23rd National Award for 2022
Excellence in Energy Management

23 – 26 August 2022

Sh. Ghanshyam Prajapati

BUH

Sh. R N Pujari GM-O&M

NTPC Ltd, Sipat

- Team Members

Mr Parimal Piyush - Team Leader
Mr Abhishek Saxena
Mr Arnav Kothiyal
Mr Maheswar

NTPC: Vision, Mission and Core Values

Vision

To be the World's Leading Power Company, Energizing India's Growth

Mission

Provide Reliable Power and Related Solutions in an Economical, Efficient and Environment friendly manner, driven by Innovation and Agility

Core Values

I	C	O	M	I	T

NTPC –India's Powerful Maharatna

69,454 MW under Operation & 17,874 MW Under Construction

10 Coal blocks, 71 MMTPA mining capacity

18,000+ committed workforce

18 JVs and 12 Subsidiaries in Generation, Services & other Business

NTPC has been recognized as one of the "Most Preferred Workplaces of 2022" in the premier edition of "Most Preferred Workplaces 2022" organized by Team Marksmen in association with India Today.

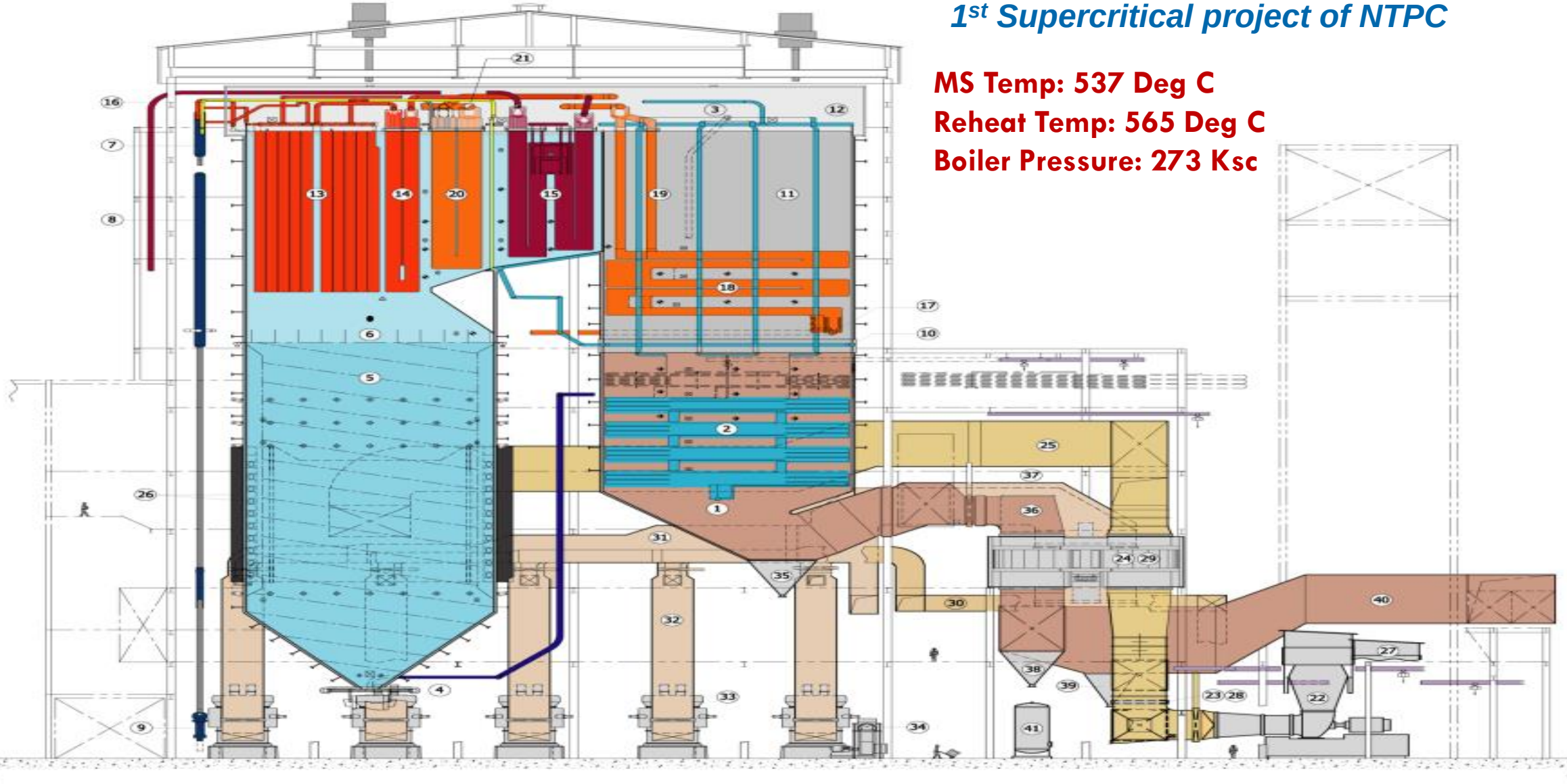
Commissioned Capacity: 69,454 MW

Sl.No.	NO. OF PLANTS	CAPACITY (MW)
NTPC Owned		
Coal	23	48,120
Gas/Liquid Fuel	7	4,017
Hydro	1	800
Small Hydro	1	8
Solar PV	20	2,094
Wind	1	50
Total	**53**	**55,089**
Owned By JVs/Subsidiaries		
Coal	9	8,754
Gas/Liquid Fuel	4	2,494
Hydro	8	2,925
Small Hydro	1	24
Wind	2	113
Solar	2	55
Total (JVs/Subsidiaries)	**26**	**14,365**
Total	**79**	**69,4**

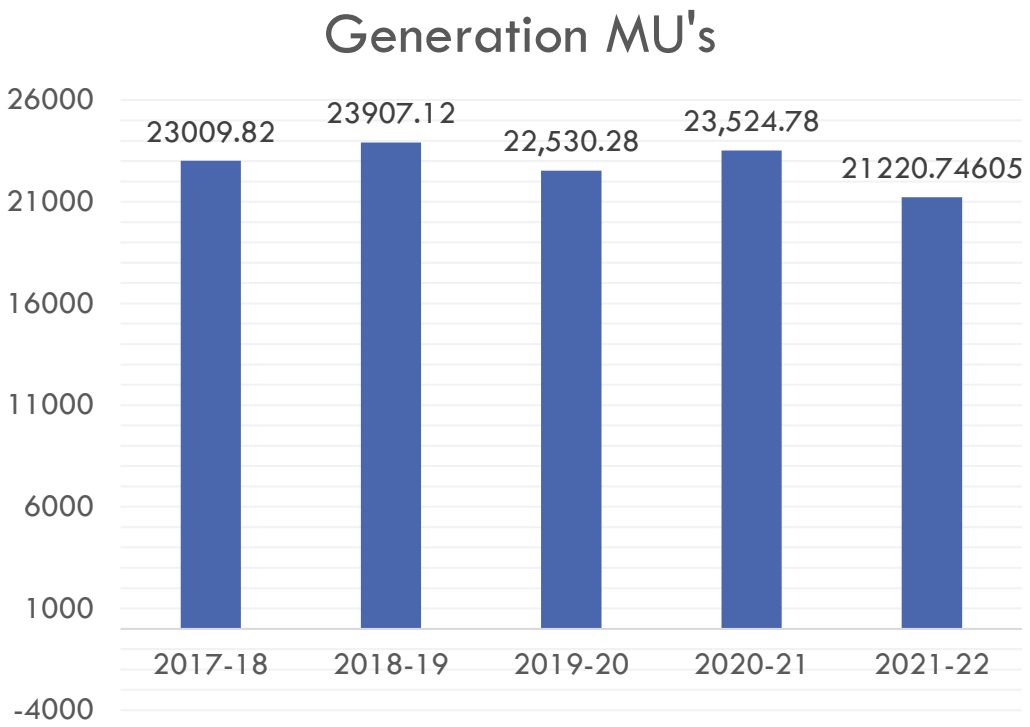
Sipat Super Critical Boiler

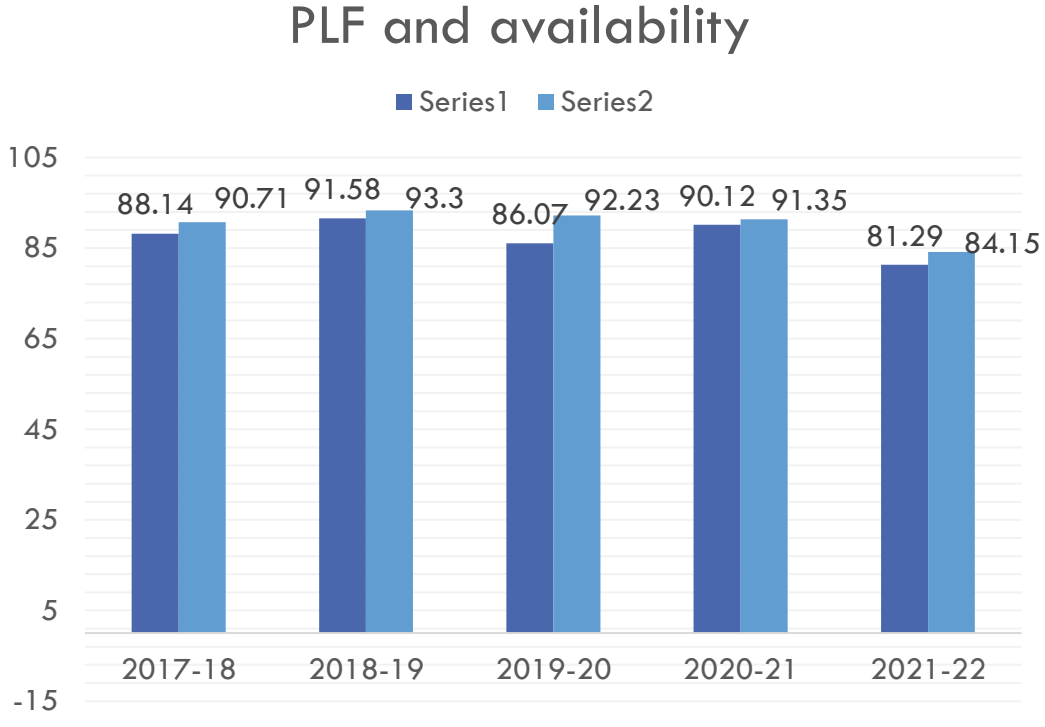
1st Supercritical project of NTPC

MS Temp: 537 Deg C
Reheat Temp: 565 Deg C
Boiler Pressure: 273 Ksc



SIPAT: *Consistent performer over the years*





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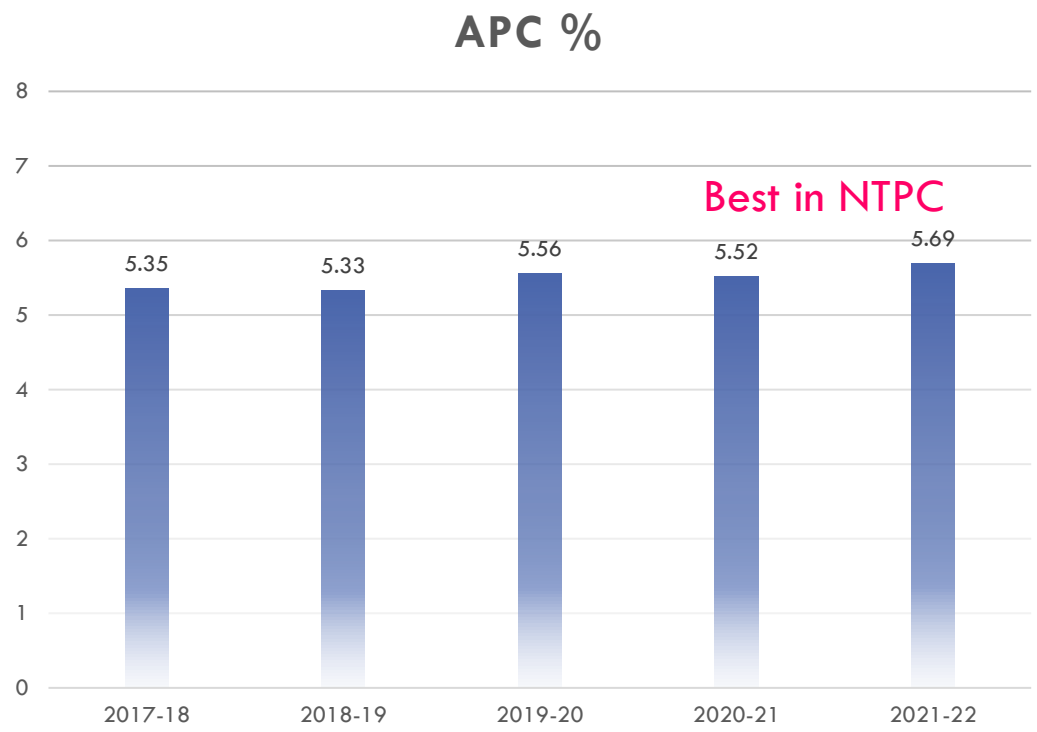
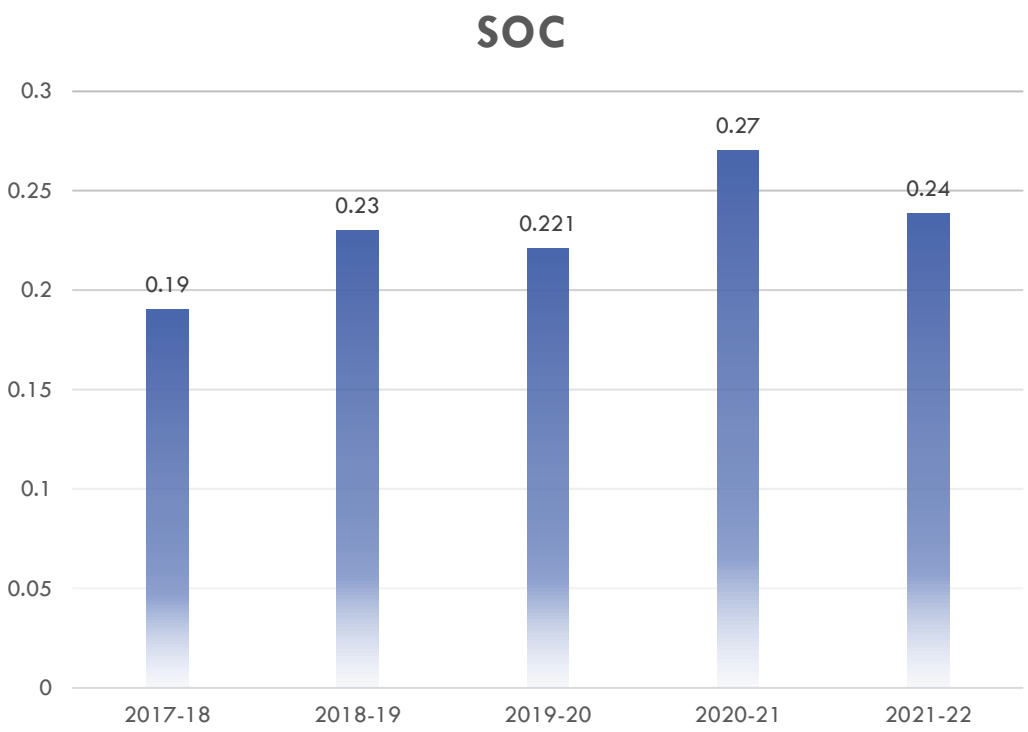
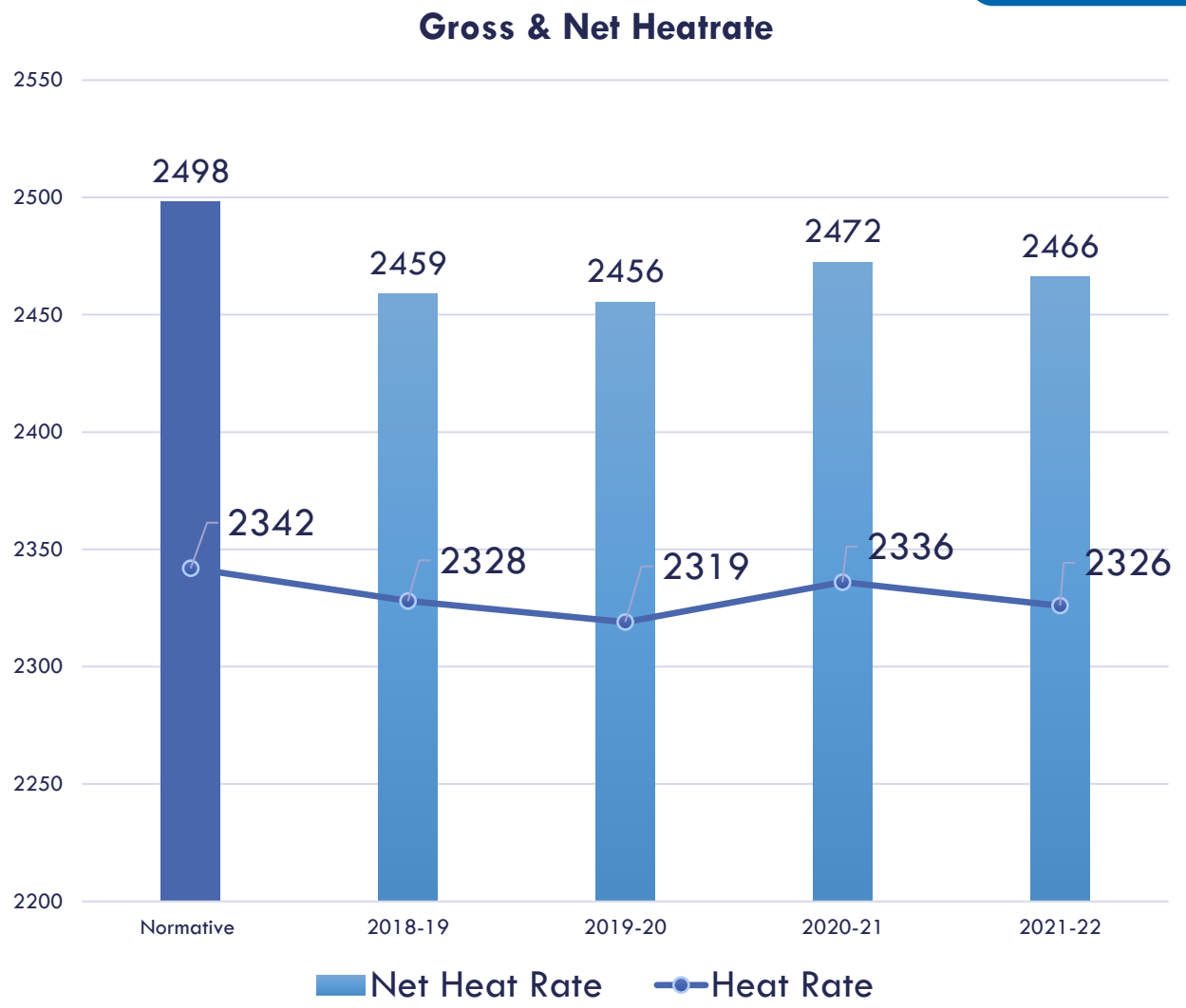




Gross & Net Heat Rate Trends

- Central electricity regulatory commission (CERC) has fixed a normative Heat Rate for NTPC Sipat at 2342 kcal/kwhr based on the technology.
- NTPC Sipat has been able to maintain Gross Heat Rate below the Norms continuously for the past few years.
- Despite low PLF Gross HR is improved by 10 Kcal/kWh and NHR by 6 kCal/kWh. (CERC allows a degradation 1.25 %/29.35 kCal/kWh).



Bench Marking

External : PAT (perform Achieve and Trade

NTPC Sipat is Notified by BEE under PAT cycle VII

Baseline : 2417.4 kCal/kWh @ 22362 MU's BY 2018-19

Target : 2411.7 kCal/kWh Assessment Year 2024-25.

PAT CYCLE	PERIOD	Aassessment Year	NHR TARGET	NHR ACHIEVED	ESCERTS
PAT CYCLE-I	2012-15	2014-15	2484	2438	+36443
PAT CYCLE-II	2016-19	2018-19	2430	2424	+13499
NTPC SIPAT TRADED CYCLE-1 ESCERTS ON IEX AND EARNED APPX 3 Cr.					
PAT CYCLE-II M&V AUDIT , AEA RECOMMENDED FOR 13499 ESCERTS					

Internal NTPC Performance Evaluation Matrix Ranking

- NTPC has a system of evaluating performance of its station based on a comprehensive matrix which covers all the aspects of performance like O&M Index, MOU Index, Thrust Area Index and Fuel index.
- Business Excellence(BE) department through BE position report.

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Position	5th	1st	4th	1st	4th

Action Plan

- **Major ENCON Projects planned for FY 2022-23**

&

- **To achieve the PAT Target**

S. NO	Activities	Estimated Expenditure (in Rs Lac)	Saving Potential
1	VFD Retrofitting in stage-2 CEP's	900	11.82 Mu's
2	Fill replacement in Stage-1 Cooling tower 81 cells.	1365	0.35 LMT Coal
3	Fill replacement in Stage-2 Cooling tower 5 cells	50	0.08 LMT Coal
4	Low power consumption energy efficient slurry pump.	45	1.18 MU's
5	Unit 2 over hauling draft power improvement 1500 Kw	100	7.85 MU's
6	Unit 4 over hauling draft power improvement 1200 Kw	90	6.3 MU's
7	Unit 5 over hauling draft power improvement 1200 Kw	90	6.3 MU's
8	SOLAR Powered LED Street lighting (Switch yard & Ash Dyke area)	184	0.25 Mu's

Energy Savings projects implemented in last 3 years

S. No	Year	Nos of Energy Saving Projects	Investment (INR Millions)	Electrical Saving (Million kWh)	Thermal Saving (Million Kcal)	Total Saving (INR Million)
1	2019-20	9	19.2	23.3	231700	166.64
2	2020-21	11	46.5	25.3	80850	82.13
3	2021-22	7	114.78	13.64	158400	109.17

Innovative Project

Ash Dyke Toe drain / Seepage drain water recovery.

Water channelized and routed to ash water lagoon.

- Ash water return increased to 90 % (additional 8000 M3/day)
- Fresh water requirement and Pumping power of MUPH pump house reduced.
- Total investment – 20 Lac

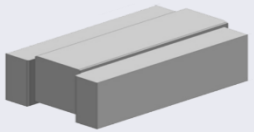
Electrical Energy Saved : 1.12 MU's

Water Saved : 1.3 MCM

ASH TECHNOLOGY- PROJECTS

SN	Project	Salient features	Status
1.	**Geopolymer Lab Set up** • 2 TPD equipment • Testing facilities 	• In-House Production & Testing of Ash based products • Development of Design Mix for new products and on going projects	• Infrastructure set-up completed • 2 TPD machine installed and commissioned • GPCA produced (20 KG) • Testing of GPCA under progress Water absorption - <18%, Impact /Abrasion value-<40%, etc
2.	NACA 	• In house development of NACA (NANO Concrete Aggregate) • Substitute for Natural resources • Potential for bulk ash utilization (70%)	
3.	GPCA 	• In house development of GPCA (Geo Polymer Coarse Aggregate) • Substitute for Natural resources • Huge potential for bulk ash utilization (80%)	

Ash Technology: NI projects

SN	Project	Project/Benefit	Status
4.	Ash to Sand	• Bulk ash utilization • Conservation of natural resources • Revenue Generation	• Under implementation • Commissioning :March' 23
5.	Interlocking Wall Blocks 	• No need of plastering and mortar • Geopolymer/high volume fly ash based cement blocks possible	

12000 Interlocking paver blocks placed in CPG-2 Building

The Projects are done to establish the techno commercial viabilities of the technology.
The alternate use of Ash in making aggerate and sand will make save natural resources and will result in resolving ash disposal issue.

Biomass Cofiring

- NTPC Sipat Started Biomass (pellet) Cofiring in FY 2021-22.
- Total Biomass cofired till date : 3444 MT
- Green Power Generated : 4.67 MU's
- CO2 generation averted : 4767 MT
- Helping Beneficiaries to meet RPO Obligations

800 KW ROOF TOP SOLAR PV AT NTPC SIPAT

- Energy savings of approximately ~1.4 lakhs MU’s annually.
- Environment protection by reduction carbon foot prints. (8.33 Lakh kg CO2 avoided)

800 KW ROOF TOP SOLAR PV AT NTPC SIPAT

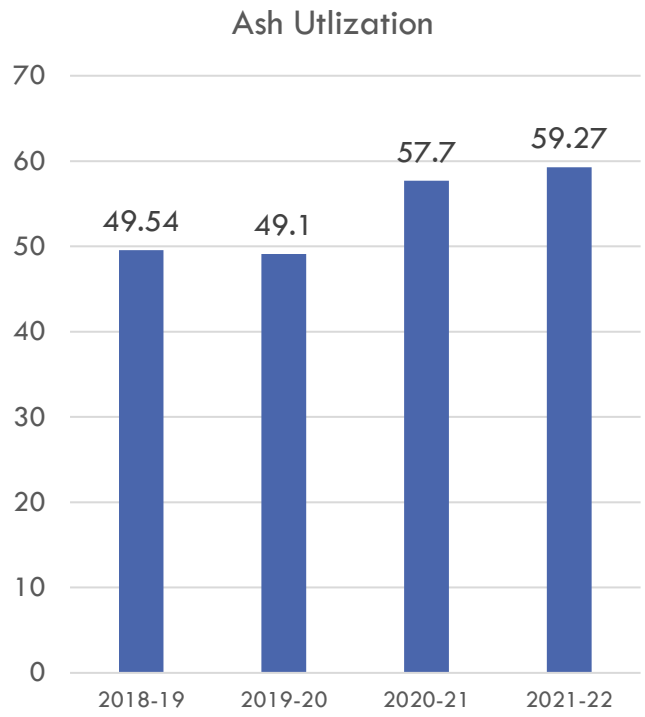
Type	Location	Installed Capacity	Investment (Lacs)	Annual Generation FY 2019-20 (MWHr)	Annual Generation FY 2020-21 (MWHr)	Annual Generation FY 2021-22 (MWHr)
Rooftop Solar PV	NTPC Sipat Hospital	50 KW	48	75.19	76.29	78.29
Rooftop Solar PV	Administrative Building	100 KW	78	127.88	131.65	132.65
Rooftop Solar PV	Solar PV at various building inside the plant	650 KW	210	-	-	11.00

Upcoming Solar PV in FY 2022-23 :

- **200 KW Solar PV for Township power consumption.**
- 5 MW floating solar is under approval to be installed in reservoir area.

Use of Renewable has helped in reducing the power requirement of conventional power for powerplant auxiliaries and township requirement.

Environment Management: Ash Utilization



- **Modes of Ash utilization:**
  - **Dry Ash: 77.8% (All units DAES commissioned)**
  - **Wet Ash: 22.2%**
- **Distribution of areas of Ash utilization**
  - **Roads and Highways**
  - **Low lying area development**
  - **Mine filling / stone query filling**
  - **Dyke raising**
  - **Cement Manufacturers / Bricks & Blocks**

Ash utilization also got affected due to COVID -19 Pandemic during Q1 & Q2 of last Finical year

Ash Utilization Action Plan : FY 2022-23

	ANTICIPATED AU 102 % ASH GENERATION FY 22-23 : 47 LMT			
	ACTIVITY	**Quantity (LMT)**	**Avenues Available**	**Remarks**
Fly Ash	Brick Industry	5.00	2.50	
	Cement Industry	5.5	1.25	
	DRY AU - TOTAL	**10.5**	**4.25**	
	ACTIVITY	**Quantity (LMT)**	**Work in progress**	**Remarks**
Pond Ash	NHAI	29.48	23.98	POs for quantity 35.1 Lakh MT awarded and under execution
	Low Lying Area-1&2	7.00	7.00	PO in place
	Mines filling	1.50	1.50	MoU with SECL signed for ash dumping in mines. PO awarded.
	POND AU - TOTAL	**37.98**	**33.48**	
	GRAND TOTAL	**47.98**		**Expected AU 102 %**

Environment Management: Emission

Particulars	UOM	2019-20	2020-21	2021-22
Total CO2 emissions per KW of generation	Ton/MWh	0.85	0.85	0.85
Current Sox emission at Full Load	Mg/Nm3	1146	1029	1018
Current NOx emission at Full Load	Mg/Nm3	246	210	140
Particulate matter	Mg/Nm3	37	35	35
Mercury	Mg/Nm3	0.0011	0.0010	0.0010

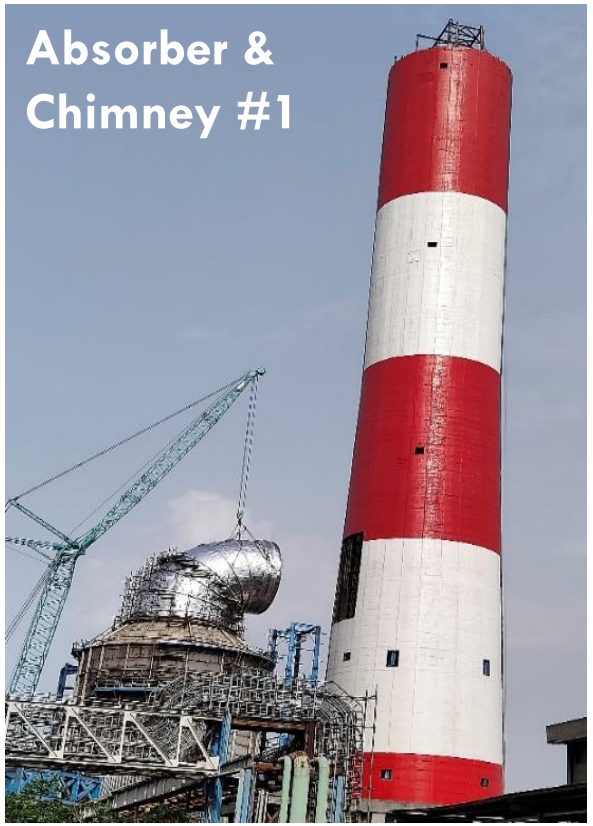
Environment Management

- ZLD compliant Station (both plant & Ash Dyke)

- FGD implementation:
  Commissioning - U#3 : Dec'22, U#1 : Jan'23, U#2 Mar'23
  - As per Supreme Court Order, completion dates are as under: U#1,3: March'23, U#2: Dec'23, Stage II: June'24

- De NOX through combustion optimization:
  ➢Work completed for Units 1, 3, 4 & 5

- Wagon Covering: (CTO condition & SC direction)
  ➢ All wagons are being covered with tarpaulin



Tree plantation

Total Tree Plantation done since inception	**11,19,376**
In NTPC area	**3,85,118**
In non - NTPC Land	**7,32,058**

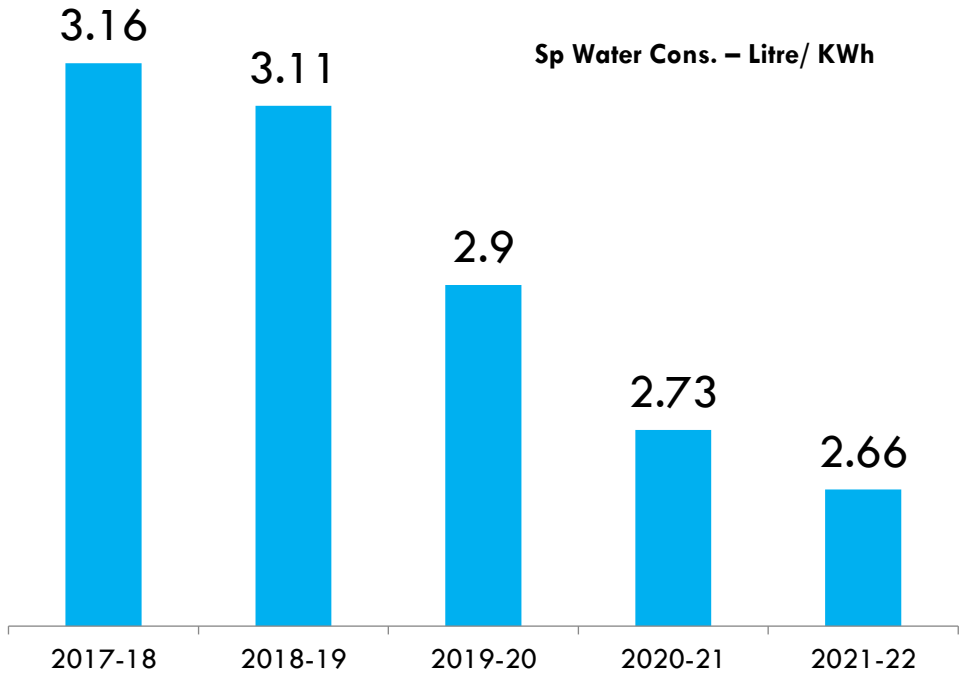
Tree plantation:

FY 21-22 : 25,546

FY 22-23 (till May'22) : 3750 (*through Miyawaki Method*)

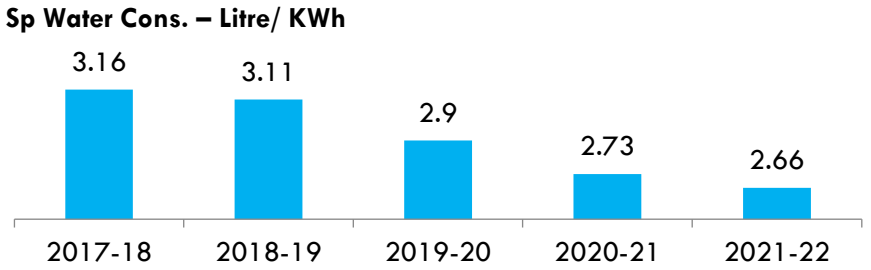
Environment Management: Water

- Optimization of AWRS water.
- Capturing rainwater trough ZLD setup.
- Daily Review of Dry Ash extraction system (DAES) with existing Facility.
- DAES for all units commissioned.
- Wet System –Daily Ash to Water Ratio Monitoring in Daily Planning meeting , Stringent Effort are being applied to reduce Ash to Water Ratio.
- CW Cycle of Concentration (COC) has been Improved from 4 to 7 with Lot of Modification and system improvement.



Environment Management: Water

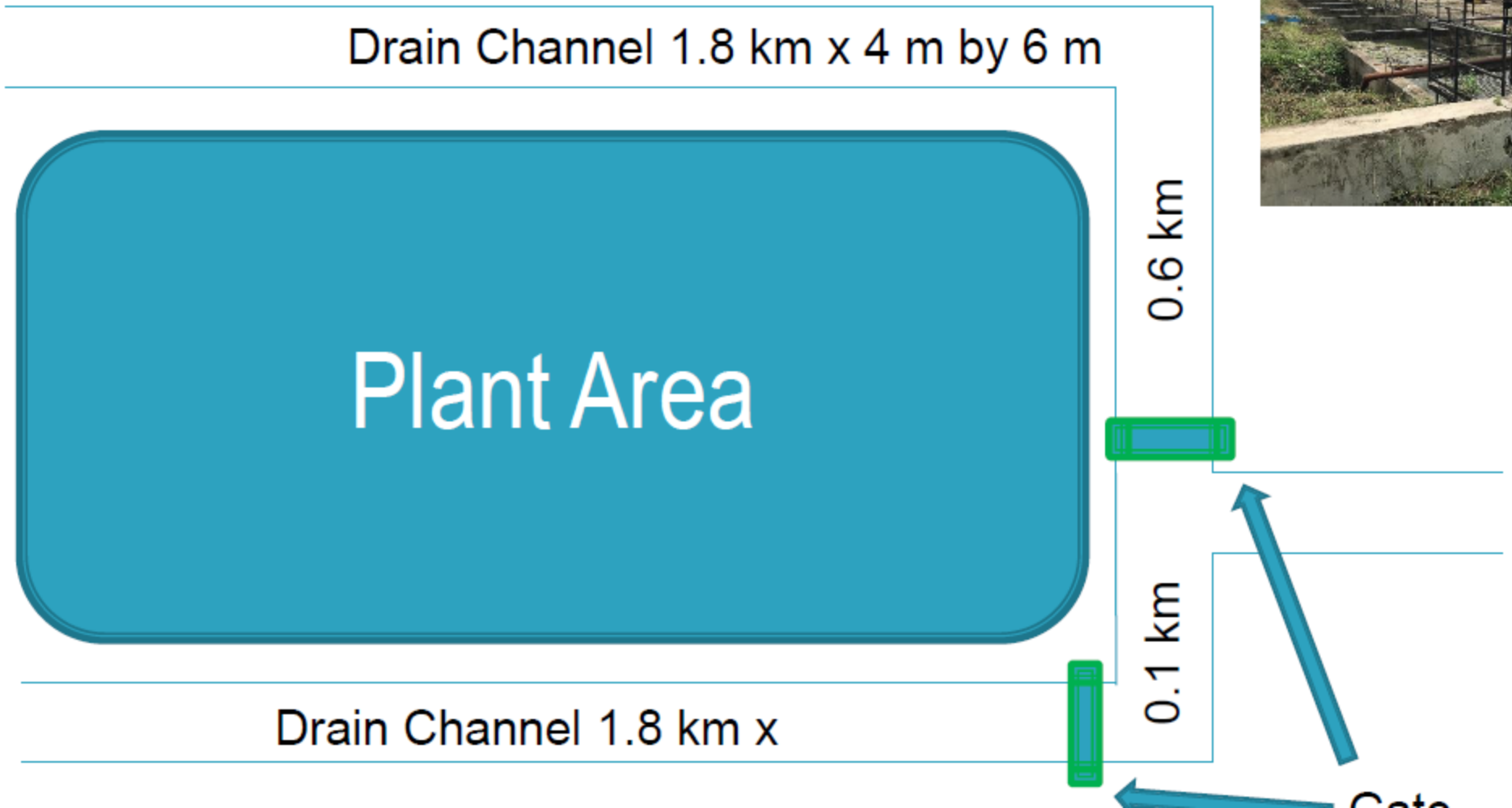
- ZLD and Drain Separation



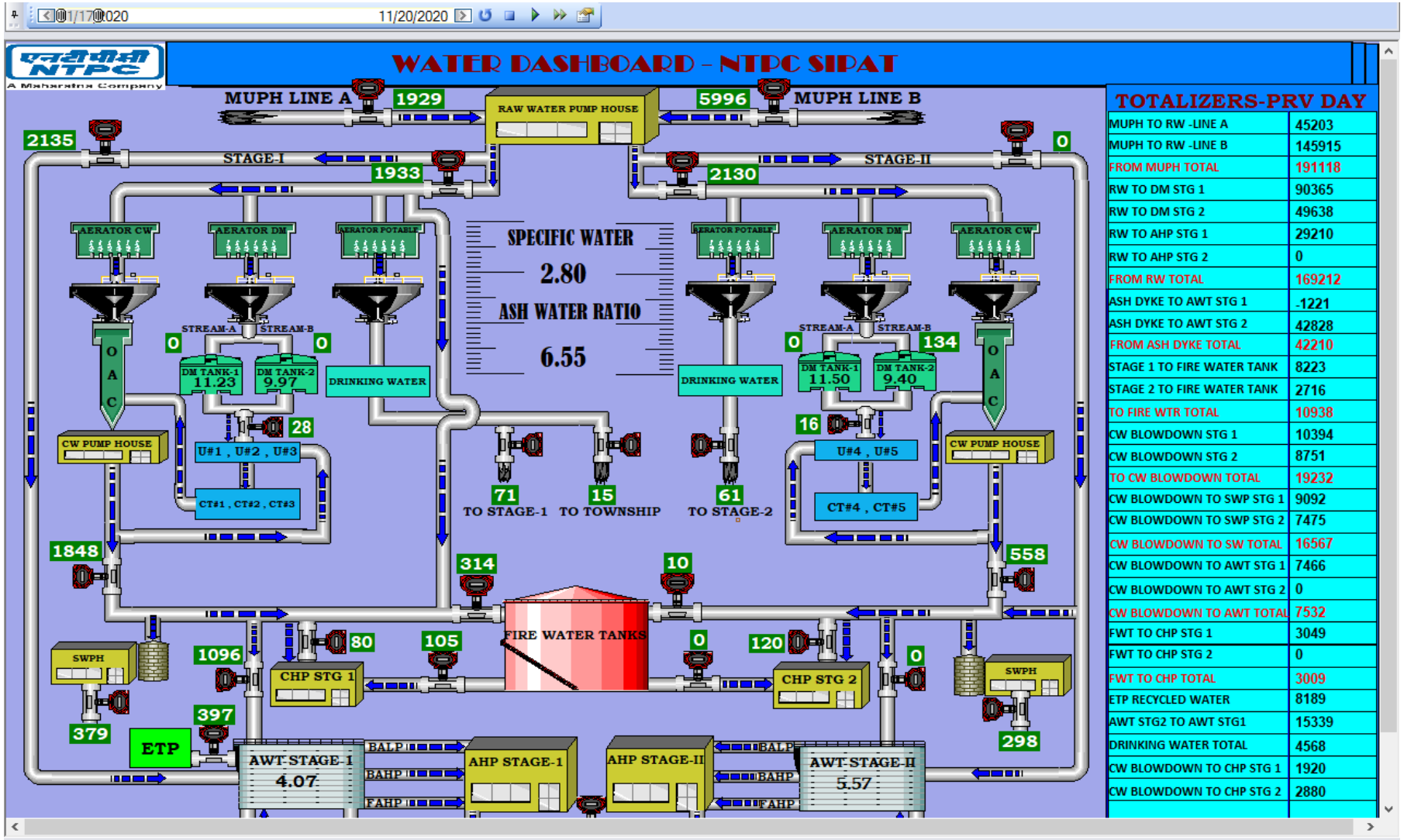
A Maharatna Company

Water harvesting through Drain Channel

SIPAT



Environment Management: Water



TOTALIZERS-PRV DAY	
MUPH TO RW -LINE A	45203
MUPH TO RW -LINE B	145915
FROM MUPH TOTAL	191118
RW TO DM STG 1	90365
RW TO DM STG 2	49638
RW TO AHP STG 1	29210
RW TO AHP STG 2	0
FROM RW TOTAL	169212
ASH DYKE TO AWT STG 1	-1221
ASH DYKE TO AWT STG 2	42828
FROM ASH DYKE TOTAL	42210
STAGE 1 TO FIRE WATER TANK	8223
STAGE 2 TO FIRE WATER TANK	2716
TO FIRE WTR TOTAL	10938
CW BLOWDOWN STG 1	10394
CW BLOWDOWN STG 2	8751
TO CW BLOWDOWN TOTAL	19232
CW BLOWDOWN TO SWP STG 1	9092
CW BLOWDOWN TO SWP STG 2	7475
CW BLOWDOWN TO SW TOTAL	16567
CW BLOWDOWN TO AWT STG 1	7466
CW BLOWDOWN TO AWT STG 2	0
CW BLOWDOWN TO AWT TOTAL	7532
FWT TO CHP STG 1	3049
FWT TO CHP STG 2	0
FWT TO CHP TOTAL	3009
ETP RECYCLED WATER	8189
AWT STG2 TO AWT STG1	15339
DRINKING WATER TOTAL	4568
CW BLOWDOWN TO CHP STG 1	1920
CW BLOWDOWN TO CHP STG 2	2880

Water Dashboard:
Real time monitoring of water consumption

Environment Management: Water cont…

SIPAT DAILY WATER CONSUMPTION D

Sr No	Parameter	18-Aug-21	19-Aug-21	20-Aug-21	21-Aug-21	22-Aug-21	23-Aug-21	Difference from yesterday
	GEN MU	69.32	68.94	68.48	69.74	68.38	68.99	0.61
1	Total Makup intake from MUPH	151179	140865	161764	190162	150820	110524	-40296.00
2	Stage-1 RW to DMPT	86400	81266	86936	86936	88788	86866	-1922.00
3	Stage-2 RW to DMPT	51367	51902	53301	53301	52548	55849	3301.00
4	RW to ash water tank st-1	23604	23904	20045	16614	17768	22678	4910.00
5	RW to st-2(CHP+SW+FW)	0	45	20	13	7	12	5.00
6	Total RW consumption	161371	157117	160302	156864	159111	165405	6294.00
7	Return from AWRS	115615	115275	115433	116295	116061	115087	-974.00
8	Total fire water intake	13860	12402	11818	12511	12257	12995	738.00
9	Station DM Consumption (TOTAL)	2240	2397	2447	2342	2104	2247	143.00
11	Drinking Water total	2185	2144	2179	2160	2148	2193	45.00
12	Recycled from ETP	9498	12149	12969	12315	12144	11184	-960.00
13	Stage-I blow down	8806	8696	8782	9021	8895	9037	142.00
14	Stage-II blow down	7697	9976	9699	10055	7631	10177	2546.00
15	SPECIFIC WATER CONSUMPTION L/KWh (RW)	2.33	2.28	2.34	2.25	2.33	2.40	0.07
16	Raw Water sump Level(mm)	7964	8008	7955	7955	7856	7789	-67.00
17	SPECIFIC WATER CONSUMPTION L/KWR (MUPH)	2.18	2.04	-289.69	2.73	22.06	1.60	-20.45
18	COC	6.4	6.1	6.0	5.9	5.9	5.9	-0.09
19	Ash water ratio	10.14	10.53	9.98	9.39	9.77	9.90	0.13
20	Series Running Hours Stage-I	75	64	65	65	64	70	5.50
21	Series Running Hours Stage-II	34	33	29	36	35	31	-4.50
22	Total ASH water intake	153120	155676	152838	149735	150421	153468	3047.00
23	% ASH water return	76%	74%	76%	78%	77%	75%	-2.17

Energy Management System (ISO 50001:2018)

Reliability And APC/Heatrate Improvement

◆ ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

CERTIFICATE

This is to Certify that the Management System of

NTPC LIMITED, SIPAT

SIPAT SUPER THERMAL POWER PROJECT, P.O. UJJWAL NAGAR - 495555, SIPAT, DIST. BILASPUR, CHHATTISGARH, INDIA

has been found to conform to the Energy Management System Standard:

ISO 50001:2018

This certificate is valid for the following scope of operations:

GENERATION OF ELECTRICITY BY COAL BASED THERMAL POWER PLANT (2 x 500 MW + 3 x 660 MW)

Certificate No.: IN54252G

Date of initial registration	*Date of this Certificate*	*Surv. audit on or before/ Certificate expiry*	*Recertification Due*
24 December 2021	*24 December 2021*	*23 December 2022*	*23 December 2024*

This Certificate remains valid subject to satisfactory surveillance audits.

Director

For verification and updated information concerning the present certificate visit to https://staunchlyservices.com

This Certificate is the property of Staunchly Management & System Services Limited and shall be returned immediately when demanded

STAUNCHLY MANAGEMENT AND SYSTEM SERVICES LIMITED

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Great Manchester, England-SK1 3DG

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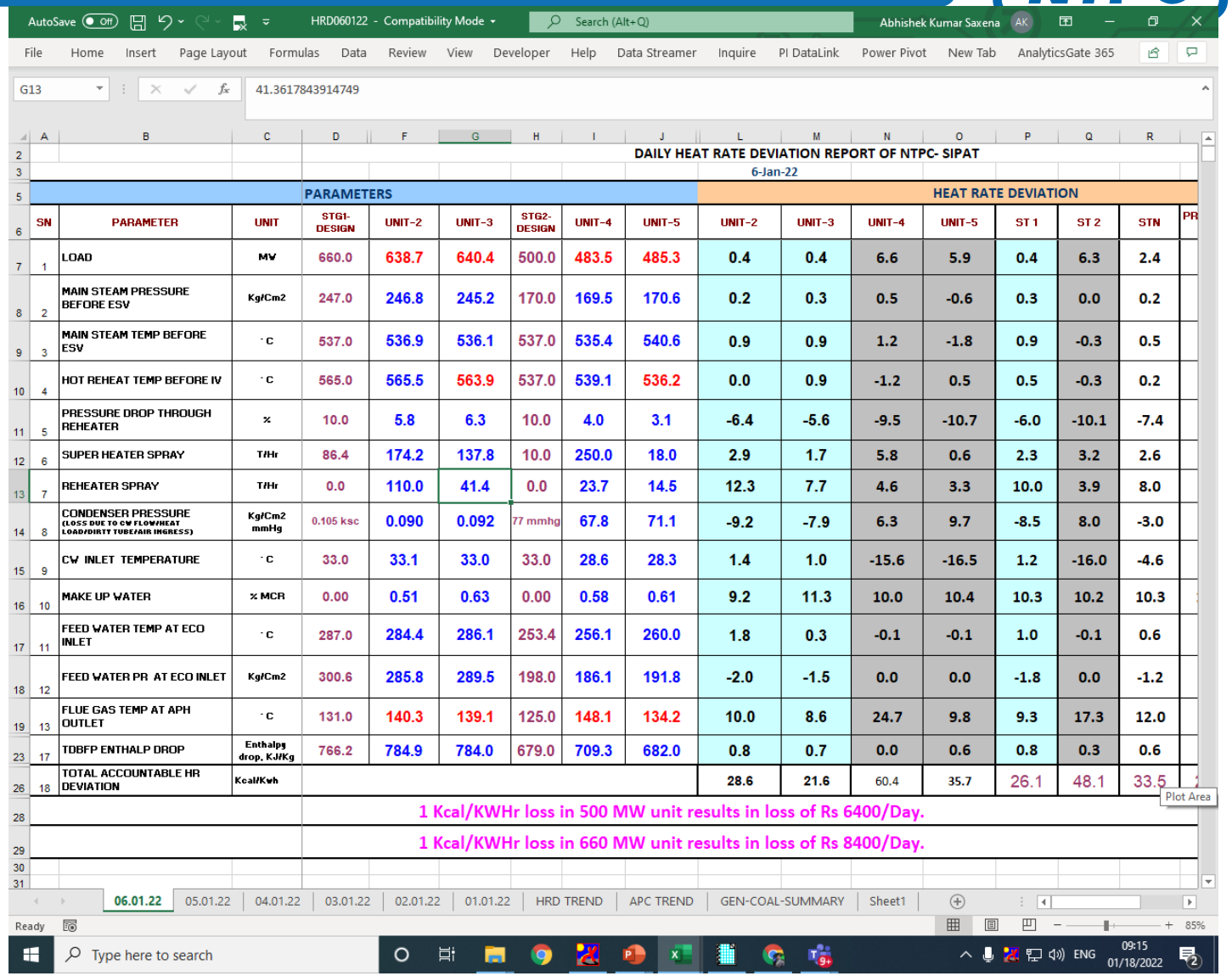
Phone :- +44 740 482 3687

Company Registered in England with Company Number 11488683

SMS/FM/001/REV06

Heat Rate Daily monitoring



DAILY HEAT RATE DEVIATION REPORT OF NTPC- SIPAT

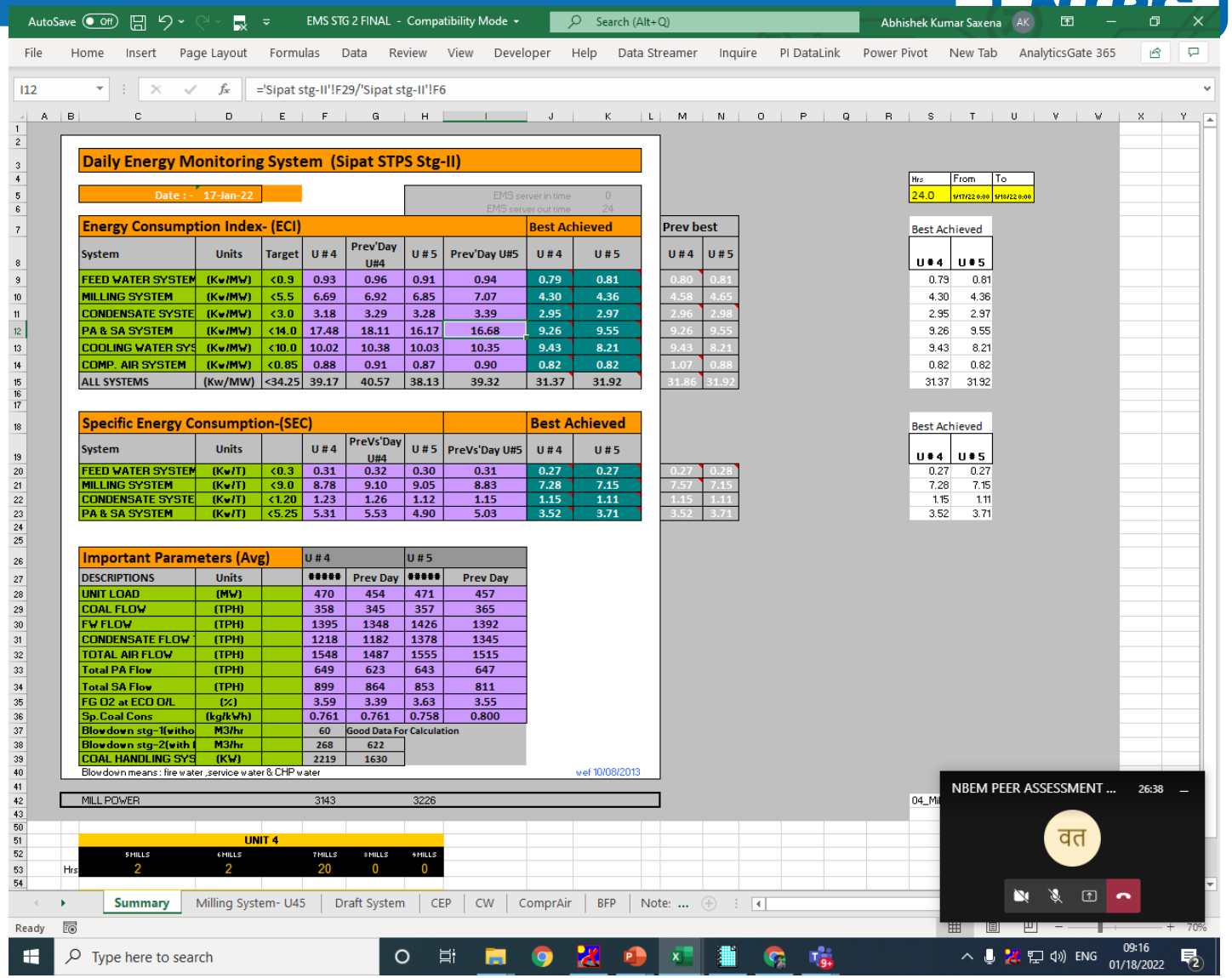
6-Jan-22

SN	PARAMETER	UNIT	PARAMETERS STG1-DESIGN	UNIT-2	UNIT-3	STG2-DESIGN	UNIT-4	UNIT-5	HEAT RATE DEVIATION UNIT-2	UNIT-3	UNIT-4	UNIT-5	ST 1	ST 2	STN
1	LOAD	MW	660.0	638.7	640.4	500.0	483.5	485.3	0.4	0.4	6.6	5.9	0.4	6.3	2.4
2	MAIN STEAM PRESSURE BEFORE ESV	Kg/Cm2	247.0	246.8	245.2	170.0	169.5	170.6	0.2	0.3	0.5	-0.6	0.3	0.0	0.2
3	MAIN STEAM TEMP BEFORE ESV	°C	537.0	536.9	536.1	537.0	535.4	540.6	0.9	0.9	1.2	-1.8	0.9	-0.3	0.5
4	HOT REHEAT TEMP BEFORE IV	°C	565.0	565.5	563.9	537.0	539.1	536.2	0.0	0.9	-1.2	0.5	0.5	-0.3	0.2
5	PRESSURE DROP THROUGH REHEATER	%	10.0	5.8	6.3	10.0	4.0	3.1	-6.4	-5.6	-9.5	-10.7	-6.0	-10.1	-7.4
6	SUPER HEATER SPRAY	T/Hr	86.4	174.2	137.8	10.0	250.0	18.0	2.9	1.7	5.8	0.6	2.3	3.2	2.6
7	REHEATER SPRAY	T/Hr	0.0	110.0	41.4	0.0	23.7	14.5	12.3	7.7	4.6	3.3	10.0	3.9	8.0
8	CONDENSER PRESSURE (LOSS DUE TO CW FLOW/HEAT LOAD/DIRTY TUBE/AIR INGRESS)	Kg/Cm2 mmHg	0.105 ksc	0.090	0.092	77 mmhg	67.8	71.1	-9.2	-7.9	6.3	9.7	-8.5	8.0	-3.0
9	CW INLET TEMPERATURE	°C	33.0	33.1	33.0	33.0	28.6	28.3	1.4	1.0	-15.6	-16.5	1.2	-16.0	-4.6
10	MAKE UP WATER	% MCR	0.00	0.51	0.63	0.00	0.58	0.61	9.2	11.3	10.0	10.4	10.3	10.2	10.3
11	FEED WATER TEMP AT ECO INLET	°C	287.0	284.4	286.1	253.4	256.1	260.0	1.8	0.3	-0.1	-0.1	1.0	-0.1	0.6
12	FEED WATER PR AT ECO INLET	Kg/Cm2	300.6	285.8	289.5	198.0	186.1	191.8	-2.0	-1.5	0.0	0.0	-1.8	0.0	-1.2
13	FLUE GAS TEMP AT APH OUTLET	°C	131.0	140.3	139.1	125.0	148.1	134.2	10.0	8.6	24.7	9.8	9.3	17.3	12.0
17	TDBFP ENTHALP DROP	Enthalpy drop, KJ/Kg	766.2	784.9	784.0	679.0	709.3	682.0	0.8	0.7	0.0	0.6	0.8	0.3	0.6
18	TOTAL ACCOUNTABLE HR DEVIATION	Kcal/Kwh							28.6	21.6	60.4	35.7	26.1	48.1	33.5

1 Kcal/KWHr loss in 500 MW unit results in loss of Rs 6400/Day.

1 Kcal/KWHr loss in 660 MW unit results in loss of Rs 8400/Day.

APC Daily monitoring



Daily Energy Monitoring System (Sipat STPS Stg-II)

Date : - 17-Jan-22

EMS server in time 0
EMS server out time 24

Energy Consumption Index- (ECI)

System	Units	Target	U # 4	Prev'Day U#4	U # 5	Prev'Day U#5	Best Achieved U # 4	Best Achieved U # 5	Prev best U # 4	Prev best U # 5
FEED WATER SYSTEM	(Kw/MW)	<0.9	0.93	0.96	0.91	0.94	0.79	0.81	0.80	0.81
MILLING SYSTEM	(Kw/MW)	<5.5	6.69	6.92	6.85	7.07	4.30	4.36	4.58	4.65
CONDENSATE SYSTE	(Kw/MW)	<3.0	3.18	3.29	3.28	3.39	2.95	2.97	2.96	2.98
PA & SA SYSTEM	(Kw/MW)	<14.0	17.48	18.11	16.17	16.68	9.26	9.55	9.26	9.55
COOLING WATER SYS	(Kw/MW)	<10.0	10.02	10.38	10.03	10.35	9.43	8.21	9.43	8.21
COMP. AIR SYSTEM	(Kw/MW)	<0.85	0.88	0.91	0.87	0.90	0.82	0.82	1.07	0.88
ALL SYSTEMS	(Kw/MW)	<34.25	39.17	40.57	38.13	39.32	31.37	31.92	31.86	31.92

Hrs	From	To
24.0	9/17/22 0:00	9/18/22 0:00

Best Achieved

U # 4	U # 5
0.79	0.81
4.30	4.36
2.95	2.97
9.26	9.55
9.43	8.21
0.82	0.82
31.37	31.92

Specific Energy Consumption-(SEC)

System	Units		U # 4	PreVs'Day U#4	U # 5	PreVs'Day U#5	Best Achieved U # 4	Best Achieved U # 5		
FEED WATER SYSTEM	(Kw/T)	<0.3	0.31	0.32	0.30	0.31	0.27	0.27	0.27	0.28
MILLING SYSTEM	(Kw/T)	<9.0	8.78	9.10	9.05	8.83	7.28	7.15	7.57	7.45
CONDENSATE SYSTE	(Kw/T)	<1.20	1.23	1.26	1.12	1.15	1.15	1.11	1.15	1.11
PA & SA SYSTEM	(Kw/T)	<5.25	5.31	5.53	4.90	5.03	3.52	3.71	3.52	3.71

Best Achieved

U # 4	U # 5
0.27	0.27
7.28	7.15
1.15	1.11
3.52	3.71

Important Parameters (Avg)

DESCRIPTIONS	Units		U # 4 *****	U # 4 Prev Day	U # 5 *****	U # 5 Prev Day
UNIT LOAD	(MW)		470	454	471	457
COAL FLOW	(TPH)		358	345	357	365
FW FLOW	(TPH)		1395	1348	1426	1392
CONDENSATE FLOW	(TPH)		1218	1182	1378	1345
TOTAL AIR FLOW	(TPH)		1548	1487	1555	1515
Total PA Flow	(TPH)		649	623	643	647
Total SA Flow	(TPH)		899	864	853	811
FG O2 at ECO O/L	(%)		3.59	3.39	3.63	3.55
Sp.Coal Cons	(kg/kWh)		0.761	0.761	0.758	0.800
Blowdown stg-1(witho	M3/hr		60	Good Data For Calculation		
Blowdown stg-2(with	M3/hr		268	622		
COAL HANDLING SYS	(KW)		2219	1630		

Blowdown means : fire water ,service water & CHP water

wef 10/08/2013

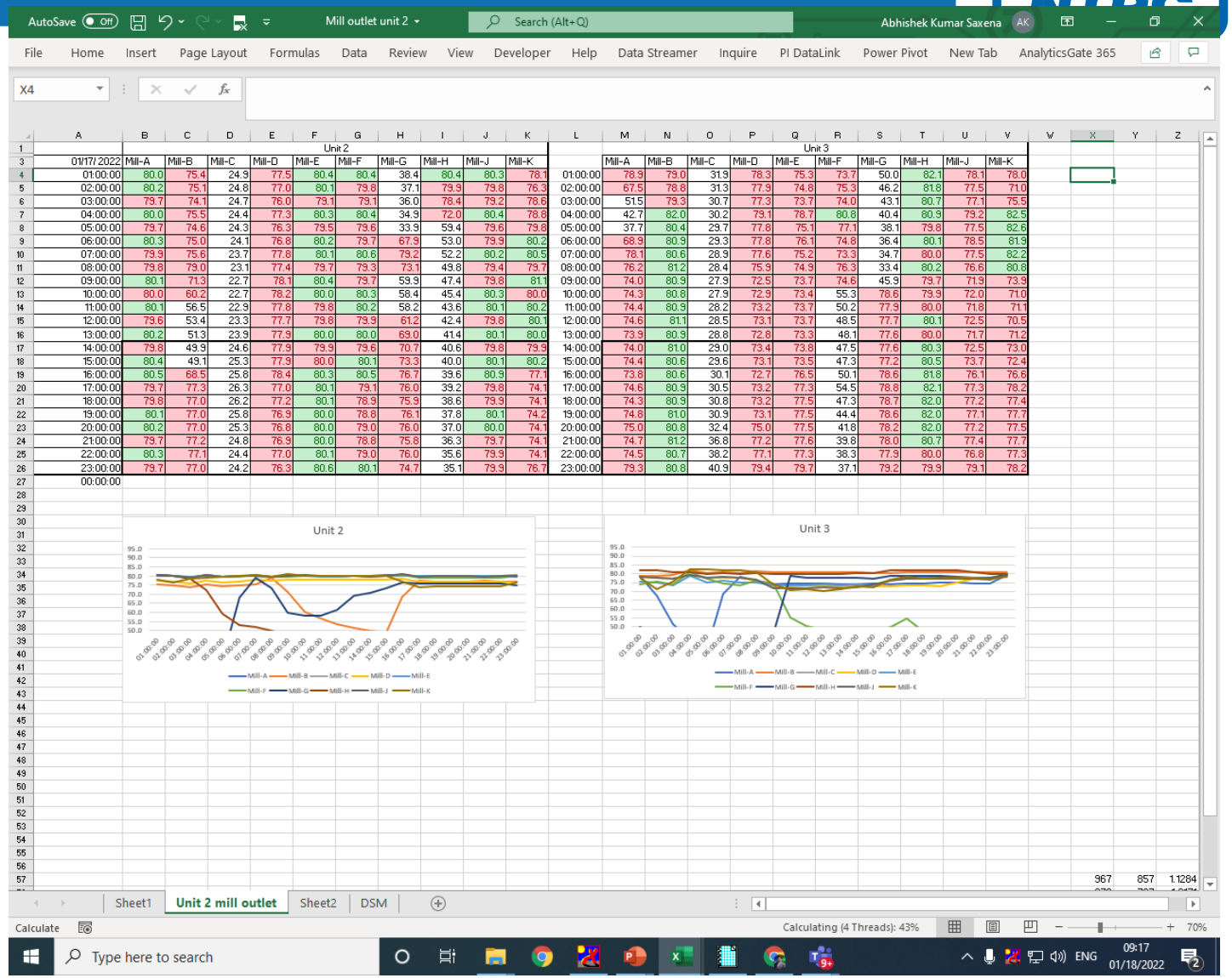
MILL POWER	3143	3226

UNIT 4

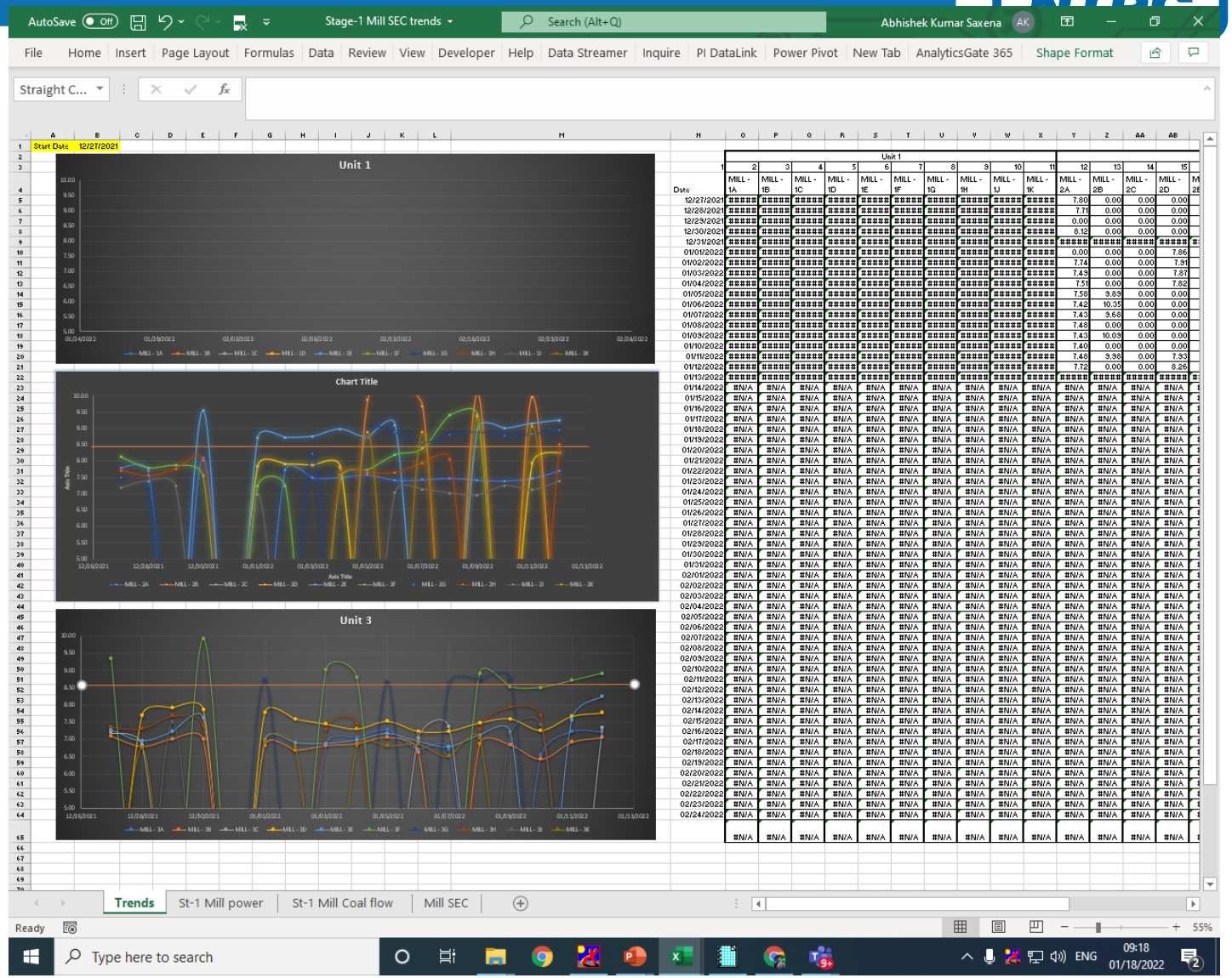
Hrs	5 MILLS	6 MILLS	7 MILLS	8 MILLS	9 MILLS
	2	2	20	0	0

NBEM PEER ASSESSMENT ... 26:38

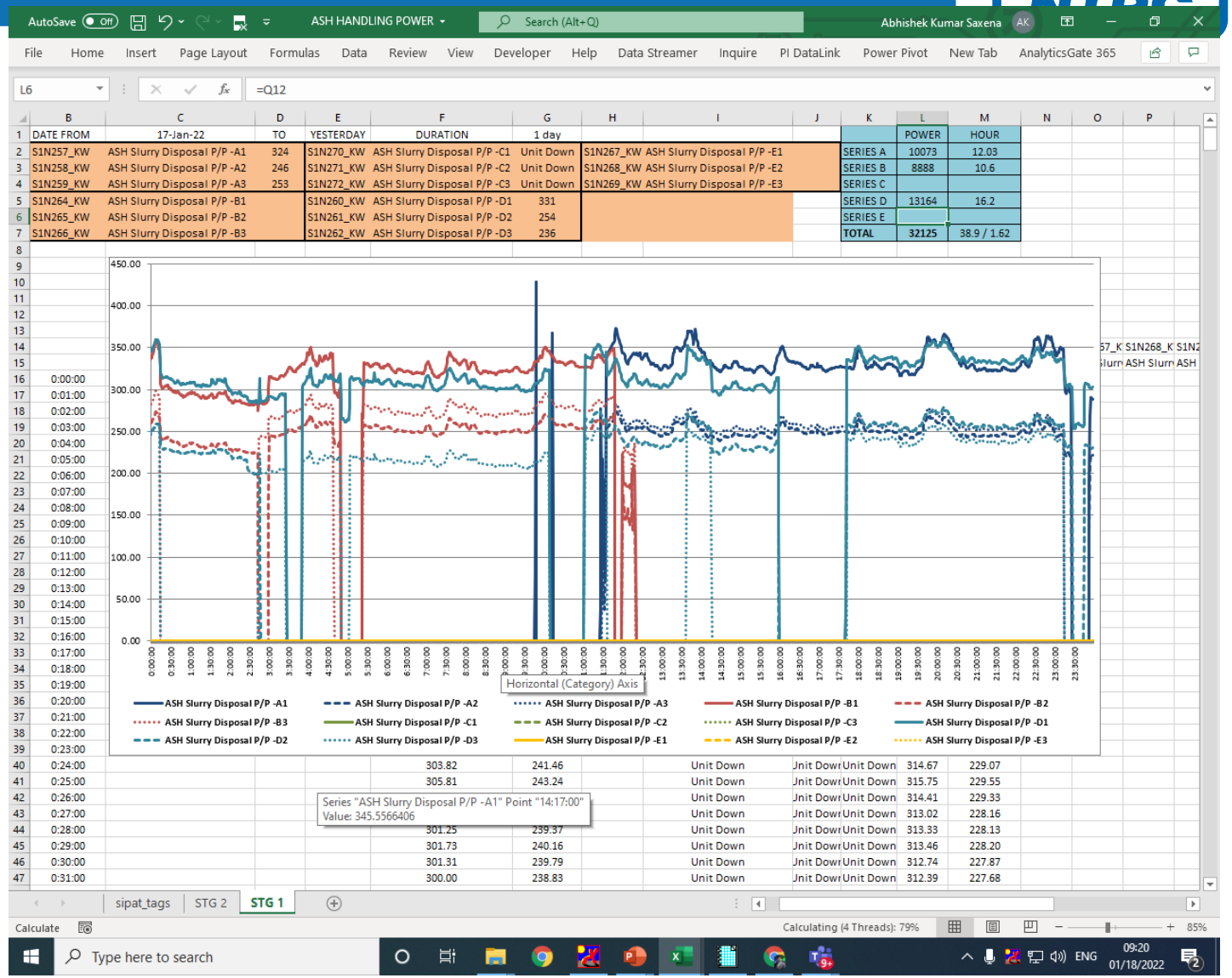
Mill Outlet Temperature trends



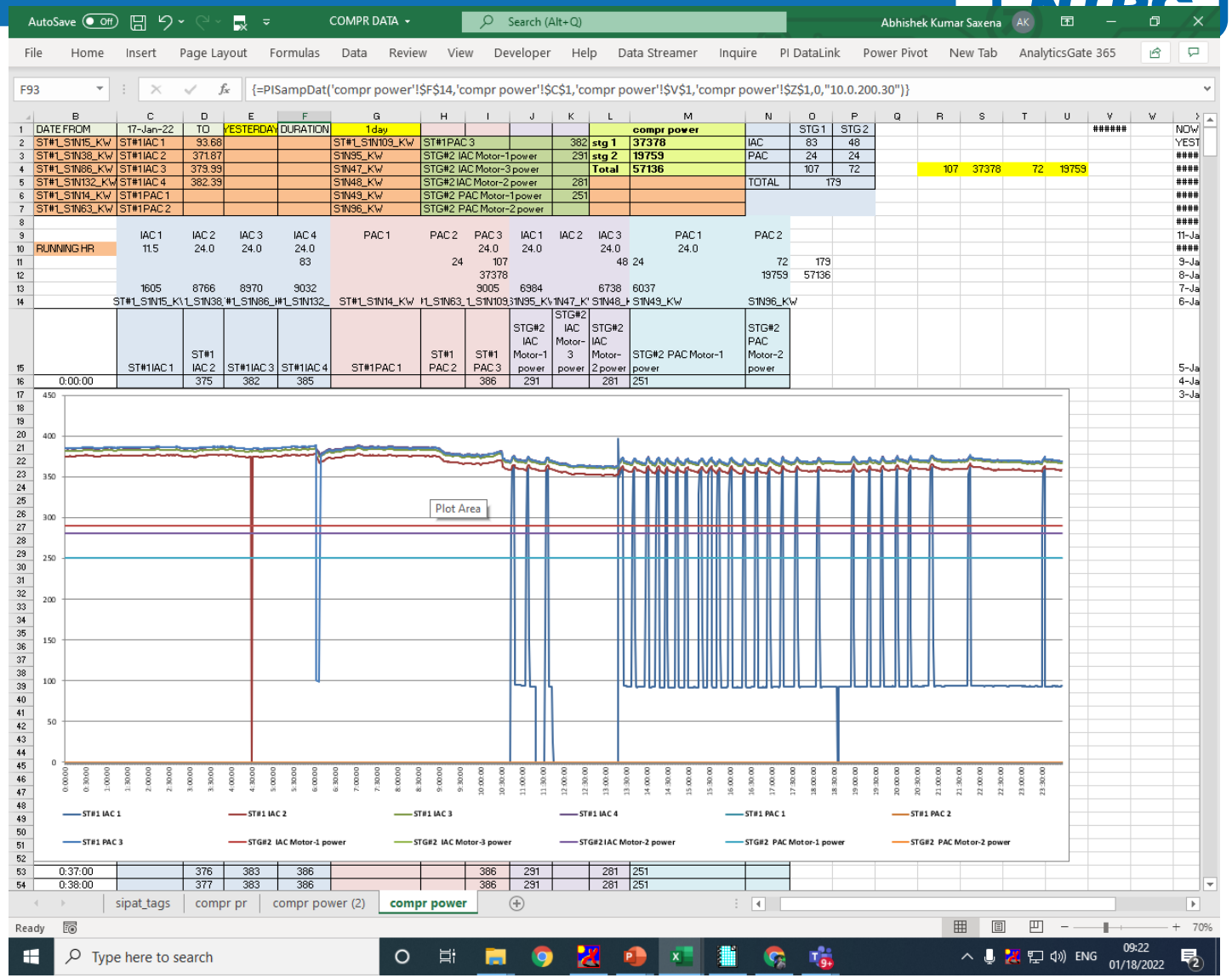
Mill SEC Trends



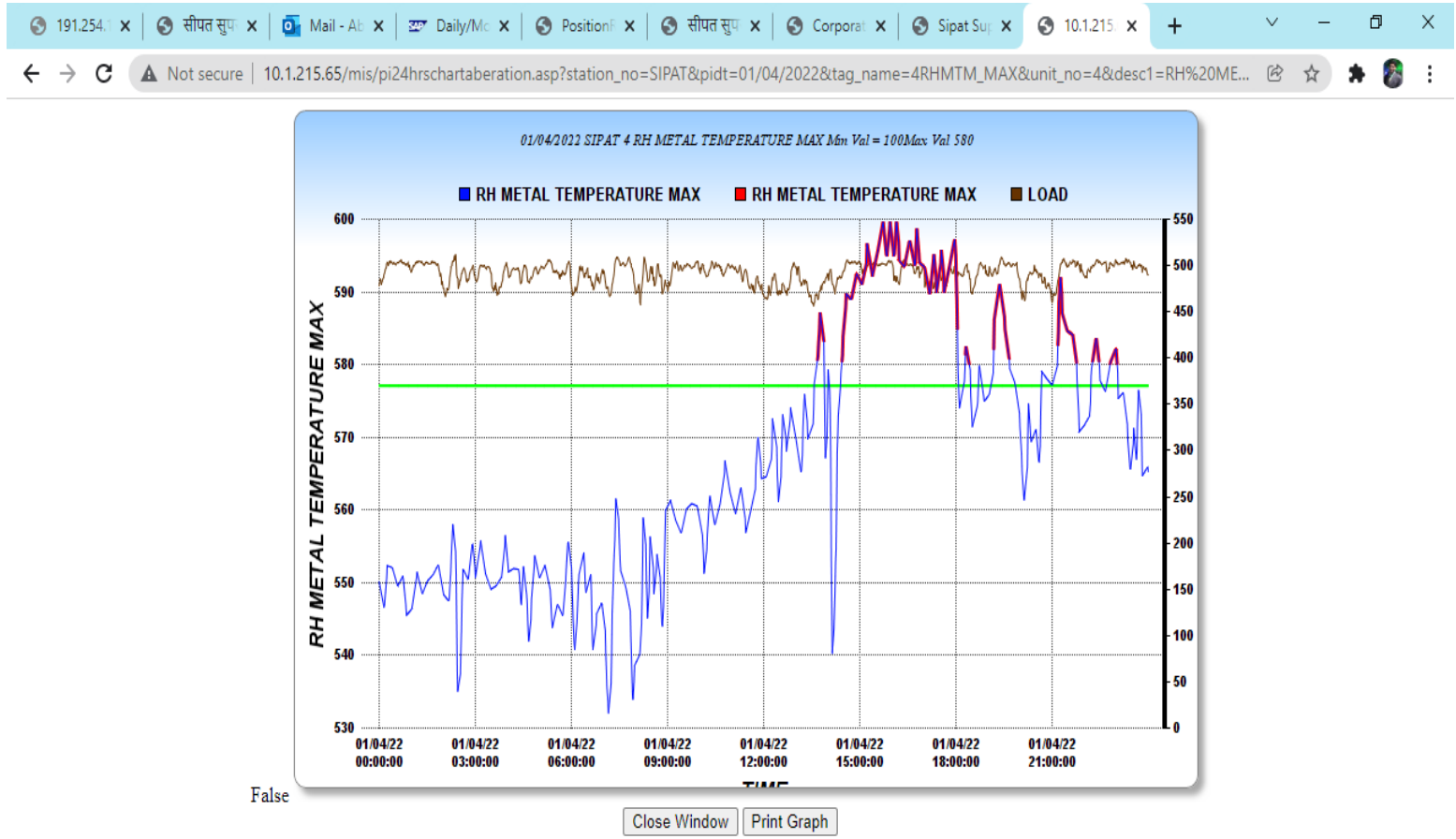
Ash Slurry Series monitoring



Compressor's Power Consumption Trend



24 hrs Parametric Monitoring



Teamwork Employee involvement & Monitoring

Daily Monitoring System:

Daily Planning Meeting(DPM) is conducted every day at 12:00 noon to discuss the critical issues and previous day performance. It is chaired by GM(Operation& Maintenance)

Review meeting:

Head of Plant(HOP) chairs this meeting twice a week to address long pending issues of varios departments.

A separate Energy conservation budget is allocated for each financial year to achieve energy savings. For FY 22-23 NTPC Sipat has allocated 10cr for ENCON activities.

Training: All Operation desk engineers have been provided training regarding Energy Efficiency performance of thermal power plant including boiler, turbine and other auxiliaries, during 01 year induction training. Employees are encouraged to give exams organized by Bureau of Energy Efficiency. Training is also provided to all Participants for BEE energy auditor exam.

Audit : 3 Energy audit every year. LMI audit

Awards

- TERI –UNDP-WSA “Water Sustainability Award 2021” only plant in Power plant Industrial category.
- Won “Environment Excellence (Gold)”
- Won Greentech Effective Safety Culture Award (Platinum) 2021
- “Best Energy Efficient Plant – Coal ” by Mission Energy Foundation
- Award as Energy Efficient unit in Energy Management 2021 by CII.
- Occupational Health & Safety (Gold) 2021.
- Brandon Hall Award(Gold) (2nd time in a row).



Thank You

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