CATEGORY: **Performance improvement**

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GUJARAT STATE ELECTRICITY CORPORATION LIMITED
WANAKBORI THERMAL POWER STATION

- GSECL Incorporated in 1993 under Companies Act, 1956 as an objective of restructuring of Power sector utility.
- As Individual Power Producer after unbundling of GEB in 2005 as per Electricity Act 2003.
- Primarily engaged in generation of Electricity by Coal, Gas, Wind & Solar power generation.

- **Vision :** To become one of the most efficient Power Generating Companies globally.

- **Mission :** To generate Power by adopting global best practices through

- Professional Excellence
- Transparency
- Value Addition
- Highest level of Productivity
- Nation Building
- Safety, Self discipline
- Customers Satisfaction
- Participative work culture
- Pride of belongingness
- Excellence
- Being ethically & Socially responsive

Gujarat State Electricity Corporation Ltd

Generating Capacity

Name of Power Station	Units (MW)	Capacity (in MW)	Base Fuel
WTPS	**7x210 + 1* 800 (Under Comm.)**	**1470 +800**	**Coal**
GTPS	3x210	630	Coal
UTPS	2x200 + 1x210 + 1 x 500	1110	Coal
KLTPS	2 x 70 + 2 x 75	290	Coal (Lignite)
Ukai Hydro	4 x 75 + 2x2.5 (Mini Hydro)	305	Hydro
Kadana Hydro	4x60 + 2x1 (Panam)	242	Hydro
UGBPS	1 x 375	375	Gas
DGBPS	107+112+376	595	Gas
STPS	2 x 270	540	Coal
Windmills	10	10	Wind
Solar plant at GTPS & KLTPS	1	2	Solar
Solar Plant at Sanad	1	1	Solar
Total		5570	MW

WANAKBORI TPS - OVERVIEW

Stage	Unit	Date of Commissioning	Capacity MW	Make/Type
I	1	23.03.1982	210	BHEL / LMZ
	2	15.01.1983	210	
	3	15.03.1984	210	
II	4	09.03.1986	210	BHEL/KWU
	5	23.09.1986	210	
	6	18.03.1987	210	
III	7	31.12.1998	210	
Ext.	8	Zero Date – Oct 14 Commissioning Activities Up-progress	800	BHEL/KWU
Power Evacuation			400 KV	3 lines
			220 KV	7 lines
			ICT	(400 KV/220 KV, 500 MVA)

Daily Monitoring of Plant Parameters:

- Every Day Plant related Data reviewed & checked. If any parameters deviated from design value than we take action for optimize that parameters up-to design value.
- Performance test of each unit carried out ones in month at full load. – out comes of test also convey to concern maintenance and operation sections for necessary corrective action for improvement of plant performance.
- Daily Report sheet display in next sheet for ref.

- Page No.1 Generation Data of previous day
- Page No.2 Plant parameters details at 06:00 AM (Parameters which affect the performance of plant)
- Page No.3 Water balance sheet (For optimization of Water consumption

VANAKBORI THERMAL POWER STATION DAILY SHIFT CHARGE ENGINEEER REPORT						QF / 006 / 03 / 04		Rev. No. 01 (Page No. 1 of 5		DATE	7-Jun-2019
SR No	Paramaeter	Unit	STAGE -I			STAGE -II			STAGE-III	STATION	STATION
			Unit # 1	UNIT # 2	UNIT # 3	Unit # 4	Unit # 5	Unit # 6	Unit # 7	Unit # 1-6	Unit # 1-7
1	GENERATION	MWH	4431	4098	5088	4436	4543	4542	4942	27138	32080
2	Backing down	MWH	612	460	0	514	470	496	129	2552	2681
3	RSD	MWH	0	0	0	0	0	5040	0	5040	5040
4	PLF	%	87.92	81.31	100.95	88.02	90.14	90.12	98.06	89.74	90.93
5	PAF (ABT base) D/M/Y	%	#1-6 D- 99.27 / M- 98.19 / Y- 85.97						#7 D- 101.11 / M- 101.11 / Y- 96.94		
5	APC %	%	9.68	9.20	8.59	8.95	8.46	8.91	8.55	8.95	8.89
5a	APC IN MWH	MWH	428.87	376.83	437.10	396.90	384.16	404.77	422.65	2428.62	2851.27
6	COAL CONSUMPTION	MT	2997	2742	2959	2852	2916	2948	3044	17415	20458.84
	1).WASHED COAL	MT	2997	2742	2959	2852	2916	2948	3044	17415	20458.84
	2).IND COAL	MT	0	0	0	0	0	0	0	0	0
	3).IMPORTED COAL	MT	0	0	0	0	0	0	0	0	0
7	COAL FACTOR	kg/kwh	0.68	0.67	0.58	0.64	0.64	0.65	0.62	0.64	0.64
8	FO CONSUMPTION	MT	0	0	0	0	0	0	0	0	0
9	LDO CONSUMPTION	KL	0	0	0	0	0	0	0	0	0
10	DM WATER Consumption	M^3	244	245	153	140	159	120	107	1061	1168
11	H_2 Bottle Consumption	Nos.	7	5	7	6	7	8	2	40	42
12	HR (2397/2305/2300) MTD	kcal/kwh	2689	2665	2312	2581	2558	2569	2449	2540	2526
13	MILL REJECT	M^3	0	5.431	11.245	0	1.818	6.298	14.284	24.792	39.076
14	Ash Dispatched	MT	533		1175		196		840	1904	2744
15	Ash Evacuated from ESP	MT	732		1234		109		840	2075	2915
16	**Ash lifted manually/Pond**	MT	0	0	32	0	3.31 / 1517.8	48	0	1598	1598
17	Max Load	MW	213	193	213	212	210	213	215	**ST-1**	**27.64**
	Time	Hrs	2.00	2.00	4.00	1.00	11.00	24.00	1.00	**ST-2**	**278.04**
18	Min Load	MW	144	145	211	146	152	155	160	**ST-3**	**69.78**
	Time	Hrs	7.00	6.00	15.00	5.00	6.00	5.00	9.00	**ST-4**	**0**
19	Generation Loss	MWH									
	I) Due to C/M problem	MWH	0	0	0	0	0	0	0	0	0
	II) Due to others	MWH	-3	482	-48	90	27	-5038	-31	-4490	-4521
20	Full Load Hrs.	Hrs.	11	0	24	9	11	12	20	67	87
	Backing Down Hrs.	Hrs.	13	13	0	12	13	12	4	63	67
	RSD Hrs.	Hrs.	0	0	0	0	0	0	0	0	0
	Forced Outage Hrs.	Hrs.	0	0	0	0	0	0	0	0	0
	Planned Maint. Hrs	Hrs.	0	0	0	0	0	0	0	0	0
	Partial loading Hrs.	Hrs.	0	11	0	3	0	0	0	14	14
	Total	Hrs.	24	24	24	24	24	24	24	144	168

	A	B	C	D	E	F	G	H	I	J	K	L
1		8-Jun-2019	06:00 hrs.		Rated at MCR	Unit # 1	UNIT # 2	UNIT # 3	Unit # 4	Unit # 5	Unit # 6	Unit # 7
2	1	Load		MW	210	145	145	210	158	156	155	160
3	2	Main steam temp		0C	535	535	535	535	535	535	535	535
4	3	Main steam pressure		Kg / Cm^2	135/150/150	83	97	127	146	145	149	150
5	4	HRH temp		0C	535	535	535	535	535	535	535	535
6	5	HRH pressure		Kg / Cm^2	25.1/38.1/38.1	16.5	16.8	23.21	23.8	25.89	25	26
7	6	Load/Vacuum/Ex.hood 16:00 hrs.		mmhg	685/671/674	209 / 643 / 53	175 / 660 / 52.51	210 / 639 / 53	201 / 648 / 51	210 / 649 / 53	205 / 639 / 53	214 / 654 / 53
8	7	Main steam flow		T/hr	700/690/690	438	440	600	486	499	520	498
9	8	Coal flow		MT/hr	-	104	107	140	112	115	127	115
11	10	Total air flow		T/hr	915/855.3/855.3	513	510	680	499	482	562	610
14	13	O2		%	3.0/3.0/3.5	4/3.8	3.5/3.8	3.9/3.8	3.18/3.6	3.75/4.16	3.4	3
15	14	Furnace draft		mmwc	-5	-1	-1	-2	-2	-2	-3	-3
16	15	Wind box DP		mmwc	100	62	57	100	78	65	68	75
17	16	Bottom ash Unburnt %		%	1.5 to 3	2.35	2.41	2.2	2.88	2.53	2.68	2.77
18	17	Fly ash Unburnt %		%	0.5 to 1	0.65	0.73	0.63	0.71	0.64	0.68	0.76
19	18	PA header pressure		mmwc	768/733/708	717	705	725	710	720	740	735
21	20	APH inlet temp A / B		0C	368/362/345	311 / 300	300 / 310	306 / 308	340 / 323	318 / 310	311 / 329	307 / 306
22	22	APH outlet temp A		0C	147/150/149	158 / 157	151 / 143	131 / 145	132 / 148	123 / 145	155 / 147	134 / 136
25	26	F.W. temp Final HPH O/L		0C	245/247/246	224	223	235	222	224	224	229
27	28	Soot blowers out of service		nos.	-	14,53-EMD	42-EMD /48-BMD	EMD :45/44 , BMD :51/53	NIL	27(EMD)	23	NIL
32	34	ESP field not in service		nos.	-	NIL	B3	D4 mA 0	NIL	B1	C1,D4	1A2,1B1,2B2
33	35	Boiler drum silica				0.49	0.30	0.35	0.19	0.18	0.18	0.18
34	36	CBD position		Turns		CLOSE	CLOSED	CLOSED	CLOSED	CLOSED	Closed	CLOSED
35	37	Disolved oxyzen (latest)HW		ppb	10	**24.2 / HOT / 4.16**	**17.2/14.3/4.25**	**20.8/16.0/3.18**	**2.38**	**12.5/2.52**	**26.4/16.6**	**4.19**
36	38	Hydrazine dosing		Kg		**1.523**	**2.153**	**2.457**	**2.352**	**2.625**	**2.268**	**1.092**
37	39	Main steam silica		ppm	0.02	0.016	0.016	0.016	0.016	0.016	0.02	0.016
38	40	SPM		mg/nm^3	100	102	91	85	101	25	98	50
39	41	CW sump level		Mtr.	7 / 8 / 7.95 (Max)		6.8			7.92		7.95
40	42	BAH temp		0C	50	51	51	49	50	51	52	51
41	43	BTD Position		Degree		-10	-10	-2	-6	-2	-12	-2
42	44	SH spray / RH spray		T/Hr	Valve position% / T/hr	38-30/10--10	30-30/10--10	28%43%/0%0%	41/4	DEF/6	42/0	0/6
43	45	Oil gun cleaning done				NIL	NIL	nil	Nil	NIL	0	AB1&AB3

	A	B	C	D	E	F	G	H	I	J	K	L
1							QF / 006 / 03 / 04		Rev. No. 01 (Page No. 3 of 5)		7-Jun-2019	
2	ASH PLANT					RAW WATER				COAL PLANT		
3	7-Jun-2019	ASH Plant Running Hrs.	Idle Hrs.	Ash plant Power cons. in		JACKWELL / CANAL RAW WATER				POWER CONSUMPTION (MWH)		
4				7-Jun-2019	Previous day	Canal Water running hrs.		Jack well running hrs.		COLONY	ASH PLANT	COAL PLANT
5	UNIT # 1	6:54:00	17:06:00	21.60	20.50	1A	00.00	A	00.00	8.11	56.63	27.99
6	UNIT # 2	22:30:00	1:30:00			1B	00.00	B	00.00	Coal handled		Coal plant idle hrs.
7	UNIT # 3	12:39:00	11:21:00	10.37	12.20	1C	00.00	C	24.00	Consumption	20459	
8	Unit # 4	10:35:00	13:25:00			2A	00.00	Incoming raw water m3		Stacking	1800	1:55
9	UNIT # 5	8:10:00	15:50:00	18.66	19.66	2B	00.00	Stage-I	0	SFC (KWH/T) of coal plant	7-Jun-2019	Previous day
10	UNIT # 6	13:59:00	10:01:00			2C	00.00	Stage-II/III	0		1.26	1.45
11	UNIT # 7	5:15:00	18:45:00	6.00	8.00	Total			100180			
12												
13	ASH plant water Consumption m3			Stage wise Ash Water consumption		RAW WATER USAGE			SERVICE WATER			
14		7-Jun-2019	Previous day			Consumption Raw of water M3		Previous day				
15	UNIT # 1	4451	5174	Stage-I	4451	Fire	1327	1325	Consumption service of water M3		7-Jun-2019	Previous day
16	UNIT # 2			Stage-II	23816	Clarifier for DM water	2596	4431	Colony Borewell(boost up)		1076	1019
17	UNIT # 3	6048	7852	Stage-III	911	AHP (As per meter)	29178	31607	Colony service water		2978	3062
18	UNIT # 4					AHP (Sealing water)			Plant service water # 1-6		11201	11259
19	UNIT # 5	17768	15958	ASH water ratio		Evp. Loss	66001	8329	Plant service water # 7		267	287
20	UNIT # 6					Total	99103	45692	Total		15522	15627
21	UNIT # 7	911	2623	Daily	Monthly	Water ratio (Raw+service) m3/MWH	7-Jun-2019	Prev. day	Unit#8 Water m3		7-Jun-2019	Prev. day
22	Total	29178	31607	9.96	12.43		3.27	12.25	RAW & SERVICE WATER (Cla. S-I + Fire Pump CW-III + Raw Water		862.00	2344
23									DM WATER		0.00	0.00
24									Raw Water Consumption by Unit#8		17862	
25	Water charges RS. In lacs		C.O.C (Ca) CW STAGE-I/II/III	ETP	ETP Running hrs.	Oxidation pump running hrs.	Re-use water M3			Water discharge to river M3		
26								7-Jun-2019	Previous day		7-Jun-2019	Previous day
27	7-Jun-2019	Previous day	I- 4.01	A	2.50	0.00	ETP	5985	5991	From ETP	1700	1508
28	26.04	13.78	II- 2.21	B	24.00	0.00	Oxidation / PH gravity sump	1998	2127	From Oxidation	948	1006
29			III- 4.76	C	21.50	24.00	Total	7983	8118	Total	2648	2514

For Reduction of Auxiliary consumption

- Daily basis 6.6 kv Auxiliary consumption reviewed.
- To check healthiness of all HT auxiliaries we measured vibration every forth night.
- Mill grinding roller and bullring segment running hrs is maintained also observed once in month during meeting.
- Loading and unloading of service and instrument air compressor is observed and if required corrective action is to be initiated.
- During Reserved Shut down period – minimum / required auxiliary run only.
- Coro coating of CW pump is done to improve flow of CW pump.

STATION GROSS HEAT RATE (kcal/kwh)

	2016-17	2017-18	2018-19
UNIT #1	2733	2667	2681
UNIT #2	2716	2674	2654
UNIT #3	2718	2485*	2326
UNIT #4	2584	2553	2561
UNIT #5	2608	2563	2575
UNIT #6	2619	2551	2573
UNIT #7	2490	2450	2454
UNIT #1 TO 6	2661	2580	2539
UNIT #1 TO 7	2621	2555	2524

* Unit#3 turbine and boiler retrofitting was carried out in Dec-2017. After that Heat-rate improved. Details mention in slide no. 11,12.

Auxiliary Power consumption in %

	2016-17	2017-18	2018-19	2019-20
UNIT #1	9.66	9.49	9.79	9.84
UNIT #2	9.11	8.99	8.83	8.92
UNIT #3	9.09	8.63	8.36	8.45
UNIT #4	9.92	8.94	8.88	9.13
UNIT #5	9.98	8.96	8.94	9.01
UNIT #6	10.96	9.39	9.58	9.78
UNIT #7	9.59	9.07	9.09	9.17
UNIT #1 TO 6	9.75	9.09	9.00	9.11
UNIT #1 TO 7	9.71	9.08	9.02	9.12

SPECIFIC OIL CONSUMPTION (ml/kwh)

	2016-17	2017-18	2018-19
UNIT #1	2.49	0.94	1.48
UNIT #2	1.73	1.37	0.86
UNIT #3	2.29	2.71	0.50
UNIT #4	1.81	0.58	0.63
UNIT #5	1.88	0.84	1.17
UNIT #6	2.86	0.78	0.97
UNIT #7	1.42	0.32	0.17
UNIT #1 TO 6	2.13	1.10	0.87
UNIT #1 TO 7	1.96	0.95	0.75

WTPS Unit no 3 - Turbine Retrofitting

Plan	**Turbine Retrofitting** • Complete Replacement of HP,IP Module (including outer casing) with new high efficient design. • Replacement of complete steam path of LP module with new high efficient design. • Replacement of hydraulic governing system by Electro Hydraulic Governing System & Turbo Supervisory system
Agency	• M/s NTPC GE Power Services Pvt. Ltd, (NGSL) Noida
Benefit	• Guaranteed Turbine Heat Rate after R&M : 1950 Kcal/ kwh. • Turbine Heat Rate improvement by 12 to 14 %. • Life extension up to 20 years.

WTPS Unit no 3 – Boiler Back pass & APH Modification

Plan	**Boiler R&M** • Replacement of existing Air pre heater (model No 27 VIT 72 - 52^0 PA angle) with 27.0 VIMT 2000 (72^0 PA Angle) having 04 layers of heating elements and double sealing system (24 sectors). • Replacement of Hot & Cold Primary and Secondary air ducts. • Replacement of existing Economizer by new double bank Economizer with header & terminal tubes. • Extension of SCW to accommodate double bank Economizer. • Replacement of existing LTSH coils and inlet & outlet headers with terminal tubes. • Replacement of roof and rear wall panels with bottom ring header. • Pent house roof sealing • Replacement of Economizer hopper along with duct between Economizer & APH.
Agency	M/s BHEL
Benefit	Guaranteed Improvement in Boiler Efficiency by 1% over design • Design boiler efficiency - 86.04% • Guaranteed Boiler Efficiency - 87.04 %

WTPS Unit-3 Saving after R&M

Month	Heat-rate	PLF	Gen	APC	CV	CF	SOC	HR DEVIATION	Heat Saved	Coal To Be saved	Total Saving
	Kcal/Kwh	%	MW	%	Kcal/Kg	MT/MW	ml/Kwh	Kcal/Kwh	Mcal	MT	Rs in Cr.
Up to 30 June 2017	2669	72.4	332066	8.45	3897	0.68	0.46				
Dec-17	2394	52.36	0.001	9.14	3835	0.6	7.91	19	0.01900	0.00000	0.02477
Jan-18	2322	90.99	142156	8.09	3916	0.59	0.79	347	49328132	12596.6	6.30
Feb-18	2320	76.98	108632	8.24	3945	0.59	0.64	349	37912568	9610.3	4.81
Mar-18	2323	93.4	145923	8.08	3993	0.58	0.48	346	50489358	12644.5	6.32
Apr-18	2314	95.38	144211	8.01	4114	0.562	0.37	355	51147002	12433.5	6.22
May-18	2321	97.36	152115	8.20	4026	0.576	0.39	348	52920194	13144.4	6.57
Jun-18	2319	96.11	145314	8.28	4094	0.566	0.00	350	50914862	12437.0	6.22
Jul-18	2328	80.52	125797	8.64	3913	0.593	0.58	341	42959546	10979.9	5.49
Aug-18	2327	70.48	110120	8.63	3952	0.588	0.44	342	37664809	9529.7	4.76
Sep-18	2333	80.01	120970	8.59	4075	0.569	1.31	336	40655318	9976.7	4.99
Oct-18	2318	93.92	146733	8.31	4040	0.572	0.57	351	51549648	12759.0	6.38
Nov-18	2324	68.04	102870	8.65	3861	0.600	0.83	345	35469068	9187.3	4.59
Dec-18	2322	86.48	135114	8.41	3852	0.602	0.32	347	46926901	12182.1	6.09
During Year	2328	83	1579955	8.41	3970	0.58	1.12	321	507648941	127857.5	68.77

* Considering Cost of Coal at 5000 Rs/MT

Total R&M Cost	
Description	Rs in Cr.
R&M Cost	165
Fuel FO+LDO	4.7
APC during R&M	0.91
Total R&M Cost	170.61

Plant Performance improvement

- **WTPS has designed one internal web site, Based on running plant data our engineer can easily calculate and evaluate the Condenser performance, Feed water Heater performance and Air pre-heater performance. It's help to improve the plant performance.**

- **Data of Daily and monthly and yearly key parameters like KPI, Fuel, Stock, Unit running hrs, APC, water report are available for reference.**

- **Also by continuous monitoring on Schedule, Frequency and Sent out WTPS earns from DSM. Details mentions as under.**

YEAR	WTPS-1-6 (Rs. In Cr)	WTPS-7 (Rs. In Cr)	WTPS-1-7 (Rs. In Cr)
FY-2017-18	8.19	1.35	9.55
FY-2018-19	2.47	1.24	3.71

Monitoring performance of condenser

WANAKBORI THERMAL POWER STATION

Time : 14-06-2019 16:23:06 Frequency : 49.910 #1 : 0 #2 : 0 #3 : 170 #4 : 0 #5 : 0 #6 : 0 #7 : 0

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

CONDENSOR | AIR PREHEATER | HEATER

Please enter Heater data

HEATER FEED WATER INLET TEMP (C)	
HEATER FEED WATER OUTLET TEMP (C)	
HEATER EXTRATION TEMP (C)	
HEATER EXTRATION PRESSURE (kg/cm2)	
HEATER DRAIN TEMP (C)	

Click here for Heater Performance

PARAMETER	ACTUAL
HEATER FEED WATER INLET TEMP (C)	162
HEATER FEED WATER OUTLET TEMP (C)	190
HEATER EXTRATION TEMP (C)	305
HEATER EXTRATION PRESSURE (kg/cm2)	23.8
HEATER DRAIN TEMP (C)	209
SATURATION TEMP (C)	222.57
TEMPERATURE TERMINAL DIFFERENCE (C)	32.57
DRAIN COOLER APPROACH (C)	47

Monitoring performance of Air Pre-Heater

WANAKBORI THERMAL POWER STATION

Time : 14-06-2019 16:17:17 Frequency : 50.000 #1 : 0 #2 : 0 #3 : 170 #4 : 0 #5 : 0 #6 : 0 #7 : 0

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

CONDENSOR | AIR PREHEATER | HEATER

Please enter Air Pre heater data

FLUE GAS APH OUTLET TEMP (C)	
APH INLET OXYZEN (O2 %)	
APH OUTLET OXYZEN (O2 %)	
APH AIR INLET TEMP (C)	

Click here for Air Preheater Performance

PARAMETER	ACTUAL
FLUE GAS APH OUTLET TEMP (C)	150
APH INLET OXYZEN (O2 %)	3.2
APH OUTLET OXYZEN (O2 %)	6.1
APH AIR INLET TEMP (C)	39
AIR LEAKAGE (%)	19.46
CORRECTED FLUE GAS APH OUTLET TEMP (C)	171.6

Monitoring performance of Feed Water Heaters

WANAKBORI THERMAL POWER STATION

Time : 14-06-2019 16:23:06 Frequency : 49.910 #1 : 0 #2 : 0 #3 : 170 #4 : 0 #5 : 0 #6 : 0 #7 : 0

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

CONDENSOR | AIR PREHEATER | HEATER

Please enter Heater data

HEATER FEED WATER INLET TEMP (C)	
HEATER FEED WATER OUTLET TEMP (C)	
HEATER EXTRATION TEMP (C)	
HEATER EXTRATION PRESSURE (kg/cm2)	
HEATER DRAIN TEMP (C)	

Click here for Heater Performance

PARAMETER	ACTUAL
HEATER FEED WATER INLET TEMP (C)	162
HEATER FEED WATER OUTLET TEMP (C)	190
HEATER EXTRATION TEMP (C)	305
HEATER EXTRATION PRESSURE (kg/cm2)	23.8
HEATER DRAIN TEMP (C)	209
SATURATION TEMP (C)	222.57
TEMPERATURE TERMINAL DIFFERENCE (C)	32.57
DRAIN COOLER APPROACH (C)	47

Monitoring APC unit wise, Auxiliary wise daily

WANAKBORI THERMAL POWER STATION

Time : 09-05-2018 13:48:31 Frequency : 49.893 #1 : 154 #2 : 155 #3 : 191 #4 : 165 #5 : 0 #6 : 159 #7 : 165 Demand : 14811 Wind+Solar : 992 + 864

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

DAILY | MONTHLY | YEARLY | ARCHIVES | APC AUX. WISE | WATER REPORT | TARGET AND DESIGN

- Data for the Date (08-May-2018)
- FEED WATER & CONDENSATE SYSTEM
- COAL MILL
- DRAFT POWER

DRAFT POWER CONSUMPTION Data for the Date :08-May-2018

AUX.	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7
ID-A	20.00	16.00	17.00	23.00	0.00	26.00	24.00
ID-B	20.00	16.00	18.00	25.00	5.00	24.00	21.00
FD-A	4.00	4.00	4.00	4.00	0.00	3.00	5.00
FD-B	3.00	5.00	4.00	2.00	0.00	5.00	6.00
PA-A	31.00	27.00	25.00	27.00	0.00	29.00	24.00
PA-B	30.00	27.00	24.00	28.00	0.00	26.00	23.00
DRAFT POWER TOTAL	108.00	95.00	92.00	109.00	5.00	113.00	103.00

- CW PUMP
- ASH PLANT
- UST TRANSFORMER
- COMMON AUXILIARY
- TOTAL AUXILIARY POWER CONSUMPTION

WANAKBORI THERMAL POWER STATION

Time : 17-06-2019 14:34:13 Frequency : 49.990 #1 : 0 #2 : 0 #3 : 164 #4 : 0 #5 : 0 #6 : 0 #7 : 155

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

DSM (1 TO 6) | DSM (7) | DSM (TEST)

Unit: 1 to 6 Block No: 59

Please Enter Schedule Generation for Unit-1 to 6....

Schedule Generation(MWh)	
Submit Query	

	Frequency(Hz)	INJECTION (MWh)	DSM Rate (Rs.)
Instantaneous	49.990	150	1.99
Average Current Block (59)	50.03	149	0.71
Schedule for current Block (59)	--	135	

UI CALCULATION

CHARGES (Rs.)	Amount(Rs.)
UI CHARGES	2492
Additional Charges	0
CAP Charges	0
Total	2492

(-) means LOSS (Payable)

WANAKBORI THERMAL POWER STATION

Time : 17-06-2019 18:25:36 Frequency : 50.050 #1 : 0 #2 : 0 #3 : 164 #4 : 0 #5 : 0 #6 : 0 #7 : 155

EMPLOYEE CORNER | EFFICIENCY | PERFORMANCE | DSM | POWER STATUS | UNIT-8

DSM (1 TO 6) | DSM (7) | DSM (TEST)

Unit: 1 to 6 Block No: 74

Please Enter Schedule Generation for Unit-1 to 6....

Schedule Generation(MWh)	
Submit Query	

	Frequency(Hz)	INJECTION (MWh)	DSM Rate (Rs.)
Instantaneous	50.050	150	0
Average Current Block (74)	50.05	150	0
Schedule for current Block (74)	--		

UI CALCULATION

CHARGES (Rs.)	Amount(Rs.)
UI CHARGES	0
Additional Charges	0
CAP Charges	0
Total	0

(-) means LOSS (Payable)

THANKS