Insulation Bricks for COB-6 Additional work Rs. 2.4 crore (net of cenvat)	Multiple parties	4.08 <u>Gross cost:</u> 4.25	6.53	02.08.08	Oct'09 (Dec'11)	<ul style="list-style-type: none"> <li>▪ Total 7,782 T recd.</li> </ul>																								
8	New CCD Plant for COB-6	Sriram EPC/ Hutni Projects, Czeck Republic	280.05 (33.33)  297.33 <u>Gross cost:</u> 322.18	292.55	01.10.08	Feb'11 (Apr'13 BRP- Dec'14 HRP- Feb'15)	Under operation.																								
9	Upgradation of Existing CCD		141.35  146.16 <u>Gross cost:</u>																												

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP																								
			147.74	145.96																											
i.	Ammonia Liquor Treatment Plant & Ammonium Sulphate Plant	Sriram EPC	48.93		14.10.08	Apr'10 (Aug'14)	<ul style="list-style-type: none"> <li>CC issued on 25.08.14.</li> <li><b>FAC: 12.04.18</b></li> </ul>																								
ii.	Primary Gas Pre-cooler , Decanter & Pit tank (GPC - 6 nos., Pit Tank - 2 nos. and Decanter - 2 nos.) <u>Additional Work</u> For tar removal around decanter- Rs.0.0269 crore (net of cenvat)	Bengal Tools	34.56		23.10.08	Oct'10 (Apr'13)	<ul style="list-style-type: none"> <li>Commissioned.</li> <li><b>FAC : 15.03.18</b></li> </ul>																								
iii.	Knock-out Pots  (Retendered after RPN)	IMECO  Bhilai Techneeds	18.09  7.14		01.11.08  09.11.11	Apr'10  May'12 (Aug'14)	<ul style="list-style-type: none"> <li>All site activities stopped as time validity expired on 30.07.11. RPN issued to M/s Imeco and retendered.</li> <li>LOI placed on M/s Bhilai Techneeds on 09.11.11 (Rs.7.14 cr.) Effective date of Contract was 14.12.11.</li> <li>Air Load Test of Booster-4 &amp; Booster-5 completed successfully.</li> </ul>																								
iv.	Electrostatic Tar Precipitator 1.0 MT - 6 nos. ETP 1.8 MT - 4 nos. ETP	Thermax	15.10 (0.97)		11.12.09	Sep'11 (Aug'14)	<ul style="list-style-type: none"> <li>All 10 nos. ETPs (6 nos. in 1.0MT + 4 nos. in 1.8MT) commissioned.</li> <li>PG Test conducted for 4 nos. ETPs at 1.8 MT area.</li> <li><b>FAC: 26.07.16</b></li> </ul> <table border="1"> <thead> <tr> <th>ETPs</th> <th>PAC</th> <th>Commissioning</th> <th>PG</th> </tr> </thead> <tbody> <tr> <td>1A - 1B</td> <td>12.06.2012</td> <td>12.06.2012</td> <td>29.05.2015</td> </tr> <tr> <td>1C - 1D</td> <td>11.02.2013</td> <td>15.02.2013</td> <td>29.05.2015</td> </tr> <tr> <td>1E - 1F</td> <td>03.03.2014</td> <td>08.03.2014</td> <td>29.05.2015</td> </tr> <tr> <td>2A - 2B</td> <td>10.05.2012</td> <td>10.05.2012</td> <td>31.03.2014</td> </tr> <tr> <td>2C - 2D</td> <td>20.11.2012</td> <td>24.11.2012</td> <td>31.03.2014</td> </tr> </tbody> </table>	ETPs	PAC	Commissioning	PG	1A - 1B	12.06.2012	12.06.2012	29.05.2015	1C - 1D	11.02.2013	15.02.2013	29.05.2015	1E - 1F	03.03.2014	08.03.2014	29.05.2015	2A - 2B	10.05.2012	10.05.2012	31.03.2014	2C - 2D	20.11.2012	24.11.2012	31.03.2014
ETPs	PAC	Commissioning	PG																												
1A - 1B	12.06.2012	12.06.2012	29.05.2015																												
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2A - 2B	10.05.2012	10.05.2012	31.03.2014																												
2C - 2D	20.11.2012	24.11.2012	31.03.2014																												
v.	Gas Booster	SBW, China	13.54 (10.12)		30.10.08	Apr'10 (Aug'14)	<ul style="list-style-type: none"> <li>Booster-4 &amp; Booster-5 commissioned successfully and are under operation.</li> <li>PAC issued for Gas Boosters on 29.10.14.</li> <li>Commissioning : 09.07.2015</li> <li><b>FAC:14.03.18</b></li> </ul>																								
vi.	Electrical package	Servomax	4.45		31.10.08	Apr'10 (Aug'14)	<ul style="list-style-type: none"> <li>PAC : 21.12.2012</li> <li>PAC points liquidated &amp; PAC payment made. Commissioning certificate issued on 22.09.14.</li> <li>PG: 19.09.2015</li> </ul>																								
vii.	Instrumentation package	New Era Control	1.97		12.11.08	Apr'10 (Jun'14)	<ul style="list-style-type: none"> <li>PAC: 31.05.2013</li> <li>PAC points liquidated &amp; PAC payment already made.</li> <li>Commissioning: 05.02.14, certificate issued on 05.06.2014.</li> <li>PG : 30.03.2015</li> <li><b>FAC:18.09.15</b></li> </ul>																								
viii.	Hoist & Handling Facility	Grip Engrs.	1.76		16.10.08	May'09 (Jan'12)	<b>Completed.</b>																								
ix.	Civil & Structural Works	Steel	1.52		18.09.08	Jan'09	PAC: 24.07.2013																								



Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP																								
		construction				(Dec'10)	Completed. FAC: 26.04.17																								
x.	Electrically Operated Gas Valves (Supply package) <u>Additional Work</u> Change order for rectification & Re-conditioning of valves- Rs.0.17 crore (net of cenvat)	Fouress	0.87		16.10.08	May'09	Completed.																								
xi.	Air Conditioning & Ventilation System	Batliboi	0.37		19.09.08	Mar'09 (Jun'15)	Remaining job retendered to M/s S K Enterprises on 22.07.13. All 3 nos. package A/Cs commissioned.																								
10	New Sinter Plant-3 (1x360 m <sup>2</sup> ) gross sinter: 3.706 Mtpa (11,230 tpd)  <u>Additional Work</u> For additional civil work change order placed on L&T for Rs. 2.7 crore (net of cenvat)	Outotec/ L&T	688.11 (146.65)  754.27 <u>Gross cost:</u> 840.35	791.16	05.09.08	Mar'11 (Apr'12)	<ul style="list-style-type: none"> <li>SP-3 under operation since 01.04.12</li> <li>PAC issued: 09.07.12</li> <li>Commissioning certificate: 21.04.14</li> <li>PG test: 03.05.15, PG test certificate: 05.08.15</li> <li>Highest production since inception-11,145T on 25.6.15</li> <li>Cumulative production since inception: 2,01,92,642T this includes : <ul style="list-style-type: none"> <li>Production in 2012-13: 2,95,441T</li> <li>Production in 2013-14 :12,77,180T</li> <li>Production in 2014-15: 24,29,539T</li> <li>Production in 2015-16 :29,16,044T</li> <li>Production in 2016-17: 32,03,300T</li> <li>Production in 2017-18: 33,10,758 T</li> <li>Production in 2018-19 : 35,32,982T</li> <li>Production in 2019-20 : 32,27,398 T this includes (T)</li> </ul> </li> </ul> <table border="1"> <tr> <td>Apr</td> <td>2,28,592</td> <td>Oct</td> <td>3,19,797</td> </tr> <tr> <td>May</td> <td>2,65,637</td> <td>Nov</td> <td>3,16,961</td> </tr> <tr> <td>Jun</td> <td>3,00,632</td> <td>Dec</td> <td>3,20,480</td> </tr> <tr> <td>Jul</td> <td>3,01,759</td> <td>Jan</td> <td>3,17,083</td> </tr> <tr> <td>Aug</td> <td>2,27,284</td> <td>Feb</td> <td>3,07,561</td> </tr> <tr> <td>Sep</td> <td>3,21,612</td> <td>Mar</td> <td></td> </tr> </table>	Apr	2,28,592	Oct	3,19,797	May	2,65,637	Nov	3,16,961	Jun	3,00,632	Dec	3,20,480	Jul	3,01,759	Jan	3,17,083	Aug	2,27,284	Feb	3,07,561	Sep	3,21,612	Mar	
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	<b>New BF-5 Complex</b>																														
11	New Blast Furnace-5 (Useful volume: 4060 m <sup>3</sup> , Production per day: 7924 (avg.), 8320 (max.) Annual hot metal production : 2.8 Mtpa) <u>Additional Work</u> Change order-1, 2 nos. static torpedo ladle weigh bridge on TPL for Rs.3.0 crore (net of cenvat)	Danieli Corus/ Tata Projects Ltd.	1577.76 (432.43)  1659.30  <u>Gross cost:</u> 1863.41	1665.81	02.10.08	Apr'11 (Aug'13) PCI-Jul'14 & TRT-Nov'14)	<ul style="list-style-type: none"> <li>PAC (total 23 units) issued: Jun'13-Sep'14</li> <li>BF-5 blown-in: 05.08.13</li> <li>First hot metal tapping: 16.08.13.</li> <li>Coal grinding started: 08.06.14</li> <li>PCI started: 07.07.14</li> <li>TRT started: 06.11.14</li> <li>TRT production 13-14 MW (average).</li> <li>Commissioning Certificate: 17.10.14</li> <li>PG test: 15-19.09.15</li> <li>PCI in Feb'2020 at a rate of 124.88kg/ton.</li> </ul>																								

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							<ul style="list-style-type: none"> <li>Highest production since inception – 9245 on 25.05.18.</li> <li>Cumulative production since inception: 1,50,55,160 T this includes: <ul style="list-style-type: none"> <li>Production in 2013-14: 8,08,081 T</li> <li>Production in 2014-15 : 17,71,386 T</li> <li>Production in 2015-16: 21,11,459 T</li> <li>Production in 2016-17: 2,758,439T</li> <li>Production in 2017-18: 25,52,538 T</li> <li>Production in 2018-19 : 27,10,467 T</li> <li>Production in 2019-20: 23,42,790 T this includes (T) <table border="1"> <tr> <td>Apr</td> <td>1,93,018</td> <td>Oct</td> <td>2,12,092</td> </tr> <tr> <td>May</td> <td>2,26,432</td> <td>Nov</td> <td>2,29,809</td> </tr> <tr> <td>Jun</td> <td>2,30,026</td> <td>Dec</td> <td>2,29,978</td> </tr> <tr> <td>Jul</td> <td>2,00,205</td> <td>Jan</td> <td>2,39,262</td> </tr> <tr> <td>Aug</td> <td>1,46,391</td> <td>Feb</td> <td>2,29,422</td> </tr> <tr> <td>Sep</td> <td>2,06,155</td> <td>Mar</td> <td></td> </tr> </table> </li> </ul> </li> </ul> <li>The Consortium has filed Arbitration in ICC on 6.10.16 against their extra claims. Matter is being looked into by Corporate Law.</li> <li><b>Status of Arbitration:</b> M/s Danieli &amp; TPL (Consortium Partner) invoked the arbitration clause as per the contract, under the aegis of ICC for a claim of – Rs.411.52 crore &amp; Euro 1,73,00,048 along with @18% interest in Oct'16. SAIL/RSP also filed a counter claim against the parties for dismissal of their claim and pass an award in favour of SAIL/RSP for Rs 211.7927 crore along with @18% interest. Matter was argued before the Arbitral Tribunal consisting of 3 Arbitrators. Vide majority award dated 16<sup>th</sup> May'17, the following reliefs have been awarded to the claimant: <p><b>To first claimant i.e. TPL</b></p> <ul style="list-style-type: none"> <li>Rs 325.7640932 crore and Euro 261,600</li> <li>Costs amounting to Rs 3.8611086 crore and USD 125,000</li> <li>Pre award interest on awarded amount and cost amounting to Rs 113.8804818 crore and Euro 125,090 @18% p.a.</li> </ul> <p><b>To second Claimant i.e. Danieli Corus B.V (DC)</b></p> <ul style="list-style-type: none"> <li>Euro 16,633,672</li> <li>Cost of arbitration amounting to Euro 95,769 and USD 89,446</li> <li>Pre award interest on awarded amount and cost amounting to Euro 53,075,56 @18% p.a.</li> </ul> <p>Further, the claimant has been awarded Post award interest @18% p.a. from the date of the award till the date of actual payment.</p> <p>Vide the same award the counter claim of SAIL/RSP has been disallowed.</p> </li>	Apr	1,93,018	Oct	2,12,092	May	2,26,432	Nov	2,29,809	Jun	2,30,026	Dec	2,29,978	Jul	2,00,205	Jan	2,39,262	Aug	1,46,391	Feb	2,29,422	Sep	2,06,155	Mar	
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							The Award of the Tribunal has been challenged in Delhi High Court and case is under progress.
12	Torpedo Ladles & Repair Shop for BF-5 (10nosx350 t) <u>Additional Work</u> <ul style="list-style-type: none"> <li>Change order for 2 nos., TLC for BF-5- Rs.18 crore (net of cenvat)</li> <li>Change order for reconditioning of TLC No. 10 – Rs.2 crore (net of cenvat)</li> </ul>	Simplex Casting Ltd./ Hyundai, Korea	75.18 (16.27)  91.68 <u>Gross cost:</u> 94.6	83.40	19.08.08	Apr'10 (Aug'13)	<ul style="list-style-type: none"> <li>PAC issued: 03.05.14</li> <li>Operation of BF-5 in Aug'13 was started with 6 nos. torpedoes.</li> <li>Presently, all 10 TLC's are in operation.</li> <li>Commissioning Certificate: 07.03.15</li> </ul>
13	Pig Casting Machine or BF-5 (Continuous, double strand. 150 t/h per PCM (75 t/h per strand) <u>Additional Work</u> Change order for hot metal dumping pit- Rs. 0.4 crore (net of cenvat)	METCO, Kolkata	42.69  43.29 <u>Gross cost:</u> 46.54	45.35	12.08.08	Aug'10 (Apr'13)	<ul style="list-style-type: none"> <li>PAC issued: 03.07.13</li> <li>Commissioning certificate: 13.05.14</li> <li>PG test: 07-09.05.15</li> <li>PG certificate: 05.10.15</li> <li><b>FAC issued : 17.11.2017</b></li> </ul>
14	Boilers, Steam TGs, BPTG & Balance of Plant for BF-5 (3x100 t/h BF Gas Fired Boilers, 2x18 MW Steam Turbo Generator, 1x6.5 MW Back Pressure Turbo Generator) <u>Additional Work</u> Change order for following work on Thermax for Rs.10.90 crore (net of cenvat) <ul style="list-style-type: none"> <li>Modification of DM water/condensate system of PBS</li> <li>Air drier &amp; high velocity water spray</li> </ul>	Thermax	383.26  438.61 <u>Gross cost:</u> 461.81	398.41	12.08.08	Aug'10 (Jul'13)	<ul style="list-style-type: none"> <li>PAC: 03.07.13</li> <li>Steam TurboG-1: Sep'13</li> <li>Steam TG-2: Nov'13</li> <li>BPTG: Feb'14</li> <li>Commissioning certificate: 21.03.14 w.e.f. 15.03.14</li> <li>PG test: 09.11.15</li> <li>PG test certificate: 29.12.15</li> </ul>
15	Turbo Blowers (3 nos.) Station for BF-5  (Air blast requirement to BF-5- Max flow- 7000 Nm3 /min Normal flow- 5,500 Nm3 /min)  <u>Operating parameter of each blower:</u> (discharge flow : 3500 -2550 Nm3/min)	BHEL	322.93 (100.26)  337.03 <u>Gross cost:</u> 370.42	328.46	29.08.08	May'11 (TB1: Apr'13, TB2: Jun'13, TB-3: Apr'14)	<ul style="list-style-type: none"> <li>PBS, comprising of Boilers &amp; Turbo-blowers, was inaugurated by Chairman on 25.04.14.</li> <li>PAC issued: 26.07.14</li> <li>Commissioning certificate: 28.02.15 w.e.f. 05.01.15.</li> <li><b>FAC issued; 24.02.18</b></li> </ul>

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	<b>SMS Complex</b>						
16	Civil Works for BOF & CCP <u>Additional work</u> a) Change order on Simplex Infra for Rs. 11.3 crore (net of cenvat) b) Additional quantities for civil works in SMS II- Rs.51.8 crore (net of cenvat) c) Civil change order for SMS-II: Rs.20 crore (net of cenvat)	Simplex Infra Ltd.	122.11  234.78 <u>Gross cost:</u> 237.28	234.33	08.08.08	Feb'10 (For Caster-Jun'13, For BOF-Jun'15)	<ul style="list-style-type: none"> <li>• For WTP-3, meant for BOF, SIL off-loaded civil work to M/s Unistar.</li> <li>• PAC : 19.03.15</li> <li>• <b>FAC: 19.03.15</b></li> </ul>
17	Structural Works for BOF <u>Additional work</u> Change order of Rs.16.48 crore(net of cenvat credit of Rs.1.65 crore)	KCS Pvt. Ltd.& consortium	20.48 21.67 <u>Gross cost:</u> 24.43	39.47	05.08.08	Feb'10 (Jun'15)	<ul style="list-style-type: none"> <li>▪ Completed.</li> <li>▪ PAC : 10.07.15</li> <li>▪ <b>FAC: 16.05.16</b></li> </ul>
18	Structural Works for CCP	Shapoorji Pallonji	132.99  135.99 <u>Gross cost:</u> 144.05	123.35	11.08.08	Feb'10 (Jun'15)	<ul style="list-style-type: none"> <li>▪ Completed.</li> <li>▪ PAC : 24.07.15</li> <li>▪ <b>FAC: 12.07.16</b></li> </ul>
19	New Lime Calcining Plant (2x350 tpd)One limestone, one dolomite kiln	FL Smidth & Cimprogetti Spa, Italy	93.99 (11.59)  99.88 <u>Gross cost:</u> 107.15	92.97	06.02.10	Feb'12 (Kiln-5:Oct'14 Kiln-6:Aug'15)	<ul style="list-style-type: none"> <li>▪ <u>Kiln-5</u> : <ul style="list-style-type: none"> <li>➤ Charging: 27.09.14</li> <li>➤ Hot trial: 15.10.14</li> <li>➤ However, after some time, refractory bricks were seen coming out with lime and a red spot was observed in the kiln. Damage to the insides of kiln was repaired by 08.12.14 and Kiln was lighted-up again on 16.12.14. It is under regular production since 22.12.14.</li> </ul> </li> <li>▪ <u>Kiln-6</u>: <ul style="list-style-type: none"> <li>➤ Charging:13.08.15</li> <li>➤ Hot trial:21.08.15</li> </ul> </li> <li>▪ PAC &amp; commissioning done.</li> </ul>
20a	EOT Cranes (9 nos. < 100T) for BOF & CCP	Anupam Industries/ JSB	54.82  54.82 <u>Gross cost:</u> 62.11	136.57	30.09.08	Sep'10 (Jun'15)	<ul style="list-style-type: none"> <li>▪ Under operation.</li> <li>▪ PAC &amp; commissioning done.</li> </ul>
20b	EOT Cranes (5 nos. > 100T) for BOF & CCP (4 nos.:2x250T & 2x100T in BOF and 1x120T in CCP) <u>Additional Work</u> a) Change order -1 DSL along with feeding system in DE bay, LM bay, MSRS bay at SMS-II on Vazant for Rs.0.7 cr. (net of	Taiyuan Heavy Ind./ Vazant Ent., Thane	68.90 (55.26)  83.16 <u>Gross cost:</u> 95.88		23.04.10	Apr'12 (Feb'14)	<ul style="list-style-type: none"> <li>▪ Under operation.</li> <li>▪ PAC issued: 23.12.13</li> <li>▪ Commissioning done.</li> </ul>

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	cenvat) b) Change order -2, DSL feeding cable from new crane S/S in SMS area on Vazant for Rs.3.5 cr. (net of cenvat)																														
21	3 <sup>rd</sup> BOF Converter (BOF) (1X150 t) (Liquid Steel: 1.584 Mtpa No. of heats per day: 32 (average) )  <u>Additional work</u> For Balance work (Pedestal, drive base frame etc.) on SMS Siemag for Rs.6.1 cr. (net of cenvat)	SMS Siemag/SMS India	328.91 (115.99)  399.64  <u>Gross cost:</u> 430.77	383.15	08.01.10	May'12 (Jun'14)	<ul style="list-style-type: none"> <li>PAC issued: 31.05.14</li> <li>First heat: 03.06.14/ C-shift</li> <li>Inaugurated by the Chairman on 06.06.14.</li> <li>Commissioning certificate: 02.07.15</li> <li>PG test for Functional Unit-1 i.e. 3rd BOF was conducted on 28-29.04.16</li> <li>Highest heats since inception-617 nos in Apr'18</li> <li>Cumulative heat since inception: 32,348 nos. this includes: <ul style="list-style-type: none"> <li>Heats taken in 2014-15: 3,463 nos.</li> <li>Heats taken in 2015-16: 4,548 nos.</li> <li>Heats taken in 2016-17:5,681 nos.</li> <li>Heats taken in 2017-18:5,865 nos.</li> <li>Heats taken in 2018-19: 6684 nos.</li> <li>Heats taken in 2019-20 : 6107 nos. this includes (nos.): <table border="1"> <tr> <td>Apr</td> <td>401</td> <td>Oct</td> <td>666</td> </tr> <tr> <td>May</td> <td>561</td> <td>Nov</td> <td>622</td> </tr> <tr> <td>Jun</td> <td>597</td> <td>Dec</td> <td>512</td> </tr> <tr> <td>Jul</td> <td>569</td> <td>Jan</td> <td>595</td> </tr> <tr> <td>Aug</td> <td>555</td> <td>Feb</td> <td>526</td> </tr> <tr> <td>Sep</td> <td>503</td> <td>Mar</td> <td></td> </tr> </table> </li> </ul> </li> </ul>	Apr	401	Oct	666	May	561	Nov	622	Jun	597	Dec	512	Jul	569	Jan	595	Aug	555	Feb	526	Sep	503	Mar	
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22	3 <sup>rd</sup> Ladle Furnace (1X150 t) (Annual treatment capacity:1.44 Mtpa No. of heats: 30 per day)	Saralle, Spain	39.07 (16.16)  39.65 <u>Gross cost:</u> 42.07	41.69	13.08.09	Sep'11 (Sep'14)	<ul style="list-style-type: none"> <li>PAC done.</li> <li>First heat taken on 15.09.14.</li> <li>Under regular operation.</li> <li>Commissioning done.</li> </ul>																								
23	New RH Degasser (1x150t) (Annual treatment capacity:1 Mtpa No. of heats: 24 per day)	Siemens VAI	63.43 (23.95)  66.29 <u>Gross cost:</u> 72.68	70.00	16.07.10	Jul'12 (Feb'16)	<ul style="list-style-type: none"> <li>On 25.09.15, during trial by Siemens VAI, the RH travel cage hit the upper fixed supporting steel structure. Due to this, the pulley structure sheared out of the pulley supporting girder and complete travel cage along with vessel fell down into the empty ladle which was placed in the treatment position. This caused damage of travel cage with installed equipment &amp; vessel, including the instruments and ladle transfer car. Repair work completed.</li> <li>Hot trial done on 20.02.16, under operation.</li> <li>PAC issued in Feb'16, commissioning test done successfully on 18.05.16 and commissioning certificate issued on 30.06.16, w.e.f. 18.05.16.</li> <li>PG test done on 22.03.18.</li> </ul>																								
24	3 <sup>rd</sup> Single Strand Slab Caster (CCP) (1x1 Slab Caster, Capacity 1.5 Mtpa, No. of heats: 30 per day )	SMS Siemag/SMS India	482.32 (256.36)  461.28		24.10.08	Feb'11 (Jun'13)	<ul style="list-style-type: none"> <li>PAC issued: 04.06.13</li> <li>First hot trial: 06.06.13</li> <li>Commissioning certificate: 28.10.2013 w.e.f. 14.10.13</li> <li>PG test: 03.07.14</li> </ul>																								

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			<u>Gross cost:</u> 510.85	486.53			<ul style="list-style-type: none"> <li>▪ Highest heats since inception-802nos in Mar'19</li> <li>▪ Cumulative heats since inception: 44,168 nos., this includes: <ul style="list-style-type: none"> <li>▪ Heats taken in 2013-14: 2,307 nos.</li> <li>▪ Heats taken in 2014-15: 5,669 nos.</li> <li>▪ Heats taken in 2015-16: 6,144 nos.</li> <li>▪ Heats taken in 2016-17: 7,021nos.</li> <li>▪ Heats taken in 2017-18: 7,126 nos.</li> <li>▪ Heats taken in 2018-19: 8,614 nos.</li> <li>▪ Heats taken in 2019-20: 7,287 nos. this includes (nos.) : <table border="1" style="margin-left: 20px;"> <tr> <td>Apr</td> <td>671</td> <td>Oct</td> <td>601</td> </tr> <tr> <td>May</td> <td>678</td> <td>Nov</td> <td>664</td> </tr> <tr> <td>Jun</td> <td>768</td> <td>Dec</td> <td>690</td> </tr> <tr> <td>Jul</td> <td>638</td> <td>Jan</td> <td>724</td> </tr> <tr> <td>Aug</td> <td>549</td> <td>Feb</td> <td>701</td> </tr> <tr> <td>Sep</td> <td>603</td> <td>Mar</td> <td></td> </tr> </table> </li> </ul> </li> </ul>	Apr	671	Oct	601	May	678	Nov	664	Jun	768	Dec	690	Jul	638	Jan	724	Aug	549	Feb	701	Sep	603	Mar	
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25	Erection, Testing & Comsng. of Plant & Equipment of BOF & CCP  <b>After RPN</b> Erection, Assistance during Testing & Commissioning of Balance work of Secondary Emission Control of Converter#3	UB Engg.  M/s SC Verghese & Co.	22.70  23.76 <u>Gross cost:</u> 25.88  2.99	26.61	18.09.10  28.09.15	Oct'11 (For CCP-Jun'13), For BOF-Jun'14 except Secondary dedusting system)  Jun'16	<ul style="list-style-type: none"> <li>▪ 3<sup>rd</sup>BOF &amp; Caster are under operation.</li> <li>▪ Contract was terminated in Jan'15.</li> <li>▪ Hot trial done.</li> </ul>																								
26	Water Supply Facilities for New Units in SMS-II (WTP-1&2 for Caster & LHF and WTP-3 for BOF & RH-OB) <u>Additional Work</u> a) Change order for Stop gap arrangement water supply- Rs.cr(net of cenvat) b) Change order for Sinter screen deck –Rs.0.8 crore (net of cenvat)	Voltas Ltd., Kolkata	44.95  52.51 <u>Gross cost:</u> 55.54	43.53	28.12.10	Jun'12 (Jun'15)	<ul style="list-style-type: none"> <li>• <u>WTP-1</u>:All pumps in operation.</li> <li>• <u>WTP-2</u>:All pump erected</li> <li>• <u>WTP-3</u>: All 4 nos. pumps erected &amp; all four nos. pumps for BOF-3 are in service.</li> <li>• PAC done.</li> </ul>																								
27	BOF Shop Platforms, Bunkers, Pipe Supporting Structures and Other Facilities  <b>New Plate Mill Complex</b>	HSCL	27.02 <u>Gross cost:</u> 27.02	26.25	18.01.12	Sep'12 (Jun'15)	<ul style="list-style-type: none"> <li>▪ Completed.</li> <li>▪ PAC : 21.07.15</li> <li>▪ <b>FAC: 17.06.16</b></li> </ul>																								

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28	Piling Works for New Plate Mill	Simplex Infra Ltd.	63.27 (Incl. free issue of steel cost- Rs. 9.49 cr.)  26.43  <u>Gross cost:</u> 26.98	27.07	10.08.10	Sep'11 (Apr'12)	<ul style="list-style-type: none"> <li>▪ Completed.</li> <li>▪ PAC done.</li> </ul>
29	Civil Works for New Plate Mill	Shapoorji Pallonji	273.57 (Including free issue of steel cost- Rs. 97.42 cr.)  330.46 <u>Gross cost:</u> 330.93	325.09	18.01.11	Jan'13 (Jun'15)	<ul style="list-style-type: none"> <li>▪ For Accelerated Cooling System, cooling bed-1,cold plate leveler, Dividing Shear, Double Side Trimming Shear, flame cutting machine &amp; plate marking machine, primary inspection bed all civil work completed.</li> <li>▪ PAC done.</li> </ul>
30	Structural Works for New Plate Mill	Simplex Infra Ltd.	216.15 (Including free issue of steel cost- Rs. 143.01 cr.)  262.12 <u>Gross cost:</u> 262.42	189.36	21.01.11	Dec'12 (Jun'15)	<ul style="list-style-type: none"> <li>▪ Major work completed.</li> <li>▪ For cold plate leveller, accelerated cooling system, cooling bed-1, dividing shear, Double Side Trimming Shear&amp; plate marking machine all structural work completed.</li> <li>▪ PAC done.</li> </ul>
31	Slab Reheating Furnace for New Plate Mill (One 225 t/h Walking beam type, top &bottom fired)	Tenova Spa, Italy	83.27 (28.12)  91.95 <u>Gross cost:</u> 104.43	98.89	20.08.10	Aug'12 (Jun'14)	<ul style="list-style-type: none"> <li>▪ PAC issued: 08.08.14</li> <li>▪ Reheating Furnace lighted-up: 12.05.14.First 2 slabs were discharged for rolling on 26.05.14/ morning&amp; on 27.05.14, some problem occurred.</li> <li>▪ Furnace was started again on 02.06.14.</li> <li>▪ Commissioning done.</li> </ul>
32	Rolling Facilities for New Plate Mill (4-Hi reversing Roughing Mill Stand- 920,000 tpa of plates) (3,067 tpd)	Danieli & C	731.90 (467.70)  814.07  <u>Gross cost:</u> 929.30	788.96	17.08.10	Feb'13 (Jun14)	<ul style="list-style-type: none"> <li>▪ Rolling started: 05.06.14</li> <li>▪ Commencement of rolling from the 4300mm wide Plate Mill was inaugurated by the Chairman on 06.06.14. Also, the first load of 2 nos. 100mm thick plates was flagged-off by the Chairman on 06.06.14.</li> <li>▪ PAC issued: 31.07.15.</li> <li>▪ CC issued: 21.03.17</li> <li>▪ PG test: 25.12.17</li> <li>▪ Plate Mill was under shutdown since 14.08.14 due to failure of main Mill Motors.</li> <li>▪ Rolling started on 30.11.14 and was under operation with repaired motors.</li> <li>▪ Plate mill was under shut down from 23.09.16 for 17 days for replacement of main mill stand motors (8 MW each).</li> <li>▪ Both the motors have been replaced and rolling resumed since 09.10.16.</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP																								
							<u>Hot Plate Leveler:</u> Integrated cold trial done on 20.09.14.																								
33	Finishing Facilities for New Plate Mill (4 -Hi reversing Finishing Mill)  Total production aim ( plates, thickness 6-100 mm): 920,000 tpa (3,067 tpd) Of that : • Plates, thickness 6-50 mm : 828,000 tpy • Plates, thickness > 50-100 mm : 92,000 tpy  <u>Critical issues</u> Completion of balance piping job.	SMS Siemag/SMS India/ABB	518.50 (343.88)  580.32 <u>Gross cost:</u> 655.9	618.35	23.08.10	Feb'13 (Mar'15)	<ul style="list-style-type: none"> <li>▪ PAC issued :23.11.15,</li> <li>▪ CC issued: 07.04.17</li> <li>▪ PG test done in Oct'18</li> <li>▪ Hot Plate Leveler: Hot trial on 20.09.14.</li> <li>▪ Accelerated Cooling System: Hot trial on 30.11.14</li> <li>▪ Dividing Shear: Hot trial on 03.01.15, plate cutting done on 17.01.15.</li> <li>▪ Cold Plate Leveler: Hot trial on 30.01.15.</li> <li>▪ Double Side Trimming Shear: Hot trials on 31.01.15. After completion of integrated trials, plate cutting done on 20.02.15.</li> <li>▪ Cooling Bed-1: Both entry &amp; exit sections are in operation.</li> <li>▪ Plate Parking Machine: Hot trial on 18.03.15.</li> <li>▪ Under operation since Mar'15.</li> <li>▪ Cumulative slabs rolled since inception: 36,07,339 T</li> <li>▪ Cumulative Plates produced since inception : 32,45,808 T this includes: <ul style="list-style-type: none"> <li>▪ Production of plates in 2014-15: 33,991 T</li> <li>▪ Production of plates in 2015-16: 2,20,923 T</li> <li>▪ Production of plates in 2016-17: 5,42,363 T</li> <li>▪ Production of Plates in 2017-18: 8,00,617 T</li> <li>▪ Production of Plates in 2018-19 : 8,57,966 T</li> <li>▪ Production of plates in 2019-20 7,89,948 T this includes (T): <table border="1" style="margin-left: 40px;"> <tr> <td>Apr</td> <td>74,393</td> <td>Oct</td> <td>69,689</td> </tr> <tr> <td>May</td> <td>79,865</td> <td>Nov</td> <td>70,925</td> </tr> <tr> <td>Jun</td> <td>75,112</td> <td>Dec</td> <td>81,411</td> </tr> <tr> <td>Jul</td> <td>58,300</td> <td>Jan</td> <td>74,765</td> </tr> <tr> <td>Aug</td> <td>70,712</td> <td>Feb</td> <td>60,142</td> </tr> <tr> <td>Sep</td> <td>74,634</td> <td>Mar</td> <td></td> </tr> </table> </li> </ul> </li> </ul>	Apr	74,393	Oct	69,689	May	79,865	Nov	70,925	Jun	75,112	Dec	81,411	Jul	58,300	Jan	74,765	Aug	70,712	Feb	60,142	Sep	74,634	Mar	
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34	Water System for New Plate Mill	Flowmore Ltd., Ahmedabad	52.96  54.56 <u>Gross cost:</u> 54.61	53.79	22.10.11	Apr'13 (Nov'16)	<ul style="list-style-type: none"> <li>▪ Pumps of DCW-Mill, ICW-General, ICW-Furnace and Settling Tank PH have been erected.</li> <li>▪ Automation system has been commissioned in Re-circulating Pump House (RCPH) &amp; Settling tank Pump House (STPH).</li> <li>▪ PAC &amp; Commissioning done.</li> </ul>																								
35	Power Distribution System for New Plate Mill	Siemens	29.86  32.62 <u>Gross cost:</u> 35.61	31.85	01.02.12	Apr'13 (Nov'16)	<ul style="list-style-type: none"> <li>▪ Completed.</li> <li>▪ PAC &amp; Commissioning done.</li> </ul>																								
36	Air Conditioning System for New Plate Mill  <u>After RPN</u> Balance work of Air Conditioning	Trans Tech Turnkey Pvt. Ltd. Kolkata  S.C.Varghese	16.67 <u>Gross cost:</u> 19.36  4.47		20.04.12  27.12.18	Jul'13  Jun'19	<ul style="list-style-type: none"> <li>▪ One chiller unit is under operation. Other two unit work is balance.</li> <li>▪ Since site progress is very slow, RPN issued to Party and order placed on S.C.Vergheese in Dec'18, alternate agency with implementation schedule of 6 months. 50% jobs completed earlier, balance jobs to be completed after RPN includes pipeline, its insulation, automation etc.70-80 % jobs have been</li> </ul>																								



Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
	System for NPM		<u>Gross cost</u> 5.28	16.57		(After RPN) Apr'2020	completed.
37	Auxiliary Power, Lighting & Earthing for New Plate Mill	Cosmic Power Systems Pvt. Ltd., Vizag.	19.30  19.74 <u>Gross cost:</u> 20.94	19.21	18.04.12	Apr'13 (Nov'16)	<ul style="list-style-type: none"> <li>Major work completed, balance is under progress.</li> </ul>
38	Auxiliary Civil Work for New Plate Mill <u>Critical issues</u> Poor mobilization and payment to vendors by M/s HSCL affecting the progress of work	HSCL	29.17  40.67 <u>Gross cost:</u> 29.17	33.88	05.07.12	Aug'13 (Nov'16)	<ul style="list-style-type: none"> <li>Major work completed.</li> <li>Balance work in road &amp; drain area various areas is under progress.</li> </ul>
39	EOT Cranes & Hoists for New Plate Mill (total 22 cranes)	Anupam Industries, Anand	130.22  210.26 <u>Gross cost:</u> 224.44	130.74	08.09.12	Mar'14 (Jun'15)	<ul style="list-style-type: none"> <li>Under operation.</li> <li>PAC done.</li> </ul>
40	Erection of Mech. Equipment for New Plate Mill	Essar Project (India) Ltd, Mumbai	72.79  76.11 <u>Gross cost:</u> 84.05	72.91	06.10.12	Aug'13 (Jun'15)	<ul style="list-style-type: none"> <li>PAC &amp; Commissioning done.</li> <li>Rolling started on 05.06.14.</li> <li>In Hot Plate Leveler, integrated cold trial done on 20.09.14 in presence of Chairman, SAIL</li> <li><u>In Finishing facility :</u> <ul style="list-style-type: none"> <li><u>Dividing Shear:</u> Hot trial: 03.01.15, plate cutting: on 17.01.15 and under operation.</li> <li><u>Cold Plate Leveler:</u> Hot trial: 30.01.15 and under operation.</li> <li><u>Double Side Trimming Shear:</u> Hot trials: 31.01.15. After completion of integrated trials, plate cutting: 20.02.15. Trial run of scrap conveyor done.</li> <li><u>Cooling Bed-1:</u> Both entry &amp; exit sections are in operation.</li> <li><u>Plate Marking Machine:</u> Cold trials have been completed. Hot trial taken through solvent and paint/solvent for continuous operation received on 18.03.15.</li> <li><u>Primary Inspection Bed:</u> hot trial: 23.05.15.</li> <li><u>Flame Cutting Machine:</u> Erection work has been completed. Reconciliation is under progress.</li> </ul> </li> </ul>
41	Ventilation System for New Plate Mill	C Doctor	10.65  10.16 <u>Gross cost:</u> 10.91	10.68	07.10.13	Oct'14 (Apr'2020)	<ul style="list-style-type: none"> <li>Furnace -ECR Washed air System completed.</li> <li>ECR-1 Washed Air System (3 nos.) completed.</li> <li>Progress was poor due to GST issues (resolved now) and theft of material.</li> <li>16/23 nos ventilation system completed so far.</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
42	Utility Pipework, Air Drier & Aux. Eqpts. for New Plate Mill	Flowmore Ltd., Ahmedabad,	20.41 <u>19.33</u> Gross cost: 21.01	17.92	23.10.13	Dec'14 (Nov'16)	<ul style="list-style-type: none"> <li>▪ Engineer's notice to M/s Flowmore on 13.01.14 and sustained pressure at various levels to expedite the jobs, progress has improved.</li> <li>▪ Make-up water (DN-150, 350) 350m, DCW (DN-150) 100m, ICW (DN-80, 150) 350m, Mixed Gas (DN-25, 100, 150, 900, 1200, 1500) 212m, Nitrogen (DN-100, 200, 300, 400) 814m, Inst. Air (DN200) 972m, Compressed Air (DN-300, 400) 1204m: completed.</li> <li>▪ For cold plate leveler, DSTS&amp; dividing shear, piping for ICW &amp; IA has been completed.</li> <li>▪ For cooling bed-1, all ICW, DCW, compressed air and instrument air piping completed.</li> <li>▪ For accelerated cooling system, piping for DCW, compressed air, instrument air and piping from PCPH to Piezometric tank has been completed.</li> <li>▪ PAC issued.</li> </ul>
	<b>Utility/Enabling Packages</b>						
43	Augmentation of existing MSDSs and installation of new MSDSs-IV, V & V <u>Additional Work</u> a) Change order-1- Rs. 0.7 cr. (net of cenvat) b) Change order-2- Rs.3.6 cr. (net of cenvat)	Siemens	219.41 (35.86) <u>227.65</u> Gross cost: 233.23	226.14	03.10.08	Oct'10 (Apr'13)	<ul style="list-style-type: none"> <li>▪ PAC (7 units) issued: Jul'12-Apr'14</li> <li>▪ Commissioning certificate: Mar'15-May'15</li> </ul>
44	Medium Voltage Power Distribution System & SCADA <u>Additional Work</u> a) Change order 1 – Rs. 1.02 crore (net of cenvat) b) Change order 2- Rs.2.83crore (net of cenvat) c) Change Order 3- Rs.4.22crore (net of cenvat) d) Change order 4- Rs10.32crore (net of cenvat) e) Change Order 5 – Rs.2.14 crore (net of Cenvat)	L&T	111.55 <u>135.07</u> Gross cost: 144.22	118.73	07.04.10	Mar'12 (Apr'13)	<ul style="list-style-type: none"> <li>▪ PAC issued: Jan'14 - Feb'15</li> <li>▪ Commissioning certificate: Nov'14-Nov'15</li> <li>▪ Commissioning &amp; PG of few routes is pending.</li> </ul>
45	Intra-Plant Transportation Facilities <u>Additional Work</u> a) Change order 1, Wagon loading system for coke on MBE for Rs.8.3 cr. (net of cenvat) b) Additional sanction-change order for wagon loading of coke- Rs.0.1 cr. (net of cenvat)	MBE Co. Ltd.	237.21 <u>261.80</u> Gross cost: 276.85	247.03	07.04.10	Feb'12 (Aug'13) CDIroute- Mar'14 & coke from existing COBs route- Jul'14)	<ul style="list-style-type: none"> <li>▪ Under operation.</li> <li>▪ PAC done.</li> </ul>
46	Interplant Fuel & Industrial Pipelines <u>Additional Work</u>	UB Engg.	153.09		18.09.10	Dec'11 (Aug'13)	<ul style="list-style-type: none"> <li>• The minimal utility pipelines required for supplying mixed gas, compressed air &amp; nitrogen to New Plate Mill was completed on 09.05.14 and Reheating</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
	a) Change order-Rs.18.26crore (net of cenvat) b) Change order - Rs.1.73 cr(net of cenvat)  <u>After RPN action (estimated cost Balance work : Rs.45.99 Crore(net of cenvat credit of 5.35 cr)</u>  Major work of balance job	Consortium of Vimal Organics Ltd.	152.39 <u>Gross cost:</u> 161.79  40.04 <u>Gross cost:</u> 45.39	203.10	03.05.16	NPM route minima- <b>May'14</b>  Jan'17 <b>(Jul'17)</b>	Furnace was lighted-up on 12.05.14. <ul style="list-style-type: none"> <li>The main line is to come from a distance of about 5 Kms from the gas booster point through new Gas corridor. .</li> </ul> <p><b>After RPN to UB Engg.</b>            For major balance work, after RPN action, LOA placed on consortium of M/s Vimal Organics on 22.04.16 with implementation schedule of 8 months.</p> <ul style="list-style-type: none"> <li>Site work was started on 13.05.16.</li> <li><u>For New Plate Mill:</u> Mixed Gas (DN 1500 mm) 1800 meters charging done on 15.11.16.</li> <li><u>Structural:</u> Leftout Platform, stair case &amp; walkway job in progress in all zones. PRMS mechanical erection completed, instrumentation &amp; Electrical work in progress.</li> <li>DN 100 mm Propane Line for old mills section has been charged on 03.02.2017. DN 400 mm / 500 mm Compressed Air Line charged on 08.02.2017; DN 80 Oxygen line from TOP-II to New Plate Mill- total 3,500 meters erected and charged on 07.03.17. DN 150 O<sub>2</sub> line erection completed (350 m), DN 50 MP N<sub>2</sub> line Charged on 17.03.2017, DN 250 LP N<sub>2</sub> line erected 600/600 meters, DN 1000 LD gas line erected 85 /85 meters.</li> </ul>
47	LPG/Propane Storage & Handling System	Globe Gas Equipment	9.63  10.13 <u>Gross cost:</u> 10.46	9.98	09.03.10	Jun'11 <b>(Feb'16)</b>	<ul style="list-style-type: none"> <li>One unit is under operation since 27.01.16 and supplying to RHOB.</li> <li>Second unit under operation since 16.02.16.</li> <li>After oxygen made available through separate package IPPL on 07.03.17, propane also made available to NPM.</li> <li>PAC done.</li> </ul>
48	Make-up, Drinking & Firefighting Water System <u>Additional Work</u> For Pipe lines & valves for soft water to BF-5- Rs. 1 cr. (net of cenvat)	JUSCO	37.52  38.77 <u>Gross cost:</u> 39.33	39.94	21.08.10	Feb'12 <b>(Jun'15)</b>	<ul style="list-style-type: none"> <li>PAC issued: 17.04.15</li> <li>Commissioning certificate: 15.05.15</li> <li>PG test: 03.12.15</li> <li>PG test certificate: 08.12.15</li> <li><b>FAC: 08.04.17</b></li> </ul>
49	<b><u>Railway Infrastructure</u></b>		168.91  195.88 <u>Gross cost:</u> 197.35	160.56			
49a	Supply of Rails for Railway Infrastructure	BSP	32.43 <u>Gross cost:</u> 36.93		12.02.09	-	<ul style="list-style-type: none"> <li>Total 9,816T IU rail (60kg) received and 416T IU rail (52kg) yet to be procured by RSP.</li> </ul>
49b	Supply of PSC Sleepers etc. for Railway Infrastructure	OCP, OCAIL & GPT	29.23 <u>Gross cost</u> 30.89		24.08.10	Aug'11 <b>(Jun'12)</b>	<ul style="list-style-type: none"> <li>Total 1,18,558 nos. of various types of PSC sleepers (sch.- Aug'11) recd.</li> </ul>
49c	Supply of Turnout and Fittings for	Multiple	10.77		27.08.10	Jul'11	<ul style="list-style-type: none"> <li>Total 11,43,333T received.</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
	Railway Infrastructure	parties	<u>Gross cost:</u> 10.77			(Jan'12)	
49d	Cons. & Upgradation of Tracks for Railway Infrastructure <u>Addl. Work:</u> Change order on M/s ARSS for Rs.3.9 cr. (net of cenvat)	ARSS Infra Projects Ltd.	36.31 <u>Gross cost:</u> 37.49		27.08.10	Feb'12/ Sep'19* (Upgradation on work to new party)  (Mar'20) (M/s S.N. Sharma job))	<ul style="list-style-type: none"> <li>New tracks-major jobs have been completed .M/s ARSS were called for conciliation on 29.10.19, they have not come, conciliation meeting is again planned on 06.11.19.</li> <li>To resolve various issue raised by M/s ARSS, party has been called for conciliation meeting, party has not come yet.</li> <li>Party didn't agree to work on same rates for up-gradation of tracks. Hence, for retendering for up-gradation works.</li> <li>For balance Railway track work, order placed on 28.06.18 on M/s Suresh Chand Gupta for Rs 22.43 Crore with implementation schedule of 15 months, Work is under progress. Work was stopped by party and RPN notice issued to the party on 30.11.19. For Balance jobs (inside the plant) NIT issued with TOD on 25.03.2020. For outside the plant work, documents are being prepared for retendering.</li> <li>For BNDM to marshalling Yard railway track upgradation/construction, order placed on M/s S.N.Sharma constructions for Rs. 5.47 crore. Out of 8 kms only 700-800 mtr job is balance and work is under progress.</li> </ul>
49e	Service Buildings in NCCY, OBBP & Marshaling Yard for Rail Infra	ZA Construction	2.05 <u>Gross cost:</u> 2.11		28.12.10	Jun'12 (Jun'15)	Completed.
49f	Overhead Electrification of Tracks for Railway Infrastructure <u>Additional Work</u> Change order for interim deviation - Rs.9.6 crore	Cimechel Electric Co.	26.02 <u>Gross cost:</u> 26.43		17.01.11	Jul'12 (Jan'20)	<ul style="list-style-type: none"> <li>OHE Work for NCCY, Marshalling yard completed and partly completed for OBBP. Bay Extension at MSDS-VI charged and Commissioned.</li> <li>Earlier, power had to be supplied by Railway but they refused. Later, separate order for construction of a 132/25 KV traction substation (TSS) was placed on M/s Cimechel Electric Co. as separate contract in Oct'14 at ~ Rs.37 Cr. and work is under progress.</li> <li>Disputes with M/s Cimechel Electric Co resolved amicably.</li> <li>Permission for no load charging of Traction Sub Station (TSS) received from Railways. Tripartite agreement to be signed among Railway, RSP and Western Electricity Supply Company of Orissa (WESCO). NOC of RSP has been conveyed to WESCO and inspection done by WESCO on 13.04.19. Clarification of WESCO complied by RSP on 06-05-2019 and sent to WESCO.</li> <li>Further, WESCO asked for supplying power to Railways directly, RSP has agreed for this arrangement time being. Discussions with WESCO authority are under progress for Tripartite agreement. Meeting with WESCO held on 01.10.19 in this regard. Draft agreement was submitted to WESCO, Comments on the same given by WESCO to RSP. Meeting held with WESCO and RSP on 27.12.19 to discuss the points not agreeable to RSP.</li> <li>Subsequently, WESCO has submitted revised draft agreement after incorporating points resolved in meeting. However, one new condition is raised by Railways, in that regard, Railways will discuss the issue with WESCO. The condition is not linked with RSP. Issue resolved and draft agreement is likely to be signed shortly. Thereafter, TSS will be charged.</li> </ul>

Sl. No.	Package	Party	Cost/ RCE in Rs.Cr Net of CENVAT (FE)	Expenditure till Feb,2020 (Rs. Cr)	Eff. Date of Contract	Schedule (Likely/ Actual)	Status RSP
49g	Signaling & Telecomm. for upgradation of Rail infra (Indoor)	Kiran Infra Engg. Ltd., Jaipur	21.14 <u>Gross cost:</u> 21.79		17.11.11	Feb'13 (*)	<ul style="list-style-type: none"> <li>▪ New Coal Chemical Yard commissioned since Dec'15 and is in operation.</li> <li>▪ Track modification work of Marshalling Yard has been completed.</li> <li>▪ For OBBP Yard, will be taken up after track modification (track work is under progress under package mentioned in sl. No.49d).</li> </ul> <p><b>*Presently, work has been stopped by parties, claims are sent. To resolve the issue committee has been formed and outcome of the report has been communicated with the parties.</b></p> <p><b>For Outdoor work, party communicated to work after resolving of disputes (reg part commissioning, part PBG etc) . Disputes have been resolved and processed for approval.</b></p> <p><b>For Indoor work, party is interested to close the contract, However, discussions are under progress with the party for resolving of disputes.</b></p>
49h	Signaling & Telecomm. for upgradation of Rail Infra (Outdoor)	HBL Power Systems Ltd, Kolkata	10.99 <u>Gross cost:</u> 11.76		11.11.11	Feb'13 (*)	
50	2x700tpd O <sub>2</sub> Plant (BOO basis)	BOC	(BOO basis)		02.01.09	Jun'11 (Sep'15)	Completed.

## BSL – Expansion of Bokaro Steel Plant

1. **'In-Principle' Approval** : Dec'06
2. **Cost** (Rs. crore) :
  - a) Indicative cost (Dec'06) : Rs 8,399 (Net of Cenvat benefit of Rs 866 Cr.)
  - b) Revised estimates (Jul'08) : Rs15,196 (Net of Cenvat benefit of Rs1,517 Cr.)
  - c) Revised estimates (Jun'09) : Rs 6,325 (Net of Cenvat benefit of Rs 626 Cr.) (FE – Rs 1,275 Cr)
  - d) Cost of approved packages : Rs 5,160.59(Net of Cenvat benefit of Rs 543.97Cr.) (FE – Rs 1,275.68 Cr)
  - e) Expenditure (**Till Feb'20**) : **Rs. 7003.57 Cr.**
3. **Approved Schedule** : Dec'11 (New CRM); Jan'14 (HSM)  
**Actual Completion** : Jul'15 (PLTCM - Completed)  
 : Sep'15 (HSM - Completed)  
 : May'18 (HDGL - Hot trials)  
**Now Scheduled** : Mar'20 (HMDS - linked to 450 T crane)

#### 4. **Production (Mtpa)**

Item	Installed Capacity	2005-06 (Base Case)	After Phase-I Expansion	Present Level
Hot Metal	4.59	4.7	5.77	5.77
Crude Steel	4.36	4.23	4.61	4.61
Saleable Steel	3.78	3.73	4.18	4.18

#### 5. **Techno- Economic parameters**

Item	2005-06	After Expansion
Coke Rate (Kg/thm)	524	386
BF Productivity (t/m <sup>3</sup> /d)	1.89	2.16
Specific energy (Gcal/tcs)	7.09	5.5

#### 6. **Facilities envisaged (Dec 2006):**

- Introduction of Auxiliary fuel injection in two Blast Furnaces
- Augmentation of existing Sinter machines
- Introduction of appropriate Secondary refining facilities in Steel Melting Shop for producing value added grades of steel
- Up-gradation of existing HSM
- Conversion of higher quantities of HR coils to value added CR products with the installation of additional Cold Rolling capacity

The Comprehensive Project Feasibility Report (Dec'06) envisaged the Hot Metal production as 7.44 MTPA, Crude Steel as 7.00 MTPA and Saleable Steel as 6.53 MTPA. In June'09, keeping the prevalent market conditions in perspective, overall review of SAIL Expansion Plan was done by SAIL Board. Facilities envisaged under CPFPR i.e. New Sinter Plant, Up-gradation of 2 numbers of BF (no. 1 & 5), SMS-III, Up-gradation of Tandem Mill -1, Services & Auxiliary facilities earlier envisaged at BSL were deferred.

#### **Facilities envisaged (June 2009) :**

- Augmentation of Raw Material Handling Facilities
- Rebuilding of 3 Coke Oven Batteries compliant with Statutory environmental norms
- Up-gradation of BF no. 2 and Up-gradation of Stoves of BF- 5 to enhance Hot Metal production from 4.7 to 5.77 Mtpa
- Introduction of Hot Metal De-sulphurisation facility in SMS-II for producing value added grades of Steel
- Up-gradation of Roughing stands of HSM
- New Cold Rolling Mill complex (CRM-III) - 1.2 Mtpa
- Augmentation of Infrastructure facilities, Utilities and Services, Pollution control schemes, etc.

#### 7. **Present Status**

- **Major linked facilities completed :**
  - ✓ Up-gradation of Blast Furnace No.2
  - ✓ 2nd Ladle Furnace in SMS-II
  - ✓ Coal Dust Injection system for BF- 2 & 3
  - ✓ Rebuilding of Coke Oven Battery No.1&2
  - ✓ Turbo-blower-8
  - ✓ Up-gradation of Stoves of BF-5

**Package-wise Details for Expansion of Bokaro Steel Plant**

**Packages under Implementation:**

S N	Package	Party	Cost in Rs. Cr Net of CENVAT (FE) / Gross Cost	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status BSL																								
	<b>New CRM Complex</b>																														
1.	<p>Pickling Line-Tandem Cold Mill (Capacity - 1.261 Mtpa; 3978 TPD)</p> <p><u>Profile</u> Coil wt. – 18T, 22.5T, 24T, 27T Width – 800 to 1560 mm Thickness – 0.25 – 2 mm</p> <p><u>Issues :</u></p> <ul style="list-style-type: none"> <li>- Delay in stabilisation of Laser welder and procurement of spares.</li> <li>- Additional Mandays being discussed with M/s Primetals.</li> </ul>	Primetals / Primetals India/ /Mcnally Bharat	694.31 (332.57)  Gross Cost - 810.47	792	3.3.08	Dec'10 <b>(Aug'14-completed Jul'15)</b>	<ul style="list-style-type: none"> <li>• <b>PAC: 28.02.14</b></li> <li>• <b>CC: 28.07.15</b></li> <li>• Production details : <ul style="list-style-type: none"> <li>- 2015 - 16: 85,810 T</li> <li>- 2016 - 17: 2,17,394 T</li> <li>- 2017-18 : 3,55,561 T</li> <li>- 2018-19 : 3,65,565 T</li> <li>- 2019-20 : 4,23,946 T till Feb'20</li> </ul> <table border="1" style="margin-left: 20px;"> <tr><td>Apr</td><td>24708</td><td>Oct</td><td>36240</td></tr> <tr><td>May</td><td>37362</td><td>Nov</td><td>46976</td></tr> <tr><td>Jun</td><td>38238</td><td>Dec</td><td>43004</td></tr> <tr><td>Jul</td><td>34490</td><td>Jan</td><td>40803</td></tr> <tr><td>Aug</td><td>41145</td><td>Feb</td><td>46237</td></tr> <tr><td>Sep</td><td>33046</td><td>Mar</td><td></td></tr> </table> </li> <li>• Due to fire on 02.11.18, PLTCM was under shutdown; Repair work completed and operation resumed on 22.11.18.</li> <li>• Work order for maintenance of Laser welder of PLTCM issued on OEM M/s Primetals on 30.11.18.</li> <li>• Technical support from M/s Primetals started from 17.06.2019. Welder expert visited Bokaro on 15.07.2019.</li> <li>• To improve the welding quality, Major corrective Maintenance after supply of requisite spares.</li> <li>• Two stands roll change in auto-mode achieved. Sensors procurement in progress for rest three stands, expected by Feb'20.</li> </ul>	Apr	24708	Oct	36240	May	37362	Nov	46976	Jun	38238	Dec	43004	Jul	34490	Jan	40803	Aug	41145	Feb	46237	Sep	33046	Mar	
Apr	24708	Oct	36240																												
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2.	Hot Dip Galvanizing line & Electrolytic Cleaning line	Primetals / Primetals India/ Andritz AG	486.30 (207.71)	532.07	3.3.08	Jul'10 (ECL-CC)	<p><u>ECL:</u></p> <ul style="list-style-type: none"> <li>• <b>PAC : Mar'15.</b></li> </ul>																								

	<p><u>HDGL</u> (Capacity - 0.38 Mtpa; 1141 TPD)</p> <p><u>Profile</u> Width – 800 to 1560mm Thickness – 0.28 – 2mm Zn coating – 30-300 g/m2</p> <p><u>ECL</u> (Capacity - 0.37 Mtpa; 1111 TPD)</p> <p><u>Profile</u> Broad Gauge range - 0.25 to 1.5 mm</p> <p><u>Issues :</u> Support of M /S Primetals is required to run the line but M/s Primetals is not willing to provide support and is linking the same with Commercial issues of CRM-3. However, the commercial issues of Primetals are being taken up on priority.</p>		Gross Cost - 563.00			issued) HDGL-May'18	<ul style="list-style-type: none"> <li>• <b>Hot Trials held in May'16.</b></li> <li>• <b>CC: 18.03.17</b></li> <li>• 1st phase of commissioning tests held in Oct'16, 2nd phase tests conducted during 15-19 Feb'17.</li> <li>• Cumulative output from ECL in 2019-20 is 20169 T</li> </ul> <p><u>HDGL:</u></p> <ul style="list-style-type: none"> <li>• <b>PAC issued on 04.02.17 with effect from 19.11.16.</b></li> <li>• Furnace lighted up on 10.05.18.</li> <li>• Strip threading started on 29.05.18.</li> <li>• <b>Hot Trial started on 31.05.18.</b></li> <li>• <b>CC issued on 28.06.18.</b></li> <li>• HDGL production in 2018-19 (Jun'18 till Sep'18 ) : 9338 T. Production for 2019-20 is mentioned as under:</li> </ul> <table border="1"> <tr> <td>Apr</td> <td>-</td> <td>Oct</td> <td>-</td> </tr> <tr> <td>May</td> <td>-</td> <td>Nov</td> <td>-</td> </tr> <tr> <td>Jun</td> <td>-</td> <td>Dec</td> <td>-</td> </tr> <tr> <td>Jul</td> <td>-</td> <td>Jan</td> <td>1070 T</td> </tr> <tr> <td>Aug</td> <td>-</td> <td>Feb</td> <td>5645 T</td> </tr> <tr> <td>Sep</td> <td>-</td> <td>Mar</td> <td>-</td> </tr> </table> <ul style="list-style-type: none"> <li>• HDGL is under breakdown since 10.08.18 due to multiple holes in Radiant tubes of RTH/RTS section of furnace. High Temperature ceramic chemical pasting done on perforated Radiant tubes by M/S Andritz. RTH/RTS section of furnace tested with repaired Radiant tubes on 10.11.18 in hot condition and results found satisfactory.</li> <li>• Modifications done in 15/46 nos. of Burners for injection of propane with mixed gas ( total 22 no. Burners found damaged, out of which, 13 nos. are blocked).</li> <li>• Radiant tubes with Nickel content 18-22% i.e ASTM A297HL are being procured. For procurement of Radiant tubes, Work order placed on 2 parties on 17.01.19 i.e, MD Steel (70%) &amp; Sajjan Precision Casting (30%). Delivery period would be 35 days for 1st sample and 56-70 days thereafter for complete delivery.</li> <li>• 1st sample from MD steel delivered on 15.04.2019.</li> <li>• All 46 nos. Radiant tubes supplied and 46 tubes are installed. HDGL has been started from 26.01.2020.</li> </ul>	Apr	-	Oct	-	May	-	Nov	-	Jun	-	Dec	-	Jul	-	Jan	1070 T	Aug	-	Feb	5645 T	Sep	-	Mar	-
Apr	-	Oct	-																												
May	-	Nov	-																												
Jun	-	Dec	-																												
Jul	-	Jan	1070 T																												
Aug	-	Feb	5645 T																												
Sep	-	Mar	-																												
3.	<p>Skin Pass Mill (Capacity-0.86 Mtpa; 2567 TPD )</p> <p><u>Profile</u> Thickness – 0.3 -1.5 mm Width – 1000-1500 mm</p>	Danieli / Sunag	107.23 (64.43)	118.61	16.5.08	Jul'10 (Jul'13)	<ul style="list-style-type: none"> <li>• <b>PAC : 18.01.13</b></li> <li>• <b>CC : 07.10.16</b></li> <li>• <b>PG : 25.09.17</b></li> <li>• <b>FAC : 21.06.18</b></li> <li>• Production details :</li> </ul>																								



							<ul style="list-style-type: none"> <li>➤ 2015-16 : 74,234 T</li> <li>➤ 2016-17 : 2,03,429 T</li> <li>➤ 2017-18 : 3,36,123 T</li> <li>➤ 2018-19 : 3.25.553 T</li> <li>➤ 2019-20 : 3,89,881 T till Feb'20</li> </ul> <table border="1" style="margin-left: 20px;"> <tbody> <tr> <td>Apr</td> <td>27288</td> <td>Oct</td> <td>32937</td> </tr> <tr> <td>May</td> <td>30272</td> <td>Nov</td> <td>37585</td> </tr> <tr> <td>Jun</td> <td>34110</td> <td>Dec</td> <td>40557</td> </tr> <tr> <td>Jul</td> <td>35120</td> <td>Jan</td> <td>39872</td> </tr> <tr> <td>Aug</td> <td>38642</td> <td>Feb</td> <td>38526</td> </tr> <tr> <td>Sep</td> <td>34972</td> <td>Mar</td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Rolling through textured roll commenced from 12.12.14.</li> <li>• Commissioning of Coil Positioning Control system : Sensors were replaced by OEM expert from NIRECO Japan. Telescopic cylinder seal replaced. Work not satisfactory and Danieli was requested to send expert from NIRECO. Procurement of damaged sensor completed.</li> </ul>	Apr	27288	Oct	32937	May	30272	Nov	37585	Jun	34110	Dec	40557	Jul	35120	Jan	39872	Aug	38642	Feb	38526	Sep	34972	Mar	
Apr	27288	Oct	32937																												
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Aug	38642	Feb	38526																												
Sep	34972	Mar																													
4.	Bell Annealing Furnace (Capacity - 0.86 Mtpa; 2552 TPD)  <u>Profile</u> 510 mm coil ID 1800 mm coil OD 1000-1500 mm width <0.3 mm- >1.5 mm Gauge	Rad-Con, USA / MACO / Gillanders Arbuthnot Co. Ltd/ Sunag	132.94 (52.53)/ Gross Cost - 153.06	165.44	30.5.08	Feb'10 / <b>Apr'18</b>	<ul style="list-style-type: none"> <li>• <b>PAC : 30.07.14</b></li> <li>• <b>CC : 20.04.18</b></li> <li>• <b>PG : 22.05.18</b></li> <li>• <b>Production détails</b> <ul style="list-style-type: none"> <li>➤ 2015-16 : 55459 T</li> <li>➤ 2016-17 : 1,99,745 T</li> <li>➤ 2017-18 : 3,48,484 T</li> <li>➤ 2018-19 : 3,36,236 T</li> <li>➤ 2019-20 : 4,05,622T till Feb'20</li> </ul> </li> </ul> <table border="1" style="margin-left: 20px;"> <tbody> <tr> <td>Apr</td> <td>28315</td> <td>Oct</td> <td>33597</td> </tr> <tr> <td>May</td> <td>32071</td> <td>Nov</td> <td>39252</td> </tr> <tr> <td>Jun</td> <td>36945</td> <td>Dec</td> <td>41289</td> </tr> <tr> <td>Jul</td> <td>36198</td> <td>Jan</td> <td>41215</td> </tr> <tr> <td>Aug</td> <td>40049</td> <td>Feb</td> <td>39747</td> </tr> <tr> <td>Sep</td> <td>36944</td> <td>Mar</td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• <b>Highlights:</b> Reduction in Heating cycle from 28 to 22 hrs, Cooling cycle from 32 to 27 hrs and PCB from 50 to 42 hrs. Reduction in Loading / Unloading from 8 to 6 hrs.</li> <li>• 35 nos. of bases (out of 47) &amp; 18 Furnaces (out of 26) commissioned earlier.</li> <li>• All the spares for Commissioning of balance 12 bases supplied at site by Mar'18. <b>Balance 12 nos. Bases lighted up. With this, all 47 Bases commissioned in Apr'18.</b></li> <li>• All 47 bases are under operation.</li> </ul>	Apr	28315	Oct	33597	May	32071	Nov	39252	Jun	36945	Dec	41289	Jul	36198	Jan	41215	Aug	40049	Feb	39747	Sep	36944	Mar	
Apr	28315	Oct	33597																												
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Jul	36198	Jan	41215																												
Aug	40049	Feb	39747																												
Sep	36944	Mar																													
5.	Acid Regeneration Plant (Designed Purified Iron Liquor Flow	ISSI, USA	60.03 (4.04)	68.64	5.6.08	Dec'09 <b>(Jan'11)</b>	<ul style="list-style-type: none"> <li>• Acid regeneration started on 26.03.15.</li> <li>• <b>ARP Commissioned on 17.07.15.</b></li> </ul>																								

	rate : 8,500 l/h ; Regeneration efficiency : 99%; Production of Iron Oxide : 1,750 kg/h)		Gross Cost - 63.25				• <b>FAC : 05.09.16</b>
6.	Coil packaging line (Capacity : Line-1 : 400,000 tpa Line-2: 1,000,000 tpa)	ITW, Hyderabad	18.98 Gross Cost - 22.02	22.01	4.7.08	Jan'10 <b>(Jun'12)</b>	<ul style="list-style-type: none"> <li>• CPL-2 completed in Mar'12</li> <li>• CPL-1 completed in Jun'12</li> </ul>
7.	Tension Leveling lines (Capacity : 350,000T/year ; 1125 TPD)	Tenova SPA / Sunag Engg / Multiform Machinery	93.01 (46.13) Gross Cost - 102.48	102.62	19.02.10	Feb'12 <b>(Oct'18)</b>	<ul style="list-style-type: none"> <li>• Integrated Trial with strip started on 30.10.17.</li> <li>• <b>PAC issued on 04.11.17.</b></li> <li>• Commencement of Production trial started with manual welding on 29.01.18.</li> <li>• Production trial started from 01.03.2018.</li> <li>• Production trial restarted from 20.03.18.</li> <li>• <b>Commissioning test done on 05.10.18</b></li> </ul>
8.	Roll Shop (2 CNC Roll grinding machines for work and intermediate rolls. One combination CNC Roll grinding machine. One EDT machine. One Automatic roll loader for loading, roll shop management system, roll changing machines, CNC shear blade grinder etc.)	Tenova SPA (earlier Pomini Tenova) / Arcum engg.	107.92 (80.02)  Gross Cost - 119.75	118.71	08.04.10	Apr'12 <b>(Aug'15)</b>	<ul style="list-style-type: none"> <li>• PAC issued on 09.04.15.</li> <li>• Firefighting system of EDT commissioned in Jul'15.</li> <li>• CC of Combi grinder issued on 02.05.15 and for balance facilities issued on 14.08.15.</li> </ul>
9.	Civil work for New CRM  (Change Order placed for Rs. 122.81 Cr)	L&T	387.71 (incl. change order)  Gross Cost - 387.71  (in addition Esc: 51.16 Cr)	429.96	17.4.08	Apr'10/ <b>(Aug'15)</b>	<ul style="list-style-type: none"> <li>• Major works completed.</li> <li>• Commissioning certificate issued in Jul'15. Defects liquidation to be completed.</li> <li>• Defects liability period extended to Jan'17.</li> <li>• Rs. 12 Cr recovered by BSL against taxes in the escalation payment made to the party.</li> <li>• Balance to be paid after reconciliation of executed works (against Commissioning Certificate issued) at the time of final payment.</li> </ul>
10.	Balance Civil works for New CRM <b>Issue</b> Quantity Deviation under approval.	HN Singh	48.88 Gross Cost - 49.24	50.39	21.04.15	Dec'15 /Jul'20	<ul style="list-style-type: none"> <li>• Design &amp; Engineering -131/131 nos submitted.</li> <li>• Concreting - 16000/16000 m3 done</li> <li>• Toilet Blocks : 05/11 handed over.</li> <li>• Cycle Sheds : 11/11 handed over.</li> <li>• Storm Water line : 80% completed.</li> <li>• Surface drain : 100% completed.</li> <li>• Store bldg electrical work, Balance Fecal line, seepage area in tunnel, Sealing work of CRM-III are under progress. The same shall be completed after deviation approval.</li> </ul>

11.	Structural work for New CRM  (Change Order placed for Rs. 37.89 Cr)	Era Infra	164.18 (incl. change order)  Gross Cost - 164.18	164.60	12.3.08	Mar'10 / Jul'16	<ul style="list-style-type: none"> <li>• <b>Completion certificate issued in Jul'16.</b></li> </ul>
12.	Structural work-RGBS & Miscellaneous  (Change Order placed for Rs. 1.02 Cr)	HSCCL	30.93 (incl. change order)  Gross Cost - 35.39	33.40	31.12.11	July'12 <b>(Jul'14)</b>	<ul style="list-style-type: none"> <li>• <b>Completion certificate</b> issued for RGBS area on 02.07.14.</li> </ul>
13.	Miscellaneous Structural Items - Racks, Store Box - CRM III  <u>Issues:</u> Balance supply - Hydra, C hook, Commissioning spares etc. Balance work TS to be prepared by MECON.	UR Engg. Dewas	8.1  Gross Cost -8.1	7.51	11.05.15	Oct'15 / Dec'20	<ul style="list-style-type: none"> <li>• Equipment supply – 720 / 800 T. Erection done - 600/800 T.</li> <li>• Fixed coil saddle, Sleeve, Scrap Box etc have been supplied. Balance supply: C-hook, PU Pads, Removable coil Saddle, Commissioning spares etc.</li> <li>• Fixed coil saddle, Sleeve, Scrap Box have been erected.</li> <li>• Notice for contractors default issued. RPN Action initiated.</li> </ul>
14.	Hydrogen Generation plant (Capacity-2x250 NM3/Hr)	Airoxnigen / Tianjin Mainland, China	20.42 (4.39)  Gross Cost - 23.28	21.07	14.7.08	Dec'09 <b>(April'18)</b>	<ul style="list-style-type: none"> <li>• H2 taken to BAF for Annealing on 26.05.15 from unit-1. PAC issued on 24.07.15.</li> <li>• There was an explosion on 29.07.15 in unit-2. Parts of unit-2 like electrolyzer, separator, rectifier, valves, connecting pipelines were damaged.</li> <li>• As per contract, the damaged equipment was to be supplied by M/s Tianjin, China, but M/s Tianjin was not responding for the same. M/s AiroxNigen as consortium leader proposed to supply the same indigenously. BSL agreed to accept indigenous supply.</li> <li>• Skid supplied. Shutdown taken from 19.07.16 to 23.07.16 for erection of the Skid (replacement of damaged Skid). Hydrogen Generation started from 23rd Jul'16 and export to BAF started from the old Skid. Shutdown taken for 9 hrs on 29.09.2016 for final calibration of PLC for new skid. Jobs of Rectifier completed and tested for 5300 amp current on 30.09.2016. New HMI system installed, generation of Hydrogen started. Hydrogen taken for purification system on 20.06.17 with Rectifier current 4000 amp.</li> <li>• Requirement of Hydrogen to cater at least 16 bases for heating is around 250 Nm3/hr.</li> <li>• New Lye pump delivered at site. Shutdown taken on 31.10.17 for 1 day. New Lye pump installed at skid1 on 31.10.17.</li> </ul>

							<ul style="list-style-type: none"> <li>Stand-by Distribution Transformer charged.</li> <li><b>CC test of Skid-1 completed in Jan'15. CC of Skid-2 done in Mar'18.</b></li> <li>Skid#1 is under regular operation and is catering to BAF, presently under 50-60% of rated capacity..</li> <li>In Skid-2, gasket was found damaged. New gasket has been installed and Skid-2 is under trial since 03.07.18.</li> <li><b>New 125 Nm3/ hr Methanol based Skid has been installed by M/s AiroxNigen for supply of Hydrogen on conversion basis (at a conversion cost of Rs. 60/m3).</b></li> </ul>
15.	<p>EOT Cranes (part A - 04 cranes; Part B- 19 cranes)</p> <p>3 nos of 50/10t x28 m span</p> <p>2 nos. 80/20t *28 m</p> <p>2 no 50/10 *28 m</p> <p>3 nos. 50/10 t *40m</p> <p>1 no 50/10 t *40m</p> <p>1 nos 80/20t*40m</p> <p>2 nos 50/10 *30m span</p> <p>2 nos 16t*27.5m span</p> <p>1 no 16t*29m span</p> <p>2 no 50/10 t *30m span</p> <p>2 no 50/10 t *30m span</p> <p>2 no. 50/10t*30m span</p> <p>(Change Order placed for Rs. 2.27 Cr)</p> <p>Issues :</p> <ul style="list-style-type: none"> <li>Balance work : Erection of Telfer in Crane no. 10. Waiting for shutdown.</li> <li>Change order for DSL shifting in ST bay.</li> </ul>	WMI	91.3	94.65	19.2.10	Aug'11/Apr'20	<ul style="list-style-type: none"> <li>21/23 Cranes commissioned. <b>CC issued for 21 nos. Cranes.</b> PG given for 7/23 nos. Cranes.</li> <li>21 out of 23 Telfers erected so far. Commissioning of 8/23 nos Telfers done so far.</li> <li>Crane-9: Shutdown for 1 day received on 05.07.19. Welding work of telfer platform done. Shut down work completed.</li> <li>Crane-10: Shutdown awaited. Likely by Apr'20</li> </ul>
16.	HR Coil Conveyor (capacity : 1.27 Mtpa)	SVAI, Austria/SVAI, India (now Primetals)	68.847 (8.302)	76.36	22.2.10	Nov'11 (Jan'15)	<ul style="list-style-type: none"> <li>PAC issued on 10.01.15. <b>CC issued on 10.05.15.</b></li> </ul>
17.	Water supply system	Ion Exchange	68.40	77.58	15.02.10	Oct'11 (Jan'19)  (Jul'14 - DM)	<ul style="list-style-type: none"> <li>Cooling water and Potable water was made available at all required locations. Erection of RO plant completed in Oct'15.</li> <li>Emergency OH tank completed (52 m) in Nov'15. Commissioning of Emergency Overhead Tank (EOHT) for HDGL and BAF done on 04.03.17.</li> </ul>

			Cost - 72.70				<ul style="list-style-type: none"> <li>• Trial run of RO &amp; DM plant in auto mode completed.</li> <li>• Change order issued to M/s Ion Exchange for Softening plant under Water supply system on 23.07.17 at a price of Rs. 8.02 Cr with an implementation schedule of 4 months.</li> <li>• Temporary water softening plant supplied and erected on 31.08.17 for catering to requirement of HDGL. Work Completed. Soft water plant commissioned on 24.11.18.</li> <li>• <b>Commissioning tests done 03.1.19. Certificate issued on 11.01.19 to M/s Ion Exchange.</b></li> </ul>
18.	<p>Effluent Treatment plant</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>- Replacement of damaged HDPE pipe line</li> <li>- Quality &amp; quantity of Effluent is not as per contract</li> </ul>	Voltas	7.59	7.72	06.03.10	Sept'11/ Mar'20	<ul style="list-style-type: none"> <li>• Basic Engg. completed in Nov'11. Detailed Engg completed in Oct'14.</li> <li>• Equipment supply and erection completed in Jul'15.</li> <li>• Trials completed and PAC issued in Mar'15</li> <li>• HDPE pipe to ETP laid underground has been damaged by other working agencies of CRM III. Change order has been issued to M/s Voltas for re-laying of HDPE pipes on existing trestles.</li> <li>• All HDPE pipes supplied at site. Erection of the same, completed.</li> <li>• Commissioning of ETP is planned after accumulation of sufficient effluent.</li> <li>• Testing and Trial in progress. Effluent accumulated at collection tank. Commissioning test in progress</li> <li>• Process of effluent started on 25.12.19. Put in use on 16.01.2020.</li> </ul>
19.	<p>Tertiary Treatment plant</p> <p><u>Issue</u></p> <p>Balance supply for ZLD – Pump 18 nos, Electric panel.</p>	S.R Paryavaran	32.5	31.73	12.03.15	Jul'16/Mar'20	<ul style="list-style-type: none"> <li>• All major works for RO plant completed. Trial and testing is in progress.</li> <li>• Basic Engg. - 40/45nos. Detail Engg.- 300/378 nos.</li> <li>• Equipment Erection -150/150 T done.</li> <li>• Transformer charged. Cabling &amp; Charging of MCC panel done.</li> <li>• Erection of Zero liquid discharge shed completed.</li> <li>• Commissioning of TTP will be done after receiving input from ETP</li> </ul>
20.	<p>Electric operated Transfer car</p> <p>(1x60t cap Transfer car x 415m travel, 1x60t cap Transfer car x130m travel, 4x150t cap Transfer car x 265m travel each 2x40t cap Shuttle car x 25m travel, 1 no. Automated pick &amp; place equipment 4 no. floor mounted fixed coil saddles 20 nos. detachable coil saddle)</p>	Graduate Agro	10.8	13.76	10.03.10	Mar'11 <b>(Jan'18)</b>	<ul style="list-style-type: none"> <li>• All 6 no. Transfer Cars are under semi auto mode &amp; being used by operation for transferring coil &amp; rolls. Erection of PLC panel done in Jun'15.</li> <li>• Pick &amp; place equipment completed in manual mode, commissioned in Dec'15.</li> <li>• Trial of Transfer car in auto mode completed.</li> <li>• Pick &amp; Place has been started in Auto mode .</li> <li>• CC issued on 21.06.17.</li> </ul>

21.	Centralized Tele Communication System	Wipro	3.53 Gross Cost - 3.87	3.73	18.04.10	Apr'11/ (Mar'13 except welfare building) <b>Feb'17</b>	<ul style="list-style-type: none"> <li>Project commissioned on 25.03.13 except RLU location in CRM-III.</li> <li>Testing of RLU exchange completed in Jun'15.</li> <li>Commissioned in Sep'15.</li> <li><b>PAC issued in Jan'16.</b></li> <li><b>CC issued on 14.02.17.</b></li> </ul>
22.	Propane Storage Installation (2*150 T each moulded storage vessels)	Confidence petroleum	7.68 Gross Cost - 8.25	7.45	21.04.10	Aug'11/ <b>Sept'16- Charged to HDGL</b>	<ul style="list-style-type: none"> <li><b>PAC issued in 06.02.15.</b></li> <li><b>CC Issued on 25.11.17.</b></li> </ul>
23.	Fire fighting facilities <u>Issue</u> - Delay in Erection of Fire check door at cable tunnel	Tri Parulex	9.69 Gross Cost - 10.54	11.85	21.10.10	Dec'11  <b>(Sep'19)</b>	<ul style="list-style-type: none"> <li>Piping work completed.</li> <li>FDA system in PLTCM, RGBS, BAF &amp; SPM, HRCC, ECR1 &amp; ECR2, welfare building completed.</li> <li>Erection of FDA system at Welfare Building done. Panel erection completed.</li> <li>PAC issued on 01.10.15.</li> <li>Protocol processed for CC.</li> <li>Pipe testing done.</li> <li>Testing of Fire fighting equipment in all areas completed.</li> <li><b>Commissioned in Sep'19.</b></li> </ul>
24.	Building illumination, earthing, area lighting & Bus Bars in shop of CRM-III	GE / Sharmila Entp.	9.10 Gross Cost – 9.50	10.51	17.02.11	Aug'12/Mar'20	<ul style="list-style-type: none"> <li>Bay Lightings &amp; street lighting in HRCC, Roll shop, PLTCM, ECL, BAF, SPM &amp; HDGL completed.</li> <li>Bay lighting in TLIL, CPL-1 &amp; 2 done.</li> <li>HDGL furnace lighting work done. APC tower &amp; furnace lighting work completed.</li> <li>Tunnel lighting work is in progress (80% completed)</li> <li>Emergency power charging for bay lighting in progress.</li> <li><b>PAC issued for RS bay on 19.08.17.</b></li> <li><b>PAC issued on Jul'18.</b></li> <li>Installation of 4/4 nos High mast tower is in progress.</li> <li>Protocol for CC initiated.</li> <li>Permanent supply for HDGL Furnace area completed. Lighting arrester work in TU bay completed.</li> <li>CC to be issued.</li> </ul>
25.	Construction of Welfare & Canteen building	HSCL	10.8 + 0.89 (cost steel) Gross Cost – 10.50	9.68	10.07.11	Jan'13/ Sep'20	<ul style="list-style-type: none"> <li>Telecom room: Civil work completed in Mar'15.</li> </ul> <p><b>Welfare Building:</b> 1 &amp; 2<sup>nd</sup> floor handed over to CRM-3. Ground floor foundation for lab equipment -13/13 nos completed. Approach road to Welfare building completed.</p> <p><b>Canteen building completed.</b> Civil work completed and Elect. work is in progress. With temporary electrical supply it will be handed over to CRM 3.</p>

							<b>Sub-Station Building :</b> Transformer has been supplied and cable to be supplied. Inspection call has been raised
26.	Compressed Air Station (2 nos) Air volume : 200 Nm <sup>3</sup> /min. Discharge pressure - 8kg / cm <sup>2</sup> (g)	BOC	17.08 Gross Cost – 18.48	20.35	04.08.11	Jan'13 <b>(Aug'13)</b>	<ul style="list-style-type: none"> <li>Both Compressors commissioned in Aug'13 ('B' compressor on 14.08.13 and 'A' compressor on 30.08.13)</li> </ul>
27.	Installation of Nitrogen storage Vessels for CRM-III Capacity : 5 nos of Nitrogen vessels of geometric volume 100 m <sup>3</sup> (Change Order placed for Rs. 0.50 Cr)	Confidence Petroleum	2.61 Gross Cost – 2.85	1.77	16.07.12	Jan'13 /Dec'20	<ul style="list-style-type: none"> <li>Design &amp; Engg.-68/68 nos.</li> <li><b>Vessel-5&amp;6:</b> Installation &amp; Erection completed. Hydro test done. Piping and fitting with main N<sub>2</sub> line completed. Shot blasting, degreasing and painting of internal surface to be done.</li> <li><b>Vessel-1&amp;2:</b> Fabrication of vessels and its Radiography test of joints completed. Compiled inspection report of RT test for 1 vessel received &amp; cleared for installation. For 2<sup>nd</sup> vessel defect liquidation is in progress. Installation and erection awaited.</li> <li><b>Vessel-3&amp;4:</b> Fabrication of vessels and its Radiography test of joints completed.</li> <li>Connection with main pipes of N<sub>2</sub> for Vessel 1, 2, 3 &amp; 4 is balance.</li> <li>Shot blasting, degreasing and painting of internal surface is balance.</li> <li>Contract of shot blasting under finalization, likely by Mar'20.</li> <li>CCOE clearance of vessel no 4, 5 &amp; 6 by Dec'20 after shot blasting and inspection by MECON.</li> </ul>
28.	HT Cable Tunnel Ventilation  Issue: No work at site. Party not responding  Party agreed to start the work.	Maxflow fans manufacturing (p) ltd.	1.2 Gross Cost – 1.20	0.72	16.12.12	Apr'13/ Dec'20	<ul style="list-style-type: none"> <li>Design &amp; Engineering – 100/102 nos.</li> <li>All Tube axial flow fan-supplied.</li> <li>Fan erection completed.</li> <li>Balance supply- Cables. Drawings under approval.</li> <li><b>Balance Activities:</b> Erection of Balance fans, PDB. Also, Cabling work is required for running of fans, Drainage pumps etc.</li> <li>3rd Engineer Notice issued. Letter issued to MECON for RPN TS. Party agreed to start the work.</li> <li>Drawings for control cable submitted by M/s Max Flow. Under approval by MECON. M/s MECON is treating this as extra work and claiming extra payment..</li> </ul>
29.	Lab Glassware & Reagent	Prosperous World	0.0212	1.05		Dec'13 (-)	<ul style="list-style-type: none"> <li>LOA issued on 20.10.12.</li> <li>Inspection clearance awaited.</li> </ul>
30.	Lab Equipment (37 items) <u>Issue</u> <ul style="list-style-type: none"> <li>Erection cannot be started due to non-availability of Civil front.</li> </ul>	Shiv Machine Tools	18.99	10.67	18.05.16	Nov'16/ May'20	<ul style="list-style-type: none"> <li>Kick off meeting held on 11.06.16</li> <li>Basic Engineering - 23/25 nos. submitted.</li> <li>Detail Engineering - 55/66 nos. done.</li> <li>Supply -30/45 T done.</li> <li>Lab Furniture (Tech &amp; Office), Spectrometer-2 nos.,</li> </ul>

							<p>Spectrometric sample m/c, CNC lathe m/c, Abrasive cut-off m/c, Sample punching m/c, shearing M/c, Furnace for strain aging test, Misc items supplied at site.</p> <ul style="list-style-type: none"> <li>• Change order of Electrical work issued to M/s HSCL.</li> <li>• Installation of Lab equipment started Erection of CNC lathe m/c , Milling m/c , UTM &amp; Bending Folding m/c, shearing machine done.</li> </ul>
31.	Dumper cum Skip Loader	JMA stores	1.04			Jul'13 <b>(Dec'13)</b>	<ul style="list-style-type: none"> <li>• LOA issued on 11.01.13.</li> <li>• All 4 nos Dumper cum Skip Loader received at site.</li> </ul>
32.	Procurement of 02 Nos. of Trucks (10 T) & 02 Nos. of Dumpers (12 T)	Trucks: Ashok Leyland Dumper: JMA stores	0.53			Sept'13 <b>(Dec'13)</b>	<ul style="list-style-type: none"> <li>• LOA issued on 30.03.13.</li> <li>• 2 nos. Trucks &amp; 2 Dumpers received at site.</li> </ul>
33.	Material Transfer Equipment. Forklift - 6 Nos. <u>Issue</u> Re-ordering of rest 2 nos Forklift depends upon performance of 4 nos previously bought Forklift	Macrotech Eqpt	0.37		18.03.13 (LOA)	Sep'13 (-)	<ul style="list-style-type: none"> <li>• 4 no. Forklift supplied &amp; handed over.</li> </ul>
34.	Telecom inside New CRM complex (LSIS, VHF Voice Communication & Telephone Cable Network System facility)	BNA Technology, Bangalore	0.998 Gross Cost – 1.00	0.74	19.11.12	Jul'13/ ---	<ul style="list-style-type: none"> <li>• Design &amp; Engineering - 3/3 nos completed.</li> <li>• LSIS system installed - 130/194 nos.</li> <li>• Telephone connection given for 154/154 nos for new exchange.</li> <li>• VHF set - 94 nos. supplied at site and is under operation.</li> </ul>
	<b>Blast Furnace-2</b>						
35.	Up gradation of BF-2	Paulwirth/ L&T	805.45	693.31	17.12.07	Aug'09 <b>(July'10)</b>	<ul style="list-style-type: none"> <li>• Blown in on 24.07.10.</li> </ul>
	<b>Steel Melting Shop-II</b>						
36.	HM Desulphurisation Unit <u>Capacity</u> : 2 nos of De-sulphurisation stations proper. About 37 Heats of Ladle capacity 300 T per day. Hot Metal Quality – Sulphur : 0.005% average - 0.002 % min <u>Issues</u> <ul style="list-style-type: none"> <li>• 450T Crane erection by HEC</li> <li>• Trial run of ESP</li> <li>• M/s TPL is in Arbitration with SAIL.</li> <li>• Further, upstream &amp; downstream projects are not ready for Commissioning of HMDS Project.</li> </ul>	Danieli Corus/ Tata Projects	58.50 (10.07)  Gross Cost – 64.09	71.55	16.10.08	Apr'10/ Mar'20	<ul style="list-style-type: none"> <li>• Trials of HMDS Station-1 completed in Jul'15 and of Unit-2 in Aug'15.</li> <li>• <b>PAC issued on 26.02.16.</b></li> <li>• Further, upstream &amp; downstream projects are not ready for Commissioning of HMDS Project.</li> <li>• Alternate Power source made available on 22.02.2018.</li> <li>• M/s TPL was in Arbitration with SAIL and final award has been issued in favour of TPL on 10.09.18. M/s TPL and M/s Danieli Corus has been asked to submit the proposal for starting the pre-commissioning activities.</li> <li>• For refurbishment claim, offer has been given by Consortium, which is on higher side (approx. 16 Crs. ). Meeting held with the consortium partner in June &amp; July'19 to resolve the issue.</li> <li>• Consortium has pre-condition for submission of revised offer for refurbishment jobs which are in process of approval.</li> <li>• Meeting held at Corporate Office on 20/21.01.2020 to resolve the issue regarding the pre-conditions raised by the consortium</li> </ul>



							<p>for submission of revised offer for refurbishment jobs:</p> <ul style="list-style-type: none"> <li>• Commissioning payment to be made to M/s DCBV without bank guarantee as the same has already made to M/s TPL.</li> <li>• Price variation payment to be made to M/s TPL, before actual issuance of CC.</li> <li>• As discussed the CC payment to be made to M/s DCBV without BG and Interest bearing Advance for Rs.5.0 Cr. to be made to M/s TPL.</li> <li>• PV payment to be made after actual commissioning of the project.</li> </ul>
37.	<p>Supply &amp; Erection of Refractories &amp; Auxiliaries for Protection Lining in HMDS &amp; New Torpedo Bay</p> <p><u>Issues</u></p> <p>Work is held up due to un-availability of front.</p>	HN Singh Const+ HN Refractory	2.19	2.34	27.01.15	Jun'15 / Mar'20	<ul style="list-style-type: none"> <li>• Design &amp; Engineering completed.</li> <li>• Alumina bricks- 330000/330000 nos. supplied.</li> <li>• Ref lining -240000/330000 nos done.</li> <li>• Ref lining of pit -1 &amp;2 in HMDS bay done</li> <li>• Balance work- Ref lining in new Torpedo bay.</li> </ul>
38.	<p>Torpedo Ladle Car</p> <p><u>Capacity:</u> Torpedo Ladle Car- 8 nos of 340T capacity. De-bricking Machine-1 set and re-railing equipment- 1 set.</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>• Refractory lining for remaining 6 cars dependent on availability of 450T EOT cranes and railway track laying in HMDS Area.</li> <li>• Party has claimed escalation (25%) for supply of balance 6 nos. refractory. Under negotiation</li> </ul>	<p>QMMC/Narnco</p> <p>Changed to</p> <p>QQHI Co. Ltd.</p>	40.77 (18.75) Gross Cost – 45.80	30.78	31.08.08	<p>Aug'10 /Mar'20</p> <p>Project is dependent on 450T crane &amp; track laying</p>	<ul style="list-style-type: none"> <li>• Supply of all 8 nos. Torpedo Ladle and PLC, cable, control desk completed.</li> <li>• Hot Metal Transfer through Torpedo ladle from BF to SMS-II converter started on 29.08.18.</li> <li>• Heating of 2nd Torpedo ladle done.</li> <li>• Presently 2 nos Torpedo ladle are in operation.</li> <li>• M/s Premier India has been requested to come to Bokaro at the earliest to resolve the issue for supply of refractories with proper justification at the earliest.</li> </ul>
39.	<p>EOT Cranes (Group-I:3nos)</p> <p><u>Capacity :</u></p> <p>- 1 no (450+100/20) T * 19 m span FG EOT Crane</p> <p>-2 nos (450+100/16) T *25m span FG EOT Crane</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>- HEC to sort out all contractual issues with its sub-contractor for erection and commissioning of 02 cranes in HMDS bay.</li> <li>- Start of electrical jobs of 2<sup>nd</sup> crane. No work is being done in 2nd 450T crane by M/s HEC</li> </ul>	Gr-I: HEC	63.37 Gross Cost – 75.25	82.57	01.09.08	Mar'10/ Jun'20	<ul style="list-style-type: none"> <li>• Equipment supply completed by Jul'15 (1891T).</li> <li>• Mechanical erection of 1st 450 T crane done.</li> <li>• Mechanical erection of 2nd crane started by M/s NP Construction in Aug'16. All major erection jobs are completed.</li> <li>• Siemens appointed SP Enterprise for erection of electrical panels. However, work could not progress due to payment related issues and issuance of Change order.</li> <li>• For completion of balance electrical work of Cranes of HMDS, Change order Issued by M/s HEC to M/s Siemens on 30.03.2017. Approval for sub-contractor i.e, M/s Power Link obtained.</li> <li>• HEC hired a contractor M/s Kisan Enterprises in Nov'16 for retrofitting jobs of panels and Bus bar. Bus bar fitting at panel completed by M/s Kisan Enterprises.</li> <li>• Service engineer of Siemens reached site on 13.05.17. <u>Electrical work started</u> (3 months time for one Crane).</li> </ul> <p><u>Crane-1:</u></p>

							<ul style="list-style-type: none"> <li>• Load Test done successfully from 19 - 20/07/2018.</li> <li>• Rope changing completed and crane put to use for Hot Metal handling on 29.08.18.</li> <li>• During Hot Metal Handling, crack was observed on main hoist brake drum of 450T Crane. The repair of brake drum has been done; load testing completed and clearance for Hot Metal handling given by M/s HEC. New brake drum by HEC supplied at site. Installation of new brake drum completed.</li> </ul> <p><u>Crane-2:</u></p> <ul style="list-style-type: none"> <li>• Mechanical Erection -80% work done.</li> <li>• No work is being done in 2<sup>nd</sup> 450T crane by M/s HEC.</li> <li>• Meeting with M/s HEC held on 19/02/19, M/s HEC ensured to start the balance work of 2<sup>nd</sup> crane from 25/02/19.</li> <li>• 80% of Mechanical Erection done.</li> <li>• Preparatory work for erection under progress.</li> </ul>
40.	<p>EOT Cranes (Group-II: 11 no ;4 EOT+7 under slung )</p> <p><u>Capacity :</u></p> <p>-1 no 20/5t*18 m span DG EOT Crane  - 1 no 80/20 *20.8 m span DG EOT Crane  -2 nos. 100/20 t *21 m span DG EOT Crane  - 7 nos. (6 nos 10t + 1 no 5 t) under slung crane</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>- Front not available for balance 6 nos U/Slung cranes.</li> <li>- Party has claimed for additional repair &amp; refurbishing cost.</li> </ul>	Gr-II: Anupam	22.85 Gross Cost – 25.96	0.51	2.10.08	Feb'10/ Jun'20	<ul style="list-style-type: none"> <li>• 2 nos. of Double girder crane &amp; 1 no. under slung crane erection completed.</li> <li>• Part PAC for Torpedo ladle repair shop crane (20/5T) issued.</li> <li>• Front not available for erection of cranes in HMDS, New Torpedo bay, Tundish repair shop.</li> </ul>
41.	<p>Ladle, Ladle Stand &amp; Transfer Car (Ladle Stand -5 nos, Transfer Car -4 nos, Steel Ladle -2 nos, Hot Metal Ladle -4 nos.)</p> <p><u>Issue:</u></p> <ul style="list-style-type: none"> <li>- Site not available for 1no. Vertical stand, 01 no horizontal stand and 02 nos Transfer Car</li> <li>- Further testing and trial run is held up due to hydraulic hose pipe</li> </ul>	Mukand, Thane	24.72 Gross Cost – 28.06	27.55	1.09.08	Dec'09/ Mar'20	<ul style="list-style-type: none"> <li>• 2/2 nos. Steel Ladle, 2/4 nos. Hot Metal Ladle and 2/5 no. Ladle stand handed over to user dept. &amp; put to use.</li> <li>• Erection and Trial run of 2/4 nos. of Hot metal Transfer Cars in HMDS done.</li> <li>• Testing of Ladle tilter done on 12.10.18. Ladle preparation done on 01.11.2018.</li> <li>• <b>Hot Metal Transfer Car.</b></li> <li>• Both Transfer car drive testing and trial run done.</li> <li>• Car # 2 put to use on 29.08.18 for transfer of Hot Metal ladle with load.</li> <li>• Balance 2 nos. Transfer car and 1 no. Ladle stand in New Torpedo Bay.</li> <li>• Refractory Lining of 02 no. Hot Metal ladle completed.</li> </ul>

							<ul style="list-style-type: none"> <li>Balance Refractory Bricks supplied at site.</li> <li>2 nos remaining Ladle shifting to be done.</li> </ul>
42.	<p>Gas Holder, ESP &amp; Booster Fan complex</p> <p><u>Capacity</u> : Gas holder of capacity 80,000 m3 effective geometric volume. Dia: 55700mm, Height: 52600 mm, pressure: 200 mm, 2 nos. Booster fan 40000 Nm3/h.</p> <p><u>Issues:</u></p> <ul style="list-style-type: none"> <li>Regular recovery of LD gas to be started after conducting HAZOP study and Dispersion Modeling and rectification of water seal check valve of Converter-II of SMS-II.</li> </ul>	Gillanders Arbuthnot, Kol. / MotherWell Bridge Inl. Ltd.	102.66 (8.18) Gross Cost – 112.05	101.95	01.09.08	<p>Sep'10 (Completed in Mar'16)</p> <p>Jun'20</p>	<ul style="list-style-type: none"> <li>All work completed. PAC issued on 05.03.16.</li> <li>ID Fan-2 Commissioned in Feb'17 and ID Fan-1 Commissioned in Apr'17.</li> <li>Pre-Commissioning activity and testing is in progress.</li> <li>Pressure / Leakage test of duct from ID fan to Gas holder done on 22.12.17.</li> <li>Sequence test of ID Fan-2 completed and during Hot trial LD gas recovery of 7000 m3 gas done on 19.09.18.</li> <li>During Converter-1 shutdown (from 18.10.18 to 27.10.18), Testing related to recovery system of ID Fan-1 completed.</li> <li>Work order placed on M/s National Safety Council (NSC) for conducting HAZOP study &amp; Dispersion Modeling.</li> <li>M/s NSC submitted final reports for Hazop and study Dispersion modeling.</li> <li>For implementation, proposal has been processed for In-principle approval to execute the work.</li> <li>In-principle approval has been obtained and is being executed through Works Division.</li> <li>Fabn of HNRV in progress at Strl shop.</li> <li>Procurement of sensors &amp; Gas Analyzer is in process.</li> </ul>
43.	<p>Civil &amp; Structural works for SMS-II</p> <p>(Change Order placed for Rs.75.48 Cr)</p> <p><u>Issue (new Torpedo bay):</u> No work by party since Feb.-19.</p>	Transtech Turnkey Pvt. Ltd.	171.81 Gross Cost – 171.81	135.66	25.08.08	Apr'10/ Mar'20	<ul style="list-style-type: none"> <li>18410/21027 m3 concreting done.</li> <li>6650/7800 T Structural fabrication done &amp; erection 5635T done</li> </ul> <p><u>HMDS Main building:-</u></p> <ul style="list-style-type: none"> <li>Road network work around HMDS completed.</li> <li>Pit-2 Hood erection completed.</li> <li>Roof-sheeting &amp; side-sheeting work in progress.</li> <li>Balance Structural work is in progress.</li> </ul> <p><u>New Torpedo Bay (11m)</u></p> <ul style="list-style-type: none"> <li>8M wall completed. Balance Civil work in NTB is in progress.</li> <li>Last lift shuttering completed.</li> </ul>
44.	<p>Torpedo ladle heating, drying &amp; cooling (2 nos of TLC heating stations and 1 no. of cooling station)</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>Trial run of burner is dependent on availability of CO Gas. Expert from M/s Schneider PLC awaited.</li> </ul>	Ador Welding	2.35 Gross Cost – 2.63	2.12	1.09.08	Apr'09/ <b>(May'19)</b>	<ul style="list-style-type: none"> <li>Earthing work completed in Aug'15.</li> <li>MCC charged in Nov'15.</li> <li>Heating of station-1&amp;2 done by using internal resources of BSL due to the reason that M/s Ador welding was not turning up for the balance work after several requests made by BSL.</li> <li><b>Both heating station 1 &amp; 2 put in use on 22.08.18 from internal resource by BSL and handed over to Operation.</b> M/s Ador is demanding refurbishment cost and milestone payment for further work.</li> </ul>

							<ul style="list-style-type: none"> <li>Balance work- Automation work.</li> </ul>
45.	<p>Power Distribution Package</p> <p><u>Issues</u></p> <p>- Charging of balance 3 Transformers of LTSS-1 dependent on shutdown.</p>	ABB	16.45 Gross Cost – 18.41	15.96	31.08.08	Oct'09 <b>(Oct'11)</b>	<ul style="list-style-type: none"> <li>LTSS-I: Transformer-1 charged on 23.02.11 &amp; Transformer - 2 on 04.03.11.</li> <li>New panel of 6.6 kV section - 3 hooked-up with existing system on 06.04.11.</li> <li>LTSS-II - Transformer no. 2 charged on 14.07.10.</li> <li>MSDS-VI - Erection of 3.3.KV system &amp; 4 MVA Transformer completed and 3.3 KV system charged on 28.10.10.</li> </ul>
46.	Dismantling / Relocation of 4 nos. of N2 Vessels (100 m3)	JK Enterprises, B S city	4.59 Gross Cost – 4.73	3.97	22.08.08	Feb'09 /* (*Contract to be foreclosed)	<ul style="list-style-type: none"> <li>1 no. Nitrogen vessel from Structural Shop supplied &amp; erected at site.</li> <li>All 3 nos Tapping of N2 completed during S/d of SMS II on 13.05.13.</li> <li>3rd party inspection of N2 vessel is awaited from Mecon.</li> <li>After completion of rail track job of HMDS for movement of TLRs, it is observed that relocation of Nitrogen vessel has not been required. Under review by M/s MECON.</li> </ul>
47.	Electrics	IEP	2.64 Gross Cost – 2.75	2.23	04.11.08	July'09/Mar'20 (Linked with HMDS)	<ul style="list-style-type: none"> <li>Testing and Commissioning of 01 no. 3.3 KV Power supply panel completed.</li> <li>3 nos HT Junction box supplied at site.</li> <li>1 no Junction box erected at 450 T HEC crane. 1 no. Junction -box charged on 20.12.17.</li> </ul>
48.	UPS system at CCD Complex	Hi-rel Electronic	1.65 Gross Cost – 1.87		30.08.08	Mar'09	<ul style="list-style-type: none"> <li><b>Commissioned on 23.03.09.</b></li> </ul>
49.	102 T Slab Car (10 no. slab cars)	Simplex Engineering & Foundry Works	11.22 Gross Cost – 12.78	21.77	31.08.08	Sept'09 <b>(Nov'10)</b>	<ul style="list-style-type: none"> <li><b>Completed in Nov'10.</b></li> </ul>
50.	<p>Steel Ladle Drier and Cooler</p> <p><u>Capacity</u> :</p> <p>Steel Ladle drier 1 no. - Capacity of Steel ladle 300 T, Heating time for freshly lined ladle 10-11 hr, Duration of heating 4-5 hrs, temperature -1200°C.</p> <p>Ladle cooler 1 no.- 300 T ladle capacity, cooling time 2 hrs.</p> <p><u>Issues</u></p> <p>Front for physical execution of work is not available due to non-removal of debris from site and civil work</p>	Wellman Wacoma Limited	2.14 Gross Cost – 2.31	1.47	05.02.10	Feb'11 (linked to site clearance by TTTK)	<ul style="list-style-type: none"> <li>Design &amp; Engineering - 77/85 nos.</li> <li>Package is under Arbitration.</li> </ul>
51.	De-bricking Machine-SMS-II <u>Capacity</u> : 125 HP (93 KW)	GradallInds	2.09 (1.98) Gross	2.59	12.05.10	May'11 <b>(Jan'12)</b>	<ul style="list-style-type: none"> <li>Trial run done and commissioned in Nov'12.</li> </ul>

			Cost – 2.10				
52.	Slag pot car- SMS-II <u>Issues</u> Proposal has been processed for dropping the project.	AMT International	0.79 Gross Cost – 0.88		09.08.10	May'11 (proposal to be dropped)	<ul style="list-style-type: none"> <li>Detailed Engineering completed.</li> <li>Considering logistics and movement related problems, the package was kept in abeyance.</li> </ul>
53.	Extension of trolley line in HMDS building of SMS-II	Sharmila Enterprisers	0.25 Gross Cost – 0.25	0.32	15.12.10	Dec'11/Mar'20 (linked to HMDS building)	<ul style="list-style-type: none"> <li>Design &amp; Engg-19/19 nos. completed.</li> <li>Change order issued on 29.03.18 for extra job. Isolator (channel fixing) work done.</li> <li>Erection of Bus bar and DSL support done.</li> <li>Trial run of HMTC done.</li> <li>Fabrication of walkway platform done. Ercn of walkway platform in progress.</li> <li>Structures supplied at site. Supply of Elec Eqpt (MCC Breaker, Cable Termn kit etc) awaited.</li> <li>Erection of walkway platform in progress.</li> </ul>
54.	Extension of LD gas pipeline from SMS-II area to TPP area	UB Engg	12.32 +3.92 (cost of steel) Gross Cost – 13.04	16.30	06.04.11	Apr'12 /Jun'20	<ul style="list-style-type: none"> <li>All Civil, Structural, Mechanical eqpt along with Utility Pipeline (Nitrogen &amp; Water) erection completed.</li> <li>Electrical and instrumentation work completed.</li> <li>Integrated testing to be done at the time of commissioning of gas holder</li> </ul>
55.	Electrics for extension of SMS-II CCD shop <u>Issue:</u> - Front is dependent on completion of Bldg ext. of SMS II & CCD (under Pkg-7)	IEP	1.1 Gross Cost – 1.21		12.04.11	Apr'13/ Mar'20 (Dependent on Building extension package)	<ul style="list-style-type: none"> <li>Design &amp; Engg -13/27 nos.</li> </ul>
56.	Tundish de-skulling shop <u>Issue</u> -Erection of equipment shall be done after const. of Tundish Deskulling shop	Graduate Agro	8.53 Gross Cost – 9.39	10.48	29.06.11	Jun'12/Dependent on completion of civil works of the shop - Dec'20	<ul style="list-style-type: none"> <li>Design &amp; Engg. -36/38 nos. approved.</li> <li>All equipment supplied. [Tundish lifting Transverse (2 no.), Rubbish container (3 nos.), 2 nos. Tundish lifting Transverse stand-2 nos. and Tundishdeskulling stand along with Hydraulic system.</li> <li>Ercn of eqpt shall be done after construction of Tundish Deskulling shop (Pkg-32).</li> </ul>
57.	Civil Structural work for New Tundish De-skulling Shop-SMS-II	Geetanjali	5.31+3.47 (cost of Steel) Gross Cost – 5.89	7.98	10.07.11	July'12 / Jul'20	<ul style="list-style-type: none"> <li>Design &amp; Engg-70/75 nos.</li> <li>Piling- 180/180 nos. completed.</li> <li>Fabrication 1000/1200 MT completed,</li> <li>Structures ercn-800T done.</li> <li>Column erection 18/18 nos. completed.</li> <li>Crane girder 16/16 nos. completed.</li> <li>Assembling of roof truss is in progress. 4/17 nos roof truss erection completed.</li> </ul>

58.	Under slung crane for CCS & SMS-II complex <u>Issue:</u> PBG not submitted. Party has become non-responsive and case referred to T&C	Robin Engg	0.51 Gross Cost – 0.51		05.08.11	Nov'11(linked to Building extension pkg.)	<ul style="list-style-type: none"> <li>PBG not submitted. Party is not responding.</li> </ul>
59.	Building extrn. of SMS-II & CCD	Geetanjali	5.38+ 4.12 (cost of steel) Gross Cost –5.91	5.88	10.07.11	Nov'12 / Mar'20	<ul style="list-style-type: none"> <li>Design &amp; Engg in progress-66/70 nos.</li> <li>SMS-2: SMS2 side Piling –all 42 completed. Foundation work - 2/3 no. done.</li> <li>CCD: Piling -69/69 nos. done.</li> <li>Load test of Pile done towards CCD side.</li> <li>Assembly of Building Steel Structures towards BF side is in progress.</li> </ul>
60.	Augmentation of water supply facilities at GCP, SMS & CCD shop <u>Issue:</u> <ul style="list-style-type: none"> <li>Progress is very slow.</li> <li>Pipeline Supply of Soft water has an ambiguity in contract &amp; GTS. MECON recommended to accept the carbon steel with financial implication. However as per contractor no commercial settlement is required for using the carbon steel.</li> <li>Bal. supply- Control valve, Elect cable tray, RTD, Electromagnetic Flow meter, pressure &amp; temperature gauge etc.</li> <li>Work stopped due to non-payment to sub contractor.</li> </ul>	OEPC Pvt. Ltd.	31.18 Gross Cost – 31.18	19.92	27.11.12	Jun'14/ Jul'20	<ul style="list-style-type: none"> <li>The project was on hold due to dispute / objection raised by the agency on MOC of pipe and settlement of commercial implications arising due to use of CS pipe in place of SS pipe.</li> <li>In-principle approval obtained on 23.03.16. BSL has informed agency to go ahead with CS pipe. Communicated to MECON on 30.03.16.</li> <li>312 mtr 500 nb U/g Piping work done and hook up with SMS &amp; 165 mtr 500nb piping U/g erection work done.</li> <li>AVGF erection Placement &amp; alignment work done.</li> <li><u>New Cooling Tower (11.8 M)</u>: Casting of 8.5 M level done.</li> <li><u>Cable tunnel</u> – PCC work done from PH to cable gallery 15 RP. RCC in progress.</li> <li>Electro mag. Flow meter -9 nos. recd at site.</li> <li>700 Dia pipe 216/216 M, Earthing &amp; lighting material, Make up water tank, LT Control panel supplied at site.</li> <li><u>Bal supply</u>: HT cable, N2 vessel, AHU &amp; SW unit, EC, Tray, IBR Pipe, LDB-SLDB, HPS, Light &amp; fittings, Control valve, Elect cable tray, etc.</li> </ul>
61.	ID Fan Complex	SMS- Siemag	83.13 (20.78) Gross Cost –90.14	75.70	11.02.13	Feb'15 /Apr'17 <b>(both ID fans put into operation)</b>	<ul style="list-style-type: none"> <li>ID Fan-2 hooked up with existing converter. Converter put in to operation on 16.02.2017 with new ID fan.</li> <li>Hooking up of ID Fan-1 to the existing stream of conveter-1 done and working smoothly since 27.04.2017. With this both new ID fans are brought into the stream.</li> <li><b>CC issued on 10.01.18.</b></li> </ul>
62.	Hydraulic Shovel	Telco Const.	1.04 Gross Cost –1.05		18.09.12	Oct'13 <b>(Jun'13)</b>	<ul style="list-style-type: none"> <li>Hyd shovel supplied &amp; handed over to CCS/OG on 07.06.13.</li> </ul>
	<b>Power Distribution</b>						
63.	Extra high voltage power supply (132KV Switchyard) <u>Issue:</u>	Siemens	178.54 Gross Cost –	155.45	30.08.08	May'10 /Jan'16 <b>(Mar'12 - Supply to</b>	<ul style="list-style-type: none"> <li>Change order to M/s Siemens for deleting MSDS-8 and new Transmission line issued on 07.01.14. The contract has been segregated to 5 categories namely:</li> </ul>

	<ul style="list-style-type: none"> <li>- Power supply from DVC to be expedited.</li> <li>- Category C: Commissioning Linked with DVC.</li> </ul> <p>Issue:</p> <p>Foundation of 6 nos. of transmission tower was fouling in sludge compartment. Revised drawing for alternate route submitted.</p> <p>Catg-C : Pre shutdown work completed. Shutdown (42 days) awaited for comm. of MSDS-1 by DNW.</p>		199.84			<p><b>CRM-III completed)</b></p> <p>(Final commissioning dependent on availability of 220kv supply at MRS)</p> <p>(Catg. C)- <b>Mar'20</b></p>	<ul style="list-style-type: none"> <li>- <b>Category A &amp; B</b> - PAC issued w.e.f 13.01.14. <b>Catg-A:</b> CC issued wef Jan'14. <b>Catg-B:</b> CC issued wef Dec'14.</li> <li>- <b>Category-C:</b> Revamping of MSDS-1 with additional control &amp; Automation system</li> <li>- Pre shutdown work completed. Shutdown (42 days) awaited for comm. of MSDS-1. DNW has intimated S/D will be planed after compln of transmission line from MRS to Township which was deleted in change order. A separate contract has made for balance stringing job from MRS to Township.</li> <li>- Shutdown (42 days) of MSDS-1 by DNW, started from 19.09.19. 9/14 no's Panels charging done.</li> <li>- <b>Category D (MSDS-8) –Deleted.</b></li> <li>- <b>Category E</b> (Supervision services for charging of MRS from 220kv DVC source when available) –compln time -2M. Transmission line from MRS to MSDS-1 charged on 29.11.16.</li> <li>- <b>Transmission Line from MRS to MSDS-8:</b></li> <li>- Supply of transmission line tower is completed.</li> <li>- Civil foundation- 18/19 nos. done. Civil fdn of balance 1 no. tower is in progress.</li> <li>- Tower erection: 18/19 nos. done. Stringing work is in progress.</li> <li>- SCADA interfacing in the existing MSDS1 &amp; new MRS completed.</li> <li>- SAS completed on 06.12.19</li> </ul>
64.	HV System	Siemens	38.38 Gross Cost – 41.97	41.28	21.07.10	Sept'11/ Apr'13 ( <b>Mar'12 Supply to CRM-III completed</b> )	<ul style="list-style-type: none"> <li>• 11KV Power supplied to CRM-III.</li> <li>• 6.6KV Power supplied to CHSGP-6.</li> <li>• PAC issued.</li> <li>• FAC: Aug'18</li> <li>• Package is put to use from Jun'13.</li> </ul>
65.	Leveling of MRS area for EHV package	HSCL	0.69 Gross Cost – 0.699		24.11.10	<b>Apr'11</b>	<ul style="list-style-type: none"> <li>• work completed</li> </ul>
	<b>Cast House Slag Granulation Plant for BF 1,2 &amp; 3</b>						
66.	Main Package(PKG-1) (CHSGP for six cast houses of BF#1,2&3.)  <u>Issue :</u> - For cast houses related to BF-1, work is dependent on capital repair	ZuberiEngg./HNSC	58.6 Gross Cost – 62.49	67.63	28.04.10	Oct'12/Jul'20  (CH-1 & CH-2 is linked with BF-1 Operation.)	<ul style="list-style-type: none"> <li>• All equipment supplied.</li> <li>• CH -3-CC issued on 3.3.16.</li> <li>• CH-6- CC issued on 6.8.13.</li> <li>• CH-5- CC issued on 8.1.18</li> <li>• CH-4: PAC issued. <b>Cast house 4 was started on load from 01/01/2020. CC issued on 05.01.2020.</b></li> <li>• <b>CH-6 and CH-3 – Commissioned in Oct'12 and Jul'13 respectively.</b></li> </ul>

	<ul style="list-style-type: none"> <li>- Agency is not working due to non Payment.</li> </ul>						<ul style="list-style-type: none"> <li>• <b>CH5 and CH4:</b> Hot trial with slag taken on 13.09.17 for CHSGP-5 for BF-3.</li> <li>• <b>CH1 &amp; CH2-</b> PAC issued.</li> <li>• Preparatory work for commissioning of <b>CH-2</b> in progress.</li> <li>• <b>CH-1:</b> Foundation fouling with existing electrical room &amp; storm water line. Under examination by Consultant/CET</li> </ul>
67.	<p>Electrical, Inst &amp; automation System (Pkg-2) CHGP – BF-1, 2 &amp;3</p> <p><u>Issues :</u></p> <ul style="list-style-type: none"> <li>- The electrical contractor M/s IEEP performance is not satisfactory</li> <li>- Party is not responding to do further Jobs. RP action has been initiated</li> </ul>	IEEP	12.88 Gross Cost – 13.55	13.53	22.04.10	Oct'12/Jul'20	<ul style="list-style-type: none"> <li>• Design engg., civil work and eqpt. supply completed.</li> <li>• VCB Panel testing done.</li> <li>• Charging of PLC done.</li> </ul>
68.	<p>Granulated Slag Disposal System (pkg 3)</p> <p>(Job of 26 belt conveyors of 800 TPH; 1200 mm belt width &amp; 1.8 m/s speed, conveyor galleries and junction houses)</p> <p><u>Issue :</u></p> <ul style="list-style-type: none"> <li>- M/s TTTK had delayed the package which affected the overall completion. Several notices were issued at Plant and Corporate level. No adequate manpower at site.</li> <li>- Disposal system at Junction House-22 which is currently in operation is not able to manage generated granulated slag due to the limited storage space and handling difficulties. With addition of CH-3 granulated slag, the handling at JH -22 has become much more difficult.</li> <li>- Separate route from JH-24 to JH-27 finalised with CET, MECON &amp; BF to avoid critical areas of retention pond and SMS-III. Revised General Layout Drg. has been approved for JH-24 to JH-27 due to route diversion from the original scheme.</li> <li>- Direct payment being resorted to the sub-contractor of TTTK for completion of balance works.</li> </ul>	Transtech	127.3 Gross Cost – 142.12	117.53	28.04.10	Oct'12/Jul'20	<ul style="list-style-type: none"> <li>▪ Total no. of JH-16 nos. <ul style="list-style-type: none"> <li>- Civil &amp; Strl work completed.-11/16 nos JH.</li> </ul> </li> <li>▪ Total no of conveyors-31 <ul style="list-style-type: none"> <li>- Civil &amp; Strl -22/31 nos conveyors completed.</li> <li>- Erection of conveyor Belts for 11/31 nos conveyors done.</li> </ul> </li> </ul>



	Infrastructure facilities						
69.	<p>Construction of Railway track inside the plant premises in new CRM area (51 A) (Infrastructure)</p> <p>(Rolling mills are type-II track-dismantling &amp; relaying of existing tracks-8.5 km &amp; laying of new tracks-2.5 km.;</p> <p>CRM area-about 1.2 km of type-II tracks;</p> <p>Tippler area-about 4 Km type-II track)</p> <p><u>Issue</u></p> <ul style="list-style-type: none"> <li>- Work stopped by the party since Jun'15.</li> <li>- Balance laying of rails and defect liquidation, supply of Panel for signaling are yet to be done.</li> </ul>	ARSS	23.32 Gross Cost – 27.06	22.13	03.06.10	Dec'11/ RPN action initiated	<ul style="list-style-type: none"> <li>• 15.70/16.2 km rail supplied and 13.25 km laid.</li> <li>• Erection of Track no-449A completed in Oct'15.</li> <li>• Construction of new track no 430B completed in Oct'15 &amp; 430C in Apr'16.</li> <li>• Work stopped by the party since Jun'15.</li> <li>• Extension given till Sep'16, however no progress of work by the party. RPN notice issued in Mar'17.</li> <li>• As no commitment given and job not started, engineers notice issued in June'17 and August'17.</li> <li>• M/s ARSS has requested for conciliation and have appointed their nominee.</li> <li>• Balance work is under RPN.</li> <li>• TS, Eligibility Criteria, assessment of balance work estimate not yet received from Mecon even after several reminders. <b>Party has gone for arbitration, SAIL/BSL to submit statement of defence.</b></li> </ul>
70.	<p>Rehabilitation &amp; up-gradation of existing tracks inside the plant premises (Infrastructure)</p> <p>(Relaying of tracks with 60 kg rails-43.50 Km. turn out 1 in 8.5 with 60 kg rails (55 nos), turnout 1 in 7 with 60 kg rails, 2 in 7 diamond crossing with 60 kg rails (5 nos), 30 Deg diamond crossing with 60 kg rail)</p> <p><u>Issue</u></p> <ul style="list-style-type: none"> <li>- Work stopped by the party since Jan'15.</li> <li>- Pkg is under foreclosure. Track measurement is in progress</li> </ul>	ARSS	43.10 + 22.19 (cost of rails for both ARSS packages ) Gross Cost – 47.89	42.84	03.06.10	Jun'12/ Pkg is under foreclosure.	<ul style="list-style-type: none"> <li>• 41.1/43.5 km rail supplied and 36 km laid. 13 km handed over to operations.</li> <li>• Pre-tipling Track of Wagon Tippler no-4 and Rehabilitation work at track no 1019 in SMS area completed.</li> <li>• Work stopped by the party since Jan'15</li> <li>• M/s ARSS had shown their inability in execution of the balance work and requested for closure of the contract as the validity of the contract already expired on <b>31.03.2015</b>.</li> <li>• BSL had insisted the Party to complete the balance jobs of 51A, as this is a prioritized area.</li> <li>• Engineers notice issued in June'17 and August'17.</li> <li>• Meanwhile, ARSS has requested for conciliation and have appointed their nominee. Corporate law has advised to settle the dispute through conciliation. Conciliator has also been appointed by BSL.</li> <li>• <b>Balance work is under RPN. Party has gone for arbitration,</b></li> </ul>
71.	<p>Interplant and in-shop pipeline for CRM-III (Change Order placed for Rs. 0.51 Cr)</p> <p><u>Issue</u></p> <ul style="list-style-type: none"> <li>- Bal work: Laying of oxygen &amp; nitrogen pipe line from O2 plant to BF-1,2,3,4,5 &amp; steam pipe line from Plant medical to TPP &amp; associated civil &amp; strl work.</li> </ul>	ACE Pipeline	43.3 + 18.2 (cost of Steel)  Gross Cost – 46.01	45.68	19.11.10	Mar'12/ Dec'20	<ul style="list-style-type: none"> <li>• Piping erection- 23/31 km completed.</li> <li>• <b>Priority 1 (For CRM-3 area):</b></li> <li>• Charging of Steam, Mixed gas, compressed air, Nitrogen, Propane done.</li> <li>• Balance work- Walkway for mixed gas line, Electrical &amp; instrum work for operation of valves.</li> <li>• <b>Priority-2</b></li> <li>• Steam pipeline from TPP : 2 km balance</li> <li>• Oxygen &amp; Nitrogen line (for BF Area): 3 km balance.</li> </ul>

	<ul style="list-style-type: none"> <li>- Fabn &amp; Ercn.of walk way for mill Gas line.</li> <li>- Bal Elect &amp; instmn work.</li> </ul>						<ul style="list-style-type: none"> <li>• Part CC (55%) given on 12.09.15. The requirement for CRM-III projects fulfilled. Balance work is for BF.</li> <li>• Work is stopped from Aug'16. Party has demobilized its resources.</li> <li>• RPN action under process. The process for pre-closure of the contract is under process, likely by Dec'20.</li> </ul>
72.	<b>Up-gradation of stoves for BF-5</b>	Various	63.07 Gross Cost – 68.58	6.92	--	June'11 <b>(Mar'12)</b>	<ul style="list-style-type: none"> <li>• Blowing of BF-5 after its capital repair started on 11th Mar'12 with two furnaces. Heating &amp; drying of 3rd stove completed on 23.3.12 and put in operation.</li> <li>• FAC: Dec'13</li> </ul>
	<b>CRM-I</b>						
73.	ARP for PL-1 of CRM-1 <u>Capacity :</u> process a waste pickle liquor of 5.5 m3 /h	ISSI	40.89 (1.80) Gross Cost – 42.86	34.06	30.04.11	Dec'12 <b>(Sep'14)</b>	<ul style="list-style-type: none"> <li>• PAC issued on 24.06.14.</li> <li>• Commissioning certificate issued on 24.09.14.</li> <li>• FAC: 03.01.17</li> </ul>
74.	Conversion of sulphuric acid pickling line to HCL pickling	Tenova/Sunag	62.14 (27.29) Gross Cost – 65.05	74.38	10.07.11	Jan'13 / <b>Jan'16</b>	<ul style="list-style-type: none"> <li>• 50 days Shutdown started from 14.08.15.</li> <li>• Major works completed in Oct'15</li> <li>• 1st Pickled coil processed on 03.11.15.</li> <li>• <b>CC issued on 05.01.16</b></li> </ul>
	<b>HSM</b>						
75.	Replacement of pusher type RHF-1 by walking beam furnace	Fivestein	65.04 Gross Cost – 68.49	66.95	28.09.11	Sept'13/ <b>May'17</b>	<ul style="list-style-type: none"> <li>• Furnace lighted-up on 25.05.17 and 1st slab Rolled-out on 28.05.17. PAC issued on 29.05.17.</li> <li>• L-2 Automation Establishment -23.11.17</li> </ul>
76.	Civil work for RHF-1	BSBK	9.6 Gross Cost – 10.01	14.02	30.08.11	Aug'12/ <b>Dec'16</b>	<ul style="list-style-type: none"> <li>• All works completed in Dec'16.</li> <li>• Work delayed initially, as Rock encountered on the discharge end of RHF-1 had delayed the job and subsequent hand-over of the site to technological contractor.</li> </ul>
77.	Up-gradation of Roughing Mill Area of HSM Capacity-4.5 MTPA; 13,433 TPD (Installation of new 2Hi Roughing Mill with heavy edger at location R-2 / E-2, Revamping of existing stands R-3,4&5 with hydraulic work roll changing system, New short stroke hydraulic AGC in R-5, new automation system, new width gauges, new passive heat shield on delay table with up-graded QWRC etc.,)	Danieli & C	496.27 (311.52) Gross Cost – 558.54	680.13	07.01.12	Jan'14/ <b>Sep'15</b>	<ul style="list-style-type: none"> <li>• PAC: 07.10.15</li> <li>• CC: 10.01.16. <b>Commissioning Certificate issued on 19.2.16</b></li> <li>• PG: 10.07.17</li> <li>• Main s/d of 31 days taken from 24.07.15.</li> <li>• Hot trials taken on 30.9.15</li> <li>• 2015 - 16 (Oct'15-Mar'16): 1474180 T</li> <li>• 2016-17 : 33,11,766 T</li> <li>• 2017-18 : 35,56,226 T</li> <li>• Mill was under breakdown during 22<sup>nd</sup> - 27th Jun'16 due to RR-2 drive tripping (Supplied by GE). To rectify the problem, 4 personnel from GE were at site. Problem rectified and the mill started operation from 27th Jun'16.</li> <li>• The Mill was down on 11.9.16 due to tripping of RR-2 top drive (supplied by GE) due to shifting of position of one of the slip ring studs after melting inside the slip ring cover.</li> </ul>

							<ul style="list-style-type: none"> <li>Problem was rectified by GE personnel and mill put to operation on 13.09.2016.</li> <li>The Mill shutdown was taken during 06.10.2016 - 09.10.2016 to replace the links and studs of RR-2 main Mill motor.</li> <li>Major defect liquidation completed during the shutdown for capital repair period of 30.06.17 – 08.07.17.</li> </ul>
78.	3 new Roll Grinding machines in RGSB for HSM	Praise machinery	68.41 (34.23) Gross Cost – 71.25	64.01	28.05.14	Dec'15/ <b>(Jan'20)</b>	<ul style="list-style-type: none"> <li>Erection of 1 no combo grinding M/c completed. Testing &amp; commissioning completed in Sep'17. PAC issued on 27.01.18 wef 07.07.17. Combo grinding Machine- put into operation from Sep'17.</li> <li>Lathe M/c : Put in operation in Aug'17.</li> <li>Small grinder m/c (1st): Put in operation in Mar'18.</li> <li>2nd small grinder: T/run of 2nd small grinder is completed. Put in use by operation in Aug'19. CC test completed.</li> <li><b>CC issued on 18.02.2020 with effect from 22.12.2019..</b></li> </ul>
	<b>Iron Zone</b>						
79.	Augmentation of BF High line conveying system <u>Issues:</u> - Delay in getting shutdown of conveyors for up-gradation work.  - *Design Issue of space constraint in balance 4 nos. of Shuttle Conveyors. Under review by Consultant.	BHEL	48.64 Gross Cost – 52.37	45.89	30.09.11	Mar'13 / (dependent on shutdown)  *	<ul style="list-style-type: none"> <li><b>43/47 nos. Conveyors upgraded and put in use.</b></li> <li>Design issue of balance 4 conveyers is under review.</li> <li>Work of KD6 - 2 &amp; PKD6 - 2 completed and handed over to BF (O) on 29.01.16.</li> <li>Shutdown for KD7-4 &amp; PKD 7-4 received; work completed and handed over on 24.02.16.</li> <li>Shutdown received on 02.05.15 till 15.05.16 for KD4-2 &amp; PKD4-2. Work completed and 02 up-graded conveyors were handed over to operations on 23.05.16.</li> <li>Shutdown received for 2 conveyors (KD4-4 &amp; PKD4-4) for 15 days starting from 18.11.16 and work completed. Trial runs taken on 03.12.16. Conveyors handed over to Operations on 04.12.16.</li> <li>PKD 1-4: Shutdown received on 27.04.19 for 8 days. Dismantling of trolley completed. Rail alignment &amp; fixing completed. Rail replacement done. Erection of trolley with technological structure done along with belt. PKD 1-4 handed over to operation on 03.05.19 &amp; put into operation</li> <li>PKD1-6: S/d received on 09.05.19. All jobs pertaining to PKD1-6 completed &amp; put in operation.</li> </ul>
80.	Revamping of Sinter machine no.1 for productivity enhancement	Tyazhaprom Export	75.16 (40.96) Gross Cost – 77.87	99.76	10.12.11	Dec'12 <b>(Jan'15)</b>	<ul style="list-style-type: none"> <li>Sinter Machine no-1 put into operation on 08.01.15.</li> </ul>
81.	Replacement of 2 nos. of Exhausters for Sinter band-1 <u>Issues:</u> 120 days Shutdown for replacement of	Bengal Tools, Andrew Yule	17.84 Gross Cost – 19.36	9.99	23.09.12	Dec'14/ Jun'20	<ul style="list-style-type: none"> <li>All major Mechanical, Electrical &amp; Instrumentation item supplied at site.</li> <li>Basic Engineering : 11/11 nos approved</li> <li>Design Engineering : 129/ 129 nos submitted</li> <li>Structural erection : 100/200T done.</li> </ul>

	2 <sup>nd</sup> exhauster.  Commissioning of Exhauster-2 is linked with comm. of ESP-2 by M/s Unicorn/HNCPL						<ul style="list-style-type: none"> <li>Equipment erection: 500/1000T done.</li> <li>1 no Exhauster put into operation on 29.10.17 after 80 Days of S/d for replacement of Exhauster no-1 by higher capacity Exhauster.</li> <li>Replacement of exhauster # 2: Shutdown received on 18.10.19. Dismantling of fan, motor, electric &amp; instrmn panel of control room done. Blanking of outlet duct of Exhauster-2 done. HT cable laying started.</li> <li>Civil survey work started for dismantling of civil fdn of Exhauster -2. F2 &amp; F3 foundation dismantling completed.</li> <li>Electrical control room: Panel positioning completed. Control cable laying is in progress. Re-Positioning of reactor at MSDS-4 is in progress.</li> <li>VCB Panel: Retrofitting work started from 28.12.19 after arrival of Schneider expert.</li> <li>Erection of Pedestal of Rotor started.</li> <li>Alignment with motor to fan is under progress.</li> <li>Hi-pot testing of motor and HT cable is under progress.</li> <li>HT motor testing without load on 04.02.2020.</li> <li><b>After completion of Intermission on 4/03/20. Hi-pot testing of motor will be done on 05/03/20.</b></li> <li><b>Relay testing to be done on 6<sup>th</sup> March 20.</b></li> <li><b>Trial run of HT mortar in Di-coupling position by 7<sup>th</sup> March.</b></li> </ul>
	<b>COBPP</b>						
82.	Replacement of Ammonium Sulphate Plant for BPP <u>Issues :</u> - Change order for Modification of Storage shed with provision of 2 nos. Cranes in place of 1 no. - Finalisation of Change order for additional 3 nos valves for tapping of CO gas line.	Bengal tools	88.25 Gross Cost – 94.60	82.32	10.12.11	Dec'13 / Jun'20	<ul style="list-style-type: none"> <li>Centrifuge building - Finishing is in progress.</li> <li>Erection of Gas pipes – 900 / 1000 M done. Welding of gas pipe is in progress.</li> <li>Erection of Cable tray - 75% done &amp; conduit in progress.</li> <li>Erection of Pipe line (780 / 820 M done) &amp; fittings for Ammonium column is in progress.</li> <li>Erection of Pump - 31/48 done.</li> <li>Conveyor belt supplied.</li> <li>Balance supply - Bucket Elevators, lighting fixture, Instrumentation item, Transmitter - 20% supplied. Technological Pipe Line erection is in progress.</li> <li>Price Bid opened for additional 3 no. valves for tapping of CO gas line.</li> <li>Change order issued for Addl 3 nos valve for tapping of CO gasline on 26.12.19.</li> <li>Pipe line work in ammonia column area in progress.</li> <li>Erection of service water line in progress.</li> <li>Centrifuge bldg: Brick work in progress.</li> </ul>
83.	Raw Material Handling System	Zuberi Engg/ HNCPL/TRF	107.35 Gross Cost –	97.79	31.12.11	Dec'13/	<ul style="list-style-type: none"> <li><b>Trial run of Wagon Tippler-5 in load completed and approx. 14000 MT raw materials tumbled through Wagon Tippler no. 5.</b></li> <li>Part PAC issued in May'18.</li> </ul>

			117.29			(Nov'19)	<ul style="list-style-type: none"> <li>▪ <b>Wagon Tipler-5 put in operation.</b></li> <li>▪ <b>PG Test successfully completed on 03.09.19.</b></li> <li>• In-principle approval for Deletion of IOSB obtained.</li> <li>• Out of 4 nos. Shuttle Conveyor, 2 nos. completed. For 2<sup>nd</sup> Shuttle conveyor (PKP20-1), Shuttle modification, platform cutting for feeding KP4-0 &amp; Modification in chute of Conveyor KP20-1 completed during S/d from 13 to 15.03.19 &amp; handed over on 15.03.19</li> <li>• <b>CC issued on 26.11.19.</b></li> </ul>
	<b>Enabling Packages</b>		192.25 Gross Cost – 193.48	87.77			

## Expansion of IISCO Steel Plant

1. **'In-Principle' Approval** : Jul'06
2. **Final Approval** : 5.9.2007 / 31.1.2008 / 22.2.08 / 27.6.2008
3. **Cost (in crore):**
  - a) Indicative cost (Jul'06) : Rs.8871 (Net of Cenvat benefit of Rs.720.82 crore)  
FE component: Rs.745.00 crore
  - b) Approved Cost (Sep'07) : Rs.12,743 (Net of Cenvat benefit of Rs.1452.74 crore)  
FE component: Rs.2274.22 crore
  - c) Approved Cost (Jul'08) : Rs.14,443 (Net of Cenvat benefit of Rs.1630.74 crore)  
FE component: Rs.2609.03 crore
  - d) Updated Cost (Feb'11) : Rs.16,408 (Net of Cenvat benefit of Rs.1553.01 crore)  
FE component: Rs.2828.06 crore
  - e) Expenditure (Till Feb'20) : **Rs.18,989.57 crore**
4. **Approved Schedule** : Dec'10 (3 converters)  
Actual : Dec'14 (Integrated process route in Operation)

### 5. Production (Mtpa)

Item	Installed Capacity (1955)	2005-06	After Expansion	2015-16	2016-17	2017-18	2018-19	2019-20 Upto Feb'20	ABP 2019-20
Hot Metal	0.85	0.78	2.91	1.43	1.809	2.055	2.20	2.283	2.7
Crude Steel	0.50	0.43	2.50	0.87	1.396	1.802	1.888	1.887	2.5
Saleable Steel	0.42	0.31	2.39	0.86	1.338	1.686	1.907	1.9236	2.407

### 6. Techno-economic parameters

Item	Base case 2005-06	After Expansion
Coke/ CDI Rate (kg/ tHM)	786	410/ 150
BF Productivity (t/m <sup>3</sup> /d)	0.86	2.24
Specific energy (Gcal/tcs)	8.55	5.46
Manpower Productivity (tcs /man/year)	56	325

### 7. Facilities

- MECON is the Consultant cum Project Manager (including Project Management and Construction Management services) of ISP Expansion
- All major facilities of new stream to produce 2.7 Mtpa Hot Metal and 2.5 Mtpa Crude Steel, completed as below:
  - ✓ Raw Material Handling System (to handle 12 Mtpa of Raw Material) in Jun'12
  - ✓ New Coke Oven Battery-11 (7 m tall, 2 x 37 ovens) Complex in Feb'13
  - ✓ Sinter Machines (2x204 m<sup>2</sup>) in Dec'12/ Jan'13
  - ✓ New Blast Furnace(4160 m<sup>3</sup> useful volume and associated facilities in Nov'14
  - ✓ 3x150 t Basic Oxygen Furnace Converters, in Oct'14/ Nov'14/ Aug'16
  - ✓ 2x6-strand Billet Casters (1.67 Mtpa) in Dec'13/ Oct'14
  - ✓ 1x4-strand Beam Blank/ Bloom Caster (0.83 Mtpa) in Apr'15
  - ✓ Wire Rod (Rate Cap.0.5 Mtpa/ Cap. with Hot Charging 0.55 Mtpa) in Mar'13 & Bar Mill (Rate Cap. 0.75 Mtpa / Cap. with Hot Charging 0.90 Mtpa) in Feb'15
  - ✓ Universal Section Mill (Rate Cap. 0.6Mtpa/ Cap. with Hot Charging 0.85 Mtpa) in Jun'15

Other linked facilities like 2x750 tpd Oxygen Plant and Power & Blowing Station have been completed.

### 8. Present Status

- Hon'ble Prime Minister laid the foundation stone on 24.12.06 at ISP, Burnpur.
- Environmental clearance was granted by Ministry of Environment & Forests (MoEF) for ISP Expansion vide letter dated 7.8.2007.
- Power Purchase Agreement was signed with Damodar Valley Corporation (DVC) for 5 MVA power. 220 kV incoming Power Line for new Main Receiving Station (MRS) of ISP, Burnpur was charged from DVC Sub-Station on 30.06.2011. The DVC transmission line was commissioned & 220 kV Power Supply commenced on 13.7.11. Power supply from DVC was augmented from 5 MVA to 30 MVA and from 30 to 60 MVA progressively in Feb'12 for meeting power requirement for testing and trials of equipment in different units. Main Receiving Station (MRS) has been commissioned.
- On 21.6.12, the villagers shifted the local deity 'Jhorabudi' to an alternate site developed by ISP outside the plant premises. Balance portion of railway track of Coke Dispatch System was laid. The Coke Dispatch System was inaugurated by Hon'ble Minister /l/ Dept. of Commerce & Industries, Public

Enterprises, Industrial Re-construction, Information Technology, Parliamentary Affairs on 23.9.12.

Railway Receiving Yard (Damodar Yard) - For receipt of raw materials, Damodar Railway Yard of ISP is integrated with Railway network for meeting the full requirement. Commercial Notification of Damodar siding issued by SE Railway on 4.8.14 for opening ISP's siding (Lines - 6 to 10) for commercial traffic and on 19.3.15 for lines 1-5 . 25 kV power charged by SER in all 10 lines. Rakes with electric Loco of Railways have started directly coming inside ISP through Main Line.

Upgraded West Yard commissioned on 26.12.11. This yard will take care of dispatches of Finished steel, Coke, Sinter and Granulated slag from Expansion project. Overhead Electrification at Hirapur Exchange Yard done on 7.9.13. New triple siding line no. 11 & 12 commissioned in Sep'13. Full rakes can be handled directly through Hirapur yard & Upgraded West Yard for dispatch.

Diesel Locomotives have been commissioned in Damodar Yard (3 nos.) and Upgraded West Yard (2 nos.).

#### Dedication of SAIL's Modernised & Expanded IISCO Steel Plant to the Nation

On 10.5.15, Shri Narendra Modi, Hon'ble Prime Minister of India, dedicated SAIL's Modernised and Expanded IISCO Steel Plant to the Nation at Burnpur. The Prime Minister also visited the New Blast Furnace 'Kalyani' (the largest operative Blast Furnace in the country).

#### National Green Tribunal Judgment for ISP

Against the complaint lodged by the inhabitants adjacent to site on pollution from ISP, NGT has passed judgment dated 6.5.16 wherein no direction has been issued with respect to acquisition, rehabilitation and compensation. ISP has been directed to construct a garland drain around the premises of the unit within a span of six months and also develop a green belt in order to prevent the dust particles entering the village. Excavation of the drain has been completed (~3.6 km).

#### Closure of Existing Units –

Light Structural Mill	-	Oct'13
Billet Mill	-	Mar'14
Merchant Mill	-	Mar'14
Heavy Structural Mill	-	Apr'14
Blooming Mill	-	Apr'14
SMS-1	-	Apr'14
Blast Furnace-2	-	Apr'15
COB-8	-	Mar'12 (cold repair)
COB-9B	-	Apr'09
COB-9A	-	Mar'14

**Package-wise Details for Expansion of IISCO Steel Plant**

**Packages under Implementation:**

*Cost figures in Italics indicates updated figures as on Feb'11*

*Cost figures in Italics indicates updated figures as on Oct'19*

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
<b>Raw Material Handling System</b>								
1.	Ore Handling Plant (to handle 5.68 Mtpa raw material – Iron ore/ Llime stone/ Dolomite/ Quartzite/ Manganese ore) Piling – 5479 nos. RCC – 72,000 m3 Strl. Steel – 10,500 t Equipment – 7015 t	McNally Bharat, Kolkata	534.50 (Nil)  <i>592.75</i> <b>528.13</b>  <u>Gross Cost –</u> 662.39	565.78	6.3.08	May'10 (Jun'12)	Rakes of Ore Fines are being received and Ore is being supplied to the Base Mix plant. PAC issued on 14.5.2013. Commissioning tests commenced from 26.5.2015 and completed on 3.6.2015. Commissioning certificate issued on 26.08.15. PG test completed on 4.6.16. PG Certificate issued on 8.10.16. <b>FAC issued on 2.2.18.</b> <b>Contract closed on 11.4.18.</b> <b>(Claim Rs.49.55 cr.)</b> <b>Party has raised issue for held-up payments due to shortfall in guaranteed CENVAT &amp; VAT.</b> <b>M/s MBE vide letter dated 17.01.2019 requested ISP to confirm for arbitration proceedings in ICA. ISP law suggested for conciliation/ arbitration proceedings in SCOPE forum. Consent Letter for conciliation /arbitration issued to M /s MBE on 05.02.2019 with approval of competent authority. ISP also gave consent for sole conciliator vide letter dated 16.09.2019. MBE vide letter dated 16.12.2019 unilaterally terminated the conciliation and invoked arbitration under ICA. ISP vide letter 04.01.2020 did not agree for the same and asked M/s MBE to initiate conciliation in SCOPE forum first.</b>	
2.	Coal, Coke Handling & Pipe Conveyor (to handle 1.44 Mtpa coal) Piling – 3375 nos. RCC – 41,000 m3 Strl. Steel – 9650 t Equipment – 7500 t  <u>Additional Work</u> Coke Dispatch System Order placed on 31.5.11 for Rs.8.98 crore (net of Cenvat).  Piling – 108 nos. RCC – 545 m3 Strl. Steel – 610 t Equipment – 155 t	L&T, Chennai	504.50 (Nil)  <i>573.08</i> <b>562.57</b>  <u>Gross Cost –</u> 616.09	572.63	7.3.08	May'10 (Jun'12)	Receipt, unloading and return of 1 <sup>st</sup> Coking coal rake of 58 wagons done successfully from 15.6.12-17.6.12. After the receipt of 3rd coal rake, stacking of Prime coking coal bed started on 5.10.12. Coal rakes are being received continuously. Trial run for pipe conveyors was successfully completed on 2.9.2013 for coke and on 4.9.2013 for ore. First load trial of transportation of coke from COB-10 to New Plant through pipe Conveying System successfully done on 15.1.2014. PAC has been issued. Commissioning certificate issued for all 11 streams. PG test for 10 out of 11 streams completed on 8.5.15, and CDI stream (11 <sup>th</sup> stream) on 26.9.16. <b>PG certificate issued on 21.10.16.</b> Cracks has developed in Area Repair Shop (ARS) Building, retrofitting works for ARS is in progress by L&T. MECON has observed that the deflection in the Gravity take-up Unit is higher than the permissible limits. L&T has been requested to take up the strengthening of the Steel structure. <u>Coke Dispatch System</u> The coke dispatch system has been commissioned. It was inaugurated by Hon'ble Minister Shri Partha Chatterjee on 23.9.12. First consignment of BF grade Coke (from COB-11) was flagged off on 17.2.13.	



SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
							Party has raised issue for held payments due to shortfall in guaranteed CENVAT & VAT. M/s L&T vide letter dated 31.05.2019 submitted a notice of conciliation. Consent letter has been issued on 05.07.2019. M/s L&T submitted the statement of claim on 17.09.19. Party has withdrawn from conciliation and submitted a letter on 11.12.2019 for arbitration in ICA. ISP has rejected the same and requested L&T & SCOPE to conduct conciliation under a sole conciliator under a sole conciliator appointed by SCOPE.	
3.	<p>Base Mix Preparation plant</p> <p>Piling – 2704 nos. RCC – 22,000 m3 Strl. Steel – 13,700 t Equipment – 7200 t</p> <p><u>Change Order</u> Procurement and Installation of 3x50 tpd Rod Mill Crushers in place of originally proposed 2x200 tpd Rod Mill dated 16.2.11, cost (-) Rs.2.79 cr.</p> <p><u>Additional Work</u> Sinter Dispatch System Order placed on 27.7.11 for Rs.7.65 crore (net of Cenvat). Piling – 70 nos. RCC – 390 m3 Strl. Steel – 440 t Equipment – 145 t</p>	L&T, Chennai	<p>457.50 (Nil)</p> <p>522.36 <b>468.74</b></p> <p><u>Gross Cost –</u> 561.79</p>	524.25	7.3.08	<p>May'10 (Jun'12)</p>	<p>Base mix is being supplied to the Sinter Plant. PAC has been issued for all 15 streams. Commissioning certificate issued for all 15 streams on 26.8.15. PG test completed on 4.6.16. PG Certificate issued on 19.7.16. <b>FAC issued on 7.8.17.</b> <b>Contract Closed on 6.3.18.</b></p> <p><u>(Claim Rs.31.45 cr.).</u> M/s L&amp;T issued a notice of arbitration dated 27.09.2018 for disputes related to withheld payments and informed they will be notifying for arbitration to ICA/SCFA ISP replied to M/s L&amp;T on 14.11.18. M/s L&amp;T approached SCOPE forum for conciliation. Law department on 05.02.2019 suggested for conciliation. Consent letter for conciliation has been issued to SCOPE on 21.02.2019 with approval of competent authority. L&amp;T vide letter dated 15.03.2019 &amp; 20.03.2019 informed that since there will be considerable delay in settlement of dispute by way of conciliation, L&amp;T terminated the conciliation and invoked arbitration under ICA. ISP issued consent letter for adjudication of disputes through arbitration vide letter dated 28.03.2019 under Scope forum. SCOPE vide letter dated 02.04.2019 &amp; 12.04.2019 asked L&amp;T to initiate the conciliation procedure for termination but L&amp;T denied for the same vide letter dated 09.04.2019. M/s L&amp;T vide letter dated 08.05.2019 (received on 13.05.2019) informed that they do not agree for arbitration under SCOPE forum and once again asked ISP to appoint arbitrator, failing which they will move to Hon'ble High Court for getting the other two arbitrators appointed. ISP vide letter dated 17.05.2019 once again requested M/s L&amp;T to proceed for arbitration in SCOPE forum. M/s L&amp;T vide letter dated 06.06.2019 did not agree for arbitration under SCOPE forum. ISP vide letter dated 14.06.2019 once again requested to conduct the arbitration under the SCOPE Rules and the applicable rules thereunder. SCOPE vide letter dated 18.6.2019 has also asked L&amp;T to submit the statement of claim. Court has appointed arbitrator and hearing is scheduled on 13.8.2019 and as per directive arbitrator statement of claim has to be submitted by the party. Statement of defence submitted to arbitrator on 14.11.2019. Next hearing is scheduled on 18<sup>th</sup> and 19<sup>th</sup> April 2020.. <u>Sinter Dispatch System</u> Load trials were done on 31.1.13. 10 wagons of sinter (~600 t) was loaded and dispatched to BSL on 10.2.13.</p>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP																								
4.	Yard Machines Group – I – 6 machines Group – II – 12 machines Group – III – 6 machines	Elecon Engg. , Anand, Gujarat	164.99 (nil)  176.32 <b>159.26</b> <u>Gross Cost</u> – 199.85	159.20	7.3.08	May'10 <b>(Jun'12)</b>	All 24 machines are in use. PAC has been issued for all machines Commissioning certificate issued for Group – I and Group – III machines on 19.11.15, for. Group – II on 26.12.16 PG test has been completed for all machines. <b>PG certificate issued for Group – I and Group – III machines on 24.10.16 and Group –II on 24.10.17.</b>																									
<b>New Coke Oven Complex</b>																																
5.	Coke Oven Battery (0.882 Mtpa/ 104 pushings/ day 2x37 ovens, 7 m tall)  Piling – 2967 nos. RCC – 28,331 m3 Strl. Steel – 4213 t Equipment – 6981 t 21 sets Refractory – 28,186 t	Giprokoks/CUI/CIFG / Mcnally Bharat(Kolkata)/ BEC(Bhilai)	537.53 (117.25)  587.59 (136.5) <b>549.99</b>  <u>Gross Cost</u> – 655.63	593.02	13.10.07	Mar'10 <b>(Feb'13)</b>	Battery heating was started on 30.5.12. The battery was charged on 13.2.13 and 1 <sup>st</sup> coke pushed on 14.2.13. PAC issued on 27.3.13. Commissioning certificate issued on 29.4.2014 w.e.f. 28.10.13. Regular charging/ pushing being done in the Coke Oven Battery. PG tests have been completed. <b>97 nos. coke pushing (highest) has been done on 19.5.15.</b> PG Certificate issued on 25.4.16. Heating medium of Battery has been changed from Coke Oven Gas to Mixed Gas under firing on 30.3.16 for N2 block and on 28.6.16 for N1 block. <i>5% LD has been deducted on account of delay.</i> <b>FAC issued on 9.4.18 (w.e.f 3.4.18).</b> <b>Contract closed on 4.6.18.</b> <b>(Claim Rs.1.72 cr.)</b> <b>Party requested ISP to release their withheld amount against clause 7.4.3.6 (w.r.t. spares) and approached SCOPE for conciliation.</b> <b>ISP given consent to SCOPE for conciliation proceedings on 25.10.2018. ISP agreed for Sole conciliator. First conciliation meeting held on 24.07.2019 and 21.08.2019. As per directive of conciliator, meeting of ISP &amp; BEC held on 27.08.19 at ISP Burpur for reconciliation of statement of claim. Conciliation proceedings failed.</b>  Oven Pushing in - <b>2012-13 - 1632 nos.</b> <b>2013-14 - 20,929 nos.</b> <b>2014-15 - 23,569 nos.</b> <b>2015-16 – 30,292 nos.</b> <b>2016-17 – 31,241 nos.</b> <b>2017-18 – 33,072 nos.</b> <b>2018-19 – 34,639 nos.</b> <b>2019-20 (Upto Feb'20) – 32173 nos.</b>																									
								<table border="1"> <tr> <td>Apr'19</td> <td>2797 nos.</td> <td>Oct'19</td> <td>3008</td> </tr> <tr> <td>May'19</td> <td>3031 nos.</td> <td>Nov'19</td> <td>2912</td> </tr> <tr> <td>Jun'19</td> <td>2937 nos.</td> <td>Dec'19</td> <td>3047</td> </tr> <tr> <td>Jul'19</td> <td>2889 nos.</td> <td>Jan'20</td> <td>2914</td> </tr> <tr> <td>Aug'19</td> <td>3052 nos.</td> <td>Feb'20</td> <td>2811</td> </tr> <tr> <td>Sep'19</td> <td>2775 nos.</td> <td>Mar'20</td> <td></td> </tr> </table>	Apr'19	2797 nos.	Oct'19	3008	May'19	3031 nos.	Nov'19	2912	Jun'19	2937 nos.	Dec'19	3047	Jul'19	2889 nos.	Jan'20	2914	Aug'19	3052 nos.	Feb'20	2811	Sep'19	2775 nos.	Mar'20	
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6.	Coke Dry Cooling Plant (0.882 Mtpa) - 4 modules, 50 tph each (2W+1 hot standby+1 under repair/ maintenance)	Giprokoks/ CUI/ BEC(Bhilai)	307.38 (44.69)  327.96		16.7.08	Jul'10 <b>(Feb'13)</b>	All 4 modules have been completed. Coke from battery is being cooled and dispatched through K1 & K2 conveyors. PAC for CDCP issued on 24.8.13.																									

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
	Strl. Steel – 3712 t Equipment –3789 t 15 sets Refractory –3370 t		(42.78) <b>296.58</b> <u>Gross Cost</u> – 357.89	307.99			Commissioning certificate issued on 29.4.2014. PG tests completed and certificate issued on 24.6.15. <i>5% LD has been deducted on account of delay.</i> <b>FAC issued on 19.4.18.</b> <b>Contract closed on 5.6.18.</b> <b>(Claim Rs.1.23 cr.)</b> <b>Party requested ISP to release their withheld amount against clause 7.4.3.6 (w.r.t. spares) and approached SCOPE for conciliation.</b> <b>ISP given consent to SCOPE for conciliation proceedings on 25.10.2018. ISP agreed for Sole conciliator. First conciliation meeting held on 08.07.2019 &amp; 6.8.2019. Next meeting of conciliation is scheduled on 6.9.2019. As per directive of the conciliator meeting of ISP &amp; BEC held on 27.8.2019 at ISP Burnpur for reconciliation of statement of claim. Conciliation proceedings failed.</b>	
7.	Coke Dry Cooling Plant (Civil & Structural Work) Piling – 1118 nos. RCC – 10,347 m3 Strl. Steel – 345 t	BEC Ltd., Bhilai	23.20  23.20 <b>23.31</b> <u>Gross Cost</u> – 25.50	26.82	7.2.09	Aug'10 (Feb'13)	PAC issued on 31.3.14. <i>7.5% LD has been deducted on account of delay.</i> <b>FAC issued on 23.9.17 (w.e.f. 9.2.16).</b>	
8.	By-Product Plant  Piling – 666 nos. RCC – 16,315 m3 Strl. Steel – 1747 t Equipment – 3702 t	Mcnally Bharat Engg., Kolkata (under licensee of DMT GmbH, Germany)	231.31 (21.00)  251.74 (24.78) <b>238.0</b>  <u>Gross Cost</u> – 283.85	235.9245	12.10.07	Mar'10 (Feb'13)	Steam is being supplied from Power & Blowing station and CDCP. The Exhauster, Chiller Unit and the Electrostatic Tar precipitator of the By-product plant are connected. Coal tar produced is being dispatched. Elementary Sulphur plant has started in Mono-Claus mode on 12.11.2013. Presently both Claus plants are running. Ammonium Sulphate production has started. PAC issued on 12.2.13 Commissioning certificate issued on 15.9.14. Dispatch of Naphthalene has started from 30.8.17. Order placed on M/s Plantech (~Rs.4.8 cr.) for taking up hot tapping method for PG tests. Connection of tail gas line from Sulphur plant with Raw CO gas line has been done. <b>PG tests conducted from 24 -3.8.18.</b> <b>PG certificate issued on 15.10.18 (w.e.f. 30.7.18)</b> <b>FAC issued on 20.02.2020</b> Balance –As-built drawings & FAC.	
9.	B.O.D. Plant  Piling – nil RCC – 3350 m3 Strl. Steel – 40 t Equipment – 160 t	UPL Environmental Engg., Vadodara	8.26 (nil)  8.92 <b>7.86</b>  <u>Gross Cost</u> – 9.49	8.4443	12.10.07	Feb'10 (Jul'13)	Plant is in trial operation from 16.04.13. Bacteria culture is in process. Regular monitoring is being done by EMD. Receiving effluent from BPP started from Jul'13. PAC issued on 31.5.14. Commissioning Test successfully conducted from 05.08.15 to 11.08.15. Commissioning Certificate issued on 17.9.15. Balance – PGT & FAC.	
<b>Sinter Plant Complex</b>								
10.	Sinter Plant (2x204 m2, 3.88 Mtpa/ 11,750 tpd gross sinter production)	L&T / Outokumpu* Kolkata ** Renamed as Outotec GmbH Germany	704.19 (123.70)  790.91 (142.65)		13.10.07	Mar'10 (Hot trial production – Sinter M/c-1 - Dec'12)	Hot trial production of Sinter Plant (Machine-1) done on 24.12.12. In Sinter Machine No.2, Pilot burner of ignition furnace lighted up on 23.1.13 and hot trial production done on 31.1.13. Trial production of Sinter Plant (Machine-1) started on 11.3.13. PAC issued on 15.2.13.	

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	Piling – 1539 nos. RCC – 40,000 m3 Strl. Steel – 12,975 t Equipment – 11,750 t Refractory – 1100 t  <u>Change Order:</u> 1) Modification of Burner to use Coke Oven Gas. Supply – dated 19.8.11- Rs.0.22 cr.		<b>775.65</b>  <u>Gross Cost – 860.97</u>	856.43		<b>Sinter M/c -2- Jan'13)</b>	Commissioning tests done from 9.6.2015 to 15.6.15, commissioning certificate issued on 19.7.15. PG test completed on 10.6.16. PG Certificate issued on 16.9.16. <b>FAC issued on 18.7.17.</b> <b>Contract closed on 28.12.17</b> Sinter production – <b>2012-13 - 1560 t</b> <b>2013-14 - 1,12,403 t</b> <b>2014-15 - 6,58,429 t</b> <b>2015-16 – 22,40,030 t</b> <b>2016-17 –29,60,496 t</b> <b>2017-18 – 33,27,595 t</b> <b>2018-19 – 33,23,818 t</b> <b>2019-20 (Upto Feb'20) –34,12,799 t</b> <table border="1"> <tr> <td>Apr'19</td> <td>1,38,547 t</td> <td>Oct'19</td> <td>2,82,773 t</td> </tr> <tr> <td>May'19</td> <td>3,55,772 t</td> <td>Nov'19</td> <td>3,10,189 t</td> </tr> <tr> <td>Jun'19</td> <td>3,26,656 t</td> <td>Dec'19</td> <td>3,67,044 t</td> </tr> <tr> <td>Jul'19</td> <td>3,43,801 t</td> <td>Jan'20</td> <td>3,52,570 t</td> </tr> <tr> <td>Aug'19</td> <td>3,35,869 t</td> <td>Feb'20</td> <td>3,41,354 t</td> </tr> <tr> <td>Sep'19</td> <td>2,48,324 t</td> <td>Mar'20</td> <td></td> </tr> </table>	Apr'19	1,38,547 t	Oct'19	2,82,773 t	May'19	3,55,772 t	Nov'19	3,10,189 t	Jun'19	3,26,656 t	Dec'19	3,67,044 t	Jul'19	3,43,801 t	Jan'20	3,52,570 t	Aug'19	3,35,869 t	Feb'20	3,41,354 t	Sep'19	2,48,324 t	Mar'20		
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<b>Best ever production in a day - 13,353 t on 11.5.19.</b> <b>Guaranteed CENVAT- (Claim Rs.15.88 cr.)</b> <b>Party has raised issue for held payments due to shortfall in guaranteed CENVAT &amp; VAT. Party has appealed directly for arbitration on 15.06.2018.</b> <b>ISP vide letter dated 07.07.2018 advised L&amp;T to go first for conciliation, as per contract terms &amp; conditions. Consent letter to SCOPE issued on 06.02.2019. Since the contract was awarded to Consortium of M/s L&amp;T &amp; M/s Outotec Germany, SAIL ISP requested SCOPE Forum for inclusion of M/s Outotec in conciliation proceedings. SCOPE forum vide letter dated 05.03.2019 has asked M/s L&amp;T to include M/s Outotec and submit the statement of claim for initiation of conciliation. M/s L&amp;T vide letter dated 11.03.2019 has not agreed for the same and has unilaterally terminated the conciliation proceedings for adjudication through arbitration. SCOPE vide letter dated 02.04.2019 &amp; 12.04.2019 asked L&amp;T to initiate the conciliation procedure for termination but L&amp;T denied for the same vide letter dated 09.04.2019. Party has approached now in ICC for arbitration. ICC vide letter dated 17.04.2019 requested ISP for arbitration. Statement of defense has been submitted to ICC on 04.09.2019. Next hearing on 5<sup>th</sup> &amp; 6<sup>th</sup> May 2020.</b>																																
<b>Blast Furnace Complex</b>																																
11.	New Blast Furnace (BF5) (2.7 Mtpa / 7700 tpd Gross Hot Metal)  Piling – 4506 nos. RCC – 63,756 m3	POSCO E & C, South Korea/ Nagarjuna Const. (NCCL), Hyderabad	1493.50 (473.24)  1640.53 (547.48) <b>1638.05</b>		16.10.07	<b>Apr'10 (Blow in - Nov'14)</b>	PAC issued on 19.7.13. Heating of Hot Blast Stoves started on 1.8.14 & completed on 7.9.14. Timbering Process started on 9.11.14 and completed on 16.11.14. Burden Filling started on 18.11.2014 and completed on 27.11.14. Blow-in of Blast Furnace done on 30.11.14. Commissioning test carried from 6.12.2014 to 13.12.2014 and																									

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	Strl. Steel –12,233 t Equipment – 31,856 t Refractory – 33,364 t  Change Orders issued: 1) Design, supply, erection and commissioning of one Goggle Valve after demister on 6.8.12, Rs.1.30 crore 2) Upkeep of Facilities and Repetition of Pre-Blow in activities in Blast Furnace on 29.11.14, Rs.0.08 crore & Euro 615000 3) Extra quantity for Painting of Additional Coat on Structures & Equipment at Blast Furnace on 13.4.15 Rs.0.50 crore		Gross Cost – 1861.52	1770.03			commissioning certificate issued on 1.5.15. A new Pressure reducing & Distribution System (for reducing steam from 13 ata to 9 ata) installed on 15.12.15 for supplying steam at 9 ata to BF. PG test of BF-5 completed 21-28.12.16. PG certificate issued on 16.1.17. <b>FAC issued on 10.5.18.</b> <b>Contract closed on 13.10.18.</b> <i>Hot metal produced in –</i> <b>2014-15 - 3,75,389 t</b> <b>2015-16 – 14,31,733 t</b> <b>2016-17 – 18,10,438 t</b> <b>2017-18 – 20,54,991 t</b> <b>2018-19 – 22,00,367 t</b> <b>2019-20 (Upto Feb'20) – 22,85,988 t</b> <table border="1"> <tr> <td>Apr'19</td> <td>80,957 t</td> <td>Oct'19</td> <td>1,94,894 t</td> </tr> <tr> <td>May'19</td> <td>2,35,833 t</td> <td>Nov'19</td> <td>2,11,077 t</td> </tr> <tr> <td>Jun'19</td> <td>2,16,572 t</td> <td>Dec'19</td> <td>2,50,305 t</td> </tr> <tr> <td>Jul'19</td> <td>2,25,920 t</td> <td>Jan'20</td> <td>2,40,312 t</td> </tr> <tr> <td>Aug'19</td> <td>2,29,309 t</td> <td>Feb'20</td> <td>2,34,647 t</td> </tr> <tr> <td>Sep'19</td> <td>1,66,018 t</td> <td>Mar'20</td> <td></td> </tr> </table>	Apr'19	80,957 t	Oct'19	1,94,894 t	May'19	2,35,833 t	Nov'19	2,11,077 t	Jun'19	2,16,572 t	Dec'19	2,50,305 t	Jul'19	2,25,920 t	Jan'20	2,40,312 t	Aug'19	2,29,309 t	Feb'20	2,34,647 t	Sep'19	1,66,018 t	Mar'20		
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12.	Top Pressure Recovery Turbine (1 X 14MW TRT)	SSIT, China/ Tangshan Iron & Steel Design, China/ MICCO, Kolkata	41.73 (24.99)  44.55 (28.17) <b>22.16</b>	12.91	13.10.07	Oct'09 (-)	The Package was re-tendered against RPN. <b>The contract was terminated on 30.11.12.</b>  <b>The package is under arbitration.</b> <b>Party's claim Rs.1.1 cr.</b> <b>ISP's claim Rs.17.29 cr.</b> <b>RPN was issued to party on 21.04.2012 due to unsatisfactory progress of work. Ultimately contract was terminated on 30.11.2012 and balance jobs were executed through separate contract. ISP issued a recovery notice to consortium on 26.09.2015 for Rs. 17.29 Cr. Letter was issued to consortium on 21.07.2017 for conciliation. Consortium has agreed for conciliation. Letter was issued on 09.11.2017 to the consortium along with documents demanded by M/s Gillander for assessment of claim of ISP. M/s Gillander later on demanded drawings of pkg. 18R-01, which have also been sent to them. Arbitration has not yet commenced. ISP submitted petition letter in ICC for arbitration on 25.09.18. Statement of Claim has been filed to ICC for initiating Arbitration proceedings. ISP once again submitted the request of arbitration in ICC on 7.01.2020. Admitted. ICC admitted the request.</b> Contract signed with Consortium of M/s NICCO Corporation Ltd. and M/s Mitsui Engg. & Shipbuilding Co. Ltd., Japan on 13.2.13.																									
	Balance Work of Top Pressure Recovery Turbine  Change order issued – 1) On 18.1.2016 for Additional Foreign Supervision of 44	Nicco Corp. Ltd./ Mitsui Engg. & Shipbuilding Co. Ltd.	57.74 (32.84)  Gross Cost – 65.17	61.41	30.12.12	Part A – Nov'13 (By-pass system) (Nov'14) Part B –Jul'14 (Total TRT)	<b>Hot trial of TRT successfully done on 26.12.15 with synchronisation at 2MW.</b> <b>PAC issued on 28.12.15</b> <b>In the presence MES experts, Continuous running of the TRT started on 8.2.16 and synchronized at load of 7.1 MW, Inlet BF Gas flow was 4,20,000 Nm3/hr and Inlet pressure 1.82 kg/cm2.</b>																									

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	mandays for JPY 60,46,040 (Rs.0.35 Cr.)					system) (Dec'15)	<p>Maximum generation 10.5 MW. CC issued on 31.3.16. PG Test completed on 27.12.16 in the presence of MES (Japan) experts. Generation of 14.25 MW power with BFG flow of 5,21,000 Nm<sup>3</sup>/hour at 2.16 kg/cm<sup>2</sup> inlet pressure was achieved. PG certificate issued on 28.1.2017. TRT is running continuously with ~10MW generation depending on the BF Gas volume. <b>FAC issued on 29.3.18.</b> <b>Contract Closed on 12.12.18</b></p> <p><b>M/s NICCO has raised issue for held-up payments due to shortfall in guaranteed CENVAT &amp; VAT and non-compliance of insurance.</b> <b>M/s NICCO vide letter dated 20.05.2019 submitted a notice of conciliation. Letter from SCOPE received on 13.06.2019 for consent of conciliation. Consent letter has been issued on 9.8.2019.</b></p>																									
13.	<p>Pig Casting Machine (2x1400 tpd continuous twin strand)</p> <p>Piling – 27 nos. RCC – 8220 m<sup>3</sup> Strl. Steel – 936 t Equipment –1420 t</p> <p>Change Order issued: 1) On 24.2.11 for Extra item to Complete Rail Track foundation for PCM pouring end building &amp; discharge end building including flooring: Rs.0.97 crore</p>	METCO, Kolkata	<p>48.26 (nil)</p> <p>53.49 <b>47.68</b></p> <p><u>Gross Cost</u> – 59.28</p>	52.02	9.10.07	Oct'09 (Dec'14)	<p>1<sup>st</sup> casting of PCM with Hot metal from BF-5 successfully done on 5.12.14. Commissioning certificate issued on 25.02.2015. PG test carried out from 17.2.16-19.2.16 (72 hours). PG certificate issued on 30.3.16. <b>FAC issued on 27.1.18.</b> <b>Contract closed on 12.6.18.</b></p> <p>Pigs produced in – <b>2014-15 - 1,03,428 t</b> <b>2015-16 – 2,96,763 t</b> <b>2016-17 – 2,37,124 t</b> <b>2017-18 –1,03,834 t</b> <b>2018-19 – 80,482 t</b> <b>2019-20 (Upto Feb'20) – 1,26,603 t</b></p> <table border="1"> <tr> <td>Apr'19</td> <td>15,370 t</td> <td>Oct'19</td> <td>7,981 t</td> </tr> <tr> <td>May'19</td> <td>9117 t</td> <td>Nov'19</td> <td>13,962 t</td> </tr> <tr> <td>Jun'19</td> <td>25,834 t</td> <td>Dec'19</td> <td>13,933 t</td> </tr> <tr> <td>Jul'19</td> <td>13,256 t</td> <td>Jan'20</td> <td>8,157 t</td> </tr> <tr> <td>Aug'19</td> <td>5,332 t</td> <td>Feb'20</td> <td>8,768 t</td> </tr> <tr> <td>Sep'19</td> <td>4,903 t</td> <td>Mar'20</td> <td></td> </tr> </table>	Apr'19	15,370 t	Oct'19	7,981 t	May'19	9117 t	Nov'19	13,962 t	Jun'19	25,834 t	Dec'19	13,933 t	Jul'19	13,256 t	Jan'20	8,157 t	Aug'19	5,332 t	Feb'20	8,768 t	Sep'19	4,903 t	Mar'20		
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14.	<p>Coal Pulverisation &amp; Injection system Coal Injection rate – 150kg/ tHM (Avg.)</p> <p>Piling – 169 nos. RCC – 5100 m<sup>3</sup> Strl. Steel –2044 t Equipment –1081 t</p> <p>Change order issued – 1) For Extra items for Rs.0.11</p>	<p>CISRI China/ SSIT China/ Shapoorji Pallonji, Mumbai</p> <p>Change Order issued on 17.7.13 with revision in the Responsibility Matrix and Price Schedule.</p>	<p>78.79 (38.07)</p> <p>86.98 (42.9) <b>86.68</b></p> <p><u>Gross Cost</u> – 100.53</p>	88.6823	13.10.07	Oct'09 (Mar'15)	<p>PAC issued on 11.3.15. Coal successfully ground on 14.3.15 in Stream -1 and on 22.3.15 in Stream-2. Hot trials of Coal Pulverisation and Injection into BF-5 done on 28.3.15. Commissioning parameters reduced considering a min. HM production of 4,500 tpd from BF-5. Commissioning tests carried out from 18.3.16 to 24.3.16 in the presence of Chinese experts. Commissioning certificate issued on 25.4.16 wef 24.3.16. PG test completed on 29.12.16 along with Blast Furnace. PG certificate has been issued on 2.5.17 wef 29.12.16. FAC issued on 8.7.19 wef 27.6.19 5% LD has been deducted on account of delay.</p>																									

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	crore, on 27.5.15.						<p>The package is under arbitration. 5% LD imposed on party after delay analysis. M/s SPCL did not accept the same and requested ISP to withdraw the LD. As per contract, amicable settlement tried but failed and matter was referred to SCOPE forum on 09.12.2017 by M/s SPCL to resolve through conciliation. ISP submitted the consent for the same. Later on considering cost involve in conciliation, ISP law suggested to resolve the matter directly through arbitration. Accordingly M/s SPCL has been communicated on 21.03.2018. M/s SPCL on 23.03.2018 requested ISP to communicate directly to SCOPE forum for arbitration instead of conciliation. ISP is in the process of sending the matter for arbitration before SCOPE Forum of Conciliation and Arbitration</p> <p>SPCL has filed statement of claim on 21.06.2018 to SCOPE. ISP issued a letter for arbitration in ICC Delhi as per contract provision. SPCL did not agree. File sent to Corp. office. As per advice of Corporate Office, approval for arbitration in SCOPE forum has been obtained and the same has been communicated to SCOPE by Law department. Statement of Claim of SPCL has been received. Statement of defense has been filed. Last hearing held on 29.7.19. Earlier arbitral panel resigned. New arbitral panel has to be constituted by SCOPE. Date of hearing is yet to be communicated.</p>	
		CISRI	Original US\$ 670,000	Ammended US\$ 2,163,232				
		SSIT	US\$ 8,643,400	US\$ 7,150,168				
		SPCL	Rs.43.11 cr.	Rs.43.11 cr.				
15.	Hot Metal Handling System (10 x 350 t Torpedo ladles)  Piling – 52 nos. RCC – 2325 m3 Strl. Steel – 765 t Equipment – 2150 t Refractory – 1730 t  Change Order – 1) For Two nos. Torpedo Ladle along with Ladle car (without refractory) placed on 9.10.14 (Rs.1.30 crore)	Dalian Huaruri Heavy Industry, China/ Simplex, Bhilai	71.91 (26.69)  80.44 (31.21) <b>97.16</b>  <u>Gross Cost – 90.97</u>	87.25	14.10.07	Oct'09 (Nov'14)	<p>Trial run of Torpedo Ladle Car from Cast House-II to Ladle Repair Shop successfully completed on 25.8.14 through Interplant Rail Network.</p> <p>Track between BF and BOF (EF bay) completed and Trial run of Loco along with one Torpedo ladle done successfully on 14.9.13.</p> <p>Trial run of Torpedo Ladle Car between the Ladle repair Shop and Sand Pit done successfully on 21.10.2014.</p> <p>1<sup>st</sup> Torpedo Ladle Car carrying Hot Metal from BF-5 taken to BOF-shop on 13.12.14 for sequential casting.</p> <p>Torpedo Ladles (8 nos.) are in continuous use with Hot metal being transported to sand pit/ PCM &amp; BOF. Balance 2 nos. are kept reserve for future usage.</p> <p>PAC issued on 02.05.2015 CC issued on 30.05.2015. PG test conducted on 19.10.16. PG certificate issued on 20.12.16.</p> <p><b>FAC issued on 27.1.18.</b> <b>Extra claims (Rs.0.38 cr.) under settlement.</b></p>	
16.	BF & CO Gas Flare Stack	Ador Welding	4.34  5.02 <u>Gross Cost – 5.38</u>	4.16	29.4.09	Apr'10 (Nov'14)	<p>BF &amp; CO Gas Flare stacks are in operation.</p> <p>PAC issued on 16.6.14. Commissioning Certificate issued on 13.2.16 (w.e.f. 30.11.14).</p>	
	<b>Steel Melting Shop</b>							
17.	BOF Converters (3 x 150t)  2.559 Mtpa/ 52 heats/ day  Equipment – 14,456 t 938 lots	SMS Demag/ SMS(Kolkata) India/ Bridge & Roof Co. Gurgaon	1120.83 (357.87)  1204.61 (380.97) <b>1358.06</b>		19.3.08	Oct'10/ Dec'10 (1 <sup>st</sup> converter Sep'14)  (2 <sup>nd</sup> Converter Nov'14)	<p>First heat taken from BOF Converter - 3 (1<sup>st</sup> Converter) on 8.9.14 and from BOF Converter - 2 (2<sup>nd</sup> Converter) on 20.11.14. Heats are being taken regularly.</p> <p>Commissioning Certificate for Converter-3 issued on 9.9.15. Commissioning Certificate for Converter-2 issued on 27.8.16 Performance Guarantee certificate issued on 06.07.19 wef 19.5.19</p> <p>BOF Gas Holder –Hot trial of Gas recovery from BOF Converter to</p>	

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	<u>Change Orders</u> i) Additional Foreign Supervision of 55 man months for BOF (9.1.15) - 2,641,916 Euro ii) Additional Indian Supervision of 60 man months for BOF (16.2.15) – Rs.2.94 cr. iii) Supply of 3 modification sets for lance quick coupling system (25.1.16) – Euro 135,000 (Completion time - 1 <sup>st</sup> set – within 6 weeks, ex works Germany, balance 22 weeks) iv) Additional Indian Supervision of 25 man months for BOF (21.9.16)– Rs.1.25 cr.		<u>Gross Cost</u> – 1340.87	1263.1844		(3 <sup>rd</sup> Converter – Aug'16)	Gas Holder done successfully for the first time on 11.9.15. Regular Gas recovery & export started on 21.11.15. BOF- Container Laboratory made operational on 13.6.15. Hot trial of ESP-2 along with Dust transport System successfully conducted on 8.7.16 and is in operation. <u>BOF-1 Converter</u> Hot trial of Converter-1 done on 30.8.16. Commissioning test carried out on 20-21.1.17. Commissioning certificate issued on 28.2.17. Heats taken in - <b>2014-15 - 1132 nos.</b> <b>2015-16 – 6634 nos.</b> <b>2016-17 – 10,320 nos.</b> <b>2017-18 –12,591 nos.</b> <b>2018-19 – 12,879 nos.</b> <b>2019-20 (Upto Feb'20) – 13,091 heats</b> <table border="1"> <tr><td>Apr'19</td><td>283 heats</td><td>Oct'19</td><td>1190</td></tr> <tr><td>May'19</td><td>1364 heats</td><td>Nov'19</td><td>1198</td></tr> <tr><td>Jun'19</td><td>1120 heats</td><td>Dec'19</td><td>1437</td></tr> <tr><td>Jul'19</td><td>1306 heats</td><td>Jan'20</td><td>1394</td></tr> <tr><td>Aug'19</td><td>1409 heats</td><td>Feb'20</td><td></td></tr> <tr><td>Sep'19</td><td>1045 heats</td><td>Mar'20</td><td></td></tr> </table>	Apr'19	283 heats	Oct'19	1190	May'19	1364 heats	Nov'19	1198	Jun'19	1120 heats	Dec'19	1437	Jul'19	1306 heats	Jan'20	1394	Aug'19	1409 heats	Feb'20		Sep'19	1045 heats	Mar'20		
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18.	Hot Metal De-sulphurisation Station (2 x 150t )  Equipment – 1222 t 40 sets	Kuttner GmbH/ Somani Kuttner, New Delhi	37.27 (11.65)  38.22 (11.02) <b>39.58</b>  <u>Gross Cost</u> – 43.53	40.74	4.6.08	Jun'10 (Jun'15)	PAC issued for both Stands on 28.2.15. Hot trial run done in Stand -1 on 18.6.15 and in Stand-2 on 24.6.15 with mono injection of Calcium Carbide into Hot Metal in manual mode. Commissioning test for HMDS unit -1 and unit-2 successfully done on 11.10.2015 and 12.10.2015 respectively. Commissioning certificate issued on 23.12.2015. <b>PG Certificate has been issued on 8.4.2019 (w.e.f 30.3.19).</b> <b>FAC issued on 15.01.2020</b>  <b>Claim of Party - €160342.32 and Rs.4.28 cr.</b> <b>Party has raised issue for held up payments due to shortfall in guaranteed CENVAT &amp; VAT and other payment related issues.</b>  <b>Party has requested for conciliation proceedings in SCOPE forum. Consent letter sent by ISP on 04.10.18 for conciliation. Party is likely to withdraw/revise the statement of claim.</b>																									
19.	Secondary Refining System (2 x 150t LF – 2.55 Mtpa/ 2x26 heats/day,  1 x 150t RHF – 1.00 Mtpa/ 24 heats/day)  Equipment – 1792 t 236 sets	SMS India/ SMS Mevac UK/ Shriram EPC Ltd., Chennai	215.19 (32.78)  225.78 (29.75) <b>224.16</b>  <u>Gross Cost</u> – 245.93	217.6046	23.5.08	Sep'10 (LHF1-Dec'13 LHF2-Oct'14 RH Degasser-Apr'16)	Liquid Steel was brought from existing Twin Hearth Furnace through 2 nos. converted ladles (75t each) and then taken to new Ladle Furnace after re-ladling on 19.12.13. Thereafter, first heat was taken successfully in LHF for rinsing and arcing and liquid steel was placed on turret of Billet Caster No.1. On 10.10.2014, heat was taken successfully in Ladle Heating Furnace-2 for rinsing and arcing. PAC issued for LHF-1 on 29.3.14 & for LHF-2 on 10.10.14 <u>RH Degasser</u> PAC for RH Degasser issued on 4.3.16. 1 <sup>st</sup> hot trial was done on 5.3.16, however, due to leakages observed																									



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	Refractory – 314 t						<p>in loaded condition, the desired vacuum level (&lt;1 milli bar) was not achieved. Leakages have been rectified. After completion of major punch points, again heat was taken on 23.4.16 when desired vacuum could be achieved.</p> <p>For Level-2 Automation, Hardware installation and networking is completed.</p> <p>Commissioning tests completed on 30.5.18.</p> <p><b>CC issued on 21.6.18.</b></p> <p><b>Present Status :</b></p> <ul style="list-style-type: none"> <li>➤ <b>Commissioning has been done on 30.05.2018</b></li> <li>➤ <b>PG of 02 Nos. LHF completed</b></li> <li>➤ <b>PG of RH degasser - Balance.</b></li> <li>➤ <b>MECON's recommended rectification jobs completed.</b></li> <li>➤ <b>No Load trial taken on 28.12.2019.</b></li> </ul> <p><b>Note :</b></p> <ul style="list-style-type: none"> <li>➤ <b>Consecutive heats required for successful PGT.</b></li> </ul>	
20.	<p>EOT cranes for BOF &amp; CCP (&gt; 120t capacity) Total 12 Nos. (280T= 8 Nos.; 120T= 4 Nos.)</p> <p><b>For BOF:</b></p> <p>2x280t - HMDS bay (D-E), 2x280t - Charging bay (E-F), 1x280t - Ladle Prep. Bay (H'-J), 1x120t- Ladle Prep. Bay (H'-J) , 3x120t- Slag Bay (A-B)</p> <p><b>For CCP:</b></p> <p>3x280t- Secondary Ref. Bay (K-L)</p>	Anupam Industries, Anand/ SIB Cranex, Russia	<p>186.30 (52.37)</p> <p>194.1 (51.81) <b>191.19</b></p> <p><u>Gross Cost</u> – 223.30</p>	191.37	4.6.08	<p>Jun'10 <b>(Apr'16)</b></p>	<p>PAC issued for all 12 cranes. CC issued for all 12 cranes.</p> <p>PG test completed in all cranes. PG certificate issued for 9 cranes. Balance is cranes in KL bay.</p>	
21.	<p>Lime &amp; Dolomite Plant (3 x 330 tpd Lime kiln, 1 x 200 tpd Dolomite Kiln)</p> <p>Equipment –2900 t 51 sets Refractory – 28,186 t</p>	Cimprogetti, Italy/ FL Smidth Minerals Pvt. Ltd., Chennai	<p>105.82 (16.48)</p> <p>113.89 (17.99) <b>112.89</b></p> <p><u>Gross Cost</u> – 126.46</p>	108.43	18.4.08	<p>Apr'10 <b>(Dolo kiln – Oct'14 Lime kiln-2 Feb'15 Kiln-3 – Feb'16 &amp; Kiln-4 – Jun'16)</b></p>	<p>It was decided to start Dolo kiln (200 tpd) with CO gas for Production of lime for requirements of 1<sup>st</sup> heat.</p> <p>On 16.10.2014, Kiln-1 was lighted up with Coke Oven Gas to start production of Calcined Lime. Kiln-1 started trial production of Calcined Lime on 20.10.2014.</p> <p>Production of Dolo started from 27.3.15</p> <p>Kiln-2 lighted-up on 4.2.15.</p> <p>Order placed on 27.4.15 on M/s TRL for Dismantling, Disposal and Erection of Refractory at Kilns 3 &amp; 4. Order value is Rs.1.10 crore.</p> <p>Kiln-3 lighted up on 28.1.16 and lime production started from 4.2.16.</p> <p>Kiln-4 lighted up on 18.6.16 and lime production started from 24.6.16.</p> <p>Commissioning certificate issued</p> <ul style="list-style-type: none"> <li>- Kiln-1 &amp; 2 - 17.11.15</li> <li>- Kiln – 3 - 31.3.16</li> <li>- Kiln-4 - 27.7.16</li> </ul> <p>Consolidated CC issued on 24.12.16.</p> <p>PG test of Kiln-3 &amp; 4 conducted 20-24.11.17.</p>	

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22	<p>Continuous Casting Plant (2x6 strand Billet Caster – 1.67Mtpa/ 2x20 heats/ day Max. 2x24 heats/ day 1x4 strand Bloom cum Beam Blank Caster – 0.83 Mtpa/ 12 heats/ day) Max. 24 heats per day.</p> <p>Equipment – 9640 t</p> <p><u>Change Orders</u></p> <p>i) Change Order for Missing/ Damaged items for CCP (10.12.13) – Rs.0.80 cr. ii) Change Order for Additional Foreign Supervision of 750 Mandays (2.9.14) – Rs.4.88 cr. iii) Change Order for Additional Foreign Supervision of 373 Mandays (19.1.15) – Rs.2.42 cr. iv) Missing/ damaged items for CCP on M/s SAS Engg. Works (25.2.15) – Rs.0.26 cr. v) Missing/ damaged items for CCP on M/s Sangeeta Engg., Kabelschlepp India Filtration Engg., Universal Fire &amp; Mico Corpn. (25.2.15) – Rs.0.1 cr. vi) Y link Panel Installation for Level-1 Automation Interface between Casters &amp; Mills for hot charging of Billets on M/s Primetals on 26.10.15 for Rs.0.076 crore vii) Emergency work in Cable Tunnel for CCP on M/s Primetals on 26.10.15 for Rs.0.11 crore. viii) Supply of Equipment Parts/ Items for repairing damaged 'Marking Machine' M/s Primetals Technologies India Pvt. Ltd, on 25.2.16 for Rs.0.489 crore. ix) Change Order for Additional Foreign Supervision (300) Mandays and Indian Supervision (280 mandays) (27.1.17) – Rs.2.258 cr.</p>	Siemens VAI, Austria/ Siemens VAI, India Kolkata	<p>447.93 (217.87)</p> <p>480.02 (231.06)</p> <p><b>485.66</b></p> <p><u>Gross Cost –</u> 564.17</p>	511.9014	11.10.07	<p>Jul'10 (1<sup>st</sup> heat from Caster-1 – Dec'13 1<sup>st</sup> heat from Caster- 2 – Oct'14) 3<sup>rd</sup> Caster – Apr'15)</p>	<p><b><u>BILLET CASTER – 1 &amp; 2</u></b> First heat taken successfully in Billet Caster-1 on 19.12.13 (with Liquid Steel brought from existing Twin Hearth Furnace). PAC for CCM-1 issued on 3.3.14. UK Enterprise, Asansol engaged for completion of balance mechanical jobs of CCM-1 &amp; CCM-2 after contract with M/s UBEL Engg. Ltd. was terminated. First heat taken successfully in Billet Caster-2 on 17.10.14 (with liquid steel from BOF-3). PAC for CCM-2 issued on 16.12.14. Commissioning certificate issued for Caster- 1 &amp; 2 on 17.12.15. EMS - 14 nos. of EMS sent to Ergoline work shop, Italy for refurbishment. They have been received and commissioned in Caster-1 (7 nos.) and Caster-2 (7 nos.). PG tests completed in all 3 casters. <b>PG certificate issued on 8.1.19 w.e.f.17.12.18</b> Billets cast from CCM-1 &amp; 2 – <b>2014-15 - 1,41,199 t</b> <b>2015-16 – 8,42,371 t</b> <b>2016-17 –11,63,055 t</b> <b>2017-18 – 14,48,474 t</b> <b>2018-19 – 14,72,917 t</b> <b>2019-20 (Upto Feb'20) – 15,14,274 t</b></p> <table border="1"> <tr><td>Apr'19</td><td>32,009 t</td><td>Oct'19</td><td>1,52,342 t</td></tr> <tr><td>May'19</td><td>1,48,990 t</td><td>Nov'19</td><td>1,43,640 t</td></tr> <tr><td>Jun'19</td><td>1,23,935 t</td><td>Dec'19</td><td>1,60,220 t</td></tr> <tr><td>Jul'19</td><td>1,50,121 t</td><td>Jan'20</td><td>1,59,004 t</td></tr> <tr><td>Aug'19</td><td>1,59,850 t</td><td>Feb'20</td><td>1,55,647 t</td></tr> <tr><td>Sep'19</td><td>1,28,516 t</td><td>Mar'20</td><td></td></tr> </table> <p><b>Max. heats per day in CCM 1&amp; 2 so far - 47 nos. on 28.3.19.</b></p> <p><b><u>CASTER -3</u></b> First Heat was taken successfully on 22.4.15 in Bloom cum Beam Blank Caster (CCM-3) by casting 280mm x 200mm bloom through one strand (approx. 30.6m cast) Casting of Beam blank, BB2, of size 430x350x90 has been done on 3.6.15. PAC for CCM-3 issued on 24.8.15. Casting of Beam blank, BB3, of size 686x350x90 done on 5.2.17. Closed casting system to be stabilised in Caster- 3 (only for casting blooms) Casting of Beam Blank - BB1 (292x305x85) is balance. Commissioning test of CCM-3 has been completed on 23.2.17. Commissioning certificate issued on 30.3.2017 w.e.f. 23.2.17. Marking Machine has been commissioned.</p> <p><b>Blooms/ Beam Blanks cast from CCM-3</b> <b>2015-16 – 26,647 t</b> <b>2016-17 – 2,31,264 t</b> <b>2017-18 – 3,51,486 t</b></p>	Apr'19	32,009 t	Oct'19	1,52,342 t	May'19	1,48,990 t	Nov'19	1,43,640 t	Jun'19	1,23,935 t	Dec'19	1,60,220 t	Jul'19	1,50,121 t	Jan'20	1,59,004 t	Aug'19	1,59,850 t	Feb'20	1,55,647 t	Sep'19	1,28,516 t	Mar'20		
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							<p><b>2018-19 – 4,14,496 t</b>  <b>2019-20 (Upto Feb'20) – 3,78,869 t</b></p> <table border="1"> <tr> <td>Apr'19</td> <td>8313 t</td> <td>Oct'19</td> <td>20053 t</td> </tr> <tr> <td>May'19</td> <td>49,987 t</td> <td>Nov'19</td> <td>31,676 t</td> </tr> <tr> <td>Jun'19</td> <td>34,718 t</td> <td>Dec'19</td> <td>46,613 t</td> </tr> <tr> <td>Jul'19</td> <td>36,130 t</td> <td>Jan'20</td> <td>48,996 t</td> </tr> <tr> <td>Aug'19</td> <td>40,791 t</td> <td>Feb'20</td> <td>40.905 t</td> </tr> <tr> <td>Sep'19</td> <td>20,687 t</td> <td>Mar'20</td> <td></td> </tr> </table> <p><b>Max. heats per day taken so far - 17 nos. on 23.2.17.</b>  <b>Max. heats with all 3 casters together – 53 heats on 29.10.18</b>  <b>PG Certificate issued on 8.1.19 with date of completion 17.12.18.</b></p>	Apr'19	8313 t	Oct'19	20053 t	May'19	49,987 t	Nov'19	31,676 t	Jun'19	34,718 t	Dec'19	46,613 t	Jul'19	36,130 t	Jan'20	48,996 t	Aug'19	40,791 t	Feb'20	40.905 t	Sep'19	20,687 t	Mar'20		
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23.	Misc. Cranes below 120t for BOF & CCP (total 50 nos.) EOT cranes - 11 nos. Repair trolleys – 30 nos. Jib cranes – 3 nos. Cantilever Cranes – 2 nos. Semi Gantry cranes – 3 nos. Semi Portal Crane – 1 no.	HEC Ltd. Ranchi	73.11 (nil)  78.22 <b>76.33</b>  <u>Gross Cost –</u> 85.72	71.6153	26.2.09	Oct'10 ( <b>May'20</b> )	<p>ISP placed Work Order on an alternate agency, M/s MC Enterprise for erection of Scrap Handling Cranes (2 nos.) and Semi-portal Crane on 14.5.14 as the erection of these cranes was not being started by M/s HEC. Order placed on Alternate agency for erection of Repair trolleys, Jib Cranes etc. PAC issued for 19/ 20 cranes. CC issued for 19/20 cranes and 30 Repair Trolleys. CC issued for DSL system to HEC on 8.7.19 wef 20.2.19. 50/10 t cap. Lance handling Crane (2 nos.) 20+20t scrap bay crane (2 nos.) 60+60t cap. Semi-portal crane 10t cap. Lance Workshop crane 100 t cap. Casting bay crane (2 nos.) 20/10 t cap. Ferro handling crane 20/ 10 t cap. Ladle Furnace crane 30/5 t cap. Discharge Bay Crane</p> <p>Semi Gantry cranes – 3 nos. of 7.5t Cantilever Cranes (in relining bay)– 2 nos. of 3t. Jib cranes – (3 nos. 1t capacity) Repair trolleys – 30 nos. (21 nos. of 5t incl. 3 nos. spare &amp; 9 nos. of 15t) - supply completed. Erection completed. There are repeated failures during electrical testing. Reasons for Delay: Delay in structural Front Handover and delay due to laying of additional cable because of voltage drop.</p>																									
24.	Rotating Trolley Cranes for BOF, CCP & Billet Storage (Total 6 cranes for CCP) 2 x 18 t in Discharge Bay (MN) 1x25t & 1x18t in Storage Bay (NP) 2 x 25t in Storage Bay (PQ)  <u>ISSUES</u> ➤ Slew motion is jammed in the cranes.	WMI Cranes Ltd. Mumbai	35.72 (nil) 38.28 <b>35.65</b>  <u>Gross Cost –</u> 41.93	37.13	3.3.09	Nov'10 ( <b>Apr'16</b> )	<p>PAC issued for all cranes CC issued for "25T*2Tmtrs.span Rotating Trolley Tong Crane at NP bav (44B) " to WMI KONECRANES INDIA LTD,Pune, on 09.07.19 with date of completion 06.07.18.</p> <p>25t capacity – PQ bay (magnetic ) – 2 cranes - in operation. NP bay (tong) – crane is not in operation due to defective MH drive. Slew motion is jammed. 18t capacity – NP bay (magnetic) –magnet crane in operation. Slew motion problem has been rectified and in operation. MN bay (magnetic) – 2 cranes - Both magnet cranes in operation. But slew motion is jammed. In one crane of 25t capacity (PQ bay), bearings were replaced and is working fine. Bearings are being procured and replaced in the</p>																									

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							balance cranes.	
25.	<p>BF Slag handling system, Bulk Material Handling System of BOF and Ferro Alloy Stores (Civil, Structural, Mechanical, Electricals for BF Slag Handling System, Bulk Material Handling System for BOF &amp; Ferro Alloy Stores)</p> <p><b>ISSUES</b></p> <p>➤ M/s OKIS was reluctant to follow inspection call procedures as per contract and submit all relevant documents. Subsequently, consortium re-constituted without M/s OKIS and Amendment order to contract was issued by ISP on 10.11.11.</p> <p>➤ Later, CFMCC has expressed their inability to proceed due to shortage of funds and the contract was amended on 18.1.13 with revised Responsibility Matrix with M/s Technofab having additional scope.</p> <p>➤ The party is under financial constraints and is not able to mobilise resources to complete the balance work.</p> <p>Change Order issued on 5.6.14 for Additional Job of PLC Installation for Rs.0.4 crore</p>	<p>China First Metallurgical Constr. Co. Ltd. Consortium/ Capital Engg. &amp; Research Inc./ Beijing Okis New Tech. Co. Ltd./ Technofab Manufacturing Ltd.) Kolkata</p> <p>The Consortium has been re-constituted as follows: CFMCC- Rs.30.7081 cr. CERI - US\$566,000 Technofab - Rs.39.7213 cr.</p> <p><b>The contract was further amended on 18.1.13</b> CFMCC- Rs.18.5956 cr. CERI - US\$566,000 Technofab - Rs.51.8339 cr.</p>	<p>74.98 (16.39)</p> <p>79.05 (15.72)</p> <p><b>86.50</b></p> <p><u>Gross Cost</u> – 90.51</p>	77.65	4.3.09	Jul'10 (Mar'18)	<p>BMHS &amp; FAS: In operation. Fork lift is balance in FAS. In BMHS, 3 nos. Belt Weigh Scales (BWS) have been commissioned (2 nos. in LDCP area and 1 no. in BOF).</p> <p>BFSHS: BF Slag Granulation site was made available in Jun'12 after resolving Jhoraburi issue. Slag disposal system is in operation.</p> <p>PAC issued on 15.10.15. <b>CC issued on 29.3.18</b></p> <p><b>Under Arbitration (M/s Technofab) (Claim Rs.51.23 cr.)</b> Party invoked conciliation for various claims against due payments, BG invocation, Retention amount held, Extra work etc.</p> <p>Party has approached SCOPE forum for conciliation. Consent Letter for conciliation has been issued to SCOPE on 22.02.2019 with approval of competent authority. However SCOPE has been requested to adjudicate the case alongwith all consortium members of M/s TFML. SCOPE vide letter dated 08.03.2019, 15.05.2019 and 18.06.2019 has advised TFML to submit statement of claim and give comments on portion of consortium members.</p>	
26.	<p>External Water Supply Facility for BOF &amp; CCP (External Water supply system for BOF, CCP, SRU, HMDS. In shop water piping &amp; utility piping for BOF)</p> <p>Change Order issued-</p> <p>i) On 8.1.11 for Replacement of existing damaged pipes in the Scale Pit area for Rs.0.02 crore</p> <p>ii) on 8.10.14 for Additional job for Sludge transfer from storage hopper to truck loader for Rs.1.02 crore</p>	<p>MBE/ Southern Cooling Tower Pvt. Ltd./ Resindia Water Treatment Pvt. Ltd. Kolkata</p>	<p>111.35 (nil)</p> <p>116.40</p> <p><b>119.23</b></p> <p><u>Gross Cost</u> – 120.98</p>	115.086	25.3.09	Sep'10 (Jan'15)	<p>PAC for the water supply system for BOF &amp; CCP including gas facilities for BOF complex issued with effect from 20.01.15. The job for Sludge transfer from storage hopper to truck loader completed and in operation. Commissioning completed on 19.05.2017 and CC issued by ISP on 26.05.2017. PG test completed. PG certificate issued on 25.7.18.</p>	
27a.	Erection of mechanical plant & equipment including refractory for BOF & CCP	UB Engg. Pune	41.99 (nil)		20.4.09	Oct'10/ Jun'10	<p>BOF</p> <ul style="list-style-type: none"> <li>14,880/15,600t (95%) equipment received (Sch./ Likely - Mar'10/ -)</li> <li>2400/ 6628 t (36%) refractory received (Sch./ Likely - Jun'10/ -)</li> </ul>	

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	Scope BOF: Equipment – 15,600 t Refractory – 6628 t CCP: Equipment – 7572 t Refractory – 3000 t  <b>Erection contract with M/s UBEL terminated on 1.8.2014.</b>		54.11 <u>Gross Cost –</u> 56.68	47.08			<ul style="list-style-type: none"> <li>14,809/ 15,600 t (95%) equipment erected (Sch./ Likely - Oct'10/ -)</li> <li>2254/ 6628 t (34%) refractory erected (Sch./ Likely - Jun'10/ -)</li> </ul> CCP <ul style="list-style-type: none"> <li>All equipment received (Sch./ Act. – Jul'09/ Mar'13)</li> <li>1788/ 3000 t (60%) refractory received (Sch./ Likely - Jun'10/ -)</li> <li>6618/ 7572 t (87%) equipment erected (Sch./ Likely - Jun'10/ -)</li> <li>1296/ 3000 t (43%) refractory erected (Sch./ Likely - Jun'10/ -)</li> </ul> Scope includes mechanical eqpt., technological structures and refractories. Balance jobs of BOF- 3 & 2 and common facilities have been executed by M/s SMS Group and termination order has been issued on 28.1.15. Work order for balance mechanical erection of Converter-1 has been placed on M/s SMS (I). M/s UK Enterprise, Asansol has been engaged for completion of balance mechanical jobs of CCM-1 & CCM-2. In CCM-3, order has been placed on M/s UK Enterprise for balance mechanical erection activities. <b>RPN was issued to consortium on 19.07.2014 due to unsatisfactory progress of work by the party. Contract was terminated on 01.08.2014 and balance jobs were executed through separate contracts by various agencies. Notice of Recovery of an amount Rs. 98.07Cr. was issued on 15.06.2017. UBEL also filed claim against ISP and referred the matter for arbitration. UBEL has also filed insolvency to NCLT. Claim for Rs.98.07 crores has been filed by SAIL as 'operational creditor' before the Official Liquidator of UBEL. Application has been filed before NCLT Mumbai for lodging the claim of ISP. Confirmation for acceptance of claim not yet received.</b>	
27b.	Erection of Miscellaneous Plant & Equipment	Banerjee Enterprise, Asansol	3.215	0.85	26.9.13	Sep'14 (Nov'15)	Manpower was being supplied to other agencies.	
27c	Balance Mechanical Jobs for BOF Converter-3 & 2 of ISP	SMS India Pvt. Ltd., Gurgaon	on Cost Plus Fee Basis. 16.854	15.97	27.5.14	Jan'15	<ul style="list-style-type: none"> <li>Order placed on 27.5.14</li> <li>Balance work in Conv-3 and Conv-2 were executed.</li> <li>Termination notice issued on 28.1.15.</li> </ul>	
27d	Balance Mechanical Jobs for BOF Converter-1 of ISP	SMS India Pvt. Ltd., Gurgaon	on Cost Plus Fee Basis.  42.15	41.72	20.2.15	Dec'15 (Sep'16)	<ul style="list-style-type: none"> <li>Work order for balance erection of Converter-1 has been issued to M/s SMS (I) on 20.2.15 with completion schedule of 9 months from acceptance of work order or issuance of gate pass whichever is earlier.</li> <li><b>Contract closed</b></li> </ul>	
27e	Balance work & 1 month Commissioning of Technological equipment for CCM-1 & 2	UK Enterprises	Gross Cost - 1.58	1.58	7.8.14	Oct'14	Major work has been completed	
27f	Balance Mechanical Erection Work of Caster-3	UK Enterprises	on Cost Plus Fee Basis. <u>Gross Cost –</u> 16.236	16.14	17.11.14	Mar'15 (Dec'15)	Major work has been completed	
28	Illumination, Earthing and Lightning protection for BOF & CCP	EMC Ltd., Kolkata/ Heavy Electricals & Engg., Panipat	6.45  6.97 <u>Gross Cost –</u> 7.49	4.55	16.4.09	Apr'10 (Aug'16)	Illumination completed for all bays and major electrical buildings. Illumination in BOF cable tunnel and CCP pipe tunnel is balance. For erection works of Lightning Protection System of SMS Area, LOI has been issued to M/s Vector Industrial Service (Pkg-11-07A) on 12.11.2015. The job has been completed.	

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29.	A/C & Ventilation Sys. for CCP (1 AC Plant, 3 nos. Chillers (2/ 3 working), Cooling tower, Air Handling Units, Pumps, Ventilation Pumps, Motors, Air Washers, Electrics etc.	Sterling & Wilson Pvt. Ltd. Kolkata	4.38 4.38 <b>4.38</b> <u>Gross Cost – 5.01</u>	4.69	23.5.09	Apr'10 (Aug'15)	AC system –3 Chiller M/c (2W+1S) - 325TR each. Serves 28 AHUs. 28 AHUs are Installed. System Operational and part PAC issued to M/s Sterling & Wilson on 11.08.2015 w.e.f. 31.07.2015. Ventilation System – Part PAC for Ventilation System issued on 30.08.2016 w.e.f. 12.08.2016. Commissioning certificate issued on 27.04.2017 w.e.f. 13.04.2017. <b>PG certificate issued on 23.4.18 with date of completion 16.4.18.</b>	
30.	A/C & Ventilation System for BOF 2 nos. AC Plant (AC Plant -1 - 3W+1S screw Chiller each 325TR serves 42 AHUs & AC Plant -2 1W+1S reciprocating chiller each 60TR, Cooling tower, Air Handling Units, Pumps, Ventilation Pumps, Motors, Air Washers & UAFs, Electrics, Ventilation for electrical rooms, cable basement and tunnel (45°C), Air conditioning(RH55±5%) for control rooms (24°C), and electrical rooms with electronics (35°C) Change Order issued on 18.2.14 for Revision of price schedule for Rs.1.44 crore	ABB Ltd. Kolkata	8.53 8.53 <b>8.93</b> <u>Gross Cost – 11.33</u>	10.84	11.7.09	Jul'10 (Dec'15)	Part PAC for AC system issued on 18.5.15 w.e.f. 04.05.2015. Part PAC for Ventilation System issued on 29.12.15 w.e.f. 23.11.15. Commissioning Certificate issued on 2.2.16 (w.e.f. 19.1.16). Balance punch points being expedited. PG test conducted - 1.6.16 to 4.6.16. PGC issued 18.10.2016 FAC issued on 16.03.17 w.e.f. 19.1.17 <b>Contract Closed on 5.4.2018</b>	
31.	Refractory for BOF/CCP	Various suppliers	13.06 13.06 <u>Gross Cost – 13.06</u>	14.05	various	various	<ul style="list-style-type: none"> <li>Refractory supply and erection completed.</li> <li>Additional requirement is being ordered separately.</li> </ul>	
32.	Balance fire fighting facilities for BOF	Tyco Fire & Security Kolkata	1.573 1.67 <u>Gross Cost – 1.77</u>	1.25	12.10.09	Jan'11 (Oct'15)	<ul style="list-style-type: none"> <li>Inergen system erected (114 nos.)</li> <li>CO2 system (18 nos.) erected.</li> <li>PAC issued on 7.10.15.</li> <li>Integrating commissioning is in progress, completed in Control Room &amp; Hydraulic Room.</li> </ul>	
33.	Elevators (BOF-2 nos. of 5t each & CCP – 1 no. of 1t)	Thyssen Krupp Elevator (I) Pvt. Ltd.	3.75 4.03 <u>Gross Cost – 4.12</u>	2.98	24.9.08	Mar'10 (-)	Supply of 3 nos. of elevators completed (Sch./ Act. - Jul'09/ Sep'09). 1 <sup>st</sup> BOF lift handed over to operation and is in operation without ARD (Automatic Rescue device). PAC issued on 3.3.15. For lift in CCP area, civil & structural part is ready, scaffolding is erected, mechanical & electrical erection to start. For 2 <sup>nd</sup> BOF lift, shaft is ready. M/s TKEP did not erect the balance two Elevators due to materials shelf life outlived after prolonged storage and also due to material stolen/missing from their store. Commercial Notice has been issued on 14.02.2020 to M/s ThyssenKrupp Elevator. M/s TKEP requested for an amicable settlement and held meeting in ISP, but had not submitted the proposal with details of the amicable settlement. ISP Law Dept. is examining the case for Risk Purchase Action	
34.	Civil Work for BOF, CCP & Lime Dolo Plant  Piling – 7633 nos. RCC – 1,76,527 m3	Shapoorji Pallonji & Co. Ltd. Kolkata	199.63 (nil) 258.50 <b>410.86</b>		24.5.08	Oct'10 (Mar'16)	PAC issued on 18.5.16 w.e.f. 29.3.16. FAC issued on 12.9.18 (w.e.f. 6.7.17).  <b>Party has invoked arbitration with an option to ISP to initiate conciliation proceedings vide letter dated 15.03.2019 for</b>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
	Change Orders issued: 1) Extra item & Increase in existing items of BOQ dated 2.7.10 – Rs.33.37 crore 2) Extra Item - Metal Trough Sheet dated 23.4.11 – Rs.2.45 crore 3) Extra Item – Basalt Lining dated 19.5.11 – Rs1.62 cr. 4) Extra Item & Increase in existing items of BOQ dated 2.6.12 – Rs.99.85 crore 5) Extra Item & Increase in existing items of BOQ dated 4.4.13 – Rs.2.26 crore 6) Extra Item & removal of existing rail of torpedo track & re-fixing dated 6.5.14 – Rs.0.03 crore 7) Revision of Quantities of existing items of BOQ dated 22.7.14 – Rs.8.391 cr. 8) Extra items dated 9.6.15 – Rs.0.12 crore.		Gross Cost – 369.05	351.77			various claims (like CENVAT, extra items, BG & Insurance charges etc.). Conciliation committee has been formed. As per advice of Law Department, before conciliation, party to be invited for amicable settlement. Amicable settlement meeting was held on 11.06.2019 and 19.7.2019. MOM has not been signed by M/s SPCL. Conciliation committee formed. 1 <sup>st</sup> Conciliation meeting held on 06.03.2020. Statement of claim by party shall be submitted on 25.03.2020. Next conciliation meeting shall be held on 24.04.2020.	
35.	Structural Work for BOF, CCP & Lime Dolo Plant  Strl. Steel – 51,380 t Sheeting – 2,14,911 m2  1) Extra Item & Increase in existing items of BOQ dated 16.4.11 – Rs.126.63 crore 2) Extra items dated 21.5.13 – Rs.0.04 crore. 3) Extra items dated 29.7.13 – Rs.0.08 crore. 4) Extra items dated 9.6.14 – Rs.1.37 crore. 5) Extra items dated 19.1.15 – Rs.0.25 crore. 6) Modfrn/ Addl. jobs dated 5.3.15 – Rs.0.98 crore. 7) Extra items dated 18.5.15 – Rs.1.68 crore.	Nagarjuna Constr. Co. Ltd., Hyderabad	278.91 (nil)  413.53 <b>486.66</b>  Gross Cost – 419.30	414.85	22.5.08	Jan'11 (Jan'16)	PAC issued for complete package on 21.08.2014 FAC issued on 27.1.16. <b>Conciliation failed.</b> <b>Issues pertaining to both structural Pkgs of M/s NCC (applies to Sl. 42 also)</b> <b>Cess Issue Total claim Rs.6.51 cr. plus interest</b> <b>Issue raised by M/s NCCL against deduction of amount from bills towards cess.</b> a) Ld. Sole Arbitrator on 16.10.2015 directed SAIL-ISP to pay Rs.6,50,92,271/- with additional interest @9% from the date of filing of petition till date of award and thereafter @15% per annum till actual recovery. Arbitrator further directed to pay Rs.2,00,000/- as cost of proceedings. b) Both ISP & NCCL have challenged this award. c) Later on 27.09.2016, NCCL requested to pay 75% of arbitral award amount as per NITI AAYOG's memorandum dated 05.09.2015. d) A letter from ED (Law) & PLO dated 09.06.2017 was received wherein it has been clarified that in case of arbitration pertaining to construction sector where the award has been challenged by both the parties, the directions for deposition of 75% of the award of amount to the party cannot be enforced.  Hearing Ongoing. Court has asked to process refund of Rs 1.29 crores to NCC as amount deducted after passing of the arbitral award on 16.10.2015 and the same has been compiled. BG of value Rs. 6.50Cr. has been submitted to Highcourt by ISP.  <b>CENVAT Issue Total Claim 48 A2Rs.101.85 cr./ 48B2-Rs.66.01 cr.</b> <b>i. Release of withheld amount against Guaranteed CENVAT</b>	

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							ii. Release of withheld amount against Guaranteed VAT iii. Reimbursement of variation in service tax in erection iv. Release of payment against final RA bill v. Reimbursement of insurance premium due to prolongation of contract vi. Release of payment towards price adjustment vii. Payment due towards additional costs or losses suffered due to prolongation of contract viii. Payment due towards adjustment of derived base rate  <b>Party has invoked arbitration. Conciliation Committee has communicated that conciliation has failed and failure report has been sent to SCOPE for initiation of arbitration proceedings. SOC of NCCL submitted to SCOPE received on 12.03.2019. Arbitrator appointed by SCOPE. Statement of defense filed on 25.10.2019. Rejoinder submitted by SAIL ISP in last hearing held on 18.02.2020 for both the packages. Next date of hearing is not yet finalized.</b>	
36.	Additional civil work for Rolling mills, BOF, CCP including LDCP  Piling – 22,929 nos. RCC – 55,150 m3  1) Extra items dated 29.9.09 – Rs.26.49 crore. 2) Extra items & Increase in existing items of BOQ dated 2.7.10 – Rs.56.44 crore.	L & T Mumbai	178.15 + 33.51 (cost of steel) 312.74 <b>312.74</b>  <u>Gross Cost</u> – 324.33	303.73	14.3.09	Mar'10 (Jan'13)	PAC issued on 4.1.13. FAC issued on 21.09.2015. Final billing is certified. Conciliation is in progress. As per request of L&T, citing their financial difficulties, before the Conciliation committee in 1st Conciliation meeting held on 23.11.16, an amount of Rs. 11.90 Cr. was released on 04.01.2017 as an interim payment. Subsequent Conciliation meetings were held on 11.01.17, 12.01.17, 15.02.17 and 10.3.17. In the 6 <sup>th</sup> meeting held on 23.05.17, it was decided that the Conciliation Committee would put up their proposal to the parties for settlement by 30.6.17. Next meeting was to be held on 17.7.2017, but not held. <b>The proposal submitted by SS Agarwal (L&amp;T representative) was not accepted by ISP Conciliators. ISP's proposal also was not accepted by L&amp;T conciliator.</b>  <b>Total Claim Rs.33.70 cr.</b> <b>M/s L&amp;T raised issues related to PVC payment and deduction on account of shortfall in guaranteed taxes and duties. Amicable settlement failed. As per directive of conciliation committee, undisputed amount of Rs. 11.90Cr. was released as steel credit note to M/s L&amp;T. After various conciliation meetings, resolution through conciliation failed.</b> <b>M/s L&amp;T vide letter dated 26.03.2018 invoked arbitration before ICA. ISP has given consent to arbitration.</b> <b>M/s L&amp;T vide its letter dated 19.09.2018 submitted arbitration fee in ICA and nominated the Arbitrator from their side. ISP to nominate Arbitrator but there is no communication from ICA regarding the same. ISP given reply to L&amp;T. Claim of L&amp;T has been forwarded by ICA on 28.01.2019 for submission of defense statement. Statement of defense is under preparation by Law department. As per advice of Law department, amicable settlement for PVC claim was tried on 26.04.2019 but could not</b>	



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							be mutually settled with M/s L&T. Statement of defence submitted on 24.06.2019 to ICA. Rejoinder received from L&T. Hearing concluded on 3.12.2019, award reserve.	
37.	Additional Strl. Work for BOF, CCP & LDCP  Strl. Steel – 30,986 t Sheeting – 1, 58,633 m2  1) Extra items dated 14.10.11 – Rs.78.55 crore. 2) Increase in Quantities dated 9.7.14 – Rs.84.92 crore. 3) Modfrn/ Addl. jobs dated 25.7.14 – Rs.0.35 crore. 4) Modfrn/ Addl. jobs dated 31.8.15 – Rs.0.60 crore.	Simplex Infra Kolkata	41.01 + 74.65 (Cost of steel)  200.75 <b>208.50</b>  <u>Gross Cost</u> – 206.02	125.88	11.08.09	Jun'10 (Sep'15)	PAC issued for all units on 17.9.15. <b>Contract Closed on 14.6.19.</b>	
<b>Rolling Mills Complex</b>								
38.	Reheating Furnace (1 x 180 tph –USM, 1 x 150 tph WRM & 1 x 160 tph BM)  Equipment – 9220 t Refractory – 3500 t  Change Order issued – i) Modification/ replacement of furnace combustion and control system of Re-heating furnace for WRM for use of CO Gas (dated 19.12.11) – Rs.0.126 cr. Euro 142,000 ii) Additional Foreign supervision of 300 Mandays (dated 27.11.14) – US\$ 2,67,384 iii) Additional Foreign supervision of 150 Mandays (dated 4.12.15) –US\$ 1,33,692.9	Bricmont, USA/ Gillander Arbuthnot, Kolkata	167.65 (53.99)  183.04 (62.12) <b>180.59</b>  <u>Gross Cost</u> – 208.61	180.14	11.10.07	Oct'09 (WRM - Mar'13) (BM –Feb'15) (USM –Jun'15)	RHF of Wire Rod Mill is in use. WRM RHF has been re-lighted with mixed gas after modification in burners for receiving mixed gas in place of CO gas. PAC (on 29.3.13) & Commissioning certificate (on 26.12.13) issued.  1 <sup>st</sup> hot billet discharge from RHF of Bar Mill successfully done on 25.2.15. PAC issued on 22.1.14, Commissioning certificate issued on 13.10.15  RHF of Universal Section Mill was lighted up on 14.6.15 and first Beam Blank was discharged on 16.6.15. PAC issued on 21.4.15 Commissioning certificate issued on 6.7.17. Level-2 Automation jobs for all the RHF's (WRM, BM & USM) have been completed. <b>PG test for USM RHF completed successfully on 23.4.18.</b> <b>PG certificate for USM RHF issued on 25.9.18 w.e.f. 23.4.18.</b>  <b>PG Test of BM RHF completed on 2.11.18</b>	
39.	Wire Rod & Bar Mill (Rated capacity- WRM - 0.55 Mtpa, BM - 0.9 Mtpa)  Equipment – 9220 t  Change Orders issued – i) Erection of two nos. compressors, accessories along with piping & electric work on 28.6.13 for Rs.0.04 crore. ii) Additional Foreign supervision of 132 Man months (dated 31.8.13)	Danieli & C, Italy/ Danieli Eng., India/ Shriram EPC Ltd. Chennai	698.97 (307.97)  771.97 (358.80) <b>806.99</b>  <u>Gross Cost</u> – 889.44	838.48	13.10.07	Dec'09 (Mar'13/ Feb'15)	<u>Wire Rod Mill</u> PAC issued on 30.3.13 Hot trials of WRM started on 31.3.13 with billets procured from DSP. The coils are being dispatched both by rail and road. Commissioning tests of WRM started on 7.8.13 and concluded successfully on 12.8.13. Commissioning targets achieved with a total production of 4150t of 10 mm plain round wire rod coils against the requirement of 4050t. (Total production of 4050t has to be achieved in 5 days @ 810t /day in 3 shifts working).  Commissioning certificate for WRM issued on 15.4.2014  8 mm TMT Rolling started on 19.12.14 with ISP produced billets. <u>Coils Produced:</u>	

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	- Euro 22,67,496						<p>2013-14 - 37,026 t  2014-15 - 89,669 t  2015-16 - 2,71,002 t  2016-17 - 3,19,149 t  2017-18 - 3,57,474 t  2018-19 - 3,39,284 t  2019-20 (Upto Feb'20) - 3,78,539 t</p> <table border="1"> <tr><td>Apr'19</td><td>22,348 t</td><td>Oct'19</td><td>26,479 t</td></tr> <tr><td>May'19</td><td>37,054 t</td><td>Nov'19</td><td>41,162 t</td></tr> <tr><td>Jun'19</td><td>34,292 t</td><td>Dec'19</td><td>35,411 t</td></tr> <tr><td>Jul'19</td><td>37,591 t</td><td>Jan'20</td><td>35,560 t</td></tr> <tr><td>Aug'19</td><td>37,662 t</td><td>Feb'20</td><td>37,680 t</td></tr> <tr><td>Sep'19</td><td>33,300 t</td><td>Mar'20</td><td></td></tr> </table> <p><b>Best Prodn. in a day – 1786 t on 27.3.17 (12 mm dia plain)</b></p> <p><u>Bar Mill</u>  1<sup>st</sup> rolling of hot billet successfully completed on 25.2.15. With this hot trial of Bar Mill successfully done.  PAC issued on 29.7.14.  Commissioning test done from 28th May to 3rd Jun'15 for 20mm rebar.  Commissioning certificate for BM issued on 16.12.2015.  EWR (Endless Welding Rolling) –Trial of Billet welding Machine has been done with 2, 3, 4 and 5 billets. Both lots of billet welding M/c has been received at ISP. Team of Danieli is working on site.</p> <p>Completeness of Laboratory &amp; Roll Shop facilities - Out of total 26 nos. of machines, 24 nos. machines had been commissioned and handed over. Laboratory is in use now by RCL. Remaining 2 nos. of laser cutting machines could not be commissioned as OEM is closed. M/s Danieli is exploring alternative now.  3 shift rolling started from 18.1.16.</p> <p><u>Bars Produced</u>  2014-15 - 1258 t  2015-16 - 1,55,240 t  2016-17 - 4,09,037 t  2017-18 - 5,23,103 t  2018-19 - 5,37,886 t  2019-20 (Upto Feb'20) - 5,79,629 t</p> <table border="1"> <tr><td>Apr'19</td><td>37,158 t</td><td>Oct'19</td><td>61,701 t</td></tr> <tr><td>May'19</td><td>57,365 t</td><td>Nov'19</td><td>50,416 t</td></tr> <tr><td>Jun'19</td><td>51,830 t</td><td>Dec'19</td><td>57,488 t</td></tr> <tr><td>Jul'19</td><td>61,013 t</td><td>Jan'20</td><td>49,893 t</td></tr> <tr><td>Aug'19</td><td>61,657 t</td><td>Feb'20</td><td>61,852 t</td></tr> <tr><td>Sep'19</td><td>29,256 t</td><td>Mar'20</td><td></td></tr> </table> <p><b>Best Prodn. in a day – 3131 t on 23.6.18 (32 mm dia TMT)</b></p> <p>Guaranteed CENVAT- Claim Rs.11.56 cr.  Party has raised issue for held-up payments due to shortfall in</p>	Apr'19	22,348 t	Oct'19	26,479 t	May'19	37,054 t	Nov'19	41,162 t	Jun'19	34,292 t	Dec'19	35,411 t	Jul'19	37,591 t	Jan'20	35,560 t	Aug'19	37,662 t	Feb'20	37,680 t	Sep'19	33,300 t	Mar'20		Apr'19	37,158 t	Oct'19	61,701 t	May'19	57,365 t	Nov'19	50,416 t	Jun'19	51,830 t	Dec'19	57,488 t	Jul'19	61,013 t	Jan'20	49,893 t	Aug'19	61,657 t	Feb'20	61,852 t	Sep'19	29,256 t	Mar'20		
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							guaranteed CENVAT & VAT. Party has appealed for conciliation before Scope Forum. ISP issued consent letter to SCOPE on 09.07.2018. ASP advocates proposed SCOPE for sole conciliator instead of tribunal. Danieli agreed for sole conciliator. ISP also issued consent letter for the same and nominated the sole conciliator. 1st conciliation meeting was held on 31.01.2019 in New Delhi. Statement of defense submitted to conciliator on 28.03.2019. 2 <sup>nd</sup> conciliation meeting was scheduled on 02.04.2019. As per directive of conciliation committee, Danieli to visit ISP on 02.05.2019 for reconciliation of their payment statement. Last conciliation meeting was held on 18.6.2019 and failed to settle the dispute.	
40	Universal Section Mill (Rated Capacity - 0.85 Mtpa)  Equipment – 9637 t  Change order issued – 1) On 20.7.15 for Additional Foreign Supervision of 700 mandays for Euro 10,32,785 (Rs.7.12 Cr.) 2) On 8.1.16 for Additional Foreign Supervision of 600 mandays for Euro 840,960 (Rs.6.1 Cr.)	SMS Meer, Germany/ Siemens, Mumbai/ Mukand, Mumbai/ Techno Fab, Kolkata	696.49 (396.19)  756.74 (439.28) <b>817.54</b>  <u>Gross Cost –</u> 879.47	846.43	13.10.07	Oct'09 (Jun'15)	Hot trial of USM started on 16.6.15 by taking out first Beam Blank. PAC issued on 16.6.15. USM is being stabilised. Rolling of Sections IPE300, EA150X150X12, EA200x200x16, EA200x200x20, HE300, IPE 500, IPE 500A, IPE 400, IPE 400A, IPE 450, IPE 600 and NPB 750 have been demonstrated. <ul style="list-style-type: none"> <li>Rolling of Z-Profile - SMS Meer to demonstrate</li> <li><b>Rolling of UPN 300 (Channel) - trials were taken up in Dec'18 (upto BD Mill) by SMS Meer, however, it was not successful. Trials again taken in July'19. There is positive dimension deviations.</b></li> <li>Profile Gauge – Online section measurement through Profile Gauge is not working and communication with pulpit not yet established. M/s SMS to resolve the problem.</li> <li>Level-2 operation –Interface of Level-2 between Caster &amp; Mill completed, however communication and tracking with real data not yet established</li> <li>USM is presently operating in 2 shifts.</li> <li>Change order for 600 foreign man days - 224 mandays for training - on-the-job skill development (issued) and 376 mandays for completion of check-up &amp; restoration of the Mill and PG tests (to be issued shortly).</li> <li>Commissioning test has been completed with IPE 300 (I Section). Commissioning Certificate issued on 5.7.17.</li> <li>Health Check-up of the Mill was conducted from 13-22.6.18.</li> <li>Meeting held with SMS Meer on 24.7.18 at ISP</li> <li>SMS Experts have done the following: <ul style="list-style-type: none"> <li>Replacement of Gear Box in BD Mill</li> <li>Modifications in Cold Saw - speed has increased to 90 mm/s from 30 mm/s (design speed 110-150 mm/s).</li> <li>Modifications in Straightener machine</li> </ul> </li> <li>Production to be ramped up as per market demand.</li> </ul> <u>Production -</u> <b>2015-16 – 13,113 t</b> <b>2016-17 – 1,28,845 t</b> <b>2017-18 – 1,45,277 t</b> <b>2018-19 – 2,46,068 t</b>	

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							<b>2019-20 (Upto Feb'20) – 1,55,399 t</b> <table border="1"> <tr> <td>Apr'19</td> <td>15,846 t</td> <td>Oct'19</td> <td>11,736 t</td> </tr> <tr> <td>May'19</td> <td>28,623 t</td> <td>Nov'19</td> <td>5,543 t</td> </tr> <tr> <td>Jun'19</td> <td>25,483 t</td> <td>Dec'19</td> <td>0 t</td> </tr> <tr> <td>Jul'19</td> <td>18,299 t</td> <td>Jan'20</td> <td>16,592 t</td> </tr> <tr> <td>Aug'19</td> <td>12,463 t</td> <td>Feb'20</td> <td>18,480 t</td> </tr> <tr> <td>Sep'19</td> <td>2,234 t</td> <td>Mar'20</td> <td></td> </tr> </table>	Apr'19	15,846 t	Oct'19	11,736 t	May'19	28,623 t	Nov'19	5,543 t	Jun'19	25,483 t	Dec'19	0 t	Jul'19	18,299 t	Jan'20	16,592 t	Aug'19	12,463 t	Feb'20	18,480 t	Sep'19	2,234 t	Mar'20		
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Sep'19	2,234 t	Mar'20																														
							<b>Highest in a day 1430 t on 7.11.18 (IPE 500)</b>																									
41.	Civil work for Rolling Mills Piling – 5373 nos. RCC – 184,607 m3  Change Orders issued: i) Extra item & Increase in existing items of BOQ dated 2.7.10 – Rs.12.75 crore ii) Extra Item – Basalt Lining dated 23.5.11 – Rs2.43 cr. iii) Extra Item & Increase in existing items of BOQ dated 2.6.12 – Rs.99.53 crore iv) Extra Item & Increase in existing items of BOQ dated 25.4.13 – Rs.3.31 crore v) Revision in BOQ dated 3.6.14 – Rs.0.03 crore vi) Revision in BOQ dated 21.4.15 – Rs.0.56 crore vii) Extra items dated 9.6.15 – Rs.0.03 crore.	Shapoorji Pallonji & Co. Ltd. Kolkata	184.61 (nil)  217.03 <b>369.68</b>  <u>Gross Cost –</u> 334.34	303.63	24.5.08	Apr'10 <b>(Aug'15)</b>	All civil works completed on 20.8.15. PAC issued on 22.09.15. FAC has been issued on 29.3.17 (w.e.f. 25.9.15).  <b>Party has invoked arbitration with an option to ISP to initiate conciliation proceedings vide letter dated 22.09.2018 for various claims (like CENVAT, extra items, BG &amp; Insurance charges etc.). As per advice of law department before conciliation party to be invited for amicable settlement. Amicable settlement meeting scheduled on 11.06.2019 &amp; 19.7.2019. MOM has not been signed by M/s SPCL. Conciliation committee formed. Statement of claim by party shall be submitted on 25.03.2020. Next conciliation meeting shall be held on 24.04.2020.</b>																									
42.	Structural Work for Rolling Mills Strl. Steel – 27,404 t Sheeting – 2,17,588 m2  Change Orders Issued - i) Increase in Quantities dated 13.4.11 – Rs.52.43 crore. ii) Modfrn/ Addl. jobs dated 18.5.15 – Rs.0.30 crore.	Nagarjuna Constr. Co. Ltd., Hyderabad	192.88 (nil)  253.00 <b>486.66</b> <u>Gross Cost –</u> 255.65	234.35	22.5.08	May'10 <b>(Oct'13)</b>	PAC issued on 03.04.2014 (w.e.f 31.10.13). FAC issued on 2.7.15. Payment of FAC is pending for compliance of contract closure procedure, which stipulates a 'No Claim Certificate' from the contractor. <b>Conciliation failed. Statement of claim of NCCL submitted to SCOPE received on 12.3.2019. Statement of defence is under preparation by Law department. Arbitrators appointed by SCOPE Hearing has been scduled on 11.09.2019. Guaranteed CENVAT and Other issues Claim Rs.66.01 cr. – Refer Sl. No.35</b>																									
<b>Services</b>																																
43.	Main Receiving Station  Piling – nil RCC – 4500 m3 Strl. Steel –278 t Equipment – 1500 t  Change Orders Issued - i) Extra Items & Increase in	ABB, Ltd. Kolkata	63.03 (nil)  68.63 <b>68.79</b>  <u>Gross Cost –</u> 76.52	72.13	9.10.07	Oct'09 <b>(Jul'11)</b>	MRS commissioned on 16.7.11. PAC issued on 12.3.10 Commissioning Certificate issued on 21.6.14. PG Certificate issued on 1.3.16. FAC issued on 28.6.17.																									

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	Quantities dated 11.8.09 – Rs.0.12 crore. ii) Proc. & Installation of alt. Fire Fighting System dated 7.5.10 – Rs.0.09 crore.							
44.	<p>Power &amp; Blowing Station (3 x 200 tph Boilers, 3x18MW STG, 1x8.275 BPTG, 3x2,28,600 Nm3/hr TB)</p> <p>Piling – 2658 nos. RCC – 27,093 m3 Strl. Steel – 9286 t Equipment – 12,500 t</p> <p><b>ISSUES</b></p> <p>➤ Some of the pipes which were erected were found to be defective on Inspection by the Boiler inspector. The pipes having alloy steel stamped on them, were found to be of carbon steel – 20m of 6"dia pipes, 860 m of 8"dia pipes and 9 m of 16"dia pipes. These pipes and their supports have been replaced by alloy pipes.</p> <p>➤ Boiler No.3 was stopped on 12.3.13 due to an explosion in the Economizer Zone due to prolonged running of the Boiler with only LDO (fuel). Boiler-3 has now been restored.</p> <p>Change Orders Issued - i) Restoration of Boiler-3 dated 31.3.14 – Rs.22.00 cr.</p>	<p>BHEL New Delhi</p> <p>For Restoration of Boiler-3, Work Order has been placed on BHEL on 31.3.14 for Rs.22 crore (excl. taxes &amp; duties and insurance) to be completed in 8 months.</p>	<p>672.66 (nil)</p> <p>720.80 <b>743.38</b></p> <p><u>Gross Cost</u> – 813.06</p>	728.79	12.10.07	<p>Dec'09 (1<sup>st</sup> STG : May'13 2<sup>nd</sup> STG : Jul'13 3<sup>rd</sup> STG : Mar'14 1<sup>st</sup> TB – Mar'14 2<sup>nd</sup> TB – May'14 3<sup>rd</sup> TB – Nov'14)</p>	<p>1<sup>st</sup> Boiler and 2<sup>nd</sup> Boiler are in operation BF gas is being used in firing burners of Boiler in Power and Blowing station Islanding trial and subsequent synchronization with Grid was successfully done on 25.5.15 in STG-3. Back Pressure Turbine Generator (BPTG) was rolled and synchronised on 22.9.15. <u>Restoration work of Boiler- 3 (Sch./ Act. – Nov'14/Mar'16)</u> PAC certificate for Balance jobs of PBS including Boiler-3 issued on 31.10.2015.</p> <p>Boiler light up with Light Diesel Oil (LDO) done on 31.3.16. CBM firing was done on 12.5.16. Boiler-3 running with COG &amp; CBM combined fuel was connected to Main Steam Header on 26.8.16.</p> <p>Commissioning Certificate has been issued on 14.10.16 (w.e.f. 23.9.16)</p> <p>Fuel firing of Boiler-3 with BFG was done successfully on 30.11.16. Subsequently, it was stabilized from all 4 corners and is in operation.</p> <p><b>The PG test of Boiler-3 completed on 4.5.18.</b> <b>PG test of All Turbo blowers and STGs completed on 26.11.18.</b> <b>PG certificate issued to M/s BHEL on 26.11.19 w.e.f 26.11.19</b></p>	
45.	<p>Oxygen Plant (2 x 750 tpd ASU)</p> <p>Piling – 1337 nos. RCC – 9400 m3 Strl. Steel – 1505 t Equipment – 2850 t</p> <p>Change order issued: i) Extra scope for providing Permanent liner for piles dated 12.2.09 for Rs.8.82 cr. ii) Modifications in PRMS dated 5.9.11 for Rs.0.53 crore.</p>	<p>Linde AG, Germany/ BOC, Kolkata</p>	<p>377.99 (190.89)</p> <p>432.03 (224.20) <b>492.05</b></p> <p><u>Gross Cost</u> – 501.76</p>	504.0222	12.10.07	<p>Jan'10 (Stream-1- Oct'14 Stream-2 - Apr'15)</p>	<p>Hot Trials started on 21<sup>st</sup> Jan.'12. Trial Run of 2 nos. Main Air Compressor Motors and 2 nos. Booster Air Compressor motors successfully completed. Supply of Oxygen to BOF shop from liquid Oxygen tanks started from 8.9.14. After refurbishment, Production of gaseous and liquid Nitrogen as well as gaseous and liquid Oxygen of required purity started on 21.10.2014 from Train-1. After refurbishment, Train-2 was started on 24.4.2015. Production of gaseous and liquid Nitrogen &amp; Oxygen started on 6.5.15. PAC issued – 17.12.13 CC issued – Train-1 – 31.12.15 (eff. Date 10.12.14) Train-2 – 31.12.15 (eff. Date 16.05.15) In Plant-1, 4 nos. of rotor assemblies of MAC and BAC have been repaired and re-balanced at Atlas Copco's factory in Cologne, Germany.</p>	

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							<p>Production from Train-1 started from 19.8.16. PG test completed – Train-1 – 24-27.11.16 Train-2 – 16-19.12.16</p> <p><b>PG certificate issued on 4.9.17.</b> <b>FAC issued 30.08.2019 with date of completion 22.08.2019.</b></p>	
46.	<p>Plant Power Distribution System including Cable Tunnels (10 Load Block Distribution Stations)</p> <p>Piling – 4506 nos. RCC – 36,160 m3 Strl. Steel –1250 t Equipment – 4550 t</p> <p>Change order issued: i) Supply of additional 55 nos. of 6.6 kV Switch Board Panels dated 31.12.09 for Rs.2.37 cr.</p>	Areva T& D India Ltd., Kolkata/ EMC Ltd. Kolkata	<p>183.72 (nil)</p> <p>199.66</p> <p><u>Gross Cost – 225.48</u></p>	187.07	31.7.08	Apr'10 (Jan'14)	<p>The status of 10 LBDS is as follows- <u>LBDS 1</u> (for BF No.5/ CDI), Commissioned on 26.5.12 <u>LBDS 2</u> (for COB 11), Commissioned on 14.11.11 <u>LBDS 3</u> (for Sinter Plant) CEA inspection done. Commissioned on 26.4.12 <u>LBDS 4</u> (for BOF &amp; CCP), Charged on 25.5.13 <u>LBDS 5</u> (for USM), Charged on 28.6.12 <u>LBDS 6</u> (for Water Treatment Plant), energized on 30.9.11, Sub-station commissioned on 28.9.11 <u>LBDS 7</u> (for RMHS), Commissioned on 8.12.11 <u>LBDS 8</u> (for WRBM), Commissioned on 21.3.12 <u>LBDS 9</u> (for Oxygen Plant) energized on 30.9.11, Sub-station commissioned on 3.10.11 <u>LBDS 10</u> (for LDCP/ Intake Pump House), HT Board and Power transformer has been energized. Casting of cable tunnel completed (5824 m). 67.7 km of 33/6.6/11 kV cables laid in cable tunnel. All S/S are in operation with CEA clearance. Complete PAC issued on 27.06.2017. CC issued on 6.6.18 (w,e,f 7.4.18)</p>	
47.	<p>Water Supply System</p> <p>(Raw water reservoir, Raw water treatment Plant, OHT (MW 1950 cum, DW 100 cum), Cross country line and electrics, Sump and Pump Houses, Distribution network with tappings) Piling –64 nos. RCC – 19,150 m3 Strl. Steel –257 t Equipment – 6000 t</p> <p>Change order issued: i) Misc. work and Extra items dated 30.4.11 for Rs.1.06 cr. ii) OH Cable bridge / rock cutting dated 12.5.11 for Rs.2.35 crore iii) Extra jobs dated 7.3.14 for Rs.0.05 crore.</p>	Ion Exchange (I) Ltd. / PK Thakur & Co Pvt. Ltd. Kolkata	<p>93.36 (nil)</p> <p>99.90</p> <p><b>97.12</b></p> <p><u>Gross Cost – 112.16</u></p>	99.93	28.11.08	May'10 (Jun'13)	<p>37,010 m of Distribution Network Pipeline laid. Make-up water system started and Make-up water is being supplied to all major units of ISP expansion. Drinking Water is being supplied to all major units of Iron Zone, WRM &amp; MRS. PAC issued on 9.9.13. PG test conducted from 12.03.2015 to 19.03.2015. PG certificate issued on 12.06.2015. <b>FAC issued on 12.1.18</b> <b>Guaranteed CENVAT (Claim Rs.2.66 cr.)</b> Issue is amount kept on hold on account of shortfall in guaranteed CENVAT/VAT credit. PK Thakur appealed before the Calcutta High Court for appointment of arbitrator. ISP filed SLP before the Supreme Court of India. Supreme Court of India has appointed Ld. Ex Justice Bhaskar Bhattacharya as the Ld Arbitrator in the above matter.</p> <p>Party filed statement of claim. Counter statement also filed. Arbitration is under process. Last Hearing held on 21.02.2019. Cross examination of witness is over. Next date of hearing on 10&amp; 12.08.2019. <b>ISP has been awarded the whole minimum guaranteed cenvat amount.</b></p> <p>Rock Cutting – Case pending at High Court (Claim Rs.13.89 cr.) Issue raised by M/s P. K. Thakur is for extra claim on account of rock cutting &amp; disposal at WTP. MECON recommended that the claim related to rock cutting and its disposal is not admissible as per provisions of contract.</p>	

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							<b>PENDING AT HIGHCOURT.</b>	
48.	Inter-Plant Pipelines for Gas & Utilities 75 km. of Gas Pipelines (25 mm. to 3000 mm. Size) + 3 nos. Gas Mixing Stations  Piling –849 nos. RCC – 13,827 m3 Strl. Steel –4500 t Equipment – 5600 t  Change order issued: i) Laying of Addl. CO gas pipeline dated 8.10.11 for Rs.0.62 cr. ii) Extra work for Pickling HPN line dated 26.3.14 for Rs.1.80 crore iii) Addl. Piping work dated 1.12.12 for Rs.1.94 crore. iv) Extra Work dated 8.12.15 for Rs.0.79 crore	Tata Projects Ltd Kolkata	130.50 (nil)  164.64 <b>166.30</b>  <u>Gross Cost</u> – 177.66	144.74	9.6.09	Jun'10 <b>(Mar'14)</b>	All 3 gas mixing stations (for Mills, Sinter Plant & LDCCP) are ready. The mixing station in mills area and LDCCP area is in operation. PAC issued on 22.03.2014. All facilities are in operation except gas mixing station of Sinter Plant as user department is using only CO gas at present. Commissioning Certificate issued on 13.2.16 (w.e.f 19.11.15). <b>PG Certificate issued on 28.8.18.</b> <b>GUARANTEED CENVAT (Rs.55.66 cr.)</b> Issue is amount kept on hold on account of shortfall in guaranteed CENVAT/VAT credit. Party has appealed in High Court for appointment of arbitrator. ISP advised M/s TPL to follow article 10, and accordingly settlements to be done through first amicable settlement then conciliation in case amicable settlement fails. <b>HIGHCOURT HAS APPOINTED Three bench Arbitrator panel</b> <b>1. Shri G. N. Roy, presiding arbitrator</b> <b>2. Shri S.B. Sinha (TPL),</b> <b>3. Shri Bhaskar Bhattacharya (ISP).</b> First hearing was on 30.11.2018. Direction given for submission of Statement of Claim and Counter Claim. TATA Projects submitted claim of Rs.77Cr. TPL has submitted their claim. Counter claim against TPL's claim has been submitted. Next date of hearing is in 18 <sup>th</sup> – 19 <sup>th</sup> April 2020.	
49.	Gas Boosting Station- Boosting Stations – 2 nos. COG Booster for Sinter Plant (1 working & 1 Standby) 1 no. MG Booster for RHF	TLT Engg. Kolkata	8.23 (nil)  8.79 <b>8.89</b>  <u>Gross Cost</u> – 9.44	9.09	23.6.09	Jun'10 <b>(Sep'13)</b>	PAC issued on 23.9.13. MG Boosting - At present Reheating Furnaces are running on Mixed Gas (BF gas and CBM). Adequate pressure is already available without boosting. <b>Operation of Mixed Gas Boosting Station started on 6.6.19.</b> Hot trail of CO gas boosting station completed. Presently, one booster is in operation to cater CO gas at desired pressure to Sinter Plant. Other booster is in standby mode. Commissioning Certificate issued on 13.2.16 (w.e.f 9.5.15).	
50.	Centralized Compressed Air Station (5 compressors – 300 Nm3/min) (3 Working/ 2 standby)  Piling –nil RCC – 2000 m3 Strl. Steel –218 t Equipment – 400 t	Blue Star Ltd., Mumbai/ Ingersoll Rand, Bangalore	41.40  44.35 <b>43.45</b>  <u>Gross Cost</u> – 48.36	40.33	17.6.09	Aug'10 <b>(Apr'14)</b>	Compressors no.1, 2, 3 & 5 are being operated as per requirement - PAC issued in Apr'14.  Compressor no.4 – Hot trial completed in Mar'18. Commissioning Test has been completed 24-27.4.19. Compressor # 4 was in defective state from beginning, necessary rectification was done by the contractor. Hence commissioning of the package got delayed. PG Test of the Package is planned in March' 2020. CC issued on 09.01.2020	
51.	Diesel Electric Loco – 4 nos. (Qty. Revised to 3 nos., 700HP each)	BHEL	9.70 (nil) 9.70 <b>9.49</b> <u>Gross Cost</u> – 10.46	9.72	14.1.09	Mar'10 <b>(Dec'14)</b>	All three locos have been commissioned and are in operation. Commissioning Certificate issued.	
52.	Hydraulic lab	Parker Hanifin India Pvt. Ltd.	1.46 (nil)		5.3.09	Jan'10 <b>(June'20)</b>	<ul style="list-style-type: none"> <li>Present Status:</li> <li>Material received in 2012. Party was given erection clearance in</li> </ul>	

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			1.46 <b>1.49</b> <u>Gross Cost –</u> 1.58	1.45			Feb'16. Party started erection activity on 11.08.16. Test Bench erection including electrical jobs completed. <ul style="list-style-type: none"> <li>• Before start of trial run and checking by M/s Parker, it was found that drive &amp; cables of test bench are damaged due to water ingress and long storage.</li> <li>• Damaged drive &amp; Cables of test bench needs replacement at extra cost as warranty of Component /machine expired long back.</li> <li>• A committee is formed to resolve the issue. Awaiting approval of RCE for allocation of additional fund of approx. 20.0 Lacs.</li> <li>• The Party was asked for submission of fresh quotation for drive and cables.</li> <li>• Additional budget for procurement of drive and cable already has been approved in September'2019 in RCE.</li> </ul>	
53.	Plant Wide Networking	Wipro Networks Pvt. Ltd. Kolkata	4.62 (nil) 4.96 <b>4.78</b> <u>Gross Cost –</u> 5.18	3.79	25.4.09	Jul'10 <b>(Dec'16)</b>	PAC issued on 10.12.16. <b>Commissioning Certificate issued on 24.2.17. (date of completion 24.2.17)</b>	
54.	Road weigh bridge 4 nos. – 100t each 2 near LDCCP & 2 near Sanmara gate	Endeavor Instruments Pvt. Ltd., Ahmedabad	0.53 (nil) 0.54 <b>0.54</b> <u>Gross Cost –</u> 0.56	0.35	4.5.09	Nov'09 <b>(Oct'15)</b>	Road weigh Bridge 1 & 2 inaugurated by Chairman, SAIL on 22.6.10. Road Weigh Bridge 3 & 4 in use Nos. 1 & 2 are in use (Sanmara Gate). For rest 2, use has been identified at LDCCP. PAC issued on 12.10.15. <b>Commissioning Certificate issued on 6.10.17.</b> PG certificate issued on 05.02.2020.	
55.	Energy Monitoring Center Signals for gases and utilities from OPC Compliant L-1 Systems of various process units to be displayed and monitored.	Masibus Automation	0.5775 (nil)  0.58 <b>0.60</b> <u>Gross Cost –</u> 0.61	0.49	8.5.09	Aug'10 <b>(Jul'16)</b>	13/13 systems are ready for data acquisition. COB#11, CDCP, By-Product plant, Sinter plant, PBS, WRM Reheating furnace. Flare Stack, Blast Furnace, Coal dust Injection, Oxygen plant, Centralised Compressed Air station transfer of data from shop location to centralised EMC located in General building. CC issued on 21.01.2020	
56.	Server based Telephone Exchange Total 16 exchanges.	Wipro Ltd.	2.73 (nil)  2.73 <b>2.58</b> <u>Gross Cost –</u> 2.86	2.34	30.5.09	May'10 <b>(Feb'17)</b>	PAC issued on 8.2.17. Commissioning certificate issued on 11.2.17.	
57.	Cranes, Hoists & Transfer Cars for Various Shops (5 nos. of cranes + 4 hoists) Area Repair Shop – 30t+ 2 hoists (3t+5t) Electric Repair Shop – 20t + 3t hoist Diesel Loco shop -50t +3t hoist Central Plant Store – 10t (EOT)+20t (gantry)	Grip Engineers, Faridabad, India	2.45 (nil) 2.62 <b>2.68</b> <u>Gross Cost –</u> 3.07	2.24	22.5.09	May'10 <b>(Nov'18)</b>	Load test and over load test are completed for all cranes and electric hoists	
58.	Electronics & Instrumentation Repair Shop cum laboratories (Electrical & Electronic instruments,	Masibus Automation & Instrumentation Pvt. Ltd., Kolkata	3.307 (nil)		17.8.09	Aug'10 <b>(Jan'15)</b>	Majority of the instruments and test benches are installed and handed over to user department. PAC issued to the party on 01.01.15.	



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	Temperature & Pressure instruments, ETL & CMD Instruments, Test Benches)		3.31 <u>Gross Cost –</u> 3.59	2.36			9 nos. of defective instruments are under repair.	
59.	Pneumatic Sample Transport Sys.	Kerri Engg. Works	0.76 (nil) 0.82 <b>1.08</b> <u>Gross Cost –</u> 0.90	0.99	1.4.09	Jul'10 <b>(Apr'16)</b>	All the lines have been laid - 2 Lines from Container Lab (+9.5 m) to Express Lab - one line each from LHF-1 & LHF-2 to Express Lab - From CCM- 1 & 2 - From CCM-3 - From RH Degasser (not running presently) - From Torpedo Ladle Load test completed on 13.8.15. Lines are in operation PAC issued on 13.4.16. Commissioning certificate issued on 23.5.17. <b>PG Certificate issued on 15.6.18.</b>	
60.	Road Transport Eqpt./ Mobile Equipment for BOF & CCP	BEML	15.38 (nil) 15.38 <b>15.12</b> <u>Gross Cost –</u> 16.59	14.08	31.3.09	Mar'10 <b>(Jul'11)</b>	<ul style="list-style-type: none"> <li>Order placed on 31.3.09.</li> <li>Supply has been completed.</li> </ul>	
61.	LDO Storage and Handling System	Spacotech, Mumbai	0.56 (nil) 0.56 <b>0.56</b> <u>Gross Cost –</u> 0.61	0.50	15.5.09	Feb'10 <b>(Mar'14)</b>	PAC issued on 15.03.2014. Contractor has refused to liquidate punch points and requested for conciliation.	
62.	Fire Tender	Wadia Body Builders	1.08 (nil) 1.08 <b>1.05</b> <u>Gross Cost –</u> 1.08	0.33	20.5.09	Jan'10 (-)	<ul style="list-style-type: none"> <li>Work Order Issued on 20.5.09.</li> <li><b>Present Status:</b></li> <li>Order was placed on party for supply of 02 nos. Water Tender &amp; 01 no. DCP Tender.</li> <li>01 no. Water Tender received and commissioned in August'16. However, its name transfer process was completed in March'19.</li> <li>As per requirement of Fire Department and CISF, order for 01 no. Water Tender cancelled and process of procurement of Combination Tender started.</li> <li>Delivery of 01 no. DCP Tender is pending.</li> <li>Performance of party is not satisfactory.</li> <li>01 No.DCP Purchase Order stands cancelled on 06.03.2020.</li> <li>Fresh Purchase action to be initiated by the user department</li> </ul>	
63.	Ambient Air monitoring System (4 nos. of monitoring stations)	Chemtrols Industries Ltd.	2.13 (nil) 2.13 <b>2.34</b> <u>Gross Cost –</u> 2.30	2.96	25.6.09	Jun'10 <b>(Jul'14)</b>	<p><i>Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at SCOB gate, Sanmara gate, Dharampur Rly yard and WTP area erection completed.</i></p> <p><i>PAC issued on 30.07.2014.</i></p> <p><i>At present only 1 no. (at Sanmara Gate) is in operation (commissioned on 24.2.16). PG test of CAAQMS at Sanmara Gate completed.</i></p> <p><i>For balance 3 CAAQMS, few analyser components alongwith 3 nos. Display Boards were faulty. Change order has been issued and items replaced.</i></p> <p><b>Commissioning certificate issued on 23.4.18 (w.e.f. 23.2.18).</b></p>	
64.	Additional Fire Tenders (foam)	Wadia Body Builders	0.3251 (nil) 0.33		29.6.09	Jan'10 <b>(Jun'11)</b>	<ul style="list-style-type: none"> <li>LOA issued on 26.6.09.</li> <li>Supply completed</li> <li>Commissioning certificate issued in 2011</li> </ul>	

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			<b>0.33</b> <u>Gross Cost –</u> 0.33	0.33				
65.	Equipment for loco repair shop/ maintenance garage	Various suppliers	2.65 (nil) 2.65  <u>Gross Cost –</u> 2.70	0.76	various		<ul style="list-style-type: none"> <li>• LOA issued to all groups.</li> <li>• Equipment supply partly (~50%) completed.</li> <li>• Validity of balance Purchase Orders has expired.</li> </ul>	
66.	Road transport equipment (other than BEML)	Various suppliers	12.34 (nil) 12.34 <u>Gross Cost –</u> 12.85	7.80	various	Oct'10 (Mar'17)	<ul style="list-style-type: none"> <li>• LOA issued to all groups.</li> <li>• 6/7 items Supply completed. Balance is 10 t Trucks (1 nos.). Tender to be issued.</li> </ul>	
67.	Civil Work for LDO Storage & Flare stack	Friends Construction	1.13 (nil) 1.13 <u>Gross Cost –</u> 1.13	1.51	8.1.10	Jul'10 (completed)	<ul style="list-style-type: none"> <li>• Work completed</li> </ul> <i>Job already complete, delay analysis has been received from MECON and formalities for closure of contract are in progress</i>	
68.	Sewage Treatment Plant (2 nos.)	P.K. Thakur & Voltas Ltd.	5.09 (nil)  5.09 <b>5.02</b> <u>Gross Cost –</u> 5.2	3.35	15.2.10	Feb'11 (Mar'20)	<p><u>STP-1</u> (capacity: 140 m3/hr) Finishing work in progress. To be commissioned</p> <p><u>STP-2</u> (capacity 7.5 m3/hr):</p> <p><b>Present Status</b></p> <ul style="list-style-type: none"> <li>➤ Major civil jobs of STP-1 completed</li> <li>➤ 95% Equipment Procured</li> <li>➤ 90% Equipment Installed and aligned</li> <li>➤ MCC panel charged Electrical connections to the equipment in progress</li> <li>➤ No-load Trial will start by 20.01.2020</li> <li>➤ Expected date of Commissioning of STP-1 is 15.03.2020</li> <li>➤ For STP-2, job was completed partially at the location of Damodar Yard. But site was abandoned due to rise of Ground Water Table since 2013</li> </ul>	
69.	Miscellaneous Service Buildings 5 Buildings - i) Diesel Loco Shed Extension, ii) SMS Express Lab, iii) Area Repair Shop, iv) Earth Moving Equipment (EME) Shop Extension and v) Central Stores.	Trans Tech Turnkey (P) Ltd.	(33.93+3.69 (rft. steel) + 8.58 (strl. steel)) (nil)  46.26 <b>45.77</b>  <u>Gross Cost –</u> 48.43	4150.56	26.3.10	Mar'11 <b>(Mar'19)</b>	<p><u>Diesel Loco Shed Extension</u> – Balance –construction of one track pit (total 5 nos.)</p> <p><u>SMS Express Lab</u> – Handed over to Works.</p> <p><u>Area Repair Shop</u> – Handed over to Works. Balance – supply of 100kV transformer and Punch points.</p> <p><u>EME Shop Extension</u> – Handed over to Works. Balance commissioning of Effluent treatment plant. Trial run to be done.</p> <p><u>Central Stores</u> - Handed over to Works. Balance works - Supply &amp; erection of Lighting Transformer, Air Compressor.</p> <p><b>PAC issued on 18.3.19 with date of completion 08.03.2019 along with punch list for all five buildings.</b></p> <p><b>Buildings are partly in use by user departments, Progress review meeting with party &amp; MECON was conducted on 25.02.2020 &amp; 02.03.2020 and each activity was discussed in detail to achieve the targets.</b></p> <p><b>Party has supplied 2 nos. Transformers.</b></p> <p><b>They have appointed new site in charge and new subcontractor to complete the balance punch points</b></p>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
70.	Construction of Waste Pit	Friends Constr. Co. & Baba Constr.	1.24 1.24 <b>1.18</b> <u>Gross Cost –</u> 1.24	1.14	1.4.10	Jan'11 <b>(Dec'14)</b>	<ul style="list-style-type: none"> <li>2.3t HDPE (High Density Polyethylene) pipes erected.</li> <li>PAC issued on 27.12.2014.</li> <li>Job completed.</li> <li>Commissioning certificate issued</li> <li>PG &amp; FAC is balance.</li> </ul>	
71.	Storm Water Drainage  <b>Arbitration proceedings are in progress and contract will be closed after settlement of dispute.</b>	Trans Tech Turnkey (P) Ltd.	32.03+9.62 (rft steel)  41.65 <b>41.65</b> <u>Gross Cost –</u> 43.03	2.51	1.6.10	Apr'11 (-)	<ul style="list-style-type: none"> <li>The work could not progress due to non-availability of clear work fronts, underground interferences and revision of drawings due to interface problems with other packages.</li> <li>Only 3.24 km length of drain work could be completed till date out of total scope of about 40.00 km.</li> <li>The contractor suspended the work since 30.06.2012 and refused to seek time extension stating that it would be difficult for them to continue work with uncertainties about release of clear work fronts unless escalation in their rates is considered by ISP.</li> </ul> <p><i>Overall job progress 3.45%</i> <b>Balance work has been re-tendered and order placed.</b></p>	
72	Sewage Network  <b>Arbitration proceedings are in progress and contract will be closed after settlement of dispute.</b>	Spacotech Eqpt. Strl Pvt Ltd and Times Enterprises, Mumbai	6.26  6.26 <b>6.26</b> <u>Gross Cost -</u> 6.26	0.07	7.4.10	Jan'11 (-)	<ul style="list-style-type: none"> <li>Only route survey, General Arrangement and manhole drawings completed.</li> <li>Contractor repeatedly failed to extend validity of security deposit BG. No action taken for procurement of pipes and construction of manholes.</li> <li>A commercial notice was issued on 16.03.2011 and on the recommendation of MECON short closure of the contract was approved by competent authority on 28.10.2011.</li> </ul> <p><b>Balance work has been re-tendered and order placed.</b> <b>In spite of repeated opportunities given to the party as extension of contract completion time, party did not show any satisfactory progress. Ultimately PBG was sent for encashment with a security deposit (BG) encashment notice to party on 13.02.2012 on account of nonperformance by the party. Thereafter, party filed arbitration petition in the matter of illegal and unlawful invocation of PBG and submitted claim of Rs. 2,48,23,986/- under various heads, before the arbitrator. Matter was tried for settlement through conciliation but failed after several conciliation meetings. Arbitration is presently pending before the SCOPE Forum of Arbitration and Conciliation. Arbitration is presently pending before the Ld Sole Arbitrator. Affidavit in Evidence has been filed by SAIL before the Ld. Sole Arbitrator. Cross examination of respondent's witness is over. Next date of hearing 20.04.2020, 04-05.05.2020.</b></p>	
73	Road Network with Drain <b>ISSUES</b> ➤ Party has indicated that they are not wanting to continue the work <b>Arbitration proceedings are in progress and contract will be closed after settlement of dispute.</b>	TCIL, New Delhi	28.42 + 0.25 cost of rft. Steel  28.67 <b>28.67</b> <u>Gross Cost –</u> 28.67	5.41	20.10.09	Oct'10 (-)	<p><i>Overall job progress 16%</i> <b>Balance work has been re-tendered and order placed.</b></p>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
74	Balance Road Work (including surface topping), Storm Water Drain and Sewerage Network 25 km of road (4 Lane – 1.507 km. 2 Lane – 17.716 km. 1 Lane – 5.472 km.) Plant Sewerage Network – 6 km with 200 manholes	Tantia Constr. Ltd., Kolkata	77.01 (nil)  <u>Gross Cost –</u> 77.01	33.41	27.6.13	Jan'15 (-)	<ul style="list-style-type: none"> <li>Road work - ~22/ 25 km of granular sub-base completed - ~18/ 25 km of Wet Mix Macadam</li> <li>RCC Drains - ~27/ 40 km completed</li> </ul> <p>Bituminous work (black topping) has started on 20.10.2014, 14./ 28km completed. Sewerage Network work has started from Apr'16. Construction of manholes is in progress. Due to non-availability of river sand, work has been affected since Oct'16. In Mar'17, sand was only intermittently available. <b>Due to poor Progress of work RPN was issued to the Contractor on 22.1.18.</b> <b>Termination Notice was issued to the party on 19.2.18.</b> <b>For balance work, order has been placed on M/s HN constructions.</b> <b>Job has started.</b> <b>Under arbitration (Party's claim Rs.39 cr./ ISP's claim Rs.24.93 cr.)</b> <b>RPN was issued to party on 22.01.2018 due to unsatisfactory progress of work. Ultimately contract was terminated with effect from 26.02.18 and balance jobs are being executed through separate contract. ISP issued a recovery notice to consortium on 15.01.2019 for Rs. 24.93 Cr.</b> <b>M/s Tantia has approached ICA for arbitration and filed a claim of Rs.39 Cr. against SAIL-ISP. ICA has informed that arbitration can only be invoked on failure of conciliation subsequent to failure of amicable settlement. Notice of Recovery from ISP has been issued to M/s Tantia Construction on 15.01.2019 for Rs. 24.93Crs. and M/s Tantia Construction have been invited for amicable settlement of dispute. Party has refused for such amicable settlement. ICA on 28.01.2019 has also directed ISP to file its statement of defense. Party later on agreed for conciliation and conciliation committee has been formed. 1<sup>st</sup> conciliation meeting was held on 06.03.2019. Party did not appear in 2<sup>nd</sup> conciliation meeting which was scheduled on 26.03.2019. Finally 2<sup>nd</sup> conciliation meeting held on 19.08.2019, the conciliation committee has asked M/s Tantia to submit fresh statement of claim before conciliation committee as earlier statement of claim was submitted before ICA for arbitration.</b></p>	
	Balance Road, Storm Water Drain and Sewerage Work	HN Constructions Pvt. Ltd	Gross cost 50.42	8.7976	6.7.18	May'19 (May'20)	<ul style="list-style-type: none"> <li>Party has mobilised in all the three parts of Road, Drain &amp; Sewerage Network. Work is in progress in the available fronts. Presently the completion time has been extended up to 05.05.2020 to complete the balance activities.</li> </ul>	
75.	Sewage Pumping Station	Spacetech Eqpt. Strl Pvt Ltd and Times Enterprises, Mumbai	2.66  2.66 <b>2.63</b> <u>Gross Cost –</u> 2.66	-	25.6.10	Mar'11 (-)	<ul style="list-style-type: none"> <li>Basic &amp; Detail engineering not completed.</li> <li>A commercial notice was issued on 16.03.2011 and on the recommendation of MECON short closure of the contract was approved by competent authority on 27.10.2011.</li> </ul> <p><b>Under arbitration (Party's claim Rs.1.1 cr.)</b> <b>As per terms of contract, PBG was sent for encashment with a security deposit (BG) encashment notice to party on 13.02.2012 on account of non-performance by the party. Thereafter, party filed arbitration petition in the matter of illegal and unlawful invocation of PBG and submitted claim of Rs. 1,09,99,790/- under various heads, before the arbitrator.</b></p>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
							Matter was tried for settlement through conciliation but failed after several conciliation meetings. Arbitration is presently pending before the SCOPE Forum of Arbitration and Conciliation <ul style="list-style-type: none"> <li>Arbitration is presently pending before the Ld Sole Arbitrator. Affidavit in Evidence has been filed by SAIL before the Ld. Sole Arbitrator. Cross examination of respondent's witness is over. Next date of hearing is 20.04.2020, 04-05.05.2020</li> </ul>	
	Sewage Pumping Station (re-tendered)	BMK Enterprises, Burnpur	2.41 (nil) <u>Gross Cost – 2.60</u>	1.82	7.11.14	Sep'15 (Mar'20)	All civil and equipment erection has been completed. 5 nos. of Pumps installed. <b>PAC ISSUED TO M/s BMK Enterprises on 20.11.19. Date of completion: 19.10.2019. Party has liquidated punch points. Commissioning shall be done after connection of Sewage Network package.</b>	
76.	Area Lighting High mast Tower 30, Single arm pole- 36, Double arm pole- 79, Feeder pillars- 20, Watch Tower 35, Boundary wall lighting 608 numbers lighting pole	Electrical Manufacturing Co. Ltd.	5.19 5.58 <b>5.71</b> <u>Gross Cost – 6.18</u>	4.00	10.1.09	Jun'10 (-)	Due to repeated failure of the Contractor to execute the job, it was decided to short close the package. Package has been short closed	
	Balance Road, Area & Security Lighting  Change order issued: i) On 27.6.16 for additional work – increase of contract price – ~Rs.0.35 cr.(LCNC)	Eureka Contractor Pvt. Ltd., Burnpur	1.51 (nil) <u>Gross Cost – 1.67</u>	1.35	8.8.14	Mar'16 (Mar'19)	Completed.	
77.	Green Belt Development (for 15Ha)	TK Mandal	1.10 (nil) 1.10 <b>1.10</b> <u>Gross Cost – 1.10</u>	0.62	28.1.09	Aug'12 (Jun'15)	10 Ha complete in all respect. 5 Ha Plantation work completed and the work related to plantation maintenance for two years are remaining. Balance is RA bill, Final Bill, PAC and FAC.	
78.	Fly-over (from tunnel gate side to inside of plant)	Allied Infrastructure & Projects Pvt. Ltd., Kolkata	19.64 (nil) <u>Gross Cost – 20.62</u>	10.5374	14.4.14	Apr'16 (July'2020)	<ul style="list-style-type: none"> <li>LOA issued on 15.3.14, Contract signed on 23.4.14</li> <li><b>Facilities:</b></li> <li>Construction of Flyover in lieu of Level Crossing for hassle free movement to works.</li> <li><b>Present Status:</b></li> <li>Pile 100%, Pile Cap/Pier/Pier Cap 90%, Casting RCC Girders 100%, RCC Girders Erection 45%, Supply of Bearing 100%, RE Wall Panels Casting 75%</li> <li>Final erection and grouting of bearing (34 nos) completed</li> <li><b>Present Status:</b></li> <li>RCC Girders 39/39, RCC Girders Erection 17/39, RE Wall Panels Casting approx. 75%, Deck slab 1/10.</li> <li>Revised GAD submitted to Railway for approval on 16.11.2019</li> <li>Award of work for Railway portion done. LOA issued on 02.03.2018 by SER. Pile, Pile cap, Pier completed. Concreting of Pier cap held up due to non submission of bearing location drawing by Allied.</li> </ul>	

SL. No.	Package	Party	Cost in Rs Cr Net of CENVAT (FE)	Expenditure upto nOV'19 (Rs. Crore)	Eff. Date of Contract	Contractual Schedule (Likely/Actual)	Status	ISP
							<ul style="list-style-type: none"> <li>RPN served to party on 05.12.19. Party failed in RPN. Party has gone to Commercial court for this Contract. Termination of the present Contract &amp; Floating of new Tender Enquiry expected to be done by end of April'2020.</li> <li>Draft TS for balance job of Flyover submitted by MECON on 04.01.20.</li> <li>Comments from ISP on draft TS sent to MECON on 06.01.20.</li> <li><b>Major balance jobs:</b> CISF building, Boundary wall, RE Wall Panel erection, protection / Rerouting of 900 dia. pipeline, Superstructure jobs, Road work</li> <li><b>Help Required:</b> Shifting of Coke, Lime fouling in alignment of road inside works in the back shunt area</li> </ul>	
79	Central Workshop (Size ~66mx120m)	Subir Engg. Works Pvt. Ltd.	13.67 (nil)  Gross Cost – 13.71	17.52	21.11.11	Jul'12 (Feb'17)	<ul style="list-style-type: none"> <li>Offices and all amenities made ready. Permanent Power supply given on 9.2.17. PAC issued on 20.2.17.</li> <li>Load test and 3<sup>rd</sup> party inspection completed for – <ul style="list-style-type: none"> <li>2x30/5 t EOT cranes.</li> <li>1x50 t EOT crane</li> <li>1x15t EOT crane</li> <li>20t gantry crane</li> <li>5t under slung crane</li> <li>30 t Transfer Car</li> </ul> </li> <li>6 New machines to be installed –4 nos. ready. CNC Horizontal &amp; Vertical Milling machine is under installation (drive controller is under repair). Plano Milling m/c to be procured.</li> <li>10 machines from the old plant have been shifted. All 10 machines are ready.</li> <li><b>Commissioning certificate issued on 7.10.2017.</b></li> </ul>	
80	Refractory Storage Shed (Size ~96mx36m)	Metal Engg. & Treatment Co. Pvt. Ltd.	13.824 (nil)  Gross Cost – 14.25	8.35	24.12.16	Sep'17 (July'2020)	<ul style="list-style-type: none"> <li>Design Engg. completed.</li> <li>Site Handed over on 15.3.17.</li> <li>Shed (76x19m x 2 bays).</li> <li>Foundation work has been completed.</li> <li>Structural erection in progress 270/ 280t completed</li> <li>Office building (3 storeys) – RCC work and Brickwork completed.</li> <li>Plastering completed. Electric work/ plumbing/ carpentry in progress</li> <li>Work in the open yard has started.</li> </ul>	

## SSP – Expansion of Salem Steel Plant

1. Final Approval : 05-Sep-2007 / 29-Jan-2008  
(In-principle Approval –28-June-2006)
2. **Cost** (in crore):
  - a. Indicative Cost (Jul'06) : Rs.1,393 crore (Net of Cenvat benefit of Rs.160 cr.)  
(FE: Rs.414.59 cr.)
  - b. Approved Cost (Sep'07) : Rs.1,780 crore (Net of Cenvat benefit of Rs.224.22 cr.)  
(FE:Rs.480 cr.)
  - c. Approved Cost (Jan'08) : Rs.1,902 crore (Net of Cenvat benefit of Rs.236 cr.)  
(FE: Rs.606 cr.)
  - d. Revised Cost Estimate (Aug'19) : Rs.2370.76 crore (Net of CENVAT/ITC of Rs.81.86 crore)  
(FE: Rs.689.53 crore)
  - e. **Expenditure (Till Feb-2020) : Rs. 2377.75 Crores (Gross)**
3. **Approved Schedule** : March-2010  
Actual Completion : Sep-2010 (Except 20-Hi Sendzimir Mill No: 3)  
For 20-Hi Sendzimir Mill (Z-Mill-3)  
**Approved Schedule** : Jan-2016  
Actual completion : **March-2016**

#### 4. Production (in MTpA)

Capacity	Before Expansion (Base Case)	After Expansion	Production During 2014-15	Production During 2015-16	Production During 2016-17	Production During 2017-18	Production During 2018-19	Production During 2019-20 (up to Feb-2020)
Crude Steel	-	1,80,000	1,24,874	1,19,671	1,07,511	96,532	1,16,775	<b>1,03,560</b>
Hot Rolled Coils	1,86,000	3,64,080	3,57,904	3,42,924	3,70,217	2,07,113	2,87,094	<b>2,32,521</b>
Cold Rolled Stainless Steel	65,000	1,46,028	63,920	69,729	70,388	62,726	62,097	<b>56,761</b>
HRAP ( No.1)	1,10,000	1,93,144	67,213	47,176	38,498	21,651	36,392	<b>24,522</b>
Saleable Steel	1,75,000	3,40,000	360,399 (SS-131,986) (CS - 228,413)	3,38,571 (SS - 1,17,890) (CS - 2,20,681)	3,66,925 (SS - 1,10,495) (CS - 2,56,430)	1,96,667 (SS - 85,447) (CS - 1,11,220)	2,76,899 (SS - 98,659) (CS - 1,78,240)	<b>2,11,769</b> (SS - 81,622) (CS -1,30,147)

(Tonnes Per Year)

#### Saleable Steel Product mix as per DFR

Products Grade	Quantity (Mtpa) (HRAP)	Quantity (Mtpa) (CRSS)
SS Low Nickel (SSLN) 1	60388	43632
AISI 409 M	14000	3668
AISI 304	118756	85480
AISI 430	--	13248
<b>TOTAL</b>	<b>193144</b>	<b>146028</b>

#### 5. Facilities

- Steel Melting Shop  
Electric Arc Furnace (55T); AOD Converter (60T); Ladle furnace (60T); Single Strand Slab Caster
- Hot Rolling Mill  
Roll Grinder
- Cold Rolling Mill Complex  
Annealing and Pickling line; Coil Preparation Line; 20-high Sendzimir Mill; Skin Pass Mill; Tension Leveling Line; Slitting Line; Mixed Acid Recovery System; Rotary Polisher

#### 6. Present Status

- M/s MN Dastur & Co. was appointed as Consultant-cum-Project Manager in Dec-2006.
- The Expansion project was carried out through 21 main packages.
- Hon'ble, then Prime Minister, Dr. Manmohan Singh, laid the foundation stone for expansion plan of SSP at Salem on 05.09.2008.
- As against the approved completion schedule of March-2010, Expansion of SSP has been completed by Sep-2010 [except 20-Hi Sendzimir Mill-(Z Mill-3)].
- Z- Mill-3 was inaugurated by Hon'ble, Minister of State for Steel on 22.09.2016 and Z-Mill-3 was commissioned on 15.10.2017.
- **20-Hi Sendzimir Mill (Z Mill-3):**
  - a. Mill Housing was damaged in a road accident on way to Salem in May-2010 and implementation of the package was interrupted. After several attempts by SSP to resolve the matter with the Consortium of M/s Waterbury Farrel, Canada (**M/s WF**) & M/s Shriram EPC, Chennai (**M/s SEPC**) had failed, SSP sent the Final Termination Notice to them on 09.10.2012 and balance work for this package has been taken-up at their Risk & Cost.
  - b. Global tender was issued in October-2013 for the balance jobs of Z Mill-3. Since the price obtained was very much higher than the estimate, the package was retendered in April-2014 by dividing into (a) Electrical package, (b) Mechanical package and (c) Erection package.

- c. Proposal was approved by the Empowered Committee (EC) on 19.12.2014 at an overall cost of Rs.53.49 crore (net of Cenvat credit of Rs. 6.65 crore) and implementation schedule of 12 months from the effective date of contract.
- d. Since the price obtained for Mechanical Package was much higher, approval was given for taking up the same by retendering again after further sub-division of the package. Accordingly, the Mechanical package was taken up and orders were placed for Repair of Mill housing and for required mechanical items.
- e. Hot Trial run was successfully done on 01.03.2016 with rolling of one coil of 430 grade from 1.60mm to 1.40 mm and Z-Mill-3 was commissioned on 15.10.2017.
- f. Performance Guarantee Test of Z-Mill-3 was successfully completed on 03.11.2018 and PG Test certificate issued.

## 7. Status of Court Cases, Conciliation & Arbitration

M/s SEPC had filed a petition in Madras High Court on 07.11.2012 for grant of injunctions restraining SAIL/SSP from proceeding ahead with the notice inviting EOI, invoking their Performance Bank Guarantee (PBG), return of their tools & tackles and direction to SAIL to furnish security for Rs. 5.27 crore. Counter petition was filed by SSP on 17.02.2013. High Court, on 13.06.2013, dismissed the petition filed by SEPC and on 11.10.2013, passed the judgment in favor of SAIL/SSP. In compliance to Court orders, M/s SEPC deposited the PBG amount of Rs. 0.84 crore on 28.10.2013 and tools & tackles were returned by SAIL/ SSP to M/s SEPC.

The PBG of WF amounting to Rs. 4.48 crore was en-cashed on 02.01.2013 and Petition was filed by M/s WF on 04.01.2013 in the court of Addl. District Judge, Salem for grant of injunctions restraining SSP from completion of project through third party & interfering with the performance of the contract. The counter petition was filed by SAIL/SSP on 09.02.2013. The Hon'ble Court, on 13.08.2013 dismissed the case filed by M/s WF. An appeal petition was filed on 10.01.2014 in Hon'ble Chennai High Court by M/s WF against Hon'ble Salem District Court's order.

In parallel, in Feb-2013, M/s SEPC & M/s WF had requested M/s SCOPE Forum for conciliation & arbitration. SAIL had sent its nomination of Conciliator to M/s SCOPE Forum on 06.08.2013 and M/s SEPC had sent their nomination on 10.08.2013. M/s SCOPE Forum had asked SAIL/ SSP to name an International Conciliator except from India and Canada. In Sep-2014, M/s SCOPE Forum had suggested name of a neutral Conciliator/ Arbitrator and had sought acceptance of their nomination / charges from both the parties. Since SAIL couldn't agree upon the fee of Conciliator, process of conciliation was dropped and it was decided to go for Arbitration.

SAIL had submitted the request for Arbitration at **International Court of Arbitration (ICA) of International Chamber of Commerce (ICC), Paris** on 08.10.2015 and pursuant to that, an acknowledgement letter had been received from ICC-ICA on 09.10.2015, confirming that commencement of Arbitration from 08.10.2015. (ICC case No: 21382/CYK). As advised by SAIL-Corporate Law on 07.05.2016, SAIL/SSP had submitted Statement of Claim and subsequently, Supplementary Statement of Claim was filed by SAIL/SSP on 12.06.2017 in **Arbitration Tribunal**.

After several hearings and examination & cross examination of witnesses by Arbitration Tribunal, submission of final written documents was completed.

The matter was argued at length till October-2018 and awarded by **ICA on 28-February-2019 in favour of SAIL / SSP**.

### **The following are gist of the Award;**

- i. M/s WF (First Respondent) and M/s SEPC (second respondent) shall jointly and severally pay Rs.19.52 Crores towards Claim of Risk Purchase.
  - ii. Rs. 4,01,73,764/- as Pre-Award Simple Interest at the rate of 12% per annum from 12.06.2017 (i.e Date of Supplementary Statement claim filed by SAIL/SSP) till date (Award date i.e.28.02.2019).
  - iii. Post Award interest at the rate of 12% on Rs.23,53,73,764/- (i.e. Rs.19,52,00,000 + Rs. 4,01,73,764) from the date of the Award till date of payment.
  - iv. Cost of Arbitration to an Extent of 75% of the total Arbitral Costs incurred by SAIL/SSP. [i.e. USD 1,20,000 (ICC Fee) + Rs. 88,24,463/- (Legal fee and expenses) + USD 5,660 (costs towards Transcription services as arranged by SAIL/SSP)].
- Consequent upon the Award of Arbitration Tribunal, M/s Waterbury Farrel (**M/s WF**) vide notice dated 22.05.2019, had informed to appeal against the Award. Then, M/s WF has filed an application in the court of Principal District Judge, Salem on 10.06.2019 and hearings were held on 08.07.2019, 26.07.2019 and 09.09.2019 at Salem.
  - The Court asked SSP to file a counter by 16.10.2019 to the petition filed by M/s WF. SSP filed the counter on 16.10.2019 at Salem Court and further hearings were held on 15&20-Nov-2019, 5-Dec-2019, 10.01.2020, 04.02.2020 & 27.02.2020.

### **Package-wise Details for Balance works ordered under Z-Mill -3 against RPN**

Sl. No	Package Name	Contractor Name	Cost in Rs. Net of Cenvat (FE)	Expenditure up to Feb-2020 (Rs. Crores)	Status
1.	Electrical & Automation Package	M/s ABB India Limited, Bangalore	30.34 Crores. (Net of Cenvat credit of Rs. 2.88 Crores) (Nil)	29.59	<ul style="list-style-type: none"> <li>• In Feb-2020, 2,074Tonnes has been rolled in Z-Mill-3 and</li> <li>• Total 61,514Tonnes rolled from March-2016 to Feb-2020.</li> <li>• After completing trial run tests on 01.03.2016, Z-Mill-3 was commissioned on 15.10.2017.</li> <li>• Performance Guarantee Test of Z-Mill-3 was successfully completed on 03.11.2018 and PG Test certificate issued.</li> </ul>
2.	Mechanical Package	Various	20.50 Crores. (Nil)	19.81	
3.	Erection Package	M/s Mesuka Engineering Company Pvt. Ltd., Navi Mumbai.	2.65 Crores. (Net of Cenvat credit of 33.11 Lakhs) (Nil)	2.78	



## RMD - Expansion of Mines

1. Cost break-up (June'09)					Rs. Cr
Sl. No.	Mine	Mine expansion	Beneficiation	Infrastructure	Total
1	Bolani Iron Ore Mines	255	600	236	1091
2	Kiriburu Iron Ore Mines	142	729	69	940
3	Meghahatuburu Iron Ore Mines	172	688	57	917
4	Barsua Iron Ore Mines	133	694	11	838
5	Gua Iron Ore Mines	460	1980 (with pellet plant)	438	2878
	<b>RMD Total</b>				<b>6,664</b>
6	Rowghat Iron Ore Mines				3,600
	<b>Total</b>				<b>10,264</b>

### 2. Facilities

- **Capacity Expansion, Beneficiation facilities at existing Mines**
  - i) Kiriburu Iron ore Mines from 4.25 Mtpa to 5.5. Mtpa
  - ii) Meghahatuburu Iron ore Mines from 4.3 Mtpa to 6.5 Mtpa
  - iii) Bolani Iron ore Mines from 4.1 Mtpa to 10 Mtpa
  - iv) Gua Iron ore Mines from 2.4 Mtpa to 10 Mtpa; Beneficiation Plant for 12.5 Mtpa throughput; 4 Mtpa Pellet Plant
  - v) Beneficiation Plant at Bolani Iron ore Mines for 6.53 Mtpa throughput
  - vi) Kuteshwar Limestone Mines from 1.1 Mtpa to 2 Mtpa
- **Utilization of Low Grade Fines/Slimes available at Mines**
  - i) Installation of 0.6 Mtpa throughput capacity Slime Beneficiation Plant at Kiriburu Iron ore Mines
  - ii) Installation of Slime Beneficiation Plant at Barsua Iron ore Mines

### 3. Present Status of Expansion Projects

- **Enhancement of Loading Capacity at Bolani Iron Ore Mines :**
  - Out of two lines (LC-3 and LC-4), one line (LC-3) completed in June'12 and stabilized in Sept.'13 for full rake loading. However, due to accident in Reclaimer in Nov'13, full rake loading through this line was not being done. Full rake loading through LC-3 is being done on Line no. 6 since Jan '17.
  - Risk Purchase Notice (RPN) issued on 14.08.2014 to M/s Tecpro due to poor performance. Balance jobs (under RPN) are being executed through five (05) packages which have been further sub-divided into 24 sub-packages. 19 packages have been completed, 02 packages are under execution (Miscellaneous Electrical works - 2 C1, Dust Suppression system - 2B 4), 03 are yet to be tendered (Training, As-built drawing, Construction of LC4).
  - Alternate scheme in place of LC4 has been worked out in consultation with CET. The project is proposed to be executed through 04 packages on turnkey basis. i.e Package-1: Geotechnical investigation & area survey work for the loading area (Turnkey); Package-2 : Installation of Rapid Loading System (Turnkey); Package-3 : Extension of line no-7 to accommodate full rake (To be executed by BOM, RMD); Package-4 : Slope Retention on D-area road from chainage 648 m to chainage 1068 m. Proposal for RLS processed by RMD for Stage I approval. COD meeting held on 13.12.2019. The on-going project is to be closed before initiating the proposal for RLS. Closure has been initiated.
- **Under Kiriburu Expansion project, Expansion facilities completed.**
- **Under Meghahatuburu Expansion Project :**
  - Crushing section completed in Feb'13.
  - Augmentation of Power Supply completed in July'13. Final Acceptance Certificate (FAC) issued to M/s Sterling & Wilson Limited.
  - Upgradation of Loading system completed in May'14.
  - Erection of Wagon Loader completed in Nov'14.

- All 03 nos. Classifiers have been erected. No load test for all Classifiers completed in Sept'14.
- No Load & Load Trials of Scalping Screen completed.
- Risk Purchase Notice issued to M/s Tecpro Systems Limited on 16.08.14. Balance jobs (under RPN) are being executed through two (02) packages:-
  - **RPN Pkg 01 – Balance works of Main package excluding Bucket Wheel Reclaimer:** Contract signed with M/s HSCL on 05.12.15.

- **RPN Pkg 02 – Balance works of Bucket Wheel Reclaimer:** Contract signed with M/s Lepton Pvt. on 16.10.2017.

Shutdown at MIOM taken from 10<sup>th</sup> – 15<sup>th</sup> Dec.'19 for execution of jobs pertaining to Tertiary Crusher, Bucket wheel Reclaimer & Loading system.

- **Under Expansion of Bolani Iron Ore Mines :**

- Modification of Dumping Platform completed.
- All six nos. (03 sets) of Classifiers installed. Four Classifiers (DSC-3, 4, 5 & 6) have been commissioned and are under operation.
- Erection of Stacker & Bucket wheel Reclaimer completed and put into operation on 25.06.2015.
- Plant shutdown was taken for 3 days, from 05-07.01.2015, wherein Belt Changing (around 1600m), Non Drive pulley changing (16 nos) and Scalping Screen was replaced.
- 02 Nos Scalping Screen commissioned on 08.01.2015.
- Erection of 02 Nos. Tertiary Screen and 03 Nos. Recirculating Screen completed.
- Erection of 02 Nos. of Tertiary Cone Crusher completed.
- Shutdown taken from 11-28.05.2015 for Augmentation of capacity of Crushing plant & Washing plant conveying system (1200 tph to 1800 tph). Plant handed over to operations on 29.05.2015 after completion of jobs.
- RPN issued to M/s Technofab on 22.02.2017 for the package of Installation / Upgradation of Conveyors and Crushing / Screening building (2E). Party was given 21 days time to respond. Reply alongwith schedule received on 29.03.2017. Reply of SAIL sent to the party on 26.04.2017. Bank Guarantee of M/s Technofab of Rs. 2.04 Crores encashed on 03.04.2017. Balance job is being undertaken through RPN and has been divided in following 4 sub-packages :-

-**RPN pkg 2E - 01 - Installation of De-Watering Screen & Extension of WFC-1 Conveyor:** LOA issued to M/s National Construction Company on 04.01.2018. Job has been completed. PAC issued on 29.08.18. Commissioning dependent on Wet circuit operation. Commissioning payment released in lieu of equivalent amount of BG.

-**RPN pkg 2E - 02 - Balance work of Tertiary Crushing system :** The scope has been repackaged and the work is now being executed in 4 sub-packages as under:-

- **Pkg-2A** - Balance Civil and Electrical works for ECR building: Tender issued on 16.10.2018 with TOD 14.11.2018. 08 offers received viz. M/s Unistar Company; Electro-Mech Engineers; Maa Vindhya Vasini & Sons; VK Enterprises; Electro Steel Corporation; Roop Chand & Co.; Regional Construction & Co; Sai Electricals. Techno-commercial evaluation completed. Tender cancelled. Revised TS received from CET on 04.11.2019. Acceptance given by Bolani Ores Mines on 06.11.19 for further action of tendering by RMD, Kolkata. NIT issued on 02.01.2020 with TOD on 31.01.2020. 06 offers received. Extension request received from 03 bidders, TOD extended up to 15.02.2020. 08 offers received on 15.02.2020. Techno-Commercial evaluation is in progress.
- **Pkg-2B** - Balance Civil, Structural and Mechanical works of Tertiary Crusher Building : Tender issued on 16.10.2018 with TOD 13.11.2018, extended to 01.12.2018. 03 offers received viz. M/s Maa Vindhya Vasini, Bolani; Geetanjali Enterprises, Bokaro and Vidhividhan Engineers, Rourkela. As per the recommendations of Tender Committee, Tender cancelled after approval of Competent authority. NIT floated on 02.09.2019 with TOD as 1.10.2019. TOD extended to 25.10.2019 due to receipt of single offer. No further offers received. Case referred to Screening Committee in view of the request of prospective bidders for relaxation in eligibility criteria. Original tender cancelled. Eligibility criteria reviewed. NIT floated on 16.01.2020; TOD on 14.02.2020. TOD was extended up to 28.02.2020, as no offers were received, further extended up to 13.03.2020.
- **Pkg-2C** - Balance Electrical works of Tertiary Crusher Building: Tender issued on 08.11.2018, TOD 07.12.2018. 11 offers received viz. M/s IEE Projects; Electro Steel Corporation; Adarsh Controls and Automation; Reliable Hi Tech; Power Max; ECS

Engineering; Om Shakti; Real Time Engineering; Incotech Engineering; Devika Electrical; Sai Electricals. Techno-commercial evaluation completed. RA failed. Price discovered through Physical bid opening on 30.12.2019. L1 offer was 97% above the estimate. Under consideration of TC. TC during its meeting on 22.01.2020, decided to ask L-1 bidder to submit their BOQ along with rates, so that same can be compared with the estimate prepared by CET.

- **Pkg-2D** - Construction of Retaining wall of Tertiary Crusher Building: TS received from CET. To be Tendered. Kept on hold.

- **RPN pkg-03 - Balance work of 600 TPH Secondary Crushing area** : LOA issued to M/s Bengal Tools Limited on 03.07.2018 at Rs. 5.85 Crore. Kick off meeting held at Mines on 07.09.2018. Contract signed on 27.11.2018. Party started site activities w.e.f.18.12.18. Work is in progress.

- **RPN Pkg-04 - Balance work of D & Panposh Crusher & Conveyor system** – To be Tendered.

- **Expansion of Gua Iron Ore Mines - Crushing, Beneficiation & Pellet Plant:** LOA issued on 04.04.2014. Contract Agreement signed on 02.04.2015 with effective date of contract of 03.05.2014 and contractual schedule of 40 months. Joint delay analysis made by RMD and L&T on 02.05.2015, wherein it was assessed that 7 months delay during May'14 to Apr'15 is attributable to SAIL / RMD. Accordingly vide letter dated 01.09.2017, addressed to L&T, RMD extended Contract period by 7 months i.e upto April 18 which was further extended upto Oct'18. No further extension has been granted. M/s L&T has not agreed for considering zero date from the date of obtaining Stage II FC. 3 LCs opened for payment in Foreign currency have been closed. BGs given by the consortium lapsed on 5.12.2018 and 31.03.2019 respectively and not renewed further.
  - Discussions held with MECON (consultant) and Law for deciding future course of action. MECON opined to terminate the contract and go for commercial settlement. Opinion of RMD as well as Corporate law also in the same line. Matter was put up to COD on Raw Materials for further deliberation. Contract cancelled on 05.08.2019. SAIL Board informed on 09.08.2019.
  - Re-tendering will be done after revisiting the requirement and technological changes & statutory provisions in the intervening period. Assignment has been given to CET for preparing the EOI documents to find probable bidders and their requirements for installation of Beneficiation & Pellet plant on BOO basis. CET shall also re-examine all the enabling / linked packages for 10 Mtpa Expansion project. These packages will be done on EPC basis. Information /document prepared by MECON shared with CET for review of linked/enabling packages.
  - Scheme revisited by RMD & CET and has been finalised as under:
    - 12.5 MTPA Crushing and Beneficiation facilities
    - 2 MTPA Pellet Plant (capacity of Pellet Plant to be ascertained after completion of test results). Sample collection is under process.
  - EOI floated for Beneficiation and Pellet Plants on BOO basis.
- **Sample Testing:** L&T submitted an interim report on sample test work in Jan '16. Several meetings held between RMD, MECON, L&T / METSO as the test results did not conform to the output parameters mentioned in the contract. In the meeting held on 07.06.2016 between RMD, MECON, L&T and Metso, it was mutually agreed that additional sample is required to carry out test work for Lump & Fines Jig Streams. Sample sent to SGS and NMDC on 23.07.2016 for analysis and report received on 22.09.2016. However, as the Test results were found to be in variance from Contract Technical Specification, it was decided to send further samples for testing and the same was sent to M/s SGS on 29.09.2016 and report received by RMD on 19.10.16. The same was discussed between RMD and MECON on 04-05.11.16 and it was decided to send samples to RDCIS for testing. Samples sent to RDCIS on 30.11.16 and report submitted by RDCIS on 14.12.16. M/s L&T / METSO were requested by RMD on 22.12.16 to lift Lump (10-40 mm) and Fines (-10 mm) samples for further testing. 25 Tons of Iron ore samples handed over to L&T / Metso for testing at NMDC, Hyderabad and the same has reached NMDC, Hyderabad on 21.01.17. A team of 3 executives from MECON, Gua and P&D, RSP visited NMDC, Hyderabad on 02.02.2017 for discussion of Sampling and Test results. L&T/METSO started the test work on 03.02.2017. SAIL/ MECON witnessed Jig test on 24 -25.05.2017. Results received from NMDC in June'17. Test Work for Lump and Fines Jig have been completed and accepted. Further, L&T/METSO has sent the Jig rejects from NMDC, Hyderabad to GTK, Finland for pilot & batch scale test in Aug'17. Test work for Lump and Fines Jig have been completed and accepted. Further, L&T/Metso has sent Jig rejects from NMDC, Hyderabad to GTK Finland for pilot and batch scale tests in Aug'17. One official each from SAIL and MECON visited Finland for witnessing test

- works during 9-20.10.2017. Test results received. Pilot scale tests for Fines beneficiation held at GTK, Finland in Dec'17, report received. Pelletisation test done at Outotec, Germany, report received and under examination by MECON.
- General Layout Drawings of the Crushing, Beneficiation and Pellet Plant (Overall plot plan) submitted by L&T has been "Approved as Noted" by MECON on 19.01.2016.
  - Appointment of Project Management Consultant:** LOA issued on M/s Essar Projects India Ltd. on 11.01.2016.
  - Stage II FC for 37.66 Ha** of Jungle - Jhar land in Surface Lease area received from MoEFCC, Ranchi on 04.03.2016. Land release order and tree felling permission obtained.
  - Power from JUSNL:** Contract signed with M/s JUSNL in Jul'15. NIT issued by JUSNL on 09.02.2016 with last date of bid submission as 29.02.2016. After three extensions, offer received from 04 parties on 13.04.16. Price opened on 11.06.16, M/s. A 2 Z Infra Engg. Ltd., Gurgaon was L-1 at Rs. 104.54 Cr against estimate of Rs. 93 Cr. Order placed by JUSNL on M/s A to Z Infra on 29.09.16. Amended agreement signed with JUSNL on 17.06.2016 with provision of opening of an ESCROW account and payment of 21.5% as supervision charges with progressive bills. Draft agreement for ESCROW account cleared by Corporate Finance in July'16. Agreement for ESCROW account signed between RMD and JUSNL on 27.09.16; ESCROW account opened in Bank of India, Ranchi. Work to be completed in 30 months from opening of ESCROW Account i.e. by Mar'19. Route Survey approved by JUSNL. Soil investigation completed. For substation, Survey, levelling and structural foundation completed. Major civil works except road completed; 90% equipment received; 83% equipment erected. For Transmission Line, Route alignment, survey done. Out of 278 towers, 104 have been erected & foundation completed for 124 towers. The project cannot be commissioned unless MRSS is ready. The possibility of setting up small MRSS to utilise the T/L for the time being (till the main project is commissioned) is being explored.
  - Railway Siding:** FR approved by Railways. DPR submitted by RITES to SE Railway on 22.09.2015. Reply to queries raised by Railways has been submitted. DPR approved by Railways on 31.05.2016 with certain conditions (settlement of land ownership issues with Railways). Letter issued by RMD to Railways on 12.07.16 agreeing to Land Licensing pending land ownership issue to be resolved by State Govt. On 22.07.16, Railways informed that on the basis of SAIL's consent letter, Railways is in the process of taking concurrence of their Finance and approval of Railway Board for giving Railway land to SAIL on lease. Land ownership issue taken-up with DC, Chaibasa and meeting held in Dec'16. Revised Engineering Scale plan (ESP) approved by railways on 01.09.2017. Land Licensing Plan (LLP) submitted to Railways on 20.09.2017 and approved on 03.11.2017. The surface lease rights of the subject land (32.61 Ac) has been renewed in favour of SAIL/Gua Mines in Dec'17, but Railway is not agreeing and insisting on deposit of Rs. 17.97 crore as land leasing fees. DC (Singhbhum) held meeting with SAIL and Railways on 22.09.2018 and advised Railways to submit proof of their claims in 15 days, which is yet to be submitted. SAIL has submitted a letter on 31.10.2018 requesting DC (Singhbhum) for early resolution. Soil investigation completed. Packaging done by RITES and Tender Documents are under preparation at RITES. (Disputed Area - 28 Acres). Vide order dated 05.08.2019, DC, Chaibasa clarified that SAIL has a legal right on plot 291 (29.05 acres). Accordingly, a letter was given to SE Railways for permission for execution of Railway Siding on 20.08.2019. In this context, meeting was held with CPDE, SE Railways and RMD on 16.10.2019 & 22.11.2019 wherein Railways was requested to review their demand for land licensing fees. Railways reiterated to make payment. Matter is still unresolved.
  - Project Management Services** for Development of New Full Rake Railway Siding - Order finalized by RMD on M/s RITES on negotiation basis at Rs. 25.99 Cr. LOA issued on 18.05.2017.
  - MRSS and HT Power Distribution:** NIT issued on 25.01.2016 with TOD on 09.03.2016.<sup>1st</sup> Extension of TOD - 29.03.2016; 2nd Extension - 19.04.2016; 3<sup>rd</sup> Extension - 05.05.2016. 04 offers received (M/s Siemens, Alstom, ABB and L&T). Tender discussions completed on 20-21 Sep'16. Techno-commercial evaluation completed. TAR received from MECON on 03.06.2017. Tender cancelled in Oct'18.
  - **Fees for Consultancy Services of MECON for Expansion including Installation of Beneficiation & Pelletisation facilities in various mines of SAIL- RMD:** Empowered Committee accorded the final approval for the Proposal in Oct'15 at Rs. 158.81 Crore (DPER - 30, Consultancy - 125, EIA / EMP - Rs. 3.81 Cr). Sanction Letter issued by Projects Directorate on 27.10.2015. Contract agreement signed between SAIL & MECON on 07.12.2015.

## Package-wise Details RMD Projects

### Packages under Implementation:

#### Expansion Packages

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status
1	<p><b>Enhancement of production capacity of Bolani Iron Ore Mines (4.10 to 10 Mtpa)</b>                      Total Packages : 21                      Ordered : 17                      Balance: Construction of Dam III of Tailing Pond, GPS based Mines Management System, CCTV based DVRMS</p>		254.55 Gross – 275.28	177.82		Nov'13/Jun'15 (except Tertiary Crushing Module & Set of Conveyors from D & Panposh area )  Dec'20	Intermittent closure of Mines due to Environmental clearances during 11th Feb'12 to 2nd March'12; 10th April'12 to 1st May' 12 ; 10th Nov'12 to 27th Dec'12 has delayed the job.  Delay in obtaining Forest clearance for D & Panposh area in turn affected the start of site activities in that area. Site work was started on 18.03.2015 but subsequently stopped due to non availability of clearance.  Stage-II FC for diversion of Sabik Kisam forest lands under 6.9 Sq. mile lease of Bolani Mine was granted by MoEFCC on 29.04.2019. Stage-II FC for 465.64 Hal forest land under 6.9 Sq. Mile Lease is awaited.  Stage II FC for Sabik forest land under 5.10 Square mile granted in Nov 2019.
i.	Modification of Dumping platform (pkg-1)	HR Constructions	4.76 Gross - 5.09	4.42	28.7.10	<b>Dec'12</b>	<b>Completed.</b> FAC payment pending. LD recovered 5%.
	Augmentation of Plant Capacity (pkg-2)						Split into 11 sub-packages.
ii.	Supply/ Modifications of Screens (pkg-2A) (Two Scalping Screens, One Dewatering Screen, One Grizzly Feeder, Three Tertiary screens and Three Recirculating screens)  <u>Issues:</u> <ul style="list-style-type: none"> <li>Erection &amp; Commissioning of balance Screens is linked to RPN Package 2E</li> </ul>	International Combustion	5.35 Gross – 5.87	4.96	30.05.11	Aug'12/ Dec'20 (Linked to Pkg-2E)	<ul style="list-style-type: none"> <li>Design &amp; Engineering completed.</li> <li>Ordering of brought out items and manufacturing completed.</li> <li>100% equipment supplied. All 10 screens supplied in Apr'13 – Nov.'13.</li> <li>1) Erection of Scalping Screens at Crushing plant (02 nos.) under PKG-2E completed on 14.08.13 &amp; Commissioned on 08.01.15 and screens are in operation. Load Test of Scalping Screen-1 done on 08.01.2015 and Scalping Screen-2 done on 26.04.2015. Put into operation in Sep'18. Part PAC issued on 21.09.2018.</li> <li>2) Tertiary and Recirculating Screens (03 Nos + 03 Nos.) at PSP : Supply of Screens by M/s ICL &amp; Erection of same by M/s TFML under PKG-2E completed on 24.02.2016. Commissioning is pending as M/s TFML stopped the site activities since 30.01.2017. Commissioning will be done under RPN PKG-2B of PKG-2E at the risk and cost of M/s TFML.</li> <li>3) De-Watering Screen at Washing Plant (01 No.): Supply of Screen by M/s ICL &amp; Erection of the same by M/s National Constrn. Co. (under RPN PKG-1 of PKG-2E) at the risk and cost of M/s TFML completed.</li> </ul>

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status
							<p>Trial of 1 no. Dewatering screen at Washing Plant done on 28.08.18. PAC has been issued. Commissioning is pending due to non-working of Wet circuit.</p> <p>4) Grizzly feeder at D-area (01 No.): Supply of Screen by M/s ICL completed. Installation and Commissioning will be done through RPN Package-4 of Pkg-2E at the risk and cost of M/s TFML.</p>
iii.	<p>Supply and Installation of Crushers (pkg-2B) - 02 Tertiary Crushers, 01 Crusher at 600tph area, 01 Crusher at D area.</p> <p><u>Issues:</u> Erection of equipment linked to Crushing/Screening Building (pkg-2E)</p>	Sandvik Asia	<p>10.68 Gross – 11.82</p>	12.27	24.06.11	Dec'12/ Dec' 20 (Linked to Pkg-2E)	<ul style="list-style-type: none"> <li>All 04 Crushers have been received at site. (Feb.'13).               <ol style="list-style-type: none"> <li>Tertiary Cone Crusher (02 Nos) at PSP : Supply of Crushers by M/s Sandvik Asia and Erection of same by M/s TFML under PKG-2E completed on 27.09.14. Commissioning is pending as M/s TFML stopped the site activities since 30.01.2017. Commissioning will be done under RPN PKG-2B of PKG-2E at the risk and cost of M/s TFML.</li> <li>Secondary Cone Crusher (01 No.) at Sec Crushing House near 600TPH : Supply of Crushers by M/s Sandvik Asia and Erection of same on 23.02.2020 by M/s BTL EPC Ltd (under RPN PKG-3 of PKG-2E) at the risk and cost of M/s TFML completed. Commissioning will be done after completion of balance work of Sec Crushing Building and associated Conveyors.</li> <li>Jaw Crusher (01 No.) at D-Area : Supply of Crusher by M/s Sandvik Asia completed. Installation and Commissioning will be done through RPN Pkg - 4 of Pkg-2E at the risk and cost of M/s TFML.</li> </ol> </li> </ul>
iv.	<p>Supply and Installation of Classifiers (pkg-2C) – 06 Classifiers</p> <p><u>Issues:</u></p> <ul style="list-style-type: none"> <li>Commissioning of DSC-1 and DSC-2, which is linked to pkg-2E</li> <li>Commissioning of remaining 02 classifiers will be done after Commissioning of Dewatering screen</li> </ul>	Hindustan Dorr-Oliver Ltd.	<p>5.32 Gross – 5.80</p>	5.00	12.11.10	Feb'12/ Feb'16	<ul style="list-style-type: none"> <li>All six nos. of Classifiers (3 sets) installed. 04 Classifiers commissioned. PAC for Screw Classifiers (DSC-1, 2, 3, 4, 5, 6) issued on 13.04.16.</li> <li>DSC-3 &amp; DSC-4 : Commissioning certificate on 10.10.13.</li> <li>DSC-5 &amp; DSC-6 : Commissioned on 15.05.2014.</li> <li>Erection work for DSC-1 &amp; DSC-2 started from 12.01.15. Trial run of DSC-2 taken on 23.06.15. Trial run of DSC-1 done on 13.01.2016.</li> <li>Load Test &amp; Commissioning of DSC-1 &amp; DSC-2 was pending due to non-installation of Dewatering Screen &amp; Extension of WFC-1 Conveyor. Installation of De-Watering Screen &amp; Extension of WFC-1 Conv. completed by M/s National Construction Co. at Washing Plant under RPN PKG-1 of 2E. Commissioning is still pending due to non-working of Wet Circuit.</li> <li>HDOL officials visited Bolani on 16.02.17 and requested to complete balance works by engaging other agency at the cost of M/s HDOL and also requested for foreclosure of the contract.</li> <li>BG of Rs 28.5 lakhs encashed in June 18. In-Principle approval obtained on 30.10.2018 for Commercial Settlement with the party.</li> <li>Proposal for Commercial settlement has been sent to RMD, Kolkata along with revised Committee recommendation for approval of CA on</li> </ul>

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status
							23.10.19. • Meanwhile, the Party has gone into Liquidation.
v.	Dust Suppression System (Pkg-2D) – Installation of Dust suppression system at Crushing and Washing plant section  <u>Issue:</u> • Entire front not available for execution. Work completed in available fronts. • Contract to be foreclosed after execution of work at available fronts. • Order not finalised for RPN Pkg for balance work of Tertiary crushing system. • Dust Suppression system at 600 tph, D and Panposh area will be tendered separately after completion of balance work in D & Panposh area (RPN Pkg 04 of Main package 2E)	Dust Solution System	2.05	2.10	28.01.17	Jan'19 (for available fronts) Linked to Pkg 2E	<ul style="list-style-type: none"> <li>• LOA issued to Party on 29.12.2016.</li> <li>• Contract signed on 02.02.2017. Kick-off meeting held on 01.03.2017. Billing schedule approved in Oct'17. Site activities started on 20.11.2017.</li> <li>• 1) <b>Crushing Area:</b> Installation of Equipment, pipe lines work, Cable laying, Glanding &amp; termination (<i>Except Tertiary area</i>) completed. Testing &amp; Trial run of Equipment completed and system has been put into regular operation since 10.01.19.</li> <li>• 2) <b>Washing Area:</b> Installation of Equipment, pipe lines work, Cable laying, Glanding &amp; termination at available front (<i>Except BO-DO Project area</i>) of washing plant area completed. Testing &amp; Trial run of Equipment completed and system has been put into regular operation since 10.01.19.</li> <li>• Imparting of Training to employees completed. Formalities for handing over and taking over the Completed facilities at Crushing and Washing area completed w.e.f. 31.01.2019 without issuing Part PAC.</li> </ul>
vi.	Installation/ Upgradation of Conveyors and Crushing/Screening Building (pkg-2E) (Conveyor speed upgradation from 1200 TPH to 1800TPH)  <u>Issues:</u> • Project work could not be taken up in D & Panposh area due to non-availability of Statutory clearances. • To ensure sized output, civil works for Tertiary crushing and Screening building are to be expedited by the contractor. • Engineers Notice issued to the Contractor, M/s Techno Fab Manufacturing Ltd. for the job of Erection & Commissioning of Dewatering Screen & Shifting Tail Pulley of Conveyor WFC-1 at Washing Plant on 15.12.2014. • Poor resource mobilization by M/s Technofab due to financial crunch. All civil contractors have demobilised their manpower due to payment	Technofab Manufacturing Ltd.	95.94 Gross – 105.16	70.24	04.01.12	Jan'14/ Dec' 20  Plant Augmentation jobs completed in May'15	<ul style="list-style-type: none"> <li>• Basic Engg. completed, Design Engg. in progress. 78% Equipment supply, 35% equipment erection and 39% Structural erection done.</li> <li>• 11KV lines coming in the way have been diverted. Necessary road diversion along the site of Tertiary Crushing &amp; Screening building has been completed.</li> <li>• <u>Augmentation of Main Plant:</u></li> <li>• Plant shutdown was taken for 3 days, from 05-07.01.2015. During this period, following jobs were done: <ul style="list-style-type: none"> <li>- Belt Changing : Around 1600m</li> <li>- Non Drive pulley changing : 16 nos.</li> <li>- 2 Scalping Screens replaced</li> </ul> </li> <li>• Shutdown taken from 11 - 28.05.2015 for Augmentation of Plant. Augmentation jobs (Apron Feeder AF-106, AF-112, Conveyors CC-1, CC-2, PC-1, PC-2, PC-7, PC-8, WFC-1, WFC-2, WFC-3, WPC-1 &amp; WPC Tripper) were completed and put into operation for production from 29.05.2015.</li> <li>• Balance work includes a set of conveyors for replacing the present road transportation from D &amp; Panposh area and Tertiary Crushing module to ensure reduction of lump size to -30 mm (Present size - 50mm +10mm). Excavation work started on 18.03.2015 and is in progress.</li> <li>• Civil works for Tertiary crushing building completed, structural erection in progress. Erection of two nos. Tertiary Cone Crushers, 3 nos Tertiary</li> </ul>

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	<p>problems.</p> <ul style="list-style-type: none"> <li>• Notice issued to M/s Technofab for improving the site activities. Some improvement has been observed but still not as per site requirement. RPN action may be initiated if further improvement is not observed.</li> <li>• Meeting held on 19/03/2016 between M/s TFML and RMD to expedite completion of the package.</li> <li>• Due to poor progress of work, Engineers' notice was issued to party on 14.09.16. No work since early Nov'16. RPN Notice issued on 22.02.2017.</li> </ul>						<p>Screens done.</p> <ul style="list-style-type: none"> <li>• Civil works for Secondary screening building completed, structural erection in progress.</li> <li>• Civil Sub-Contractor (Viswakarma Feeding Agency) had mobilized the man-power to start civil works on 15.02.16.</li> <li>• Erection work stopped since 26.08.16 after seizure of 150T crane as per order of High Court, Calcutta due to non-payment of installments by crane owner to financier.</li> <li>• <u>Crushers and Conveyors in D &amp; Panposh</u> <ul style="list-style-type: none"> <li>• Tree Felling completed on 29.12.2014.</li> <li>• Excavation work started on 18.03.2015. Subsequently work stopped in Apr'15 due to non-availability of clearance.</li> </ul> </li> <li>• Risk Purchase notice issued to M/s Technofab on 22.02.2017 for the package of Installation / Upgradation of Conveyors and Crushing / Screening Building. The party was given 21 days time to respond. Reply of party alongwith schedule received by Bolani Mines on 29.03.2017. Reply of SAIL sent to the party on 26.04.2017.</li> <li>• Bank Guarantee of M/s Technofab of Rs. 2.04 Cr encashed on 03.04.2017.</li> <li>• Balance work under RPN has been divided into 04 sub-packages:-</li> <li>• <b>Balance Works of De-Watering Screen &amp; Extension of WFC-1 Conveyor (Pkg-01)</b> – NIT issued on 26.05.2017 with TOD of 23.06.2017. Offers received from 6 parties. Techno-commercial evaluation completed in Sep'17, RA held on 26th Oct 17, M/s National Construction was L-1 at Rs. 50.83 lakh against estimate of Rs. 66.16 lakh. <b>LOA issued to M/s National Construction Company on 04.01.2018.</b> Approved civil drawings received from CET on 12.03.2018. Excavation for De-watering screens and Wet Fines Conveyor (WFC) started on 15.03.2018 and completed in Apr'18. Casting of all 05 nos. foundation for De-watering screens completed in Jun'18. Erection of Chute, Tail Pulley and Frame, and Dewatering screens completed in Jul'18. <b>Work completed and PAC issued on 29.08.18.</b> Commissioning could not be carried out due to non-working of Wet circuit. However, for payment of 2.5% retention amount towards Commissioning was released against submission of Bank Guarantee of equal value, as per provision of Contract clause no.-25.4. Proposal was sent to RMD, Kolkata for releasing 5% retention amount towards PG Test without any Bank Guarantee, as in the instant case, PG was not applicable. Proposal was returned from RMD without approval on 19.03.19. File was again sent to HQ through GM (Mines) on 26.07.19. No approval for releasing 5% retention amount towards PG Test even with submission of Bank Guarantee as commissioning of completed facility has not been done.</li> <li>• <b>Pkg 02 – Balance job of Tertiary Crushing system</b> – TS (R=2) submitted by CET to RMD on 06.09.2017 and accepted by Mines.</li> </ul>



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							<p>Screening Committee meeting held on 21-22.09.2017. NIT issued on 28.09.2017 with TOD of 31.10.2017. TOD extended till 14.11.2017. 05 offers received from M/s HMTC Engg.; Edifice Engg.; Powermax India; Indiana Conveyors; BTL EPC Ltd. TER received from CET on 27.12.2017. TC meeting held on 10.01.2018. Opinion of Corporate Law sought on 06.02.2018 on the issue of acceptance of bid of M/s Indiana Conveyors. The opinion of Law has been sent to RMD on 20.02.2018. Final TC meeting held on 03.03.2018. RA conducted on 14.05.2018, but failed. Tender committee recommended for cancellation of Tender on 25.05.2018 and Tender cancelled. <b>Balance works to be executed in 4 sub-packages as under:</b></p> <ul style="list-style-type: none"> <li>• <b>Pkg-2A (Balance Civil and Electrical works for ECR building):</b> Tender issued on 16.10.2018, TOD 14.11.2018 and 8 offers received viz. M/s Unistar Company; Electro-Mech Engineers; Maa Vindhya Vasini &amp; Sons; VK Enterprises; Electro Steel Corporation; Roop Chand &amp; Co.; Regional Construction &amp; Co; Sai Electricals. During Techno-commercial evaluation, 03 bidders were rejected. During Technical evaluation by CET, it was observed that the quantity of Teakwood handrail (Polished) for staircase was mentioned 7900m in place of 7.9m as a typographical error, for which downward revision is 56.08 Lakh (30.56% of Initial package cost i.e.183.53 Lakh. Hence, CET has been asked to review the eligibility criteria in line with the revised cost estimate i.e from 183.53 to 127.45 (Net of ITC on GST). SC during meeting on 24.06.19 opined that since there is considerable downward revision in estimate i.e. 30.56% against original estimate, the eligibility criteria may be reviewed. Tender has been cancelled. Revised TS received from CET on 04.11.2019. NIT issued on 02.01.2020 with TOD on 31.01.2020. 06 offers received. 03 Bidders requested for Time extension, hence TOD extended up to 15/02/2020. 08 offers received. Techno-Commercial evaluation is in progress.</li> <li>• <b>Pkg-2B (Balance Civil, Structural and Mechanical works of Tertiary Crusher Building):</b> Tender issued on 16.10.2018, TOD 13.11.2018, extended to 01.12.2018 and 3 offers received viz. M/s Maa Vindhya Vasini, Bolani; Geetanjali Enterprises, Bokaro and Vidhividhan Engineers, Rourkela. Tender to be cancelled based on recommendations of TC meeting (held on 19 &amp; 26.2.2019). Tender cancelled after approval of Competent authority. Re-tendered with TOD on 01.10.2019. TOD extended to 25.10.2019 due to receipt of single offer. No further offers received. Case referred to Screening Committee in view of the request of prospective bidders for relaxation in Eligibility criteria. Original tender cancelled. Eligibility criteria reviewed. NIT floated on 16/01/2020; TOD on 14/02/2020. TOD was extended up to 28.02.2020, as no offers were received, further extended up to 13.03.2020.</li> </ul>

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							<ul style="list-style-type: none"> <li>• <b>Pkg-2C (Balance Electrical works of Tertiary Crusher Building):</b> Tender issued on 08.11.2018, TOD 07.12.2018. 11 offers received viz. M/s IEE Projects; Electro Steel Corporation; Adarsh Controls and Automation; Reliable Hi Tech; Power Max; ECS Engineering; Om Shakti; Real Time Engineering; Incotech Engineering; Devika Electrical; Sai Electricals. Techno-commercial evaluation completed. RA failed. Price discovered through Physical bid opening on 30.12.2019. L-1 offer was 97% above the estimate. The case is under consideration of TC. TC during its meeting on 22.01.2020, decided to ask L-1 bidder to submit their BOQ along with rates, so that same can be compared with the estimate prepared by CET.</li> <li>• <b>Pkg-2D (Construction of Retaining wall of Tertiary Crusher Building):</b> TS received from CET. To be tendered.</li> <li>• <b>Pkg 04 - Balance work of D &amp; Panposh Crusher &amp; Conveyor system – Not yet Tendered.</b></li> </ul>
	<p>RPN Package-3 of Pkg-2E: Balance Work for New Crusher Building &amp; Associated Conveyors near 600TPH Plant</p> <ul style="list-style-type: none"> <li>• Secondary Crusher House building including installation of Cone Crusher (already supplied)</li> <li>• Associated Conveyors, JHs, Cranes</li> <li>• Related Civil, Structural &amp; Electrical works</li> </ul> <p>Issues :</p> <ul style="list-style-type: none"> <li>• Party was requesting amendment in Contract due to Additional quantity in different areas even though this is a turnkey contract.</li> <li>• The site work was stopped since Jul'19. Engineer's Notice was issued to the party on 25.07.2019 and it was made clear to the party that no Additional scope can be given under this contract.</li> <li>• Meeting in this regard was held with MD, BTL in the office of ED (Proj), RMD where they agreed to start work without any deviation.</li> <li>• Job started on 27.09.2019. Civil and</li> </ul>	M/s Bengal Tools Ltd.	5.58	3.16	02.08.18	March 20	<ul style="list-style-type: none"> <li>• NIT issued on 07.10.2017 with TOD of 07.11.2017. TOD extended till 21.11.2017. 10 offers received - Vidhividhan Engineers; Maa Vindyavasini; HMTC Engg.; BTL EPC Ltd.; Hamtek technology; Graduate Agro; Indiana Conveyors; Powermax; Edifice Engg.; Geetanjali Enterprises. Final TC meeting held on 30.05.2018. RA held on 12.06.2018 and M/s BTL EPC Ltd became L-1 bidder.</li> <li>• LOA issued to M/s BTL EPC on 03.07.2018 at Rs. 5.85 Crore with a completion schedule of 15 months. Kick Off meeting held on 07.09.2018. LOA was issued to M/s BTL EPC Ltd. on 03.07.2018. Contract signed on 28.11.2018. Party started site activities w.e.f.18.12.18.</li> <li>• Retaining Wall : Completed in all respect on 07.11.2019. JH-JS - Casting of first floor &amp; Second Floor with ironite flooring and casting of ground floor, painting of JH has been completed. Sheeting is pending. JH-TT-1 : Casting of all 04 nos Foundation along with Bolt fixing and sand pit has been completed. Structural erection started on 06.12.19. Till now structural erection of 16T/49T has been completed. R-1: Erection of Drive Frame has been completed. Erection of Mechanical Eqpt (Gear box, Pulleys. coupling, Motor, stringer, shortpost, Belt) is pending. R-2: Casting of Trestle &amp; VGTU FDN has been completed. Structural erection was started on 14.11.19. Till now, structural erection of 24.0MT/ 42MT has been completed. Erection was held up since 19.11.19 to 06.12.19 for want of strl steel. Strl steel (22.3MT) recd at site on 06.12.19. Strl fabrication is in progress. R-3 Conveyor : Casting of all 08 nos. footing has been completed.</li> </ul>

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	structural work in progress.						Casting of Tail Fdn with Bolt fixing has been completed. Strl erection started on 30.01.2020. Till now, structural erection of 3.3MT/ 18MT has been completed. Sec Crushing Building (SCB) : Casting of all 17nos Plinth beam, all 23 nos column with Bolt fixing of Fdn Bolts and back filling has been completed. Structural erection is in progress. Till now 115.0MT has been erected out of 145.674MT. Casting of ground floor & 1st floor ( at + 506.30 level has been completed. R/F binding, staging & shuttering for floor (Belt Feeder) at +511.4 level completed on 01.02.2020 and casting completed on 03.02.2020. ECR Building : 1) Construction of ground floor with roof casting has been completed. Brick work of ground floor has been completed and wall plastering is in progress. Roof casting of 1st floor completed on 14.02.2020 (41.7m3). R/f & shuttering of 07nos column has been completed.
vii.	Power Supply package (pkg-2F) <u>Issues :</u> <ul style="list-style-type: none"> <li>No site activities since 30.04.15. Engineers Notice issued on 18.08.2015.</li> <li>Site activities restarted by party in Jun'16 and stopped on 01.11.16 as time extension was up to 30.10.16. Time extension granted upto 30.09.2017. Further, extension granted up to 31.12.2017.</li> <li>Entire front not available for execution.</li> <li>Non-availability of Forest Clearance at D and Panposh area and agitation of local people at Tailing Pond Area.</li> <li>Contract to be foreclosed.</li> <li>Major work at clear front has been completed and party has applied for PAC.</li> <li>Balance work will be taken up separately on availability of fronts.</li> </ul>	OM Shakti Enterprise	6.98 Gross – 7.23	5.31	04.04.12	Apr'13/ -  (Except D Area, Panposh, Tailing Pond)	<ul style="list-style-type: none"> <li>Design Engg. completed.</li> <li>Retrofitting of 03 old Panels 6(spare), 16(600 TPH), 17 (D &amp; Panposh) at MRS completed. Charging of panel no. 6 completed on 14.09.13.</li> <li>Installation of 02 new panels (18 &amp; 19) at MRS &amp; One new panel at Washing Plant completed.</li> <li>Re-routing of 11 KV lines to PSP completed for the construction of sub-station for Tertiary Crushing unit. HEME Substation erected. Over head line erection from MRS to 600 TPH is under progress.</li> <li><b>Sub-station (SS-5)</b> building near 600 TPH completed. Erection of one no. HT Transformer and 4 nos. HT panels completed on 13.06.14. Testing of HT Panels, Fixing of electrical accessories completed. Pole erection for drawing power from MRS is in progress. Flooring is completed. Brick work &amp; Plastering for Plinth protection and Drain around Sub-station Bldg completed. Format for DGMS approval has been handed over to Party. Party has submitted all documents for DGMS approval. DGMS approval is awaited. Balance works completed in Nov'18 and Party has applied for PAC.</li> <li><b>Sub-station at PSP (SS-7)</b> : Sub-station Bldg &amp; Erection of electrical equipments completed. Test Charging of O/H line from MRS to SS-5, HT Panels, HT Transformer, PCC Panel &amp; various DBs has completed. Format for DGMS approval has been handed over to Party. Party has submitted all documents for DGMS approval. DGMS approval is awaited. Installation of capacitor bank completed and miscellaneous control cable termination completed in Oct'18. Balance works completed in Nov'18 and Party has applied for PAC.</li> <li>Balance work – NGR (Neutral Grounding Resistor Panel), Capacitor Bank panel, Ventilation fan and Misc. sanitation jobs.</li> <li><b>Sub-station at HEMM Shed (SS-8)</b>: Erection of Pole mounted Transformer &amp; Poles to draw power from Campus store to HEMM shed completed. Drawing of 11KV Conductor completed. Muffing of erected</li> </ul>

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							<p>Electric Pole and Earthing work for Transformer completed</p> <ul style="list-style-type: none"> <li>No work since Apr'17. Letter sent to Party on 07.08.2017 to resume the work at site. Work restarted by Party and inter-connection of Bus-bars of 04 nos Panels at MRS done on 31.08.2017 during shutdown.</li> <li>No site activities since 11.09.17. Meeting with Om Shakti was held at RMD, Kolkata on 30.10.17 and MOM signed regarding completion of balance works at clear front. Accordingly, Time extension granted to the party up to 31.03.2018.</li> <li>For SS-8, Earthing work completed in Mar'18. Test charging of Overhead line and Transformer done on 23.03.2018.</li> <li>Major work at clear front has been completed. Party has liquidated maximum defects which were enlisted during meeting on 09.02.19. All the completed facilities at MRS, Washing Plant, SS-5 at 600TPH, SS-7 at PSP, SS-8 at HEMM have been taken over from party as per provision of clause no. - 26.2 of Contract agreement.</li> <li>Contract to be foreclosed.</li> </ul>
viii.	<p>Instrumentation and Automation with PLC system (pkg-2G) – for following: Existing Crushing &amp; Washing plant; New Tertiary Crushing &amp; Screening plant; New Crushing plant at Panposh, D Area, near existing 600 tph C&amp;S plant, New pump house at Tailing pond</p> <p><u>Issues :</u></p> <ul style="list-style-type: none"> <li>No work since 04.07.16.</li> <li>BOM wants to keep the existing Relay Logic Control System. This requires additional Control cables and alternate location for PLC / RIO Panel.</li> <li>Proposal for obtaining approval for installation of PLC / RIO Panel at alternate location keeping existing logic control panel in the existing control room, subject to financial concurrence for procurement of approx. 4000 mtr length control cable has been processed for approval in Dec'16. Clarifications sought by RMD, Kolkata have been replied by Mines on 28.01.17. Approval for cable procurement accorded by RMD, Kolkata on 14.02.2017. Cable received at site on 01.09.2017</li> <li>Entire front not available for execution.</li> </ul>	Technisys Engg	6.92 Gross – 7.75	6.13	10.04.14	Apr'15/ Dec '20	<ul style="list-style-type: none"> <li>Kick-Off meeting held on 08.07.14.</li> <li>Fibre Optic Cable, Control system (Console), Wireless Communication system, PLC Panels received at site.</li> <li>Shifting of panels commenced from 12.10.2015.</li> <li>Two nos control desk shifted near to CP-1 of Crushing for installation.</li> <li>Erection group reached BOM on 01.02.16 and erection started on 09.02.2016. Erection of 10 nos Panel, 01 no. Control desk, 04 nos UPS &amp; 01 no. ISO Servo done in Feb'2016.</li> <li>Dismantling of existing Toilet inside Control room of Karo Pump house to accommodate Control desk completed in Jul'16.</li> <li>Dismantling of MCC Panel for Conv. WFC-2 at JH-WJ-1 done. Shifting and handing over of MCC Panel for Conv. WFC-2 to Electrical store done.</li> <li>No work since Jul'16 as additional requirement of control cable for commissioning of new PLC system keeping the existing Relay Logic Control is to be procured.</li> <li>Open tender floated for procurement of 4000 m Control Cable on 20.03.2017 with TOD of 20.04.17. As only 2 offers were received, TOD was extended to 18.05.2017. Five offers received. Order placed on MEM Industries on 21.06.2017; Cable received at site on 01.09.2017. M/s Technisys asked to start the balance works. Bolani issued a reminder to the party on 16.09.2017.</li> <li>Party resumed work on 27.10.17. Aluminum cable hardware work completed in Nov'17. Power and control cable laying at Crushing Plant completed in Nov'17.</li> <li>Power &amp; Control cable laying, Termination with PLC panel at Hirakud SS, Karo Pump house and TP-19 has been completed. Termination with existing Logic Relay Panel is pending, will be done during shutdown.</li> </ul>

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	<ul style="list-style-type: none"> <li>Agitation of local people at Tailing Pond Area.</li> </ul>						<ul style="list-style-type: none"> <li>Laying of FO cable in progress at washing area. Party stopped site activities since 18.01.18. Work resumed by party on 22.02.2018 and erection of UPS at Karo Pump House and Hirakud sub-station completed. Laying of FO cable of Crushing Plant area completed in Apr'18.</li> <li>PLC work for Crushing section completed on 05.05.2018. Defect Liquidation work completed in Jun'18.</li> <li>Party mobilised site for work in Washing plant area on 23.06.2018. Cable laying and termination from existing Relay Panel to PLC Panel completed in Jun'18. Charging of Transformer for UPS – 1 and 2, Internal wiring at Control Desk and Software installation completed in Jul'18.</li> <li>Party resumed the site activities on 01.06.19, which was stopped since 03.05.2019.</li> <li>Cable laying from existing Relay panel to PLC panel completed. Equipment at CWPH erected.</li> <li>Software installation and SCADA for CWPH completed. Graphic and Logic design completed.</li> <li>Washing Plant: During Shutdown taken from 18.09.2019 to 30.09.2019, Integration / Commissioning of PLC System for running 13 Nos drives, DD Screens (308A &amp; 308B) of W/Plant through PLC completed.</li> <li>TP-19: Testing / commissioning / integration with PLC System for running of all Drives / Motors of Conv. FS-1, FS-2, FC-4, FS-3 Tripper Conveyor and Tripper LT have been completed on 06.02.2020 with Washing Area Control room PLC (CP-2) during shutdown period from 28.01.2020 to 06.02.2020. Installation of 01 no AC done on 15.02.2020.</li> <li>Hirakud Sub-Station : Job started on 27.02.2020. Laying of FO cable from TP-19 to Hirakud Sub-station is in progress.</li> <li>CMS Bldg : Shifting of all console to CMS Bldg has been completed.</li> </ul>
ix.	<p>Reclamation of water from Tailing pond (pkg-2H) – Providing recovery system of settled water from Tailing pond up to existing Make-up water tank by installing pumps, valves and pipelines, etc.</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>Work is suffering due to agitation from local people. Matter has been taken up with District Authority for site clearance from the villagers.</li> <li>Party has requested for commercial closure on 10.02.2017.</li> </ul>	Kirloskar Brothers	9.12 Gross – 9.95	7.76	01.09.11	Feb'13/ ---	<ul style="list-style-type: none"> <li>Basic Engineering completed and Detail Engineering is in progress. supply of equipment completed.</li> <li>Survey work for LP pump house has been completed.</li> <li>350 NB pipes (to be supplied by SAIL-BOM) for extension of slime line received at site on 17.02.14.</li> <li>Supply of all DN 600 pipe completed. Total 3010.93 Mtr (258 Nos) pipes have been supplied.</li> <li>Instrumentation items like pressure gauge, monitoring system, junction boxes etc have been received.</li> <li>Taper plug valve, Air release valve and Gate valve received at site.</li> <li>Another attempt for measuring of land was done for demarcation purpose on 28.06.16, could not succeed due to strong agitation by local people.</li> <li>Meeting held between party and RMD on 07.10.16.</li> <li>Meeting again held between party and RMD on 07.02.2017. Party</li> </ul>

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							<p>requested for Commercial Closure of Contract on 10.02.2017. Proposal for Commercial closure sent by Mines to RMD, Kolkata for approval on 20.03.17; discussions held on 28.03.17 at RMD, Kolkata.</p> <ul style="list-style-type: none"> <li>Committee constituted in Jul'17 to examine different aspects and to decide the modalities of Commercial Closure. Discussions between Committee members and M/s KBL held on 22.08.2017. Conditional signed MOM received from M/s KBL on 21.09.2017. Committee report to be finalized.</li> <li>Contract to be foreclosed. Committee constituted for commercial closure and report sent by Mines to HQ on 10.09.2018. KBL personnel visited site on 5 - 6.12.2018. Reconciliation and handing over – taking over of materials completed.</li> <li>BG returned to party on 18.02.2019. Commercial settlement is in progress.</li> <li>Committee recommendations have been approved. But party is not accepting the recommendations. Discussions being held with the party.</li> </ul>
x.	<p>Supply and Installation of Stacker and Bucket Wheel Reclaimer - pkg-2l 01 Stacker – 1800 tph and 01 Bucket Wheel Reclaimer – 2000 tph at Secondary Stockpile.</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>Commissioning &amp; PG Done for Stacker.</li> <li>Commissioning of Reclaimer done.</li> <li>PG Test of Reclaimer not done due to failure of Hydro-motor. After Hydro-motors are put into operation, FL Smith will be asked to do the PG test.</li> </ul>	FL Smith	<p>15.50 Gross – 16.68</p>	16.28	22.11.10	Jul'12/Dec'14	<ul style="list-style-type: none"> <li>Erection work of Stacker and Reclaimer completed.</li> <li>Trial run, Load Test and Commissioning of Stacker and Reclaimer completed. Equipments have been put into operation.</li> <li>Inauguration of Stacker &amp; Reclaimer done on 25.06.15.</li> <li>Breakdown of Reclaimer took place on 01.03.16 as Bucket wheel of Reclaimer was hitting the main boom structure &amp; receiving chute. Rectification work was started by M/s F L Smith on 20.05.16 and completed on 22.06.16. Trial run done on 22.06.16 and Reclaimer put into operation on 01.07.16.</li> <li>Problem in long travel drive observed in Reclaimer on 04.07.2016. M/s F L Smith attended the job on 14.07.2016 and put it in operation from 15.07.16.</li> <li>Dismantling of old Stacker started from 18.07.2016 and completed on 30.08.16. Dismantled material shifted from site by 10.09.16.</li> <li>Radio Modem and its accessories for both Stacker &amp; Reclaimer have been received at site. License for Radio modem is yet to be received.</li> <li>Engineers of the Party visited site to attend to slew and LT defects of Reclaimer on 18.01.17, rectification completed on 20.01.17.</li> <li>PG Test of Stacker done on 21.02.2017.</li> <li>PG Test of Reclaimer could not be done due to defect in Slew mechanism. Hydraulic pump of Slew sent to Ahmedabad for repairing on 28.02.2017, received back on 16.03.2017 and installed. However, problem was observed in 2 nos. Hydraulic motors and the same were dismantled on 23.03.2017 and sent to Ahmedabad on 13.04.2017 for repairing. Proposal processed by mines on 22.06.2017 for approval of Rs. 37 lakhs towards repairing. RMD, Kolkata has suggested to consider the proposal of repair / replacement at Mines level. Proposal cleared by internal committee of Mines on 04.10.2017 and sent to ED l/c for approval on 17.10.2017.</li> </ul>

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							<ul style="list-style-type: none"> <li>As repairing of motors was not economically viable, proposal for procurement of 2 nos. new Hydraulic motors was sent by Mines to RMD, Kolkata on 18.04.2018. Approval accorded by RMD HQ to Mines on 12.06.2018.</li> <li>Supply of 02 nos Hydro Motor by M/s Aditya Enterprises (authorized dealer of M/s Maha Hydraulics), make-Mascot completed on 10.01.2019.</li> <li>Party intimated on 07.02.19 that presently Machine is not in a condition to install Hydro motor. Before installation, servicing of complete machine is required, which involves huge cost implication. BOM has procured one set flushing machine. M/s Maha Hydraulics has been asked to depute their Service Engineer for installation of Hydraulic Motor. Party arrived on 17.04.19 for installation of Hydraulic Motor. Flushing &amp; installation of Hydraulic Motor completed on 01.05.19.</li> <li>During trial run, it was observed that Hydraulic pump of power-pack is not developing sufficient pressure (developing pressure of only 20 bars in place of 150 bars). Failure of Hydraulic Pump of power-pack is suspected. Budgetary offer for procurement of 01 no. Hydraulic Pump has been received from M/s Parker. PO was placed on M/s Sison Hydraulics for supply of 01 no. Hyd Pump on 04.09.19. New pump installed on 05.12.2019, but there was some issue with PLC. PLC engineer to attend the same.</li> </ul>
xi.	EOT Cranes and Electric Hoists (Pkg- 2J)  03 EOT Cranes for Tertiary Crushing building, 600 tph building and HEMM shed  <u>Issues</u> <ul style="list-style-type: none"> <li>Linked to pkg-2E and Pkg 3B1</li> <li>Non-availability of front</li> <li>Erection &amp; Commissioning of balance 2 cranes not done.</li> <li>2 cranes to be commissioned after completion of facilities at Tertiary Crushing area and 600 tph area.</li> </ul>	Alpha Services	3.02 Gross – 3.40		30.08. 15	Dec'16 / Mar'20	<ul style="list-style-type: none"> <li>LOA issued on 31.07.2015. Contract agreement signed on 28.09.2015.</li> <li>Inspection call given by M/s Alpha Services to RMD, which was referred to Project Directorate by RMD. Inspection of Cranes by officials of Projects Directorate done on 06.10.16 at Bhiwadi and inspection report sent to RMD on 18.10.16. Billing schedule approved and Material dispatch clearance given on 15.11.16.</li> <li>All 03 EOT Cranes (40/10T, 35/10T &amp; 25/5T), 04 nos Electric Hoists and Commissioning Spares received at site.</li> <li>Erection of 40/10T Crane at HEMM Shed completed in Jan'17, to be commissioned. Commissioning is pending due to pending works (Fixing &amp; Alignment of Rails &amp; non-availability of power supply) under separate packages.</li> <li>Erection of 35/5T EOT Crane in Tertiary Building at PSP and 25/5T EOT Crane in Secondary Crushing Building near 600TPH is pending due to non-availability of front clearance.</li> <li>Officials of M/s Alpha Services visited on 27.02.18 &amp; 28.02.18. MOM signed regarding future course of action for completing the jobs.</li> <li>Party has been asked to submit Application for Extension of Contract period and completing the statutory obligation as fronts for erection and commissioning of EOT cranes at SCH – 600 TPH &amp; HEMM Shed will be available shortly.</li> </ul>
xii.	Works Package (pkg-2K)  Scope – Civil works of other packages.	H. R. Constructions	4.46 Gross – 4.46	2.19	30.05.11	Nov'12/ July '19 (Available Fronts)	1) GPS Bldg.- Job has been completed and handed over to user Deptt. (Mining) w.e.f. 06.12.19.

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	<u>Issue:</u> <ul style="list-style-type: none"> <li>Work at Tailing pond area could not be taken up due to agitation of locals.</li> <li>Delay in other packages is causing delay in completion as the scope is to carry out Civil &amp; Structural jobs as per need of other packages.</li> <li>To be foreclosed after completion of jobs at available fronts.</li> </ul>						<p>2) Extension room of RCPH - Job has been completed and handed over to user Deptt. (Plant) w.e.f. 06.12.19.</p> <p>3) CMS Bldg - Construction of Building along with Flooring, Tile fixing, Window fixing &amp; Electrification has been completed. Wall putty &amp; distemping work , Concrete &amp; APP coating of roof, False Ceiling, Fixing of Aluminium door &amp; window, sanitation &amp; water line connection work has also been completed. Fixing of Electrical fittings has started on 24.02.2020 and is in progress.</p> <p>4) D-area Office Bldg - Construction of Building is completed. App coating for roof water proofing completed on 24.12.2019. Electrification, Sanitation and Distemping &amp; Painting is pending. No work since 25.12.2019.</p> <p>5) 600 TPH Office Bldg - Job has been completed and handed over to user Deptt. (Plant) w.e.f. 06.12.19.</p>
xiii.	<p>Maintenance Shed for HEMM (Pkg 3B-1)</p> <p>Maintenance Shed for HEMM along with Handling rooms.</p> <p><u>Issue:</u></p> <ul style="list-style-type: none"> <li>Work was stopped in Nov'16 as Civil and Structural quantity as per BOQ got exhausted.</li> <li>Committee formed by ED (projects), RMD to assess additional quantity. Report submitted by committee on 15.12.16; revised report submitted on 09.01.2017. Approval for 1<sup>st</sup> interim deviation received on 02.02.2017.</li> <li>Two member committee formed on 15.02.2017 for certifying the actual quantities executed.</li> <li>Some of the scope at High-pressure washing system has been taken out from the party as the drawing &amp; designing is dependent on High-pressure washing system package. It has been clubbed with the TS for High-Pressure system.</li> </ul>	HR Construction Ltd	5.60 Gross – 5.60	5.45	15.10.14	Nov'15/ Jun '20	<ul style="list-style-type: none"> <li>Site activities started on 09.01.2015.</li> <li>Civil works for all foundation to start erection work completed.</li> <li>Erection of structure started on 09.02.2016. Erection work stopped due to non-availability of Structural materials on 16.06.16. Fabricated Structural materials (32.662MT) received at site in July'16 and Structural erection restarted on 11.08.16.</li> <li>Two member committee constituted on 15.02.2017 by GM (Mines) for assessment of executed work.</li> <li>Party submitted execution schedule for balance work on 29.04.2017 wherein start of work on 15.05.2017 was indicated. Party mobilized manpower to resume work on 13.10.2017.</li> <li><b>Civil Works</b> : Floor casting &amp; Roof casting of 09 rooms has been completed. Floor casting of Dumper / Dozer / Excavator Maint Bay is also completed. Party started Ironite flooring work of Maintenance bay on 13.12.19 and completed on 20.02.2020.</li> <li><b>Mechanical Works</b> : Party started erection work on 16.02.18. Supply of total 467.135MT Fabricated Structural Items as per scope including 152.135MT (Deviated Quantity) has been completed and Erection of 466.735 MT out of 467.135 MT has been completed. Erection of total 144 R/M CR-80 rail (12Pcs) has been completed. Party started Rail alignment work on 24.12.19 and completed on 26.02.2020. CGI Sheet (5.320MT) out of 32.0MT (Approx.) received on 12.12.19. Sheeting work for 5.320 MT was started on 25.12.19 and completed on 21.02.2020. Now sheeting work is held up since 22.02.2020 for want of CGI Sheet. Party resumed the site activities on 17.02.2020, which were stopped since 31.12.2020 due to non-availability of Time extension of Contract period.</li> </ul>



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xiv.	Electrics for HEMM Shed (Pkg 3B-2) <u>Issue:</u> • HEMM shed not completed.	Rally Tech Services Pvt. Ltd	0.23				<ul style="list-style-type: none"> <li>• LOA issued on 30.01.2016. Contract could not be signed due to non-availability of fronts. Letter for cancellation of work issued on 02.04.2018.</li> <li>• NIT issued on 01.09.2018, TOD on 21.09.2018. No offers received. TOD extended till 05.11.2018 and then till 04.12.2018.</li> <li>• Tender cancelled as no offers received after three attempts.</li> <li>• CET was requested to revise the cost estimate on 20.12.2018. Revised cost estimate received on 05.02.2019.</li> <li>• Screening Committee meeting held on 26.07.2019. After revision in DOP of GM (Mines), proposal file has been sent to Mines from RMD, Kolkata on 05.08.19 to initiate tendering action at Mines. Contract Cell to initiate tendering action.</li> <li>• NIT uploaded on 28.01.2020 with TOD as 03.03.2020. TOD has been extended up to 28.03.2020.</li> </ul>
xv.	PKG-3B-3: Supply & Installation of High Pressure Washing System at HEMM shed						<ul style="list-style-type: none"> <li>• NIT floated on 30.11.2019 with TOD 31.12.2019. No offer received.</li> <li>• TOD extended to 17.01.2020. No offer received.</li> <li>• TOD further extended to 04.02.2020. No offer received.</li> <li>• Matter has been referred to CET for review of Eligibility criteria.</li> </ul>
xvi.	PKG-3B-4: Supply of Compressor and Air Receiver at HEMM shed	M/s Airgases Projects Pvt Ltd			9.8.18		<ul style="list-style-type: none"> <li>• Purchase Order placed on M/s Airgases Projects Pvt Ltd on 09.08.2018. Dispatch clearance given to party for supply of Air Compressor on 28.05.2019.</li> <li>• Air Compressor and Air Receiver received on 03.07.2019 and 29.07.19 respectively.</li> <li>• Installation will be done under PKG-3B-1 by M/s H R Construction.</li> <li>• Casting of Foundation for installation of Air Receiver completed by M/s HRC on 28.11.2019. Erection is pending.</li> </ul>
xvii.	PKG-3B-5 : Fabrication , Supply and Erection of additional steel (45.236MT) required for completion HEMM Maintenance Shed	M/s S K Rai	36,16,301.00		15.04.19	<b>Aug'19</b>	<ul style="list-style-type: none"> <li>• Tender opened on 28.12.2018. Three no. bids received. Price bid opened on 08.02.2019. M/s S K Rai became L-1 bidder. WO issued to the party on 29.03.2019. Party has completed total structural erection work as per scope of work order. Completion Certificate issued on 03.08.19 W.E.F.- 30.07.19.</li> </ul>
xviii.	PKG-5 : GPS based Mines Management System						<ul style="list-style-type: none"> <li>• Split in two parts. Tendering in first part done for procured HEMM.</li> <li>• NIT was uploaded on 19.12.2019 with TOD as 18.01.2020. No offers were received. TOD extended up to 12.02.2020. Further extended up to 26.02.2020, as no offers were received. Tender opened on 26.02.2020. 03 (three) offers have been received. Techno-commercial evaluation is under process.</li> </ul>
xix.	PKG-6: CCTV Based DVRMS						<ul style="list-style-type: none"> <li>• Split in two parts. Tendering in first part done for areas where Plant Augmentation job is complete.</li> <li>• Tender Notice was issued on 21.12.2019. Tender opened on 22.01.2020. 03 (three) no. offers have been received. Techno-commercial evaluation is under process.</li> </ul>
xx.	PKG -8 : Procurement of HEMM						<ul style="list-style-type: none"> <li>• 1 excavator, 3x100 T dumper, 2 drill, 2 dozers, 1 water sprinkler etc. ordered and received.</li> </ul>

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							<ul style="list-style-type: none"> <li>Order to be placed for remaining equipment (3X100 t Dumper, 1 drill, 1 water sprinkler, 2 wagon drills etc.)</li> <li>To be ordered after contractual mining is replaced by departmental mining at D and Panposh area.</li> </ul>
xxi.	Survey & Soil Investigation (Pkg-7)	P K De & Associates	0.06	0.06			Job Completed
2	<b>Expansion of Gua Iron Ore Mines to 10 MTPA along with 12.5 MTPA Beneficiation Plant (10 MTPA ROM + 2.5 MTPA Dumped fines) and 4 MTPA Pellet Plant</b>		4749 (969) Gross – 5104.00	123.51		40 months from May'14 i.e Sep'17 Rev– 47 months from May'14 i.e. Apr'18; extended up to Oct'18; No further extension granted;  Contract cancelled on 5.08.2019	<ul style="list-style-type: none"> <li>Approved by SAIL Board on 14.02.14</li> <li>Sanction letter issued on 02.04.014</li> <li>Contract cancelled on 05.08.2019.</li> <li>Re-tendering to be done after revisiting the requirement and the technological changes &amp; statutory provisions in the intervening period.</li> <li>CET has been given the assignment for finalization of the plan.</li> <li>Scheme revisited and finalised as under by CET: <ul style="list-style-type: none"> <li>12.5 MTPA Crushing and Beneficiation facilities</li> <li>2 MTPA Pellet Plant (capacity of Pellet Plant to be ascertained after completion of test results)</li> </ul> </li> <li>M/s. L&amp;T has submitted a claim of approx.. Rs. 250 crore plus 4430799(\$ and 34686864 (Euro) in lieu of the jobs done by them.</li> <li>Letter has been given to L&amp;T on 25.09.2019 for amicable settlement.</li> <li>A high level Committee has been constituted for amicable settlement with M/s. L&amp;T. Discussions underway.</li> <li>EOI floated for Beneficiation and Pellet plants on BOO basis.</li> </ul>
i.	Crushing, Beneficiation and Pellet Plant (Pkg-001)  <u>Issues:</u> <ul style="list-style-type: none"> <li><u>Statutory Clearances</u></li> <li>Non-availability of Stage-II FC for 361.295 Ha Mining lease area: The proposal for Stage-II FC has been recommended by Jharkhand State Govt. in July'15 and it is under consideration of MoEFCC, New Delhi. Matter is being followed up at each level of PMG, CCI, PMO, MOS, MoEFCC. Issue taken-up by Secretary (Steel) with Secretary (MOEF) vide letter dated 07.02.2017.</li> <li>The site for project work was to be handed over within 4 months i.e. by Aug'15. Due to non-availability of Stage-II FC for 361.295 Ha Mining lease area and Surface Lease renewal, the site could not be handed over as planned.</li> </ul>	L&T / Outotech	2742.84 Gross – 3019.84	-	03.05.14	36 Months from handing over of site after Stage II FC	<ul style="list-style-type: none"> <li>LOA issued on 04.04.2014.</li> <li>Tripartite Agreement between SAIL, Larsen &amp; Toubro Limited and Metso Minerals (Sweden) AB signed on 31.03.2015.</li> <li>Contract Agreement signed with M/s L&amp;T and Consortium on 02.04.2015. The effective date of contract is 03.05.2014.</li> <li>L&amp;T has set up site office.</li> <li>Survey work completed.</li> <li>Soil Investigation under progress.</li> <li>Plot plan approved by MECON on 19/01/16.</li> <li>Basic Engineering will start after finalisation of Test results.</li> <li>Stage II FC for 37.66 Ha of Jungle-Jhar land in Surface Lease area received from MoEFCC, Ranchi on 04/03/2016.</li> </ul> <u>Test works:</u> <ul style="list-style-type: none"> <li>Permission for dispatch of material to NMDC, Hyderabad received on 5th June 2015. Material reached NMDC Hyderabad on 17th June 2015. Permission for dispatch of material for destinations MINTEK, South Africa as well as GTK Finland received on 30th June 2015 from Mining Department of Jharkhand.</li> <li>Interim test results for DF (dumped fines) and BO (beneficiable ore) has been submitted by L&amp;T. Submitted sample Test results not found in order (not conforming to output parameters mentioned in the contract) and the same is under discussion with L &amp; T / Metso.</li> <li>In the meeting held on 07.06.2016 between RMD, MECON, L&amp;T and</li> </ul>

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	<ul style="list-style-type: none"> <li>- Site will be made available for excavation (cutting &amp; filling work) after availability of necessary clearances from the Government and tree felling.</li> <li>- Project land at Birsa Nagar &amp; Baazaar area is occupied. In this area, facilities related to Pellet Plant including input material yard have been envisaged.</li> </ul> <ul style="list-style-type: none"> <li>• <u>Test works</u>: Beneficiation Test Results completed. Test work for Pelletisation under progress.</li> <li>• Tendering for remaining linked packages.</li> </ul>						<p>Metso, it was mutually agreed that additional sample is required to carry out test work for Lump &amp; Fines Jig Streams.</p> <ul style="list-style-type: none"> <li>• Sample sent to SGS and NMDC on 23.07.2016 for analysis and report received on 22.09.2016. However, as the Test results were found to be in variance from Contract Technical Specification, it was decided to send further samples for testing and the same was sent to M/s SGS on 29.09.2016 and report received by RMD on 19.10.16. The same was discussed between RMD and MECON on 04-05.11.16 and it was decided to send samples to RDCIS for testing. Samples sent to RDCIS on 30th Nov'16 and report submitted by RDCIS on 14.12.16. M/s L&amp;T / METSO was requested by RMD on 22.12.16 to lift Lump (10-40 mm) and fines (-10 mm) samples for further testing. 25 Tonnes of Iron ore samples handed over to L&amp;T / Metso for testing at NMDC, Hyderabad and the same has reached NMDC, Hyderabad on 21.01.17. NMDC started the test work on 03.02.2017. A team of 3 executives from MECON, Gua and P&amp;D, RSP visited NMDC, Hyderabad twice (6-7.03.17 and 30.03.17 – 01.04.17) for discussion on Sampling and Test results. SAIL/ MECON witnessed Jig test on 24-25.05.2017. Test Work for Lump and Fines Jig have been completed in Jun'17 and accepted. Further, L&amp;T / METSO has sent the Jig rejects from NMDC, Hyderabad to GTK, Finland for pilot &amp; batch scale test in Aug'17. One official each from SAIL and MECON visited Finland for witnessing test works during 9-20.10.2017. Test results received. Pilot scale tests for Fines beneficiation held at GTK, Finland in Dec'17 and report received. Pelletisation test done at Outotec, Germany, report received and under examination by MECON.</li> <li>• Re-location of Authorised / Un-authorised Occupants: <ul style="list-style-type: none"> <li>- 108 Prefab Quarters (M/S Lloyd Insulations) constructed to shift Authorised occupants. Construction of all 27 blocks completed. Shifting of occupants (108) completed.</li> <li>- Construction of 160 Dwelling Units for Un-authorised occupants <ul style="list-style-type: none"> <li>Part – A (110 Dwelling Units) : Contract signed with M/s Electro-Mech Engineers on 10.02.2016. Total 11 blocks – Work completed.</li> <li>Part - B (50 Dwelling Units): Contract signed with M/s Jyothi Construction on 03.02.2016. Work completed.</li> </ul> </li> </ul> </li> </ul> <p>Un-authorised occupants (160) have been evicted and the area is under control of Gua Ore Mines.</p>
ii.	Appointment of Consultant for rendering Project Management Services	Essar Projects (India)	12.00 Gross-13.68	-			<ul style="list-style-type: none"> <li>• LOA issued on 11.01.2016.</li> </ul>
iii.	Power Distribution 220/11kV MRS, 11/3.3kV HTSS, SAS/SCADA and Transmission Line			-			<ul style="list-style-type: none"> <li>• Tender floated on 25/01/2016 with TOD on 09/03/2016.</li> <li>• Pre bid meeting held on 09.02.2016 in which 08 bidders participated (Siemens, Sterling &amp; Wilson, L&amp;T, ABB, Enmas Power- Chennai, Honeywell, McNally Bharat &amp; Alstom).</li> <li>• 1<sup>st</sup> Extension of TOD – 29.03.2016; 2<sup>nd</sup> Extension of TOD –</li> </ul>

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	<ul style="list-style-type: none"> <li>• 220/11 kV MRS</li> <li>• 3 HTSS (Crushing Plant, Beneficiation Plant and Pellet Plant)</li> <li>• Related infrastructure</li> </ul> <u>Issues</u> <ul style="list-style-type: none"> <li>▪ Forest clearance awaited.</li> </ul>						<p>19.04.2016; 3<sup>rd</sup> Extension of TOD – 05.05.2016.</p> <ul style="list-style-type: none"> <li>• 4 offers received - M/s L&amp;T; M/s ABB India Ltd.; M/s Alstom T&amp;D India Ltd. and M/s Siemens Ltd. Offers under evaluation by MECON. Tender discussions completed on 20-21 Sept'16. Techno Commercial evaluation completed. TAR received from MECON on 03.06.2017.</li> <li>• Tender cancelled in Oct'18. Being reviewed by MECON.</li> </ul>
iv.	<p>Power from JUSNL</p> <ul style="list-style-type: none"> <li>• 2 nos. 220 kV Bay Extension work at 220/132/33 kV Ulijhari (Chaibasa) Substation.</li> <li>• 220 kV D/C from Chaibasa to Gua</li> </ul> <u>Issues</u> <ul style="list-style-type: none"> <li>▪ The project cannot be commissioned unless MRSS is ready.</li> <li>▪ The possibility of setting up small MRSS to utilise the T/L for the time being (till the main project is commissioned) is being explored.</li> </ul>		143	51.96		Dec'20	<ul style="list-style-type: none"> <li>• Contract signed with JUSNL in Jul'15 for supply of 220 KV power on Deposit Term basis.</li> <li>• Payment terms re-negotiated with M/s JUSNL. They agreed for "ESCROW" account arrangement.</li> <li>• NIT issued by JUSNL on 09.02.2016 with last date of submission of bids by 29.02.2016. Date extended to 15.03.2016 and further extended up to 30.03.2016. Last date for Bid submission extended further (3<sup>rd</sup> extension) to 11.04.2016. On 13.04.2016 (TOD), 04 offers received from - M/s L&amp;T; M/s Prem Power, Gurgaon; M/s A to Z Maint. &amp; Engg. Services; Jagbandhu - BMW Joint Venture.</li> <li>• Price opened on 11.06.16 by JUSNL, M/s. A 2 Z Infra Engg. Ltd., Gurgaon is L-1 at Rs. 104.54 Cr against estimate of Rs. 93 Cr. After two rounds of price negotiation (06/07/2016) with the L-1 bidder, revised offered price is 12% higher than the estimate.</li> <li>• The firmed up cost of the package is Rs. 124 cr, which is 7 Cr higher than the earlier agreed cost of Rs. 117 Cr.</li> <li>• Order placed by JUSNL on M/s. A to Z Infra on 29.09.16.</li> <li>• Amended agreement signed with JUSNL on 17.06.2016 with provision of opening of an ESCROW account and payment of 21.5% as supervision charges with progressive bills. Draft agreement for ESCROW account has been cleared by Corporate Finance in July'16. Agreement for ESCROW account signed between RMD and JUSNL on 27.09.16; ESCROW account opened in Bank of India, Ranchi. Work to be completed in 30 months from opening of ESCROW Account i.e. by Mar'19.</li> <li>• GSS - For substation, Survey, levelling and structural foundation completed, Major civil works except road completed and 83% equipment erected.</li> <li>• TL - For Transmission Line, Route alignment, survey done. Out of 278 towers, foundation for 124 towers have been completed and 104 towers have been erected.</li> <li>• NOC obtained from PGCIL for 400 KV line crossing. NOC from DC for Govt Land and Jungle- jhar obtained.</li> </ul>

**Sustenance Schemes - under Expansion**

S N	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status  RMD
	<p><b>Enhancement of Loading Capacity at Bolani Iron Ore Mines</b> (Installation of Stacker and Reclaimer; Installation of long Conveyors – LC3 &amp; LC4 with movable Trippers for Full Rake loading; Installation of Conveying system from Fines stockpile to Loading yard; Modification of existing conveyors; Dust suppression system)</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>▪ PAC for commissioned facilities issued on 26.08.13. Part commissioning certificate issued on 09.09.13 has been withdrawn on 15.01.14 due to accident of Reclaimer.</li> <li>▪ An incident of Structural failure of the new Reclaimer supplied by M/s Elecon occurred on 09.11.2013 when work related to addition of counter weights was going on. Three persons working on the Reclaimer fell down &amp; got seriously injured. Two persons succumbed to injuries later.</li> <li>▪ Site activities have been abandoned by contractor since 09.11.13. Engineer's Noticed issued to M/s Tecpro on 23.04.14. Risk Purchase Notice (RPN) issued on 14.08.2014. Balance jobs are being executed in five packages, which have been further divided into 24 sub-packages.</li> </ul>	Tecpro Systems Ltd.	119.88 Gross – 124.88	114.49	24.07.08	<p>Dec'09/ <b>Sep'13 (LC3)</b></p> <p>LC-4 balance – (RLS system in place of LC4 has been envisaged)</p> <p>On-going project will be closed before processing the proposal for RLS.</p>	<ul style="list-style-type: none"> <li>• Out of two lines, one line has been completed and stabilized for full rake loading except Reclaimer.</li> <li>• Stacker commissioned on 13.07.12 and stacking of material started from 28.08.12.</li> <li>• For Reclaimer, counter weight boom buckled and complete Bucket wheel assembly fell on the ground in collapse condition on 09.11.13. <ul style="list-style-type: none"> <li>- Sri P K Singh, DMS (Mech), Ranchi inspected the accident site twice on 11.11.13 and 03.01.2014 and instructed for further investigation of "Failure of Bucket Wheel Reclaimer" by M/s CMERI, Durgapur (Govt Agency).</li> <li>- As instructed by DMS (Mech), Ranchi, Mr Abhijit Chatterjee, Chief Scientist of M/s CMERI inspected the structure from 15.11.13 to 17.11.13, took photographs of the location of BWR, collected the material samples from Bucket Wheel boom and chemical analysis report of sinter grade fines from new stockpile for further investigation</li> <li>- M/s CMERI submitted Preliminary Report (Stage-I) on 26.12.13 &amp; Final Report (Stage-II) on 28.02.14 and also gave permission for dismantling of collapsed Reclaimer.</li> <li>- M/s TSL has been asked to mobilize their manpower and resources for dismantling the failed Reclaimer. No response from M/s Tecpro.</li> </ul> </li> <li>• After Modification of Conveyor F-3 (Tail Pulley shifted 233 m toward Head Pulley), trial run done on 20.12.13. Loading is continuing by deploying Backhoe since 01.08.14.</li> </ul> <p>Proposal for tendering the balance works by splitting the balance work into 05 Packages under RPN approved.</p> <p><b><u>RPN packages</u></b></p> <ul style="list-style-type: none"> <li>• Project being implemented in 24 sub-packages out of which 19 have been</li> </ul>

S N	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status RMD
							<p>completed, 02 packages (2C1 &amp; 2B4 are under execution, 03 are yet to be tendered (2C2, 2G &amp; 5C).</p> <ul style="list-style-type: none"> <li>• <b>Package I (A &amp; B) Balance Mechanical &amp; Civil Work and Electrical Work to start High Grade Fines Loading system - Completed.</b></li> <li>• <b>Package II (Defect Liquidation work of LC-3 Loading Network):</b> <ul style="list-style-type: none"> <li>- NIT issued on 19.11.2014 with TOD on 18.12.2014. TOD extended to 09.01.2015 and two offers received from M/s Bengal Tools Limited (BTL) &amp; M/s HSCL.</li> <li>- Approval accorded for opening of less than X+2 offers. Offers were opened on 13.01.2015. Price Bids opened on 14.05.2015.</li> <li>- Tender cancelled as the price of M/s. BTL was ~99% higher than the estimate.</li> <li>- Committee constituted to examine scope of work and packaging on 08.07.2015 submitted its report on 05.08.2015.</li> <li>- Package divided into 07 (further into 16) sub-packages considering the common scope of work and expeditious implementation.</li> </ul> </li> <li>- <b>Pkg 2A, 2B1, 2B2, 2B3, 2B5, 2C3, 2C4, 2D2, 2D3, 2F1, 2F2, 2D1 - Completed.</b></li> <li>- <b>Pkg 2B4</b> – Installation of Dust Suppression system : NIT issued on 19.05.2018. 04 offers received on extended TOD 28.08.2018. LOA placed on M/s. VidhiVidhan Engineers on 31.07.2019. Contract Agreement signed on 16.10.19. Submission of drawings started w.e.f. 18.02.2020 for approval. Site activities are yet to be resumed. Completion date : May'20.</li> <li>- <b>Pkg 2C1</b> – Balance Electrical works for LC-3 Loading network : Price bid opened on 08.01.2019. M/s BLS Enterprises is L1. LOA issued to party on 26.02.19. Work in progress. Completion date : Apr'20.</li> </ul>

S N	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
							<ul style="list-style-type: none"> <li>- <b>Pkg 2C2</b> – Preparation of As built drawing for Electrical installations : Proposal kept on hold. Will be taken up after completion of all RPN electrical packages.</li> <li>- <b>Pkg 2G</b> – Training : Kept on hold.</li> <li>• <b>Package III (Dismantling of Reclaimer &amp; Reconstruction of Conveyor F-3):</b> <ul style="list-style-type: none"> <li>- NIT issued on 19.02.2015 with TOD on 20.03.2015. TOD extended to 13.04.2015. No offers received. Tender was cancelled.</li> <li>- Split into two sub packages (<b>3A, 3B</b>) – <b>Completed.</b></li> </ul> </li> <li>• <b>Package IV (Supply &amp; Erection of Reclaimer): Completed.</b></li> <li>• <b>Package V (Construction of Conveyor LC-4, JH-8, Modification Work of Conv. 12, 14, JH-1D, Belt Feeders 4, 5):</b> Split into 03 sub-packages – 5A, 5B &amp; 5C. <ul style="list-style-type: none"> <li>- <b>Pkg- 5A &amp; 5B Completed.</b></li> </ul> </li> <li>• <b>Pkg 5C</b> – Construction of Conveyors LC-4, JH-8, JH-1D and shifting of drive of belt Conveyor 14 to JH-1D: Possibilities of alternate Loading systems are being explored as loading from Bolani will be affected if execution of LC4 is taken up. CET has been given assignment to prepare FR &amp; TS for installation of Rapid Loading System (RLS) at Loading plant of Bolani ore Mines. Proposal for RLS will be initiated for Stage I Approval after closure of the on-going project.</li> </ul>	
	<b>RPN packages Completed</b>							
	1 & 2. Balance Mechanical & Civil Works and Electrical Works to start High Grade Fines Loading system (Pkg-1A & B)	<ul style="list-style-type: none"> <li>- C R Enterprises</li> <li>- Power Net Distribution and Solution</li> </ul>	0.0210 +0.0804	0.0210 +0.0804	14.10.2014 13.10.2014	<b>Jan'15 (Completed)</b>	<ul style="list-style-type: none"> <li>• Completion Certificate issued to M/s C R Enterprises on 12.12.2014 wef 29.11.2014.</li> <li>• Completion Certificate issued to M/s Power Net Distribution &amp; Solution on 21.01.2015 wef 14.12.2014.</li> </ul>	
	3. Dismantling of Reclaimer (Pkg-3A)	M/s Fighter Construction	0.45	0.46	14.09.16	<b>Dec'16 (Completed)</b>	Completion Certificate issued on 19.12.2016.	

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	4. Reconstruction of Conveyor F-3 (Pkg-3B)	SK Rai	0.24	0.24	02.01.2017	<b>May'17 (Completed)</b>	Completion certificate issued on 24.05.2017	
	5. Rail Alignment of LC-3 (Pkg-2A)	SK Rai	0.34	0.46	24.11.2016	<b>Jan'17 (Completed)</b>	Completion Certificate issued on 02.02.2017 w.e.f. 23.01.2017.	
	6. Modification of Conveyor Gallery Structure, Stringer, Short Post (Pkg-2B-1)	Maa Vindyavashini & Sons	0.16	0.16	20.05.2016	<b>Feb'17 (Completed)</b>	Completion Certificate issued to Party on 08.02.2017 wef 30.12.2016.	
	7. Miscellaneous Structure & Mechanical works (Pkg 2B-2)	Suman Kumar Yadav	0.15	0.15	30.07.2017	<b>Jul'17 (Completed)</b>	Completion Certificate issued on 10.08.2017 wef 30.07.2017.	
	8. Painting Works (Pkg-2B-3)	Maa Vindyavashini & Sons	0.24	0.24	12.12.2016	<b>May'17 (Completed)</b>	Completion certificate issued on 26.05.2017 wef 26.05.2017.	
	9. Pull Cord Switch Circuit Modification for HT Drive Conveyor at new Loading Plant (Pkg-2C3)	BLS Enterprises	0.02		01.02.2018	<b>Jul'18 (Completed)</b>	Completion Certificate issued on 27.07.2018 wef 27.07.2018.	
	10. Providing Lighting Facility in LC-3 at new Loading Plant (Pkg-2C4)	Power Net Distribution and Solution	0.02		06.12.2017	<b>Jul'18 (Completed)</b>	Completion Certificate issued on 11.07.2018 wef 05.07.2018.	
	11. Miscellaneous Civil works and other Finishing work at new fines stockpile area (Pkg 2D-1)	Badajena Iron & Steel Ind. Pvt. Ltd	0.26	0.12	25.03.2017	<b>Nov'17 (Completed)</b>	Completion certificate issued w.e.f 15.11.2017 vide letter dt. 06.12.2017.	
	12. Balance Civil Works for VGTU (Vertical Gravity Take-up) of Conveyors (Pkg-2D3)	Badajena Iron & Steel Ind. Pvt. Ltd	0.36	0.19	26.09.2016	<b>Apr'17 (Completed)</b>	Completion certificate issued w.e.f 30.08.2017 vide letter dt. 06.12.2017.	
	13. Balance Civil, Mech & Structural works of High Grade Fines discharge Conveyor FC-3 (Pkg- 2F1)	Maa Vindyavashini & Sons	0.34	0.34	03.06.2016	<b>Apr'17 (Completed)</b>	Completion certificate issued w.e.f 08.04.2017 vide letter dt. 24.04.2017.	
	14. Supply & Erection of Reclaimer - 1500 TPH (Pkg-IV)	L&T	15.75	14.25	01.10.2015	<b>Aug'17 (Completed)</b>	Contract Agreement signed with M/s L&T on 17.10.15. PAC issued on 31.08.2017. Liquidation of defects observed during PAC completed in Oct'17. Commissioning Certificate issued on 27.10.2017. PG Tests completed on 25.01.2018 and guaranteed loading capacity of 1500 TPH achieved. PG certificate issued on 02.02.2018. Handed over to operation for regular operation in Feb'18.	
	15. Structural & Mechanical work to modify the Conveyor-12,14,JH-1D and Belt Feeder – 4 & 5 (Pkg – 5A)	S K Rai	0.23	0.16	25.04.2017	<b>Nov'17 (Completed)</b>	Completion certificate issued w.e.f 24.11.2017 vide letter dt. 06.12.2017.	
	16. Balance civil works for DFDS, DSS, Lumps & Fines MCC and ventilation system at new fines stockpile area (Pkg-2D2)	Badajena Iron & Steel Ind. Pvt. Ltd	0.29	0.03	20.09.2016	<b>Aug'18 (Completed)</b>	Completion certificate issued on 01.09.2018 wef 30.07.2018.	
	17. Misc. Mechanical works (including Ventilation System for Battery & Transformer Room, HGF Tunnel etc.) (Pkg-2B-5)	S K Rai	0.37	0.33	16.04.2018	<b>Aug'18 (Completed)</b>	Completion certificate issued on 02.08.2018 wef 26.07.2018.	
	18. Balance Electrical works for Conveyor 12/14, Belt Feeder-4/5 and Winch (pkg-5B)	Hindustan Electric Company	0.37	0.11	01.02.2018	<b>Sep'18 (Completed)</b>	Completion Certificate issued to party w.e.f. 30.09.2018 vide letter dt. 15.10.2018.-	



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	19. Balance Electrical works of High Grade Fines Discharge conveyor FC-3 (Pkg-2F-II)	M/s Power Net Distribution & Solution	0.09		05.02.2018	<b>Oct'18 (Completed)</b>	Completion Certificate issued w.e.f. 03.10.2018 vide Letter dated 25.10.2018.	
	<b>Enhancement of Production capacity of Meghahatuburu Iron Ore Mines (from 4.3 MTPA to 6.5 MTPA)</b> Total packages – 05; Ordered – 04; Balance – HEMM		118.85 Gross – 125.78	90.66		Jun'12/ Sept '20		

S N	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
	<p>Augmentation of Plant Capacity (pkg-1)</p> <p>(Main Plant Augmentation; Downhill Conveying System; Electrical Facilities; Dust Suppression System; Bucket Wheel Reclaimer)</p> <p><u>Issues</u></p> <ul style="list-style-type: none"> <li>• Risk Purchase Notice issued to M/s Tecpro on 16.08.2014 due to following reasons: <ul style="list-style-type: none"> <li>- Progress of civil and structural work was very slow.</li> <li>- Erection of Reclaimer on hold since Nov'13 as presence of M/s Elecon (supplier of Reclaimer) required during erection who had refused for the same due to commercial issues with M/s Tecpro.</li> <li>- 50% Erection of Reclaimer balance. (Pylon, Erection of locking assembly, Erection of Mast, Erection of Boom Conveyor, Erection of Bucket wheel, Erection of Counter weight, Erection of Electrical drives including PLC, Erection of Hydraulics, Erection of Mechanical drives)</li> <li>- M/s Tecpro was unable to make payments to sub-contractors. Mobilization of resources (cranes, bought-out items &amp; manpower) was suffering badly.</li> <li>- Direct payment was made to Sub-contractors &amp; sub-vendors for continuation of jobs &amp; for supply of balance bought-out items.</li> <li>- Representative of M/s Tecpro left site since Oct'14.</li> </ul> </li> <li>• CET prepared NIT for Balance jobs to be executed in 02 packages: <ul style="list-style-type: none"> <li>- RPN Pkg 1 - Balance work of Main package except Bucket Wheel Reclaimer</li> <li>- RPN Pkg 2 - Balance work of Bucket Wheel Reclaimer (3000 TPH)</li> </ul> </li> </ul>	Tecpro Systems Limited	68.20 Gross – 72.02	61.41	08.05.10	Apr'12 / Sept '20	<p>Crushing Section</p> <ul style="list-style-type: none"> <li>- Work related to Crushing section, Installation of Scalping screen, Apron Feeders (106 &amp; 112), Conveyors (107 &amp; 113) completed in Feb'13.</li> <li>- Scalping screen had not achieved the rated capacity. Scalping Screen as replacement to installed screen received at site from TRF on 14.09.14.</li> <li>- Shut down of 3 days taken in Nov'14 and erection jobs completed.</li> </ul> <p><b>Screening section</b></p> <ul style="list-style-type: none"> <li>- Sequential replacement of Screening plant equipment is in progress.</li> <li>- All the 03 nos. Classifiers have been erected and are under trial run. Modification of all 03 nos. Launderers completed. No load test for all Classifiers completed.</li> <li>- DD Screens &amp; Conveyors: Procurement of structural material not completed.</li> <li>- Conveyors: Foundations completed except for drive base and tail pulley base which will be done during shutdown. Ground assembly completed. Material procurement yet to be completed.</li> </ul> <p><b>Reclaimer</b></p> <ul style="list-style-type: none"> <li>- Only 50% erection completed. Rail travel mechanism, Electrical Platform, E-House, LT Drives, Under Carriage, Gear for Slew ring, Slew bearing, Feed Table, Central Chute upper part &amp; erection of Upper carriage of Reclaimer completed.</li> <li>- M/s Kiran Fabricators was deputed by M/s Tecpro to commence the balance erection job of the Reclaimer.</li> </ul> <p><b>Downhill Conveyors</b></p> <ul style="list-style-type: none"> <li>- Foundation jobs for Conveyors and Junction House started. Civil works nearing completion, structural erection at slow pace. 190 MT Structures yet to be supplied. Civil &amp; Structural jobs at Downhill conveyor at standstill.</li> </ul>	
(a)	<p><b>RPN Package -1</b></p> <p>Balance Work of Main Package except Bucket Wheel Reclaimer</p> <p>(Erection of three screens; Downhill conveying</p>	HSCL	19.99	0.80	9.11.2015	Nov'16 /Sept'20	<ul style="list-style-type: none"> <li>• LOA placed on 09.10.2015.</li> <li>• Contract signed with M/s HSCL on 05.12.2015.</li> <li>• Design Engineering is under progress.</li> <li>• For JH – 1, civil works completed; Structural</li> </ul>	

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	<p>system; Related Electrical Work; Dust Suppression System)</p> <p>Issues :</p> <ul style="list-style-type: none"> <li>• Abysmally poor performance of HSCL. No experienced manpower and organisation structure at site.</li> <li>• Despite assurances from HSCL, no firm plan of execution is being submitted.</li> <li>• Review meetings held with senior officials of HSCL to expedite the job.</li> </ul>						<p>erection work up to 2nd floor completed; Chequered plate flooring for 1<sup>st</sup> and 2<sup>nd</sup> floor completed. For JH -2, civil works completed. Welding &amp; column bracing erection under progress including erection of top floor beam. For JH – 3, casting of all 4 columns completed, Floor erection completed.</p> <ul style="list-style-type: none"> <li>• For Dust Suppression System building, excavation of all 4 no. columns, PCC, RCC and casting of beams completed. Civil work in progress at DSS 3 building.</li> <li>• Replacement of Double Deck Screen – S/d of screen taken from 05.12.16. Dismantling of old screen completed; new Screen installed in Jan'17 and is under regular operation. Floor strengthening work completed in Feb'17.</li> <li>• During S/d from 20.04.2017, modification work of Conveyor 309 taken-up and Trials taken on 04.05.2017; Conveyor is under operation. Work for replacement of Apron Feeder completed during S/d and No load trial taken on 26.05.2017. Strengthening of all 3 footings of Apron feeder completed and Trials done on 24.08.2017. For DSS-3, Foundation, Column and Roof casting completed.</li> <li>• Work under Downhill conveying system and construction of dust suppression system under progress. Sheeting work in progress at Conveyor 202A, 202B, JH1 and Structural erection work in progress at JH2.</li> <li>• No progress on electrical and PLC front.</li> <li>• Civil work in progress at DSS3 building.</li> <li>• Foundation columns TR4 and TR5 completed up to 4 m during shutdown in Dec'19. Balance 4 m under progress.</li> </ul>
(b)	<p><b>RPN Package 2</b> Balance Work of Bucket Wheel Reclaimer</p> <p>(Erection and Commissioning of Bucket Wheel Reclaimer - Replacement of existing Bucket wheel Reclaimer (2000 tph) with higher capacity Reclaimer (3000 tph) )</p>	Lepton projects	3.535	3.18		Jul'18 / Mar '20	<ul style="list-style-type: none"> <li>• NIT issued on 27.01.2016 with TOD on 25.02.2016; extended to 15.03.2016.</li> <li>• Offer received from 04 parties: M/s Elecon EPC Projects Limited, M/s Fighter, M/s Scorpio Engineering Pvt Limited and M/s Lepton Projects Pvt Ltd. Tender discussion held with bidders on 12-13.04.16. Price bid opened on 11.07.16, M/s Lepton is L-1 at Rs. 3.535 Cr against estimate of Rs. 4.47 Cr.</li> <li>• LOA issued to M/s Lepton Engg. Pvt Ltd on</li> </ul>

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							<ul style="list-style-type: none"> <li>30.06.2017. Contract signed on 16.10.2017.</li> <li>• Boom conveyor and mast cleaning, Head boom leveling and staircase handrail maintenance work completed in Jan'18.</li> <li>• Vertical Mast has been positioned. Boom erection in progress. Boom erection completed in May'18 and Counter weight Boom erection completed in Jun'18. Lubrication and hydraulics completed in Sep'18. Cable tray erection completed in Oct'18. Order for Tail pulley (under Scope of SAIL) placed on 05.10.2018 and received at site on 08.11.2018.</li> <li>• Mechanical, Hydraulic and lubrication related jobs completed except belt laying and erection of gear box.</li> <li>• Party to obtain Stability and Rigidity certificate from DGMS approved agency.</li> <li>• Review meeting held with M/s Lepton Projects Pvt. Ltd. on 14.02.2019.</li> <li>• Order placed for LT motor. LT Motor received at Bolani and shifted to MIOM on 25.06.2019.</li> <li>• Trial run of Boom conveyor, luffing and Operator's cabin taken on 29-30.07.2019.</li> <li>• A2Z solution completed the test required for Stability and Rigidity on 19.12.2019. The report was submitted to DGMS on 03.01.2020 and permission to operate the Reclaimer has been granted.</li> <li>• Inspection by DGMS shall be carried out during his visit to Mines.</li> <li>• The Reclaimer is being operated on load.</li> </ul>	
	Power Augmentation & Replacement of 11kV OH Line for Pump Houses (Pkg-2)	Sterling & Wilson	3.80 Gross – 4.11	3.80	10.06.10	June'11/ <b>Jul'13</b>	<ul style="list-style-type: none"> <li>• CC issued on 31.01.2014.</li> <li>• FAC issued on 10.10.2014</li> </ul>	
	Upgradation of Loading system (Pkg-3)							
	Upgradation of Loading Conveyors from 2000 TPH to 3000 TPH (pkg - 3A)  (Up gradation of all Loading conveyors to 3000 tph; Upgradation of Belt feeders to 3000 tph; Related junction houses, chutes, hoists to be upgraded).	Power Max	15.80 Gross – 17.00	14.75	06.10.10	May12/ <b>May'14</b>	<ul style="list-style-type: none"> <li>• S/d of Loading Section was taken from 08.04.2014 to 07.05.2014.</li> <li>• After replacement of Loading plant conveyors (05 nos.), loading section put into operation from 08.05.2014.</li> <li>• On 02.06.2014, Expert group from Heavy Maintenance (Elec) of RSP visited MIOM for alignment of heavy motors/ gear boxes of drive system of Loading Conveyors. The vibrations generated from the motors/</li> </ul>	

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							<p>gearboxes were found to be within acceptable range.</p> <ul style="list-style-type: none"> <li>Air blaster (12 nos.) in both the hoppers (bins) completed along with air pipe line. Commissioning of compressor, air blaster is under progress.</li> <li>Belt Feeder 419 erected and put into operation on 06.06.2018. Feeder handed over on 24.08.2018.</li> <li>Meeting held on 17.01.2019 between CET, RMD, EOM and Contractor to address issues related to operation of BF 419.</li> <li>Feeder 419 is operating successfully.</li> <li>Belt Feeder 418 installed. Teething troubles being sorted out. PLC and VFD works under progress.</li> </ul>
	Supply and Installation of 3000 TPH Wagon Loader (Pkg-3B)	Elecon	5.93 Gross – 6.36	5.00	26.08.10	Mar'12/Nov'14	<ul style="list-style-type: none"> <li>PAC issued on 06.11.2014.</li> <li>Load Trial runs commenced from 08.12.2014. Wagon loader put into commercial operation since 13.12.2014.</li> <li>Dismantling of old wagon loader completed on 04/03/2016.</li> <li>Defect liquidation in progress.</li> </ul>
	<b>Enhancement of production capacity of Kiriburu Iron Ore Mines (from 4.25 MTPA to 5.5 MTPA)</b>		96.59 Gross – 106.54	77.88		Sept'12/ <b>(Jun'13 - Mine Expansion completed)</b>	<ul style="list-style-type: none"> <li>Expansion facilities including Instrumentation, SCADA &amp; PLC system completed.</li> </ul> <p><b><u>Balance packages and status:</u></b></p> <ul style="list-style-type: none"> <li>Dismantling, shifting, erection and commissioning of Cone crushers from RSP to KIOM (Pkg 1B) - M/s HEC <ul style="list-style-type: none"> <li>All 04 Crushers (250 TPH) dismantled and transported from RSP.</li> <li>One Quaternary crusher erected in Jan'14. Tested successfully on full load after installation of succeeding screen on 06/07/2016.</li> <li>Shut down of twelve days for Dry circuit starting from 20.12.2015 taken for installation of Secondary Crusher, 8B. Installation &amp; commissioning completed on 07.01. 2016.</li> <li>For replacement of Secondary Crusher, 8A, shutdown was taken on 16.02.2017; Crusher installed and put into operation on 17.03.2017.</li> <li>All 03 Crushers (2 Secondary + 1 Quaternary) are in operation.</li> </ul> </li> </ul>

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							<ul style="list-style-type: none"> <li>- 01 Balance Crusher stacked at KIOM</li> <li>• <b>Dust Suppression System</b> : LOA placed on 31.12.2015 on M/s Dust Solution system at Rs. 1.78 Cr (Gross). Contract Signed with M/s Dust Solution System on 21.01.2016. Design Engg. completed and most of the equipment supplied. Piping work for water and compressed air line at discharge points nearing completion. Erection of equipment like compressor, pumps, air receiver, all electricals can be started after completion of DSS building. Dust Suppression system tested at Hopper on 30.01.2019. Testing at other discharge points under progress. Dust suppression system is to be linked with SCADA.</li> <li>• Construction of DSS building (M/s Hanuman Enterprises) - Erection of columns up to lintel level completed, Scaffolding and reinforcement cutting / bending for roof beam &amp; slab is being done along with brick work. Plastering is in progress. Gate erected in Sept '18.</li> <li>• PAC issued on 02.05.2019.</li> </ul>	

#### AMR Schemes

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
	<b>Installation of Tertiary Crusher at Meghahatuburu Iron Ore Mines</b>  <u>Issues</u> <ul style="list-style-type: none"> <li>• Due to poor deployment of manpower at site, the pace of progress is very slow.</li> <li>• Engineers Notice issued to M/s Heavy Engineering Corporation on 16.03.2015.</li> <li>• No manpower was at site from 13/03/2015 to 20/03/2015 due to expiry of labour license of their sub contractor.</li> <li>• Sub-contractor of M/s HEC had stopped work at site in July'15 as they had not received extension letter from HEC. The jobs at site</li> </ul>	HEC	30.85 Gross – 32.35	29.65	26.10.11	Mar'13 / March '20	<ul style="list-style-type: none"> <li>• Basic Engg. completed. Detailed Engg. is in progress (98% complete). Delivery of 96.49% Mechanical &amp; 82.50% Electrical equipment completed. 82.25% RCC work completed.</li> <li>• Party mobilized resources on 28/08/2013.</li> <li>• All excavation work completed.</li> <li>• Party has mobilized Heavy duty crane (de-assembled parts). Assembly of crane done.</li> <li>• Inspection of Tertiary crusher (Cone) done on 21/11/2015.</li> </ul>	

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
	<p>were resumed by them in Aug'15.</p> <ul style="list-style-type: none"> <li>Progress of work is very poor due to non deployment of suitable and sufficient manpower at site.</li> <li>Finalization of shutdown plan due to production requirement.</li> <li>Non-serious approach of M/s. HEC towards the progress of job despite taking up the matter with highest authorities.</li> <li>Meeting held with HEC on 23.10.2018 wherein HEC committed to complete the job by Mar'19. Meeting held with Director, HEC for expediting the progress of job.</li> <li>Sub-contractor for sheeting, painting and flooring job to be finalised by HEC through RPN (as informed by HEC).</li> <li>Meeting held with CMD, HEC on 12.07.19.</li> <li>M/s. HEC has taken RPN against the sub-contractor and the order for civil and structural jobs has been placed on alternate agency by M/s. HEC.</li> </ul>						<p>Clearance given to HEC for supply of Crusher.</p> <ul style="list-style-type: none"> <li>All Crusher components received at site. Structural fabrication and erection is in progress.</li> <li>Civil work for take-up of JH-1 and JH-2 is in progress.</li> <li>All 16 nos. equipment footings completed in Sep'16. Erection of 8 out of 10 nos columns completed. Top portion of balance 2 columns which was held-up due to crane access problem completed in Jan'17. Crusher main frame erected in Jul'17.</li> <li>For Electrical sub-station building, all 17 columns completed. All plinth beam &amp; columns casting completed by 30.06.2017. Casting of roof slab and Brick work completed. All panels installed in Electrical room in Jun'18</li> <li>For Compressor house, Casting of plinth beam completed and Casting of 1<sup>st</sup> lift of all 08 columns above plinth level completed. All plinth beam &amp; columns up to lintel level casted. Roof casting done on 31.07.2017. Equipment foundation inside compressor building completed.</li> <li>EOT Crane erected. Testing of EOT Crane completed in Jun'18.</li> </ul> <p><u>Crusher Building</u></p> <ul style="list-style-type: none"> <li>Major Civil Work relating to crusher foundation, crusher building column, JH, Conveyors, equipment foundation completed. Structural erection is in progress – Erection of screen support structure and side runner of main building is in progress.</li> </ul> <p><u>ECR</u></p> <ul style="list-style-type: none"> <li>Change Order for Electrical room relocation approved by Competent Authority. Change order for extra work issued to the party on 10.06.16.</li> </ul>	

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Expenditure up to Feb'20 (Rs. Crore)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
							<ul style="list-style-type: none"> <li>Major equipment (Crusher, Screens, EOT Crane, Transformer, Motor) supplied. Both the screens erected. Crusher feed bunker erected.</li> <li>Major Civil Work relating to crusher foundation, crusher building column, JH-1, JH2, Conv.306E, Conv.306N, equipment foundation such as screens completed.</li> <li>Work related to ECR Room completed.</li> <li>DGMS approval for charging HT lines obtained on 01.04.2019. HT lines charged after approval of DGMS.</li> <li>No-Load integrated trial run done on 10.10.2019. Vibrations observed during operation of Crusher.</li> <li>Integrated trial taken on no-load on 28.02.2020.</li> <li>Load trial taken on 29.02.2020.</li> <li>Associated jobs like sheeting and flooring in advanced stages of completion.</li> </ul>	

### Coal Mines

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
1	<p><b>Development of Tasra Coal Block</b></p> <ul style="list-style-type: none"> <li>Development of Tasra is primarily dependent on: <ul style="list-style-type: none"> <li>Getting vacant possession of 900 Ha of land falling under seven villages (Rohraband, Domgarh, Tasra, Het Kandra, Chasnalla, Upper Kandra and Chakchitahi) in phases to develop the mine as per approved Mining Plan.</li> <li>Relocation of Project Affected Families (PAFs).</li> </ul> </li> <li>With the enactment of LARR 2013 with effect from January 2014, the impact is as follows: <ul style="list-style-type: none"> <li>The amount of Rs.163.27 Cr. approved for Land Acquisition in Feb'09 by SAIL Board has now increased to Rs. 2494.67 Cr. (as in May'17)</li> </ul> </li> </ul>	M/s Lanco	MDO route	23.09.13	MDO shall be in force for 28 years from effective date of contract (including 2 years of construction period)	<ul style="list-style-type: none"> <li>CMSA (Coal Mine Services Agreement) signed on 23.09.13. M/s Lanco Infratech submitted performance guarantee of Rs.50 Cr. as per terms of contract.</li> <li>Agenda Note in regard to Land Acquisition and Rehabilitation &amp; Re-settlement subsequent to enactment of LARR 2013 was discussed with Operations, Finance, Estate Management and CRMG. Queries raised by Finance sent to CRMG.</li> <li>Tasra Washery (3.5 MTPA) : EIA / EMP report submitted to JSPCB. Public hearing held on 30.01.2016. Assistant District Magistrate (Law &amp; Order), Regional Officer (JSPCB) and Officers from Collieries Division, SAIL were present at the site. Following issues were prominently pronounced by local villagers: <ul style="list-style-type: none"> <li>The fate of the earlier employees of Bihar State Industrial Development</li> </ul> </li> </ul>	



SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
	<ul style="list-style-type: none"> <li>- The amount of Rs.219.53 Cr. approved by SAIL Board in Mar'10 towards Rehabilitation and Resettlement Scheme is now estimated at Rs. 1745.01 Cr. (as in May'17)</li> </ul>						<p>Corporation (BSIDC) who have not received salary since closure of plant.</p> <ul style="list-style-type: none"> <li>- The expectation of local villagers on issue of employment.</li> <li>- Activities of CSR in and around the area under consideration.</li> </ul> <ul style="list-style-type: none"> <li>• Public hearing on Draft R&amp;R prepared by Administrator R&amp;R (Asstt. Collector, Dhanbad) held on 18.02.16. The same was chaired by Asstt. Collector (AC), Dhanbad. District Land Acquisition Officer (DLAO), Dhanbad and Circle Officer, Jharia, Assistant District Magistrate (Law &amp; Order), Regional Officer (JSPCB) and Officers from Collieries Division, SAIL were also present.</li> <li>• The Draft R&amp;R Scheme was explained to the public by DLAO and subsequently opinions were sought from general public. Amongst various issues raised, the issue of employment in SAIL was the most demanded. Finally, AC Dhanbad concluded that their opinions and demands will be put forward to the R&amp;R Committee for final deliberation and conclusion.</li> <li>• A proposal for revision of Land Acquisition cost and R&amp;R scheme with financial implication for Development of Tasra Open Cast Project received in May'16, with cost as under: <ul style="list-style-type: none"> <li>• Rs. 2444.26 Cr for Land acquisition</li> <li>• Rs. 1434.33 Cr for R&amp;R</li> </ul> </li> <li>• MECON was appointed as Consultant on 12.05.16 to inter-alia undertake Techno-commercial study of Tasra, Sitanala and Parbatpur Coal Blocks.</li> <li>• MECON submitted revised financials for Tasra project on 20.07.16, which was sent to Corporate Finance for examination.</li> <li>• In the meantime, the proposal was returned to RMD on 19.08.16, as the following outstanding issues were to be addressed before processing further: <ul style="list-style-type: none"> <li>- Issues related to land acquisition raised by Lanco</li> <li>- Issue of Power of Attorney by SAIL to M/s Lanco</li> <li>- Permission sought by M/s Lanco regarding execution of Contract through 100% subsidiary assignee</li> <li>- Status of Legal opinion of the above issues raised by M/s Lanco</li> <li>- Availability of land for the project in view of the proposed JV between NTPC and FCIL</li> <li>- Status of investigation on allocation of coal blocks by external agency</li> </ul> </li> </ul> <p>Work order placed on MECON by Collieries Division on 06.02.2017 for preparation of Techno-Commercial viability report for Tasra Open Cast Project.</p> <p>A proposal seeking approval of BSC received from RMD on 23.03.2017 for the following:-</p> <ul style="list-style-type: none"> <li>• Revision of Commercial operation date from 22.09.2015 to 01.03.2019 in the CMSA</li> <li>• Extension of Contract period upto 28.02.2045</li> <li>• Methodology of reimbursement of Land and R&amp;R cost and other cost towards Land Acquisition and R&amp;R</li> </ul>

SN	Package	Party	Cost in Cr Net of CENVAT (FE)	Effective Date of Contract	Schedule (Likely/Actual)	Status	RMD
							<ul style="list-style-type: none"> <li>• Authorizing COD to incorporate modifications in terms and conditions of NIT and contract</li> </ul> <p>Observations on the revised proposal sent to Collieries Division on 29.04.2017, Replies received on 19.05.2017 with revised proposal. The proposal was discussed in the meeting of COD on Raw materials held on 22.05.2017 and COD recommended to process the proposal by PAG for further consideration of Project Committee of Board / SAIL Board. PAG meeting held on 25.05.2017. After receipt of replies from Collieries Division, proposal was submitted for consideration of Project Committee of SAIL Board (PCB) on 29.06.2017. PCB desired the following :</p> <ul style="list-style-type: none"> <li>• As the Lanco contract is being investigated by CBI, the status of the same may be obtained from CBI.</li> <li>• SAIL may examine the present financial position of Lanco in detail.</li> <li>• Legal opinion on the options available to SAIL for exiting from the Contract may be taken.</li> </ul> <p>The proposal was also discussed in the SAIL Board meeting held on 30.06.2017. It was desired that the proposal may be resubmitted through BSC after addressing the above issues.</p> <p>Agenda note for consideration of BSC / Board received from Collieries on 26.09.2017, indicating actions taken by Collieries on observations / directions of BSC / Board. COD desired that the proposal be put-up to BSC / Board for information. Accordingly, file was sent to RMD on 24.10.2017. Updated Agenda note incorporating actions taken on the observations of BSC / Board received on 03.02.2018, which was processed for consideration of BSC on 06.02.2018.</p> <p>Queries / observations of Dir (Fin) sent to ED (Collieries) on 16.02.2018. Revised Agenda note received from collieries on 05.03.2018 for consideration of BSC on Projects / SAIL Board. Proposal discussed in BSC meeting held on 27.03.2018. Agenda note put-up for consideration of BSC on 26.04.2018.</p> <p>NCLT, Hyderabad bench declared M/s LITL (Lanco Infratech Limited) as insolvent on 27.08.2018. SAIL submitted BG for encashment to Indian Overseas Bank, Hyderabad on 24.09.2018 and also served notice for termination of agreement to M/s LITL. BG has been encashed and an amount of Rs 50 crores has been credited to SAIL's account on 30.11.2018. Notice served to M/s LITL for vacating the mine premises.</p>

# **AMR Projects under Implementation**

कार्यान्वयन के अंतर्गत

एएमआर योजनाएँ

## BSP – Development of Rowghat Deposit

1.	<b>PROJECT:</b> Appointment of consultant for preparation of DPR	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Jan'12
ii)	Original approved date of commissioning	Oct'13
iii)	Now anticipated	There is no progress. Note has been initiated for closure of contract.
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.45.75 (Net of Cenvat credit Rs.4.71 Cr)
ii)	Expenditure till Mar'19	Rs.9.80 Cr.
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.0.00 Cr.
iv)	Cumulative expenditure up to Feb'2020	Rs.9.80 Cr.

#### 4. BENEFITS ENVISAGED

The contract is for preparation of Detailed Project Report (DPR) for development of Rowghat deposit (Mines development and beneficiation) for 14 Mtpa run of mine (ROM) capacity.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	<b>Development of Rowghat Deposit</b>	M/s Hatch Associates Pvt. Ltd., Australia	<b>NOC:</b> Rs.41.04 Cr. <b>Gross:</b> Rs.45.75 Cr.	Rs.9.80 Cr.	18.02.12	Proposal initiated for closure of contract.
<b>STATUS</b>						
<ul style="list-style-type: none"> <li>• LOA issued to M/s Hatch Associates Pvt. Ltd., Australia on 19.01.2012. Contract signed on 18.02.2012. Site visit held during 23-25<sup>th</sup> Feb '2012.</li> <li>• Basic approach report is received on 20.03.2012. Comments from CET and Committee forwarded to M/s HATCH on 07.04.12.</li> <li>• Revised Basic approach and initial site visit report submitted by HATCH on 14/05/2012. Comments from CET and committee were forwarded to HATCH on 30/05/2012. Reply from HATCH forwarded to CET for comments, CET replies is again forwarded to HATCH on 12/06/2012.</li> <li>• Hatch comment received on 19/06/2012 &amp; is forwarded to CET, Ranchi and all the committee members. Comments from CET received on 28/06/2012 &amp; forwarded to M/s Hatch on 03/07/2012.</li> <li>• Initial site visit report accepted and First Milestone completion certificate issued on 06.08.2012.</li> <li>• Survey work completed and report submitted (2<sup>nd</sup> milestone). 2<sup>nd</sup> milestone completion certificate issued on 19/02/2013.</li> <li>• 3<sup>rd</sup> Milestone work (collection of samples) was started; grab samples collected from outcrops but collection of further sample is held up since long due to non-availability of approach road to mining area.</li> </ul>						

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>• Delay in collection of samples by drilling due to security issues and lack of approach road.</li> <li>• Approach road is under construction for access to mining area. For this, tree cutting is to be completed by concerned State Government authority.</li> <li>• Blasting of hard rock is to be done for road work which is affecting the progress.</li> <li>• <b>M/s Hatch had earlier submitted request for foreclosure of contract in view of constraints which are hindering progress at site. Subsequently, Party has raised dispute and sought enhancement of contract value.</b></li> <li>• In Jun'16, M/s HATCH requested for conciliation proceedings.</li> </ul>	<ul style="list-style-type: none"> <li>• Security forces have been deployed in mining area.</li> <li>• After continuous follow-up by BSP, tree cutting contract was finalized by State Govt. Authorities and about 7000 nos. of trees has been felled and construction of 4 km road completed.</li> <li>• <b>M/s Hatch attended meetings with SAIL /BSP regarding the on-going contract but matter remained unresolved. BSP encashed the BG of M/s Hatch of Rs.1.8 Cr. on 03.09.15 and initiated proposal for closure of contract.</b></li> <li>• <b>A retired officer of Bhilai Steel Plant was appointed as conciliator and communication in this regard was sent to M/s Hatch on 22/02/2016 and 21/07/2016. However, reply from M/s Hatch is still awaited. Reminder letter sent on 04.05.17.</b></li> </ul>

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri Samir Swarup, CGM (Mines)	Shri Amit Kr Mishra DM (Rowghat Projects)	Shri V C Reddy GM (Rowghat Mines)

## BSP – Development of Rowghat Deposit: (Permanent Barracks at 21 Locations)

1.	<b>PROJECT:</b> Construction of Permanent Barracks at 21 Locations for Security Forces deployed for Dalli-Rajhara – Rowghat Rail Line and Rowghat Mining Project	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Apr'14
ii)	Original approved date of commissioning	Apr'15
iii)	Now anticipated	Linked to hand over of clear site by State Govt.
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.188.93 Cr
ii)	Expenditure till Mar'19	Rs.130.55 Cr.
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.15.01 Cr.
iv)	Cumulative expenditure up to Feb'2020	Rs.145.56 Cr.

#### 4. BENEFITS ENVISAGED

Infrastructure for security forces will facilitate 'Dalli- Rajhara – Rowghat Rail Line and Rowghat Mining Project'

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	<b>Development of Rowghat Deposit: (Permanent Barracks at 21 Locations)</b>	M/s Modern Prefab Ltd., Gurgaon	<b>NOC:</b> Rs.188.93 Cr. <b>Gross:</b> Rs.188.93 Cr.	Rs.145.56 Cr.	30.04.14	Apr'15 / (Linked to hand over of clear site by State Govt.- Completion in 6 months from date of handing over of clear site in last location)
<b>STATUS</b> <ul style="list-style-type: none"> <li>LOI issued to M/s Modern Prefab Ltd., Gurgaon on 31.03.14 and contract signed on 30.04.14.</li> </ul> Out of 21 locations, <ul style="list-style-type: none"> <li>In 1 location, barrack is established in Railway property &amp; construction of permanent barracks is not required.</li> <li>Work of permanent barracks is taken up in 18 locations.               <ul style="list-style-type: none"> <li>All 17 locations, handed over to Security Forces.</li> <li>At 18<sup>th</sup> location forces have been deployed on 16.01.2019 in temporary barracks.</li> <li>De-scoping/short closure of the contract was processed at BSP as the party has refused to take-up work beyond 17<sup>th</sup> location due to inordinate delay in handing over of clear site by State Govt..</li> </ul> </li> </ul>						

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Issuance of Forestry clearances and delay in tree cutting work by State Government authorities had delayed the start of work.</li> <li>M/s Modern Prefab to expedite completion of water supply and sanitary works.</li> <li>Security Forces are yet to be deployed in 3 out of 21 locations.</li> <li>M/s Modern Prefab has refused to undertake construction of barracks beyond 17<sup>th</sup> location due to extra ordinary delay in handing over the site by the State Govt. A separate contract is under consideration for balance locations.</li> <li>CG Police has given consent to construct, for which they are submitting the estimate. Award of contract to CG Police Housing Corporation, Raipur is being considered.</li> <li>A request letter is also given to CMD CG Police housing corporation, Raipur on 27.06.19 for submitting the estimate for construction of barracks at remaining four locations, so that action may be taken further.</li> <li>CG police Housing Corporation has submitted estimate on 22.08.19. Subsequently, approval is in progress for placement of order.</li> <li>SAIL/BSP deposited Rs 1.0 Cr. (out of Rs 4.0 Cr.) as advance with CG police Housing Corporation for the construction of 01 Barracks on 21<sup>st</sup> Nov, 2019.</li> <li>CG police Housing Corporation issue tender for the subject work on 01.02.2020. Tender opening date extended upto 04.03.2020.</li> </ul>	<ul style="list-style-type: none"> <li>BSP is pursuing concerned Authorities for Rail line work and also deployment of Security Forces.               <ul style="list-style-type: none"> <li>Meeting held at MHA on 20.01.16.</li> <li>Meeting held with IG BSF on 08.02.16.</li> <li>Meeting held at MHA on 21.10.16.</li> </ul> </li> <li>BSP is pursuing M/s Modern Prefab to expedite finishing jobs.</li> <li>These issues were also pursued in regular project coordination meetings with SP, Kanker.</li> <li>All 17 locations, handed over to Security Forces.</li> </ul>

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri Samir Swarup, CGM (Mines)	Shri V C Reddy, GM (Rowghat Mines)	Shri Jay Prakash GM (Rowghat Mines)

### BSP – Up-gradation of Stoves of BF-4

1.	<b>PROJECT:</b> Up-gradation of Stoves of Blast Furnace No.4	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Apr'13
ii)	Original approved date of commissioning	Dec'14
iii)	Now anticipated	Jul'2020
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.70.65 (Net of Cenvat credit Rs.5.30 Cr)
ii)	Expenditure till Mar'19	Rs.40.00 Cr.
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.10.93 Cr.
iv)	Cumulative expenditure up to Feb'2020	Rs.50.92 Cr.

#### 4. BENEFITS ENVISAGED

BSP has seven Blast Furnaces. BF- 4 was commissioned on 8<sup>th</sup> Dec'1964 and has working volume of 1489 m<sup>3</sup> (Useful Volume of 1719 m<sup>3</sup>). It has 4 stoves designed for a Hot Blast Volume (HBV) of 2600 Nm<sup>3</sup>/min at Hot Blast Temperature (HBT) of 1050°C and pressure of 2.5 kg/cm<sup>2</sup>. Due to several operational problems like falling of combustion chamber bricks, shell cracking etc, it has become extremely difficult to maintain the average HBT beyond 975°C. In spite of mid-term repairs & capital repairs, the stoves are not able to deliver HBT of 1050°C. In 2010-11, the stoves of BF No.4 achieved HB temperature of 918°C.

Up-gradation of stoves to HTS (Hoogoven's) design hot blast system, suitable for 1200°C hot blast temperature, will facilitate increased injection of auxiliary fuel, reduction of coke rate and, at the same time, increased hot metal production would be possible. With HTS design, the stoves will have longer life of minimum 20 years.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	<b>Up-gradation of Stoves of BF-4 to HTS Design</b>	M/s Evo Tech	<b>NOC:</b> Rs.18.44 Cr.	Rs.9.81 Cr.	16.03.13	Dec'14/ Jul'20

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
<p><b>STATUS:</b></p> <ul style="list-style-type: none"> <li>It has been decided to take up up-gradation of Stove nos.10, 11 &amp; 12 instead of nos.11, 12 &amp;13 as originally envisaged.</li> <li>RPN notice issued on 13.11.17 to M/s EVO Tech, but further RPN action not initiated against the party.</li> <li>Earthwork 900 / 1900 m<sup>3</sup> completed.</li> <li>370 / 377 m<sup>3</sup> concreting completed.</li> <li>950 / 995 T Technological structures fabricated and 910 /995 T erected.</li> <li>All 160 T Mechanical equipment supplied and 135 / 160 T erected.</li> <li>4450/7299 T Refractory erection completed.</li> <li>Furnace was to be "Blown-in" with upgraded stoves, however, the party i.e., M/s Evo Tech is not deploying enough resources. Details of the stove status is as under: <ul style="list-style-type: none"> <li><u>Stove-11:</u> Shell and refractory erection has been completed. Air and gas Valve erection has been completed.</li> <li><u>Stove-10:</u> Shell erection has been completed. Air and gas Valve erection has been completed. Refractory erection in Hot blast main and Bustle main has been completed except nozzle area. Hydraulic Pipelines erection (1850 meter) has been completed. Flushing of Hydraulic Pipelines has been completed. Stove- 11 &amp; 10 has been made ready for test/ trials.</li> <li><u>Stove-12:</u> Dismantling work of stove shell &amp; refractory completed. Erection of Shell and dome completed and welding work under progress. Erection of platforms at dome level completed and given clearance to M/s L &amp; T for laying cable. Remaining platform erection is under progress. Supply of Silica refractory &amp; Chequered bricks for Stove-12 has been completed. Erection of Cold Blast Main header under progress. Branch line to stove-10 with one valve completed. Erection of CA line &amp; BF Gas line inlet to stove-12 under progress. Work of false ceiling work under progress. FFCR room completed. Erection of air conditioning system completed except cooling tower.</li> </ul> </li> </ul> <p><i>Work delayed due to arbitration proceeding. Arbitration decision has come in Jul'18 and is in favour of the party. BSP has accepted the delay in handing over of site for stove erection work by 1 year. Party has been advised to increase resource at site.</i></p>						
<b>2</b>	<b>Stove Refractories</b>					
<b>SN</b>	<b>Package</b>	<b>Party</b>	<b>Cost</b>	<b>Expenditure</b>	<b>Eff. Dt of contract</b>	<b>Schedule (Likely/ Actual)</b>
<b>2A</b>	For scope & quantity (18 Items)	M/s SRU	<b>NOC:</b> Rs.22.11 Cr	Rs.9.78 Cr	19.03.13	Completed
<b>2B</b>	For scope & quantity (8 Items)	i. M/s Associated Ceramics Ltd ii. M/s Calcitherm Engineers Pvt. Ltd., Raipur	<b>NOC:</b> Rs.4.06 Cr.	Rs.3.89 Cr	19.09.15 & 23.09.15	Completed
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>Total 3000 T / 7299.8 T Stove Refractory Material Supplied.</li> <li>M/s SRU has shown inability in supplying SIO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> refractory for stove.</li> <li>Alternate action taken for procurement of stove refractory.</li> </ul>						
<b>3.</b>	<b>Supply of columns, girders &amp; grids</b>	M/s GAME, Bhilai	<b>NOC:</b> Rs.1.99 Cr.	Rs.1.99 Cr	06.08.13	<b>Jun'15</b>
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>All 48.6 T Columns, all 51.3 T Girders &amp; all 83.7 T Grids supplied.</li> </ul>						
<b>4.</b>	<b>Supply of Stove Valves</b>	M/s Fouress Engineering India Ltd., Aurangabad	<b>NOC:</b> Rs.5.09 Cr	Rs.5.03 Cr	<b>PO dt.</b> 17.07.13	<b>May'15</b>
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>All 15 Stove Valves, Lubrication system (1 No.) &amp; Hydraulic system (1 No.) supplied.</li> </ul>						
<b>5.</b>	<b>Supply of Expansion Joints</b>	Ms/ Flexican Bellows & Hoses	<b>NOC:</b> Rs.0.70 Cr.	Rs.0.67 Cr	<b>PO dt.</b> 16.03.13	<b>Apr'15</b>
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>All 5 nos. Expansion joint supplied. Leakage test done on 29.08.2016.</li> </ul>						
<b>6.</b>	<b>Supply &amp; Installation of Combustion Air Fan &amp; Gas Mixing Station</b>	M/s TLT Engg.	<b>NOC:</b> Rs.4.72 Cr.	Rs.3.88 Cr	13.04.13	<b>Sep'19</b>
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>All 25 BE(A) &amp; DE(R) Drawing submitted.</li> <li>All 43.5 T Mech. Eqpt. &amp; all 22.7 T Elec. Eqpt. Supplied.</li> <li>41 out of 43.5 T Mech. Eqpt. &amp; 15 out of 22.7 T Elec. Eqpt. Erected.</li> <li>Erection of Two nos CA Fan and no load trial run completed.</li> <li>Erection of Gas mixing station completed.</li> </ul>						
<b>7.</b>	<b>Supply &amp; Installation of Electrical, Instrumentation &amp; Automation System</b>	M/s L&T	<b>NOC:</b> Rs.8.36 Cr.	Rs.6.66 Cr	<b>24.04.13</b>	<b>Apr'20</b>
<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>L-2 Network (R-1) approved on 11.03.14.</li> <li>All BE Drawing &amp; DE Drawing submitted &amp; approved.</li> <li>61.5/ 64T Electrical Equipment Ordered, 61.5/64 T supplied &amp; 30/64 T erected.</li> <li>No load Trial run of both motors No.1 &amp; 2 of CA Fan completed.</li> <li>Erection of conduits about 70 % completed. Cable laying completed and PCC, MCC 1, 2 &amp; 3, PDB, LT panel for CA Fan house charged.</li> </ul>						

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
	<ul style="list-style-type: none"> <li>Fixing of LCB under progress.</li> <li>Erection of earthing plates of lightning arrestor in Chimney completed.</li> <li>Cablings for lighting fixture in FFCR room completed and clearance given for false ceiling work.</li> <li>Cablings work for stove valves started at dome area of stove after given clearance by package WP-01</li> </ul> <p><b>CONSTRAINTS FACED</b></p> <ul style="list-style-type: none"> <li>M/s L&amp;T reluctance to supply the balance items like lighting fixture, network switches required for stove automation. Shop has agreed to provide lighting fixture, network switches because party denied for supply.</li> </ul>					

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Shutdown of BF-4 was taken on 08.01.18 for 150 days.</li> <li>RPN notice issued on 13.11.17 to M/s EVO Tech, but further RPN action not initiated against the party.</li> <li>Work delayed due to arbitration proceeding. Arbitration decision has come in June'18 and is in favor of the party. BSP has accepted the delay in handing over of site for stove erection.</li> <li>In spite of all even M/s Evotech is repeatedly failing to commitment schedule and not deploying adequate resources.</li> <li>M/s Evotech has raised issue of price escalation payment against the award.</li> <li>Party not taken action for refractory erection work of Stove-12.</li> </ul>	<ul style="list-style-type: none"> <li>After arbitration decision, party is being pursued to improve resource at site.</li> <li>Procurement of refractory from other source has been arranged; revised TS finalized for supply of balance refractory.</li> <li>Refractory inspection for third stove completed.</li> <li>Due to long storage, the insulation bricks are damaged in store. These materials have been taken on returnable basis from RED (procured for stove-19 of BF-6).</li> <li>Refractory erection work of Stove-12 along with supply of auxiliary material &amp; re-do work de-scoped and it is under process of reverse auction.</li> </ul>

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri. S R Suryavanshi CGM (Blast Furnace)	Shri Srinivas Guju GM (Blast Furnace)	Shri N K Das GM (Projects)

### **BSP – Installation of Cast House De-fuming system in Blast Furnace No.7**

1.	<b>PROJECT:</b> Installation of Cast House De-fuming system in Blast Furnace No.7	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Aug'15
ii)	Original approved date of commissioning	Aug'16
iii)	Now anticipated	Mar'2020
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.21.68 Cr. (Net of Cenvat credit Rs.1.81 Cr.)
ii)	Expenditure till Mar'19	Rs.16.04 Cr
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.1.35 Cr
iv)	Cumulative expenditure up to Feb'2020	Rs.17.39 Cr

#### 4. BENEFITS ENVISAGED

Installation of Cast House De-Fuming System at both the cast houses of BF No.7 is required for a clean cast house during metal tapping operation and to meet the statutory norms laid down by the MoEF for work zone dust level in cast houses.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	Installation of Cast House Defuming system in Blast Furnace No.7 <b>Capacity:</b> 600,000 m <sup>3</sup> /h (minimum)	M/s Uniseven Engineering and M/s Soil & Enviro	<b>NOC:</b> Rs.21.68 <b>Cr. Gross:</b> Rs.23.49 Cr.	Rs.17.39 Cr	21.08.15	Aug'16/ Mar'20
	<p><b>STATUS</b></p> <ul style="list-style-type: none"> <li>4250/4300 M<sup>3</sup> earthwork &amp; 890/905 M<sup>3</sup> concreting completed.</li> <li>805/990 T equipment including technical structure supplied &amp; 651/968 T Technical structure erected.</li> <li>887/1047 T Mechanical equipment supplied &amp; 682/1077 T Mechanical equipment erected.</li> <li>All 30 T Electrical Equipment supplied &amp; 0/30 T erected.</li> <li>ESP erection &amp; alignment completed. Completion of erection of Inlet duct of ESP. Insulation work of ESP balance.</li> <li>ID Fan foundation and its erection of ID Fan completed. Shed over ID Fan completed.</li> <li>Inside the cast house of BF-7, ducting work and foundation of manipulator completed.</li> <li>7 out of 9 foundations of duct support from outside the cast house to ESP inlet completed.</li> <li>Electrical building completed.</li> <li>Placement of ESP Equipment completed.</li> <li>Two engineering notice has been issued to party.</li> <li>Suction duct of Fan and its shed structure columns erected.</li> <li>Erection of duct support structure between Rly. Track is in progress.</li> <li>Diversion of existing nitrogen line along Cast house completed.</li> <li>Excavation and casting of Chimney foundation completed. Back filling around stack completed.</li> <li>Erection of Three nos. bracket for duct support along the cast house completed.</li> <li>9 Ton electric motor of ID Fan erected.</li> <li>Assembly of structural support under progress.</li> </ul>					

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
	<ul style="list-style-type: none"> <li>Laying of cabling under progress.</li> <li>Erection of chimney partly completed.</li> <li>Erection of outlet duct of ESP completed. Erection of monorail &amp; supporting structure over ESP completed.</li> <li>Erection of duct along the cast house of BF-7 is in progress.</li> <li>An engineering notice was given on 14/01/2020 and party committed to mobilize to start work at the earliest.</li> </ul>					

#### 6.CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Initially duct from cast house to ESP inlet was envisaged that was to be supported by cast house columns but at the time of detail engineering and several site visit by Consultant, CET suggested to have a separate 5 foundations in between the track for supporting the duct which was approved in June 2017. As the tracks are supplying hot metal ladles from BFs to SMS-II, that has resulted delay in completing the civil foundations.</li> <li>Non-payments to sub-contractor by M/s Uniseven affected the site activities several times.</li> <li>Delay in payment by BSP due to implementation of GST in July, 2017.</li> <li>Delay in redesigning of incoming duct and its ducts support civil foundation between railway tracks.</li> <li>Due to poor performance of contractor, two times engineering notice issued.</li> <li>Progress at site is slow as resource deployed by the party is not adequate.</li> <li>Work started and erection of 2 trestles between tracks completed.</li> </ul>	<ul style="list-style-type: none"> <li>Party is being pursued for expediting the work.</li> <li>Charter of Corporate Responsibility for Environmental protection (CREP) issued by CPCB is the guideline for improvement of environmental performance in 17 categories of industries.</li> <li>To ensure safety and health of the employees and other contractual workers, all Personal Protective Equipment (PPE) are provided to them. In addition, to further improve the work zone environment, BSP has initiated project for installation of cast house de-fuming system in BF-7.</li> <li>Interest bearing loan sanctioned.</li> </ul>

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri S R Suryavanshi CGM (Blast Furnace)	Shri Srinivas Gujju GM (Blast Furnace)	Shri N K Das GM (Projects)

### **BSP – Setting up of Static facility for Environmentally Sound Management of PCB**

1.	<b>PROJECT:</b> Setting up of Static facility for Environmentally Sound Management of PCB	
2.	<b>SCHEDULE:</b>	
i)	Zero Date (Pkg-1)	Jul'16
ii)	Original approved date of commissioning (Pkg-1)	Oct'17
iii)	Now anticipated (Pkg-1)	Mar'20
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs.136.37 Cr. (Rs.30.79 Cr.-For Pkg-1)
ii)	Expenditure till Mar'19	Rs.24.19Cr
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.3.98 Cr
iv)	Cumulative expenditure up to Feb'2020	Rs. 28.17 Cr

#### 4. BENEFITS ENVISAGED

Polychlorinated Biphenyls (PCBs) are a class of synthetic organic chemicals used in many industries. These chemicals are categorized as Persistent Organic Pollutants (POPs) under an international agreement called 'Stockholm Convention on Persistent Organic Pollutants (POPs)'. The Republic of India signed the Stockholm Convention on POP's on 14<sup>th</sup> May 2002 and ratified it on 13<sup>th</sup> January 2006.

The facility is being set up for disposal of PCB transformers. SAIL/BSP is setting up the scheme and equipment supplied & erected by M/s Ramky under UNIDO funding.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	Building and Infrastructure (Package-1)	M/s HSCL, Bhilai	<b>Basic:</b> Rs.28.68 Cr. <b>Gross:</b> Rs.30.79 Cr.	Rs.28.17 Cr	15.09.16	Oct'17/Mar'20
	<b>STATUS</b>					
	<ul style="list-style-type: none"> <li>11805 /12000 M<sup>3</sup> earthwork completed.</li> <li>4910 / 5000 M<sup>3</sup> concreting completed.</li> <li>1294 / 1300 M<sup>3</sup> brickwork completed.</li> <li>248.5/250 T structure fabricated and 248.5/250 T erected.</li> <li>6/7 T Mechanical equipment ordered.</li> <li>Drain casting completed.</li> <li>Work has stopped in absence of Extension of Time.</li> </ul>					

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Delay in getting the statutory clearances like Building Permission &amp; height permission for water tanks</li> </ul>	<ul style="list-style-type: none"> <li>Clearance Certificate from Central Ground Water Authority received.</li> <li>Party is being pursued for expediting the work.</li> </ul>



**7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Coordinator	Project Manager
For Pkg-1 Shri R G Gupta GM(Env.MD)	For Pkg-1 Shri K Praveen, DGM (Env.MD)	ShriB K Sinha GM (Projects)
For Pkg-2,3,4,5,6,7&8 Shri H C Agrawal,CGM(Electrical)	For Pkg-2,3,4,5,6,7&8 Shri P K Basu,GM (PSD)	

**BSP– Installation of ESP’s as replacement of Multi cyclones for all 4 nos. of Sinter Machine of SP–II**

1.	<b>PROJECT:</b> Installation of ESP’s as replacement of Multi cyclones for all 4 nos. of Sinter Machine of SP–II	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Oct’16
ii)	Original approved date of commissioning	Sep’18
iii)	Now anticipated	Jun’20
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs. 46.58 Cr. (Net of Cenvat credit Rs.4.14 Cr)
ii)	Expenditure till Mar’19	Rs.5.40 Cr
iii)	Expenditure in 2019-20 up to Feb’2020	Rs.4.84 Cr
iv)	Cumulative expenditure up to Feb’2020	Rs.10.24 Cr

**4. BENEFITS ENVISAGED**

Multi cyclones were designed for stack emission level of 150 mg/Nm<sup>3</sup>. As per pollution norms, stack emission level should be less than 50 mg/Nm<sup>3</sup>. In order to meet the required pollution norms Installation of ESPs in all 4 nos. of Sinter Machines of Sinter Plant-2 was needed.

**5. PHYSICAL PROGRESS OF WORK**

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	Installation of ESP’s as replacement of Multi cyclones for all 4 nos. of Sinter Machine SP–II	M/s GEA Process Engineering (India) Pvt.	<b>NOC:</b> Rs.46.58 Cr. <b>Gross:</b> Rs.50.82 Cr.	Rs.10.24 Cr.	04.10.16	Sep’18/ Jun’20
<b>STATUS</b>						
<ul style="list-style-type: none"> <li>Kick off meeting held on 03.11.16.</li> <li>Site survey work completed. Name plate &amp; numbering system of drawing approved on 21.11.16.</li> <li>Piling work for ESP foundation in progress; 100/250 nos. Balance piling work under progress.</li> <li>Civil work for ESP-1 completed, Structure erection is in progress.</li> <li>Civil work for pile cap of ESP-2 is in progress.</li> <li>590/1800 MT steel structures for Silos 1 &amp; 2 and ESP # 1 &amp; 2 supplied.</li> <li>Civil work (Plaster &amp; brickwork) of MCC &amp; Compressor room is under progress. Concreting work for 1<sup>st</sup>, 2<sup>nd</sup> &amp; 3<sup>rd</sup> slab completed.</li> <li>Erection of support structures of Silos 1 &amp; 2 completed. Railing, Erection of railing, support structures &amp; grating is in progress.</li> </ul>						

**6. CONSTRAINTS FACED:**

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Civil work stopped since last 3 months as initial load test of pile was not done.</li> <li>Delay in fixing of agency for conducting initial load test pile.</li> <li>No deployment of agency /manpower in areas where work fronts is available.</li> <li>ESP 3 &amp; 4 - Civil work not yet started due to non-availability of clear front (Pipelines needs to be rerouted and overburden to be removed).</li> <li>Shutdown awaited from Shop SP-II for diversion of existing pipe line for ESP1&amp;2 and ECR Building.</li> </ul>	<ul style="list-style-type: none"> <li>Due to extremely slow progress, 1<sup>st</sup> Engineers notice was issued in Jul’18 after which party has started mobilizing the resources at site.</li> <li>2<sup>nd</sup> engineering notice issued to the party in Nov’18, however the progress of work is still very slow.</li> <li>3<sup>rd</sup> engineering notice issued to the party in July’19, however the progress of work is still very slow.</li> <li>4<sup>th</sup> engineering notice issued to the party in Jan’20, however the progress of work is still very slow.</li> <li>Party has been continuously communicated through letters and e-mails for resuming the work.</li> <li>In spite of repeated reminders party has not restated the work. Finally a letter was issued to party for a meeting at BSP.</li> <li>A meeting was held on 04.01.2019 in the office of GM Proj with officers of M/s GEA. In this meeting, party has agreed to restart the work immediately and also agreed to engage more agencies in the areas where work fronts is available.</li> <li>In spite of repeated reminders for shutdown to Shop (SP-II); shutdown plan is awaited.</li> </ul>

**7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Coordinator	Project Manager
Shri M B Panna GM (SP-2)	Shri R Bijurkar GM(SP-2)	Shri S.S. Moury, DGM (Projects)

## BSP–Treatment & Recycling of Waste water of Outlet-C

1.	<b>PROJECT:</b> Treatment & Recycling of Waste water of Outlet-C	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Jun'19
ii)	Original approved date of commissioning	Aug'20
iii)	Now anticipated	Aug'20
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs. 42.00 Cr. (Net of ITC Rs.7.00 Cr)
ii)	Expenditure till Mar'19	Nil
iii)	Expenditure in 2019-20 up to Feb'2020	Rs.16.81 Cr.
iv)	Cumulative expenditure up to Feb'2020	Rs.16.81 Cr.

#### 4. BENEFITS ENVISAGED

The proposed project is intended to reduce waste water discharge from BSP through treatment and recycling, progressively aiming towards “zero discharge”. The proposed project is also for enhanced conservation of water resources to reduce specific water consumption for industrial use.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure	Eff. Dt of contract	Schedule (Likely/ Actual)
1	Treatment & Recycling of Waste water of Outlet-C	M/s Effwa Infra & Research Pvt Ltd., Mumbai	<b>Net of ITC:</b> Rs.42.20 Cr. <b>Gross:</b> Rs.49.20 Cr.	Rs.16.81 Cr.	20.06.19	Aug'20/Aug'20
	<b>STATUS</b> <ul style="list-style-type: none"> <li>• Civil works for Clarifloculators, Water Treatment &amp; Circulation plant, Collection Pit for Pump House -2, Sludge drying Bed, Aeration Chambers etc. are in progress and excavation for Pump house -1 is completed.</li> <li>• Supply of 800 mm dia. ERW pipe is in progress, approx. 6000 Metres of pipes have been received at site. RCC Hume pipe 1000 mm dia. Supply in progress. HT cable complete LOT supplied and lying to be started very soon.</li> <li>• Pipe jointing, bend preparations, etc. are under progress.</li> <li>• Construction of store under progress.</li> </ul>					

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>• Slow progress in drawings for Pipeline laying work.</li> <li>• Lack of Security at PH No.1 area to facilitate Construction activities and threat of Theft/pilferages of Equipment /costly materials etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Party facilitated for Route survey to avoid SECR tracks crossing etc.</li> <li>• New route finalised and submitted to CET for clearance.</li> <li>• CISF deployment at the vicinity to strengthen Party's own security is explored by taking up the issue of threat with higher authorities of BSP/CISF.</li> </ul>

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri A L Malodia, GM (WMD)	Shri S. Bhardwaj, DGM(WMD)	Shri D K Pouriya, GM (Project-Utility)

## DSP – Installation of new Rotary Hearth Reheating Furnace at Wheel & Axle plant

1.	<b>PROJECT:</b> Installation of new Rotary Hearth Reheating Furnace at Wheel & Axle plant	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Feb'15
ii)	Original approved date of commissioning	May'16 (15 months)
iii)	Now anticipated	Hot trial started in <b>Jul'19</b>
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs. 26.65 Cr; Cenvat benefit of Rs. 3.54 Cr.
ii)	Expenditure till Mar'19	Rs. 29.02 Cr.
iii)	Expenditure in 2019-20 up to Feb'20	Rs.3.90 Cr.
iv)	Cumulative expenditure up to Feb'20	Rs.32.92 Cr.

#### 4. BENEFITS ENVISAGED

The scheme of Installation of new Rotary Hearth Reheating Furnace (20tph) is one of the projects identified under Centre of Excellence (COE) schemes for improvement of the performance of the existing W&A Plant. The existing furnace has outlived its designed life and the performance has deteriorated over the years. Thus, it has been considered essential to replace existing rotary hearth reheating furnace by a new one with state of art technology at a new location as advance replacement of the existing furnace. This will enhance the production level to the rated capacity on long term and consistent basis.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost (Party Wise)	Expenditure Rs. Cr.	Eff. Dt of contract	Sch (Likely/ Actl)
i	Installation of new Rotary Hearth Reheating Furnace at Wheel & Axle plant	Consortium of M/s Wesman Engineering & M/s Haldia Nirman Projects Ltd.	<b>NOC:</b> Rs.18.33 Cr. <b>Gross:</b> 20.95 Cr. <b>NOC:</b> Rs.5.88 Cr. <b>Gross:</b> 6.8 Cr.	32.92	28.02.15	May'16/ Jul'19
<b>Furnace Area :</b> <ul style="list-style-type: none"> <li>PAT of all facilities of New Rotary Hearth furnace have been completed in segments by 22.02.2019</li> <li>Major PAT Defect liquidation Completed.</li> <li>Integrated cold trial started from 25.3.19 with insertion of cold blanks into the furnace. Cold trials have been completed on 12.4.19.</li> <li>Charged cold blocks removed from furnace on 16.05.19.</li> <li>PAC issued on 03.06.19 w.e.f. 20.05.19.</li> <li>Furnace gas charged. Hot trial started from 09.07.19, in progress</li> <li>123Nos blocks charged on 31.7.2019</li> <li>Cumulative Discharge: 490Nos</li> <li>Liquidation of defects observed during hot trial is in progress.</li> <li><b>M/s Wesman has intimated that the Burner Blocks will be supplied by 18.01.2020 and commissioning of the furnace will be taken up by end of January 2020.</b></li> <li><b>Replacement job of burner blocks is completed. Other preparatory jobs are in progress.</b></li> </ul>						

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Delay in completion of Design and Engineering</li> <li>Delay in Equipment supply</li> <li>Inadequate site mobilisation</li> </ul>	

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri D.V. Jagannath GM (W&A)	Shri Rajesh Jaiswal DGM (Oprn), WAP	Shri R.K Mondal DGM (Projects)

## DSP – Power Evacuation for 2x20 MW New Power Plant

1.	<b>PROJECT:</b> Power Evacuation Package for 2x20 MW New Power Plant at DSP.	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Mar'17
ii)	Original approved date of commissioning	Aug'18 (16 months)
iii)	Now anticipated	Mar'20
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs. 51.71 Cr; Cenvat benefit of Rs. 3.90 Cr.
ii)	Expenditure till Mar'19	Rs.40.11 cr.
iii)	Expenditure in 2019-20 up to Feb'20	Rs.7.45 cr.
iv)	Cumulative expenditure up to Feb'20	Rs.47.56 cr.

#### 4. BENEFITS ENVISAGED

After completion of Ongoing Modernisation & Expansion Plan, Category-I and Emergency load of the Plant is likely to increase to around 33.5 MW. Capacity of OPP cannot be augmented to meet this enhanced requirement. Therefore, 2x20 MW Power Plant was envisaged to be set up vide a 50:50 JV between SAIL and NTPC, at DSP. The scheme of Power Evacuation is required for the evacuation of Generated power from the New Power Plant.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost (Party Wise)	Expenditure Rs. Cr.	Eff. Dt of contract	Sch (Likely/ Actl)
i	Power Evacuation Package for 2x20 MW NPP at DSP	M/s L& T	<b>NOC:</b> Rs.45.35 Cr. <b>Gross:</b> 49.26 Cr.	47.56	22.4.17	Aug'18 (Likely-Mar'20)
<ul style="list-style-type: none"> <li>• Contract signed on 08.05.17 w.e.f 22.04.17.</li> <li>• First Kick-off meeting held on 22-23.05.17 at DSP.</li> <li>• L-2 network has been approved</li> <li>• Design &amp; engineering: BE – completed, DE –completed.</li> <li>• RCC work in progress               <ul style="list-style-type: none"> <li>- New Power House at Old Power Plant completed (RCC- 1250 m<sup>3</sup>).</li> <li>- Overhead Cable Route from NPP to Sajara Substation completed (RCC - 384 m<sup>3</sup>)</li> <li>- Overhead Cable Route from Sajara Substation to New Power House completed (RCC - 306 m<sup>3</sup>)</li> <li>- LT Substation to BOF completed (RCC - 350 m<sup>3</sup>)</li> <li>- LT Substation at CCP completed (RCC - 350 m<sup>3</sup>)</li> <li>- Switchyard foundation completed (RCC – 60 m<sup>3</sup>)</li> </ul> </li> <li>Finishing civil work in progress at New Power House at Old Power Plant, LT Substation at BOF and LT Substation at CCP</li> <li>• Structural work               <ul style="list-style-type: none"> <li>- 558/ 660 t of fabricated structures received at site</li> <li>- 490/ 660 t of structures erected (erection of Cable gallery/ gratings in progress)</li> </ul> </li> <li>• Electrical Work in progress               <ul style="list-style-type: none"> <li>- Preparatory civil job (rod cutting, bending) for 33kV bay extension at MRS in progress</li> <li>- Casting of column for Bus Post Insulator for 33kV bay extension at MRS in progress</li> <li>- Major cable laying completed, testing jobs is in progress.</li> <li>- 33 kV Cable Jointing in progress</li> </ul> </li> <li>• After lot of follow up the SCADA RTU panels are delivered at site recently on 06th Jan'2020.</li> <li>• Schematic Testing of 11KV &amp; 33 KV panel is completed.</li> <li>• Testing of 33KV outdoor equipment CT, PT &amp; Breaker at MRS outdoor yard completed.</li> <li>• Oil Filtration of 4 Nos. oil type 10 MVa transformer complete; testing completed.</li> <li>• Central Electricity Authority inspection carried out on 29.02.20 &amp; approval for charging of electrical installation for Power Evacuation package is done 02.03.20.</li> </ul>						

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>• Interfacing of unforeseen underground services (Cables, Pipes etc.) –</li> </ul>	Additional trestles were added which were not envisaged.

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
Shri J.P. Mukherjee GM (Elect.)	Shri D Baidya DGM (PMD)	Shri G.K Guha DGM (Projects)

### DSP- Replacement of Converter Shells together with Bottom Stirring System and Installation of Secondary Emission Control in all the Three Converters of Steel Melting Shop

1.	<b>PROJECT:</b> Replacement of Converter Shells together with Bottom Stirring System and Installation of Secondary Emission Control in all the Three Converters of Steel Melting Shop	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Dec'18
ii)	Original approved date of commissioning	Sep'20 (20 months from effective date of contract)
iii)	Now anticipated	Sep'20
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.263.36 Cr; net of ITC of Rs.41.13 Cr.
ii)	Expenditure upto Mar'19	-
iii)	Expenditure in 2019-20 up to Feb'20	Rs.36.25 Cr
iv)	Cumulative expenditure up to Feb'20	Rs.36.25 Cr

#### 4. BENEFITS ENVISAGED

Due to prolonged usage of the Converters, its physical condition has deteriorated and breakdown hours have increased hampering production. Hence, replacement all three Converter shells, trunnion and their suspension systems along with bearings, pedestal assemblies and Converter drive systems with electrics is being done to enhance the reliability of Converters and reduce downtime. Also, installation of Converter Bottom Stirring System together with revamping of the Converter vessel is being taken up to accelerate blowing cycle for better kinetics & homogenization, reduce ferro-alloy consumption, leading to higher metallic yield and improved Converter lining life.

As a Pollution Control measure, Centralized Electrostatic Precipitator (ESP) based Secondary Emission Control System is being installed in all the 3 Converters to control the fugitive emissions within norms at the working platform level.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost (Party Wise)	Expenditure Rs. Cr.	Eff. Dt of contract	Sch (Likely/ Actl)
i	Main Package Gross Rs.257.23 cr.	Consortium of SMS Group GmbH, Germany &	€ 6,122,635	-	30.1.19	Sep'20
		SMS India Pvt Ltd, New Delhi	Net of ITC: Rs.164.02 Cr. Gross: 194.44 Cr.	-		
<ul style="list-style-type: none"> <li>Contract signed on 31.1.2019, effective date of Contract - 30.1.19.</li> <li>Kick-off meeting held on 25-17.2.19.</li> <li>LC has been opened.</li> <li>L-2 Schedule has been approved.</li> <li><b>Drawing Status:</b> 371 out of 373 drawings are approved /approved with note till date. An engineering meet was held at DSP from 21-22.01.2020 for across the table approval of pending drawings. 2 nos. drawings pertaining to HVAC are pending.</li> <li><b>Civil Work</b> <ul style="list-style-type: none"> <li><b>ESP Area</b> -Piling complete (66 nos.); pedestal foundation casting completed, Front ready for structural erection</li> <li><b>Stack</b>-concrete for wall upto 7.3 m completed. Wall shuttering is in progress above 7.3 m.</li> <li><b>Gas Mixer</b> -Piling complete (14 nos.); 3 out of 4 pedestal casting completed till date</li> <li><b>Dust Silo</b> - Piling complete (8 nos.)</li> <li><b>Duct Support</b> – Piling complete (16 nos.); preparatory job for Pile Cap in progress.</li> <li><b>Common Duct Support</b> - Piling in progress(50/92 complete)</li> <li><b>ID Fan</b>-Piling in progress(11/45 nos. complete)</li> <li><b>ECR Building</b> -Foundation complete; Casting of first floor slab complete on01.02.2020</li> </ul> </li> <li><b>Mechanical</b> <ul style="list-style-type: none"> <li>Converter vessel-1, lining ring base, lip ring segment &amp; Heat protection plates for one converter arrived at site and placed on the assembly bed. Alignment completed. Welding of top cone started on 31.01.2020. Welding work for trunnion ring and bottom cone assembly in progress.</li> <li>Heat Protection plate of converter received.</li> <li>Foreign supply: DC for rotary joint, bearing, bearing housing &amp; fasteners, trunnion ring &amp; pins, converter tilt drive issued. 1st shipment of lamella suspension &amp; vessel guide started from Germany on 15.01.2020</li> <li>Indigenous supply: DC for LT motors of converter tilt drive, New Master Controller for Main Control Desk Modification[Converter] and Control Desk Pendant Panel - Master Controller for Tapping /De-slagging issued. Trunnion rings &amp; pin for converter-1 dispatched to reach site shortly.</li> <li>Inspection call for ID Fans with accessories, Motorized multilouver damper at ID Fan inlet, balance foundation bolts, PLC for Converter and PLC for Secondary Emission system, Field Component / Devices, RTD for Temp. Measurement raised by M/s SMS group.</li> </ul> </li> <li><b>Structural</b> <ul style="list-style-type: none"> <li>Fabrication at manufacturer site is in progress</li> <li>Fabrication of ESP support str., Common Duct &amp; Silo, Stack Str., Gas Mixer and its supporting structure has been started. Fabrication of DOG house, 9m + charging and tapping duct is on M/s Sulekha, Vizag.</li> </ul> </li> <li><b>Refractory</b> <ul style="list-style-type: none"> <li>Drawings cleared, order placed on M/s RHI.</li> </ul> </li> <li><b>Electrical &amp; Automation</b> <ul style="list-style-type: none"> <li>IC raised for PLC Panel, DC released for tilt drive motors</li> </ul> </li> </ul>						
ii.	Power Supply Package for Secondary Emission Control	IEE Projects India Ltd.	Net of ITC: Rs.6.20 Cr. Gross: 7.23 Cr.	-	6.2.19	Mar'20
		<ul style="list-style-type: none"> <li>Contract signed on 6.2.2019, effective date of Contract - 6.2.19</li> <li>Kick off meeting held on 12-13.2.19.</li> <li>L2 Schedule approved.</li> <li><b>Drawing Status:</b></li> <li>76 out of 87 drawings are approved /approved with note till date. 81 drawings has been submitted so far, 3 nos. commented and 3 no. under scrutiny</li> <li><b>Civil Work</b> <ul style="list-style-type: none"> <li><b>Transformer Room:</b> Plastering inside the transformer room complete, painting to start.</li> <li><b>Extension Bay at MRS:</b> Major Civil Job completed.</li> <li><b>Cable Gallery Trestle Foundation (4 nos.):</b>3 out of 4 foundations completed. Excavation for 4<sup>th</sup> foundation in progress.</li> </ul> </li> <li><b>Structural :</b> <ul style="list-style-type: none"> <li>Fabrication of structure for cable gallery started</li> <li>Erection of Lattice structure and equipment at MRS extension bay completed</li> </ul> </li> <li><b>Electrical:</b> <ul style="list-style-type: none"> <li>All the items in the billing schedule has been ordered. Dc for all major Items has been released. Supply of Transformer, NGR, NIFPS,IPS Tube/bus bar, Marshaling kiosk, Relay Panel, mimic panel, Illumination, 11 kv cable, ACDB, DCDB,</li> </ul> </li> </ul>				

SN	Package	Party	Cost (Party Wise)	Expenditure Rs. Cr.	Eff. Dt of contract	Sch (Likely/ Actl)
	LA and earth pit equipment is pending. IPS AI Tube arrived at site. Clamps and connectors have to be taken out of DSP for modification. <ul style="list-style-type: none"> <li>Major Civil Job completed in Extension Bay at MRS. Casting of Cable Gallery Trestle Foundation in progress (casting of 3 out of 4 foundations completed)</li> <li>Cable laid for 90 % of the cable route. Back filling of the cable trench completed. Cable Jointing is in progress; 10 nos. Jointing completed.</li> <li>Wall mounted isolator erected at Transformer room.</li> <li>Transformer placed at the pedestal and fitting of its auxiliaries completed, Wiring for Illumination of Transformer room is started on 22.02.2020. Earthing of Transformer is in progress.</li> </ul>					

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
NIL	NIL

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
GM (Steel)	DGM (SMS)	Shri P. Kumar DGM (Projects)

### **DSP – Procurement of One no. Steam Turbine Rotor Assembly for Turbo-Blower Nos. 1-4 in Old Power Plant**

1.	<b>PROJECT:</b> Procurement of One no. Steam Turbine Rotor Assembly for Turbo-Blower Nos. 1-4 in Old Power Plant	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Feb'19
ii)	Original approved date of commissioning	Jan'20 (44 weeks)
iii)	Now anticipated	Dec'20
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs. 23.78 Cr; Net of ITC of Rs. 3.80 Cr.
ii)	Expenditure upto Mar'19	-
iii)	Expenditure in 2019-20 up to Feb'20	Rs.0 Cr.
iv)	Cumulative expenditure up to Feb'20	Rs.0 Cr.

#### 4. BENEFITS ENVISAGED

Turbine rotors for TB Nos. 1 to 4 are identical. Of the six turbine rotors, four are in service and two are kept as spare. Four out of six turbine rotors are more than 55 years old. At present, TB No. 1, 2 & 4 are in operation. Overhauling of TB-2 was taken up in 2015 and TB-1 in 2018. TB-3 is under overhauling and overhauling of turbines for TB-4, which is in continuous operation since 1997-98, is due. Out of two spare turbine rotors, one was re-conditioned and readied with new Blower Rotor Assembly and was used for overhauling of TB-1. The second spare turbine rotor which has been removed from TB No.2 has been reconditioned and re-bladed and is being utilised for overhauling of TB-3. For overhauling of TB No.4, which will be taken up after TB-3 is ready, it is essential to procure one complete bladed turbine rotor assembly.

#### 5. PHYSICAL PROGRESS OF WORK

SN	Package	Party	Cost	Expenditure Rs. Cr.	Eff. Dt of contract	Sch (Likely/ Actl)
i	Procurement of One no. Steam Turbine Rotor Assembly for Turbo-Blower Nos. 1-4 in Old Power Plant	M/s Siemens UK	<b>NOC:</b> Rs.23.78 Cr. <b>Gross:</b> 27.58 Cr.	Nil	15.3.19	Dec'20
<ul style="list-style-type: none"> <li>LOA issued on 27.2.19</li> <li>Work Order issued on 15.3.19</li> <li><b>LC opened on 21.12.19 after submission of PBG by the party. The PBG submitted is valued at 5% of the contract price.</b></li> <li><b>Delivery lead time to FOB UK Seaport is within 44 weeks from date of opening of LC. However, the same is getting delayed as M/s Siemens is still creating hindrance in the process of LC with flimsy issues.</b></li> </ul>						

#### 6. CONSTRAINTS FACED:

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN

#### 7. PROJECT OWNER/ CO-ORDINATOR/ MANAGER:

Project Owner	Project Coordinator	Project Manager
HoD Old Power Plant	-	-

## RSP- Power Evacuation at 220 kV from NSPCL to MSDS-IV

<b>1.</b>	<b>PROJECT : Power evacuation at 220 kV from NSPCL to MSDS-IV</b>	
<b>2.</b>	<b>SCHEDULE</b>	
i)	Zero Date	Nov'19
ii)	Original approved date of commissioning	May'21 (17 months from effective date of contract)
iii)	Now anticipated	May'21
<b>3.</b>	<b>COST (In ₹Cr.)</b>	
i)	Original approved (Stage-II):	Rs.51.28 Crore (net of ITC of Rs.8.22 Crore)
ii)	Expenditure till Mar'19	-
iii)	Expenditure in 2019-20 up to Feb'2020	-
iv)	Cumulative expenditure up to Feb'2020	-

#### **4. BENEFITS ENVISAGED**

It will help RSP to meet additional power requirement due to proposed new units such as Slab Caster-4, Pellet Plant etc. The project is a technical necessity for power evacuation and to increase the operation flexibility & reliability of power system.

Further, in absence of this link, power generated at new 250 MW unit of NSPCL can only be used in New HSM and surplus power shall be exported to the grid through MSDS-VII, whereas power shall have to be imported from grid to meet requirement of the existing plant. Simultaneous import and export of power shall lead to financial loss to RSP due to transmission charges payable to the transmission utility and losses on account of transmission.

Execution of proposed 220 kV double circuit line between NSPCL & MSDS-IV is therefore important to directly supply power generated by 250 MW unit to existing areas of RSP and avoid payment of such transmission charges and losses.

#### **5. PHYSICAL PROGRESS OF WORK**

Empowered Committee in its meetings held on 16.11.19 and 22.11.19 has accorded Stage –II approval for subject proposal. LoA issued on 23.11.2019 to M/s UPRNN Ltd., Ghaziabad.

- Contract signed on 04.12.2019.
- Kick off meeting held on 05.12.19.
- First & second Engg. Meeting held on 18.12.19 & 08.01.2020 respectively.
- Third engg. meeting along with review by ED (Projects) held on 27.02.2020.
- L-2 schedule submitted by party and approved.
- Design engg is under progress, BE : 6/22 nos & DE :12/136 nos completed till date.

#### **6. CONSTRAINTS FACED:**

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
NIL	NIL

#### **PROJECT OWNER/ PROJECT CO-ORDINATOR/ PROJECT MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
Shri M. K. Bhaskaran, GM I/c (Power Distribution)-	Shri D.K. Bhanja, GM (Power Distribution)	Shri S. Soren, GM (Projects)

## **BSL – Replacement of 6 nos. Battery Cyclones with ESPs in Sinter Plant**

1.	<b>PROJECT :</b> Replacement of 6 nos. Battery Cyclones with ESPs in Sinter Plant	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Jul'07 Jul'17 (after RPN)
ii)	Original approved date of commissioning	Aug'10 Dec'19 (after RPN)
iii)	Now anticipated	Dec'20
3.	<b>COST (Rs. in crore)</b>	
i)	Original approved	71.40 (net of CENVAT benefit of Rs. 9.20 crore)  62.04 (net of CENVAT benefit of Rs. 7.14 crore) -After RPN for balance work
ii)	Expenditure till Mar'19	54.89 Cr
iii)	Expenditure in 2019-20 (up to Feb'20)	9.10 Cr
iv)	Cumulative Expenditure up to Feb'20	63.99 Cr

#### 4. **BENEFITS ENVISAGED**

This is a Pollution control scheme to restrict Stack emission below 50 mg/Nm<sup>3</sup> as per the proposed pollution control norms of CPCB. The replacement of 6 Nos. of Battery Cyclones of 720,000 m<sup>3</sup>/hr with 6 nos. of Electrostatic Precipitators of capacity 900,000 m<sup>3</sup>/hr is being carried out in three machines of Sinter Plant for cleaning of sinter process gas to meet the Statutory requirement of emission level of outlet dust.

Battery cyclone No. 6 was replaced with ESP No. 6, which was brought into stream in October, 2010 by the earlier contractor (M/s SEPC). Preliminary Acceptance Certificate (PAC) for ESP No. 6 with Defect list was issued to the party on 05.07.10.

RPN action taken due to poor performance of the Contractor and fresh Contract signed after tendering. The present contract is for replacement of balance 5 ESPs.

#### 5. **PHYSICAL PROGRESS OF WORK**

- LOA issued to M/s Unicorn & M/s HNCPL on 21.07.17 at Rs. 53.55 Cr. Agreement signed on 17.10.17.
- Kick off held on 31.10.17.
- Site mobilization done.
- General layout approved.
- D & E - 139/148 nos submitted.
- Control room : Panel erection done & testing is in progress.
- Revisioning of Building & Technical structures in progress.
- Structural Fabrication completed - 500/550T.
- Equipment Supply : Electrode, ESP internal, Rapping assembly, Gas Distribution screen & slide bearing, Inlet Damper gate, Transformer supplied at site. Balance is under transit.
- Pre-shutdown activity for ESP#2 completed and shut down received on 16.10.19.
- Fabrication of 1 no Slurry disposal tank completed. Slurry diversion of Battery cyclone-1 done on 25.12.19.
- Rerouting work for isolation of ESP2 existing pipe line completed. Dismantling work completed on 02.01.2020.
- Erection will be started from 18.02.2020 and likely to be completed Apr'20. Commissioning of ESP#2 with exhaustor#2 expected by Apr'20.
- Issue: 5 month S/d for each ESP required.

#### 6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

- 5 months S/D for each exhaustor.
- Availability of shutdown as per plan

#### 7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/SP	I Majumdar, DGM (M) / SP	Sanjay Kumar DGM (P) RRMP, SP & AS Zone

## **BSL – Provision of Hydraulic Mudgun cum Drill Machine for BF-1**

1.	<b>PROJECT :</b> Provision of Hydraulic Mudgun cum Drill machine for BF-1	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Jun'14
ii)	Original approved date of commissioning	Jul'15
iii)	Commissioned	<b>Jan'20</b>
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs.28.41 Cr. (Cenvat benefit of Rs 2.76 Cr)
ii)	Expenditure till Mar'19	Rs. 24.79 Cr.
iii)	Expenditure in 2019-20 (up to Feb'20)	Rs. 0.00 Cr
iv)	Cumulative Expenditure up to Feb'20	Rs. 24.79 Cr



4. **BENEFITS ENVISAGED**

The old, maintenance prone and unreliable Mudguns and Drill Machines shall be replaced by new Hydraulically operated modern Mudguns cum Drill machines for both Cast houses of BF-1 which, in turn, will lead to smooth and trouble free tapping from the Furnace, less maintenance of Tap holes, less down time & improved productivity from the Furnace.

Mudgun

Operational capacity : 250 litres (for normal stroke)  
Plugging pressure at piston : 200 kg/cm2 (approx)

Drill Machine

Maximum Drilling Depth / Tapping depth : 3500 mm (approx)  
Drill rod length : 5200 mm

5. **PHYSICAL PROGRESS OF WORK**

- LOA placed on Paul Wurth India on 21.06.14 (order value - Rs 26.023 Cr NOC)

Work Completed

- Contract Signed on 21.07.14. Kick off meeting held on 18.08.14.
- Basic Engineering completed. Detail Engineering completed in Sep'15.
- Equipment dismantling completed in Mar'15.
- Electrical equipment erection and Hydraulics completed in Jan'16.
- Erection of Mudgun & Drill M/c completed in both Cast houses.
- Flushing of Hydraulic line completed.
- UPS charged.
- Comprehensive trial run completed in Apr'16.
- PAC issued on 07.06.16
- Trial & testing of Hydraulic Mudgun cum drill machine completed in Aug'19.
- **Put in Operation on 08.01.2020.**

6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

**Commissioning will be done with completion of BF # 1 Capital repair and Stove up-gradation.**

7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/BF	Ved Prakash DGM(Mod-E)/BF	Ratan Kumar, Manager(P)Iron zone

**BSL – New Sinter Plant**

1.	<b>PROJECT:</b> New Sinter Plant	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Mar'15
ii)	Original approved date of commissioning	Nov'17
iii)	Now anticipated	Jun'20 ( <b>Under Review</b> )
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs.1034.01 Cr (Cenvat benefit Rs 77.23 Cr.) (FE- Rs. 175.13 Cr)
ii)	Expenditure till Mar'19	Rs. 413.20 Cr.
iii)	Expenditure in 2019-20 (up to Feb'20)	Rs. 40.55 Cr.
iv)	Cumulative expenditure till up to Feb'20	Rs. 453.75 Cr.

4. **BENEFITS ENVISAGED**

New Sinter Plant shall meet Sinter requirement for production of 5.77 Mtpa of Hot Metal after Phase-I Modernisation and Expansion of BSL. Considering 70% burden, about 7.0 Mtpa gross Sinter is required. Sinter production: SP1-4.7 Mtpa; NSP-3.7 Mtpa

No. of Sinter Machine x area : 1 x 360 m<sup>2</sup>  
Productivity, Rated : 1.3 t/m<sup>2</sup>/h  
Under-grate suction : 1650 (min) mm WC

5. **PHYSICAL PROGRESS OF WORK**

LOA issued on 11.04.15 to Consortium of M/s Ukgripomez, Ukraine BEC, Bhilai Trafalgar, Dubai & Uralmash, Russia for main package; Consortium of M/s HN Singh Construction & TRF Limited for RMHS package; Consortium of M/s MECON & TEBA Zonfa Shanghai High Voltage, China for Power Supply System. LOA placed on 15.02.2016 for lime Plant on consortium of AIFL, Kolkata Ducon Technologies, Mumbai, Societa Impainti, Italy.

S N	Package	Party	Cost (Party Wise) , Rs. Cr	Expenditure, Rs. Cr	Effective date of Contract	Schedule (Likely/ Actual)
1	Main package	Ukgripomez, Ukraine Uralmash, Russia BEC, Bhilai Trafalgar, Dubai	<u>NOC : 653.85</u> (Ukgripomez -Euro 2576000 Uralmash -Euro 4648200 BEC-Rs 458.26 Cr Trafalgar Euro 12539500 + INR 38.5 Cr) <u>Gross : 710.54</u> (Ukgripomez -Euro	256.48	10.05.15	Oct'17/ Jun'20 ( <b>under Review</b> )

			2576000 Uralmash -Euro 4648200 BEC-Rs 513.13 Cr Trafalgar Euro 12539500 + INR 40.32 Cr)		
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**Status:**

Discipline	Schedule Completion	Likely Completion (Under Review)	% completed
Design & Engineering	Jun'17	May'20	65
Civil Work*	Sep'17	Jun'20	62
Structural Fabrication*	Sep'17	Jul'20	18
Structural Erection	Dec'17	Aug'20	15
Equipment supply	Jul'17	Aug'20	20
Equipment erection	Nov'17	Aug'20	NIL

\*scope increased

- Approval of drawing & site activity is very slow.
- Two Engineering Notices given to Consortium Leader.
- Regular review meetings with all consortium & consultant held at Bokaro and Ranchi.
- Review meetings to resolve pending issues was held by Director (P&BP) on 26.12.17.
- Further meetings held at CET, Ranchi on 30.12.17 and on 20.01.18.
- Meeting was conducted in Ukraine with contractors, consultant and BSL for scrutiny of drawings.
- Notice of Negligence issued on 24.06.19 to the consortium leader.
- Permission for Inside fabrication given on 20.05.19. Inside fabrication started on 30.11.2019.
- Interest Bearing revolving credit for Rs. 10 Crs. Approved & communicated on 18.05.19. However, party has submitted the requisite BG for availing the same on 09.12.2019. The same under process for issuance.
- Subsequent to issuance of notice of negligence, M/s UKG have deployed their expert at site to assess the balance jobs and accordingly the meeting of consortium members held on 22.07.2019 at Ukraine to decide the further course of action.
- Meeting was held between BSL and consortium members at Bokaro on 06.08.19 wherein M/s UKG assured to submit the concrete plan within 2 days for resolving the issue for future course of action. As M/s UKG had not submitted concrete plan, 2<sup>nd</sup> notice of negligence dated 14.08.19 was issued to all consortium members.
- Work stopped from 01.07.19 to 25.08.19. Work started in a limited way from 26.08.19.
- VC held on 13.09.19 in presence of Dir(P&BP), SAIL wherein the consortium requested for one more week to come forward with a plan to execute the balance activities.
- However, M/s UKG submitted a letter dated 19.09.19 wherein they have informed that they will monitor the progress of M/s BEC at site for 15 days and shall take necessary action accordingly.
- To resolve the stalemate in the above project, a letter was issued by Dir (P&BP) on 1.10.2019 to M/s UKG for resolving the issues at the earliest otherwise alternative actions as per provisions of contract, including RPN action shall be taken. In this regard, a meeting was held between D(P&BP) with Ambassador of Ukraine on 24.11.2019.
- Notice of Contractor's default was issued on 14.11.19 to all consortium members.
- A meeting was conducted with consortium members by Chairman SAIL on 18.11.19 to discuss various options for completing the projects within stipulated time including penal action as per contractual terms.
- Revised RPN TS submitted by CET on 20.11.19. NIT for balance work to be issued.
- Modalities is being finalized to take part of the facilities under M/s BEC's scope by the Employer and get it completed through multiple packages in parallel for expeditious completion of the project. Expression of Interest for the part of the balance facilities under M/s BEC's scope has been issued on 04.01.2020 and in response to the same; three offers were received. Discussion with the bidders held from 25.02.2020 to 27.02.2020. However, none of the bidders have agreed for the time period of 12 months for completion of balance scope of work under M/s BEC's scope. Further course of action is being under deliberation with consultant-M/s CET.
- BG for extension of contract from all consortium members have been received, Contract has been extended up to 31.05.2020 for Gate pass & Payment purpose.
- M/s UKG have requested for meeting at CO, New Delhi on 6th Mar.'2020 for further course of action to resolve the matter at the earliest

Work completed

- Surveying work completed in May'15 and Soil testing completed in Aug'15.
- Basic Engg - all 161 nos completed
- ER04 Bldg: footings 33/33 nos done.
- Dedusting stack: 70/70 M done erected.
- Proportioning Bin: 29/29 nos Column casting done.
- Waste gas stack-100/100M done
- Civil foundation of following structural building completed:  
Flux Screening Building, Flux Primary & secondary Crushing Building, Coke Primary and Secondary Crushing Building, Proportioning Bin Building, Sinter Machine Building (Except foundation of staircase), Mixing Building, Sinter Screening Building, Sinter Crushing Building, Electrical spare storage, Area Repair shop.

Work in progress

- Sinter storage Building: 2360/3174 m<sup>3</sup> RCC done.
- Inter shop cable tunnel work under progress (1648 / 3900 m<sup>3</sup>)
- Proportioning Bin : Structural erection – 1187 / 2550T done
- Sinter crushing building- 240/ 252T erection done.
- Technological erection;
- Coke Ground storage : Concreting -1134.75/1516 m<sup>3</sup> done.
- Sinter cooling building: Concreting -1688/2027 m<sup>3</sup> done.
- Sub Station - 02, 05 & 06 : Staging & shuttering for slab casting in progress.
- Emergency sinter storage - 2836/3239 m<sup>3</sup> done.
- **Sinter M/c building (axis 13 - 27)**: Structural erection – 1110 T / 2500T done.
- Sinter machine building: Technological erection 1105/2500T completed.

<ul style="list-style-type: none"> <li>All equipment of Uralmash &amp; Trafalgar imported part (40 % of total scope) supplied at site.</li> </ul> <p><b>Revised Essentiality certificate received from MOS on 15.01.18 due to error in earlier issued Essentiality certificate.</b></p>						
2	Lime Plant (450 TPD Lime Shaft Kiln-SP-II)	AIFL, Kolkata Ducon Technologies, Mumbai, Societa Impainti, Italy	<p><u>NOC</u>  AIFL - INR 31.86 Cr (contract price)  Ducon - INR 30.05 Cr (contract price)  Societa - Euro 2808000 (contract price)  <u>Gross :</u>  AIFL - INR 34.13Cr (contract price)  Ducon - INR 32.19 Cr (contract price)  Societa - Euro 2808000 (contract price)</p>	49.30	02.04.16	Mar'18/ Dec'20
<p><u>Status</u></p> <ul style="list-style-type: none"> <li>1<sup>st</sup> Engineering meeting held from 20 - 22.04.16.</li> <li>Site activity started from 02.06.2016. Dismantling of mechanical sheds completed and Scrap removal done.</li> <li>Basic engineering completed. Detailed engineering -87%, 79% concreting, 37% Structural Fabrication, 19% Structural erection, 72% equipment supply done.</li> <li>Equipment Supply (M/s SIC): 43/43 nos items received at site.</li> <li>Indigenous supply ( M/s AIFL): ID fan, Isolator, Blowers, Booster, PDB Panel, Vibrating feeder &amp; Screen, Transformer, Motor Soft starter, Bus Duct and 11 KV HT Panel supplied.</li> <li>Lime reject bunker, Lime stone storage bunker, Dedusting bunker, proper lime kiln, Gas booster house completed</li> <li><b>ECR Bldg:</b> Finishing work done.</li> <li><b>Control room (Electrical)</b> – Ground floor finishing work done.</li> <li><b>Blower house:</b> Shuttering for roof casting done.</li> <li><b>Lime Proper Kiln-</b> Strl assembly is in progress.</li> <li>5th imported consignment supplied at site.</li> </ul> <p><b>Revised Essentiality certificate received from MOS on 03.11.17 due to error in earlier issued Essentiality certificate.</b></p>						
3	RMHS : SP-II	HN Singh, TRF	<p>NOC : 148.70  Gross : 160.32</p>	79.63	11.5.15	May'17/ Nov'20
<p><u>Work completed</u></p> <ul style="list-style-type: none"> <li>General Layout approved in Jun'15</li> <li>Removal of debris from yard completed in Jan'16.</li> <li>Order placed for Stacker, Barrel type Reclaimer, Twin boom Stacker cum Reclaimer. Idler, Idler frame, Stringer &amp; short post, Gear Brake, Motor &amp; Gear coupling supplied at site.</li> </ul> <p><u>Work in progress</u></p> <ul style="list-style-type: none"> <li>Detailed Engineering in progress - 86% done.</li> <li>Civil works in progress - 85% done.</li> <li>Structural fabrication in progress - 94% done and 92% erected.</li> <li>53% equipment supplied and 31% erected.13/17 lots of equipment supplied &amp; erected at site.</li> <li><u>Conveyor (19 nos)</u> :Civil foundation of Conveyor - 16/ 19 nos done. Structural work-11/19 nos done.</li> <li>Slab casting completed for LT &amp; HT Sub-station. Brick work is in progress</li> <li><u>Junction House (21 nos):</u></li> <li>Civil foundation of JH -16/21 nos completed.</li> <li>Structural work - 12/21 nos done.</li> <li>Mechanical drawing for JNB-1 &amp; JNB-2 submitted. Under approval by CET.</li> <li>Electric room work done.</li> <li>JNAD1 Foundation work done. Fabrication &amp; erection work is in progress.</li> <li>Colour coated sheets laid: 23200/40000m<sup>2</sup> ; Translucent sheets laid -2550/3000 m<sup>2</sup></li> <li>Issue of height of JNA-12 &amp; JNA-13 is under discussion with consultant CET and technology supplier of new Sinter Plant (M/s UKG). Assignment for JNA-12 &amp; JNA-13 submitted by Pkg-1 contractor and handed over to PKG 3 contractor.</li> </ul>						
4	Power Supply- SP II	MECON, TBEA Switchgear, China	<p>NOC : 50.50 (MECON – Rs 45.26 Cr; TBEA- USD 860000)  Gross: 53.40 (MECON – Rs 48.16 Cr; TBEA- USD 860000)</p>	45.57	09.05.15	Nov'16 / Nov'20
<p><u>Work completed</u></p> <ul style="list-style-type: none"> <li>Surveying work &amp; Soil testing completed in Jun'15.</li> <li>Basic engineering completed - 21/21 nos;</li> <li>Order placed for Power Transformer.</li> <li>Route survey for underground cable laying completed in Jan'16.</li> <li>Transmission route finalized in Jan'16</li> <li>16 MVA &amp; 80 MVA transformer: Auxiliary equipment erection done for 80 MVA done. Alignment &amp; leveling done.</li> <li>Civil work for 16 &amp; 80 MVA transformer done</li> <li>80 MVA Transformers : Oil filtration and Bush fitting done</li> <li>Bus bar, Bus duct, Isolator, Gas Insulated switch gear, HT isolator switch supplied at site. Peterson coil received at site. Cable tray supports, LT cable supplied at site. SAS panel, lighting arrestor etc supplied at site. Tools for testing of cable arrived at site. Retrofitting panels supplied at site. 90% equipment supplied at site.</li> <li>Laying of hume pipe completed which was falling on track of Traffic Dept route.</li> </ul> <p><u>Work in progress</u></p> <ul style="list-style-type: none"> <li>Design engineering in progress - 294/294 Nos (Completed)</li> </ul>						

<ul style="list-style-type: none"> <li>• Concreting, 2098/2100 m<sup>3</sup> done.</li> <li>• Structural fabrication 120/150 T done.</li> <li>• <u>MV switchgear building</u> : Equipment shifting is in progress.</li> <li>• <u>GIS building</u>: Roof casting at 11M done. Internal Brick work done. 11 KV &amp; 6.6 KV Panels are erected. Internal cable trench work is in progress from GIS building to MV switch gear &amp; 80 MVA Transformer. GIS building: 24/24 relay control panel completed. EOT crane girder ercn done. Track ercn is in progress. Trench cutting &amp; construction of cable trench is in progress (500/630 M- done).</li> </ul> <p><u>Issue:</u></p> <ul style="list-style-type: none"> <li>• Track of Traffic Dept is falling in the route of cable trench which needs to be removed after taking clearance from traffic Dept.</li> </ul> <p><b>Issue of Change order for 132 KV GIS &amp; Laying of HT Cable-4km. Supply from TBEA, China has been changed to M/s Crompton Greaves (delay -1 year).</b></p>
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6.

**CONSTRAINTS / ISSUES TO BE TAKEN UP:**

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
<p>Site work delayed due to delay in detailed Engineering drawing (mainly by M/s BEC for main package)</p>	<ul style="list-style-type: none"> <li>• Monthly review meeting being held with the concerned parties</li> <li>• Parties being regularly followed up for expediting submission of drawings and resources at site</li> <li>• Submission of wrong drawings by BEC is also leading to the delays.</li> <li>• In spite of various meetings at the level of Dir (P&amp;BP)/ CEO, BSL/ ED (Project), BSL progress not improved much.</li> <li>• In the Engineering meeting held on 20.02.2017, BSL &amp; CET suggested BEC to engage a competent agency for Design engineering.</li> <li>• Inadequate deployment of manpower at all fronts by M/s BEC.</li> <li>• 1<sup>st</sup> Engineering notice given on 15.07.17. Further Communication sent on 29.8.17.</li> <li>• Progress reviewed by Chairman, SAIL on 23.10.17. Letter sent to the Consortium Leader from Director (P&amp;BP) on 24.10.17 and from CEO, BSL on 25.10.17.</li> <li>• Progress review meeting held by Director (P&amp;BP) on 26.12.17 through VC with BEC, CET and BSL.</li> <li>• Review meeting by Dir (P&amp;BP) at CET, Ranchi held on 20.01.18.</li> <li>• Meeting was conducted in Ukraine with Contractors, Consultant and BSL for scrutiny of drawings.</li> <li>• The drawing issues are still not resolved. Civil works affected in major areas like – Sinter machine, sinter storage, sinter cooler, coal storage, coke storage etc.</li> <li>• Meeting held with M/s UKG, BEC, Trafalgar on 05.07.18 at BSL and at Ranchi on 06.07.18.</li> <li>• In the above meeting, Consortium leader was specifically told that the performance of Consortium partner M/s BEC is very poor which is adversely affecting the progress of the Project.</li> <li>• It was also informed that the monthly targets for Civil and Structural work are not being achieved. In July' 2018 only 1000 Cum of Concreting done against the target of 2478 Cum and 121.079 MT of Structural erection done against a target of 205 MT.</li> <li>• Citing the above facts, BSL wrote to M/s UKG vide mail dated 31.07.18 that as Consortium leader they should intervene in the above matter and submit plan for completion of M/s BEC's scope of work within a week otherwise action will be taken according to provisions of the contract.</li> <li>• Letter sent by CEO, BSL on 27.12.18 to M/s UKG to submit detailed work plan.</li> <li>• Team of officials from M/s UKG and M/s BEC attended the meeting on 17<sup>th</sup> - 18<sup>th</sup>, Jan'19, wherein payment related issues and progress of site works were discussed. Detailed work plan along with list of activities till the month Jun'19 was submitted by them.</li> <li>• Regular meetings are being conducted by BSL &amp; CET with M/s BEC.</li> <li>• Notice of Negligence issued on 24.06.19 to the consortium leader.</li> <li>• Subsequent to issuance of notice of negligence, M/s UKG have deployed their expert at site to assess the balance jobs and accordingly the meeting of consortium members held on 22.07.2019 at Ukraine to decide the further course of action.</li> <li>• Meeting was held between BSL and consortium members at Bokaro on 06.08.19 wherein M/s UKG assured to submit the concrete plan within 2 days for resolving the issue for future course of action. As M/s UKG had not submitted concrete plan, 2<sup>nd</sup> notice of negligence dated 14.08.19 was issued to all consortium members.</li> <li>• Work stopped from 01.07.19 till 25.08.19. Work started in a limited way from 26.08.19.</li> <li>• VC held on 13.09.19 in presence of Dir(P&amp;BP) with all consortium members.</li> <li>• A letter was issued by Dir (P&amp;BP) on 1.10.2019 to M/s UKG for resolving the issues at the earliest otherwise alternative actions as per provisions of contract, including RPN action shall be taken. In this regard, a meeting was held between D(P&amp;BP) with Ambassador of Ukraine on 24.11.2019.</li> <li>• Notice of Contractor's default was issued on 14.11.19 to all consortium members.</li> </ul>

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
	<ul style="list-style-type: none"> <li>A meeting was conducted with consortium members by Chairman SAIL on 18.11.19 to discuss various option for completing the projects within stipulated time including penal action as per contractual terms.</li> <li>Modalities is being finalized to take part of the facilities under M/s BEC's scope by the Employer and get it completed through multiple packages in parallel for expeditious completion of the project.</li> <li>Expression of Interest for the part of the balance facilities under M/s BEC's scope has been issued on 04.01.2020 and in response to the same; three offers were received. Discussion with the bidders held from 25.02.2020 to 27.02.2020. However, none of the bidders have agreed for the time period of 12 months for completion of balance scope of work under M/s BEC's scope. Further course of action is being under deliberation with consultant-M/s CET.</li> </ul>
Poor progress at site by M/s BEC	<ul style="list-style-type: none"> <li>M/s BEC has been extended interest bearing advance on revolving credit basis for limit of Rs.10 Cr. and also the permission for in-plant Structural fabrication.</li> <li>Notice of Negligence issued to M/s Ukgipromez on 24.06.19, regarding persistent and repeated failure of M/s BEC to perform the contract causing considerable delay and advising M/s Ukgipromez to initiate appropriate action against M/s BEC.</li> <li>As M/s UKG had not submitted concrete plan, 2<sup>nd</sup> notice of negligence dated 14.08.19 was issued to all consortium members</li> <li>Work stopped from 01.07.19 till 25.08.19. Work started in a limited way from 26.08.19.</li> <li>VC held on 13.09.19 in presence of Dir(P&amp;BP) with all consortium members.</li> <li>A letter was issued by Dir (P&amp;BP) on 1.10.2019 to M/s UKG for resolving the issues at the earliest otherwise alternative actions as per provisions of contract, including RPN action shall be taken.</li> <li>Expression of Interest for the part of the balance facilities under M/s BEC's scope has been issued on 04.01.2020 and in response to the same; three offers were received. Discussion with the bidders held from 25.02.2020 to 27.02.2020. However, none of the bidders have agreed for the time period of 12 months for completion of balance scope of work under M/s BEC's scope. Further course of action is being under deliberation with consultant-M/s CET.</li> </ul>
Delay in LC opening for M/s Trafalgar	<ul style="list-style-type: none"> <li>M/s Trafalgar had earlier requested for opening of transferable LC which could not be agreed.</li> <li>Tripartite agreement made on 22.11.2016 between BSL, Trafalgar and Primetals, Austria for pellet car, hot sinter breaker and sinter cooler.</li> </ul>
Slow progress of site works for RMHS. - Delay due to submission of Assignment drawings of JNA 12, 13 &14 by Pkg-1. - Delay due to submission of mechanical drawings JNB-1 & JNB-2 submitted. - Encroachment of Road	<p>JNA 12, 13 &amp; 14 Assignment drawings have been received and approved.</p> <p>Mechanical drawings of JNB-1 &amp; JNB-2 submitted. Under approval by CET.</p> <p>Meeting held with User department for encroachment related issue. MOM signed. Drawings submitted to CET.</p>
Foundation drawings for ER-04 were cleared by CET on 18.4.2017 and the work was started immediately. Now when 11 rafts have been constructed, M/s UKG informs (dated 5.5.2017) that the co-ordinates for ER-04 are wrong. As a result the balance foundations have been kept on hold. This was also affecting 30 common foundations of Proportioning Buildings and ER-04 which have been approved. M/s. UKG requested to immediately resolve the issue and give clearance for starting the site activities.	Engineering meeting was held at Ranchi, wherein M/s UKG, CET and BEC were present during 23-25, May'17 and resolved the issue. It was decided to relocate the balance foundations.
Slow progress of RMHS package	<ul style="list-style-type: none"> <li>Issue of height of JNA-12 &amp; JNA-13 is under discussion with consultant CET and technology supplier of new Sinter Plant (M/s UKG).</li> <li>Assignment for JNA-12 &amp; JNA-13 submitted by Pkg-1 contractor and handed over to PKG 3 contractor.</li> </ul>
Power Supply Package:  Track of Traffic Dept is falling in the route of cable trench which needs to be removed after taking clearance from traffic Dept.	<ul style="list-style-type: none"> <li>Laying of hume pipe completed which was falling in track of Traffic Dept route.</li> </ul>

7.

**PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/SP	I Majumdar, DGM(M)/SP	Sanjay Kumar, DGM(P) I/C RRMP, SP & AS Zone

**BSL – Modernisation of SMS-I**

1.	<b>PROJECT:</b> Modernization of SMS-I	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	May'15
ii)	Original approved date of commissioning	Nov'17

iii)	Now anticipated	Mar'20 ( Converter: 1 <sup>st</sup> heat taken on 22.05.19 / Caster: Mar'20-Under review)
3.	<b>COST</b> (Rs. in Cr.)	
i)	Original approved	Rs.1154.18 Cr (Cenvat benefit Rs 99.18 Cr) (FE- Rs. 261.97 Crore)
ii)	Expenditure till Mar'19	Rs.888.06 Cr
iii)	Expenditure in 2019-20 (up to Feb'20)	Rs.113.17 Cr
iv)	Cumulative expenditure up to Feb'20	Rs.1001.23 Cr

#### 4. BENEFITS ENVISAGED

The Project will facilitate Continuous casting of steel by phasing out obsolete Ingot casting route to achieve yield & quality improvement and production of adequate quantity of CC slabs to supplement slab produced at SMS-II for full capacity utilization of existing HSM.

- Replacement of one BOF Converter with heat size of 130 t (max.) & 125 t (Avg.) with Tap to Tap time of 50 minutes (approx.).
- Suppressed Combustion system and Gas holder.
- Self propelled transfer car for Slag disposal.
- 1x1 strand Conventional Slab caster, 1.305 Mtpa:
  - Slab thickness : 200 - 250 mm
  - Slab width : 850 - 1650 mm.
  - Length of slab : 7500- 10500 mm.

#### 5. PHYSICAL PROGRESS OF WORK

- LOA issued on 05.12.2013 to M/s C.J.R Consultant, Bokaro for Geo-technical Investigations and Survey Works.
- LOA issued on 16.05.2014 to M/s HN Singh Construction, Bokaro for Enabling Works.
- LOA issued on 01.06.15 to M/s Primetals & consortium for Suppressed Combustion System along with replacement of BOF Converter.
- LOA issued on 01.06.15 to M/s Prime metals & consortium for Slab Caster with associated facilities.
- LOA issued on 01.06.15 to M/s Sterling Wilson and consortium for 132/33 kV Power supply System.

SN	Package	Party	Cost (Party Wise) , Rs. Cr	Expenditure, Rs. Cr	Eff. Dt of contract	Sch (Likely/ Actl)
1	Geo-technical Investigations and Survey Works	C.J.R Consultant	Rs 7.38 lakhs	-	05.12.13	
The final soil report submitted by contractor in Apr'14.						
2	Enabling Works	HN Singh Construction	NOC : 9.252 Gross : 9.74	10.49	16.05.14	
Major works Completed in Aug'15. <b>PAC issued on 30.10.15.</b>						
3	Suppressed Combustion System along with replacement of BOF Converter	Primetals and L&T	<u>NOC : 444.70</u> (Primetals - Euro 12,754,574 +INR 131.68Cr) L&T - INR 213.00 Cr) <u>Gross : 487.45</u> (Primetals - Euro 12,754,574 +INR 157.70 Cr L&T - INR 229.73 Cr)	416.37	30.06.15	1 <sup>st</sup> Heat taken on 22.05.19.
<ul style="list-style-type: none"> <li>• <b>Mobilization of resource at site started in Sep'15</b></li> <li><u>Work completed:</u> <ul style="list-style-type: none"> <li>• Civil work for flare stack foundation done.</li> <li>• Ordering of major equipment done.</li> <li>• Re-routing of Track # 267 &amp; 269 (for slag yard foundation) completed</li> <li>• Re-routing of GCP cooling line, Industrial water line &amp; Re-routing of N2 line done.</li> <li>• <b>Erection of Converter proper completed. Load test of Converter done.</b></li> <li>• <b>No load test of Lance car and Lance carriage completed.</b></li> <li>• <b>Erection of Dog house &amp; flare stack, Secondary ID fan, Scrubber, Cooling hood, droplet separator completed.</b></li> <li>• <b>2 nos. Transformer (2MVA) charged on 21.11.18.</b></li> <li>• Trial run of HT Spray cooling water pump motors on no-load -3 nos. completed</li> </ul> </li> <li><u>Work in progress:</u> <ul style="list-style-type: none"> <li>• 1<sup>st</sup> heat taken on 22.05.19.</li> <li>• 18 heats taken till 29.05.19, after which Hood got punctured and the Converter is down since then for defect liquidation.</li> <li>• Frequent water leakages from the movable Hood and damages occurred due to slopping of Slag from the Converter on 07.06.19.Hood replaced and Converter re-started on 01.10.19.</li> <li>• Sudden rupture of Expansion Bellow on 27.09.19 and slag pot on 03.10.19. No- operation of Converter from 03.10.19 till date.</li> <li>• Co-ordination with NMDC done for early arrival of Expansion bellow. Bellows supplied &amp; replaced.</li> <li>• The preheating started on 25.11.19 and Converter stopped for cold repair of bottom joint from 28.11.19 after 33<sup>rd</sup> Heat.</li> <li>• Converter restarted from 12.12.19. 119 heats have been made.</li> </ul> </li> </ul>						
4	Ladle Furnace with associated facilities	M/s SMS India Pvt Ltd	<u>NOC :95.23 Cr</u> (SMS India – Rs. 93.15 Cr ; SMS Group GMBH– Euro 240,000 ) <u>Gross :103.09 Cr</u> (SMS India – Rs. 100.72 Cr ; SMS Group GMBH– Euro 240,000 )	62.42	02.09.16	May'18 / May'20

Discipline	Schedule Completion	Likely Completion (under review)	% completed			
Design & Engineering	Sep'17	Mar'20	98			
Civil Work	Sep'17	Mar'20	90			
Structural Fabrication	Dec'17	Mar'20	94			
Structural Erection	Jan'18	Mar'20	80			
Equipment supply	Dec'17	Mar'20	90			
Equipment erection	Feb'18	Mar'20	75			
<ul style="list-style-type: none"> <li>Kick off meeting held on 26.09.16. Lay out drawings submitted on 16.05.17</li> <li>Fume extraction duct Layout of civil &amp; structural drawing approved.</li> <li>Site mobilization started on 21.08.17</li> <li>Bag House: Erection done.</li> <li>Civil work of ID fan &amp; clean gas stack completed.</li> <li>Civil work in LF proper completed.</li> <li>Civil work of cooling tower, secondary pump house in progress.</li> <li>Civil work in MCC room, Hydraulic &amp; Transformer room in progress.</li> <li>Balance civil work in Primary Pump house, ECR &amp; Laboratory is in progress.</li> <li>Erection of Bag house, Drop point structures, Dust silo and clean gas stack, air receiver completed.</li> <li>PQ bay &amp; QR bay: Erection work is in progress.</li> <li>Erection of ID fan completed</li> <li>Parts of Fume Exhaust duct supplied at site.</li> <li>On repetitive request, M/s SMS India has deployed two more additional agencies on 24.05.19. All efforts are being put to commission it in May'20.</li> </ul>						
5	Slab Caster with associated facilities	Primetals and L&T	<u>NOC : 475.73 Cr</u> (Primetals - Euro 16,247,000+ INR 80.64Cr and L&T -INR 252 Cr) <u>Gross : 522.76 Cr</u> (Primetals - Euro 16,247,000+ INR 109.21Cr and L&T -INR 270.46 Cr)	482.36	30.06.15	Nov'17/ Mar'20 (Under review)
Discipline	Schedule Completion	Likely Completion	% completed			
Design & Engg	Jan'17	Oct'19 (completed)	100			
Piling	Mar'17	<b>Sept'17 (Completed)</b>	100			
Civil Work	Sep'17	Mar'20	98			
Structural Fabrication	Apr'17	Oct'19 (completed)	100			
Structural Erection	May'17	Mar'20	99.5			
Equipment supply	Jul'17	Mar'20	100			
Equipment erection	Oct'17	Mar'20	98			
<ul style="list-style-type: none"> <li>Mobilization of resource at site started in Sep'15.</li> <li>Dismantling of building started on 24.12.15. Total 825 t dismantled in Caster area (refractory building, mechanical/electrical maintenance shed, cooling shower-2 and pump house-2, compressor house building) completed. Dismantling of moulding coating yard completed. (Dismantling of Structure (873/873 MT) done in Feb'17.</li> <li>Shutdown from 08.11.16 to 15.11.16 received from Traffic Dept for track re-routing. Track-300A connected with Track #301 and is under operation. Revamping of Track # 332A for launder foundation is in progress.</li> <li>Civil work pile pusher and roller table completed.</li> <li>Civil work in Cross transfer roller table &amp; scale pit is in progress.</li> <li>Piping work is in progress. (110200/ 130000 inch-metre done.)</li> <li>Erection of Utility pipeline: rerouting work is in progress.</li> <li>Propane unit: Go-ahead letter was given for new location in 2nd week of Apr'19. Excavation &amp; Raft casting done. Brick wall for storage and sand filing completed.</li> <li>Erection of torch cutting machine, Roller table and Strand guide supports for segments completed. Erection of Tundish car, Tundish preheater and Oscillator completed. Segment manipulator guide rail erected.</li> <li>Testing of Hydraulic line &amp; utility line is in progress.</li> <li>No load trials of LT Motors completed. No Load trials for Hydraulic system in progress.</li> <li>Elbow in Oxygen line supplied on 27.01.2020. Erection to be completed by 10.02.2020.</li> <li>Refractory supply: 80% completed.</li> <li>Alternate arrangement for propane gas has been made.</li> </ul>						
6	132/33 kV Power supply System	Sterling Wilson and Crompton Greaves	NOC :Rs 30.87 Cr Gross : Rs. 35.26 Cr	28.94	06.07.15	Dec'16 /Mar'20
<ul style="list-style-type: none"> <li>Detailed Engg. 269/269 submitted.</li> <li>Removal of Scrap material from the site completed.</li> <li>Soil testing completed. Report submitted.</li> <li>Structural fabrication completed and 68% have been erected</li> <li>GIS system charged on 11.02.19 from Bay-14 of MSDS-1. System is under observation.</li> <li>Transformer (50/63 MVA) charged on 15.02.19.</li> <li>Testing of 33KVA panel for charging completed. Charging done.</li> <li>Testing of 2nd Transformer done. Charging done on 03.05.19.</li> <li>Defect liquidation in progress.</li> <li>5 days Shutdown required for charging of GIS from feeder no-13 of MSDS-1 which is feeding power to HSM. Shutdown received on 25.09.19. Tower erection &amp; stringing of conductor completed.</li> <li>GIS charging done 30.09.19.</li> </ul>						

6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>Site activities were affected due to Brownfield nature of jobs which include re-routing of High Tension/ Low Tension (HT/LT) cables, pipelines and Railway tracks.</li> <li>As a result, dismantling of the BOF Converter could be started only after shutdown given in Oct'15 (about 5 months after signing the contract).</li> </ul>	
Dismantling of buildings falling in the Caster area	Many buildings were operating in the area. Departments were followed-up vigorously to vacate the premises.
Non availability of track shutdown	66 piles were on hold due to non-availability of track shutdown. Alternate track has been laid. Shutdown given on 1 <sup>st</sup> Feb'17. With this, all fronts of Caster area were ready for execution.
There is a requirement for modification of Crane girder of Mould & Segment repair shop and Railway track	Change orders for modification of Crane girder, Mould & segment repair shop (Rs. 36.65 cr) and Railway track (Rs. 13.75 cr) have been issued on M/s L&T on 27.04.2017. Initially, the same were not accepted by the party citing the insufficient extension of the contract (6 months extension given by BSL; L&T is demanding 18 months extension). On 27 <sup>th</sup> May'17, L&T accepted the Change order under protest for extension of time.  Apart from the above, Change order placed for change in Slab thickness i.e, 250 mm to 225 mm based on the HSM requirement. Financial impact is Rs. 18 lakhs.
BSL had requested the party to dispatch shell plate in the 1 <sup>st</sup> lot.	However, the same has not been dispatched by the party in the 1 <sup>st</sup> lot. Issue was taken-up by BSL with the party. Shell plate supplied in Apr'17.
Water logging due to rain and space constraint resulted in slow progress in civil & structural erection.	Progress is being expedited.
1 <sup>st</sup> heat was planned on 31.12.18 without Dedusting system & Gas holder. However due to non-availability of foreign experts for testing and trail run, 1 <sup>st</sup> heat was planned in May'19.	Letter sent to M/s Primetals from CEO BSL on 27.12.18 and Dir (P&BP) on 02.01.19 for deputing required personnel on priority.  A team consisting of two members was at site from 05.02.19. 1 <sup>st</sup> heat taken from BOF Converter on 22.05.19.

7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/SMS-I	R Dhawan, SMS-I	MK Haldar, DGM(P) Steel & Power zone

**BSL – Upgradation of Stoves of Blast Furnace No. 1**

1.	<b>PROJECT:</b> Up-gradation of Stoves of Blast Furnace No. 1	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Sep'16
ii)	Original approved date of commissioning	Jan'18
iii)	Now anticipated	<b>Jan'20 (Blown in on 08.01.2020.)</b>
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs.127.30 Cr (Cenvat benefit Rs 14.49 Cr)
ii)	Expenditure till Mar'19	Rs. 95.51 Cr.
iii)	Expenditure in 2018-19 (up to Feb'20)	Rs. 16.14 Cr
iv)	Cumulative expenditure up to Feb'20	Rs. 111.65 Cr

4. **BENEFITS ENVISAGED**

Up-gradation of Stoves of BF-1 (3 stoves) by incorporating Mushroom Domes technology for achieving higher hot blast temperature of 1200°C with advanced features which will lead to higher production and reduced coke rate. It is envisaged that Hot metal production from BF-1 will go up from the present level of 2694 tpd to 2813 tpd and the Coke rate will also come down from the present level of 528 kg/ tHM to 505 kg/ tHM.

5. **LOA placed on Paul Wurth on 10.10.2016.**

M/s Paul Wurth Italia S.p.A., Italy (in EURO)	M/s Paul Wurth India Pvt. Ltd., India (in INR), NOC	M/s MCK Kutty Engineers Pvt. Ltd., India (in INR), NOC
2,400,000	69,68,97 ,952	23,06,87,279

- Contract Agreement signed on 25.10.16. Kickoff meeting held on 26.10.16.
- Design & Engg in progress.
- De-bricking & dismantling of all 4 nos. Stove done.
- Stove-1, 2 & 3 : Refractory lining 35/35 M completed.
- WHRS: Job related to Erection of Heat Exchanger and related pipe connections completed.
- Refractory lining of all three stoves completed.
- Repair of Bustle Main 36/36 segment completed.
- Refractory lining of Hot Blast main 40/40M completed.
- Hydraulic line – testing completed.
- Testing of valves completed.
- Stove-1 heating on 27.07.19, Stove-2 heating on 28.07.19 and Stove 3 Heating on 31.07.19 started
- Heating of all stoves completed on 27.08.19.



- Pressure testing completed. Furnace is ready for operation. BF#1 furnace blown in on 08.01.2020.
6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
Availability of 60 mm thick boiler quality plate of 35 tons is critical. Delay in Rolling of stove shell plates of boiler grade steel.	Matter was taken up with PPC of SAIL, Bhilai for rolling of boiler grade plates. The same has been rolled by BSP.
Delay in Rolling of stove shell plates of boiler grade steel.	Matter was taken up with PPC of SAIL, Bhilai for rolling of boiler grade plates.
Bustle pipe found deformed and need to be repaired.	18/18 segment (deformed) done.  Change order issued on 16.02.19 for repair of Bustle pipe at a cost of 68000 Euro & 1.56 Crs INR with completion period of 4.5 months.

7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/BF	Ved Prakash, DGM(Mod-E)/BF	A K Paswan, Manager (P) Iron zone

**BSL – Re-building of Coke Oven Battery - 8**

1.	<b>PROJECT:</b> Rebuilding of Coke Oven Battery- 8	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Nov'16
ii)	Original approved date of commissioning	Jun'19
iii)	Now anticipated	Nov'20 <b>(Under review)</b>
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs. 262.87 Cr (Cenvat benefit of Rs 22.19 Cr)
ii)	Expenditure till Mar'19	Rs. 83.84 Cr
iii)	Expenditure in 2019-20 (up to Feb'20)	Rs. 53.88 Cr
iv)	Cumulative expenditure up to Feb'20	Rs. 137.72Cr

4. **BENEFITS ENVISAGED**

Rebuilding of Battery no.8 alongwith revamping of common upstream and downstream facilities to meet Coke demand & CO gas shortage and latest Pollution control facilities to comply with Statutory emission levels.

- Specifications : 5 m tall 69 ovens
- Gross coke (dry) : 0.566 Mt/yr.
- B F coke (dry) : 0.500 Mt/yr.

5 **PHYSICAL PROGRESS OF WORK**

Battery Proper

Discipline	Schedule Completion	Likely Completion (under review)	% completed
Design & Engineering	Nov'18	Mar'20	90
Civil Work	May'19	Mar'20	42
Structural Fabrication including TOPR	Mar'19	Mar'20	61
Structural Erection	April'19	Apr'20	56
Equipment supply	Mar'19	May'20	48
Equipment erection	May'19	Oct'20	18

- LOA placed on 04.11.2016 on M/s MECON for Battery Proper Package, on M/s OCL for Silica bricks, on BEC for Oven machines.
- Contract Agreement signed with MECON for Battery proper on 02.12.16 and with BEC for Oven machines on 13.12.16. PO placed for Silica bricks on 25.11.16.

SN	Package	Party	Cost (Party Wise) Rs. Cr	Expenditure Rs. Cr	Effective Date of contract	Schedule (Likely/ Actual)
1	Battery Proper	MECON	NOC : 118.60 Gross : 130.53		01.12.2016	Jun'20
	<ul style="list-style-type: none"> <li>• L-2 network submitted by MECON.</li> <li>• Enabling works: LOA placed on 31.01.17 on Udaya Industrial by MECON.</li> <li>• Order placed on M/s NP Constructions on 31.10.17 for Civil works.</li> <li>• Supply of structures for TOPR – 339 T of 435T done.</li> <li>• TOPR erection is in progress (245/435 T). Erection of 19/19 nos. Column 38/38 nos.</li> <li>• Change order issued on 20.03.19 for repair of Nozzle deck slab civil structure. Repair work of Nozzle deck slab started from 19.04.19. 78/78 nos columns rectified for nozzle deck. Ceiling repair work of Nozzle deck Slab done. Cleaning work completed. Screeding of nozzle deck in progress 60% done</li> <li>• Pusher car track: 4/4 nos. rails placed</li> <li>• Flash plate 140/140 supplied at site.</li> <li>• Buck stay tie rod supplied.</li> <li>• 1st Engineers' Notice issued on 21.09.19. MECON has been asked to deploy additional resources to expedite the jobs.</li> <li>• 14 nos. TOPR column and platform brackets have been provided by BSL, on returnable basis, to expedite the TOPR erection jobs. All 14 nos. TOPR columns shifted at site.</li> </ul>					

1A	Coke Oven Doors & Door Frames	Simplex	Rs. 10.80 Cr Net of ITC on GST		08.05.2018	Jun'20
	<ul style="list-style-type: none"> <li>• LOA issued to M/s Simplex at Rs. 10.80 Cr Net of ITC on GST on 08.05.18 against Consultants estimate of Rs. 10.40 Cr.</li> <li>• Contract signed &amp; Kick off meeting held on 01.08.18.</li> <li>• Design &amp; Engineering completed.</li> <li>• Under manufacturing at Simplex Bhilai. Supply expected to start from Feb'20.</li> <li>• Party has raised inspection call for supply &amp; approval of billing schedule is under progress.</li> </ul>					
2	Procurement of Silica bricks and Silica mortar	OCL	NOC : 41.48 Gross : 41.49		25.11.2016	Aug'17/Aug'20
	<ul style="list-style-type: none"> <li>• Brick shape album handed over to M/s OCL on 01.04.17.</li> <li>• Supply of Fireclay refractory –5540 / 5540T done.</li> <li>• Supply of Silica brick – 9720 / 9720 T done. Bal Supply: Silica Mortar 1220 T.</li> <li>• Refractory Erection to be started after TOPR.</li> </ul>					
4	Oven Machines	BEC 1 pusher, 1 guide cars & 1 charging car	NOC : 22.60 Gross : 24.49		03.12.2016	Nov'20
	<ul style="list-style-type: none"> <li>• Contract signing &amp; Kick off meeting held on 13.12.16.</li> <li>• Design &amp; Engineering - 162/166 nos submitted.</li> <li>• Pusher Car-1 no. ; Charging car-1 no. ; Guide car-1 no supplied at site.</li> <li>• Alignment of trolley line for pusher car-2 done</li> <li>• Wagon pusher car- 2 handed over to operation. Front for erection is not available. Expected by Feb'20</li> </ul>					
3 & 5	<b>Common Packages of COB - 7&amp;8</b>					
	LOA issued on M/s MECON for Quenching system on 04.09.15 LOA issued on M/s Paul Wurth India for Coal Handling & Coke Sorting plant on 12.06.15					
-	Quenching system	MECON	NOC : 16.73 Gross : 17.73		01.10.2015	Aug'17 / Jun'18
	<ul style="list-style-type: none"> <li>• Quenching system put into use on 28.12.17.</li> <li>• PAC issued on 23.01.18.</li> </ul>					
-	Coal Handling & Coke Sorting plant	M/s Paul wurth India Pvt. Ltd & M/s N. P. Construction	NOC : 16.17 Paul wurth -11.26 cr N. P : 4.91 cr)  Gross : 17.53 Paul wurth -12.23 cr N. P : 5.30 cr)		10.07.2015	Mar'17
	<ul style="list-style-type: none"> <li>• All major jobs completed which include Coal tower-4, Crusher area, Wharf area and New PLC room.</li> <li>• PAT (Primary acceptance test) done in Mar'17, PAC issued on 17.04.17.</li> <li>• CC issued on 06.01.18.</li> </ul>					
6	Geotech Investigation	CEG Test House	8.34 lakh	-	20.02.15	Aug'15 (Completed)
	Completion: 2 Month. Soil report received on 17.04.15.					

6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
<ul style="list-style-type: none"> <li>- Main package of Civil work for COB #8 – ordering delayed</li> <li>- Starting of Civil works</li> </ul>	<ul style="list-style-type: none"> <li>- Progress reviewed by Chairman, SAIL on 23.10.17.</li> <li>- Letter sent to CMD, MECON from CEO, BSL to expedite the ordering of Civil works for Battery Proper on 25.10.17.</li> <li>- Subsequently, order placed by MECON on M/s N P Constructions on 31.10.17 for Civil works.</li> </ul>
Delay in firming-up of Coke Oven Doors & Door Frames package	- Order placed on 08.05.18.
Slow progress of Temporary Oven Protection Roof (TOPR) erection	<ul style="list-style-type: none"> <li>- Delay in appointing the agency for civil &amp; structural works by main contractor, M/s MECON.</li> <li>- Slow progress of civil jobs and delayed supply of fabricated structures by M/s MECON.</li> <li>- 14 nos. TOPR column and platform brackets have been provided by BSL, on returnable basis, to expedite the TOPR erection jobs.</li> </ul>
Sub contractor of MECON for Civil works M/s NP Construction is not able to pay to their workers. This is affecting progress.	<ul style="list-style-type: none"> <li>- Site work has been slowed down / stopped by the sub-contractor of MECON ie M/s NP Constructions from 3<sup>rd</sup> week of Dec'18 due to non-payment to its workmen. Issue is being discussed.</li> <li>- Letter sent to CMD, MECON on 02/03/2019 by D (P&amp;BP) regarding expediting the site work at COB-8.</li> <li>- 1<sup>st</sup> Engineer's notice issued on 21.09.19 for slow progress of work.</li> </ul>

CONSTRAINTS / ISSUES FACED	CORRECTIVE ACTION TAKEN
	Thereafter, MECON have increased resources at site. Letter sent to CMD, MECON on 28.02.2020 by D (P&BP) to expedite the work.
The issue of Additional Repair of Deck Slab civil structure is still pending between the contractor - MECON and consultant-CET.	Go-ahead letter given to MECON on 24.12.2018. Change order issued on 20.03.19 for repair of Nozzle deck slab civil structure.

7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/CO&BPP	BK Singh DGM(R&R) / CO&BPP	AK Thakur DGM(P) CO & BPP zone

**BSL – Up gradation of 06 nos. of ESP’s of Lime kiln**

1.	<b>PROJECT:</b> Up gradation of 06 nos. of ESP’s of Lime kiln	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Jan’17
ii)	Original approved date of commissioning	Jun’19
iii)	Now anticipated	Jun’20
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs. 25.56 Cr (Cenvat benefit Rs 2.61 Cr)
ii)	Expenditure till Mar’19	Rs. 6.75 crores
iii)	Expenditure in 2019-20 (up to Feb’20)	Rs. 4.88 Crores
iv)	Cumulative expenditure up to Feb’20	Rs. 11.63 Crores

4. **BENEFITS ENVISAGED**

The project is to bring down the Stack emission level of Refractory Materials Plant from the present level of 380 - 1200 mg/Nm<sup>3</sup> to within the Statutory norm of 150 mg/Nm<sup>3</sup> and futuristic norm of 50 mg/Nm<sup>3</sup>.

5. **PHYSICAL PROGRESS OF WORK**

- LOA issued to M/s Thermax Limited on 14.01.17. Agreement signed on 23.03.17.
- Kick-off meeting held on 09.02.17.
- Basic Engineering: 23/24 ; Design Engineering : 33/46 nos completed.
- Supply of discharge & collecting received at site.
- Erection of Monorail done.
- ESP 6: Work Completed. Put into operation on 22.03.18.
- ESP 1: Exhauster started on 22.1.19. Kiln light up done & put into operation on 01.02.2019. Under stabilization.
- ESP 3: Shutdown received on 02.04.19 for 62 days. Kiln no-3 light up done & put into operation on 29.06.19.
- ESP 4: Shutdown for ESP-4 received on 27.08.19 for 62 days. Put into operation on 16.01.2020. Under stabilisation. PAC issued.
- ESP 5: Likely date of shutdown 01.03.2020.

6. **CONSTRAINTS / ISSUES TO BE TAKEN UP:**

- 1<sup>st</sup> Engineer notice issued on 25.07.18.
- Availability of Shut down for 60 days.

7. **PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
GM/RMP	S Jayam, DGM/RMP	Sanjay Kumar DGM(P) RRMP, SP & AS Zone

**BSL – Development of Alternate System for Drawal of Raw Water from Damodar River for Bokaro Steel Plant and Township**

1.	<b>PROJECT :</b> Development of Alternate System for Drawal of Raw Water from Damodar River for Bokaro Steel Plant and Township	
2.	<b>SCHEDULE:</b>	
i)	Zero Date	Dec’18
ii)	Original approved date of commissioning	Mar’20
iii)	Now anticipated	Oct’20
3.	<b>COST (Rs. in crore)</b>	
i)	Original approved	98.37 (net of ITC of 9.37 Cr)
ii)	Expenditure till Mar’19	7.09
iii)	Expenditure in 2019-20 (up to Feb’20)	4.02 Cr
iv)	Cumulative expenditure up to Feb’20	11.11 Cr

4. **BENEFITS ENVISAGED**

The Proposal is a technical necessity and is of the nature of insurance scheme to provide an alternate supply system of raw water from Baidhara Weir in addition to the existing Tenu Canal in order to eliminate dependency on a single source and avoid any production loss in future due to disruption of water supply. On completion of the proposed system, Tenu Canal can be taken up for repair in phases for longer duration.

5. **PHYSICAL PROGRESS OF WORK**

- LOA issued to M/s Zuberi Engg Co. & M/s H N Construction Pvt Ltd on 29.12.18, Contract signed on 16.01.19.

- Survey work started on 16.01.19.
- A set of drawings for laying pipe-line under the Railway tracks has been submitted to concerned division of Railways i.e, Adra and the same has been cleared by the Railways.
- Drawing for Jack pushing under approval by Adra division.
- Billing schedule processed on 08/05/19. Under approval by CET.
- Master drawing list approved on 15/03/19. General Layout drawing approved on 10/04/19.
- HNCPL assured to start site activities by 1st week of June, 2019.
- Excavation at Pump house started on 08.06.19.
- Excavation work of approach channel started on 01.07.19.
- Land allotted for installation of Batching Plant has been accepted by the party.
- Electrical sub-strn: Column concreting completed. Shuttering for roof sla casting in progress.
- RCC approach road 500 Cu.m./500 Cu.m. done.
- Wrapping & coating of pipes in progress.
- Jointing of pipes at site (1400dia & 1000dia both) is in progress.
- A joint site inspection has been carried out by City DSP (Bokaro) and Inspector Sector-9 Thana on 10.02.2020 for blasting. Clearance awaited
- Stretch-2: excavation work restarted.

**Power Supply Package**

- LOA issued to M/s DVC on 08.01.19. Payment (Rs. 7.08 Crs.) on depository basis to M/s DVC made on 31.01.19.
- Meeting with DVC held on 29.01.19 at Kolkata. M/s DVC assured to give power supply by July'20.
- Meeting held on 29/04/19 at DVC, Maithan.
- NIT issued on 03/05/2019 with due date 03/06/19.
- Contract awarded to M/s ABN Tower by M/s DVC.
- Survey work completed.
  - 80T Free issue of material handed over to M/s DVC on 20.02.2020.
- Rail pole shifting and Pit marking in progress.

**CONSTRAINTS / ISSUES TO BE TAKEN UP:**

- Rock encountered during excavation for bay.
- Notice of negligence issued to party on 16.10.19.

7.

**PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ordinator	Project Manager
Shri L. Upadhyaya DGM (WMD)	-	-

## CFP: 4 MW Power Plant

1.	<b>PROJECT:</b> Installation of 4 MW Power Plant	
2.	<b>SCHEDULE:</b>	
	i) Zero Date	Sep'12
	ii) Original date of commissioning	Mar'14 (18 months)
	iii) Now anticipated	- (New contract awarded in Oct'14 after RPN action)
3.	<b>COST</b> (Rs. in Cr.)	
	i. In-prin. approved Cost	Rs.39.19 Cr. (net of cenvat credit of Rs.2.36 Cr.)
	ii. Expenditure till March'18	Rs.10.46 Cr.
	Expenditure in 2019-20 up to Feb'2020	Rs.0.00 Cr.
	Cumulative expenditure up to Feb'2020	Rs.10.46 Cr.

#### 4. BENEFITS ENVISAGED

- For utilizing excess gas generated from 45MVA SAF as fuel for power generation.
- Generation of 20,670 MWh exportable power.

#### 5. PROGRESS OF WORK:

SN	Package	Party	Cost (Party Wise)	Expenditure (till Feb'20)	Eff. Dt of contract (LOA)	Schedule (Likely/ Actual)
1	4 MW Power Plant	M/s Tecpro Systems Ltd, Chennai <b>RPN was issued to M/s Tecpro on 31.12.13 and contract was terminated on 19.09.14.</b>	<b>Evaluated Cost;</b> Rs.33.47 Cr (net of cenvat)			
	<b>Balance work after RPN</b>	M/s Resurgent Power Projects Ltd, Chennai. <b>RPN was issued on 25.04.19 and Termination notice issued to the contractor 29.05.19</b>	<b>Evaluated cost:</b> Rs.32.73 Cr. (net of Cenvat).	Rs.10.46 Cr	16.10.14	
<b>STATUS</b>						
<ul style="list-style-type: none"> <li>✓ <b>NAME OF COMPANY CHANGED FROM M/S ENMAS GB POWER SYSTEMS PROJECTS LTD, CHENNAI TO M/S RESURGENT POWER PROJECTS LIMITED.</b></li> <li>✓ Basic and detail Engineering is in progress. Drawings and data sheets being submitted to CET for approval. Approval/ comments on the drawings are in process by CET.</li> <li>✓ <u>Turbine Building</u> casting of tie beam at 2.4 mtr. Is in progress. Casting of deck slab completed.</li> <li>✓ <u>Cooling Tower</u>: Casting of wall upto 12 mtr completed.</li> <li>✓ <u>Pump House</u>: Casting of roof completed.</li> <li>✓ <u>Booster House</u>: Construction of Booster house completed. Flooring work is under progress.</li> <li>✓ All Gas Pipeline structure foundations from furnace to new Booster house and from new booster house to old Booster house completed.</li> <li>✓ <u>Gas Pipeline structures</u>: Pipeline structure erection from Furnace to new Booster house and from new Booster House to old Booster house is under progress. Approximately 66 MT of structural erection completed at site. Fabrication and erection of gas pipeline structural is under progress.</li> <li>✓ <u>Gas Pipeline</u>: 600 NB Gas pipeline erections from Furnace to Old Booster House is under progress. Approximately 350 mtrs of pipeline laying from Furnace Building completed. One Booster fan gas pipeline connections and 600 NB valves erection completed. U seal water pipeline and nitrogen pipeline work is under progress.</li> <li>✓ Very Poor work progress by M/s Resurgent Power Projects Ltd due to pending payment issues with sub-contractors and suppliers. Party has also stopped work at site since April 2018.</li> <li>✓ Although Work at Site has been restarted by Contractor from 4<sup>th</sup> June 2018, the work progress at site was slow due to pending payment issues with suppliers and Contractors.</li> <li>✓ Alternate plan was worked out with CET for RPN against Resurgent. CET to prepare TS of the balance work. The sub vendors of M/s Resurgent for important materials like Turbine, Boiler etc were contacted directly and the readiness of material was assessed. The list and status of the same was submitted to CET for preparation of TS for pending work and supplies of the Power plant.</li> <li>✓ Draft TS for RPN was received from CET on 31<sup>st</sup> August 2018 and the same is under review at CFP.</li> <li>✓ A meeting was held at CFP along with Directors of M/s Resurgent wherein they had committed to release funds amounting to Rs.10 lakhs for site work immediately but the funds of Rs.2 lakhs have only been released till date. M/s Resurgent Power Projects Ltd is not releasing funds from their side for the Project.</li> <li>✓ Cable tray laying work started by Contractor.</li> <li>✓ Validity of the Contract has expired on 12<sup>th</sup> October 2018. M/s Resurgent Power Project Ltd has completely stopped work at site from that date.</li> <li>✓ <b>Risk Purchase action taken and Termination notice issued to the contractor vide letter 29.05.19.</b></li> <li>✓ <b>Contractor submitted request for interim stay on the action being taken by CFP before Hon'ble Principal District Court, Chandrapur. Preliminary reply submitted from SAIL-CFP end on 29.08.19.</b></li> <li>✓ <b>Reply to application of contractor before court for interim stay was submitted on 09.09.19.</b></li> <li>✓ <b>Request for extending date submission of reply placed before Hon. Court placed on 07.10.19.</b></li> <li>✓ <b>Reply submitted before Hon. Court on 25.11.19</b></li> <li>✓ <b>Case heard on 16.12.19&amp; 27.01.2020, next date awaited.</b></li> <li>✓ <b>Approval to separate out scope of SAF Gas booster House from main (4 MW PP) contract for completion of balance jobs of booster house accorded. TS and cost estimate for balance work of SAF Gas booster House has been received, tendering process is under progress.</b></li> </ul>						

**6. CONSTRAINTS FACED:**

CONSTRAINTS / ISSUES FACED:	CORRECTIVE ACTION TAKEN
Poor progress by M/s Tecpro.	Alternate agency engaged after RPN.
<ul style="list-style-type: none"> <li>✓ Very Poor work progress by M/s Resurgent Power Projects Ltd due to pending payment issues with sub-contractors and suppliers. Party has also stopped work at site since April 2018.</li> <li>✓ Work restarted by Contractor from 4<sup>th</sup> June 2018 but there was no work progress at site due to payment issues with sub-contractors.</li> <li>✓ Contractor has requested CFP to release direct payments to their sub-Contractors/ sub vendors but further payment not released by Finance deptt.</li> <li>✓ Validity of contract which has expired in Oct'18.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Discussions carried out with directors of M/s Resurgent for starting the site work and release of funds from their side.</li> <li>✓ Direct payment had been also released to their sub-contractors and suppliers.</li> <li>✓ Party was called for discussion on 11.02.19. Party has not attended the meeting.</li> <li>✓ Risk Purchase Notice has been issued to M/s Resurgent Power Project Ltd. On 25.04.19 and the party was advised to mobilize all the resources at site and complete the project within 15 days from the issuance of the notice.</li> <li>✓ Termination notice issued to the contractor vide letter dt. 29.05.19.</li> </ul>

**7.PROJECT OWNER/ CO-ORDINATOR/ MANAGER:**

Project Owner	Project Co-ord.-cum-Project Mgr.	Overall Project I/c
	Sri JP Mahto, DGM (Power Plant)	Sri D.D.Bhattachar, GM (Proj)

## Assam- Hot Dip Galvanising Project at Dagaon

1.	<b>PROJECT:</b> Formation of Joint Venture for Hot Dip Galv. Line Project, Dagaon, Assam	
2.	<b>SCHEDULE</b>	
i)	Zero Date	Jan'97
ii)	Original approved date of commissioning	Jan'99 (24 months)
iii)	Now anticipated	Under Joint Venture (12M after commencement of site work)
3.	<b>COST (Rs. in Cr.)</b>	
i)	Original approved	Rs.42.85 Cr.
ii)	Anticipated	-----
iii)	Expenditure till Mar'19	Rs.15.90 Cr.
iv)	Expenditure in 2019-20 up to Jan,2020	Nil
v)	Cumulative expenditure up to Jan,2020	Rs.15.90 Cr.

#### 4. PHYSICAL PROGRESS OF WORK

The work was awarded to MECON in Jul'97 (completion: 18 months). Civil work was in advance stage of completion and equipment supply had also started. However, due to delay in completion of approach road & the bridge work by Govt. of Assam and stoppage of work due to heavy rains & floods in the area, the project got delayed. In view of the time and cost overrun of the project, M/s IFCI re-appraised the project in Oct'99 and indicated that under the existing conditions and without fiscal incentives (viz. exemption from excise duty & income tax etc.), the project is not financially viable. Accordingly, SAIL Board in Mar'00 decided that project be kept in abeyance and alternate strategies, including identification of suitable party who may be interested in owning and executing the project, may be examined.

The work was suspended in Apr'00, M/s North East Steel (NES), Guwahati were selected as prospective JV partner in Jul'01 on preliminary basis and approval of SAIL Board for formation of JV Company (JVC) and Memorandum of Understanding (MOU) with M/s NE Steel Pvt. Ltd. (NESPL- the newly incorporated company with consortium members of erstwhile NES as its Directors) was obtained in May'02.

After discussion/negotiation with MECON in Jul'2004, SAIL's liabilities were crystallized at Rs.5.16 Cr. (Rs.2.91 Cr. payable to MECON as per Contract Agreement for the work already executed/to be executed and Rs.2.25 Cr. payable as per the negotiated/mutually agreed commercial settlement). Consent of NESPL for additional liability of Rs.2.25 Cr. on the proposed JVC was received in Jul'04 and approval of Chairman was obtained in Aug'04 for the above liability.

The modified MOU with NESPL and Tripartite Agreement with MECON & NESPL were signed in Mar'05. The JVA, along with the MoA & AoA, was signed with NESPL in Nov'05. JVC named M/s NE Steel & Galvanising Pvt. Ltd. (NESGPL) has been incorporated in Dec'05. Rs.3.07 Cr. was deposited by NESPL with NESGPL in Apr'06 and Rs.2.25 Cr. has been paid by NESGPL to MECON on May'06. Subsequently, the Deed of Transfer has been signed in Jun'06 amongst MECON, SAIL and NESGPL for transfer of the turnkey contract of MECON from SAIL to NESGPL.

De-reservation of HDGL land was approved by GoA in Sep'07 and the land records have been corrected. For further actions of payment of land revenue tax from 1997 to 2007 and issuance of 'Patta' for this land in SAIL's favour (so that SAIL's rights on the land can be transferred to NESGPL), SAIL's follow-up with state Govt. since Oct'07 has not borne any fruit. As the HDGL land has not yet been transferred to NESGPL, no further action could be taken by them on resuming the site work.

In the meantime, the Committee constituted at CO had recommended closure of NESGPL and the report was submitted to D (T) in Jul'10. For initiating the legal process for closure of the JVC, BSC note was processed in Jul'13 but kept on hold to have discussions with NESPL to have a smooth closure of the JVC. Since discussions with NESPL proved futile, the BSC note was processed again in Oct'14.

After receipt of opinion of Corporate Law Deptt in Mar'16, proposal for winding-up the JV company was put-up to the BSC for JVs & SAs in their meeting held on 27.06.16.

As desired by BSC, before initiating process for winding up of the JVC, a letter dtd. 06.07.16, 23.01.17 and on 01.08.17 has been written to Principal Secretary (PS), Govt. of Assam for getting a formal opinion. HDGL issues are being followed up with PS, Assam and reply are awaited; matter was also informed and followed up with the Chief Secretary (CS), Assam vide email Dtd. 15.09.16 but no information has been received from CS office. Also, as desired by the BSC, information regarding SAIL's intention for winding up of the JVC was communicated to JVC partners on 23.01.17. Parallely, techno-economics has been updated by CET to 3<sup>rd</sup> Qtr 2016 and according to that, project is not economically viable.

As already one year lapsed and no formal opinion received from Govt. of Assam, again proposal for windingup of the project was considered by the Board Sub-Committe on Strategic Alliances and Joint Ventures in its meeting held on 10.08.17. As decided by BSC, for fast track winding-up, the documents have been forwarded to Business Planning. In this regard, consultant has been appointed by Business Planning and draft report submitted by the consultant in Jan'18.

For taking up the stock of the equipments lying at site, comprehensive list has been prepared by SAIL, HDGL personnel. A committee to accomplish various tasks involved in reconciliation of material and facilitate in shifting it to BSL (by CMO,Guwahati) as well as the activities to be taken up thereafter formed and its first meeting held at Guwahati on 9-10.05.18.

The Committee has recommended that as a first step, the equipment and other materials identified by them which are lying at the site be shifted to Bokaro Steel Plant, (as originally HDGL Project was linked to BSL). Various actions in this regard are under progress.

SAIL Board in its meeting on 20.09.18, has approved the proposal for winding-up of M/s NE Steel and Galvanising Pvt. Ltd (NESGPL), Assam. The Board has authorized CEO, BSL to take/approve actions as deemed necessary for shifting of materials lying at Dagaon site of NESGPL, Guwahati, Assam to BSL for further utilization/disposal.

Subsequent to the Board approval on 20.09.18, a committee has been constituted by BSL, comprising of representatives from BSL and BSO, Guwahati to take actions, as deemed necessary for shifting of materials lying at Dagaon site of NESGPL to BSL for utilization/disposal. Committee has visited NESGPL site at Dagaon from 3rd – 4th Jan'19 and identified equipments for shifting/disposal. Actions are being initiated to shift the identified materials in 1st phase. The sales of balance material (erected and non-erected) shall be undertaken subsequently.

Subsequently, purchase orders were issued for transportation of identified material to BSL. Accordingly, in Sep'19 transporters along with truck and crane reached the project site for shifting the material. However, villagers/ local people gathered and did not allow them to shift any material, inspite of discussing the matter with them several times.

**“Development and Operation” of 14  
MTPA Iron Ore Mines at Rowghat**



## **Development and Operation” of 14 MTPA Iron Ore Mines at Rowghat”**

<b>1.</b>	<b>PROJECT:</b> “Development and Operation” of 14 MTPA Iron Ore Mines at Rowghat	
<b>2.</b>	<b>SCHEDULE:</b>	
i)	Zero Date	Sep’17
ii)	Original approved date of commissioning	30 years (including 5 years of Construction and 25 years of Commercial Production)
iii)	Original approved mining fee	Rs.440/- ton of unscreened ore

### **3. BENEFITS ENVISAGED**

To ensure timely availability of quality raw materials to Bhilai Steel Plant. Balance iron ore reserves in Dalli-Rajhara mines is presently assessed to be around 70 Million tonnes and the major mineable portion of the same is likely to get exhausted in 5 to 6 years. It is, therefore, of critical importance that alternate sources of iron ore are tapped in the vicinity of the Steel Plant. Rowghat Hills is a suitable source for feeding the future ore requirement of BSP.

### **4. PHYSICAL PROGRESS OF WORK**

SN	Package	Party	Mining fee	Eff. Dt of contract	Schedule (Likely/ Actual)
1	“Development and Operation” of 14 MTPA Iron Ore Mines at Rowghat	Consortium of M/s ACB (India) Ltd. and M/s Sainik Mining and Allied Services Ltd.	Rs.440/- ton of unscreened ore.	25.09.17	30 years (including 5 years of Construction and 25 years of Commercial Production)
<b>STATUS</b>					
<ul style="list-style-type: none"> <li>• Final approval accorded by SAIL, Board in its 443<sup>rd</sup> meeting held on 30.06.2017.</li> <li>• Sanction letter issued on 31.07.17.</li> <li>• LOA issued to Consortium of M/s ACB (India) Ltd. and M/s Sainik Mining and Allied Services Ltd.on 01.08.2017.</li> <li>• Contract signed on 25.09.2017.</li> </ul>					

### **5.STATUS:**

- Site visit done by the party on 09.10.17.
- Bank Guarantee of requisite amount submitted by Party on 10.10.17.
- Letter issued to party (dt.17.10.17 & 09.12.17) to deploy equipment for maintenance of approach road to Rowghat Mines and submit L-2 network as per the contract agreement but no action has been taken by party in this regard.
- A reminder letter issued to Project Head of M/s ACB on 22.12.17, again mentioning to submit all the statutory information as per the contract agreement. However, there is no response for the party so far.
- A warning letter issued to GM(Business Development) and Project Head (Rowghat Project) M/s ACB on 05.02.2018, to commence the work and submit the work plan at the earliest, failing which it will be assumed that M/s ACB is not interested to fulfil agreement obligations as per the contract and management will proceed as deemed fit.

### **6. CORRECTIVE ACTION TAKEN:**

1. Vide letter dt.20.02.2018 M/s ACB informed that Machine(1 Nos Dozer) along with operator has been deployed at Rowghat site for maintenance of approach road to Rowghat Mines.
2. Meeting held with M/s ACB (India)Ltd. on 19/03/2018 at Bhilai. M/s ACB (India) Ltd was asked to urgently appoint the consultant for DPR preparation and mines development.
3. L-2 Network submitted by M/s ACB (India) Ltd. on 27/04/2018.
4. Expression of Interest (EOI)issued by M/s ACB (India) for DPR preparation.
5. Six person (1Dy Manager (HR), 1Mining Mate,1 Geologist,1 Mining Engg & 2 Mechanical Engg)was appointed & posted at Rowghat by M/s ACB (India).
6. Office building allotted by SAIL/BSP at Bhilai to M/s ACB (India) Ltd, has been operational from 1<sup>st</sup> June 2018.
7. Float ore Sample collected by M/s ACB from Block-A, Rowghat on 5th June 2018.
8. Vide letter Dt 09.06.2018, draft L-2 network returned back to M/s ACB (India) for modifying as per comments of CET.
9. SAIL/BSP deposited amount for tree enumeration of Rowghat Mining area on 15.06.2018.Vide letter dt.16.06.2018 & 06.07.2018,M/s ACB was instructed to facilitate tree enumeration work as per the contract agreement.
10. Tree enumeration work of Rowghat Mining area has commenced from 09.07.18 onwards. It was informed by M/s ACB Mining that LOI had been issued on 29.09.2018 to M/s ELITECH EARTH SCIENCE PVT LTD for DPR preparation.
11. DGPS work alongwith pillar installation (Block-A, FootHill, Dump A, & Hill Top) completed by BSP.
12. Security camp at Khorgaon established on 16/01/2019.
13. Sample collection work(manually) done by M/s ACB from 28/01/2019.Sample collected from 12 locations.
14. Equipments deployed by M/s ACB from 13.03.19 to 22.04.19 for maintenance of road.
15. DPR preparation under progress.
16. DGPS completed of mining lease boundary pillar(previously stationed),SOI(3 triangulation point).
17. MDO has deployed equipments for preparation of road from JALTOP to BLOCK-A. Work under progress.

### **Status of progress made by M/s Elitech (Consultant DPR Rowghat-as informed by MDO):**

1. Computerized Graphic logs of all the bore holes have been prepared for the further interpretation and development of cross sections. However, final report will be submitted after final verification on field.
2. Work on Geological Report has been started. It needs to be prepared afresh as the cut-off has been changed from 55%Fe to 45%Fe.
3. Geological Cross Sections of Raodongri block is completed. Cross sections of Tarhur, Anjrel Blocks is completed.
4. Drone Survey work completed.
5. Review of all the available data is completed.
6. Area has been earmarked for borehole drilling for collecting core sample on 04.11.2019).
7. Appointed a party for drilling of boreholes for core samples.
8. Area has been surveyed for security camp establishment at Block – A. A joint inspection of state police and security forces to be carried out for final selection of the site.
9. Proposals for Infrastructure facilities such as power, water supply and road connectivity for the proposed camp site have been initiated.
10. ACB mining has appointed agency for construction of approach Road to proposed security camp site.
11. Exploration drilling to be commenced by M/s ACB after establishment of camp at Block-A.
12. Camp establishment at Block-A tentatively by Mar 2020(by BSP)

# **PROJECTS UNDER RPN & ARBITRATION**

## BSP-RPN Cases

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
1	M/s.Aireff Detox Pvt.Ltd., Thane, M/s.Himgiri Cooling Tower Thane & M/s.Model Infra Corpn.Pvt.Ltd., Bangalore	External Water System for SMS-III (Pkg.077-01)	03.03.16	15.12.16	Mobilization BG:Rs 3.07 cr& Performance BG:Rs 5.89 crencashed on 05.03.16.	Rs.194.02 Cr[net of BG encashed]	<ul style="list-style-type: none"> <li>• Party vide letter dt.08.11.16 requested to submit the Rs.194.02 Crs.</li> <li>• Vide letter dt.14.12.2016. Party informed about conciliation.</li> <li>• Vide email dt.29.12.16 Fin- Proj requested to do needful for recovery of RPN Cost.</li> <li>• RM Mumbai requested to handing over of above letters.</li> <li>• RM Mumbai vide email dt.03.02.2017 informed that office of Party was found closed and different notices were found pasted on the office.</li> <li>• Conciliation has failed.</li> <li>• Relevant documents have been forwarded to corporate law for initiation of arbitration proceedings.</li> <li>• A meeting held on 12.12.18 between BSP and advocates at Delhi for preparation of claim.</li> <li>• Projs-Utility Zone forwarded the Prayer Paragraph, affidavit and vakalatnama, duly seal &amp; signed to Corp. law through post in March 2019 for filling Arbitration.</li> <li>• Lawyer (DSK legal) on 06.05.19 filed Statement of Claim on behalf of SAIL before the SCOPE Forum.</li> <li>• As informed by Lawyer (DSK Legal) Copy of SOC not received by Party as office is found closed twice and further "SHIFTED "to unknown place.</li> <li>• Lawyer (DSK Legal) is exploring to claim with Consortium members.</li> <li>• Vide e-mail 30.11.2019 Corporate Law, SAIL informed that one of the consortium partner M/s HIMGIRI Cooling Tower has submitted SOD.</li> <li>• SCOPE has sent a Demand Note to Deposit required Arbitration fees at the earliest.</li> <li>• Arbitration fees deposited by SAIL,BSP and further course of action is awaited.</li> <li>• Arbitral panel is yet to be formed by SCOPE.</li> </ul>
2	M/s Agnice Fire Protection Ltd. Kolkata	Fire protection system for For BRM & URM(Pkg.126-02)	22.10.16	12.01.17	Performance BG: Rs0.81 cr. has been encashed on 17.10.16.	Rs.7.68 Cr. [net of BG encashed]	<ul style="list-style-type: none"> <li>• BSP has initiated action to recover the balance RPN amount of Rs.7,67,58,178/-from the pending/ future bills of M/s Agnice Fire Protection Ltd., Kolkata. Vide letter dt 05.12.2016 Fin- Proj requested to do needful for recovery of RPN Cost.</li> <li>• Conciliation has failed.</li> <li>• Relevant documents have been forwarded to corporate law for initiation of arbitration proceedings on 01.10.18.</li> <li>• CO Law informed vide email 08.01.19 that Advocate has been appointed in the matter. The documents have been</li> </ul>

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
							<p>handed over to handling Advocate and being followed up for preparation of statement of Claim.</p> <ul style="list-style-type: none"> <li>• Vide email dt 26.03.2019, CO Law submitted draft SOC for observation to Proj Zone for necessary comments. Proj Zone vide email dt 13.04.2019 forwarded observation on draft SoC to CO.</li> <li>• Proj Zone vide email dt 30.07.19 forwarded revised observation on SoC to CO.</li> <li>• Meeting held during 01.08.19-02.08.19 with Advocate at Noida,</li> <li>• Revised SOC submitted to Advocate/Corporate Law on 21.08.2019.</li> <li>• Reminders sent to Corporate Law on 21.09.19 &amp;21.10.19 regarding updated status. Corporate Law has not finalized Final SOC so far.Final SOC sent by Advocate on 24.12.2019 and sent to Corporate Law by Projects, BSP on 08.02.2020.</li> <li>• Corrections done and Final SOC sent by BSP on 06.03.2020. Awaiting the Final papers from Corporate Law for further necessary action.</li> </ul>
3	M/s Summits HygronicsPvt.Ltd. COIMBATORE	Air Drying Plant for URM and Air Drying & Filtration plant for BRM(Pkg.114A)	31.03.15	31.03.15	PBG not submitted. EMD exempted as party has submitted NSIC.	Rs.0.62 Cr.	<ul style="list-style-type: none"> <li>• Letters issued on 31.03.15, 25.04.16, 09.05.16, 26.07.16 &amp; 03.09.16</li> <li>• Vide letter dt 03.12.16 Fin- Proj requested to do the needful for recovery of RPN Cost.</li> <li>• Conciliation has failed.</li> <li>• Management on 05.12.18 accorded approval to initiate arbitration proceedings and has appointed Shri R. K. Nehru, Ex-ED (MM) as the Arbitrator. Letter issued to Shri R K Nehru on 10.12.18to initiate Arbitration proceeding.</li> <li>• First hearing held on 06.03.2019. Party did not attend.</li> <li>• Second hearing held on 27.03.2019.Party did not attend.</li> <li>• Third hearing held on 20.04.2019. Party did not attend. BSP has submitted its statement of claim.</li> <li>• Fourth hearing held on 29.05.19. Party did not attend but intimated through e-mail, dt 15.05.2019 that they will be able to visit BSP in 1st week of June'19.</li> <li>• Respondent has not filed statement of defense and/or counter claim till date.</li> <li>• Fifth hearing held on 11th June'19.Party did not attend. Affidavit on evidence to be submitted by claimant, before 26th June'19.</li> <li>• Sixth hearing held on 28th June'19.Party did not attend. Next hearing held on 23rd July'19.</li> <li>• Seventh hearing held on 23rd July'18 in which the representative of M/s Summits was present. Party has submitted a petition along with affidavit. The reply of</li> </ul>

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
							<p>petition has been sent to M/s Summits by BSP on 31.07.19. Next hearing will be held on 9th Aug'19.</p> <ul style="list-style-type: none"> <li>• Eighth hearing held on 9th Aug'19. No one was present from the respondent site. Next hearing will be held on 10th Sept.19.</li> <li>• Ninth hearing held on 10th Sept'19. No one was present from the respondent site. On 1st Oct'19, hearing held for FINAL argument, in which the party was not present. Now the case is reserved for award.</li> <li>• Tribunal has awarded on 12.12.19 and asked M/s Summit Hygronics Pvt. Ltd. to pay Rs. 55, 79, 052 + Rs. 2, 15, 000 + interest amount to BSP.</li> </ul>
4	Consortium of M/s KG Cranes, Korea and M/s Impression System & Engg. Pvt. Ltd., Pune	EOT Cranes for BOF & CCP of SMS-III (Pkg 029B1)	01.06.15	19.06.15	PBG not submitted, however EMD-BG of USD 300,000 forfeited in Feb'15.	Rs.0.43 Cr.	<ul style="list-style-type: none"> <li>• Recovery notice issued to the party for depositing risk &amp; cost amount on 01.06.15, 05.08.15. Reminders sent on 12.11.15, 06.02.16, 23.04.16, 02.09.16.</li> <li>• Contract awarded to M/s Mukandon dtd. 19.06.2015 at Rs 157.55 Crs with completion period 18.12.16.</li> </ul>
5	Consortium of M/s Vishwa Infrastructures and Services Pvt. Ltd, Hyderabad (M/s VISPL) and M/s V BhogeshwaraRao, Guntur	Augmentation of Make-up Water and Drinking Water System at all new units (Pkg. No.078)	11.04.16	22.05.17	Mobilization BG: Rs.1.5 Cr. and -Mobilization BG: Rs.6.35 Cr. Performance BG Rs.4.86 Crs. encashed in April'16.	Rs.70.31 Cr. [net of BG encashed]	<ul style="list-style-type: none"> <li>• Conciliation has failed.</li> <li>• Management on 27.03.18 accorded approval to initiate arbitration proceedings for recovery of risk &amp; cost amount. Accordingly case sent to Corporate Office on 10.04.18 for further processing.</li> <li>• A meeting held on 14.12.18 between BSP and lawyer at Delhi for preparation of claim.</li> <li>• Claims finalised and to be lodged for initiation of Arbitration.</li> <li>• Corporate Office vide email dt.20.02.19 forwarded the draft Prayer Paragraph, affidavit and vakalatnama. The same, duly sealed &amp; signed sent to Corp. law through post for filing Arbitration, which is received at Delhi on 12.04.19.</li> <li>• M/s Vishwa vide letter dt.25.04.19 informed that Corporate Insolvency Resolution Process started in their firm through NCLT.</li> <li>• SAIL BSP approached IRP through Lawyer Shri Ashish Rana.</li> <li>• SAIL is directed to file their claim directly to IRP (Liquidator) of the case Shri Hemant Sharma, New Delhi. The same will be done by 05.09.2019.</li> <li>• IRP (Liquidator) return the case as being not in his purview and asked to file the matter in NCLT, Hyderabad. Accordingly, Matter is filed on 23.09.2019.</li> <li>• Case was filed with NCLT, Hyderabad to get further direction in the matter. NCLT, Hyderabad directed liquidator on 28.10.2019 to "consider the SAIL's claim on merit". Request letter sent on 31.10.2019.</li> </ul>

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
							<ul style="list-style-type: none"> <li>• A meeting with IRP held at New Delhi on 14.11.2019 wherein SAIL, BSP has asked to submit proof of the claims with M/s VISPL. Documents posted to Liquidator in wrong address caused delay in submission, hence the case rejected by him. Request has been made by BSP on 28.01.2020 to re-consider the documents.</li> <li>• SAIL's request for re-consideration of Claim papers is under process with NCLT, Hyderabad through legal counsel.</li> </ul>
6	Consortium of M/s McNally Bharat Engineering Company Ltd and M/s Southern Cooling Towers Private Ltd, Kolkata	External water system for Mills and fire water pump house (Pkg – 077-02)	20.05.16	14.09.17	PBG of Amount Rs. 6.08 Cr., BG against Mobilization advance of Rs. 8.36 Cr, BG against 1 <sup>st</sup> Interim advance Rs. 5.60 Cr. and BG against 2 <sup>nd</sup> Interim advance of Rs. 5.50 Cr. Encashed in May'16.	Rs.122.67 Cr (net of BG encashed)	<ul style="list-style-type: none"> <li>• Conciliation has failed.</li> <li>• Management on 29.11.2017 accorded approval to initiate arbitration proceedings for recovery of risk &amp; cost amount. Accordingly case sent to Corporate Office on 09.01.2018 for further processing.</li> <li>• Vide letter dt.26.06.2018 M/s MBECL sent notice of claimed of Rs.119 Crs.</li> <li>• M/s MBECL vide letter dt.31.07.2018 have refuted our claims towards Risk and Cost and have invoked arbitration and appointed Shri Dr. V K Agarwal, Former Law Secretary, Govt. of India as their Nominee Arbitrator and requested to nominate an arbitrator on behalf of BSP.</li> <li>• Vide email dt.24.09.2018 Corporate law forwarded draft statement of claim for comments. The draft statement of claim is under preparation based on Zone comments dt.19.11.2018.</li> <li>• Vide letter dt.10.10.2018 (received on 22.10.2018) M/s MBECL addressed to Registrar, ICA regarding initiation of Arbitration proceedings. The same forwarded to Corporate Law vide email dt.23.10.18</li> <li>• SAIL's Claims finalised and related documents provided to advocate on 09.02.2019 for initiation of Arbitration.</li> <li>• Queries raised by SAIL's Counsel are replied and further queries received, Reply and desired documents sent through e-mail on 18.04.2019.</li> <li>• SOC filed with ICA on 04.06.2019 for an initial claim amount of INR 192.62 Cr.</li> <li>• ICA has send a Demand Note for submission of fees of Rs. 68.67 Lakh + GST +9.58 lakh stamp duty to be payable by BSP on or before 08.08.2019.</li> <li>• SAIL BSP's share of ICA fees are deposited and claim is being revised by counsel.</li> <li>• Meanwhile, MBECL has filed a case in Hon'ble Delhi High court to obtain status of "Claimant". The case is dealt by CO Law.</li> <li>• ICA has sent a demand note to deposit the Arbitral fees for the share of RESPONDENT M/s MBECL &amp; Co.</li> </ul>

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
							<ul style="list-style-type: none"> <li>Arbitral fees as above are deposited to ICA for further course of action.</li> <li>ICA appointed Arbitral panel under Shri T.S. Thakur,retd. CJI as Presiding arbitrator and 1<sup>st</sup> meeting is scheduled on 12.03.2020 at New Delhi.</li> </ul>
7	ISP Project Pvt. Ltd.Pune	Railway track work for Plant Internal Yard (Pkg – 095 B)	17.10.15	17.10.15	PBG of Rs. 2.61 Cr. encashed on 09.11.2015.	Rs. 73.23 Crs. (Rs. 5.83 Crs + Rs 67.4 Crs as Production loss )	<ul style="list-style-type: none"> <li>Initial notice of claim for recovery issued</li> <li>Arbitration invoked by Party. Case is under arbitration in SCOPE</li> <li>Final argument by SAIL's counsel scheduled on 04-05.03.2019 could not hold by Arbitral panel. Next proposed dates are 17-18 July 2019.</li> <li>Hearing post-poned due to lapse of the "Arbitration period" on 30.06.2019. The matter of time extension is under jurisdiction of Delhi High court having date of hearing on 19.07.2019.</li> <li>Further date of hearing is fixed on 18<sup>th</sup> and 19<sup>th</sup> September 2019 for submission of final argument by SAIL.</li> <li>Final argument by SAIL, BSP submitted and now decision by Tribunal is pending.</li> <li>Extension of time of Arbitration granted by Hon'ble Industrial Court ,Naya Raipur C.G. for another 03(Three) months. Award of Arbitration is awaited within 13.03.2020(extension of Arbitral period)</li> </ul>

**BSP-Details of RPN cases other than the list mentioned above:-**

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
8	M/s S.P. Singla Construction Pvt. Ltd.	Construction of Flyover at 3 Locations & Road Network (Pkg.111-01)" of Bhilai Steel Plant, Bhilai	30.11.17	Work of part RPN has been awarded at a contract price of Rs 1.78 Crs	-	-	<ul style="list-style-type: none"> <li>• SOD filed on 22.03.2019 at ICA, New Delhi.</li> <li>• As per Procedural order No. 6 dated 14.05.2019, passed by the tribunal on 14.05.2019, the tribunal would visit the site on 28.06.2019.</li> <li>• Site visit held by Tribunal on 28.06.2019, further order passed on 09.07.2019 for next hearing on 05.08.2019.</li> <li>• Hearing held on 05.08.2019 and attended by Projects Manager; next hearing will be done during 5th-6th Nov.' 2019.</li> <li>• Meanwhile, Arbitral tribunal proceeding held on 19.09.2019, wherein direction given to both the parties to resolve issues related to Advance and further working at site by meeting at Bhilai before next hearing which was held on 05.12.2019.</li> <li>• Arbitration Tribunal has put stay regarding termination of contract. Hearing held on 18.12.19 in which BSP's lawyer has submitted for revoking of Stay order. Next hearing held on 13.01.20 wherein M/s SPS has submitted the rebuttal for submission by BSP counsel.</li> <li>• Next hearing held on 11.02.2020, wherein Tribunal has informed to pass the order, date not yet confirmed by Tribunal in this regard.</li> </ul>
9	M/s ERA Infra Engg. Ltd.	Structural works for BOF & CCP (Pkg 033B)	21.10.17	Awarded in 5 pkgs. on (1 package awarded on 09.08.2017 prior to termination of M/s Era as part RPN, and 3 pkgs awarded as post RPN on 23.10.17 & 1 pkg awarded on 30.10.17)	Performance BG: Rs 4.89 crs. Additional PBG: Rs. 4.89 crs. Interim advance BG:Rs. 1.00 crs. All the 3 BG's encashed on 21.10.2017.	Rs. 90.68 Crs. (Rs. 66.68 Crs. & 24 Crs. Change order)	<ul style="list-style-type: none"> <li>• Initial notice of claim for recovery issued.</li> <li>• Arbitration invoked by Party. Case is under arbitration in ICA.</li> <li>• Hearing was on 18.03.2019. No representative of M/s Era was present. Notice has been issued to M/s Era. 2<sup>nd</sup> hearing on 25.04.2019 wherein extension was sought by M/s Era and further next hearing will be held on 10.07.2019.</li> <li>• Additional counter claim is to be filed on account of IDS I issued against RPN packages (Pkg 033B2, 033B4, 033B5, 033b6 &amp; 033B7) amounting to Rs 12.09 Cr is not been filed till date in arbitration all document being handed over to corporate law and M/s Fox and Mondal (dealing law firm). To be taken up on priority by corporate law.</li> <li>• Further additional counter claim shall be filed on account of Change Order which has been proposed against RPN packages (Pkg 033B2, 033B4,</li> </ul>



Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
							033B5, 033B6) amounting to Rs 12.90 Cr. Issuance of Change Order is in progress.Hearing took place on 10.07.19, M/s Era requested to postpone hearing for 03 months due to financial crises and non-availability of lawyer. SAIL has requested for a written submission from M/s Era for such extension. Since M/s Era has been referred to NCLT due to solvency and Bankruptcy, Tribunal have directed both BSP and M/s Era to obtain clearance for sustainability of claim and counterclaim from NCLT for such extension and submit to Tribunal. Filing of application has been done to NCLT. Next hearing scheduled on 19.10.19 but not held. Further Next hearing held on 08.11.19. The NCLT vide order dt. 08.11.19 allowed the Respondent's application to proceed with the Arbitration and to adjudicate both the Claim and Counter Claim. The Respondent has processed for filing of petition in Delhi HC under section 29(4) & (5) of the Arbitration and Conciliation act seeking an extension to complete the arbitration proceedings. Petition has been filed before HC. Once the same is allowed, Corporate Law office will take further necessary action regarding the same.
10	M/s Ratna Infrastructure Proj.Pvt.Ltd. Hyderabad.	Civil work for BOF and CCP at BSP (Pkg-033A)	15.12.10	21.02.2011	BG 's encashed of Rs. 8.65 Crs	Rs.2.66 Crs	<ul style="list-style-type: none"> <li>Awarded by SCOPE in favor of BSP and accordingly an amount of Rs. 2,67,17,971.25+ interest of Rs. 74,19,544.02+Rs.3,00,000 towards the costs of proceedings is payable to BSP. The same has been forwarded to BSP LAW deptt for further action.</li> </ul>
11	M/s HSCL	Civil work for BOF and CCP at BSP (Pkg-033A)	09.02.13	28.02.13	Corporate Performance guarantee bond of Rs. 5,56,26,908/- valid upto 21.10.2015 claim period upto 21.12.2015  1.41 Cr (Final RA + Price Escalation)-Hold will be adjusted against RPN recovery	Rs 89.77 Crs	<ul style="list-style-type: none"> <li>During the course of approval, Board Subcommittee held on 04.10.2012 observed that considering the impact on other works being carried out by HSCL in BSP and other plants and units the modality for recovery of additional amount required to be paid to alternate agency will be finalized after completion of work.</li> </ul>
12	ESP Based Plant De-dusting System under Modern. of SP-2, Pkg.021D	M/s Scintllant Projects India Pvt. Ltd., Kolkata	08.06.2017	<b>26.07.17</b> Contract awarded to M/s Consortium of M/s Enviropol	PBG of Rs 42.20 lakhs encashed on 29.12.14	Rs. 65,79,606/-	<ul style="list-style-type: none"> <li>Conciliator appointed vide approval dtd.17.11.17. As desired by Conciliator, BSP submitted their claim statement to the Conciliator on 07.02.2018.</li> <li>Conciliation proceedings have not yet started.</li> </ul>

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
				Engineers P. Ltd, Noida and M/s Enviro care Filtration & system, Kolkata at a cost of Rs 2.789 Crs with completion period of 4 months			

### BSP-Arbitration cases in Capital Projects

#### On-going Cases

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
1.	External Water System for SMS-III (Pkg.077-01)	M/s Aireff Detox Pvt. Ltd., Thane, M/s Hingiri Cooling Tower Thane & M/s. Model Infra Corpn. Pvt. Ltd., Bangalore	Nil	Rs.194.02 Crs [net of BG encashed]	SAIL-BSP (Dealt by Corporate Law)	D K Pouriya, GM (Projects)	Yet to be appointed	Scope	Contract Terminated due to Party's default	<p><b>Contract Terminated on 03.03.2016</b> due to Party's default</p> <p><b>Date of Award of Contract for balance work - 15.12.16</b> (Awarded to L&amp;T)</p> <ul style="list-style-type: none"> <li>•</li> <li>• Conciliation has failed.</li> <li>• Relevant documents have been forwarded to corporate law for initiation of arbitration proceedings.</li> <li>• A meeting held on 12.12.18 between BSP and advocates at Delhi for preparation of claim.</li> <li>• Projs-Utility Zone forwarded the Prayer Paragraph, affidavit and vakalatnama, duly seal &amp; signed to Corp. law through post in March 2019 for filling Arbitration.</li> <li>• Lawyer (DSK legal) on 06.05.19 filed Statement of Claim on behalf of SAIL before the SCOPE Forum.</li> <li>• As informed by Lawyer (DSK Legal) Copy of SOC not received by Party as office is found closed twice and further "SHIFTED" to unknown place.</li> <li>• Lawyer (DSK Legal) is exploring to claim with Consortium members.</li> <li>• Vide e-mail 30.11.2019 Corporate Law ,SAIL informed that one of the consortium partner M/s</li> </ul>

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
										<p>HIMGIRI Cooling Tower has submitted SOD.</p> <ul style="list-style-type: none"> <li>SCOPE has sent a Demand Note to Deposit required Arbitration fees at the earliest.</li> <li>Arbitration fees deposited by SAIL, BSP and further course of action is awaited.</li> <li>Arbitral panel is yet to be formed by SCOPE.</li> </ul> <p><b>Amount Recovered:</b></p> <ul style="list-style-type: none"> <li>Mobilization BG: Rs.3.07 crs&amp; Performance BG: Rs.5.89 crs encashed on 05.03.16.</li> </ul>
2.	Fire protection system for BRM & URM (Pkg.126-02)	M/s Agnice Fire Protection ltd. Kolkata	Nil	Rs 7.67 Cr [net of BG encashed]	BSP	M T Rao, GM (Projects)	-	-	Party proposing changes in contract & demanding extra price	<p><b>Contract Termination - 22.10.2016</b></p> <p><b>Date of Award of Contract for balance work - 12.01.17</b> (Awarded to Thermosystems)</p> <p><b>Amount Recovered:</b></p> <p>Performance BG: Rs 81.04 lakhs has been encashed on 17.10.2016.</p> <ul style="list-style-type: none"> <li>Conciliation has failed.</li> <li>Relevant documents have been forwarded to corporate law for initiation of arbitration proceedings on 01.10.18.</li> <li>CO Law informed vide email 08.01.19 that Advocate has been appointed in the matter. The documents have been handed over to handling Advocate and being followed up for preparation of statement of Claim.</li> <li>Vide email dt 26.03.2019, CO Law submitted draft SOC for observation to Proj Zone for necessary comments. Proj Zone vide email dt 13.04.2019 forwarded observation on draft SoC to CO.</li> <li>Proj Zone vide email dt 30.07.19 forwarded revised observation on SoC to CO.</li> <li>Meeting held during 01.08.19-02.08.19 with Advocate at Noida,</li> <li>Revised SOC submitted to Advocate/Corporate Law on 21.08.2019.</li> <li>Reminders sent to Corporate Law on 21.09.19 &amp; 21.10.19 regarding updated status. Corporate Law has not finalized Final SOC so far.</li> <li>Final SOC sent by Advocate on 24.12.2019 and sent to Corporate Law by Projects, BSP on 08.02.2020.</li> <li>Corrections done and Final SOC sent by BSP on 06.03.2020. Awaiting the Final papers from Corporate Law for further necessary action.</li> </ul>

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
3.	Air Drying Plant for URM and Air Drying & Filtration plant for BRM (Pkg.114A)	M/s Summits Hygronics Pvt. Ltd., Coimbatore	Nil	Rs.0.62 Cr.	SAIL, BSP	Sudhir Kumar Vaid, Mgr. (Projects)	Shri R.K. Nehru, Ex. ED (MM), BSP	Sole Arbitrator	Party proposing changes in contract & demanding extra price.	<p><b>Contract Termination - 31.03.2015</b></p> <p><b>Date of Award of Contract for balance work - 31.03.15</b>(Awarded to M/s Mellcon Engineers Pvt Ltd, N. Delhi)</p> <p><b>Amount Recovered:</b> PBG not submitted. EMD exempted as party has submitted NSIC.</p> <ul style="list-style-type: none"> <li>• Conciliation has failed.</li> <li>• Management on 05.12.18 accorded approval to initiate arbitration proceedings and has appointed Shri R. K. Nehru, Ex-ED (MM) as the Arbitrator. Letter issued to Shri R K Nehru on 10.12.18to initiate Arbitration proceeding.</li> <li>• First hearing held on 06.03.2019. Party did not attend.</li> <li>• Second hearing held on 27.03.2019.Party did not attend.</li> <li>• Third hearing held on 20.04.2019. Party did not attend. BSP has submitted its statement of claim.</li> <li>• Fourth hearing held on 29.05.19. Party did not attend but intimated through e-mail, dt 15.05.2019 that they will be able to visit BSP in 1<sup>st</sup> week of June'19.</li> <li>• Respondent has not filed statement of defense and/or counter claim till date.</li> <li>• Fifth hearing held on 11<sup>th</sup> June'19.Party did not attend. Affidavit on evidence to be submitted by claimant, before 26th June'19.</li> <li>• Sixth hearing held on 28<sup>th</sup> June'19.Party did not attend. Next hearing held on 23<sup>rd</sup> July'19.</li> <li>• Seventh hearing held on 23<sup>rd</sup> July'18 in which the representative of M/s Summits was present. Party has submitted a petition along with affidavit. The reply of petition has been sent to M/s Summits by BSP on 31.07.19. Next hearing will be held on 9<sup>th</sup> Aug'19.</li> <li>• Eighth hearing held on 9<sup>th</sup> Aug'19. No one was present from the respondent site. Next hearing will be held on 10<sup>th</sup> Sept.19.</li> <li>• Ninth hearing held on 10<sup>th</sup> Sept'19. No one was present from the respondent site. On 1<sup>st</sup> Oct'19, hearing held for FINAL argument, in which the party was not present. Now the case is reserved for award.</li> <li>• Tribunal has awarded on 12.12.19 and asked M/s Summit Hygronics Pvt. Ltd. to pay Rs. 55, 79, 052 + Rs. 2, 15, 000 + interest amount to BSP.</li> </ul>

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
4.	Augmentation of Make-up Water and Drinking Water System to all new units under Package No.078 of 7.0 MT Expansion project of Bhilai Steel Plant, Bhilai	Consortium of M/s Vishwa Infrastructures and Services Pvt. Ltd, Hyderabad (M/s VISPL) and M/s V Bhogeshwara Rao, Guntur	Nil	Rs.70.31 Cr. [net of BG encashed]	SAIL-BSP	D K Pouriya, GM (Projects)	-	Scope	Contract Terminated due to Party's default	<p><b>Contract Terminated on 11.04.2016</b> due to Party's default</p> <p><b>Date of Award of Contract for balance work - 23.06.17</b> (Awarded to Voltas, Thane)</p> <ul style="list-style-type: none"> <li>• Conciliation has failed.</li> <li>• Management on 27.03.18 accorded approval to initiate arbitration proceedings for recovery of risk &amp; cost amount. Accordingly case sent to Corporate Office on 10.04.18 for further processing.</li> <li>• A meeting held on 14.12.18 between BSP and lawyer at Delhi for preparation of claim.</li> <li>• Claims finalised and to be lodged for initiation of Arbitration.</li> <li>• Corporate Office vide email dt.20.02.19 forwarded the draft Prayer Paragraph, affidavit and vakalatnama. The same, duly sealed &amp; signed sent to Corp. law through post for filing Arbitration, which is received at Delhi on 12.04.19.</li> <li>• M/s Vishwa vide letter dt.25.04.19 informed that Corporate Insolvency Resolution Process started in their firm through NCLT.</li> <li>• SAIL BSP approached IRP through Lawyer Shri Ashish Rana.</li> <li>• SAIL is directed to file their claim directly to IRP (Liquidator) of the case Shri Hemant Sharma, New Delhi. The same will be done by 05.09.2019.</li> <li>• IRP (Liquidator) return the case as being not in his purview and asked to file the matter in NCLT, Hyderabad. Accordingly, Matter is filed on 23.09.2019.</li> <li>• Case was filed with NCLT, Hyderabad to get further direction in the matter. NCLT, Hyderabad directed liquidator on 28.10.2019 to "consider the SAIL's claim on merit". Request letter sent on 31.10.2019.</li> <li>• A meeting with IRP held at New Delhi on 14.11.2019 wherein SAIL, BSP has asked to submit proof of the claims with M/s VISPL, the same is in process.</li> <li>• Documents posted to Liquidator in wrong address caused delay in submission, hence the case rejected by him. Request has been made by BSP on 28.01.2020 to re-consider the documents.</li> <li>• SAIL's request for re-consideration of Claim papers is under process with NCLT, Hyderabad through legal counsel.</li> </ul>

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1	2	3	4	5	6	7	8	9	10	11
										<b>Amount Recovered:</b> <ul style="list-style-type: none"> <li>Mobilization BG: 1.5 Cr. and -Mobilization BG: 6.35 Cr. Performance BG 4.86 Crs. Encashed in April'2016.</li> </ul>
5.	External water system for Mills and fire water pump house (Pkg-77-02)	Consortium of M/s Mcnally Bharat Engineering Company Ltd and M/s Southern Cooling Towers Private Ltd, Kolkata	NIL	Rs.122.67 Cr (net of BG encashed)	BSP	DK Pouriya, GM (Projects)	Shri VK Agrawal appointed by MBECL SAIL's arbitrator not yet appointed	ICA	Contract Terminated due to Party's default	<b>Contract Terminated on 20.05.2016</b> due to Party's default <b>Date of Award of Contract for balance work - 14.09.17</b> <ul style="list-style-type: none"> <li>Conciliation has failed.</li> <li>Management on 29.11.2017 accorded approval to initiate arbitration proceedings for recovery of risk &amp; cost amount. Accordingly case sent to Corporate Office on 09.01.2018 for further processing.</li> <li>Vide letter dt.26.06.2018 M/s MBECL sent notice of claimed of Rs.119 Crs.</li> <li>M/s MBECL vide letter dt.31.07.2018 have refuted our claims towards Risk and Cost and have invoked arbitration and appointed Shri Dr. V K Agarwal, Former Law Secretary, Govt. of India as their Nominee Arbitrator and requested to nominate an arbitrator on behalf of BSP.</li> <li>Vide email dt.24.09.2018 Corporate law forwarded draft statement of claim for comments. The draft statement of claim is under preparation based on Zone comments dt.19.11.2018.</li> <li>Vide letter dt.10.10.2018 (received on 22.10.2018) M/s MBECL addressed to Registrar, ICA regarding initiation of Arbitration proceedings. The same forwarded to Corporate Law vide email dt.23.10.18</li> <li>SAIL's Claims finalised and related documents provided to advocate on 09.02.2019 for initiation of Arbitration.</li> <li>Queries raised by SAIL's Counsel are replied and further queries received, Reply and desired documents sent through e-mail on 18.04.2019.</li> <li>SOC filed with ICA on 04.06.2019 for an initial claim amount of INR 192.62 Cr.</li> <li>ICA has send a Demand Note for submission of fees of Rs. 68.67 Lakh + GST +9.58 lakh stamp duty to be payable by BSP on or before 08.08.2019.</li> <li>SAIL BSP's share of ICA fees are deposited and claim is being revised by counsel.</li> <li>Meanwhile, MBECL has filed a case in Hon'ble Delhi High court to obtain status of "Claimant". The case is dealt by CO Law.</li> <li>ICA has sent a demand note to deposit the Arbitral fees for the share of RESPONDENT M/s MBECL &amp; Co.</li> </ul>

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1	2	3	4	5	6	7	8	9	10	11
										<p>Arbitral fees as above are deposited to ICA for further course of action.</p> <ul style="list-style-type: none"> <li>ICA appointed Arbitral panel under Shri T.S. Thakur, retd. CJI as Presiding arbitrator and 1st meeting is scheduled on 12.03.2020 at New Delhi.</li> </ul> <p><b>Amount Recovered:</b>  PBG of Amount Rs. 6.08 Cr., BG against Mobilization advance of Rs. 8.36 Crs, BG against 1st Interim advance Rs. 5.60 Cr., BG against 2nd Interim advance of Rs. 5.50 Cr. Encashed in May' 16.</p>
6.	Installation of Medium Pressure Oxygen Production Facility of 10,450 Nm <sup>3</sup> / hour (~350 TPD) at OP I, BSP on Monthly Rental Basis	M/s Goyal MG Gases Pvt. Limited, New Delhi	Rs.81,33,06,172/-	Rs. 53.43 Crs	SAIL, BSP	Md Nadeem Khan, GM (Propane)	Hon'ble Arbitral Tribunal	Hon'ble Arbitral Tribunal	Delay in commissioning by party	<ul style="list-style-type: none"> <li>Under Arbitration before Hon'ble Arbitral Tribunal comprising of: <ul style="list-style-type: none"> <li>i) Sh. Justice D.P. Wadhwa (Retd.) (Presiding Arbitrator)</li> <li>ii) Sh. Justice R.C Chopra (Retd.) (Nominee Arbitrator from M/s Goyal MG Gases)</li> <li>iii) Sh. Justice SATPAL (Retd.) (Nominee Arbitrator from SAIL, BSP).</li> </ul> </li> <li>Arbitration proceedings are pending due to ill health of arbitrators.</li> <li>Next date of hearing is 29.11.2019; it was decided to conduct further hearing on 21.01.2020.</li> <li>Hearing took place on 21.01.2020 in which the Tribunal directed the Claimant to explain the basis of computation of its claim towards damage. Next hearing held on 26.02.2020. Hearing concluded and matter has been reserved for award.</li> </ul>
7.	Construction of Flyover at 3 Locations & Road Network (Pkg.111-01)" of Bhilai Steel Plant, Bhilai	M/s S.P. Singla Construction Pvt. Ltd.	Approx. Rs.168 crs.(Revised claim statement to be submitted by party)	BSP reserved its right for counter claim.	M/s S.P. Singla Construction Pvt. Ltd.	Shri Anupam Swaroop, GM (Projects)	Justice T. S. Doabia (Retd.), Presiding Arbitrator Shri S.S. Agarwal, Shri Ashok Sharma	ICA, New Delhi	To resolve dispute regarding payment	<ul style="list-style-type: none"> <li>SOD filed on 22.03.2019 at ICA, New Delhi.</li> <li>As per Procedural order No. 6 dated 14.05.2019, passed by the tribunal on 14.05.2019, the tribunal would visit the site on 28.06.2019.</li> <li>Site visit held by Tribunal on 28.06.2019, further order passed on 09.07.2019 for next hearing on 05.08.2019.</li> <li>Hearing held on 05.08.2019 and attended by Projects Manager, next hearing will be done during 5th-6th Nov.' 2019.</li> <li>Meanwhile, Arbitral tribunal proceeding held on 19.09.2019, wherein direction given to both the parties to resolve issues related to Advance and further working at site by meeting at Bhilai before next hearing which was held on 05.12.2019.</li> <li>Arbitration Tribunal has put stay regarding termination of contract. Next Hearing held on 18.12.19 in which BSP's lawyer has submitted for revoking of Stay order.</li> </ul>

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1	2	3	4	5	6	7	8	9	10	11
										Next hearing held on 13.01.20 wherein M/s SPS has submitted the rebuttal for submission by BSP counsel. <ul style="list-style-type: none"> <li>Next hearing held on 11.02.2020, wherein Tribunal has informed to pass the order, date not yet confirmed by Tribunal in this regard.</li> </ul>
8.	Railway track work for Plant Internal Yard (Pkg-095-B)	ISC Project Pvt. Ltd.Pune	Rs. 22.74 Crs.	Rs. 73.23 Crs. (Rs. 5.83 Crs + Rs 67.4 Crs as Production loss )	ISC Project Pvt. Ltd. Pune	DK Pouriya, GM (Projects)	Justice GP Mathur (Retd.) (Presiding Arbitrator) Justice Ashok Bhan (Retd.) (Nominee Arbitrator from M/s ISC Project) SK Mukhopadhyay (Retd. CLC of India) (Nominee Arbitrator from SAIL, BSP).	Scope	Contract Terminated due to Party's default	<b>Contract Termination - 17.10.15</b> <b>Date of Award of Contract for balance work - 17.10.15</b> (Awarded to JhahhariaNirman) <ul style="list-style-type: none"> <li>Initial notice of claim for recovery issued</li> <li>Arbitration invoked by Party. Case is under arbitration in SCOPE</li> <li>Final argument by SAIL's counsel scheduled on 04-05.03.2019 could not hold by Arbitral panel. Next proposed dates are 17-18 July 2019.</li> <li>Hearing post-poned due to lapse of the "Arbitration period" on 30.06.2019. The matter of time extension is under jurisdiction of Delhi High court having date of hearing on 19.07.2019.</li> <li>Further date of hearing is fixed on 18<sup>th</sup> and 19<sup>th</sup> September 2019 for submission of final argument by SAIL.</li> <li>Final argument by SAIL, BSP submitted and now decision by Tribunal is pending.</li> <li>Extension of time of Arbitration granted by Hon'ble Industrial Court ,Naya Raipur C.G. for another 03(Three) months. Award of Arbitration is awaited within 13.03.2020 (extension of Arbitral period)</li> <li><b>Amount Recovered:</b> PBG of Rs. 2,61,03,340 encashed on 09.11.2015.</li> </ul>
9.	Structural works for BOF & CCP (Pkg 033B)	M/s ERA Infra Engg. Ltd.	Rs. 108 Crs.	Rs. 90.68 Crs. (Rs. 66.68 Crs. & 24 Crs. Change order)	ERA Infra	Pramod Kumar (GM (Mech.)- SMS-3) / A K Malick (GM – Project NTK)	Justice Jagdish Singh Khehar (Presiding Arbitrator),  Justice Vikramajit Sen (Arbitrator ),  Justice ArijitPasay	ICA	RPN due to non - performance	<b>Contract Termination - 21.10.17</b> <b>Date of Award of Contract for balance work -</b> Awarded in 5 pkgs. on (1 package 09.08.2017 prior to termination of M/s Era as part RPN, and post RPN 3 pkgs on 23.10.17 & 1 pkg on 30.10.17) <ul style="list-style-type: none"> <li>Initial notice of claim for recovery issued</li> <li>Arbitration invoked by Party. Case is under arbitration in ICA.</li> <li>Hearing was on 18.03.2019. No representative of M/s Era was present. Notice has been issued to M/s Era. 2<sup>nd</sup> hearing on 25.04.2019 wherein extension was sought by M/s Era and further next hearing will be held on 10.07.2019.</li> <li>Additional counter claim is to be filed on account of IDS I issued against RPN packages (Pkg 033B2, 033B4,</li> </ul>



Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
							at (Arbitrator )			<p>033B5, 033b6 &amp; 033B7) amounting to Rs<b>12.09 Cr</b> is not been filed till date in arbitration all document being handed over to corporate law and M/s Fox and Mondal (dealing law firm). To be taken up on priority by corporate law.</p> <ul style="list-style-type: none"> <li>• Further additional counter claim shall be filed on account of Change Order which has been proposed against RPN packages (Pkg 033B2, 033B4, 033B5, 033b6) amounting to Rs<b>12.90 Cr</b>. Issuance of Change Order is in progress.</li> <li>• Hearing took place on 10.07.19, M/s Era requested to postpone hearing for 03 months due to financial crises and non-availability of lawyer. SAIL has requested for a written submission from M/s Era for such extension. Since M/s Era has been referred to NCLT due to solvency and Bankruptcy, Tribunal have directed both BSP and M/s Era to obtain clearance for sustainability of claim and counterclaim from NCLT for such extension and submit to Tribunal. Filing of application has been done to NCLT. Next hearing scheduled on 19.10.19 but not held. Further Next hearing held on 08.11.19. The NCLT vide order dt. 08.11.2019 allowed the Respondent's application to proceed with the Arbitration and to adjudicate both the Claim and Counter Claim. The Respondent has processed for filing of petition in Delhi HC under section 29(4) &amp; (5) of the Arbitration and Conciliation act seeking an extension to complete the arbitration proceedings. Petition has been filed before HC. Once the same is allowed, Corporate Law office will take further necessary action regarding the same.</li> </ul> <p><b>Amount Recovered:</b>  Performance BG :Rs 4.89 crs.  Additional PBG- Rs. 4.89 crs.  Interim advance BG- Rs. 1.00 crs.  All the 3 BG's encashed on 21.10.2017</p>
10.	Cast-in-situ piling works in SMS-III complex (Pkg 033A1)	M/s ERA Infra Engg. Ltd.	Rs. 24.97 Crs.	Rs. 23.45 Crs.	ERA Infra Engg. Ltd.	Aniruddha Bhagwat, AGM (Proj.) Steel / A K Malick (GM – Project NTK)	Sh. Nirmal Singh	Scope	Tenability of Price escalation. Since duration of contract is less than 12 months price	<ul style="list-style-type: none"> <li>• Initial notice of claim for recovery issued</li> <li>• Arbitration invoked by Party. Case is under arbitration in SCOPE.</li> <li>• 29th hearing was held on 16.04.2019. The examination-in-chief and cross examination could not take place since the law officer of the claimant (M/s Era) got changed. The new law officer of claimant has been directed by the learned Arbitrator to submit evidence in the form of affidavit and present their witness for</li> </ul>

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
									escalation not tenable as per contract.	examination-in-chief and cross examination. Next hearing date on 09.07.2019. Hearing took place on 09.07.19, M/s Era requested to postpone hearing due to financial crises and non-availability of lawyer. SAIL has requested for a written submission from M/s Era for such extension. Next hearing held on 16.09.2019. Next hearing held on 30.10.19. Next hearing scheduled on 12.12.19, which could not be held. Further hearingscheduled on 25.02.2020. <ul style="list-style-type: none"> <li>Next hearing scheduled on 20.04.2020.</li> </ul> <b>Amount Recovered:</b> Performance BG: Rs 2.97 crs. and Rs 33.93 lakhs encashed
11.	Installation of 700 TPD ASU-4 with Associated facilities (Pkg-1) in Oxygen Plant-II, BSP	M/s JSC "Cryogenmash", Russia	USD 16623438.8404 plus interest @ 7.75% per annum	-	BSP	Shri G A Sorte, GM (OP-II)	High Court, New Delhi	High Court, New Delhi	Party proposing changes in contract	Arbitration awarded by ICC, Paris against BSP. The award challenged by CO, LAW at Delhi High Court. Application has been accepted for hearing in March 2019. Hon'ble Delhi High Court, New Delhi vide dt 02.04.2019 passed order that "The parties shall make a joint convenience compilation of documents after inspecting the Arbitral Record. The same be filed within a period of twelve weeks from 02.04.2019. Listed on 29.07.2019 Board for hearing and the same has been postponed. Matter is fixed for final argument on 05.11.2019 & herein contractual part has been only discussed. Final hearing scheduled on 25.11.19 & Matter has adjourned to 11.12.2019 for final hearing. Further hearing held on 17.01.2020 wherein BSP's argument has been heard. Next hearing scheduled on 17.02.2020 regarding Cryogenmash's argument. On 12.02.2020, the matter could not be taken up and now Hon'ble High Court has fixed the date of 12.03.2020 regarding hearing of Cryogenmash's argument.
12.	Installation of 2 X 1250 TPD High Purity Cryogenic Oxygen Plant on "BOO" basis of M/s Praxair	M/s Praxair India Pvt. Ltd., Bangalore	Rs.10,85,97,403 Plus 12% interest	-	BSP	Shri G A Sorte, GM (OP-II)	Commercial Court, Naya Raipur	Commercial Court, Naya Raipur	Dispute in contract operation.	<ul style="list-style-type: none"> <li>Arbitration panel- Presiding Arbitrator Justice Sh. S.B. Sinha, Mr. Justice P.S. Narayana, Mr. Justice H.N. Nagmohan Das (Retd.). The arbitration has been awarded against BSP on 24.12.2018. On 19.03.2019, the case has been filed at Commercial Court, Naya Raipur under section-34.</li> <li>Hearing listed on 16.05.2019 and 03.05.2019. Hearing done on 26.06.19.</li> <li>Next hearing date scheduled on 27.07.19 for final argument. Counter claim of petitioner (BSP) filed by Advocate. Next hearing date will be decided shortly.</li> <li>Hearing done on 31.08.2019 and reserve for Order.</li> <li>Objection against award has been dismissed by</li> </ul>

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plant/Unit	Claimant Initiated by (Party / SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reason for Arbitration	Present Status
1	2	3	4	5	6	7	8	9	10	11
										<p>Commercial Court, Naya Raipur and now we are considering of filing of appeal in section 37 in Bilaspur High court against the order passed by Commercial Court, Naya Raipur.</p> <ul style="list-style-type: none"> <li>• Appeal under Section 37 is being prepared. Information will be provided to us by Corporate Law.</li> <li>• Appeal under Section 37 has been filed at High Court ,Bilaspur.</li> <li>• Next hearing held at High Court, Bilaspur. on 17.02.2020. Further hearing in due course.</li> </ul>
13.	Civil work for BOF and CCP at BSP (Pkg- 033A)	M/s Ratna Infrastructure Proj. Pvt. Ltd. Hyderabad.	Rs. 56.31 Crs.	Initial notice of claim for recovery issued – Rs. 2.67 Crs.	-	Aniruddha Bhagwat, AGM (Proj.) Steel	-	-	RPN due to slow progress	<ul style="list-style-type: none"> <li>• Awarded by SCOPE in favor of BSP and accordingly an amount of Rs. 34437515.27 (Rs. 2,67,17,971.25 + interest of Rs. 74,19,544.02 + Rs.3,00,000 towards the costs of proceedings)</li> </ul> <p><b>Amount Recovered:</b> BGs of total Rs. 16,05,59,922 {Rs. 8,65,11,116/- , 4,99,67,893/- (ISD) &amp; 2,40,80,913/- (PBG)} encashed.</p>
14.	Upgradation of Stove no.4 to HTS design for achieving higher Hot blast temperature	M/s EVO tech- Pvt. Ltd.	Rs. 6.57 Crs.	-	-	-	-	-	-	<ul style="list-style-type: none"> <li>• Arbitration invoked by party. Awarded in favour of party and has been accepted by BSP. Out of Court settlement has been reached with the party.</li> </ul>

### BSP-Cases heading towards Arbitration

Sl. No.	Name of the package & Pkg. No.	Name of the party	Claim of the Party	Claim of Plants/Units	Likely reasons for Arbitration	Present Status
1	Recycling of Waste Water from Outlet-B (Outlet- 8, 9 & 10) (Pkg-I) for WMD of BSP	M/s OTTO Projects Pvt. Ltd., Kolkata		Rs.26,92,658/- [BSP's claim against the contractor, net of BG encashed]	RPN	PBG of RS.31,21,742 encashed.
2	ESP Based Plant De-dusting System under Modern. of SP-2, Pkg.021D	M/s Scintillant Projects India Pvt. Ltd., Kolkata		Rs. 65,79,606/- [BSP's claim against the contractor, net of BG encashed]	RPN-Conciliation	PBG of Rs 42.20 lakhs encashed on 29.12.14
3	Installation of Steam Turbine Generator, Back Pressure Turbine Generator, Cooling Water System and Power Evacuation System (excluding enabling works) (Package-011-01B) at Bhilai Steel Plant, Bhilai"	M/s Triveni Engineering & Industries Ltd., Bangalore	Rs.4226.33 lakhs	Rs.6083 lakhs	Contractor has invoked conciliation. Case may lead to arbitration.	PAC issued w.e.f.08.08.2016. Commissioned w.e.f 30.07.2019.
4	Installation of 3x225 m3/h DM Water Plant for New PBS, existing PBS & BPTG station, Package No. (011- 01C) at Bhilai Steel Plant, Bhilai"	M/s TechnofabEngg. Ltd., New Delhi	Rs.1342.82 lakhs	-	Contractor has appointed Conciliator. Party's Conciliator 1 <sup>st</sup> meeting with BSP is held on 14.01.2020 at Bhilai and Party will revert back in this regard, reply still awaited.	Commissioning Certificate issued w.e.f.05.08.2017. PG yet to be done.
5	Design ,Supply, Erecting, Testing and Commissioning of Railway Electrification work of existing /proposed Railway tracks switching post (SSP) including modification of existing 25KV AC, 50 Hz single phase overhead equipment (OHE) at BSP- "Package- 095A-Sch-C"	M/s Bright power Projects (India) Pvt. Ltd., Mumbai	Rs 1883.64 Lakhs	Nil	Contractor has invoked Arbitration as per contract clauses directly due to non-availability of Conciliation. BSP initiated Conciliation proceedings but party is not responding.	Party has stopped execution of works since 01.10.2018 and not responding. <ul style="list-style-type: none"> <li>• Party has again put many baseless and unlawful allegations in its letter dated 31.07.2019 and disputed the BSP's contention of Extension of time period of contract.</li> <li>• Matter referred to M/s RITES for proper reply and to decide further course of action. Party has terminated contract from their side on 02.10.2019 and claimed an amount of Rs. 22,78,79,939.</li> <li>• Party was given opportunity to resolve the dispute by way of 'Conciliation', but party did not attend any such meeting and invoked Arbitration.</li> </ul> As per contract, BSP offered to select Sole Arbitrator from the available panel of Arbitrators, but party challenged the same and filed a case in Delhi high court for getting the arbitration held at New Delhi as per Indian Contract law but not as per Contract agreement signed by them.

## Durgapur Steel Plant-RPN Cases

Sl	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Date of Issue of Recovery Notice	Recovered amount if any (BG Amount) (Rs. Cr.)	RPN Amount Recoverable /Amount involved in arbitration /litigation (Rs. Cr.)	Forum/court in which the case is pending	Remarks
<b>A</b>	<b>MEP</b>								
1	M/s Jain Infraprojects Ltd.	Civil Works for BRC	20.10.12	20.10.12	04.08.17 (final)	2.57 (BG encashed)	5.09	NA	<ul style="list-style-type: none"> <li>1<sup>st</sup> Meeting for amicable settlement held with Jain Infraprojects Ltd on 13.12.19</li> </ul>
2	M/s Jain Infraprojects Ltd.	Civil Works for MSM	05.02.13	05.02.13	05.08.16 (final)	4.04 (BG encashed)	18.17	ICA, New Delhi	<ul style="list-style-type: none"> <li>Under Arbitration</li> <li>Claim statement filed by Jain Infraprojects on 02.05.19.</li> <li>DSP's counter-claim filed on 26.09.19.</li> <li>Counter statement of DSP filed by Corporate Law/SAIL Advocate at Delhi on 17.01.20.</li> </ul>
3	M/s Jain Infraprojects Ltd.	Inter Plant Pipeline for fuel and industrial gases	16.02.13	16.02.13	16.02.13 (provisional)	1.15 (BG encashed)	2.22 (Provisional)	NA	<ul style="list-style-type: none"> <li>Provisional claim lodged.</li> </ul>
4	M/s Tecpro Systems+M/s Haldia Nirman	De-bottlenecking of RMHP	23.05.14	23.05.14	05.08.17 (final)	4.89 (BG encashed)	17.75	NA	<ul style="list-style-type: none"> <li>Party was referred to NCLT under IBC.</li> <li>NCLT Order pronounced on 15.05.19</li> <li>Party was called for Amicable settlement on 28.11.19 and then on 17.12.19.</li> <li>Party's Kolkata address changed; Letters could not be delivered.</li> <li>Letters sent to Delhi, Gurgaon and Chennai addresses asking to attend meeting on 30.01.20.</li> <li>Party has now confirmed to attend meeting on 05.02.20.</li> </ul>
5	M/s Jain Infraprojects Ltd.	Compressed Air Station	29.03.13	29.03.13	29.03.13 (provisional)	0.70 (BG encashed)	4.59 (Provisional)	NA	<ul style="list-style-type: none"> <li>Provisional claim lodged.</li> </ul>
6	M/s Tecpro Systems	Belt Conveyor system for transportation of dolomite	13.03.14	13.03.14	12.05.17 (final)	0.58 (BG encashed)	2.08	NA	<ul style="list-style-type: none"> <li>Same as Sl 4 above</li> </ul>

## Durgapur Steel Plant-Arbitration Cases

[As on 31.01.2020]

### 1. ONGOING CASES

Sl. No.	Name of the Package & Pkg. No.	Name of the Party	Claim of the Party	DSP's claim	Initiated by	Dealing officer in Law Deptt.	Name of the Arbitrator	Pending at Forum	Reason for dispute	Present Status
1	Civil Works for Medium Structural Mill at DSP [Contract no. DSP/PROJ-PUR/EXP/MSM-02CRT2/169 dated 04.11.2010]	Jain Infra projects Ltd.	Rs 98.06 Crore	Rs. 18.17 Crore	Party	DGM (Law), DSP	Tribunal of 3 Arbitrators to be appointed by ICA	ICA, New Delhi	Termination of Contract, resulting in claims & counter-claims	1. Claim statement filed by Jain Infraprojects on 02.05.19. 2. DSP's counter-claim filed on 26.09.19. 3. Counter statement of DSP filed by Corporate Law/SAIL Advocate at Delhi on 17.01.20.
2	Medium Structural Mill - Main Package at DSP [Contract no. DSP/PROJ-PUR/EXP/MSM-01/14 dated 11.05.2010]	Primetals Technologies India Pvt Ltd.	Rs 14.75 Crore	Party's claim is not tenable.	Party	DGM (Law), DSP	Mr Charles Monzini	ICC, Hongkong	Demurrage & Detention costs incurred by Party at Kolkata Port for import consignments	1. Claim statement filed by Primetals India on 02.09.19. 2. Counter statement of DSP filed on 16.10.19. 3. Witness statement of one witness filed by Primetals on 21.01.20 and Witness statements of two witnesses filed by DSP on 23.01.20.
3	Gas Mixing and Boosting Station at DSP [Contract no. DSP/PROJ-PUR/EXP/UTIL-01/194 dtd 08.12.2011]	TLT Engineering India Pvt Ltd	Rs 2.58 Crore	---	Party	DGM (Law), DSP	To be decided by ICA	ICA, New Delhi	Non-release of Bank Guarantee submitted towards Performance Guarantee payment, Liquidated Damages issue, Extra claims, Balance payments	1. Claim statement filed by TLT Engineering on 07.12.18. 2. Vide Letter dated 02.09.19, DSP's Lawyer had requested ICA to keep the Arbitration in abeyance for the time being during the pendency of Conciliation and also to grant time upto 07.10.19 to DSP to file reply to ICA's letter dated 01.08.19. 3. Counter statement of DSP under preparation for filing.

4	Ammonia Column for Revamping of Ammonium Sulphate Plant in DSP [Work Order no. DSP/PROJ-PUR/EXPN/BPP-01/SS-11/187/WO dated 30.05.2011]	ISGEC Heavy Engineering Ltd	Rs 1.44 Crore	---	Party	DGM (Law), DSP	Shri M Akhouri, Durgapur	Sole Arbitrator at Durgapur	Non-release of balance payment	<ol style="list-style-type: none"> <li>1. 1st Arbitral sitting held on 18.10.19.</li> <li>2. Claim statement sent by ISGEC Heavy Engineering on 24.10.19.</li> <li>3. Counter statement of DSP under preparation.</li> </ol>
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**RSP- RPN cases in Capital Projects ( Contracts Cases)**

Sl. N o.	Name of the party	Name of the package & Pkg. No.	Name of Work	Contract Termination Date	Date of Award of Contract for balance work	RPN Amount Recoverable	Recovered amount if any (BG Amount)	Outstanding RPN amount	Forum/court in which the case is pending
1	HEC/SPCL	New OBBP & Base Blending Facilities (Pkg.090)	Automatic roll Grinding system for Roll Crusher for Turning Crusher roll	23.12.2016	28.03.17	Rs.5.34 Cr	Rs.5.34 Cr	NIL	--
2			Installing remote programming facilities and anti-collision system for Stacker cum Reclaimer	28.04.2018	05.06.2018	Rs.0.47 Cr	Rs.0.47 Cr	NIL	--
3			General Civil Works Maintenance Access to Raw Material Yard on OBBP	23.04.2016	23.04.2016	Rs.0.86 Cr.	Rs.0.86 Cr.	NIL	--
4			Supply of 36 sets of Tapered roller	Part	10.04.2013	Rs. 0.50 Cr.	Rs. 0.50 Cr.	NIL	--
5			Removal of Spillage Materials	Part	17.01.2013	Rs. 0.04 Cr.	Rs. 0.04 Cr.	NIL	--
6			Replacement of bearing of support roller of Barrel Reclaimer	Part	29.06.2013	Rs. 0.05 Cr.	Rs. 0.05 Cr.	NIL	--
7			HT Motor for Flux Crusher# 5 of OBBP	Part	18.10.2013	Rs. 0.02 Cr.	Rs. 0.02 Cr.	NIL	--
8			Civil works for foundation of jacking pads	23.12.2016	15.02.2019	Rs. 0.67 Cr.	Rs. 0.67 Cr.	NIL	--
9	UB Engg. Ltd.	Slab Caster (Pkg.035)	Erection, Assistance during Testing & Commissioning of Plant & Equipment of 3 <sup>rd</sup> BOF Convertor and Caster for SMS-II	20.08.2015	28.09.2015	Rs. 1.65 Cr.	Rs. 1.25 Cr.	Rs. 0.40 Cr.	Demand was sent to NCLT for recovery. BG encashed 16.09.2017.
10	UB Engg. Ltd.	Interplant piping for fuel & gas (Pkg.076)	EMS for Interplant Gas pipeline- RPN 1	21.04.2016	02.12.2016	Rs. 20.05 Cr.	NIL	Rs. 20.05 Cr.	Notice for conciliation sent to M/s U.B Engg on 05.10.2016. Since there was no response from the agency demand was sent to NCLT for recovery.
11			Balance Job of Interplant Gas pipeline- RPN 2	21.04.2016	03.05.2016		NIL		
12			Painting work for Structural and pipelines	21.04.2016	14.05.2016		NIL		
13			Painting work for Structural and pipelines	21.04.2016	14.05.2016		NIL		
14			Furnace Oil Pipeline from CP I- CPP II	21.04.2016	18.11.2016		NIL		
15			Supply of Balance Item for Energy Monitoring System	21.04.2016	06.11.2018		NIL		
16	Shriram EPC Ltd.	New by product plant for COB#6 (Pkg. CET-06)	Procurement of Citric Acid	25.09.2014	25.09.2014	Rs. 0.017 Cr.	Rs. 0.017 Cr.	NIL	--
17			Procurement of Disulphonic Acid	28.10.2014	28.10.2014	Rs. 0.51 Cr.	Rs. 0.51 Cr.	NIL	--
18			Procurement of Sodium Ammonium Vanadate	19.11.2014	19.11.2014	Rs. 0.26 Cr.	Rs. 0.26 Cr.	NIL	--
19			Procurement of Sol-R Oil	20.03.2014	20.03.2014	Rs. 2.68 Cr.	Rs. 2.68 Cr.	NIL	--
20			Procurement of Sodium Carbonate	05.08.2014	05.08.2014	Rs. 0.416 Cr.	Rs. 0.416 Cr.	NIL	--
21	Simplex Infrastructure	SMS-II (Pkg.030A)	Civil works for BOF & CCP	20.12.2013	26.12.2013	Rs. 0.316 Cr.	Rs. 0.316 Cr.	NIL	--



Sl. No.	Name of the party	Name of the package & Pkg. No.	Name of Work	Contract Termination Date	Date of Award of Contract for balance work	RPN Amount Recoverable	Recovered amount if any (BG Amount)	Outstanding RPN amount	Forum/court in which the case is pending
22	Pioneer Engg., Rourkela	SMS-II (Pkg.027B2)	Structural Works for Mould & Segment Repair Shop	15.05.2014	22.03.2014	Rs. 0.31 Cr.	NIL	Rs. 0.31 Cr.	Arbitration award in RSP favour. Party has been intimated to pay the amount. But the party has not shown any interest. Therefore RSP filed a case in District court, Sundergarh on 14.05.2019 for execution of arbitral award. Hearing held on 14.02.2020. Next hearing on 13.07.2020. Case under progress.
23	IMECO, Bhilai	CCD Upgradation	Upgradation of Existing CCD: Knock-Out Pots, Condensate Seal Pot, Gas Mixing Tank, Inter-connected Gas Pipes, Valves, receipt & storage of Sulphuric Acid	20.12.2011	14.12.2011	Rs. 4.26 Cr.	NIL	Rs. 4.26 Cr.	Under arbitration at SCOPE
24	Trans Tech Turnkey Pvt Ltd	New Plate Mill (Pkg. 241)	Air-conditioning System for New Plate Mill	Not Terminated.	27.12.2018	Rs. 4.69 Cr.	NIL	Rs. 4.69 Cr.	Demand for recovery was forwarded to F&A (Proj.) on 09.03.2019.
25	ARSS Infra Projects Ltd., Bhubaneswar	Railway infrastructure (Pkg. 103)	Construction & upgradation of railway track works for RSP yard & in plant new lines / Loco Escape Line in NCCY Area	Part	23.08.2013	Rs. 0.27 Cr.	Rs. 0.27 Cr.	NIL	--
26	Hindustan Steelworks Construction Ltd.	New HSM (Pkg.-IIB)	Site Preparation Work for New HSM	29.08.2018	07.09.2018	Rs. 0.39 Cr.	Rs. 0.39 Cr.	NIL	--

Sl. No.	Name of the party	Name of the package & Pkg. No.	Name of Work	Contract Termination Date	Date of Award of Contract for balance work	RPN Amount Recoverable	Recovered amount if any (BG Amount)	Outstanding RPN amount	Forum/court in which the case is pending
27	Technisys Engg Pvt Ltd	New HSM (Pkg.-IIE)	Re-routing Cable for New HSM	17.12.2018	31.12.2018	Rs. 0.56 Cr.	NIL	Rs. 0.56 Cr.	Demand raised across SAIL.
28	Sharmila Enterprise		Balance supply, erection, testing & commissioning of street lighting system few roads in expansion area (Pkg 126/RPN-01)	17.04.2017	05.10.2019	Rs. 0.057 Cr.	Rs. 0.057 Cr.	NIL	PBG encashed 06.01.2020
29	Bridge Track & Tower Pvt. Ltd.	Railway Package for New HSM (Pkg. III)	Procurement of P-Way fittings for rail track of New Hot Strip mill	18.03.2019	23.03.2019	Rs. 0.32 Cr.	Rs. 0.04 Cr.	Rs. 0.28 Cr.	PBG ENCASHED ON 22.05.2019 Rs 3.97.427.00
30	Patil Rail Infra Pvt Ltd, Hyderabad	Railway Package for New HSM	Procurement of PSC sleepers for rail track of New Hot Strip mill	16.10.2018					NIT issued against the RPN

### RSP: Arbitration cases in Capital Projects

#### (A) On-going Arbitration cases:

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/S AIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
1	Installation of BF#5 & Contract No. P/PROJ/643(10)/79001/08049126 dated 02.10.2008	Danieli Corus B.V	Euro 8.1 million* (Total Rs 62.55 Crores)	--	Party	Officer Associated with Arbitration: A.K.Behera, Jhumur Padhi, S S Roychoudhury  Corporate Law:  Project manager: D Prasad	Arbitration Tribunal by ICC, Paris	ICC, New Delhi	Dispute in breach of copy right and confidentiality clause.	<ol style="list-style-type: none"> <li>1. Cross examination of witnesses completed in December'2018.</li> <li>2. Oral submission made on 27-28 Jan 2019 in ICC at New Delhi. Arbitral award waited.</li> <li>3. Award declared on 15.10.2019.</li> <li>4. IP Rights claims not admitted. However, violation of confidentiality clause admitted.</li> <li>5. Award has been given in favor of the party.</li> <li>6. Award amt Rs. 24 cr, interest @ 2.23% Rs. 0.97 cr., legal charges- Rs. 3 cr. Total= Rs. 28 cr to be paid in EURO.</li> <li>7. Approval note has been sent for challenging the award in High Court.</li> <li>8. The case is being handled by</li> </ol>

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/S AIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
										Corporate Law.
2	Installation of BF#5 & Contract No. P/PROJ/643(10)/79001/08049126 dated 02.10.2008	Consortium of Danieli Corus B.V & Tata Projects Ltd	INR 26.61 Crores and Euro 1.87 million* (Total Rs 41.05 crores)	--	Party	Officer Associated with Arbitration: A.K.Behera, D Prasad, M K Mohanty  Corporate Law  Project manager: D Prasad	Arbitration Tribunal by ICC, Paris	ICC, New Delhi	Dispute in non issue of FAC and non release of FAC payment.	<ol style="list-style-type: none"> <li>Statement of Defense filed by SAIL/RSP before Arbitration Tribunal. Case under progress.</li> <li>Witness Affidavits filed on 31.01.2019.</li> <li>Final argument held on 29-30 April, 2019.</li> <li>Award declared on 20.11.2019.</li> <li>Award has been given in favor of the party.</li> <li>FAC amount-Rs.41.60 cr., Interest-Rs. 11.60 cr. and arbitration cost &amp; legal charges Rs. 3.80 cr. Total= Rs. 57 cr. to be paid.</li> <li>Award is being challenged in High Court.</li> <li>The case is being handled by Corporate Law.</li> </ol>
3	Up-gradation of Existing CCD: Knock-Out Pots, Condensate Seal Pot, Gas Mixing Tank, Inter-connected Gas Pipes, Valves, receipt & storage of Sulphuric Acid.  Contract No. P/Proj/641/79001-3/08049140 dated 01.11.2008	IMECO	--	INR 6.46 crore	RSP	Officer Associated with Arbitration: Lalit Bari/ G.Mishra  Project m Manager: K B Das	Not appointed	SFCA, New Delhi	RPN- cost recovery Affidavit dated 26/3/12	<ol style="list-style-type: none"> <li>SCOPE to appoint a new arbitral tribunal as the earlier arbitrator rescued himself as an arbitrator.</li> <li>SCOPE proposed revised arbitration fee structures which need to be paid by both the parties (IMECO &amp; SAIL, RSP) to proceed with arbitration.</li> <li>However the party has not shown any interest in moving ahead with the case.</li> <li>As advised by arbitrator additional fee forwarded to SCOPE on 01.07.19 by registered post (DD for Rs6,05,125/-).</li> <li>M/s IMECO vide letter no. IM/S/N/00164/623 dated 24.07.19 has proposed to RSP to settle the matter mutually. Same is being examined at RSP.</li> <li>Mutual discussion to be held on 18-19 Nov'19. Reply of the party awaited.</li> <li>Party vide letter dated 23.12.19 requested SCOPE for more time as they are under discussion with RSP for mutual settlement.</li> </ol>

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
										8. Another round of discussion for mutual with the party took place on 04.03.2020.
4	KCS vs MECON Rebuilding of coke oven battery #4  Contract No. P4/740/07049045 dtd 01.06.2007 Principal contractor: MECON Sub-Contractor engaged by MECON:- KCS Pvt. Ltd.	KCS Pvt. Ltd.	17.08 Lakhs + 7.82 Lakhs + 0.60 Lakhs+ 0.97 Lakhs	--	Party	Officer Associated with Arbitration: Lalit Bari  Project Manager: K B Das	Justice Tapan Sen	Jharkhand consumer disputes redressal commission, Ranchi	KCS vs MECON  RSP has been made 2nd party to the case (on the basis that RSP is the principal contractor of MECON).	1. RSP has petitioned not to be made a party on 19.03.2019. 2. Another notice received on 11.04.2019 and the same is being handled by RSP law.
	<b>Total</b> (if RSP is 2nd party, amount not considered)		<b>Rs. 103.60 Crores (approx.)</b>	<b>Rs. 6.46 crores</b>						

*\*Exchange Rate of EURO is as on 27.09.2019*

**(B) On-going court cases:**

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
5.	Structural works for extension of Mould and Segment Repair Shop of SMS-II.  Pkg.027B1 A/T No. PROJ/MM/TN (P)/589(027B1-Structural)/212/100 49187 Dtd.30.11.2010	Pioneer Industries	INR 2.14 Crores	--	Party	Officer Associated with Arbitration: G. Mishra  Project Manager: Subrat Sen	Sri N.C. Sahoo, Sole Arbitrator, Rourkela	District Court, Sundergarh	Recovery against RPN action	1. SAIL, RSP made a counter claim to the claim made by the party before the arbitrator. 2. Arbitral awarded in favour of RSP, INR 3.24 Lakhs to be paid by party to RSP. 3. Party has been intimated to pay the amount. But the party has not shown any interest.. Therefore RSP filed a case in District court, Sundergarh on 14.05.2019 for execution of arbitral award. 4. First hearing on 26.06.2019. 5. Hearing held on 22.10.2019.

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
										6. Hearing held on 14.02.2020. 7. Next hearing on 13.07.2020. 8. Case under progress.
6.	Supply of PSC Sleepers  Pkg.001B A/T No. P/ Proj/697 (001B)/79204/1004 9153 dtd.24.08.2010	Orissa Concrete & Allied Industries	INR 14.74 lakhs	--	Party	Officer Associated with Arbitration: G Mishra RSP Law:- S K Raju  Project Manager: D K Sahoo	Sri G.C.Mohapatra, Sole Arbitrator, Rourkela	District Court, Sundergarh	Dispute in deduction of LD	1. Party has claimed Rs14.74 lakhs from RSP. 2. In arbitration- No amount is to be paid by any party(M/s Orissa Concrete & Allied Industries/RSP 3. Award of Sole Arbitrator challenged at District court, Sundergarh by M/s Orissa Concrete & Allied Industries on 18.11.2016. 4. Hearing held on 14.01.2020 5. Next hearing on 18.03.2020. 6. Case under progress.
7.	Installation of BF#5  Pkg.10 Contract No. P/PROJ/643(10)/79 001/08049126 dated 02.10.2008	Consortium of Danieli Corus B.V & Tata Projects Ltd	Euro 16.70 million* + interest + 325crores + interest = approx. 619 crore in INR excluding post award interest	--	Party	Officer Associated with Arbitration: A.K. Behera, Sunil Kumar (Retd.), Gautam Das (Retd.), Samir Ray, Ravi Banjare. Project manager: D Prasad	Arbitration Tribunal by ICC, Paris	Delhi High Court	1. Dispute in delay analysis 2. Deduction of LD 3. Payment for extra work and balance quantity	1. Rs 619 crore approx. including interest up to award (additional post award interest) in favor of the agency as per ICC tribunal award. 2. Counter claim of INR 211.79 crore by RSP not admitted. 3. Tribunal award challenged in Delhi High Court by Corporate Law Deptt. Case under progress. 4. No hearing took place on 19.08.2019 5. No hearing took place on 19.11.2019. 6. Hearing held on 20 & 24.01.2020 7. Hearing held on 12.02.2020. 8. Hearing was scheduled on 28.02.2020. As the senior learned counsel was unavailable on this date, the matter was listed for hearing on 03.03.2020. 9. Next hearing was on 03.03.2020. 10. Case under progress.
8.	SAIL vs M/s Psyteme, GmbH & oth	M/s Psyteme, Germany	-	-	SAIL		Justice Prathiba M. Singh	High Court, Delhi	Dispute in breach of contract	1. Indian Council Of Arbitration's award dated 04.09.2013 directed SAIL to pay Euro 30,690 to M/s

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/ SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
	Width Measurement System in Hot Strip Mill A/T No. P4/654/09201 dated 28.08.2002								terms.	<p>Psyteme, Germany and Rs. 11,09,619/- to M/s Shridhar Mantri (Other claimant) with interest.</p> <ol style="list-style-type: none"> <li>Case filed against the above said award in Hon'ble High Court, Delhi.</li> <li>Hon'ble High Court rejected claim of party and claim of SAIL on 26th Aug'19.</li> <li>Appeal filed against the order at Division Bench of Hon'ble High Court, Delhi by Corporate Law.</li> <li>Next hearing on 23.04.2020.</li> </ol>
9	SAIL vs M/s EPI  Reheating Furnace in Hot Strip Mill & Plate Mill	M/s EPI	Rs. 20.61 Cr.		SAIL	-	-	Supreme Court	Dispute in non-payment.	<ol style="list-style-type: none"> <li>On the basis of Settlement Agreement/ MoM dt-01-02.02.2001, SAIL agreed to pay Rs.847.87Lakh to EPI.</li> <li>SAIL paid Rs400Lakh on 28.06.2002 as per PMA Arbitrator interim order dtd 30.05.2002.</li> <li>Appellate authority vide order dated 17.02.2011 upheld PMA arbitrator award of Rs849.63Lakhs and directed SAIL to pay Rs.2061.3Lakhs to EPI (balance payment including interest payment.)</li> <li>SAIL has filed WP 7970/2012 &amp; LPA 98/2015 in High Court, Delhi, which were dismissed.</li> <li>SAIL has filed case in Honourable Supreme Court vide SLP(C) 13936-2018.Matter is subjudice at Hon'ble Supreme Court</li> <li>Tentative next hearing on 24.04.2020.</li> <li>Case under progress.</li> </ol>
10	SAIL vs M/s Simplex Engineering &	M/s Simplex	Rs 13.41 Cr.		SAIL	-	-	High Court,	1. Balance Payment for	<ol style="list-style-type: none"> <li>Award of Sole arbitrator challenged at High Court, Cuttack</li> </ol>

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
	Foundry Works (Sinter Plant-2)							Cuttack	FAC & Cooler Roof 2.Escalation for Building & Technological Structures, Plant & Equipments and Erection of Plant & Equipments	on 19.02.2018 2. Case under progress.
11	Procurement of P-way Fittings for rail track of New HSM Contract no.- 042/697/16920000 33/01/00/18049006 dtd. 17.01.18  Reg No. 7/2019 Case No.: ARBP-07 of 2019	M/s Bridge Track & Tower Pvt. Ltd.	-	-	M/s Bridge Track & Tower Pvt. Ltd.	G. Mishra	-	District Court, Sundergarh	Against the RPN recovery action taken by RSP.	1. Order dtd. 27.11.19 received from Registrar District Judge, Sundergarh. 2. Ld. District Judge has given stay order for recovery action initiated by RSP. 3. Hearing held on 17.01.2020. 4. Next hearing on 12.03.2020.
	<b>Total</b> (if RSP 2 <sup>nd</sup> party amount not considered)		<b>Rs. 758.91 Crores (approx.)</b>	-						

*\*Exchange Rate of EURO is as on 27.09.2019*

**(C) On-going cases (MSME)**

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
12.	Rebuilding of coke oven battery #4  Contract No. P4/740/07049045 dtd 01.06.2007  Principal contractor: MECON Sub-Contractor engaged by MECON:- KCS Pvt. Ltd.	KCS Pvt. Ltd.	17.08 Lakhs + 7.82 Lakhs + 0.60 Lakhs+ 0.97 Lakhs = Rs.26.47 Lakhs	--	Party	Officer Associated with Arbitration: L.K.Bari  RSP Law:- S K Raju  Project Manager: K.B.Das	--	MSEFC, Cuttack  MSME CASE No.- 28/2018, 29/2018, 30/2018 & 31/2018	KCS vs MECON  RSP has been made 2nd party to the case (on the basis that RSP is the principal contractor of MECON).  Delay in payment/ Non payment by MECON.	1. KCS (Subcontractor of MECON) has filed 4 no. of cases against 4 work orders issued by MECON. 2. RSP has petitioned before MSEFC, Cuttack not to be made party on 15.03.2019. 3. Hearing held on 16.07.2019. Case under progress. 4. Case taken up by RSP, Law deptt.
13.	Upgradation of CCD  Contract No. P/Proj/641/79001-3/ 08049140 dated 01.11.2008  Principal contractor: IMECO Sub-Contractor engaged by IMECO:- KCS Pvt. Ltd.	KCS Pvt. Ltd.	29.09 Lakhs	--	Party  KCS vs IMECO	Officer Associated with Arbitration: L.K.Bari  RSP Law:- S K Raju  Project Manager: K B Das	--	MSEFC, Cuttack  MSME CASE No.- 27/2018	KCS vs IMECO  RSP has been made 2nd party to the case (on the basis that RSP is the principal contractor of IMECO).  Delay in payment/ Non payment by IMECO. RSP has been made a party.	1. KCS (Subcontractor of IMECO) has filed case against IMECO. 2. Further the order for IMECO has been cancelled after RPN issued to them by RSP for breach of Contract. The issue between IMECO and RSP is pending arbitration in SCOPE.(Ref. SI No. 6) 3. RSP has petitioned before MSEFC, Cuttack not to be made party on 15.03.2019. 4. Case taken up by RSP, Law deptt.



Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by (Party/SAIL)	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
14.	Structural work for BOF complex at SMS-II (Pkg-30B1)  Contract No. P/Proj/619(30B/1)/Strl./08049097 dtd 05.08.2008	KCS Pvt Ltd	76.83 lakh	--	Party	Officer Associated with Arbitration: M.Sethi  RSP Law:- S K Raju  Project Manager: S.Sen	--	MSEFC, Cuttack  MSME CASE No.- 4/2019 ,	Non payment, Delay in payment, Recovery against non SAIL steel, LD on price variation, Service tax claims.	<ol style="list-style-type: none"> <li>Counter claim of Rs3.55 Crore has been filed by RSP before MSEFC, Cuttack on 17.07.2019.</li> <li>Case taken up by RSP, Law.</li> <li>Letter received from Law on 30.08.2019 stating that the party has denied all the allegations made in RSP's counter statement. Comments on statement filed by the party made &amp; sent to Law deptt.</li> <li>Sitting held on 20.09.19 at MSEFC, Cuttack.</li> <li>Award of MSEFC have been given on 20.09.2019. SAIL has to pay amt of Rs.63.34 Lakhs + Rs 1.18cr. interest upto 30.11.18.</li> <li>The same has been challenged at High Court Odisha and District Court, Sundergarh on 19.12.19 vide Case filing no-27258/2019.</li> </ol>
15.	Structural work for BOF complex at SMS-II (Pkg-30B1)  Contract No. P/Proj/619(30B/1)/Strl./08049097 dtd 05.08.2008	Vedvyas Engg Work	73.01 Lakhs	--	Party	Officer Associated with Arbitration: M.Sethi  RSP Law:- S K Raju Project Mgr: S.Sen	--	MSEFC, Cuttack  MSME CASE No.- 5/2019,	Non- payment, Delay in payment, Recovery against non SAIL steel, LD on price variation, Service tax claims	<ol style="list-style-type: none"> <li>Counter claim of Rs3.69 Crore has been filed by RSP before MSEFC, Cuttack on 17.07.2019.</li> <li>Case taken up by RSP, Law.</li> </ol>

3. Letter received from Law deptt. on 30.08.2019 stating that the party has denied all the allegations made in RSP's counter statement. Comments on statement filed by the party made & sent to Law deptt.
4. Sitting held on 20.09.19 at MSEFC, Cuttack.
5. Award of MSEFC have been given on 20.09.2019. SAIL has to pay amt of Rs.49.90 Lakhs + Rs77.98 lakhs. interest upto 31.12.18.
6. The same has been challenged at High Court Odisha on 19.12.2019 and District Court, Sundergarh on 09.12.19.
7. Hearing held at District Court, Sundergarh on 12.02.2020.
8. Next hearing at District Court, Sundergarh on 26.03.2020.

**Total Claims (if RSP made a 2nd party amt not considered)**      **Rs. 1.50 Cr.**

**Summary:**

- (A) Arbitration Cases : 4 (Parties Claim = Rs. 103.60 Crores)  
(RSP's Claim = Rs. 6.46 Crores)**
- (B) Court Cases : 7 (Claim by parties = Rs. 758.91 Crores)**
- (C) MSME cases : 4 (Claim by parties = Rs. 1.50 Crores)**
- (D) Total cases : 15 (Total Claim value = Rs. 864.01 Crores)**

**BSL- Arbitration cases in Capital Projects as on 24.02.2020**

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
<b>Zone: Steel &amp; Power</b>										
1.	Ladle Drier and cooler for SMS II (Pkg. No.-28)	M/s Wellman wacoma Limited, Kolkata	Rs 1.39 Crs.		Party			West Bengal Micro and Small Enterprises Facilitation Council, West Bengal	Interest, Prolong Cost, Ideal Labour charge, Watch & Ward, Cost of Extended BG & Insurance	Matter before MSME, Kolkata. In process of filing reply by BSL. Next date is awaited.
<b>Zone: SP, RMHP &amp; Aux</b>										
2.	Replacement of battery cyclones by 06 nos ESPs in Sintering Plant at BSL.	M/s Hamon Research Cottrell, USA & Shriram EPC, Kolkata	Rs 18 Crs	Rs 60 Crs.	Party	DGM(P)	Honorable Retd. Justice Late SB Sinha	ICC, Paris	<ul style="list-style-type: none"> <li>Extended stay after completion of ESP#6.</li> <li>Cost of materials laying in vendors premises.</li> <li>Retention amount.</li> <li>Price variation amount.</li> <li>Outstanding amount.</li> </ul>	Evidence of Claimant's and Respondent's witness had been done in scope complex at New Delhi from 04/07/18 to 12/07/18. Hearing completed in Dec'18 and decision awaited.
3.	Construction of New Tracks & Signalling work & Rehabilitation of existing tracks in Rolling Mill Yard (Pkg 51A).	M/s ARSS Infrastructure Projects Limited, Bhubaneswar	Rs 13.25 Crs		Party	DGM(P)	Not Appointed	SCOPE, N. Delhi	<ul style="list-style-type: none"> <li>Final bill</li> <li>Price variation amount</li> <li>SD&amp; En-cashed BG amount</li> <li>Idle charge of plant &amp; machineries.</li> <li>Loss of profit</li> <li>Wrongful recoveries.</li> </ul>	Statement of claim has been submitted by party. In process of appointment of Arbitrator by SCOPE.
4.	Rehabilitation & Up gradation of existing tracks inside the plant (Pkg 053).	M/s ARSS Infrastructure Projects Limited, Bhubaneswar	Rs 72.60 Crs		Party	DGM(P)	Not Appointed	SCOPE, N. Delhi	<ul style="list-style-type: none"> <li>Final bill</li> <li>Price variation amount</li> <li>SD &amp; Encashed BG amount</li> <li>Idle charge of plant &amp; machineries.</li> <li>Loss of profit</li> <li>Wrongful recoveries</li> </ul>	Statement of claim has been submitted by party. In process of appointment of Arbitrator by SCOPE.
5.	PKG.01: PLC based automation system for RMHP	M/s Paradigm Engineers		Rs 1.52 cr	BSL	DGM(P)	Not Appointed	Not decided	<ul style="list-style-type: none"> <li>Initial cost difference. As under RPN order was placed on M/s Adarsha for Rs 3.07cr</li> </ul>	Approval for invoking conciliation in process by Project Division.
6.	Alternate Gas Network Inside Plant	M/s Tata Proj. Ltd	Rs 81.66 Cr		Party	DGM(P)	Justice V,K. Bali.	New Delhi	<ul style="list-style-type: none"> <li>Escalation</li> <li>Price variation to the contract.</li> <li>Over stay cost of Project Management</li> </ul>	Nomination of arbitrator from Agency side completed. However, Nomination of arbitrator from BSL side not completed.
<b>Zone: Mills</b>										
7.	PLTCM (Pkg026)	M/s PTFR	Rs 15.13 crs.		M/s PTIN	DGM (Project Finance)	Mr. Justice Amitava Roy	Arbitrational Tribunal	<ul style="list-style-type: none"> <li>Recovery of shortfall of minimum cenvat guarantee</li> </ul>	Case is being dealt by Finance Deptt. May be

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
									<ul style="list-style-type: none"> <li>Reimbursement of CST.</li> <li>Payment of CC</li> </ul>	going for appeal to high court against decision.
8.	Compressed Air Station for CRM III	Inox Air Products Ltd., Pune		Rs.4.43 Crs		CGM(P) Commercial	<b>Mrs. Justice (Retd.) Jaya Roy</b>	Arbitrational Tribunal, Ranchi	<b>Contract Termination – 27.11.10</b>  <b>Date of Award of Contract for balance work – 07.07.11</b>  <b>Amount Recovered:</b>	<ul style="list-style-type: none"> <li>At present, the matter is still under arbitration and cross examination of representative of BSL(Claimant) concluded on 12.05.2017. Cross examination of respondent (M/s Inox AP) still pending for extension of mandate. <b>Recent status may be obtained from T&amp;C.</b></li> </ul>
9.	Civil Works of CRM 3 (Pkg 037A)	M/s L&T	INR 69.16 Crore	NA	Party	NA	<b>To be appointed</b>	SCOPE	<ul style="list-style-type: none"> <li>Shortfall of guaranteed VAT</li> <li>Prolongation Cost</li> </ul>	Letter given for conciliation on 14/02/2020.
	<b>Zone: Blast Furnace</b>									
10.	CHSGP for BF#4 (Pkg.-3)	Geetanjali Enterprises	Rs 5.5 crs.	NA	Party	Sri A K Paswan, Sr Mgr (P)/ IZ	<b>Dr. M.K. Laik</b>	Arbitrational Tribunal, Ranchi	<b>Height of the conveyor gallery K-10 changed from 5100m to 7000mm</b>	Arbitrator mandate expired on 28/02/2019. A petition to be filed by claimant for extension of mandate
11.	Replacement of pipelines feeding to BFs from PH-1	Geetanjali Enterprises	Rs 2.0 crs.	NA	Party	Sri A K Paswan, Sr Mgr (P)/ IZ	<b>Dr. M.K. Laik</b>	Arbitrational Tribunal, Ranchi	<b>Closure of contract with imposition of LD.</b>	Arbitrator mandate expired on 28/02/2019. A petition to be filed by claimant for extension of mandate
12.	DFDS system for BF-2	F. Harley	Rs. 2.0 crs.	NA	Party	Sri A K Paswan, Sr Mgr (P)/ IZ		Pending at MSME, Kolkata	<b>Non-payment/ delayed payment by BSL</b>	Appointment of Arbitrator is pending.
	<b>Zone: CO&amp;BPP</b>									
13.	CO Gas line in the zone affected by Phenolic vapour in Coke-oven of Bokaro Steel Plant.	M/s H N Construction.	Rs. 9484161/-	NA	Party	Sri A Raza, AGM (P)/ CO&BPP	<b>Shri Rajiv Ranjan Mishra</b>	Arbitrational Tribunal, Ranchi	<ul style="list-style-type: none"> <li>Payment against commissioning</li> <li>Payment against PG</li> <li>Payment against FAC</li> <li>Cost of extension of BG</li> <li>Payment of BG recovered</li> <li>Cost of BG for payment against BG and FAC</li> <li>Establishment Cost</li> </ul>	PAC was issued on 12.01.2011 w.e.f. 31.05.2010. Project could not be commissioned due to non-availability of shut-down for blanking / de-blanking of the existing CO Gas pipeline.  The case was under arbitration. Decision of arbitrator came in favour of M/s H N Construction. The award has been

Sl. No.	Name of the package & Pkg. No.	Name of the Party	Claim of the Party	Claim of Plants/ Units	Initiated by	Dealing officer	Name of the Arbitrator	Pending at Forum	Reasons for Arbitration	Present Status
										challenged before competent court at Bokaro in the month of September,2019.

**BSL RPN cases in Capital Projects – Contracts Cases**

Sl. No.	Name of the Original party	Name of the Pkg & Pkg. No.	RPN Date/ Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration/ litigation	Forum/court in which the case is pending
	<b>Zone: SP,RMHP&amp;Aux</b>						
1	<b>M/s Hamon Research Cottrell, USA &amp; Shriram EPC, Kolkata</b>	Replacement of Battery Cyclones with ESPs in Sinter Plant	27.12.2016	21.07.2017	INR 3.68 Crs.	Counter claim against M/s SEPC is INR 59.76 Cr approx. in arbitration against stabilization of ESP#6, Liquidation of defects in upstream, completion of balance job, replacement of defective guides and dust cleaning through other mechanism.	Termination of defaulter party has been approved by the Competent Authority. NIT Issued with TOD 27.05.2016. Pre-Bid meeting held on 23.05.2016. RP Notice served on SEPC has been replied on last date of notice on 26.05.2016. TOD extended to 17.06.2016. Bids received from following bidders were opened and forwarded for evaluation to CET: 1. Tata Projects Ltd. 2. Unicon + HNCPL 3. Clair Engineers 4. Soil Enviro LOA issued on 21.07.2017 to M/s Unicon + HNCPL. Contract signed on 17.10.2017 at Contract price of Rs 52.59 Crs. net of Input tax credit on GST. ESP#2: shutdown work is under progress. Encashment of PBG (2 nos) from the defaulting party has been done.
2	<b>M/s Paradigm Engineers &amp; Consultants Pvt. Ltd., Jamshedpur</b>	Balance work of PLC based Automation System (Phase-I) (Pkg.-01) of Raw Material Handling Plant	22.06.2017	17.08.2018	INR 0.20 Crs.	INR 1.52 Crs.	Balance work under RPN has been awarded to M/s Adarsha Control, Bangalore. Contract signed on 19.09.2018 at contract price Rs 3.07 Cr net of ITC on GST. Work completed on 31.10.2019. Case referred to BSL/LAW for invoking of conciliation and arbitration clause under Article 9 of GCC.
	<b>Zone: Mills</b>						
3	M/s Intricate Engineering	15/3T EOT crane in PH #9 (PKG 3)					RPN action has been initiated and under approval.
4	M/s Maxflow	HT cable Tunnel Ventilation (Pkg-102)					RPN action has been initiated and under approval. Balance work for TS to be submitted by MECON. PPM to expedite from MECON for submission of TS for balance work.
5	M/s UR Engineering	Misc Structural items – Coil, saddles, tackles and Plant Auxiliaries for CRM III (Pkg-046A)					RPN action has been initiated and under approval. Balance work for TS to be submitted by MECON. PPM to expedite from MECON for submission of TS for balance work.
	<b>Zone: Tender &amp; claims</b>						
3	<b>M/s Inox Air Products Ltd., Pune</b>	Compressed Air Station for CRM III (Pkg-010)	27.11.2010	07.07.2011	---	INR 4.43 Crs.	RPN work awarded to M/s BOC on 07.07.2011. Work completed in Sep'2013.

Sl. No.	Name of the Original party	Name of the Pkg & Pkg. No.	RPN Date/ Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration/ litigation	Forum/court in which the case is pending
							Differential amount of Rs. 4.43 Cr. recovered. However, this recovered amount along with additional cost on Interest of Rs 76,86,282/- was refunded back to M/s Inox Air Products Ltd. in compliance to the order of the Hon'ble Jharkhand High Court in W. P. © No. 296 of 2013. At present, the matter is still under arbitration and cross examination of representative of BSL (Claimant) concluded on 12.05.2017. Cross examination of respondent (M/s INOX AP) still pending.
4	<b>Roselectroprom Holding, Russia (REP Holding)</b>	Installation of one new Turbo Blower in TB station- Main Package	24.09.2008	---	---	INR 20.68 Crs.	RPN work awarded to M/s NICCO+MES+SBW on 04-06-09. Work completed in Mar'12. RPN case has been referred to CO Law, who in turn sought conformity in regard to existence of the Company i.e. REP Holding, since the Company had not responded to our communications at any point of time. Law had further opined that in case the company ceased to exist, no award can be enforced against them. Even in case, the award be passed by spending substantial money as litigation cost, its execution shall be a complicated issue when SAIL/BSL have no details of assets of the M/s REP Holding as well as their whereabouts.
5	<b>M/s Megha Insulations Pvt. Ltd., Bhavnagar, Gujarat</b>	Procurement of Calcium Silicate Insulation Block	03.02.2018	---	---	Under Tendering. Still L-1 price yet to be discovered	NIT issued on 03.02.2018 with extended TOD on 24.04.2018. After several extension of TOD, tender was opened on 18.06.2018 and only one offer of M/s Sharda Insulation & Refectories', Champa received. Offer of M/s Sharda Insulation & Refectories, Champa is found not eligible by consultant CET & BSL.

### IISCO Steel Plant: RPN Cases

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
1	M/s UB Engineering Ltd.	Erection, testing and commissioning of plant & equipment including refractory of BOF & CCP	01.08.14	(Jobs executed in parts ) annexure-1	Rs.2.91 Cr.(from BG) + Rs.3.71 Cr. (From verified bills)	Rs.98.07Cr.	Notice of Recovery was issued on 15.06.2017. UBEL also filed insolvency to NCLT. Claim for Rs. 98.07 Cr. was filed by SAIL as 'operational creditor' before the Official Liquidator of UBEL. Application has also been filed before NCLT Bombay for lodging the claim of ISP. Confirmation for acceptance of claim has not yet received.

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
2.	M/s Hindustan Controls & Equipment Pvt. Ltd. & M/s Amiya Commerce & Construction Co. Pvt. Ltd.	Power Distribution, Erection, Civil Work etc. for Electrical Repair Shop (Pkg. No. 42C)	31.12.12	01.01.13	Rs.19,42,600/- (from BG) + Rs.10,47,275/- (From verified bills)	Rs. 5.99Cr.	Notice of recovery was issued on 09.05.2016. Arbitration has been invoked before SCOPE. ISP had filed the statement of claim before the SCOPE. SCOPE on 02.11.2018 & 11.12.2018 was once again requested to initiate the arbitration proceedings. Consortium has requested further time to submit their defense statement. ISP law department vide letter dated 16.01.2019 requested Scope forum to intimate the developments. M/s Amiya Commerce refused to pay arbitration fee. ISP requested vide letter dated 25.03.2019 to SCOPE to ask M/s Hindustan Control for fee payment.
3.	M/s Master Engineering	Railway OHE, Hirapur (Package No. RLY04)	25.12.13	25.12.13	Rs.0.57 Cr. (from BG) + Rs.0.8441 Cr. (Retention money)	Rs. 0.49cr.	Notice of recovery was issued on 17.11.2015. Notice of arbitration along with Statement of Claim has been submitted on 11.12.2018 to SCOPE forum for initiation of arbitration proceedings.
4.	M/s Beijing Sino Steel Industry & Trade Group Corporation (SSIT), M/s Tangshang Iron and Steel Design and Research Institute Company Ltd.,M/s Gillander Arbuthnot and Co. Ltd.	Top Pressure Recovery Turbine (Pkg. 18)	30.11.12	01.12.12	Rs.2.387Cr. (from BG)	Rs.17.29Cr.	Notice of recovery was issued on 26.09.2015. Arbitration has not yet commenced. ISP submitted petition letter in ICC for arbitration on 25.09.18. Statement of Claim has been filed to ICC for initiating Arbitration proceedings. ISP once again submitted the request of arbitration in ICC on 07.01.2020. Admitted, statement of claim is under preparation.
5.	M/s Tantia Constructions ltd.	Balance Road, Storm Water Drain and Sewerage Network (Pkg. No: 31E)	26.02.18	11.06.18	Rs.6.48 Cr. (from BG)	Rs.24.93Cr.	Notice of Recovery was issued on 15.01.2019. Conciliation at ISP Burnpur is under process by the conciliation committee as per provision of the contract.M/s TantiaConstructions ltd. has also put up their counter claim of Rs.39 Cr.2nd conciliation meeting held on 19.08.2019. the conciliation committee had asked M/s Tantia to submit fresh statement of claim before conciliation committee as earlier statement of claim was submitted before ICA for arbitration. M/s Tantia submitted the statement of claim which is being examined by ISP/MECON for preparation of defense statement.
6.	Balance Work of "Supply, Erection & Commissioning of 25KV AC traction of OHE, General Internal Electrification etc. at Hirapur Exchange Yard, Hirapur West Yard for Development/Constru	M/s BNE Infraprojects Pvt. Ltd.	30.12.17	01.01.18	Rs.0.16 Cr. (from BG)	Rs. 0.10 Cr. (tentative)	As this is an item rate contract actual amount will be finalised after completion of the balance jobs and recovery notice will be issued.

Sl. No.	Name of the party	Name of the package & Pkg. No.	Contract Termination Date	Date of Award of Contract for balance work	Recovered amount if any (BG Amount)	Amount involved in arbitration /litigation	Forum/court in which the case is pending
	ction of Railway YardFacilities under Expansion Plan of SAIL-ISP" RLY-06A						

### Salem Steel Plant

Sl. No.	Name of the package & Pkg. No.	Name of the party	Party's claim	SSP's claim	Arbitration type	Initiated by	Pending at Forum/court	Reason for Arbitration	Present Status
1.	20-Hi Sendzimir Mill (Z-Mill-3) Contract No: PU-E782002/01, dated 27.09.2007.	M/s Waterbury Farrel, Canada + M/s Shri Ram EPC, Chennai.	USD 4,66,75,292 + Rs.5.50Cr.	Rs. 25.99 Cr. (net of BG)	RPN-Arbitration	SAIL /SSP	<b>ICA</b>	<p><b>Contract Termination - 09.102012.</b></p> <p><b>Date of Award of Contract for balance work - 15.01.2015</b> (Awarded to various parties)</p> <p><b>Amount Recovered: Nil</b></p>	<ul style="list-style-type: none"> <li>▪ Arbitration at International Court of Arbitration (ICA) forum at Delhi was in progress since 08.10.15</li> <li>▪ The matter was argued at length till October-2018 and awarded by ICA on 28-February-2019 in favour of SAIL / SSP.</li> <li>▪ The following are gist of the Award: <ul style="list-style-type: none"> <li>- M/s WF (First Respondent) and M/s SEPC (second respondent) shall jointly and severally pay Rs.19.52 Crore towards Claim of Risk Purchase.</li> <li>- Rs. 4,01,73,764/- as Pre-Award Simple Interest at the rate of 12% per annum from 12.06.2017 (i.e. Date of Supplementary Statement claim filed by SAIL/SSP) till date (Award date i.e. 28.02.2019).</li> <li>- Post Award interest at the rate of 12% on Rs.23,53,73,764/- (i.e. Rs.19,52,00,000 + Rs. 4,01,73,764) from the date of the Award till date of payment.</li> <li>- Cost of Arbitration to an Extent of 75% of the total Arbitral Costs incurred by SAIL/SSP. [i.e. USD 1,20,000 (ICC Fee) + Rs. 88,24,463/- (Legal fee and expenses) + USD 5,660 (costs towards Transcription services as arranged by SAIL/SSP)].</li> </ul> </li> <li>▪ Consequent upon the Award of Arbitration Tribunal, M/s WF vide notice dated 22.05.2019, had informed to appeal against the Award. Then, M/s WF has filed an application in the court of Principal District Judge, Salem on 10.06.2019 and</li> </ul>



Sl. No.	Name of the package & Pkg. No.	Name of the party	Party's claim	SSP's claim	Arbitration type	Initiated by	Pending at Forum/court	Reason for Arbitration	Present Status
									hearings were held on 08.07.2019, 26.07.2019 and 09.09.2019 at Salem. The Court asked SSP to file a counter by 16.10.2019 to the petition filed by M/s WF. SSP filed the counter on 16.10.2019 at Salem Court and further hearings were held on 15&20-Nov-2019, 5-Dec-2019, 10.01.2020, 04.02.2020 & 27.02.2020.

**RMD-RPN CASES IN CAPITAL PROJECTS (MEP and AMR Schemes) - Status as on 02-03-2020**

Name of the Plant: Raw Materials Division (RMD)									
Sl. No.	Name of the Party	Name of the Pkg. no.	Contract Termination Date	Date of Award of Contract for Balance Work (LOA)	Recovered Amount if Any (BG Amt.) (INR)	Amount involved in Arbitration/ Litigation (INR)	Forum/ court in which the case is pending		
1	M/s Tecpro Systems Limited (TSL)	Enhancement of Loading Capacity of Bolani Ores Mines- CA no. RMD/K/GM (P)/CA/1211 dated 11.08.2008	14-08-2014	24 Sub Pkg. (19sub-pkgs completed)	5.21 Cr. (BG)	18.99 Cr.	Interim claim was lodged with 'Resolution Professional (RP)' based on estimate for some RPN sub-pkgs. The case of admittance of claim was under National Company Law Tribunal (NCLT) through Law Dept., Corporate Office. NCLT advised to go for adjudication process. Notice for conciliation sent vide letter dated 02-01-2020 but no reply received.  <b>Before we proceed for Arbitration regarding our claim, NCLT has declared M/s Tecpro Systems Limited as 'Liquidated' as per Public Announcement dated 23-01-2020 and asked to submit claim by 14<sup>th</sup> Feb'2020. Claim has been filed with 'Liquidator' for M/s TSL along with Chandrapura Ferro Alloy Plant by Constituted Attorney, SAIL, New Delhi.</b>		
2	M/s Tecpro Systems Limited (TSL)	Main Package (Package 1) Enhancement of Production Capacity to 6.5 MTPA of Meghahatuburu Iron Ore Mines- CA no. RMD/K/ PROJ/ MIOM/10-11/003 dated 10-05-2010	16-08-2014	RPN-1 09-10-2015  RPN 2- 30-06-2017	3.60 Cr. (BG)	7.72 Cr. (7.02 + 0.70)			
3	M/s Techno Fab Manufacturing Ltd. (TFML, Lead Partner) & M/s Capital Engineering and Research Incorporation	Installation/Upgradation of Conveyors and Crushing & Screening Building (Package-2E) for the Enhancement of Production Capacity to 10 MTPA of Bolani Ores Mines- CA no. RMD/K/PROJ/BOM/CA/11-12/029 dated 18-01-2012& amendment dated 03-08-2012	22-12-2017	RPN Pkg. 1- 04-01-2018  RPN Pkg 2- Under tendering (A,B,C&D)  RPN Pkg 3-	5.40 Cr. (BG)	51.86 Cr.	Interim claim was lodged with 'Liquidator' based on estimate for 2 out of 4 RPN packages. NCLT in their judgement dated 03-01-2020 directed the Liquidator to consider the claim of the applicant as per rules within 2 weeks without fail. The liquidator has rejected our claim dated 16-01-2020. The issue has been taken up with Law Dept. for		

	(CERI)			03-07-2018 RPN Pkg 4- Yet to tender			further course of action. <b>RMD Law Department has approached NCLT against the rejection of claim by Liquidator of M/s TFML.</b>
4	M/s Raj Kumar Bajpai	Construction of Bachelor and Married Hostel at Gua Township- CA no. RMD/K/PROJ/GOM/CA/14-15/56 dated 14-01-2015	18-06-2018	19-06-2018	33 Lakhs	1.08 Cr.	Letter for recovery sent to M/s R K Bajpai. The party has not replied to last email dated 26-12-2019 against RPN recovery. Law department is being consulted.
5	M/s Raj Kumar Bajpai	Construction of Auditorium cum training centre at Dist. Keonjhar- CA no. RMD/K/PROJ/BOM/CA/14-15/58 dated 06-02-2015	02-03-2018	03-03-2018	54 Lakhs	1.40 Cr.	Letter for recovery sent to M/s R K Bajpai. The party sent notice for conciliation and has claimed INR 14 Crores. Consent for appointment of Conciliator by Dir (RM&L) was sent to party but he refused the proposal citing that name and status of proposed conciliator not mentioned and two conciliators be nominated by each. The conciliation could not be proceed due to this disagreement hence party was told to deal the matter accordingly. No reply received from the party. Law department is being consulted.
6	M/s KamleshKumar Singh	Renovation of Road from CISF Check Gate Hilltop to Base Camp at KiriburuIron Ore Mines- LOA Ref no. RMD/K/PROJ/KIOM/LOA/17-18/096 dated 13-06-2017	04-08-2018	06-08-2018	8.08 Lakhs	7.89 Lakhs	Recovery advice was sent to the party. The party responded and sent their representative to attend but not responding after that. Final reminder for meeting on mutual negotiation and amicable settlement sent dated 24-12-2019. No reply received till date. Notice for conciliation being sent in consultation with Law Department.
7	M/s Kamlesh Kumar Singh	Repair & Maintenance of BT Road including drains & culverts at Township (Phase-I) at Kiriburu Iron Ore Mines- (LOA no. RMD/K/PROJ/KIOM/LOA/17-18/097 dated 27-06-2017)	04-08-2018	06-08-2018	1.00 Lakh	27.15 Lakhs	<b>Law Dept. has vetted the letter for conciliation. Letter is being sent to M/s Kamlesh Kumar Singhafter decision on proposed conciliator.</b>

**I) RMD Arbitration Cases in Capital Projects – Ongoing (Status as on 02-03-2020)**

Sl. No.	Name of the package & Pkg. No.	Name of the party	Party's claim (INR)	RMD's claim (INR)	Initiated by Party/ SAIL	Dealing Officer	Name of The arbitrator	Pending at Forum/ court	Reason for Arbitration	Present Status
1.	Design and Engineering, manufacture, fabrication, supply, erection, commissioning and handover (after successful completion of performance guarantee test) of the Plant & Equipment including civil works for the Modification of Ore Processing Plant (Package A + Package B) at Barsua Iron Mine. (CA no. Contract/RMD/C/P&D/96-04 dated 27-11-1997)	M/s Indiana Conveyors Pvt. Ltd (ICPL)	10.18 Cr.	11.56 Cr. (Counterclaim )	Party	R K Banga GM (Proj.) RMD, Kolkata	Sri J Kanjilal , Ex-ED, SAIL	Sole Arbitrator	The Performance Guarantee Test (PG) was conducted from 17-03-2000 to 01-04-2000. The contractor failed the PG Test.	Arbitration in progress. Examination of SAIL witness going on. Last sitting was on 24-25 Feb'20
2.	Reclamation of water & Augmentation of facilities at Pump House Package-3 for Enhancement of Production Capacity to 5.5 MTPA of Kiriburu Iron Ore Mines. (CA No. RMD/K/PROJ/KIOM/1142/CA/05092008 dated 17-12-2009)	M/s Techno Fab Engineering Ltd. (TFEL)	4.79 Cr.	----	Party	Sri S S Sidar, GM (Proj), KIOM	Justice Subhro Kamal Mukherjee (Retd.)	ICA	12 months job was completed in more than 5 years.	Arguments by Technofab is going on. 12 <sup>TH</sup> Sitting dated 08-02-2020: Company under Insolvency now and arbitration to continue.

**II] RMD Arbitration Cases in Capital Projects – Cases heading towards arbitration**

Sl. No	Name of the package & Pkg. No.	Name of the party	Party's claim (INR)	RMD's claim (INR)	Likely reason of arbitration	Present Status
1	Reclamation of water from Tailing Pond. Package 2H of Expansion of Bolani Ores Mines to 10 MTPA. CA No. : RMD/K/PROJ/BOM/CA/11-12/025 dated 22.09.2011	M/s. Kirloskar Brothers Limited, Pune	----	-	Supply has been completed by the party. However, erection could not be done due to unavailability of Forest Clearance and hindrance from the locals claiming the ownership of the land.	Under commercial closure but party not accepting the recommendations of the committee constituted for commercial closure.
2	Construction of Bachelors & married hostel at Gua vide CA no. RMD/K/PROJ/GOM/CA/14-15/056 dated 14-01-2015.	M/s R K Bajpai	----	1.08 Cr.	The contractor failed to complete the job.	Letter for recovery sent to Party. Reminder sent dated 26-12-2019 but no reply received from party regarding claim. Law department is being consulted.
3	Construction of building for auditorium cum training centre at Keonjhar (Pkg TK-2). (CA no. RMD/ K/ PROJ/ BOM/ CA/14-15/58 dated 06-02-2015)	M/s R K Bajpai	----	1.40 Cr.	The contractor failed to complete the job.	Letter for recovery sent to M/s R K Bajpai. The party sent notice for conciliation and has claimed INR 14 Crores. Consent for appointment of Conciliator by Dir (RM&L)

**II] RMD Arbitration Cases in Capital Projects – Cases heading towards arbitration**

Sl. No	Name of the package & Pkg. No.	Name of the party	Party's claim (INR)	RMD's claim (INR)	Likely reason of arbitration	Present Status
						was sent to party but he refused the proposal citing that name and status of proposed conciliator not mentioned and two conciliators be nominated by each. The conciliation could not be proceed due to this disagreement hence party was told to deal the matter accordingly. No reply received from the party. Law department is being consulted.
4	Renovation of Road from CISF check gate hilltop to base camp at Kiriburu Iron Ore Mines (LOA no. RMD/K/ PROJ/ KIOM/LOA/17-18/096 dated 13-06-2017)	M/s Kamlesh Kumar Singh	-----	7.89 Lakhs	LOA (BINDING AGREEMENT) accepted but no agreement signed by the party. No work done by party.	Legal notice dated 20-08-2018 received against encashment of bank guarantee of INR 8.08 Lakhs. Reply sent on 18-09-2019. RPN- Recovery of INR 07.89 Lakhs sent followed by final reminder dated 24-12-2019. The party sent their representative for amicable settlement but not responding now. Law department is being consulted for further course of action.
5	Repair and maintenance of BT road including drains & culverts at township- Ph I at Kiriburu Iron Ore Mines (LOA no. RMD/K/PROJ/KIOM/LOA/17-18/097 dated 27-06-2017)	M/s Kamlesh Kumar Singh	-----	27.15 Lakhs	LOA (BINDING AGREEMENT) accepted but no agreement signed by party. No work done by party.	<b>Law Dept. has vetted the letter for conciliation. Letter is being sent to M/s K K Singh after decision regarding proposed conciliator.</b>
6	Crushing, Beneficiation and Pellet Plant at Gua Ore Mines (Pkg 001) RMD/K/PROJ/GOM/LOA/14-15/ 054 Dated 04.04.2014	M/s L&T and Consortium [M/s Metso Minerals (Sweden), AB, as Licensor and M/s Outotec GmbH as Consortium partner]	INR 618.05 Cr. + \$ 14,725,971/- + € 57703483/-	----	Notice of termination issued as contract has come to end on 02-10-2018 by efflux of time since no time extension has been granted on 02-10-2018	Legal Notice received vide letter dated 24.01.2020. Reply being finalized.

## On-Going projects (>20 cr.) at a Glance (as on 29.02.20)

AMR Schemes							
Sl. No.	Scheme	Cost (Including Cenvat) (Rs. Cr.)	Cum. Exp. Till Feb'20 (Rs. Cr.)	Approval		Approved Schedule	Likely/ Actual Completion
				In-Prin.	Final		
<b>Bhilai Steel Plant</b>							
1	Appointment of Consultant for development of Rowghat Deposit	50.46	9.80		Jan'12	Oct'13	^
2	Upgradation of Stoves for BF-4	75.95	50.92	Nov'11	Mar'13	Dec'14	Jul'20
3	Development of Rowghat Deposit Permanent Barracks at 21 Locations	188.93	145.56		Apr'14	Apr'15	^^
4	Installation of Cast House Defuming system in Blast Furnace No.7	23.49	17.39	Mar'14	Jul'15	Aug'16	Mar'20
5	Setting up of Static facility for Environmentally Sound Management of PCB	136.37	28.17	May'15	Jul'16##	Oct'17##	Mar'20
6	Installation of ESP's as replacement of Multi cyclones for all 4 nos. of Sinter Machine SP-II	50.72	10.24	Jul'14	Aug'16	Sep'18	Jun'20
7	Treatment & Recycling of Waste water of Outlet-C at Bhilai Steel Plant	49.20	16.81	Dec'16	May'19	Aug'20	Aug'20
	<b>Total</b>	<b>575.12</b>	<b>278.89</b>				
<b>Durgapur Steel Plant</b>							
1	Power Evacuation for 2X20 MW New Power Plant	55.61	47.56	Apr'13	Mar'17	Aug'18	Mar'20
2	Replacement of Converter shells together with Bottom Stirring System and Installation of Secondary Emission Control in all the three Converters of SMS	304.49	36.25	Dec'16	Dec'18	Sep'20	Sep'20
3	Procurement of One no. Steam Turbine Rotor Assembly for Turbo-Blower Nos. 1-4 in Old Power Plant	27.58	-	Oct'16	Feb'19	Jan'20	Dec'20
	<b>Total</b>	<b>387.68</b>	<b>83.81</b>				
<b>Rourkela Steel Plant</b>							
1	Power evacuation at 220 kV from NSPCL to MSDS-IV	59.5	-	Mar'19	Nov'19	May'20	May'21
	<b>Total</b>	<b>59.50</b>	<b>0.00</b>				
<b>Bokaro Steel Plant</b>							
1	Balance work for Replacement of Battery cyclones with ESPs in Sinter Plant	69.18	63.99	Jan'05 (Original)	Jul'07 Jul'17 (RPN)	Aug'10 Dec'19(RPN)	Dec'20
2	New Sinter Plant	1111.24	453.75	Mar'11	Mar'15	Nov'17	*
3	Modernization of SMS-I	1253.36	1001.23	May'13	May'15	Nov'17	Mar'20#
4	Rebuilding of Coke Oven Battery-8	285.06	137.72	Apr'14	Nov'16	Jun'19	Nov'20*
5	Up-gradation of 6 nos of ESPs of Lime Kiln	28.17	11.63	Jul'14	Jan'17	Jun'19	Jun'20
6	Development of alternate system for drawal of raw water from Damodar River from BSL & Township	107.74	11.11	Apr'18	Dec'18	Mar'20	Oct'20
	<b>Total</b>	<b>2854.75</b>	<b>1679.43</b>				
<b>CFP</b>							
1	4 MW Power Plant	36.25	10.46	Nov'11 (Original)	Sep'12 Oct'14(RPN)	Feb'14 Apr'16(RPN))	\$
	<b>Total</b>	<b>36.25</b>	<b>10.46</b>				
<b>RMD</b>							
1	Installation of Tertiary Crusher at MIOM	32.35	29.64	Jul'09	Sep'11	Mar'13	Mar'20
	<b>Total</b>	<b>32.35</b>	<b>29.64</b>				
<b>&gt; 20 cr. Total</b>		<b>3,945.65</b>	<b>2,082.23</b>				

### AMR Projects monitored by MoS, MoSPI & PMO

\$ Contract terminated in May'19

\* Under review

# Converter-First heat taken on 22.05.19; Caster - Now likely Mar'20 (Under review)

^ Closure of contract initiated; ^^ Linked to hand over of clear site by State Govt.

Issued on 13.03.2020