



नबीनगर पावर जेनरेटिंग कम्पनी प्रा० लि०

(एनटीपीसी लिमिटेड एवं बिहार स्टेट पावर जेनरेशन कम्पनी लि० का संयुक्त उपक्रम)

Nabinagar Power Generating Co. Pvt. Limited

(A Joint Venture of NTPC Ltd. & Bihar State Power Generation Co. Ltd.)

नबीनगर सुपर थर्मल पावर प्रोजेक्ट

Nabinagar Super Thermal Power Project

Dated: 04.12.2017

07.

Ref.: 370/NPGC/ CEO/ 140

To,

The Director (IA-Division), Thermal

Ministry of Environment, Forests and Climate Change

Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi – 110 003.

Sub.: Request for Extension of Validity of Environmental Clearance of Nabinagar STPP (3x660MW) at Vill.: Majhiawan, PO: Ankohra, Distt.: Aurangabad, Bihar.

- Ref.: 1. MoEF&CC File No. J-13012/127/2007-IA.II (T)
2. NPGC online application No IA/BR/THE/11929/2007 dated 14.10.2017
3. MoEF Letter dated 13.11.2017 –Additional Information Reg extn of Validity

Dear Sir,


The additional information sought by MoEF & CC vide letter dated 13.11.2017 is tabulated below,

sn	Information requested	Submission of requisite information
1	Detailed report on Progress of Project Activity along with PERT Chart to be prepared for the balance portion of the project Work. Basic Information as per the performa given in the agenda and Brief Summery.	Detailed report on progress of Project Activity , PERT Chart for balance activities, Basic Information and Brief summery is enclosed as Annex-1 .
2	Detailed action Plan for achieving new emission standards as per MoEF &CC Notification SO 3305 (E) dated 07.12.2015 or subsequent notification issued from time to time. Undertaking that the plant will be commissioned only after installation of FGD and complying to the notification dated 07.12.2015.	Detailed action plan for achieving new emission standards as per MOEF Notification SO 3305 (E) dated 07.12.2015/Subsequent notification is enclosed as Annex-2 .
3	Capital CSR Budget of Rs 51.86 Crore , out of total project cost Rs 12964.58 Crore as stipulated earlier for implementing CSR activities shall be in commensurate with revised increased project cost. The Time bound action plan for implementing CSR activities shall be submitted.	Estimated Project cost(Completed) as per Investment Approval : INR15131.67 Crores Commensurate Capital CSR Budget : INR 60.53 Crores Time bound action plant for implementing CSR Activities is enclosed as Annex-3
4	Greenbelt development plan is found to be adequate. Action Plan for achieving 33% of the total area Greenbelt.	Action plan for achieving 33% of the total area greenbelt is enclosed as Annex-4 .

In view of the above, it is requested that validity of EC for Nabinagar STPP (3x660MW) may please be extended for another two (2) year i.e. till 26.12.2019.

Thanking you,

Yours faithfully,



M P Sinha
CEO, NPGCL

Encl.: As Above

PROJECT SUMMARY FOR NABINAGAR STPP (3X660 MW)

Nabinagar Power Generating Company Private Limited (NPGCPL), a Joint Venture (JV) company of NTPC Limited and Bihar State Power Generating Company Limited (BSPGCL) was incorporated on 09.09.2008 with an objective of setting up 3x660 MW Thermal Power Plant at Nabinagar (village Majhiawan), district Aurangabad in Bihar and operation and maintenance thereof.

Nabinagar Super Thermal Power Project (Nabinagar STPP) is located on the right bank of Sone River near village Majhiawan in Aurangabad district of Bihar. The main plant and township areas are located between latitude and longitude of 24°45'26.10"N – 24°47'6.25"N and 84°08'44.45"E – 84°10'19.36"E and ash dyke between 24°48'00"N – 24°48'38"N and 84°09'40"E – 84°11'15"E. The site is at a distance of about 15 Km from Barun and is approachable from NH-2 through a 20 Km long metalled road. Aurangabad town is about 55 Km from the project. The nearest commercial airport is Gaya located at a distance of about 120 Km. Nearest railway station is Ankorha on Sone-Garwa Road Section of ECR.

There are no National Parks, Wildlife Sanctuaries or Biosphere Reserves located within 10 Km, however, Kaimur Wildlife Sanctuary is located at about 12 Km from the project boundary. Sone river flows at a distance of approx. 2.5 Km from project towards western direction.

The Terms of Reference (TOR) for EIA study was accorded by MoEF&CC vide letter no. J-13012/127/2007-IA.II (T) dated 03.09.2007 for setting up of a 2640 MW (4x660 MW) coal based power plant to be implemented in two stages of 1320 MW each. However, the capacity was reduced to 1980 MW (3x660 MW) for which EIA study was conducted through M/s Vogue Construction and Consultancy Services Pvt. Ltd., New Delhi. Public hearing was successfully conducted by Bihar State Pollution Control Board (BSPCB) on 12.03.2010 at B.S.E.B Campus Bhawan, Barun, Aurangabad.

The Environmental Clearance (EC) was accorded vide letter dated 27.12.2010, which was valid for five years i.e. till 26.12.2015 for start of production, as per the EIA Notification 2006 dated 14.09.2006. As per the amendment to the above mentioned notification vide S.O. 1141(E) dated 29.04.2015 and subsequent clarification issued vide office memorandum dated 12.04.2016, the validity of EC was automatically extended to seven (7) years, i.e. till 26.12.2017. However, regular communication was also pursued with MoEF&CC from time to time for a formal communication in this regard.

The project is in its advanced stage of development and commissioning of Unit #1 is scheduled in Mar., 2018 and subsequent units after 6 months respectively. The implementation schedule of the project got delayed due to various constraints beyond the control of the company attributing to the major reasons as listed below:

i. Delay in Land Acquisition:

Stiff resistance from land owners on account of land compensation as decided by the District Authorities lead to grim situation due to which during Jan., 2011, a train bogey was burnt by the villagers. However, with the help of District administration and regular follow-up with the stakeholders, the land has been acquired progressively starting from Jan., 2012 onwards. The main plant work could only be awarded in Jan., 2013, which is called the zero (0) date for the project development. However, after 2013, the project work again got severely affected due to disturbances from land owners/ local villagers on various issues related to land acquisition from time to time and this affected the project till Mar., 2016 when project area was successfully covered by the boundary wall with the help of District Administration.

ii. Resettlement of Homestead Owners:

The homestead owners were residing in the areas earmarked for the Main plant as well as ash dyke. After several follow-ups only, the resettlement of these homestead owners

could be possible from these areas i.e. from main plant area in Mar., 2016 and from the ash dyke area in Jun, 2017.

iii. **Frequent Bandhs:**

The project area falls in the Left Wing Extremist (LWE)/ Naxal affected area and frequent bandhs are a common scenario. Frequent bandhs were called by naxals during 2010 – 2016, adding up-to more than 180 days of standstill. Such intermittent frequent bandhs disrupt the continuity of the work and its effect prolong more than the days of bandh *in-toto*.

iv. **Availability of Raw Material:**

NGT banned mining of sand during monsoon i.e. from Jun., 2017 – Sep., 2017; which also contributed in slowing of ongoing critical construction work. Earlier also, ban on sand and aggregates from time to time has resulted in delay of the project activities.

v. **Availability of Start-up Power:**

For testing and commissioning of various electrical establishments, the start-up power was delayed due to delay in connecting transmission line being developed by Powergrid Corporation of India Ltd. (PGCIL) pending which NPGC requested BSPTCL in Jan., 2016 for supply of start-up power by constructing LILO in its 132KV Sonenagar-Rihand Transmission line at Nabinagar. NPGC could avail/ receive the start-up power only in mid May., 2017.

Notwithstanding the above, there is around 12-15 months delay with respect to scheduled commissioning and about Rs. 10,093 Crore have already been spent on the development of the project. However, all efforts are also being made to commission the units at the earliest possible i.e. Unit #1 by Mar., 2018, Unit #2 by Sep, 2018 and Unit #3 by Mar., 2019.

BASIC INFORMATION FOR EXTENSION OF VALIDITY OF EC PROPOSAL:

Name of Project:	Green Field (new): (IPP / Merchant / Captive): Extension of Validity of EC for Nabinagar Super Thermal Power Project (3x660 MW) of NPGCPL	
	If expansion, the details of ECs (including amendments and extension of validity) of existing Units etc. Not Applicable.	
	If expansion, whether the application is under 7(ii) of the EIA Notification, 2006. Not Applicable.	
	If expansion, the date of latest monitoring done by the Regional Office (R.O) of MoEF&CC for compliance of the conditions stipulated in the environmental and CRZ clearances of the previous phases. A certified copy of the latest R.O. monitoring report shall also be submitted. Not Applicable.	
	Specific webpage address where all EC related documents (including monitoring and compliance related reports/ documents) of the specific project under consideration are/ will be available. Also contact details of PP's officer responsible for updating this webpage/ information.	
Name of Project Proponent:	Nabinagar Power Generating Company Private Ltd. (NPGCPL)	
Name of Consultant:	EIA Study was conducted through M/s Vogue Construction and Consultancy Services Pvt. Ltd., New Delhi.	
S. No.	Salient Features	
1.	Date of the ToR, extension of validity and amendment , if any.	Date of TOR: 03.09.2007 Date of EC: 27.12.2010 (EC valid till 26.12.2017)
2.	Date & Place of Public Hearing	Date of Pub. Hearing: 12.03.2010 Venue: Premises of Bihar State Electricity Board, Sonenagar (Barun), District Aurangabad, Bihar.
3.	Issues raised during Public Hearing and assurance given along with the financial provisions, if any, by the project proponent.	EC for Nabinagar STPP (3x660 MW) has already been accorded vide MoEF&CC letter no. J-13012/127/2007-IA.II(T) dated 27.12.2010. The conditions as stipulated vide EC are being complied.
4.	If the proposal is for reconsideration, the dates of the earlier EAC meeting (s) and the information/ documents sought.	Not applicable.
5.	Location of TPP Co-ordinates of all four corners: Average height of (a) TPP site, (b) ash pond site etc. above MSL (m)	Village: Majhiawan Taluk: Nabinagar District: Aurangabad State: Bihar Main Plant, Ash Dyke and Township are located between: ➤ Latitude: 24°45'26.10"N – 24°47'6.25"N ➤ Longitude: 84°08'44.45"E – 84°10'19.36"E 121 m (AMSL) 121 m (AMSL)

6.	Whether the project is in the Critically Polluted Area (CPA) or within 10 km of CPA. If so, the details thereof:	Not applicable.											
7.	Capacity & Unit Configurations:	1980 MW (3x660 MW)											
8.	Land requirement: a) TPP site b) Ash Pond c) Township d) MGR etc. (if expansion state additional land requirement)	Approx. 1500 Acres <table><tr><td>A) TPP site</td><td>596.24 Acre</td></tr><tr><td>B) Ash Pond</td><td>500.70 Acre</td></tr><tr><td>C) Township</td><td>212.86 Acre</td></tr><tr><td>D) Railway siding/ Makeup water corridor (MUW)/ Drain, etc.</td><td>100.00 Acre</td></tr><tr><td>E) Miscellaneous</td><td>90.20 Acre</td></tr></table> Note: Expansion of project is also planned; including which total 2972 Acres land is required and is being acquired.		A) TPP site	596.24 Acre	B) Ash Pond	500.70 Acre	C) Township	212.86 Acre	D) Railway siding/ Makeup water corridor (MUW)/ Drain, etc.	100.00 Acre	E) Miscellaneous	90.20 Acre
A) TPP site	596.24 Acre												
B) Ash Pond	500.70 Acre												
C) Township	212.86 Acre												
D) Railway siding/ Makeup water corridor (MUW)/ Drain, etc.	100.00 Acre												
E) Miscellaneous	90.20 Acre												
9.	Status of Land acquisition:	Almost complete. (Land acquisition for MUW corridor & Storm drain is pending)											
10.	Break-Up of Land-Use of TPP site:	(Acres / Hectares) Forests land (Type and density): Nil Single/ Double Crop agricultural land: Waste/Barren land: Grazing/Community land: Others (specify): Govt. Land: (Status of land allotment/ acquisition) – Almost Complete											
11.	Fuel to be used:	Coal											
12.	Quantity of Fuel Required per Annum:	11.25 MTPA (considering 3400 kcal/kg and 90% PLF)											
13.	Coal Linkage / Coal Block: (If Block allotted, status of EC & FC of the Block)	Central Coalfield Ltd.											
14.	Fly Ash Disposal System proposed:	High concentrated slurry system for dry ash, Lean concentrated slurry system for bottom ash.											
15.	Ash Pond / Dyke: (Area, Location & Co-ordinates) Average height of area above MSL (m)	Area: 500.70 Acres Location : Dist Aurangabad, Bihar Cordinate: Latitude: 24,48',00"N - 24,48',38"N Longitude: 84,09',40"E - 84,11',15"E Avg Height of area : 121.0 m from MSL											
16.	Quantity of Fly Ash to be Generated:	About 2.96 MTPA											
17.	Quantity of Bottom Ash to be Generated:	About 0.74 MTPA											
18.	Fly Ash utilization (details) :	Potential for ash utilization in the vicinity of Nabinagar STPP is as follows:											

		Ash Utilization Area	Potential (MTPA)
		Cement Sector	2.0
		Fly ash in concrete by RMC plant	0.5
		Fly ash bricks	0.03
		Clay ash bricks	0.01
		Roads and Highway Embankment	0.5 for 4 years
		Total	2.54 MTPA on sustainable basis and 0.5 MTPA for 4 years.
19.	Stack Height (m) & Type of Flue	Stack#1 : 275 m, Single flue Stack#2 : 275 m, Bi-Flue	
20.	Source of Water:	Indrapuri barrage on Sone River	
21.	Quantity of water requirement:	Approx. 144000 KLD (6000 m ³ /hr)	
22..	Distance of source of water from Plant:	2.3 Km approx.	
23.	Whether barrage/ weir/ intake well/ jack well/ others proposed:	Yes, Intake well.	
24.	Mode of conveyance of water:	Pipeline	
25.	Status of water linkage:	Water Resource Department (WRD), Bihar has allocated 125 cusecs of water on 31.10.2012 and Water Agreement has also been executed on 09.10.2017.	
26.	(If source is Sea water) Desalination Plant Capacity	Not applicable	
27.	Mode / Management of Brine:	Not applicable	
28.	Cooling system	Induced Draft Cooling Towers	
29.	CRZ Clearance	Not applicable	
30.	Names & distance of National Parks, Wildlife sanctuaries, Biosphere reserves, Heritage Sites, Rivers, Tanks, Reserve Forests etc. located within 10 Km from the plant boundary:	River: Sone River 2.3 Km from Project site	
31.	Any litigation / Court case pertaining to the project:	None	
32.	Is the proposal under any investigation? If so, details thereof.	Not applicable	
33.	Any violation case	None	

	pertaining to the project:	
34.	Cost of the Project:	Rs. 15131.67 Crore
35.	Employment Potential	EC for the project was accorded on 27.12.2010 and it is in the advanced stage of development. There has been overall development in the vicinity of the project in terms of ancillary employment and livelihood generation.
36.	Benefits, if the project is sanctioned	The project will boost the overall development of the infrastructure and employment potential in the area.
37.	Any other declaration	None.
Certified that the above information is true to the best of my knowledge and belief.		

Date: 4/12/2017

Place: Patna

(SIGNATURE OF AUTHORISED
REPRESENTATIVE)



Name & Designation : M. P. Sinha
Contact Nos. & e-mail: CEO (NPGCPL)
Mobile No.: 9431009112
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NABINAGAR POWER GENERATING CO. PVT LTD

(A joint venture of NTPC & BSPGCL Limited)

PROGRESS REPORT

Of

NABINAGAR SUPER THERMAL POWER PROJECT

(Stage-I ,3X660 MW)

PO-ANKORHA, AURANGABAD, BIHAR

Main Plant





Nabinagar STPP (3x660MW): PROGRESS REPORT

PROJECT PROFILE

NTPC Ltd & BSEB entered into a Memorandum of Agreement (MoA) on October 14, 2007 to promote a JV company for establishing Coal based power project near Nabinagar in Aurangabad district of Bihar. Consequently, **Nabinagar Power Generating Company Private Limited** ("NPGC" or "the Company"), a Joint Venture (JV) company was incorporated on September 9, 2008 with NTPC holding 50% of equity share capital and balance 50% being held by BSPGCL.

Accordingly, NPGC is in the process of developing **Nabinagar Super Thermal Power Project**, (Stage-I, 3 x660 MW) near village Majhiawan and Ankorha railway station in Aurangabad district of Bihar as a regional project mainly for the benefit of Bihar (around 78% share of power output) and balance to other willing States and UTs of Eastern Region. The project has been given Mega Project Status by GoI.

Location	Block: Nabinagar District:Aurangabad, State: Bihar		
Nearest Railhead / Airport	Dehri on Sone/ Patna		
Approved Capacity	1980 MW (3x660 MW)		
Investment approval	30.01.2013		
Approved Cost	INR 15131.67 Cr (COMPLETED COST)		
Beneficiary / Status of PPA	MOP vide letter dtd. 28.09.10 approved the following allocation of Power:		
	State	Power Allocated	PPA signed on
	Bihar/BSEB	1373.5 MW	21.01.10
	DVC	54 MW	Reallocated to UP
	Jharkhand	60 MW	01.12.10
	Orissa/GRIDCO	155 MW	Reallocated to UP
	West Bengal	179 MW	Reallocated to Bihar
	Sikkim	10 MW	28.09.10
	Unallocated	148.5 MW	
Project Financing	Debt: Equity ratio of 70:30,,Loan from REC.		
INPUTS			
Water (125 Cusecs)	In-Principle water clearance received on 06.06.07 from WRD Govt. of Bihar. Water Agreement executed on 09.10.2017.		
Fuel / Fuel source and Transportation	Approved by MOC on 09.03.10. LOA received from CCL on 03.11.10. Coal to be transported by Indian Railways System.		
Feasibility Report	FR finalized and approved on 01.07.09 (JV Board meeting).		
CLEARANCES:			
NOC from Airports Authority of India	Clearance received on 04.11.09 . Revalidation of NOC issued on 11.11.16 Valid up to 03.11.2021		
Defense Clearance:	Clearance received on 04.08.09 / 16.12.10.		
zForest Clearance:	As per DFO, Aurangabad letter No: 185 dated 13.02.10 there is no forest land in the Project land being acquired.		
MOEF Clearance:	MOEF clearance received vides letter dtd. 27.12.10.		
Mega Power Status:	Obtained on 30.04.09.		
CWC/WRD Clearance:	Applied on 11.12.07. CWC accorded clearance vide letter dated 11.08.10.		

FINANCE AND ACCOUNTS

Figures in Crores.

Total Project completion Cost as per Inv appr	15132.00 Cr.
Total Cumulative Expenditure up to Mar'17	10247.83 Cr.
Equity released	3319.98 Cr. (NTPC-1659.94, BSPGCL-1659.94) -
Loan – REC	7137.68 Cr (Total)



Nabinagar STPP (3x660MW): PROGRESS REPORT

MAJOR MILESTONES

Start of The Project (Zero Date) : 31.01.2013										
	BES	CES	TGES	Combined HT	Turbine BU	BLU	TG Oil flushing	SBC	SYNC	FL
U#1-Sch	Jan14	Jan15	Mar15	Aug15	Apr16	Jul16	Aug16	Sep 16	Nov16	Jan17
Act/Ant	Jun14 (A)	Sept15 (A)	Jan16 (A)	Dec16 (A)	Dec'16 (A)	Jul'17 (A)	Jun'17 (A)	Dec'17	Feb'18	Mar'18
U#2-Sch	Jul14	July15	Sept15	Feb'16	Oct,16	Jan,17	Feb17	Mar17	May17	Jul17
Act/Ant	Nov14 (A)	Dec16 (A)	Jan17 (A)	Dec'17	June'17 (A)	May'18	Apr,18	Jul'18	Aug'18	Sep'18
U#3-Sch	Jan15	Jan16	Mar'16	Aug'16	Apr'17	Jul17	Aug17	Sep17	Nov17	Jan18
Act/Ant	Apr15 (A)	Jun'17 (A)	Jul'17 (A)	Jun,18	Jul,18	Nov'18	Oct'18	Jan'19	Feb'19	Mar'19

DETAILS OF PACKAGES AWARDED

SL	Name of Work	Awarded Value (in Cr)	Name of Vendor/ Agency	(date of Award)
1	Steam Turbine Generator (STG)	2,251.19	Alstom Bharat Forge Pvt.	31-01-2013
2	Steam Generator (SG)	2,775.33	M/s BHEL	31-01-2013
3	Make-up water pipes	20.27	M/s SAIL	09-04-2012
4	Generator Bus ducts & Associated Eq.	12.97	M/s BHEL	06-02-2013
5	LT Switchgears & LT Bus ducts	23.80	M/s GE-Ind.Soln	06-02-2013
6	EHV & HT Transformers	103.25	M/s ALSTOM T&D	11-02-2013
7	400/132 KV Switchyard	83.19	M/s BHEL	12-02-2013
8	ESP Pkg.	267.27	M/s BHEL	04-03-2013
9	Coal Handling Plant Package	360.00	M/s TRF Ltd.	25-03-2013
10	Ash Handling and Ash water Recirculation System Pkg.	189.00	M/s DC IPS	22-03-2013
11	HT Switchgear Package	16.13	M/s BHEL	26-04-2013
12	Control Cable Package	5.57	M/s KEI Indl Ltd	25-04-2013
13	HT Power Cable Package	8.26	M/s Policab wires	26-04-2013
14	Fire Detection and Protection System	33.04	M/s Sureland	26-06-2013
15	SG and Offsite Civil works	357.40	M/s Era Infra	03-08-2013
16	Electrical Equipment Supply & Erection	69.61	M/s Siemens Ltd.,	07-11-2013
17	Outdoor Transformers	20.49	M/s Sachneider Electric	16-10-2014
18	Instrumentation Cables	3.86	M/s Paramount Comm.	27-11-2013
19	DM Plant & Chemical Treatment	25.48	M/s Thermax Limited,	10-01-2014
20	Water Pre-Treatment plant	42.50	M/S McNally Bharat	28-12-2013
21	Ash Dyke Pkg.	86.02	M/s K.N.I.L	30-01-2014
22	1.1 KV Power cables Pkg.	10.89	M/s. Havells India Ltd.,	27-02-2014
23	DPR & Engg.Proj.Mgm and Construction of Coal Transportation	80.44	M/S. IRCON	28-02-2014
24	Cooling Tower Package	168.00	M/s FANS a.s.,	01-03-2014
25	TG and Chimney Civil Works	308.65	M/s. Gannon Dunkerley & Co.	04-03-2014
26	Station Piping package	42.78	M/S Technofab Engg	15-05-2014
27	Balance Site levelling & Infra Works	86.77	M/s Simplex	05-06-2014



Nabinagar STPP (3x660MW): PROGRESS REPORT

28	Ventilation system	12.55	M/s Advance ventilation	03-09-2014
29	Station C&I	56.67	BHEL	07-10-2014
30	CW & Makeup water system	305.13	McNally Bharat	07-10-2014
31	CW System Equipment	29.60	FlowServe India controls	18-02-2015
32	Air conditioning system	13.09	M/s Sterling & Wilson	03-03-2015
33	Permanent Township	328.08	M/s NBCC Limited	24-12-2015
34	Locomotive Pkg.		M/s DLW	18.03.17

2. PACKAGE WISE PROGRESS DETAILS

2.1 SG PACKAGE:

STRUCTURE	U#1	U#2	U#3
Boiler Erection	Completed	Under Progress	Under Progress.
Boiler Hydro Test	Completed.		
Boiler Light Up	Completed on 17.07.17		
Boiler Acid Cleaning	Completed on 01.08.17		
Boiler Steam Blowing	Started in Oct, 17. Under Progress		
Mill LHS	4/4 Erected.	4/4 Erected.	1/4 Erected.
MILL RHS	5/5 Erected.	2/5 Erected.	2/5 Erected.
Bunker LHS	Feeder floor reinf work u/p for casting		
Bunker RHS	5/5 Erected.		
FD Fan	2/2 Erected	01/02 Erected	01 Motor erected
ID Fan	2/2 Erected	02/02 erected	02/02 erected
PA Fan	2/2 Erected	01/02 Erected	02 Motor erected

2.2 ESP PACKAGE:

Progress Status:

S. No.	Description	Units	Total Quantity	Progress Uptodate	Remark
1	U#1: ESP Erection	MT	9253	8683.8	Unit #1- All the 6 Passes ATT (A to F) completed.
2	U#2: ESP Erection	MT	9253	7895.8	Unit #2- A, B & C Passes ATT Completed.
3	U#3 :ESP Erection	MT	9253	5850.0	

2.3 SG CIVIL & OTHER OFFSITE CIVIL :

Detailed Physical Progress

Description	UNIT #1	UNIT #2	UNIT #3
BOILER	COMPLETED.	COMPLETED.	COMPLETED.
ESP	Foundation completed. PASS D WORK I/P, HARD CURSTING REST COMPLETED.	Foundation completed. PASS C PAVING WORK I/P.	Foundation completed. COMPLETED. PAVING PASS -B, D & E COMPLETED.
Mill	Fndn Completed.	All fndn completed	All Fndn completed
Bunker	Fndn Completed.	Fndn completed	Fndn completed.
ESP CONTROL BUILDING	HARDNER FLOORING WORK I/P.	TRANSFORMER FOUNDATION COMPLETED.	SLAB +6MTR COMPLETED. COLUMN ERECTION & DECK SHEET WORK IN PROGRESS.



Nabinagar STPP (3x660MW): PROGRESS REPORT

PA FAN /FD FAN	COMPLETED & HANDOVER.	R/F WORK I/P FOR PA FANB.	FD FAN 1A COMPLETED.
DUCT SUPPORT BTW ESP & CHIMNEY	COMPLETED.	COMPLETED.	COMPLETED.
ID DUCT SUPPORT BTW BOILER & ESP	VACCUM PUMP FOUNDATION 18 NOS COMPLETED.	ID DUCT SUPPORT COMPLETED.	COMPLETED.

2.4 TG Civil and Chimney Package:

Progress Status: TG & Chimney

U#1 – Up to Axis 12 – all the floors casted

	U#1	U#2	U#3
TG Deck	Completed	completed	Completed
Chimney	Chimney#1- Staircase- up to 262 M completed, railing +210M completed. Painting completed. Elevator erection upto 262M completed.	Chimney #2 flue can erection completed. Inside compensator is completed, Minishell Completed, External platform (3/5 nos completed)Brick lining work in progress.	
CCR U#1	Aluminum composite panel work, tiling work completed. False ceiling completed.		
MDBFP Deck	Completed	completed	Completed
TDBFP deck	Completed	completed	U#3 TDBFP-A Completed
Compressor House	Handed over. Cladding work completed. Ironite flooring in progress.		
Service Building	Top Slab concreting started on 31.07.17 & Ground level fitting work in progress.		

2.5 TG Package:

	U#1	U#2	U#3
TG Erection Start	Jan'16	Dec'16	31.07.17
Condenser Erection Start	Sep'15	Des'16	03.06.17
TG Oil Flushing	Jan'17(Start) July'17(Compltd)		
TG Box Up	Dec'16	May'17	
TG On Barrage Gear	Sep'17		

Erection status

S N	Work	Status
1.	EOT commissioning.	<ul style="list-style-type: none"> ∞ EOT is operational till axis 35. ∞ Rail and DSL installation up to axis 37 is completed.
2.	Condenser	
	Condenser #1	<ul style="list-style-type: none"> ∞ CW piping – Painting and Drain piping in progress. ∞ CEP Flushing is completed normalization work in progress after completion of CEP trail run Condenser flood test will be started ∞ Structure platform along with condenser is completed on west side. ∞ CEP pump instrumentation work is completed.
	Condenser #2	<ul style="list-style-type: none"> ∞ Erection of MCW piping is in progress. ∞ Condenser neck joint welding and UT is completed.
	Condenser #3	<ul style="list-style-type: none"> ∞ Hot well ready for erection; waiting for structure stability clearance along with roof sheet. ∞ Installation of dragging structure is planned after hot well erection.



Nabinagar STPP (3x660MW): PROGRESS REPORT

3.	TG #1	<ul style="list-style-type: none"> ∞ TG Barring Gear on 14-09-2017 ∞ COT & DOT commissioning in progress. ∞ Erection of AC/DC ducting work is completed. ∞ Control oil flushing is completed normalization work in progress. ∞ Stator water flushing in progress. ∞ TD BFP-A Cable laying work is in progress and TD BFP-B Cable laying is completed. ∞ Turbine final painting is completed. ∞ TD BFP-B Oil flushing work in progress.
	TG #2	<ul style="list-style-type: none"> ∞ Exciter work in progress ∞ Ready for Lube oil flushing ∞ JOP Piping work will start next week
	TG U#3	<ul style="list-style-type: none"> ∞ Erection started on 31.07.17 ∞ All Pedestal chipping work is completed ∞ Foundation Anchor plate tack welding is completed .
4.	LubOil Flushing	<ul style="list-style-type: none"> ∞ Lube oil flushing is completed. thermal shock is also done.
5.	TG CCW/ECW	<ul style="list-style-type: none"> ∞ CCW Piping & Instrumentation is completed. ∞ CCW/ACW piping work is in progress. ∞ PHE material shifting in progress. ∞ ECW Material shifting in progress.
6.	ACW System	<ul style="list-style-type: none"> ∞ U#2 - ACW buried piping welding completed. Hydro test is completed. ∞ U#2 - ACW buried piping hydro test filling in progress. ∞ Erection to be done after Excavation.
7.	Vacuum Systems	<ul style="list-style-type: none"> ∞ Vacuum pump -A Instrumentation work in progress. ∞ U#2 -Vacuum Pump Pocket grouting is completed.
8.	TDBFP	<ul style="list-style-type: none"> ∞ TD BFP Ready for water flood teat. ∞ TD BFP-A Oil piping work in progress. ∞ HP Bypass Oil piping work in progress. ∞ LP bypass skid installation work is completed.
9.	MDBFP	<ul style="list-style-type: none"> ∞ MDBFP-A&B commissioning work is completed. ∞ U#2- BFD main header installation work in progress. ∞ U#2 MD BFP: Ammonia dosing skid installation work next week.
10.	De-aerator	<ul style="list-style-type: none"> ∞ De-aerator /FST insulation work in progress. ∞ De-aerator silencer piping work in progress. ∞ U#2-FWT and De-aerator welding completed; Hydro test planned and waiting for DM water availability. ∞ De-aerator/FST final box up work in progress.
11.	HP Heaters	<ul style="list-style-type: none"> ∞ Drip system restoration work is completed. Instrumentation and control cabling work in progress. ∞ Final Extraction Joint to turbine is in progress. ∞ U#2 -LP/HP heaters piping work in progress.
12.	CW System	<ul style="list-style-type: none"> ∞ CW piping lowered and positioned in CW pit – in progress.
13.	Seal Oil System	<ul style="list-style-type: none"> ∞ Seal oil system ready. Seal oil flushing is in progress. ∞ U#2 –Seal oil system mechanical installation completed; piping to be started.
14.	Control Oil System	<ul style="list-style-type: none"> ∞ Control oil system is ready. Instrumentation installed and function checks are completed. ∞ U#2-Control oil skid erection completed.

2.6 DM Plant:

DM Plant commissioning –All the 03 stream charged manually.

Office& lab building - civil work completed.

2.7 WPT Plant:

S.No.	Description	Remark /ERECTION WORKS
1.	Reactor Clarifier PT-DM	Bridge assembly completed/ Trial run by manually completed. Hydro test completed.



Nabinagar STPP (3x660MW): PROGRESS REPORT

2.	Cascade Aerator PT-DM	Aerator & staircase civil work completed.
3.	Chemical House	Brick work, Plaster & Flooring is in Progress.
4.	Sludge Pit Sump	Sludge Pump discharge and recirculation Piping Work done.
5	Gravity Filter House	Back wash gutter, channel in progress
6	Reactor Clarifier PT-CW-2	Completed. Mechanical Erection completed. HT completed.
7.	Reactor Clarifier PT-CW-3	wall final lift completed.
8.	Reactor Clarifier PT-CW-1	Wall lift-4 completed
9	Cascade Aerator PT-CW	Inlet pit in progress.
10	Filter Back Wash pit & PH	Completed.
11	CW PH	Erection completed. APH Pump Erection With Motor, Service Pump Erection With Motor, HVAC Pump Erection With Motor, CW Make up line with Valve Erection, Suction , Discharge and Header Line with Valve completed.

2.8 Coal Handling Plant:

S.No.	Description	Units	Total Quantity	Cumu. Upto date	Remark /erection
1	Wagon Tippler	Cum	6785	3899	WT#3 Raft, Apron feedeer Raft & slab comp, 3rd Lift wall comp. WT-1,2 Raft, (-)15.M slab & 1st Lift wall comp
2	Track Hopper	Cum	14576	8716	MH-1 to MH-2 Raft, 1st and 2nd lift wall conc comp. 3rd lift wall 27% comp. Seg#9 wall 3rd lift east. MH-2 3rd lift wall comp.
3	Crusher House	MT	1790	1596	(+)4.5M, 9.5M, (+)20.5M, (+)26.5M & (+) 35M slab & 4 nos Crusher deck slab RCC Completed & Flooring work WIP.
4	TP 2	MT	179	155	Foundation, 1 st & 2 nd slab completed.
5	TP3	MT	307	271	Foundation, 1st slab completed & 7 nos PD Grouting completed.
6	TP4	MT	326	302	Foundation & Grade slab Completed.
7	TP5	MT	175	153	Foundation & Grade slab Completed.
8	TP6	MT	1185	954	Foundation, 1 st to 4 th & (+)61.5M Floor slab comp. (+)72M Floor slab balance.
9	Conv -2 A/B	Cum	297	260	Completed. 6/8 Gallery Erection completed.
10	Conv -3 A/B	Cum	207	229	Completed.
11	Conv -4 A/B	Cum	61	61	Completed.
12	Conv -5 A/B	Cum	1328	1127	Flooring 240 M comp, Gravel filling WIP.
13	Conv -6 A/B	Cum	1225	1089	15/20 nos Gallery erection completed.
14	Conv -7 A/B	Cum	536	536	3/3 Gallery Erection Completed.
15	Stacker Reclaimer	Cum	6907	647	C-13B 3 seg rail beam comp. two seg grouting completed.
16	MCC-IC	Cum	1200	1161	Cable Trench Raft & Slab Comp. Transformer fdn WIP.
17	MCC-IE	Cum	300	155	Cable Trench 17M Raft Comp. & WIP.
18	Cable Gallery	Cum	1200	359	Cable gallery erection completed b/n TP-3 to TP-4
19	ER Hopper	Cum	1525	943	



Nabinagar STPP (3x660MW): PROGRESS REPORT

2.9 CW & MUW:

S. No	Description	Units	Total Quantity	Progress Uptodate	Remark
1	Concreting	CUM	11000	11100	
2	CW Liner Fabrication	MT	6000	6000	Completed.
3	CW Liner Erection	MT	6000	6000	Completed.
4	Hydro Test	MT	6000	6000	Completed.
5	Encasing	CUM	38000	36066	Base Concreting(M20)
6	MUW Pipeline Laying	RM	14000	5964	Land issue for 35% of burried MUW pipeline stretch.
7	Forebay & Pump house Concreting	Cum	12500		
8	CWPH Concreting	Cum	11100	11100	Grade M30
9	RWPH Concreting	Cum	2800	2792.5	
10	SACWPH Concreting	Cum	750	740	Grade M30
11	Approach Bridge Pile	No.	382	382	
12	Structural Truss fabrication	MT	4300	4328	Stu. Truss fab i/p
13	Structural Truss Erection	MT	4300	1163.7	
14	Intake Well RCC	Cum	7600	3278	Intake well concreting completed 3278CuM and Well sinking done for to 16.57RM.

2.10 AHS & AWRS

Description	Total Qty FOR 03 UNIT	Erection & Fabrication Status	Remarks
BAH	369	Fabrication-123MT Compl. Erection-123 MT Compl. WELDING Compl.	BAH- Refractory work completed.
FAE	540	171 MT Fabrication done. 40 MT Erection completed.	FAE Tower # 1- all columns erected of unit#01. B & C Pass- Adapter box & KGV installed. FAE Tower # 2- all columns erected of unit #1.
HCS D Silo	456	210 MT Fabrication Completed .110 MT Erection completed And balance under progress.	10/16 nos column erected & 03nos columns ready for erection.03 column is in progress. Silo 1 fabrication completed.
Ash Pipe line		Pipe laying – approx 2.5 km lying completed.	
Clinker Crusher		Clinker Crusher installed.	
AWPH		3 BAH,4 BALP Base plate frame erection completed.	

2.11 Fire detection & protection

S.N.	Description	Remarks
1	Work progress	<ol style="list-style-type: none"> 1. Structural material & plates of Tank 2 received at site. - 60/72 MT. 2. Structural material & plates of Tank 1 received at site. - 62/72 MT. 3. All Pipes 25MM to 150 MM received at site. 4. Erection of Fire water of Tank 2 Completed. hydro test completed. 5. Piping of Fire Water Pump House Completed & Commissioning of pumps completed. 6. Grouting of Pumps & Motors (8 nos) completed. 7. Piping on trestle FWPH to ST Completed & Piping on trestle in Switch yard area u/p. 8. MOT & CCR Piping Completed. 9. ST HVWS system charged. 10. MST HVWS piping completed.



Nabinagar STPP (3x660MW): PROGRESS REPORT

		<p>11. Boiler Burner Front HVW system in 24 M, 28 M & 35M Completed. 38 M erection of pipe in progress.</p> <p>12. UAT 1a piping completed.</p> <p>13. 8.5M UPS Room- MICC Cable work & seamless tubes work to be started immediately as false ceiling work can't be done without Fire fighting work. Erection work completed.</p> <p>14. SWYD Area- Work in progress.</p> <p>15. HFO/LDO Area & Foam Pump House- Sprinkler system in LDO completed. Piping in Foam Pump House completed. Sprinkler system in Day-oil tank completed.</p> <p>16. As per site, Contingent arrangement being done by laying of 150NB pipe on trestle instead of 300NB pipe underground for availability of spray/ hydrant system in HFO/ LDO area. Contingent work for laying of 150NB pipe on trestle completed.</p>
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2.12 Ash Dyke-

➤ Embankment- 8.2/9.3 kM Work under progress.

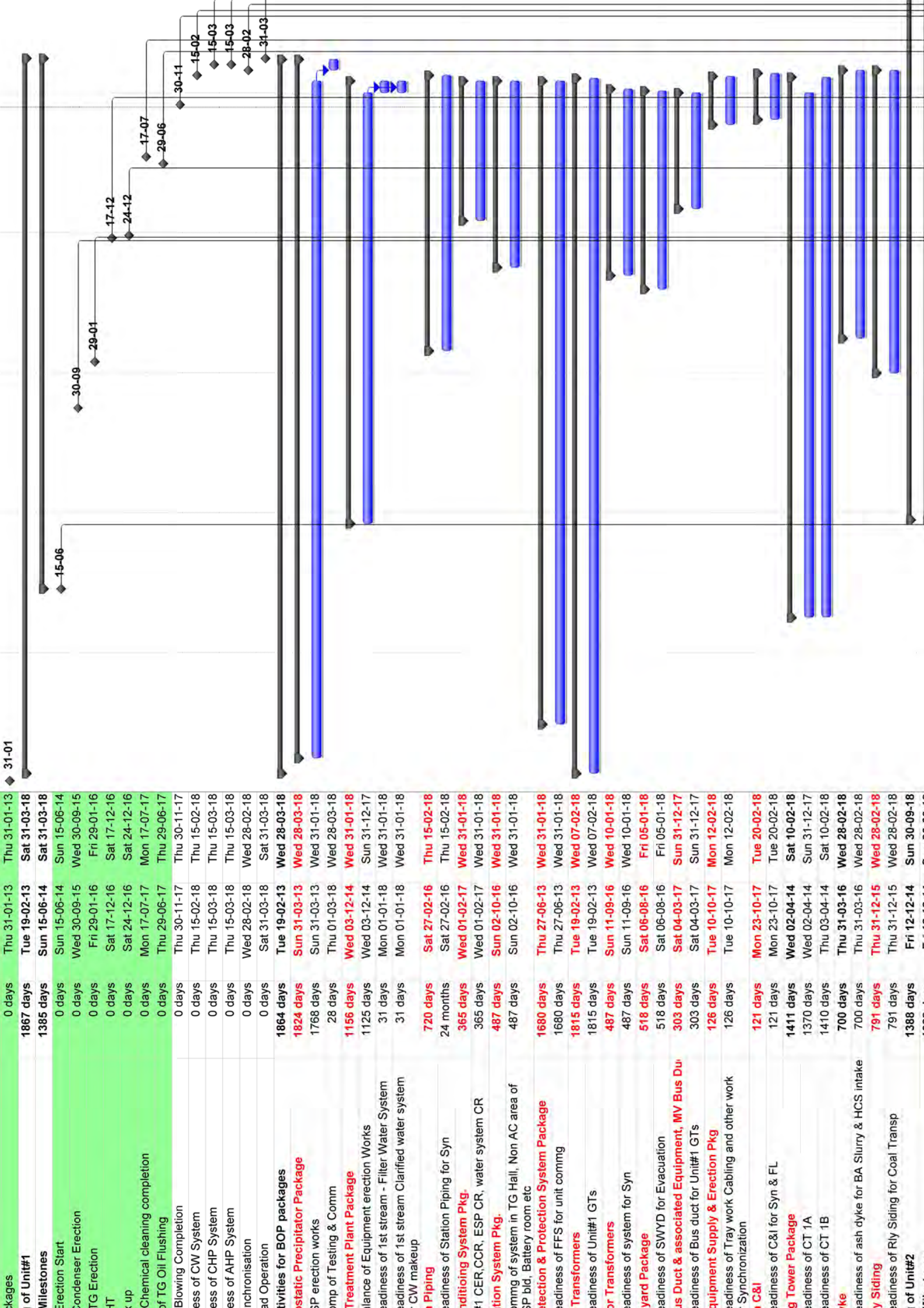
S N	Description	Unit	Total Qty	Compl.	Remarks
1	Striping	M3	175000	120718	
2	Foundation prep	M2	550000	445630	
3	Cut off trench filling	M3	48000	32500	
4	Sand blanketing	M3	390000	240000	
5	Embankment	M3	2025000	1500000	
6	Road Embankment	RM	6500	1600	
7	Drains Excav	RM	6500	2000	
8	Drain PCC	RM	6500	1400	
9	Drain RCC	RM	6500	1400	

2.13 Cooling tower-

S No.	Description	Sch	Units	Total Quantity	Progress Uptodate	Remark /Erection Work
1	CT1A					16 Deck casting done.64/64 lifts completed. Fill erection for all shells completed. Drift eliminator 1500/6400 completed. Both side Piping work completion upto Valve level in progress.
2	CT1B					Ready for Trail Run of Motors and Gear Box. Risers- work completed. Vibration monitoring instruments to be placed. Electrical- Poles- 88/88 erected. Cable tray & cabling work under progress by Seimens.
3	CT2A					HW Piping work completed. Second side balance piping work completed. All structure completed. Electrical and piping work in progress.
5	CT3A					8 Deck Slab completed.
6	CT3B					Excavation completed. PCC completed. Reinforcement in progress. RCC of basin slab completed.
7	Aux CT					Aux CT commissioned. Aux CT vertical cable tray work completed. Cabling work completed, Swgr charged.
8	MCC-1					Handed over for electrical works.

2.14 CW SYSTEM EQUIPMENT

Area	Pump	Motor	Remarks
CW Pump House	06/06 Pump erected.	06/06 Erected.	06/06 Butterfly valve erected. Recirculation line u/p.
Raw Water Pump House			Gantry Erection completed.
SACW Pump	03/03 Pump erection completed.	Motor erection completed.	Gantry crane erection completed.
Make Up Water Pump			



Activity	Duration	Start Date	End Date
HT	0 days	Sun 31-12-17	Sun 31-12-17
Make up	0 days	Fri 30-06-17	Fri 30-06-17
Chemical cleaning completion	0 days	Wed 30-05-18	Wed 30-05-18
Flushing of TG Oil	0 days	Mon 30-04-18	Mon 30-04-18
Blowing Completion	0 days	Tue 31-07-18	Tue 31-07-18
Test of CW System	0 days	Wed 15-08-18	Wed 15-08-18
Test of CHP System	0 days	Sat 15-09-18	Sat 15-09-18
Test of AHP System	0 days	Sat 15-09-18	Sat 15-09-18
Synchronisation	0 days	Fri 31-08-18	Fri 31-08-18
Load Operation	0 days	Sun 30-09-18	Sun 30-09-18
End of Unit#3	1390 days	Wed 10-06-15	Sun 31-03-19
Milestones	1390 days	Wed 10-06-15	Sun 31-03-19
Erection Start	0 days	Wed 10-06-15	Wed 10-06-15
Condenser Erection	0 days	Fri 30-06-17	Fri 30-06-17
TG Erection	0 days	Mon 31-07-17	Mon 31-07-17
HT	0 days	Sat 30-06-18	Sat 30-06-18
Make up	0 days	Tue 31-07-18	Tue 31-07-18
Chemical cleaning completion	0 days	Fri 30-11-18	Fri 30-11-18
Flushing of TG Oil	0 days	Tue 30-10-18	Tue 30-10-18
Blowing Completion	0 days	Thu 31-01-19	Thu 31-01-19
Test of CW System	0 days	Fri 15-02-19	Fri 15-02-19
Test of CHP System	0 days	Fri 15-03-19	Fri 15-03-19
Test of AHP System	0 days	Fri 15-03-19	Fri 15-03-19
Synchronisation	0 days	Thu 28-02-19	Thu 28-02-19
Load Operation	0 days	Sun 31-03-19	Sun 31-03-19



NABINAGAR POWER GENERATING CO. PVT LTD

(A joint venture of NTPC & BSPGCL Limited)

Nabinagar STPP (3x660MW) : **Action Plan for achieving new emission standards**

- NTPC vide letter dated 06/04/2017 (Copy enclosed for ready reference-**Annex-2.1**) from Director (Technical) to CEA/MOP/MOEF&CC had requested for implementation period of 4-5 years for FGD and De-NO_x systems for all existing and under construction units (including Nabinagar STPP Stage-I (3 X 660 MW)).
- However, the following action has been taken for meeting new emission standards,

Sn	Parameter	Limit	Action Plan
1	Particular Matter (PM)	30mg/Nm ³	The ESP has already been designed with efficiency 99.97% to meet the Prescribed Limit of 30mg/Nm ³ .
2	Sulphur Dioxides (So ₂)	100mg/Nm ³	<p>In order to meet the revised SO₂ environmental norm limit of 100 mg/Nm³, Wet Limestone based Flue Gas Sulphurisation (FGD) system shall be installed at Nabinagar STPP Stage-I (3 X 660 MW) units of NTPC. The status of the implementation of FGD for Nabinagar STPP Stage-I (3 X 660 MW) is as below:</p> <ul style="list-style-type: none"> • FGD Package NIT: Done on 30/06/2017 • Bid Opening scheduled on 30/11/2017 • Award expected by 31/03/2018. • Implementation period for FGD is about 30 months for first unit followed by 3 months interval for subsequent units each. <p>Further, it may also be noted that in the 36th Eastern Region Power Committee (ERPC) meeting held in September 2017, it was deliberated to freeze the implementation of FGD for all power plants in Eastern Region by December 2022. (Copy of MOM Item No. B7 extract of ERPC meeting enclosed for ready reference-Annex-2.2).</p>
3	Oxides of Nitrogen (Nox)	100mg/Nm ³	NTPC vide letter dated 06/04/2017 from Director(Technical) to CEA/MOP/MOEF&CC had also requested that since no available De-NO _x technologies are proven for high ash Indian Coals (to meet the revised NO _x environmental norm limit of 100 mg/Nm ³) and hence, NTPC is carrying out Pilot Test for technologies like Selective

Annex-2



NABINAGAR POWER GENERATING CO. PVT LTD

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			Catalyst Reduction (SCR) and SNCR at various NTPC operating stations with world-reputed De-NO _x system suppliers and based on the Pilot test results (expected by June 2018), NTPC will take action for implementing the De-NO _x systems.
4	Mercury	0.03mg/Nm ³	The existing design Shall met the prescribed limit.
5	Water Consumption	2.5m ³ /Mwh	The water system and effluent system has been redesigned to meet the requirement.
6	Zero Liquid discharge		The revised water system diagram is enclosed as Annex-2.3.



एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)

NTPC Limited
(A Govt. of India Enterprise)

केन्द्रीय कार्यालय/Corporate Centre

Date: 06th April 2017

To,
Member (Thermal),
Central Electricity Authority,
Sewa Bhawan, R. K. Puram
New Delhi.

Subject: - Time extension for all existing as well as under construction units in order to meet the revised environmental norms as per Environment (protection) Amendment Rules, 2015

Dear Sir,

This is with reference to new environmental norms notified by MOEF & CC on 07th December 2015. The impact of new environmental norms were analysed by NTPC and a representation indicating various issues pertaining to implementation of new Environmental norms was sent to CEA, MOP & MOEF&CC vide letter dated 26/02/2016 (**Annexure-I**). MOP vide their letter dated 04/06/2016 (**Annexure-II**) had also taken up these issues with MOEF & CC with request to re-visit the notification dated 07/12/2015. Further, these issues and requests of NTPC were also deliberated in various meetings conducted by CEA (on 21/10/2016 & 13/12/2016) for phasing plan for implementation of new norms. Further these issues were also discussed during MOP-JS-Thermal review on 01/12/2016 and MOP -Secretary (Power) review on 03/01/2017. However, the response on the issues are still awaited.

It may also be noted that a Committee with CEA as Convenor had been constituted by MOP vide letter dated 20/09/2016 (**Annexure-III**) to finalise the "Phasing Plan" for implementation of new environmental norms with a schedule for submission of report by CEA by March 2017. Various meetings conducted by CEA with NTPC, other utilities and suppliers have already been held and phasing plan is being worked out.

As per the notification, units coming after 1st Jan 2017, for which environment clearances are already accorded and are under construction also have to meet new Environmental Norms, when it gets commissioned. Hence, hardly any time is being given for installation of De SOx and DE-NOx system in these units.


As on date, there are 35 units in NTPC Group, totalling approximately 22 GW (list enclosed at **Annexure-IV**), which have been under construction, commissioned after 1st Jan'17 and likely to be commissioned in near future require installation of De-SOx system and De-NOx system to meet new Environmental norms.

At the outset, NTPC principally agrees to Install DeSOx system and De-NOx system in these units but no available De-NOx technologies are proven for high ash Indian coal. Hence, NTPC is carrying out pilot test at various stations with the world reputed DE-NOx system suppliers and based on the pilot test result, NTPC will implement the De-NOx system in these units.

However, starting April'17, we are coming out with tenders for FGD system. It may be noted that time required for retrofitting of De-SOx system in one unit is around 32 months after placement of order and wherever stations have more number of units, implementation time may go up to 4-5 yrs. Further, shut down period for a single unit for retrofitting of DeSOx system is around 4 to 6 months and availability of such long shut down will depend on regional requirement of power. Similarly, implementation time required for retrofitting of De-NOx system in one unit is around 30-32 months and if number of units are more, the time required may go up to 4-5yrs.

NTPC would like to reiterate its commitment to meet environment norms and would like to request you to allow a time extension for its all existing and as well as under construction units for a period of 5-10 years for implementation of DeSOx and De-NOx system because of various aspects as mentioned above.

Yours faithfully,


(A K Jha)

Director-Technical

Copy for kind information to:

- (i) **Secretary (Power)**
Shram Shakti Bhawan,
Ministry of Power, New Delhi
- (ii) **Secretary (MOEF &CC)**
Indira Paryavaran Bhawan,
MOEF&CC, Jorbagh, New Delhi.
- (iii) **Chairman- CEA**
Central Electricity Authority,
Sewa Bhawan, R. K.Puram, New Delhi.



भारत सरकार
विद्युत मंत्रालय
पूर्वी क्षेत्रीय विद्युत समिति
GOVERNMENT OF INDIA
MINISTRY OF POWER
EASTERN REGIONAL POWER COMMITTEE



No. ERPC/TCC&Committee/14/2017/2692-2757

Date: 30th October 2017

To:

1. Members of Eastern Regional Power Committee.
2. Members of TCC.

Subject: Minutes of 36th ERPC & TCC Meetings.

Sir,

The minutes of the 36th TCC & ERPC meetings held on 13th & 14th September 2017 respectively at Bhubaneswar have been issued and uploaded on www.erpc.gov.in. As per the decision of ERPC distribution of hard copies of the Minutes of Meeting has been discontinued as a Go Green initiative.

Yours faithfully,

(A.K. Bandyopadhyay)
Member Secretary

Encl. As above.

Deliberation in the TCC meeting

POSOCO stressed upon optimum utilisation of hydro generation during peak hours. Study reveals that there is a scope of improving the generation during peak hours by OHPC generators Upper Kolab, Indravati, Burla, Chiplima and Rengali.

ERLDC presented the performance of hydro generators of Eastern Region for peak availability against their installed capacity for 2016 and 2017. During presentation, ERLDC highlighted that there is a scope of improvement for Burla, Chiplima and Rengali.

POSOCO advised OHPC/GRIDCO that they may purchase power from exchange during off peak hours as the price is low and conserve the water during off peak hours. The same water may be used for peak hour generation and there will be a huge commercial advantage.

OHPC informed that they are declaring their availability to SLDC, Odisha and SLDC is scheduling the OHPC generators. However, they will try to run their units upto the available capacity during peak hours subjected to volume of the water to be released for irrigation, which is being decided by their irrigation department. OHPC added that some of their units are under major R & M work and take 2 years to bring into service.

ERPC may advise.

Deliberation in the ERPC meeting

Members felt that in due course ER constituents may start adopting recommendations of the committee. It was also stressed that the flexibility of hydro generators must be used for peak support and variation in renewable power.

ITEM NO. B7:	Phasing Plan for implementation of new Environmental Norms for Thermal Plants, issued by MOEF&CC
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A committee headed by Chairperson, CEA was constituted by Ministry of Power, Govt. of India vide Office Order No. FU-1/2015-IPC dated 21.09.2016 for preparing a phasing plan for implementation of new environmental norms issued by MoEF & CC in December 2015 regards to SPM, Sox & NOx emissions. The 1st & 2nd meeting of committee was held on 21.10.2016 and 13.12.2016 respectively.

A special meeting was convened on 13.02.2017 at ERPC, Kolkata wherein a quarter wise tentative plan for installation of FGD has been prepared for the thermal units of Eastern Region and the same was updated in consultation with all ER constituents.

Further the thermal units, which are not in a position to install FGDs due to non-availability of space and would not be able to meet new SOx emission norms are required to be phased out. In the meeting held on 14th March 2017, between Secretary (P) and Secretary (MoEF&CC), it was decided that CEA would prepare the plan for phasing out the aforesaid. Subsequently, a special meeting was convened on 24.03.2017 at ERPC, Kolkata and a phasing out plan has been prepared in consultation with all utilities including RLDCs.

The Region wise lists of phasing plan for implementation of new environmental norms were prepared by RPC's and consolidated by TPE&CC Division, CEA. Some further modification in the phasing plan was also carried out as per communication from the respective State Governments

/PSUs/IPP's. The phasing plan was submitted to MoP which was further submitted to MoEF& CC. The existing phasing plan for Eastern Region is placed at Annexure-B25.

Subsequently, A meeting between Secretary (Power) and Secretary (MoEF& CC) was held at New Delhi on 01.09.2017 to discuss the implementation plan. It was decided that implementation plan must be restricted to 31.12.2022.

Therefore, members may go through the existing phasing plan for their respective plants/units for ESP Upgradation and FGD installation in consultation with concerned Power utilities, SLDC & POSOCO and freeze the implementation plan within 31.12.2022. The revised unit-wise phasing plan as per the above timeline may be forwarded to ERPC (e-mail: mserpc-power@nic.in) at the earliest for finalization of the phasing plan.

Members may update and finalize.

Deliberation in the TCC meeting

CE, CEA informed that the existing phasing plan needs to be revised to complete the implementation plan within 31.12.2022. He informed that as per the phasing plan of ER 17 units of NTPC, 8 units of DVC and one unit of CESC is falling beyond 31.12.2022 and need to be revised. The revised plan should be submitted within a week as per directive of ministry.

Further, he pointed that as per WBPDCCL some of the units in its control area are complying the new norms of SO_x. He informed that without FGD it is not possible to achieve the new standard and suggested WBPDCCL to reassure.

GRIDCO informed that NTPC may explore for FGD installation for TTPS units as they have already invested 800 cr.

NTPC informed that the units of Stage-I of TTPS have completed 48/49 years and units of Stage-II have completed 34/35 years as on January, 2017. Till 2014 expenditure of around Rs. 678 crore has been made towards R&M and the station is operating under extended life of around 20 years i.e. upto 2021.

TVNL informed that they have already planned for FGD installation for TVNL units and tendering is in progress. TVNL requested CEA to revise the phasing out plan.

TCC advised TVNL to submit the FGD installation plan within a week.

Further, TCC advised all the constituents to submit the revised plan by accommodating respective generators within threshold date 31.12.22 within a week to CEA with a copy to ERPC otherwise CEA may revise and finalise the phasing plan.

ERPC may guide.

Deliberation in the ERPC meeting

ERPC felt that the matter has been deliberated in detail and Govt of India has passed a Law (new Environmental norms) which we all have to abide by. Therefore, the matter may be discussed by the constituents with their respective generators bilaterally and communicate their revised plan to CEA within the timeline.

ERPC advised all the constituents to adhere to the timeline and furnish their revised phasing plan by accommodating respective generators within threshold date 31.12.2022 to CEA.

Further, ERPC also advised CEA to revise and finalise the phasing plan to complete the implementation plan within 31.12.2022 in case of the revised plan not received within the above timeline.

ITEM NO. B8:	Restoration of 400kV Patna-Kishanganj D/c line—additional agenda by Powergrid
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Powergrid informed that 400kV Patna-Kishanganj D/c line was under massive breakdown due to devastating floods in Ganga and Kankai rivers during July and August 2017 with collapse of several towers and pile foundation. The line has been successfully restored on 4th August 2017 after casting two pile foundations one each in Ganga and Kankai rivers, repair of one massively damaged pile foundation and erection of new towers at various locations.

TCC may note.

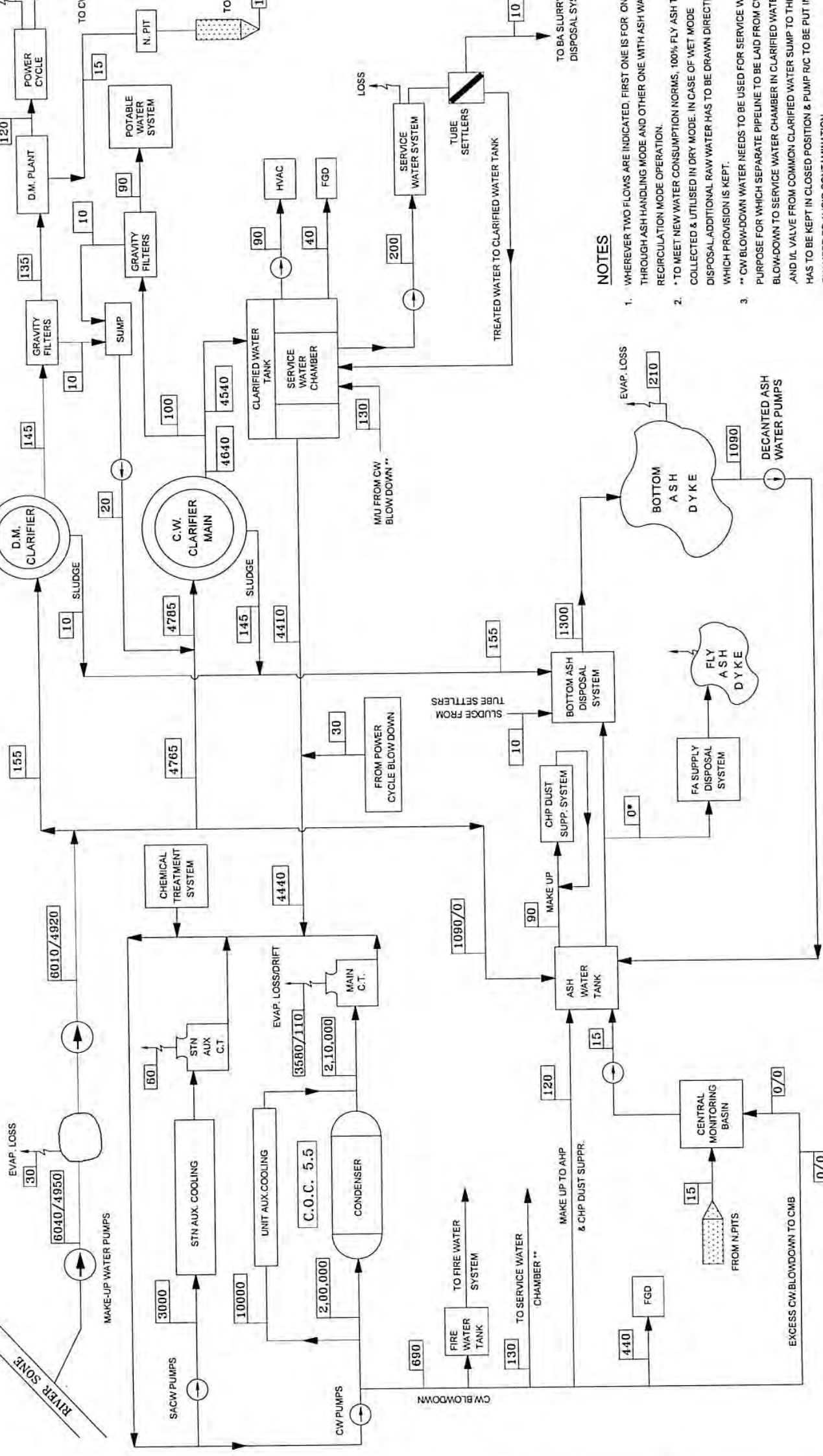
Deliberation in the TCC meeting

TCC appreciated the efforts of Powergrid for restoring the line in record minimum time during unfavourable conditions.

ERPC may note.

Deliberation in the ERPC meeting

ERPC noted.



NOTES

- WHEREVER TWO FLOWS ARE INDICATED, FIRST ONE IS FOR ON THROUGH ASH HANDLING MODE AND OTHER ONE WITH ASH W RECIRCULATION MODE OPERATION.
- * TO MEET NEW WATER CONSUMPTION NORMS, 100% FLY ASH COLLECTED & UTILISED IN DRY MODE. IN CASE OF WET MODE DISPOSAL ADDITIONAL RAW WATER HAS TO BE DRAWN DIRECT WHICH PROVISION IS KEPT.
- ** CW BLOW-DOWN WATER NEEDS TO BE USED FOR SERVICE W PURPOSE FOR WHICH SEPARATE PIPELINE TO BE LAID FROM C BLOW-DOWN TO SERVICE WATER CHAMBER IN CLARIFIED W AND IL VALVE FROM COMMON CLARIFIED WATER SUMP TO TH HAS TO BE KEPT IN CLOSED POSITION & PUMP RIC TO BE PUT IN CHAMBER TO AVOID CONTAMINATION.
- IN VIEW OF INCREASE IN COC TO 5.5 (APPROX) CW CHEMICAL T TO BE ADOPTED ACCORDINGLY.

ANNEX-3

ACTION PLAN FOR COMMUNITY DEVELOPMENT PROGRAMME FOR NABINAGAR STPP (3X660MW)					
Amount In Crores					
Sl.No	Strategically important Activities	BUDGET	Action Plan		
			Work awarded (Executed/ Under Execution)	Work to be awarded (In FY 2017-18)	Balance Work to be awarded in FY 2018-19 & FY 2019-20
1.0	Education - Saath Parhe Saath Barhe	2	3	4	5
1.1	Schools : Distribution of Computers & peripherals,Furniture,Sweaters, School bags with stationeries, Tat-Patti,LED Bulb for school going childrens/electrification/ Ceiling/pedestal fan, Sewing/ knitting/Embroidery machines, Game kits, play equipment, installation of jhoola etc.	5.00	0.53	2.13	2.34
1.2	Sponsoring/Organizing various relevant skill development/vocational trainings/ Reimbursement of tuition fee to PAPs wards etc. for youths/students of vicinity villages/Scholarship to meritorious students/Award to meritorious student of PAVs/Support to meritorious & BPL students for higher study/support to sporty etc				
	(A) Total Amount (In Cr.)	5.00	0.53	2.13	2.34
2.0	Health -Sankalp Arogyam				
2.1	Organising Blood donation camps/ health checkup camps/ Eye checkup camps/ Maternity checkup & awareness camps/ veterinary checkup & awareness camp with free medicine and other requisites for vicinity villages, Mobile health services, cataract camp etc.	6.70	1.95	2.58	2.17
2.2	Distribution of items for blind students like Brailer,Hearing aid/machines to deaf students/villagers,Tri-cycles to physically challenged etc. - Sambal				
2.4	Additional PHC construction at Meh & Ankorha with medical equipment				
	(B) Total Amount (In Cr.)	6.70	1.95	2.58	2.17
3.0	Drinking Water - Jal Dhara				
3.1	Installation of Hand Pumps/over head tanks/boring/water ATMs/RO System in Project Affected Villages/schools and other strategic locations/disbursement of water filter among the students of project affected schools etc (Revised)	1.50	0.06	0.55	0.89
	© Total Amount (In Cr.)	1.50	0.06	0.55	0.89
4.0	SANITATION - Nirmal				
1	Construction of Girls/Boys Toilets in Schools/ of Project Affected Villages/ or any location subject to prime requirement Distribution of Dustbin, Construction of common toilets at PAVs with water facility.	0.35	0.00	0.15	0.20
	(D) Total Amount (In Cr.)	0.35	0.00	0.15	0.20
5.0	INFRASTRUCTURE - Bunyadi				
1	Internal Village PCC Road with drainage system, Solar light, construction of school building/additional class rooms & boundary wall, land filling of school campus, play ground, Construction of Power sub-Station at village kundwa (deposit work thru SBPDCL Patna),Construction Community building/Panchayat Bhawan, street lights at PAVs subject ownership of villagers & elected members, Construction of Kala Manch/ Construction of stadium, Construction of Ghat, Irrigation system etc	37.95	15.43	11.17	11.36
	(E) Total Amount (In Cr.)	37.95	15.43	11.17	11.36
6.0	WELFARE & CULTURAL ACTIVITIES				
1	Supporting/organizing sports/Cultural events on festivals and other occasions/support to BPL families of Project affected villages/Support to NGO/CBO for welfare activities at project affected villages.	1.30	0.13	0.50	0.67
	(F) Total Amount (In Cr.)	1.30	0.13	0.50	0.67
6.0	Others				
6.1	Tree plantation, activities under Swacch Bharat/ VidhyalayaAbhiyan and other Environment related activities.	0.30	0.06	0.10	0.14
	(G) Total Amount (In Cr.)	0.30	0.06	0.10	0.14
7.0	Community Development Programme for Surrounding area of District	10.40	2.08	0.99	7.33
	(H) Total Amount (In Cr.)	10.40	2.08	0.99	7.33
	CD (A to H) Grand Total Amount (In Cr)	63.50	20.24	18.17	25.09

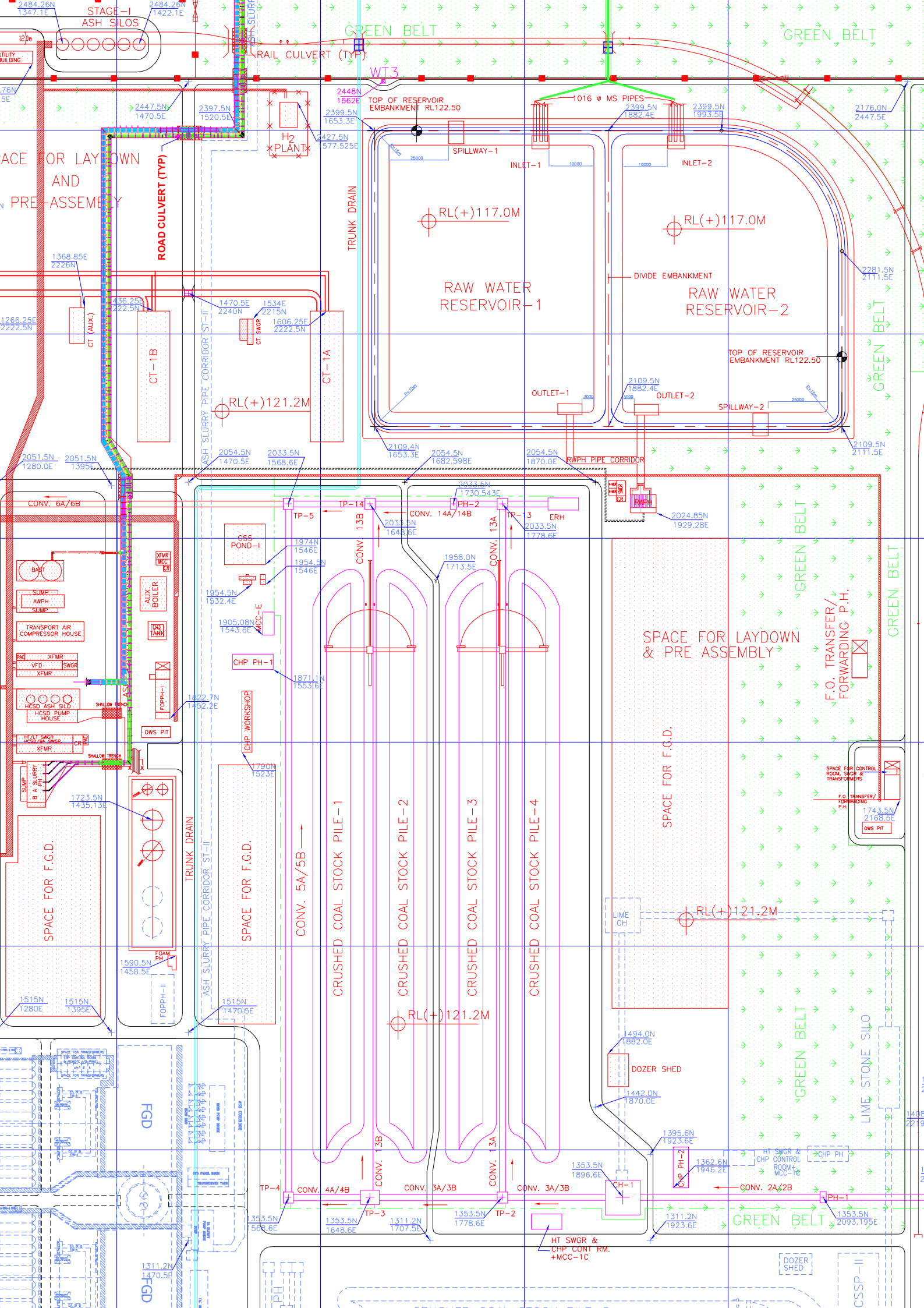


NABINAGAR POWER GENERATING CO. PVT LTD

(A joint venture of NTPC & BSPGCL Limited)

Nabinagar STPP (3x660MW) : **Action Plan for Green belt Development**

- As directed, The revised layout plan complying 33% as Greenbelt area has been finalized as enclosed at **Annex-4.1.**
- The land for Green belt development was available to NPGC during 2016 onwards.
- Further, In the Year 2016, Tree plantation for 10000 Trees was awarded to Forest Department, Aurangabad, Bihar (**Ref Annex-4.2**) and Forest Department has started the work on the occasion of World Environment day.
- In the Year 2017, Tree plantation for further 10000 Tree were agreed and awarded to Forest Department, Aurangabad (**Ref-Annex-4.3**)
- Further, request for offer for further 30000 Tree plantation were requested to Forest Dept, Aurangabad. The offer has been submitted (**Ref Annex-4.4**) , the work shall be awarded to forest department within month.
- Further plantation of around 1,00,000 trees with the aim to cover at lease 180 Acres of land till Mar,2019 has been decided and action to execute the same has been initiated for completion the same by Mar, 2019. (**Refer Annex-4.5**)
- In addition, tree plantation in township and other area has been done on various occasion including work environment day.





नबीनगर पॉवर जेनरेटिंग कम्पनी प्रा० लि०

(एनटीपीसी लिमिटेड एवं बिहार स्टेट पॉवर जेनरेशन कम्पनी का संयुक्त उपक्रम)

Nabinagar Power Generating Company Pvt. Ltd

(A Joint Venture of NTPC Ltd. & Bihar State Power Generation Co. Ltd.)

Ref. No. 0370-1617-CS-FQA-00488

Date: 08.07.2016

To,
M/s Divisional Forest Officer,
Maharajganj, Aurangabad
Gov. of Bihar
Pin:-824101

Contact Person- Mr.A.Verma
Mobile: + 91 8986153536

SUB:Letter of Award no.C&M/0503 dtd. 08.07.2016 for the work of "Afforestation (Plantation and maintenance of saplings) by Forest Dept., Govt. of Bihar, Distt.-Aurangabad" Bihar.

Dear Sir(s),

This is with reference to your offer letter dated 30.06.2016 submitted for the subject work.

We are pleased to award the subject work on you with the following terms & conditions:

1	Bill of Quantity & Rates	As per Annexure-I
2	Scope of Work & Package Specific T&C of Contract shall be as per Annexure-II.	
3	Total Contract value	Rs. 50,76,625/-
4	Completion period	21 (Twenty one) months.
5	Price Basis	Shall be firm till the completion of the contract except for item Sl. No.8 &10 which shall be revised as per Cl.No.2.1 of additional terms & condition.
6	Defect Liability Period	Not Applicable.
7	Taxes & Duties	In case applicable, shall be paid extra.
8	Engineer in-charge	AGM(TS) or his Authorised representative
9	Date of Start	As per Instruction of Engineer-In-Charge
10	Payment terms	As per Clause No. 03 of special terms & conditions
11	TDS	Not Applicable
12	SD	Not Applicable
13	Contract Agreement	Not Applicable.
14	General Conditions of Contract for Civil work of NPGC to the extent relevant shall form integral part of the Contract.	

मुख्यालय : विद्युत भवन प्रथम मंजिल, बेली रोड, पटना-800 001 फ़ोन : 0612-2504010, फ़ैक्स : 0612-2504098

Head Quarter: First Floor, Vidyut Bhawan II, Bailey Road, Patna-800 001 Ph: 0612-2504010, Fax: 0612-2504098

केन्द्रीय कार्यालय : एन टी पी सी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003. ई-मेल: cnmnpgc@gmail.com

Corporate Centre: NTPC Bhawan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003, E-mail: cnmnpgc@gmail.com



नबीनगर पॉवर जेनरेटिंग कम्पनी प्रा० लि०

(एनटीपीसी लिमिटेड एवं बिहार स्टेट पॉवर जेनरेशन कम्पनी का संयुक्त उपक्रम)

Nabinagar Power Generating Company Pvt. Ltd

(A Joint Venture of NTPC Ltd. & Bihar State Power Generation Co. Ltd.)

Ref. No. 0370-1617-CS-FQA-00488

Date: 08.07.2016

15	Acknowledgement	This award letter is being issued to you in duplicate. We request you to return the duplicate copy of this award Letter duly signed and stamped, as a proof of your acknowledgement and unconditional acceptance.
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Thanking you,

Yours faithfully,

एन. चट्टोपाध्याय / S. Chattopadhyay
एन पी जी सी / AGM (C&M)
एन.पी.जी.सी./N.P.G.C.
शिवपुर, जिला-औरंगाबाद, बिहार
Shivpur, Dist.: Aurangabad, Bihar

Encls.

- | | | |
|----|-------------|---|
| 1. | Annexure-I | : BOQ |
| 2. | Annexure-II | : Scope of Work and Package specific T&C of Contract. |
| 3. | Annexure-A | : Observance Of Labour Laws & Contractor's Responsibility |

Copy To:

1. Engineer - in- Charge: AGM (TS)
2. AGM (FIN)
3. Office Copy

Contact Person: Sh. V.K.Agarwal, Sr. Manager(FQA) ,
Mob. 97781440960

Bill of Quantity

Annexure-I

क्र.सं०	कार्य का विवरण	ईकाई	छर प्रति (रूपयेमें)	परिमाण	कुल व्यय
	प्रथम वर्ष (2016-17)				
1.	सर्वे सीमांकन (05 मानव दिवस)	प्रति हेक्टेयर	1030.00	7.4 हेक्टेयर	7622=00
2.	जे०सी० बी० मशीन से स्थल पर लगे 400 पौधों की जड़ों को कुल 10 घंटे में निकालना एवं मिट्टी भराई	प्रति घंटा	1000.00	10 घंटे	10000=00
3.	कड़ी मृदा पीट खोदाई (45 C.M x 45 C.M x 45 C.M) कुल 10000 पीट	प्रति पीट	18.107	10000 पीट	181070=00
4.	मिट्टी का कय परिवहन 32150 CFT (10.75 रूपया प्रति CFT)	प्रति CFT	10.75	32150 CFT	345613=00
5.	वृक्षारोपन हेतु गोबर का कय	प्रति पौधा	Rs. 25/-	10000 पौधा	250000=00
6.	5-6 फिट साइज पौधों का कय परिवहन इत्यादि 20% अतिरिक्त के साथ	प्रति पौधा	150=00	12000 पौधा	1800000=00
7.	वनरोपण कार्य (10 ग्राम डी० ए० पी० एवं सात ग्राम मिट्टी एवं गोबर के मिश्रण के साथ 5-6 फिट	22.28	10000 पौधा	10000	222800=00
8.	प्रथम वर्ष 500 पौधों के लगातार कोड़ने निकौनी मृत पौधों का बदलाव तथा 09 माह जुलाई से मार्च तक पटवन हेतु एक मजदूर 26*206*1=48204 प्रति 500 पौधों, रसायनिक खाद एवं पटवन सामग्री, ठेला		96.408	10000 पौधा	964080=00
9.	विविध साइन बोर्ड			01 बोर्ड	10000=00
				कुल	3791185=00
10.	वित्तीय वर्ष (2017-18) 500 पौधों के दो कोड़नी मृत पौधों का बदलाव तथा 12 माह (अप्रैल से मार्च) तक 26*206*12=64272/-		128.544	10000	1285440=00
				Grand Total	5076625=00





नवीनगर पावर जेनरेटिंग कम्पनी प्रा० लि०

(एनटीपीसी लिमिटेड एवं बिहार स्टेट पावर जेनरेशन कम्पनी का संयुक्त उपक्रम)

Nabinagar Power Generating Company Pvt. Ltd

(A Joint Venture of NTPC Ltd & Bihar State Power Generation Co. Ltd.)

Ref. No. 0370-1718-CS-FQA-00623

Date: 23.08.2017

To,
M/s Divisional Forest Officer
Maharajganj Aurangabad
Govt. of Bihar
Pin-824101

Contact Person: Sh. Sunil Kumar (DFO)
Mob- +91 8986153475

SUB: Letter of Award no. C&M/0627dtd. 23.08.2017 for the work of Afforestation (plantation and maintenance of saplings) by Forest Dept., Govt. of Bihar, Dist.- Aurangabad.

Dear Sir,

This is with reference to your consent letter for the work ref. no. 1045 dated 10.06.2017.

We are pleased to award the subject work on you with the following terms & conditions:

1	Bill of Quantity & Rate	As per Annexure-I
2	Scope of Work & Terms & Conditions shall be as per Annexure-II	
3	Total Contract Value	Rs.53,75,891/-
4	Completion Period	2017-2018 for afforestation work & 2018-19 for Maintenance work.
5	Defect Liability Period	Not Applicable
6	Date of Start	As per direction of EIC.
7	Taxes & Duties	In Case applicable, shall be paid extra
8	Engineer-In-Charge	AGM (TS) or his Authorized representative
9	Payment Terms	As per Clause No. 3 of Special terms & condition
10	TDS	Not Applicable
11	SD	Not Applicable
12	Price Basis	Firm till contract period
13	Contract Agreement	Not Applicable
14	Rest of the terms & conditions as per tender terms & conditions	
15	General Conditions of Contract for Civil Works of NPGC to the extent relevant shall form integral part of the contract.	

मुख्यालय : विद्युत भवन II, प्रथम मंजिल, बेली रोड, पटना-800 001। फोन: 0612-2504010, फैक्स : 0612-2504098

Head Quarter: First Floor, Vidyut Bhawan II, Bailey Road, Patna-800 001 Ph: 0612-2504010, Fax: 0612-2504098

केन्द्रीय कार्यालय : एन टी पी सी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीटयुनल एरिया, लोधी रोड, नई दिल्ली-110 003, ई-मेल: cnmnpge@gmail.com

Corporate Centre: NTPC Bhawan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003, E-mail: cnmnpge@gmail.com



नबीनगर पॉवर जेनरेटिंग कम्पनी प्रा० लि०

(एनटीपीसी लिमिटेड एवं बिहार स्टेट पॉवर जेनरेशन कम्पनी का संयुक्त उपक्रम)

Nabinagar Power Generating Company Pvt. Ltd

(A Joint Venture of NTPC Ltd. & Bihar State Power Generation Co. Ltd.)

Ref. No. 0370-1718-CS-FQA-00623

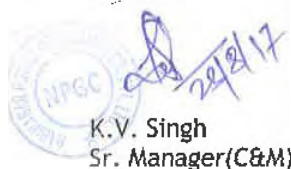
Date: 23.08.2017

16 Acknowledgement

This award letter is being issued to you in duplicate. We request you to return the duplicate copy of this award letter duly signed and stamped, as a proof of your acknowledgement and unconditional acceptance.

Thanking you,

For and on behalf of NPGCPL,


K.V. Singh
Sr. Manager(C&M)

Encls.

1. Annexure-I : BOQ & Rate Analysis
2. Annexure -II : Scope of Work & terms & conditions

Copy To:

1. Engineer - in- Charge: AGM (TS)
2. AGM (FIN)
3. Office Copy

Contact Person: - Sh. V.K Agarwal, Sr. Mgr. (FQA), NPGC Pvt. Ltd., Mob. No. +91 9771440960

मुख्यालय : विद्युत भवन II, प्रथम मंजिल, बैली रोड, पटना-800 001 फोन: 0612-2504010, फैक्स : 0612-2504098

Head Quarter: First Floor, Vidyut Bhawan II, Bailey Road, Patna-800 001 Ph: 0612-2504010, Fax: 0612-2504098

केन्द्रीय कार्यालय : एन टी पी सी भवन, स्कोप कॉम्प्लेक्स, 7 इंस्टीटयुशनल एरिया, लोदी रोड, नई दिल्ली-110 003, ई-मेल: cnmnpgc@gmail.com

Corporate Centre: NTPC Bhawan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003, E-mail: cnmnpgc@gmail.com



कार्यालय :- वन प्रमण्डल पदाधिकारी, औरंगाबाद वन प्रमण्डल, औरंगाबाद।

वन भवन, कर्मा रोड, औरंगाबाद (बिहार), Mob. No- 8986153475 email- aurangabaddfo@gmail.com..

पत्र संख्या /

प्रेषक,

सुनील कुमार, भा0व0से0
वन प्रमण्डल पदाधिकारी,
औरंगाबाद वन प्रमण्डल।

सेवा में,

वन संरक्षक,
गया अंचल, गया।

औरंगाबाद, दिनांक /

विषय :-

एन0पी0जी0सी0पी0एल0, शिवनपुर, औरंगाबाद कैम्प में वृक्षारोपण वर्ष
2017-18 अग्रिम एवं 2018-19 समापन कार्य के संबंध में। संशोधित पत्र।

प्रसंग :-

इस कार्यालय के पत्रांक 1979 दिनांक 16.11.2017

महाशय,

उपर्युक्त विषय के आलोक में एन0पी0जी0सी0एल0, शिवनपुर, औरंगाबाद कैम्पस में, वृक्षारोपण के साथ-साथ स्थल पर पटवन हेतु समरसेबुल/पलम्बर सामग्री का क्रय कर वृक्षारोपण को सफल बनाने हेतु अनुरोध किया गया है। प्रयोक्ता एजेन्सी के द्वारा आवश्यकतानुसार बोरिंग की व्यवस्था स्वयं की जाएगी।

अतः एन0पी0जी0सी0पी0एल0, शिवनपुर, औरंगाबाद के अनुरोध पर 30000 पौधों के वृक्षारोपण हेतु प्राक्कलन तैयार किया गया है जो निम्नवत् है :-

क्र0 सं0	वनरोपण स्थल का नाम	प्रक्षेत्र का नाम	नेट रकबा पौधों की संख्या	प्राक्कलित राशि						
1	2	3	4	अग्रिम- कार्य 2017- 18	समापन कार्य 2018-19	प्रथम सम्पोषण कार्य 2019-20	द्वितीय सम्पोषण I कार्य 2020 -21	तृतीय सम्पोषण कार्य 2021- 22	कुल राशि	अभ्युक्ति
1	NPGCPL शिवनपुर औरंगाबाद	महाराजगंज	12 हे0/ 30000 पौधा	785808	3637726	347656	351930	88330	5211450	वृक्षारोपण का प्राक्कलन।
2	-do-	महाराजगंज		604350	0	0	0	0	604350	पलम्बर सामग्री एवं अन्य
कुल				1390158	3637726	347656	351930	88330	5815800	

उक्त प्राक्कलन को प्रतिहस्ताक्षरित कर तकनिकी स्वीकृति प्रदान करने हेतु अग्रसारित किया जा रहा है। अतः अनुरोध है कि तकनिकी स्वीकृति प्रदान करते हुए अग्रेतर कार्रवाई करने की कृपा की जाय, जिससे कि प्रयोक्ता एजेन्सी से समयानुसार राशि प्राप्त कर वनरोपण का अग्रिम कार्य शीघ्र प्रारम्भ किया जा सके। वनरोपण कार्य निम्नलिखित शर्तों के साथ ही स्वीकार होगा :-

- 1) वित्तीय वर्ष 2017-18 हेतु स्वीकृत राशि एकमुश्त रूप में तकनिकी स्वीकृति प्राप्त होने के उपरान्त प्रयोक्ता एजेन्सी द्वारा अविलम्ब इस कार्यालय में जमा कराना होगा।
- 2) वर्ष 2018-19, 2019-20, 2020-21 एवं 2021-22 हेतु स्वीकृत राशि वित्तीय वर्ष के प्रारम्भ में अप्रैल माह में एकमुश्त रूप में प्रयोक्ता एजेन्सी के द्वारा इस कार्यालय में जमा कराना होगा।
- 3) समयान्तर में मजदूरी दर एवं सामग्री में सम्भावित वृद्धि के आलोक में तदनुपरान्त संशोधित प्राक्कलन के अनुसार राशि प्रयोक्ता एजेन्सी के द्वारा देय होगी।
- 4) वनरोपण कार्य पूर्णतः मौसमी कार्य है। अतः इसको किसी भी परिस्थिति में निर्धारित अवधि में ही किया जाना तकनिकी रूप से बाध्यकारी है। प्रयोक्ता एजेन्सी से यह आशा किया जाता है कि स्थल की उपलब्धता एवं इस पर समसामयिक कार्य में पूर्ण सहयोग प्रदान किया जाएगा। ऐसा न होने पर वनरोपण की सफलता संदिग्ध हो सकता है, जिसके लिए वन विभाग की कोई जिम्मेवारी नहीं होगी।

अनु० :- यथोक्त।

विश्वास भाजन

ह०/-

वन प्रमण्डल पदाधिकारी,
औरंगाबाद वन प्रमण्डल।


ज्ञाप संख्या/1993...../ औरंगाबाद, दिनांक 22.11.2017./

प्रतिलिपि :- Addl. General Manager (Tech. Services), Nabinagar Power Generating Company, Shivanpur, P.O. - Ankorha, Distt- Aurangabad, Bihar- 824303 को इस पत्र के साथ प्राक्कलन तैयार कर भेजा जा रहा है। साथ ही साथ अनुरोध है कि क्रमशः वर्ष 2017-18 के लिए :-

(1) वृक्षारोपण के अग्रिम कार्य की राशि	-	785808.00
(2) पटवन हेतु पलम्बर सामग्री क्रय एवं अन्य राशि	-	604350.00
कुल -		1390158.00

अतः अनुरोध है कि वन संरक्षक, गया अचल, गया से तकनीकी स्वीकृति प्राप्त होने के उपरान्त वित्तीय वर्ष 2017-18 में कुल प्राक्कलित राशि 1390158 शीघ्रताशीघ्र एकमुस्त उपलब्ध कराई जाय ताकि ससमय कार्य प्रारम्भ किया जा सके तथा वित्तीय वर्ष 2018-19 में वृक्षारोपण हेतु राशि अप्रैल 2018 में तथा वित्तीय वर्ष 2019-20, 2020-21 एवं 2021-22 में ससमय वित्तीय वर्ष के माह अप्रैल में राशि उपलब्ध कराई जाए ताकि ससमय वृक्षारोपण कार्य को सफल बनाते हुए आपको हस्तगत कराया जा सके।

अतः अनुरोध है कि उक्ता ससमय राशि उपलब्ध नहीं कराई जाती है तो कार्य करना सम्भव नहीं हो सकेगा।


वन प्रमण्डल पदाधिकारी,
औरंगाबाद वन प्रमण्डल।

**एन0पी0जी0सी0एल0, शिवनपुर, औरंगाबाद कैम्पस में वृक्षारोपण का पटवन के तैयारी हेतु
पलम्बर सामग्री का क्रय एवं स्थल पर प्रतिस्थापन। वर्ष 2017-2018**


क्र० सं०	कार्य का विवरण	इकाई	मानव दिवस	मजदूरी	सामग्री	प्राक्कलित राशि
1	सिचाई हेतु स्थल पर बोरिंग उपलब्ध होने के उपरान्त बोरिंग में समरसेबुल का क्रय करना	1	0	0	13500	13500
2	पाईप टाटा 02 इन्च का 2200 फीट का क्रय करना	4210	0	0	130	547300
3	पटवन हेतु विछाये गये पाईप में नल का क्रय करना	20	0	0	140	2800
4	पटवन हेतु रबर पाईप 15 लेन्थ का क्रय करना	15	0	0	950	14250
5	पटवन में उपयोग करने हेतु पवार झरना हेतु 15 झरना का क्रय करना	15	0	0	900	13500
6	पलम्बर सामग्री को फिटिंग हेतु पलम्बर मिस्त्री 02 को 04 दिन का मजदूरी प्रतिमिस्त्री 1000.00	1000	8	8000	0	8000
7	सामग्री का परिवहन				5000	5000
	कुल					604350

(रु० छः लाख चार हजार तीन सौ पच्चास मात्र।)

समर्पित

तकनीकी स्वीकृत

वन क्षेत्र पदाधिकारी,
महाराजगंज वन प्रमंडल।


वन प्रमंडल पदाधिकारी,
औरंगाबाद वन प्रमंडल।

औरंगाबाद वन प्रमण्डल।

एन0पी0जी0सी0पी0एल0, शिवनपुर, औरंगाबाद कैम्पस में वृक्षारोपण का प्राक्कलन।

- | | | | |
|-----|-------------------------|-----|--|
| 1) | प्रमण्डल का नाम | : | औरंगाबाद वन प्रमण्डल |
| 2) | वन क्षेत्र का नाम | : | महाराजगंज वन प्रक्षेत्र। |
| 3) | वन परिसर का नाम | : | नवीनगर |
| 4) | जिला का नाम | : | औरंगाबाद |
| 5) | प्रखण्ड का नाम | : | नवीनगर |
| 6) | वन (वनरोपण स्थल) का नाम | : | एन0पी0जी0सी0पी0एल0, कैम्पस, नवीनगर |
| 7) | क्षेत्रफल ग्राँस (हे0) | : | 12 |
| 8) | क्षेत्रफल नेट (हे0) | : | 12 |
| 9) | स्पेसिंग | : | 2 मीटर x 2 मीटर |
| 10) | कुल पौधों की संख्या | : | 30000 पौधा |
| 11) | मजदूरी दर | 242 | रु0 प्रति मा0दि0/पौधों की संख्या 2500 पौधा प्रति हे0 |

Item No	कार्य का विवरण	इकाई	आवश्यक (मा0दि0)	कुल मजदूरी	सामग्री	कुल सामग्री	कुल व्यय होने वाली राशि
1	2	3	4	5	6	7	8
वृक्षारोपण अग्रिम कार्य (वर्ष 2017-18)							
1.1	सर्वे सीमांकन-वृक्षारोपण क्षेत्र का सर्वे सीमांकन एवं अस्थायी बाउण्ड्री पीलरो का निर्माण-Soil Profile पीट की खुदाई सहित। (12 हे0)	हे0	3	8712	25	300	9012
1.2.2	झाड़ी सफाई- अत्यन्त धनी झाड़ी 12 हे0		24	69696	0	0	69696
1.8	मृदा कार्य-पीट का आकार 0.45mx0.45mx0.45 पीट का ALIGNMENT निर्धारित आकार में पीट की खोदाई						
1.8.2	कड़ी मृदा 30000 पौधा	प्रति 1000 गड़दा	85.00	617100	0	0	617100
	बाहरी मिट्टी भराई- 60 ट्रैक्टर प्रति ट्रैक्टर- 1500 रु0	60	0	0	1500	90000	90000
	कुल खर्च			695508		90300	785808
वृक्षारोपण समापन कार्य (वर्ष 2018-19)							
	पौधा का क्रय 3-5 फीट का पौधा प्रति पौधा 85 रु0 (30000 पौधा का 20 प्रतिशत 6000 पौधा अर्थात् 36000 पौधा का क्रय)	36000	0	0	85	3060000	3060000

1.12	पौधारोपण कार्य (10 ग्राम डी0ए0पी0 एवं कीटनाशक प्रति पौधों के साथ) क्रय किये गये पौधों को स्थाई जगह रखने के उपरान्त पौधों की दुलाई एवं पौधारोपण कार्य । पौधारोपण-20 मानव दिवस पौधा का परिवहन -06 मानव दिवस। डी0ए0पी0 कीटनाशक नीम की खल्ली सहित एवं विविध (30000 पौधे)	प्रति 1000 पौधे	32	232320	450	13500	245820
1.13	कोड़नी एवं निकौनी (मृत पौधों के बदलाव के साथ) उर्वरक 10 ग्राम प्रति पौध Dimeter 6' में धास की सफाई एवं 3' Dimeter में कोड़ाई कर मिट्टी को हलका करना एवं मृत पौधों का प्रतिस्थापना करना।						
1.13.2	दो कोड़नी-निकौनी						
1.13.2.2	कड़ी मृदा 30000 गड़ड़ा (प्रथम-21, द्वितीय -14)	प्रति 1000 गड़ड़ा	35	254100	300	9000	263100
1.15	समापन वर्ष में सुरक्षा (अगस्त से मार्च) सुरक्षा व्यवस्था						
1.15.2	0-30 हे0 तक		243	58806	0	0	58806
1.21.1	समापन वर्ष	प्रति वृक्षारोपण	0	0	10000	10000	10000
	कुल खर्च			545226		3092500	3637726
वृक्षारोपण प्रथम सम्पोषण कार्य (वर्ष 2019-20)							
1.16	दो कोड़नी-निकौनी (मृत पौधों के बदलाव)						
1.16.2	कड़ी मृदा 30000 पौधे (प्रथम-21, द्वितीय-14)	प्रति 1000 गड़ड़ा	35	254100	150	4500	258600
1.17	प्रथम वर्ष सम्पोषण में सुरक्षा (अप्रैल से मार्च) सुरक्षा व्यवस्था						
1.17.2	0-30 हे0 तक		365	88330	0	0	88330
	बाँस जाली खुटा धेरान का मरम्मत		3	726	0	0	726
	कुल खर्च			343156	150	4500	347656
वृक्षारोपण द्वितीय सम्पोषण कार्य (वर्ष 2020-21)							
1.18	दो कोड़नी-निकौनी						
1.18.2	कड़ी मृदा 30000 पौधे	प्रति 1000 गड़ड़ा	35	254100	150	4500	258600
1.19	सुरक्षा व्यवस्था = द्वितीय वर्ष सम्पोषण में सुरक्षा (अप्रैल से मार्च) सुरक्षा व्यवस्था						
1.19.3	0-30 हे0 तक		365	88330	0	0	88330
1.21.3	द्वितीय सम्पोषण वर्ष	प्रति	0	0	5000	5000	5000
	कुल खर्च			342430		9500	351930

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वृक्षारोपण तृतीय सम्पोषण कार्य (वर्ष 2021-22)							
1.2	तृतीय वर्ष सम्पोषण में सुरक्षा (अप्रैल से मार्च) सुरक्षा व्यवस्था						
1.20.3	0-30 हे० तक		365	88330	0	0	88330
	कुल खर्च			88330	0	0	88330
	कुल खर्च			2014650		3196800	5211450

सारांश :-

वर्ष	कार्य	मजदूरी	सामग्री	कुल
2017-18	वृक्षारोपण का अग्रिम कार्य	695508	90300	785808
2018-19	वृक्षारोपण का समापन कार्य	545226	3092500	3637726
2019-20	वृक्षारोपण का प्रथम सम्पोषण कार्य	343156	4500	347656
2020-21	वृक्षारोपण का द्वितीय सम्पोषण कार्य	342430	9500	351930
2021-22	वृक्षारोपण का तृतीय सम्पोषण कार्य	88330	0	88330
	कुल	2014650	3196800	5211450

नोट :-

1) 17-18	वृक्षारोपण को पटवन हेतु पर पलम्बर सामग्री का क्रय एवं मजदूरी संबंधी प्राक्कलन की राशि (प्राक्कलन संलग्न)			604350
	कुल राशि			5815800

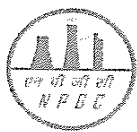
(रु० अनठावन लाख पन्द्रह हजार आठ सौ मात्र)

समर्पित

प्रतिहस्ताक्षरित

वनो के क्षेत्र पदाधिकारी,
महाराजगंज वन प्रक्षेत्र।

वन प्रमण्डल पदाधिकारी,
औरंगाबाद वन प्रमण्डल।



Nabinagar Power Generating Company Pvt. Ltd.

(A Joint Venture between NTPC Ltd. & BSPGC.)

Nabinagar Super Thermal Power Project (3 x 660 MW)

Record notes of MRM for HORTICULTURE

Chaired by: - Sh.M.P.Shinha,CEO(NPGC)

Date:-25.11.17

List of Participants enclosed

SI No	Description	Status as on 25.11.17	Decision in Review meeting
1	Plantation of 30000 saplings by Forest Department.	Proposal received from DFO and initiated recently. Will be sent shortly to C&M for award.	Proposal for Two Lakhs mass tree transplantation from DFO to be taken. 180 Acres of land to be covered up to March, 2019
2	Nursery proposal of landscaping and development. Guest house and shopping center, road sides have been included in Pmt. T/s.	Under process.	To be initiated immediately and a small proposal to be initiated for GH inauguration.
3	Annual Horticulture maintenance proposal for township and plant.	To be distributed in four parts for award to PAP's. Rework, fresh proposal.	Fresh proposal to be initiated in parts so that it could be awarded to PAP's
4	In lieu of annual horticulture maintenance contract short term proposal for payment of gardeners for six months.	Proposal sent to C&M. Date of start- 04.12.2017.	To be awarded by C&M up to 04.12.2017
5	Fencing of Green belt, Nursery, Amusement park and Lake park. New area adjacent to Orchard for World Environment day-2018.	Fencing to be done by CCD.	No fencing required in green belt.
6	Proposal for Rashi Grah garden, Gulab Vatika and Medicinal garden, Herbal park.	Under process.	To be initiated soon
7	Proposal for enabling Township Horticulture for Field Hostel, B type and C type Qrs.(Two no's parks)	In finance for Vetting.	To be done immediately.



Nabinagar Power Generating Co. Pvt. Ltd.
(A Joint Venture between NTPC Ltd. & BSPGC.)
Nabinagar Super Thermal Power Project(3x660MW)

NAME OF MEETING MRM of TS Review

Packages Name:-

Agency Name:

Chaired by - Sh. M.P. Sinha, CEO (NPNC)

Date: 25/11/17

List of Participants:-

Sr. No	Name	Designation	Signature
1			
2			
3	<u>Ravi Kumar</u>	<u>Dy. Mgr (PES)</u>	<u>Ravi</u>
4	<u>Ravindra Kumar</u>	<u>Dy. Mgr (F&A)</u>	<u>Ravi</u>
5	<u>U.K. Agrawal</u>	<u>Sr. Mgr (F&A)</u>	<u>U.K. Agrawal</u>
6	<u>AJEET KUMAR</u>	<u>Dy. Mgr. (F&A)</u>	<u>Aj. K.</u>
7	<u>Raj Kumar Vishwakarma</u>	<u>Engr (IT)</u>	<u>Raj</u>
8	<u>N.K. Sisodia</u>	<u>DE M (IT)</u>	<u>N.K. Sisodia</u>
9	<u>S. N. Pandey</u>	<u>DGM (F&A)</u>	<u>S.N.</u>
10	<u>Ramesh Kumar</u>	<u>AGM (P&S)</u>	<u>Ramesh</u>
11	<u>Om Prakash</u>	<u>AGM (M&E)</u>	<u>Om</u>
12	<u>Sanjay Sinha</u>	<u>AGM (CS)</u>	<u>Sanjay</u>
13	<u>CK Thakur</u>	<u>AGM (F&A)</u>	<u>CK</u>
14	<u>HARJIT SINGH</u>	<u>AGM (HR)</u>	<u>Harjit</u>
15	<u>Manoj Kumar Singh</u>	<u>AGM (F&A)</u>	<u>Manoj</u>
16	<u>V.M. Tripathi</u>	<u>AGM (C&M)</u>	<u>V.M.</u>
17	<u>K.V. Singh</u>	<u>Sr. Mgr (C&M)</u>	<u>K.V.</u>
18	<u>B.C. Pandey</u>	<u>AGM (CAI)</u>	<u>B.C.</u>
19	<u>Navdeep Srivastava</u>	<u>Asst. Manager (C&M)</u>	<u>Navdeep</u>
20	<u>Aniruddha</u>	<u>Asst Manager (PES)</u>	<u>Aniruddha</u>
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