

ANNEXURE - A

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ASH HANDLING SYSTEMS DESIGNED, SUPPLIED AND COMMISSIONED BY DC INDUSTRIAL PLANT SERVICES PRIVATE LIMITED

SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
01	Kothagudem Thermal Power Station (1 x 67.5 MW)	Andhra Pradesh State Electricity Board (Thru' BHEL)	1268046 Dt.10.09.86	Commissioned in December, 1987	Fly ash handling for ESP thru' feeder ejector. The slurry is transported thru' trench upto slurry sump.
02	Bathinda Captive Power Plant (1 x 210 T/hr. Boiler)	National Fertilizers Limited	PND/PUR/ 224576.20- 001/ 80/558 Dt.10.04.87	Commissioned in April, 1988	Bottom ash is accumulated in water impounded hopper and disposed upto slurry sump by jet pump. Fly ash is conveyed by Hydro-pneumatic vacuum system. Slurry is formed in Air separator and then conveyed upto sump. The slurry pump and M.S. piping (400 NB) are provided for slurry disposal. Complete water system is provided. The slurry pump is having capacity of 1000 cu.m/hr. per series with discharge pressure for 5 kms. piping.
03	Panipat Captive Power Plant (1 x 210 T/Hr Boiler)	National Fertilizers Limited	SPS/PB/006/ 2041 Dt.15.09.87	Commissioned in July, 1988	Bottom ash is collected in water impounded hopper and transported intermittently by jet pump upto slurry sump. Fly ash is conveyed by Hydro-pneumatic vacuum system upto sump via air separator. The slurry is disposed upto Dyke by slurry pump and 350 NB M.S. pipe (6 kms). The slurry pump capacity is 700 cu. m/hr. per series.



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
04	Nellore Thermal Power Station (1 x 35 MW)	Andhra Pradesh State Electricity Board	Telex LOI Nos.39 & 40 Dt.28.01.88	Commissioned in December, 1990	Bottom ash system thru' jet pump upto sump. Fly ash system thru' hydro-pneumatic vacuum system upto silo thru' dust collector for dry collection. Silo is provided with rotary unloader for truck unloading and alternatively wet disposal upto sump. The slurry is disposed upto dyke (2 kms) by slurry pump and C.I. piping. Complete civil work is also being provided.
05	Southern Generating Station (2 x 67.5 MW)	CESC Limited	PRS/PTJM: 3284 Dt.13.05.88	Both the units commissioned in April, 1991	Bottom ash system comprises water impounded hopper, crusher, jet pump and piping upto disposal area. Fly ash system (one row of ESP) upto silo thru' pressure conveying (Nuvafeeder). Silo unloading thru' rotary unloader. Complete water system is also provided.
06	Kolaghat TPS, Stage -II, (3 x 210 MW)	West Bengal Power Development Corporation Ltd.	Telex Dt.20.06.88	Unit # 5 Commissioned in 1991 Unit # 6 Commissioned in 1993 Unit # 4 Commissioned in 1994	Turnkey supply (including design, engineering, manufacturing, procurement, testing, commissioning and performance testing) of bottom ash and fly ash handling system. Bottom ash comprises of water- impounded hopper, crusher, jet pump and piping upto sump. Complete design engineering of total plant. Fly ash thru' vacuum system (3 x 45 TPH) thru' water exhauster. Slurry is formed in air separator & conveyed upto sump. The slurry is disposed by slurry pump and 400 NB MS piping upto disposal area.



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07	Gandhinagar Thermal Power Station (2 x 210 MW)	C/o. Gujarat Electricity Board	PEU:GEB: GN:ASH:8/59 Dt.11.09.88	Both the Units commissioned in 1992	Complete engineering and supply of bottom ash system comprising of water impounded hopper (W-type), crusher, jet pump and piping upto slurry sump.
08	Shriram Fertilizers & Chemicals Captive Power Plant (1 x 35 MW)	SFC, Kota	PR/PP/35 MW/ESP/ FAH/8039 Dt.15.09.88	Successfully commissioned in January, 1989	Fly ash system for new ESP is provided with Hydro-pneumatic vacuum conveying thru' water exhauster. Slurry is conveyed upto the sump by gravity thru' MS piping. Water pump and piping are also provided.
09	Tata Iron & Steel Company Limited Power Plant (1 x 30 MW)	Tata Iron & Steel Company Limited	PEU:TISCO: 30:NW: PHASE-1: AHS:775 & 940 Dt.08.12.88	Ash plant for all boilers commissioned & operating successfully	Fly ash handling system thru' pneumatic vacuum conveying. Vacuum produced by mechanical exhausters. Ash is collected in Silo thru' dust collector. Rotary unloader is provided for truck unloading.
10	Jalkheri Power Station (1 x 10 MW) FBC Boiler	Punjab State Electricity Board (Thru' BHEL)	PW/PE/EPX/ RST-769/ KKS & PW/ PE/EPX.RST- 798 Both Dt. 08.05.89	Commissioned in January, 1992	Bed ash removal thru' jet pumping system. Fly ash removal thru' Hydro-pneumatic vacuum conveying system with water recirculation system. This is the first project in India with Rice straw ash system.
11	Kathara & Moonidih Captive Power Plants (2 x 10 MW) FBC Boiler	Coal India Limited (Thru' BHEL)	TOI Dt.05.07.89	Commissioned in September, 1992	Bed ash thru' Jet pumping system (90 TPH). Fly ash thru' Hydro-pneumatic Vacuum conveying (40 TPH per stream). Once thru' direct disposal.



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
12	Farakka Super Thermal Power Project (3 x 210 MW)	National Thermal Power Corporation Limited	LOI Dt.05.03.90	Commissioned in December, 1991	Bottom ash modification system including supply of slurry pumps and disposal piping including civil works.
13	Mejia Thermal Power Station Unit # 1, 2 & 3 (3 x 210 MW)	Damodar Valley Corporation	L.O.A Dt.14.04.90	Unit # 1 commissioned in March, 1996 Unit # 2 commissioned in March, 1998 Unit # 3 commissioned in March, 1999	Bottom ash system thru' jet pumping with 'W' type water impounded hopper. Fly ash with Eductor assisted sluicing. Disposal of slurry thru' slurry pumping facility having Basalt Lined Disposal pipes.
14	Zhejiang Provincial Electric Power Bureau, Beilungang Thermal Power Station, China, Ash Handling System (1 x 600 MW)	United Conveyor Corporation, U.S.A.	Order Dt.12.06.90	Commissioned	Detail design and engineering.
15	Nellore Thermal Power Station (1 x 30 MW)	Andhra Pradesh State Electricity Board	Telex Dt.10.08.90	Commissioned in February, 1991	Economiser and mud drum ash system.



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
16	Southern Generating Station, (2 x 67.5 MW)	CESC Limited	LOI No. PRS: PRJM:13549 Dt.06.11.90	Commissioned in March'93. This plant is working as a trend setter for pollution free Ash Handling System.	Bottom ash water recirculation system complete with dewatering bins, settling tank and surge tank facility. This is a ZERO pollution plant for bottom ash removal.
17	Santaldih Thermal Power Station (1 x 120 MW)	West Bengal State Electricity Board	-	Commissioned in January, 1992	Vacuum conveying system for new ESP installation for hooking up with existing vacuum system for Fly Ash removal.
18	Bathinda Captive Power Plant (180T/Hr. Boiler)	National Fertilizers Limited	LOI No.NFD/ FAH/BP/19 Dt.24.02.92	Commissioned in June, 1993	Augmentation of fly ash system with Hydro- pneumatic vacuum facility upto air separator. Complete exhauster and fly ash slurry facility is included.
19	Sanjay Gandhi Thermal Power Station, Unit # 1 & 2 (2 x 210 MW)	Madhya Pradesh Electricity Board	2394, 2395, 2396, 2397, 2398 All dated 06.06.1992	Unit #1 commissioned on 07.10.1993 Unit #2 commissioned on 26.05.1994	Bottom ash thru' jet pumps (2 x 60 TPH) upto slurry sump. Fly ash vacuum conveying (2 x 60 TPH) to surge hopper with mechanical exhauster and pressure transportation to silo with provision for 2nd stage pressure transportation to disposal area. The capacity of pressure transportation per pipeline is 120 TPH, which is also the highest in capacity for eventual disposal of fly ash. Total management of ash plant operation including operation, maintenance and spares for two years is covered in the scope. The total package includes entire electrical supply system necessary to meet the demand of ash plant and ancillary services. The entire civil work is also included.



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
20	Kota Thermal Power Station Stage-III (1 x 210 MW)	Rajasthan State Electricity Board	Telegraphic LOI Dt.28.07.92	Plant commissioned in April '94 in a record time	Bottom ash system thru' jet pump (2 x 76 TPH) with W-type water impounded hopper and excen crusher. Fly ash handling system thru' pneumatic vacuum conveying using water exhauster (4 x 37 TPH). Slurry transfer system is thru' 300 NB Cast Iron disposal piping. The complete system for entire ash handling plant and equipment are included alongwith the necessary electrical and civil works.
21	Tata Iron & Steel Company Limited Unit # 4, P.H.# 4 (1 x15 MW)	Tata Iron & Steel Company Limited	LOI Dt.22.09.92	Commissioned in 1993	Bottom ash jet pump system with water impounded hopper with removal capacity of 30 TPH. Fly ash Hydro-sluicing system and slurry pumping. The slurry pumping is with stages having final disposal upto 3 kms. Disposal pipe size : 200 NB.
22	Panipat Captive Power Plant (2 x 210 T/Hr. Boiler)	National Fertilizers Limited	LOI No.NFD/ FAH/BP/19 Dt.24.12.92	Commissioned in July, 1993	Augmentation of fly ash system with Hydro- pneumatic vacuum facility upto air separator. Complete exhauster and fly ash slurry facility is included.



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SL. NO.	PLANT	OWNER	ORDER REF. &	PROJECT STATUS	JOB DESCRIPTION
NO .			DATE		
23	Bandel Thermal Power Station Unit # 1 thru' # 4 (4 x 80 MW)	West Bengal State Electricity Board	L.O.I.s Dt.29.12.92	Unit # 1 thru' 4 Commissioned	Dry fly ash system covering design, manufacturing, supply, civil works, erection and commissioning. The system comprises vacuum pressure combination system upto a local silo (500 Mtrs. away) and further to a brick plant from the silo. All electrical and civil works are also included in the contract. Direct system to brick plant is commissioned in January'95, having 850 Mtrs. conveying distance. Vacuum system commissioned in March'94 and pressure conveying system commissioned in January'95.
24	TISCO Jojobera Captive Power Plant (67.5 MW)	Tata Iron & Steel Company Limited, Jamshedpur	L.O.I.s Dt.13.07.93	Commissioned in January, 1996	Bottom Ash Handling System with water impounded hopper having 60 TPH jet pumping facility thru' slurry sump. Slurry disposal pumping facility along with water and other auxiliaries.
25	Tata Iron & Steel Company Limited Power House # 4 (4 x 15 MW)	- Do -	Orders in June'94	Commissioned in December, 1995	Slurry disposal facility for integrated ash handling system. Optimisation of disposal.
26	Kutch Lignite Thermal Power Station (1 x 75 MW)	Gujarat Electricity Board	LOI Dt.10.08.94	Commissioned in April, 1997	Bottom ash thru' jet pump. Fly ash vacuum system with mechanical exhauster both wet and dry including pressure transportation upto silo and dry unloading from silo.

27	Budge Budge	CESC Limited,	L.O.I.	Unit # 1 commissioned	Bottom	ash	system	comprises	water
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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	Generating Station (2 x 250 MW)	Kolkata	Dt.13.04.95	in January, 1998 Unit # 2 commissioned in March, 1999	impounded hopper, crusher, jet pump (2 x 60 TPH) and piping upto disposal area. Silo unloading thru' Rotary unloader. Complete water system is also provided. Bottom ash recirculation system complete with dewatering bins, settling tank and surge tank facility. This is a ZERO pollution plant for bottom ash removal.
28	Guru Hargobind Thermal Plant, Bathinda (2 x 210 MW)	Punjab State Electricity Board	1415/TH/ GNDTP/MV/ 562/31825 Dt.27.11.95	Unit #1 commissioned in March, 1998 Unit #2 commissioned in September, 1998	Bottom ash system comprises 'W' type water impounded hopper, crusher, jet pump (2 x 60 TPH) and piping (300 NB MS, 2.5 km) upto slurry sump and further transportation by slurry pumps (620 m ³ /hr). Fly ash direct pressure conveying system (2 x 76.5 TPH) below fly ash hoppers upto a silo. Silo unloading both wet and dry.
29	Gandhinagar Thermal Power Station, Unit-V (1 x 210 MW)	Gujarat Electricity Board	PP/GNR.5/ M.III/124/ 1042 Dt.14.05.96	Commissioned in June, 1998	Bottom ash system comprises water impounded hopper, crusher, jet pump (2 x 64 TPH) and piping upto slurry sump. Fly ash vacuum conveying (3 x 43 TPH) upto silo with mechanical exhauster & silo by- pass arrangement through wetting unit, collector tank upto slurry sump. Slurry disposal system upto dyke by slurry pump and 300 NB C.I. pipe (6 kms.).

30	Surat Lignite	Gujarat Industries	L.O.I. Nos.	Unit # 1 & 2	Bed ash	pneumatic	pressure of	conveying
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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	Power Project (2 x 125 MW) CFBC Boiler	Power Company Limited	SLPP/MECH/ AHP/66/01, SLPP/MECH/ AHP/66/02 & SLPP/MECH/ AHP All Dt.07.1.97	commissioned in March, 2000	system (2 x 35 TPH) from each boiler upto silo utilizing conveying blower.
31	Sanjay Gandhi Thermal Power Station,Unit #3&4 (2 x 210 MW)	Madhya Pradesh Electricity Board	CE(PRG)/ SGTPS/1310 /1063 Dt. 31.03.97	Unit #3 commissioned on 01.04.1999 Unit #4 commissioned on 23.11.1999	Bottom ash thru' jet pumps (2 x 60 TPH) upto slurry sump. Fly ash vacuum conveying (2 x 60 TPH) to surge hopper with mechanical exhauster and pressure transportation to silo with provision for 2nd stage pressure transportation to disposal area. The capacity of pressure transportation per pipeline is 120 TPH, which is also the highest in capacity for eventual disposal of fly ash. Total management of ash plant operation including operation, maintenance and spares for two years is covered in the scope. The total package includes entire electrical supply system necessary to meet the demand of ash plant and ancillary services. The entire civil work is also included.

32	Bakreswar	West Bengal	PSER:SCT:	Unit #1 commissioned	Bottom ash water impounded hopper with 2
	Thermal Power	Power	BKW-M145:	in October, 1999	x 60 TPH jet pumping upto slurry sump &



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	Station Unit #1&2 (2 x 210 MW)	Development Corporation Ltd. (Thru' BHEL)	98:WO-I:5819 Dt. 11.03.98 & PSER:SCT: BKW-M145: 98:WO-II: 5873 Dt. 01.04.98	Unit #2 commissioned in July, 2000	slurry pumping. Fly ash vacuum conveying system with mechanical exhauster (3 x 45 TPH) upto surge hopper. Pressure conveying system (1 x 135 TPH) from surge hopper to remote silo (750 M). Silo bypass wet disposal & slurry pumping system (650 m ³ /hr.) along with slurry disposal piping (300 NB MS, 3 x 6 km). Job includes complete mechanical, electrical and civil works including recovery water system.
33	Bakreswar Thermal Power Station, Unit # 3 (1 x 210 MW)	West Bengal Power Development Corporation Ltd. (Thru' BHEL)	PSER:SCT: BKW-M188: 99:LOI-I: 7245 Dt. 22.01.99	Commissioned in May, 2001	Bottom ash water impounded hopper with 2 x 60 TPH jet pumping upto slurry sump & slurry pumping. Fly ash vacuum conveying system with mechanical exhauster (3 x 45 TPH) upto surge hopper. Pressure conveying system (1 x 135 TPH) from surge hopper to remote silo (750 M). Silo bypass wet disposal & slurry pumping system (650 m ³ /hr.) along with slurry disposal piping (300 NB MS, 1 x 6 km). Job includes complete mechanical, electrical and civil works including recovery water system.

34	Korba Super	National Thermal	CS-2120-	Commissioned in	Fly ash pneumatic vacuum conveying (2 x
	Thermal Power	Power Corpn.	162-9-SU-	March, 2001	47.5 TPH) by mechanical vacuum pump. Fly



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	Project, New Ash Handling System Package, Stage-I (3 x 200 MW)	Ltd., Noida	LOA-3724 Dt.03.03.99 & CS-2120- 162-9-ER- LOA-3725 Dt.03.03.99		ash slurrification by wetting unit and subsequent slurry disposal. Job includes complete mechanical, electrical and civil works.
35	Durgapur Projects Ltd. Unit # 1 & 2 (2 x 30 MW), Unit # 3, 4 & 5 (3 x 75 MW)	Durgapur Projects Limited (Thru' PPIL)	PPIL/3238/ SV/GUH/ 1493 Dt.02.09.99	Unit #1 commissioned on 15.03.2001 Unit #2 commissioned on 12.08.2000	Renovation of ash handling system. Bottom ash hydro-sluicing through water impounded hopper & jet pump. Fly ash dry vacuum conveying upto existing silo & bypass wet system through wetting unit & collector tank. Job includes mechanical, electrical and civil works.
36	Talcher Super Thermal Power Project, Stage-II (4 x 500 MW)	National Thermal Power Corpn. Ltd., Noida Order received from BHEL, New Delhi	PW/PE/CMP/T AL/P-065/99 & 066/99 Dt.07.02.2000	Unit #3 commissioned In February, 2003 Unit #4 commissioned In November, 2003 Unit #5 commissioned In July, 2004 Unit #6 commissioned In March, 2005	Bottom ash handling system with water impounded hopper and jet pumping (2 x 90 TPH) upto slurry sump. Slurry pumping (1220 cu.m/hr.), 450 NB 9.52 thk. slurry pipe, water pump and piping, complete in all respect including PLC based control panel.

37	Kothagudem	APGENCO	4790536 E	Unit # 5 -	Bottom ash handling system with water
	Thermal Power	(Thru' BHEL,	Dt.28.03.2000	Commissioned on	impounded hopper and jet pumping (1 x 45
	Station	Ranipet)		13.05.2001	TPH) upto slurry sump for unit # 5 & 6. Fly



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	(4 x 110 MW)			Unit # 6 - Commissioned on 15.08.2002 Unit # 7 - Commissioned on 16.05.2004 Unit # 8 - Commissioned on 09.03.2004	ash sluicing (flushing apparatus) and Slurry pumping upto slurry sump for unit # 5 & 6. Fly ash vacuum conveying, feeder ejector and slurry pumping upto slurry sump for unit #7 & 8. Re-routing of 2.7 km ash slurry piping (300 NB 9.52 thk MS).
38	Vijayawada Thermal Power Station (2 x 210 MW)	APGENCO (Thru' BHEL, Ranipet)	4700412 E Dt.05.06.2001	Unit # 1- commissioned Unit # 2- commissioned in September, 2002	Fly ash vacuum conveying system using hydraulic exhauster and dry collection using dust collector with an emergency hydro sluicing system below ESP hopper (flushing apparatus).
39	Guru Nanak Dev Thermal Plant, Bathinda (4 x 110 MW)	Punjab State Electricity Board	PNRTH/MD-V/ 142-M 19458 Dt.30.08.2001	Commissioned in April, 2004	Dry fly ash collection system (2 x 35 TPH per unit) from existing fly ash header using bag filter separator, vacuum pump upto surge hopper. Dense phase pressure conveying system (1 x 50 TPH per unit) from surge hopper upto remote silo (2 nos. 400 MT). Silo unloading with rotary unloader & dry spout.

40	Guru Gobind	Punjab State	PNRTH/MV/	Commissioned in	Dense phase dry fly ash conveying system
	Singh Super	Electricity Board	362 MA 19761	March, 2004	below ESP hopper to a local silo. Dense
	Thermal Plant,		Dt.05.09.2001		phase pressure conveying system from local
	Ropar				silo to cement plant silo located approx. 1600



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SL.	PLANT	OWNER	ORDER	PROJECT STATUS	JOB DESCRIPTION
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	(6 x 210 MW)				m away from local silo. Silo unloading with rotary unloader & dry spout.
41	Ramagundam Super Thermal Power Project, Stage-III (1 x 500 MW)	National Thermal Power Corpn. Ltd., Noida Order received from BHEL, New Delhi	PW/PE/CMP/ RAM/P-150/01 PW/PE/CMP/ RAM/P-151/01 & PW/PE/CMP/ RAM/P-152/01 All Dt.21.12.2001	Commissioned in October, 2004	 Bottom Ash Handling system with dry BA hopper, scraper conveyor, BA slurry pumping upto combined slurry sump. Fly ash vacuum conveying system with mechanical exhauster (4 x 61 TPH) upto local surge hopper/wetting unit. Pressure conveying system (2 x 122 TPH) from surge hopper to remote silo using screw compressor. Ash Slurry disposal system employing slurry pumps (1220 cu.m/hr.), 450 NB 9.52 thk. slurry piping (3 x 10 km). Associated water pump and piping, blowers, IA compressors etc. PLC based control system for entire Ash Handling Plant.

42	Raichur Thermal	Karnataka Power	LOA No. :	Commissioned on	Bottom ash system with water impounded
	Power Station,	Corporation Ltd.,	TD H5 D5 A/	03.03.2003	hopper and jet pumping (2 x 60 TPH) upto
	Unit - 7	Bangalore	AHS/4708	(in record time)	slurry sump. Fly ash vacuum conveying
	(210 MW)		Dt. 05.01.2002		system (4 x 50 TPH) upto surge hopper for



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
					dry collection, fly ash wet disposal system through wetting unit-collector tank (5 x 40 TPH). Pressure conveying system from surge hopper (2 x 100 TPH) to a remote silo (approximately 1000 M distance), slurry pumping (850 m ³ /hr.) with slurry disposal piping (350 NB MS, 2 x 3 km), water and instrument air system along with complete electrical & civil work on turnkey basis for the complete ash handling system.
43	Gandhinagar Thermal Power Station, Unit - 1 thru' 5 (2 x 120 MW + 3 x 210 MW)	Gujarat Electricity Board (Thru' NASL, New Delhi)	LOI No. : CEG/G-II/ GTPS/ NASL/ 9062 Dt.19.02.2003	Unit # 1 - 4 - Commissioned in October, 2005 Unit # 5 - Commissioned in October, 2006	Renovation & Modernisation of existing bottom ash and fly ash handling system of all the five (5) units. Optimization of slurry pumping system by employing a combined ash disposal pumping and piping system common for all the five units. Combined slurry disposal by 450 NB piping partly lined with basalt and rest 9.5 thk MS SW. Complete mechanical, electrical and C&I and civil works are included. All ash handling plants will be converted to PLC based control system.

44	Rihand Super	National Thermal	LOI No. :	Commissioned in	Complete Ash Water Re-circulation System
	Thermal Power	Power Corpn.	77/03/0001/	February, 2006	from ash pond comprising re-circulation
	Project	Ltd., Noida	KVB		water pump (3 nos. 950 cu.m/hr. capacity) &
	Stage-II	(Thru' BHEL-ISG,	Dt.08.04.2003		800 NB M.S. pipe (6 km).



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	(2 x 500 MW)	Bangalore)			Complete civil work is also included.
45	Mejia Thermal Power Station, Extn. Unit # 4 (1 x 210 MW)	Damodar Valley Corporation (Thru' BHEL-ISG, Bangalore)	LOI No. : 77/03/0005/ AKS Dt.16.04.2003	Commissioned In May, 2005	Bottom Ash Handling System comprises water impounded hopper, crusher, jet pump (2 x 60 TPH) and piping upto slurry sump. Fly Ash Vacuum Conveying (2 x 60 TPH) with liquid ring vacuum pump for dry collection in silo & silo unloading having capacity of 60 TPH (dry spout & rotary unloader) along with silo bypass arrangement through wetting unit, collector tank. Slurry disposal system upto dyke by slurry pumps (650 cu.m/hr.) and 300 NB M.S. pipe (3.7 kms.). Complete ash water pumping system and civil & structural works are also included.

46	Vindhyachal	National Thermal	CS-2240-	Commissioned :-	Bottom ash system with water impounded
	Super Thermal	Power Corporation	162-2-SU-	Unit #9 – 23.08.2006	hopper and jet pumping (2 x 62 TPH) upto
	Power Project,	Ltd., Noida	NOA-4267	Unit #10 – Feb., 2007	slurry sump. Fly ash vacuum conveying
	Stage-III		Dt.23.12.2003		system (4 x 48.33 TPH) upto surge hopper
	(2 x 500 MW)		&		for dry collection, fly ash wet disposal system



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
			CS-2240- 162-2-ER- NOA-4268 Dt.23.12.2003		through wetting unit-collector tank. Pressure Conveying System from surge hopper (2 x 96.66 TPH) to a remote silo (approximately 850 M distance), slurry pumping (960 m ³ /hr.) along with slurry disposal piping (400 NB MS, 4 x 13.5 km), water and instrument air system along with complete electrical & civil work on turnkey basis for the complete Ash Handling System.
47	Durgapur Project Power Station, Main Plant Package for Extension Unit # 7 (1 X 300 MW)	Durgapur Projects Limited (DPL) Thru' Magaldi Power S.p.A, Italy	March, 2006	Commissioned :- March, 2008	Dry Bottom Ash and Economizer Ash Handling System.

48	WBPDCL -	The West Bengal	DEC-STPP-	Commissioned in	Bottom ash system with water impounded
	Sagardighi	Power	LOA-S-15	December, 2009	hopper and jet pumping (2 x 75 TPH streams
	Thermal Power	Development	Dt.04.10.2005		per Unit) upto slurry sump. Fly ash vacuum
	Project,	Corporation Ltd.,	&		conveying system (3 x 60 TPH streams per
	Phase-I, Units	Kolkata	DEC-STPP-		Unit) either upto bag filter/ surge hopper for
	1&2	Thru'	LOA-E-16		dry collection or to wetting unit-collector tank



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SL. NO.	PLANT	OWNER	ORDER REF. & DATE	PROJECT STATUS	JOB DESCRIPTION
	(2 x 300 MW) Main Plant Package: SGMP-1	Dongfang Electric Corporation, China/ Kolkata	Dt.04.10.2005		for wet disposal. Pressure conveying system from surge hopper (2 x 90 TPH streams per Unit) to remote silo(s) (approximately 1400 M away). Slurry disposal system by 300 NB MS piping. Associated ash water/seal water/clear water and instrument air systems. Complete electrical/C&I & civil/structural works for the entire Ash Handling System.
49	WBPDCL - Sagardighi Thermal Power Project, Phase-I, Units 1&2 (2 x 300 MW) Main Plant Package: SGMP-1	The West Bengal Power Development Corporation Ltd., Kolkata Thru' Dongfang Electric Corporation, China/ Kolkata	DEC-STPP- LOA-S-47 Dt.09.11.2006 & DEC-STPP- LOA-E-48 Dt.09.11.2006	Commissioned in March, 2010	Complete Ash Water Recovery System from ash pond comprising recovery water pump (3 nos., 330 cu.m/hr. capacity) & recovery water pipe, 300 NB M.S., 6.35 thk. (Approx. 1600 m) and seal water pumps. Scope includes Garlanding of ash slurry disposal piping (300 NB MS, 9.52 thk., Approx. 11 kM) over the ash dyke. Scope also includes Complete electrical work.

In addition to the above Plants, several other Installations of Ash Handling Plant for different Power Stations Including one 700 MW, five 660 MW, four 500 MW Units and many other Units are Under Execution