ENVIRONMENT ACTION PLAN FOR Eastern Region PROJECTS -NTPC Ltd.

SI.No.	Developer	Project	Sector	State	Region	Unit No	Dt. of Comm(as per CEA)	Capacity MW (as on31.12.16)	New limit- SPM	ESP R&M status	New Sox limit	FGD compln.	New Nox limit	DeNox completion plan	CC conversion	Remarks
1	NTPC	Farakka STPS	Central	W.B	ER	1	01.Jän.86	200	100	In progress,2018-19	600		600	NR	NE	
2	NTPC	Farakka STPS	Central	W.B	ER	2	24.Dez.86	200	100	In progress,2018-19	600		600	NR	NE	Linit 1 F may be allowed for
3	NTPC	Farakka STPS	Central	W.B	ER	3	06.Aug.87	200	100	In progress,2018-19	600		600	NR	NE	Unit 1-5 may be allowed for
4	NTPC	Farakka STPS	Central	W.B	ER	4	25.Sep.92	500	100	2020-21	200		600	NR	NE	conversion to flexible operation
5	NTPC	Farakka STPS	Central	W.B	ER	5	16.Feb.94	500	100	2020-21	200		600	NR	NE	
6	NTPC	Kahalgaon STPS	Central	Bihar	ER	1	31.Mär.92	210	100	2020-21	600		600	NE	NR	
7	NTPC	Kahalgaon STPS	Central	Bihar	ER	2	17.Mär.94	210	100	2020-21	600		600	NE	NR	Unit 1-4 may be allowed for
8	NTPC	Kahalgaon STPS	Central	Bihar	ER	3	24.Mär.95	210	100	2021-22	600		600	NE	NR	conversion to flexible operation
9	NTPC	Kahalgaon STPS	Central	Bihar	ER	4	18.Mär.96	210	100	2022-23	600		600	NE	NR	
10	NTPC	Kahalgaon STPS	Central	Bihar	ER	5	31.Mär.07	500	50	NR	200	2022-23	300	2022-23	NR	Will be made compliant with env.
11	NTPC	Kahalgaon STPS	Central	Bihar	ER	6	16.Mär.08	500	50	NR	200	2023-24	300	2023-24	NR	Norms
																Will be made compliant with env.
12	NTPC	Nabinagar TPP	Central	Bihar	ER	1	2016	250	50	NR	600	2022-23	300	2023-24		Norms
13	NTPC	Talcher(Old)TPS	Central	Odisha	ER	1	17.Dez.67	60	50	Completed	600		600	NE	NR	
14	NTPC	Talcher(Old)TPS	Central	Odisha	ER	2	28.Mär.68	60	50	Completed	600		600	NE	NR	Unit 1-6 to be phased out after
15	NTPC	Talcher(Old)TPS	Central	Odisha	ER	3	11.Jul.68	60	50	Completed	600		600	NE	NR	commissioning of Stg III (2 x 660
16	NTPC	Talcher(Old)TPS	Central	Odisha	ER	4	11.Apr.69	60	50	Completed	600		600	NE	NR	MW),likely by-2023-24
17	NTPC	Talcher(Old)TPS	Central	Odisha	ER	5	24.Mär.82	110	50	Completed	600		600	NE	NR	ivivv),iikely by-2023-24
18	NTPC	Talcher(Old)TPS	Central	Odisha	ER	6	24.Mär.83	110	50	Completed	600		600	NE	NR	
19	NTPC	Talcher STPS	Central	Odisha	ER	1	19.Feb.95	500	50	In progress,2018-19	200		600	NR	NR	
20	NTPC	Talcher STPS	Central	Odisha	ER	2	27.Mär.96	500	50	In progress,2018-19	200		600	NR	NR	Unit 1-4 may be allowed for
21	NTPC	Talcher STPS	Central	Odisha	ER	3	04.Jän.03	500	50	In progress,2018-19	200		600	NR	NR	conversion to flexible operation
22	NTPC	Talcher STPS	Central	Odisha	ER	4	25.Okt.03	500	50	In progress,2018-19	200		600	NR	NR	
23	NTPC	Talcher STPS	Central	Odisha	ER	5	13.Mai.04	500	50	In progress,2019-20	200	2023-24	300	2023-24	NR	Will be made compliant with env.
24	NTPC	Talcher STPS	Central	Odisha	ER	6	06.Feb.05	500	50	In progress,2019-20	200	2023-24	300	2023-24	NR	Norms
25	NTPC & Bihar	Muzaffarpur TPS	Central	Bihar	ER	1		110	100	Completed	600		600	NR	NR	Proposal to be finalised in
26	NTPC & Bihar	Muzaffarpur TPS	Central	Bihar	ER	2		110	100	Completed	600		600	NR	NR	consultation with Govt. of Bihar

Explanatory Note

As per environment action plan approved by management, no new environment related action is envisaged for the units commissioned before 2003.

Mercury emission shall be controlled by ESP/ESP R&M as well as planned FGD installation for units as applicable.

Old units in each region have been identified for flexible operation to meet the grid requirments to avoid rendering of expenditure made towards R&M of ESPs as infructuous to the extent possible.

<u>LEGEND</u>

- * NR Not Required
- * NE Not Envisaged
- * CC Closed Cycle



DAMODAR VALLEY CORPORATION

OFFICE OF THE CHIEF ENGINEER (OS&U)

DVC TOWERS: VIP ROAD Kolkata – 700 054

No. EDCON/OS&U/ Misc./494

Date: 29th, March, 2017

To The Member Secretary, ERPC, 14, Golf Club Road, Tollygunje, Kolkata – 700 033.

Sub.: Phasing out of thermal units of DVC towards implementation of new environmental norms issued by MoEF & CC – reg.

Ref. No.: (i) ERPC/MS/2016-17 dated 21st March 2017.

(ii) Special meeting on 24.03.2017 at ERPC's office, Kolkata.

Dear Sir,

As scheduled, DVC representatives attended the special meeting at ERPC, Kolkata on 24/03/2017 for discussion towards Phasing out Plan of Chandrapura TPS U#1-3, Durgapur TPS U#3&4, Bokaro B TPS U#1&2 that are having no space for installation of FGDs to meet new SOx emission norms. It may kindly be recalled that in the meeting another supplementary list was presented wherein Mejia TPS U#1-6, Chandrapura TPS U#7&8 and Bokaro B TPS U#3 have been included under the title of "THERMAL STATION UNITS WHERE NO SPACE FOR FGD" and DVC was requested to submit its views immediately on this score.

In this regard, following is submitted:

Chandrapura TPS Unit # 1 (130MW) & Durgapur TPS Unit# 3 (140MW) have already been decommissioned and these capacities have been deleted from National Grid by CEA subsequently.

Furthermore, it has been decided to de-commission Chanbrapura TPS Unit # 2& 3 (130 MW units) by middle of 2018 after suitable augmentation of the transmission network ensuring grid stability.

(Contd.)

As regards other thermal units enlisted, having no space for FGD installation, our submission is as follows:

- **Grid Instability**: Closure of these unit will pose severe instability not only in DVC grid in the state of Jharkhand and West Bengal but also affect whole Eastern Regional grid.
- Consumer inconvenience: DVC's existing consumers in valley area will starve for power supply due to inadequate generating capacity as well as system constraints. There will be severe load-generation imbalance in DVC grid.

Moreover, Chandrapura TPS Unit #7&8 (2X250MW) and Mejia TPS U#5&6 (2X250MW) are export oriented units catering beneficiaries specially Delhi and MP with long term agreement.

 All the above units were commissioned complying the then statutory norms and Environmental Clearance (EC). Units are located adjacent to each other and there is no space for installation of FGD. Moreover, in ECs there were no stipulation for keeping space for installation of FGD.

This is for your kind information.

Yours faithfully

CE-I, OS&U ,DVC

Copy:

The Chief Engineer (GM), Grid Mgt. Division, CEA, Sewa Bhawan, R. K. Puram, Sector-I, New Delhi-110 066. Kind Attn. Shri Dinesh Chandra

SUBMISSION OF REPORT AND PLAN FOR IMPLEMENTATION MOEF NOTIFICATION DTD. 07/12/2015 REGARDING WBPDCL'S UNITS OF DIFFERENT POWER STATIONS.

- 1. WBPDCL have 5 power stations at location Kolaghat, Bandel, Santaldih, Bakreswar and Sagardighi.
- 2. Capacity, COD, Age as on March, 2017 are as below:

Power Station	Unit No.	Capacity (MW)	Age as on March 2017 (Yrs)	Present Sox level	Availability of space for FGD	Remarks			
	U#1	210	27	S/D	Space available	R & M of ESP planned from Feb'19 to Oct'19. Order placed.			
	U#2	210	31	1023	Space available	R & M of ESP planned from Apr'18 to Jan'19. Order placed			
	U#3	210	33	887	Space available	R & M of ESP planned from Jul'17 to Mar'18. Order placed			
KTPS	U#4	210	22	463	Space available	Renovation of ESP through OEM M/s GE ALSTOM in FY 2017-18. Order will be placed to OEM within 31/03/17			
	U#5	210	26	637	Space available	Renovation of ESP through OEM M/s BHEL in FY 2017-18. Order will be placed to OEM within 31/03/17			
	U#6	210	23	731	Space available	Renovation of ESP through OEM M/s BHEL in FY 2017-18. Order will be placed to OEM within 31/03/17			
	U#1	210	17	621	To be ascertained				
	U#2	210	16	598	To be ascertained	Almost complying MOEF norms .			
BkTPP -	U#3	210	16	569	To be ascertained	RLA study along with requirement of need based R&M will be taken			
DKITI	U#4	210	08	561	To be ascertained	up.			
	U#5 210		08	617	To be ascertained				
	U#1	60	52	718	To be ascertained	Renovation of ESP along with need			
	U#2	60	52	617	To be ascertained	based R&M has been planned for avoiding station operation with only one unit i.e. BTPS # 5, for			
	U#3	60	51	616	To be ascertained	compliance of MOEF norms and for future to shift operation to balance			
BTPS	U#4	60	51	S/D	To be ascertained	with solar power generation .			
5.13	U#5	215	34	754	To be ascertained	As per SERC & CEA permission, EER & M Completed on 24/11/2015,. Life extension expected 15 yrs from 2016. Cost involvement for EERM is approximate Rs. 650 Crore			

	Unit 1 to 4	4X 120			Space available	Phased out due to techno commercial consideration . Ref: CEA/PLG/PDM545/2016 dtd-21/12/2016		
STPS	U#5	250	1/04/2009	650	Space available	Almost complying MOEE norms		
	U#6	250	30/09/2011	050	Space available	Almost complying MOEF norms .		
	U#1	300	06/09/2008	570	Space available			
	U#2	300	06/11/2008	573	Space available	Complying MOFF norms		
SGTPP	U#3	500	1/07/2016	573	Space available	Complying MOEF norms .		
	U#4	500	20/12/2016	570	Space available			

2. Opinion in respect of phasing out of different units of WBPDCL:

- a) BTPS & KTPS both stations are located at load centre points. Phasing out of the units will be difficult for load balancing.
- b) BTPS Unit 5 phasing out due to age may not be considered due to completion of EER & M with PG Test & also with MOEF compliance. Effective life extension after EER & M is more than 15 years. Commissioning date should be considered as 24/11/2015 in stead of 23/03/1983.
- c) As per direction of SERC Islanding operation at BTPS will be implemented very shortly. Islanding operation with only one unit will not be effective. So support of small unit operation is extremely necessary for islanding operation with DCS backup. Beside this one station with one unit availability & operation may face different problems due to non-availability of auxiliary steam from adjacent units, if phased out. After RLA study of BTPS units, it is found, the health of the units are satisfactory and sustainable, reliable generation complying MOEF norms is expected for another 10 years after R & M work auxiliary system and major overhauling of Boiler-Turbine-Generator. The small units of BTPS are also effective in consideration with load balance source from solar & thermal.
- d) FGD will be installed wherever space is available provided Sox level is found to be higher than the prescribed norms.
- e) Where FGD space is not available, coal of low sulphur content from captive coal mines will be used to maintain Sox level. Winning of coal from captive coal mines is expected to start soon.

This email has been blocked from loading remote images.

Subject: Reply i.r.t. Phasing out of Thermal Power Plant Units of The Durgapur Projects Ltd., Durgapur

To: mserpc_power@nic.in, mserpc-power@nic.in

Cc: cegmcea1@gmail.com, "GM (O&M)" <pkbanerjee@wbpdcl.co.in>, "DGM(Env)" <rnganguly.dpl@gmail.com>, "tkpaldpl <>, <" <>, tkpaldpl@gmail.com, UTPAL PAL <ukpaldpl@gmail.com>,

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Debasis Mazumder PDCL <debasis410@yahoo.co.in>

Date: 03/29/17 12:16 PM

From: JNANADA SANKAR MANDAL <plandppsdpl@gmail.com>

Ref - 1. Letter No. ERPC / MS/ 2016 - 17 / Fax Msg No - 168 dtd 21.03.2017 2. Meeting on 24.03.2017 conducted by ERPC

Respected Sir,

This is to confirm that space has been provided for FGDs for Unit No.s 7 (300MW) & 8 (250MW) in line with the directives of MoEF & CC, Govt. of India.

Further to above, enough space is also available for construction of FGD for Unit No. 6 (110MW).

Thanking you & Regards (P. K. Banerjee) General Manager (O&M) The Durgapur Projects Limited

image.pngDPPS, The Durgapur Projects Limited, Durgapur-713201,W.B.

Phone +91 9434706559;

1 of 1 29/03/17, 3:04 PM