



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति

75
Azadi Ka
Amrit Mahotsav



Eastern Regional Power Committee

14, गोल्फ क्लब रोड, टॉलीगंज, कोलकाता-700033

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दिनांक/Date: 28.04.2023

सेवा में : (संलग्न सूची के अनुसार)

To: As per enclosed list.

विषय : मार्च-2023 माह की ईआरपीसी की मासिक प्रगति रिपोर्ट ईआरपीसी की वेबसाइट पर अपलोड - के संबंध में

Subject: Upload of Monthly Progress Report of ERPC for the month of March, 2023 on ERPC website.

महोदय / Sir ,

पूर्वी क्षेत्रीय विद्युत समिति की मार्च -2023 माह की मासिक प्रगति रिपोर्ट ईआरपीसी की वेबसाइट www.erpc.gov.in पर अपलोड कर दी गई है। यह आपकी जानकारी के लिए है।

Monthly Progress Report of Eastern Regional Power Committee for the month of March, 2023 has been uploaded on ERPC website www.erpc.gov.in. This is for your information please.

संलग्नक : यथोपरी।

Encl. – As above.

भवदीय / Yours faithfully,

(Srijit Mukherjee)

कार्यकारी अभियंता

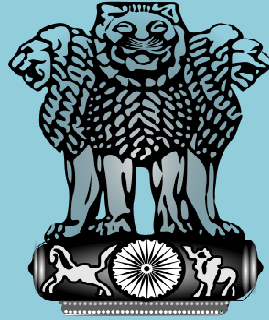
Executive Engr.

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Government of India

विद्युतमंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

PROGRESS REPORT FOR THE MONTH OF

मार्च - 2023

March-2023



14, गोल्फ क्लब रोड, टोलीगंज

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INDEX

Sl. No.	Contents	Page No.
1	Highlights & Salient Features	1-2
2.	Power Supply Position of Eastern Region and Constituents wise performance	3-3A
5.	Comparative study of power supply position with previous year	4
7.	Performance vis-à-vis Energy Generation from Power Stations	5-6
8.	Plant Load Factor (PLF) of Thermal Power Stations	7-8
9.	Power Scenario at the time of Regional Peak	9
10.	Hourly Load/Generation Data of region for Peak day & Lean day	10
11	Notified Power Cut, Restriction & Power Supply to Agriculture Sector	11
ANNEXURES		
I	Frequency Analysis	12
II	Voltage Analysis	13
III	Reservoir level of major hydro stations and Import from IPPs/CPPs by Constituents	14
EXHIBITS		
I	Chart: Effective Capacity & Generation Corresponding to Peak Demand Met	15
II	Chart: Net Energy Generation & Reservoir Levels recorded	16
III	Chart: Capacity & Generation pattern of the Peak Day	17
IV	Daily Regional Peak Demand Met & Shortage	18
V	Hourly Load/generation Pattern of Peak Day	19
VI	Hourly Load/generation Pattern of Lean Day	20
VII	Monthly Load Duration Curve	21
VIII	Reservoir Levels	22
IX	Reserves Report	23-27

Highlights of Eastern Regional Power System for March- 2023

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of **Mar, 2023** was **23779 MW** which is 3.27% less than the **Mar, 2022** (24582 MW). Individual **Peak Demand (MW)** of all the constituents (except JUVNL & Odisha) **decreased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of **Mar, 2023** was **474.48 MU** (excluding export), which is marginally more than the corresponding period of last year (474.37 MU).
- The **Average regional PLF of thermal units during the month is 80.89 %**, which is 1.35% less than the corresponding period of the last year (**82.24%**).

Bakreswar TPP (WBPDC) registered the highest PLF of 101.36%, followed by Sagardighi TPP (WBPDC) 100.20% and Santaldih TPS (WBPDC) 99.54% during the month of **Mar, 2023**.
- **Maximum Net generation** was **30714.75 MW** against total **Effective Capacity of 42433.41 MW** (including import from Bhutan). At the time of Regional peak (**23779 MW** on 04.03.2023 at 19.00 hrs.), the generation was **29322 MW**, import from CPP was 2063 MW and Net export was 7606 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 65.63% of time during the month. **Average frequency** for the month was **49.99 Hz**. The instantaneous maximum and minimum frequency were 50.48 Hz and 49.56 Hz, respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.27 Hz** and **49.67 Hz** respectively (refer Annexure-I).
- At 400 kV voltage level, the **maximum Voltage** recorded was 424 KV at Biharsharif 400 KV S/s whereas the minimum voltage recorded 388 KV at Jamshedpur 400 KV S/s of Power grid.
- The **Maximum Export from ER to outside region** was **11868 MW** (including Nepal and Bangladesh) on **21st Mar, 2023** at 24:00 hrs. Total net energy export during the month was **5872.97 MU** (Inc.Transmission loss) which corresponds to 30.51 % of Ex-bus total generation 19251.00 MU of Eastern Region.
- The import from CPPs was 1330.82 MU during the month.

➤ **Export(+)/Import(-) during the month:**

Region/Country	Max. Export of Power from ER (MW)	Max. Import of Power by ER (MW)	Net Export of Energy inc.Transmission loss(MU)
NR	5609	675	2162.73
WR	3405	1104	882.38
SR	4155	0	2126.34
NER	743	1228	-277.14
BANGLADESH			657.07
NEPAL (via-CTU)			229.53
Chukha, Kurichu, Tala, Mangdechhu			92.07
Total			5872.97
NEPAL by Bihar(NBPDCL)			77.36

SALIENT FEATURES

(YEAR TO YEAR COMPARISON)

		Mar-23		MAR-2022	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)					
	THERMAL (MW)	32730		31600	1130	3.58
	HYDRO (MW)	5990	\$	5990	0	0
	DIESEL (MW)	0		0	0	0
	RES (MW)	1518		1518	0	0
	TOTAL (MW)	40237		39107	1130	2.89
2)	Peak Demand (MW)	23779		24762	-983	-3.97
3)	Peak Demand Met (MW)	23779		24582	-803	-3.27
4)	Shortage (MW)	0		180	-180	0.00
5)	% Shortage	0.00		0.73	-0.73	0.00
6)	Average Energy Requirement Per Day (MU)	477.46		479.88	-2.42	-0.50
7)	Average Energy Availability Per Day (MU)	474.48		474.37	0.11	0.02
8)	Average Shortage Per Day (MU)	2.98		5.51	-2.53	--
9)	% Shortage	0.62		1.15	-0.53	--
10)	Net Generation for the Month					
	Thermal (MU)	18308.94		17928.57	380.37	2.12
	Hydro (MU)	801.14	*	1157.03	-355.89	-30.76
	RES (MU)	140.93		120.02	0.00	-
	Total (MU)	19251.00		19205.62	45.38	0.24
11)	Generation at the Time of Max. Regional Demand Met (04-03-23 at 19.00 Hrs.)					
	Thermal (MW)	25902		24190	1712	7.08
	Hydro (MW)	3399	*	4654	-1255	-26.96
	RES(MW)	20		24	-4	-15.12
	Total (MW)	29322		28868	454	1.57
12)	Inter-Regional Energy Transfer					
	Export (MU)	6150.11		5517.71	632.40	11.46
	Import (MU)	277.14		37.89	239.25	631.43
	Net Exp.(+)/Net Imp.(-) (MU)	5872.97		5479.82	393.15	7.17
13)	Import From Captive(MU)	1330.82		979.68	351.14	35.84
14)	Peak Inter Regional Power Transfer					
	Max Export (MW) on 21-03-23 at 24.00Hrs	11868		11655	213	1.83
	Max Import (MW) on 19-03-23 at 18.00Hrs	1511		2156	-645	-29.90
	Max Net Export(+)/Import (-) (MW)	11115		11366	-251	-2.21
15)	Maximum voltage recorded	424		BIHARSHARIFF	400 kv	s/s
16)	Minimum voltage recorded	388		JAMSHEDPUR	400 kv	s/s

\$ Excludes 2196 MW contribution from HEPs of Bhutan

* Includes contribution from HEP of Bhutan (Chukha, Kurichhu ,Dagahhu , Tala & Mangdechhu HEP)

POWER SUPPLY POSITION FOR THE MONTH OF MAR'2023

A) Net Average Energy Per Day

System	Requirement Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSPHCL	93.90	94.51	0.62	0.65
JUVNL	33.79	36.12	2.33	6.45
DVC	72.25	72.27	0.02	0.03
ODISHA	111.64	111.68	0.04	0.03
WBSEDCL	132.28	132.48	0.20	0.15
CESC	28.72	28.73	0.01	0.03
SIKKIM	1.66	1.66	0.00	0.03
REGION	474.48	477.46	2.98	0.62

B) Peak Demand in MW:

System	Demand Met (MW)	Demand (MW)	Shortage (MW)	% Shortage
BSPHCL	5267	5289	23	0.43
JUVNL	1719	1970	251	12.73
DVC	3268	3268	0	0.00
ODISHA	5539	5539	0	0.00
WBSEDCL	7147	7147	0	0.00
CESC	1736	1738	2	0.1
SIKKIM	113	113	0	0.00
REGION	23779	23779	0	0.00

➤ DIVERSITY FACTOR : 1.04

➤ Regional Peak Demand Met on 4-3-2023 at 19.00 hrs. at 50 Hz.

CONSTITUENT-WISE PERFORMANCE DATA MAR-2023

SYSTEM	Gross Generation(MU)				Auxiliary power Consumption(MU)				Net Generation (MU)				Import from	Exchange	Energy	Per Day	Net Peak	Gross Peak
	HYDRO	Thermal	RES (Hy+Solar)	Total	HYDRO	Thermal	Solar	Total	HYDRO	Thermal	Solar	Total	Captive (MU)	Net Import(+)	Consumption(MU)	Cons.(MU)	Demand	Demand
														Net Export(-)			Met (MW)	Met (MW)
BSPHCL	0.00	331.26	50.62	381.88	0.00	32.76	0.00	32.76	0.00	298.50	50.62	349.13	0.00	2561.65	2910.78	104.0	5267	5318
JUVNL	5.05	333.21	0.00	338.26	0.00	31.63	0.00	31.63	5.05	301.58	0.00	306.63	39.58	701.24	1047.45	37.4	1719	1754
DVC	9.27	3899.70	0.00	3908.96	0.12	250.95	0.00	251.07	9.15	3648.75	0.00	3657.89	3.63	-1421.89	2239.64	80.0	3268	3637
ODISHA(OPGC+OHPC+ITPS)	292.89	1111.58	65.27	1469.75	3.19	76.35	0.00	79.54	289.70	1035.23	65.27	1390.20	997.35	1073.43	3460.98	123.6	5539	5632
WBPDC+WBSEDCL+DPL	114.15	3203.76	22.98	3340.89	0.00	262.34	0.00	262.34	114.15	2941.42	22.98	3078.55	290.26	731.96	4100.77	146.5	7147	7543
CESC	0.00	548.45	0.00	548.45	0.00	41.62	0.00	41.62	0.00	506.83	0.00	506.83	0.00	383.54	890.38	31.8	1736	1808
HEL	0.00	362.31	0.00	362.31	0.00	27.38	0.00	27.38	0.00	334.93	0.00	334.93	0.00	-334.93				
SIKKIM	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	50.41	51.41	1.8	113	113
NTPC	0.00	7786.21	1.05	7787.26	0.00	535.14	0.00	535.14	0.00	7251.07	1.05	7252.11	0.00	-7252.11				
MPL	0.00	655.66	0.00	655.66	0.00	36.05	0.00	36.05	0.00	619.61	0.00	619.61	0.00	-619.61				
APNRL	0.00	232.42	0.00	232.42	0.00	19.47	0.00	19.47	0.00	212.95	0.00	212.95	0.00	-212.95				
GMR	0.00	479.27	0.00	479.27	0.00	29.94	0.00	29.94	0.00	449.33	0.00	449.33	0.00	-449.33				
JITPL	0.00	754.20	0.00	754.20	0.00	45.47	0.00	45.47	0.00	708.73	0.00	708.73	0.00	-708.73				
NHPC (Inc TLDP= 37.84 MU)	146.20	0.00	0.00	146.20	0.00	0.00	0.00	0.00	146.20	0.00	0.00	146.20	0.00	-146.20	0.00			
CHUZACHEN HPS	10.29	0.00	0.00	10.29	0.00	0.00	0.00	0.00	10.29	0.00	0.00	10.29	0.00	-10.29	0.00			
DIKCHU HPS	14.75	0.00	0.00	14.75	0.00	0.00	0.00	0.00	14.75	0.00	0.00	14.75	0.00	-14.75	0.00			
JORHANG HPS	10.40	0.00	0.00	10.40	0.00	0.00	0.00	0.00	10.40	0.00	0.00	10.40	0.00	-10.40	0.00			
TASHIDING HPS	3.12	0.00	0.00	3.12	0.00	0.00	0.00	0.00	3.12	0.00	0.00	3.12	0.00	-3.12	0.00			
TEESTA-III HPS	164.00	0.00	0.00	164.00	0.00	0.00	0.00	0.00	164.00	0.00	0.00	164.00	0.00	-164.00	0.00			
RONGNICHU HEP	10.32	0.00	0.00	10.32	0.00	0.00	0.00	0.00	10.32	0.00	0.00	10.32	0.00	-10.32	0.00			
CHPC(Birpara Receipt)	0.09	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09	0.00	-0.09	0.00			
KHPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
THPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
DAGACHU HPS	12.98	0.00	0.00	12.98	0.00	0.00	0.00	0.00	12.98	0.00	0.00	12.98	0.00	-12.98	0.00			
Mangdechhu HEP	10.95	0.00	0.00	10.95	0.00	0.00	0.00	0.00	10.95	0.00	0.00	10.95	0.00	-10.95	0.00			
Total Drawal by HVDC Sahsaram,Alipurduar & Others														7.49	7.49			
Total	804.45	19698.03	140.93	20643.41	3.31	1389.10	0.00	1392.40	801.14	18308.94	140.93	19251.00	1330.82	-5872.94	14708.89	474.48	23779	25676

3A

19251.00

14708.89

POWER SUPPLY POSITION IN EASTERN REGION DURING THE YEAR AS COMPARED TO PREVIOUS YEAR

A) Net Average Energy

Month	2021-22					2022-23				
	Requirement Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (HZ)	Requirement Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (HZ)
APRIL	495.89	497.87	1.98	0.40	49.99	542.68	555.15	12.46	2.25	49.93
MAY	429.83	430.89	1.06	0.25	49.99	519.86	524.87	5.02	0.96	49.99
JUNE	462.07	462.84	0.77	0.17	49.99	547.72	553.79	6.07	1.10	49.98
JULY	498.44	500.02	1.57	0.31	50.00	569.64	576.81	7.17	1.24	49.99
AUGUST	501.37	505.13	3.76	0.74	49.99	556.08	563.58	7.50	1.33	49.98
SEPTEMBER	485.60	489.40	3.80	0.78	50.00	554.91	558.02	3.11	0.56	49.99
OCTOBER	453.17	458.67	5.51	1.20	49.98	498.49	500.63	2.14	0.43	50.00
NOVEMBER	388.80	390.35	1.55	0.40	49.99	418.14	422.38	4.24	1.00	49.99
DECEMBER	384.67	388.30	3.63	0.94	49.99	409.75	413.83	4.08	0.98	50.00
JANUARY	409.39	412.33	2.94	0.71	49.99	440.92	444.61	3.69	0.83	49.99
FEBRUARY	409.74	412.62	2.87	0.70	49.99	454.39	458.11	3.72	0.81	49.99
MARCH	474.37	479.88	5.51	1.15	49.97	474.48	477.46	2.98	0.62	49.99

B) Peak in MW:

Month	2021-22					2022-23				
	Demand Met (MW)	Demand (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)	Demand Met (MW)	Demand (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)
APRIL	24405	24405	0	0.00	49.99	25690	25735	45	0.17	49.93
MAY	24191	24191	0	0.00	49.99	25070	25369	299	1.18	49.99
JUNE	23494	23521	28	0.12	49.99	26196	26730	534	2.00	49.98
JULY	25145	26019	874	3.36	50.00	26609	27739	1130	4.07	49.99
AUGUST	24157	24236	79	0.33	49.99	27218	28275	1057	3.74	49.98
SEPTEMBER	25010	25454	445	1.75	50.00	26650	26915	266	0.99	49.99
OCTOBER	23675	23979	304	1.27	49.98	26220	26225	5	0.02	50.00
NOVEMBER	20961	20998	37	0.18	49.99	21741	22225	484	2.18	49.99
DECEMBER	20631	20992	362	1.72	49.99	20720	21076	357	1.69	50.00
JANUARY	21204	21396	191	0.89	49.99	22095	22461	366	1.63	49.99
FEBRUARY	21198	21540	342	1.59	49.99	22689	22779	90	0.39	49.99
MARCH	24582	24762	180	0.73	49.97	23779	23779	0	0.00	49.99

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF MAR -2023

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	Net Energy Generation in MU	Cummulative Gross Energy Generation upto Current Month (2022-23) in MU	Cummulative Net Energy Generation upto Current Month (2022-23) in MU
BIHAR	NTPC	Barauni (U# 6,7)	220.00	210.00	10.50	7.60	43.89	31.20
		Barauni (U# 8)	250.00	250.00	159.56	144.11	1748.14	1588.21
		Barauni (U# 9)	250.00	250.00	161.20	146.79	1830.77	1658.14
	for Bihar) RES	Thermal Total	720.00	710.00	331.26	298.50	3622.79	3277.55
			354.91	354.91	50.62	50.62	373.84	373.84
		Total BIHAR	1074.91	1064.91	381.88	349.13	3996.64	3651.39
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	170.02	152.13	2585.54	2317.10
TPCL		JOJOBERA	240.00	240.00	163.19	149.45	1321.21	1208.53
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	5.05	5.05	168.96	168.89
	RES		60.41	60.41	0.00	0.00	0.00	0.00
		Total	190.41	190.41	5.05	5.05	168.96	168.89
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	-0.32	0.00	-5.57
		Chandrapura(U7 # 8)	500.00	500.00	183.77	166.33	3478.14	3135.58
		Durgapur(4)			0.00	-0.23	135.12	111.25
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	734.12	656.20	8403.36	7495.60
		Mejia(U # 7,8)	1000.00	1000.00	671.51	636.26	7264.83	6864.33
		Bokaro-A(1)	500.00	500.00	319.38	301.30	3796.10	3581.17
		Durgapur STPS (U#1,2)	1000.00	1000.00	687.50	652.98	7096.24	6723.96
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	655.73	619.50	5641.51	5281.52
		Koderma STPS (U#1,2)	1000.00	1000.00	647.69	616.72	7269.62	6886.88
		Total Thermal	6540.00	6540.00	3899.70	3648.75	43084.91	40074.72
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.46	6.43	100.68	100.40
		Panchet (U#1,2)	80.00	80.00	2.81	2.72	136.46	135.34
		Tilaiya (U#1,2)	4.00	4.00	0.00	0.0	2.41	2.3
		Hydro Total	147.20	147.20	9.27	9.15	239.55	238.05
Total DVC		6687.20	6687.20	3908.96	3657.89	43324.46	40312.77	
WEST BENGAL								
WBPDCCL	Thermal	Bandel TPS	320.00	275.00	160.04	145.60	1855.19	1677.88
		Santaldih TPS(U#5&6)	500.00	500.00	370.30	341.88	4001.76	3679.84
		Kolaghat TPS	840.00	840.00	464.17	415.90	4970.38	4418.12
		Bakreswar TPP	1050.00	1050.00	791.86	727.91	8497.25	7778.19
		Sagardighi TPP	1600.00	1600.00	1192.83	1107.49	12529.52	11610.27
		DPPS (300+250)	550.00	550.00	224.57	202.63	2706.20	2431.90
		Thermal Total	4860.00	4815.00	3203.76	2941.42	34560.29	31596.20
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	1.54	1.54	168.65	168.65
		Rammam (4x12.73)	51.00	51.00	9.43	9.43	245.62	245.62
		Teesta C.F. (3x3x7.5)	67.50	67.50	11.81	11.81	139.33	139.33
		Purulia PSS (4x225)	900.00	900.00	91.37	91.37	1578.06	1578.06
		Total Hydro	1053.50	1053.50	114.15	114.15	2131.66	2131.66
		RES	500.76	500.76	22.98	22.98	225.97	225.97

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF MAR -2023

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	Net Energy Generation in MU	Cummulative Gross Energy Generation upto Current Month (2022-23) in MU	Cummulative Net Energy Generation upto Current Month (2022-23) in MU
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00
		Southern (2x67.5)	135.00	135.00	55.38	50.54	635.68	580.79
		Budge-Budge (3x250)	750.00	750.00	493.07	456.30	5330.69	4909.86
		Total CESC	1125.00	1125.00	548.45	506.83	5966.37	5490.66
HEL	Thermal	HEL	600.00	600.00	362.31	334.93	4219.34	3889.91
		Total West Bengal	8139.26	8094.26	4251.65	3920.31	47103.62	43334.39
OPGC	Thermal	IB TPS	420.00	420.00	257.20	228.30	2779.51	2456.69
		IB TPS U#3(660 MW)	660.00	660.00	419.83	396.51	4573.52	4314.10
		IB TPS U#4(660 MW)	660.00	660.00	434.56	410.43	4357.39	4113.26
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	14.66	14.52	904.80	902.40
		Hirakud-II (Chiplima)	72.00	72.00	9.24	9.16	326.07	325.04
		Balimela (6x60+2x75)	510.00	510.00	32.91	32.44	1004.55	997.58
		Rengali (5x50)	250.00	250.00	23.30	23.20	758.55	757.44
		Upper Kolab (4x80)	320.00	320.00	75.93	75.66	544.40	542.48
		Indravati HPS (4x150)	600.00	600.00	115.61	113.49	1380.37	1364.49
		McKd.(Odisha drawal)	57.38	57.38	21.24	21.24	235.17	235.17
		Total Hydro	2084.88	2084.88	292.89	289.70	5153.91	5124.60
		RES	539.57	539.57	65.27	65.27	729.18	729.18
		Total Odisha	4364.45	4364.45	1469.75	1390.20	17593.52	16737.82
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00	1.00	17.00	17.00
NTPC		MTPS Stg-II	390.00	390.00	271.78	245.85	2991.94	2705.16
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	822.67	756.34	9651.55	8862.85
		FSTPP (U# 6)	500.00	500.00	340.88	318.46	2750.78	2562.30
		KhSTPP (4x210+3x500)	2340.00	2340.00	1232.72	1144.19	15595.58	14468.82
		TSTPP (2x500)	1000.00	1000.00	708.54	658.30	7572.53	7014.28
		BARH STPS II (2X660)	1320.00	1320.00	540.62	502.65	9074.41	8555.53
		BARH STPS I (1X660)	660.00	660.00	405.55	383.52	4069.96	3810.05
		BRBCL # I,2,3,4(4X250 MW)	1000	1000	570.25	528.14	6926.76	6395.14
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	1384.48	1296.67	12858.23	12168.76
		NSTPS infirm			0.00	0.00	75.63	69.22
		DSTPP #1&2	1600.00	1600.00	1104.71	1039.20	11317.49	10611.29
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		NKSTPP	660.00	660.00	404.02	377.75	600.80	561.75
		Total NTPC	13050.00	13050.00	7786.21	7251.07	83485.67	77785.13
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	12.44	12.44	323.25	323.25
		Teesta (3x170)	510.00	510.00	103.25	103.25	2836.21	2836.21
		TLDP(4x33+4x40) for WBSEDCL	292.00	292.00	30.51	30.51	1314.70	1314.70
		Total NHPC	862.00	862.00	146.20	146.20	4474.15	4474.15
		MPL (U#1&2)	1050.00	1050.00	655.66	619.61	7555.12	7129.95
		APNRL (U#1,2)	540.00	540.00	232.42	212.95	3506.78	3205.86
		GMR (2x350)	700.00	700.00	479.27	449.33	4700.06	4383.61
		JITPL (2X600)	1200.00	1200.00	754.20	708.73	7842.77	7375.10
		CHUZACHEN** (2x55)	110.00	110.00	10.29	10.29	492.59	492.59
		JORETHANG (2x48)	96.00	96.00	10.40	10.40	431.53	431.53
		TEESTA URJA St III (6x200)	1200.00	1200.00	164.00	164.00	6103.42	6103.42
		Tashilding (2x48.5)	97.00	97.00	3.12	3.12	443.24	443.24
		DICKCHU (2x48)	96.00	96.00	14.75	14.75	537.44	537.44
		RONGNICHU HEP (2x56.5)	113.00	113.00	10.32	10.32	429.12	429.12
		TALCHER SOLAR	10.00	10.00	1.05	1.05	13.04	13.04
		Total Thermal (E.R)	32785.00	32730.00	19698.03	18308.94	214161.28	198618.38
		Total Hydro (E.R)	5989.58	5989.58	780.44	777.12	20605.56	20574.67
		Total RES	1517.83	1517.83	140.93	140.93	1359.04	1359.04
EASTERN REGIONAL		TOTAL (E.R)	40292.41	40237.41	20619.39	19226.98	236125.88	220552.09
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	0.09	0.09	1569.95	1569.95
	Hydro	Kurichu (4x15)	60.00	60.00	0.00	0.00	28.65	28.65
	Hydro	TALA (6x170)	1020.00	1020.00	0.00	0.00	2417.33	2417.33
	Hydro	DAGACHU (2x63)	126.00	126.00	12.98	12.98	422.43	422.43
		MANGDECHU(4x180)	720.00	720.00	10.95	10.95	2648.51	2648.51
		Grand Total	42578.41	42433.41	20643.41	19251.00	243212.74	227638.96

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF MAR' 2023

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY (in MW)	EFFECTIVE CAPACITY (in MW)	Gross Energy Generation in MU	PLF of Current Month (%)	Cummulative Gross Energy Generation upto Current Month (2022-23) in MU	Cummulative PLF upto Current Month (%)
BIHAR	NTPC	Barauni (U# 6,7)	220.00	210.00	10.50	6.72	43.89	1.27
	Thermal	Barauni (U# 8)	250.00	250.00	159.56	85.78	1748.14	79.82
		Barauni (U# 9)	250.00	250.00	161.20	86.66	1830.77	83.60
	for Bihar) RES	Thermal Total	720.00	710.00	331.26	62.71	3622.79	57.92
			354.91	354.91	50.62		373.84	
		Total BIHAR	1074.91	1064.91	381.88		3996.64	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	170.02	54.41	2585.54	70.27
		JOJOBERA	240.00	240.00	163.19	91.39	1321.21	94.39
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	5.05		168.96	
	RES		60.41	60.41	0.00		0.00	
		Total	190.41	190.41	5.05		168.96	
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	0.00	0.00	0.00
		Chandrapura(U7 # 8)	500.00	500.00	183.77	49.40	3478.14	79.41
		Durgapur(4)			0.00	0.00	135.12	9.75
		Mezla(1,2,3,4,5,6)	1340.00	1340.00	734.12	73.64	8403.36	71.59
		Mejia(U # 7,8)	1000.00	1000.00	671.51	90.26	7264.83	82.93
		Bokaro-A(1)	500.00	500.00	319.38	85.85	3796.10	86.67
		Durgapur STPS (U#1,2)	1000.00	1000.00	687.50	92.41	7096.24	81.01
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	655.73	73.45	5641.51	53.67
		Koderma STPS (U#1,2)	1000.00	1000.00	647.69	87.06	7269.62	82.99
		Total Thermal	6540.00	6540.00	3899.70	80.15	43084.91	73.43
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.46		100.68	
		Panchet (U#1,2)	80.00	80.00	2.81		136.46	
		Tilaiya (U#1,2)	4.00	4.00	0.00		2.41	
		Hydro Total	147.20	147.20	9.27		239.55	
		Total DVC	6687.20	6687.20	3908.96		43324.46	
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	320.00	275.00	160.04	78.22	1855.19	77.01
		Santalidih TPS(U#5&6)	500.00	500.00	370.30	99.54	4001.76	91.36
		Kolaghat TPS	840.00	840.00	464.17	74.27	4970.38	67.55
		Bakreswar TPP	1050.00	1050.00	791.86	101.36	8497.25	92.38
		Sagardighi TPP	1600.00	1600.00	1192.83	100.20	12529.52	89.39
		DPPS (300+250)	550.00	550.00	224.57	54.88	2706.20	56.17
		Thermal Total	4860.00	4815.00	3203.76	89.43	34560.29	81.94
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	1.54		168.65	
		Rammam (4x12.73)	51.00	51.00	9.43		245.62	
		Teesta C.F. (3x3x7.5)	67.50	67.50	11.81		139.33	
		Purulia PSS (4x225)	900.00	900.00	91.37		1578.06	
		Total Hydro	1053.50	1053.50	114.15		2131.66	
	RES		500.76	500.76	22.98		225.97	
DE- COMM SSIONED	1.WBPDC, Bandel TPS Unit #1 (IC=1X60 MW,EC=1X60 MW) decommissioned from 21.02.2022.							
	2.WBPDC, Kolaghat TPS Unit #1,2 (IC=2X210 MW,EC=2X210 MW) decommissioned from 21.02.2022.							
	3.BIHAR, Muzaffarpur TPS Unit(KBUNL) #1,2 (IC=2X110 MW, EC=2X110 MW) decommissioned from 08.09.2021.							
	4.NTPC, TTPS Odisha All Six units(4X62.5+2X110) decommissioned from 01.04.2021							
	5.DVC, BTPS(B) Unit #3 (210 MW) de-commissioned from 01.04.2021							
	6. DPL U#6 (110 MW) Decommissioned from 28.01.20 as per CEA.							
	7. CTPS U#6 (140 MW) Decommissioned from 19.03.2020 as per CEA.							
	8.KBUNL Muzaffarpur TPS U-1 & 2, each 110 MW decommissioned on 08.09.2021							
	9. DTPS#4 decommissioned on 19.12.22							
COMMISS- IONED	1.NTPC NPGCL U#3 (660 MW) COD from 01.06.2022							
	2.NTPC Nabinagar TPP(BRBCL) U#4 (250 MW) COD from 01.12.2021							
	3.NTPC BARAUNI TPP U#9 (250 MW) COD from 01.11.2021							
	4.NTPC Barh St-1, U#1(660 MW) COD from 12.11.2021							
	5.NSTPS U#2 (660 MW) COD from 23.07.2021							
	6.NTPC DARLIPALI STPS U#2 (800 MW) COD 01.09.2021							
	7.DARLIPALI S TPS U#1(800 MW) COD 01.03.2020							
	8.BARAUNI TPS U#1(250 MW) COD 01.03.2020							
	9.North Karanpura Super Thermal Power Project Unit-I (660 MW) of NTPC Ltd. COD on 28.02.2023							

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF MAR' 2023

ORGANI- SATION	TYPE	POWER STATION	INSTALLED CAPACITY	EFFECTIVE CAPACITY	Gross Energy Generation in MU	PLF of Current Month (%)	Cummulative Gross Energy Generation upto Current Month (2022-23) in MU	Cummulative PLF upto Current Month (%)
CESEC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00
		Southern (2x67.5)	135.00	135.00	55.38	55.14	635.68	53.75
		Budge-Budge (3x250)	750.00	750.00	493.07	88.36	5330.69	81.14
		Total CESC	1125.00	1125.00	548.45	65.53	5966.37	60.54
HEL	Thermal	HEL	600.00	600.00	362.31	81.16	4219.34	80.28
		Total West Bengal	8139.26	8094.26	4251.65		47103.62	
OPGC	Thermal	IB TPS	420.00	420.00	257.20	82.31	2779.51	75.55
		IB TPS U#3(660 MW)	660.00	660.00	419.83	85.50	4573.52	79.10
		IB TPS U#4(660 MW)	660.00	660.00	434.56	88.50	4357.39	75.37
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	14.66		904.80	
		Hirakud-II (Chiplima)	72.00	72.00	9.24		326.07	
		Balimela (6x60+2x75)	510.00	510.00	32.91		1004.55	
		Rengali (5x50)	250.00	250.00	23.30		758.55	
		Upper Kolab (4x80)	320.00	320.00	75.93		544.40	
		Indravati HPS (4x150)	600.00	600.00	115.61		1380.37	
		Mckd.(Odisha drawal)	57.38	57.38	21.24		235.17	
		Total Hydro	2084.88	2084.88	292.89		5153.91	
		RES	539.57	539.57	65.27		729.18	
		Total Odisha	4364.45	4364.45	1469.75		17593.52	
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00		17.00	
NTPC		MTPS Stg-II	390.00	390.00	271.78	93.67	2991.94	87.58
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	822.67	69.11	9651.55	68.86
		FSTPP (U# 6)	500.00	500.00	340.88	91.63	2750.78	62.80
		KhSTPP (4x210+3x500)	2340.00	2340.00	1232.72	70.81	15595.58	76.08
		TSTPP (2x500)	1000.00	1000.00	708.54	95.23	7572.53	86.44
		BARH STPS II (2X660)	1320.00	1320.00	540.62	55.05	9074.41	78.48
		BARH STPS I (1X660)	660.00	660.00	405.55	82.59	4069.96	70.40
		BRBCL # I,2,3,4(4X250 MW)	1000.00	1000.00	570.25	76.65	6926.76	79.07
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	1384.48	93.98	12858.23	78.51
		NSTPS infirm					75.63	
		DSTPP #1&2	1600.00	1600.00	1104.71	92.80	11317.49	80.75
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		NKSTPP			404.02	93.98	600.80	78.51
		Total NTPC	13050.00	13050.00	7786.21	80.19	83485.67	77.01
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	12.44		323.25	
		Teesta (3x170)	510.00	510.00	103.25		2836.21	
		TLDP(4x33+4x40) for WBSEDCL	292.00	292.00	30.51		1314.70	
		Total NHPC	862.00	862.00	146.20		4474.15	
	Thermal	MPL (U#1&2)	1050.00	1050.00	655.66	83.93	7555.12	82.14
		APNRL (U#1,2)	540.00	540.00	232.42	57.85	3506.78	74.13
		GMR (2x350)	700.00	700.00	479.27	92.03	4700.06	76.65
		JITPL (2X600)	1200.00	1200.00	754.20	84.48	7842.77	74.61
		CHUZACHEN** (2x55)	110.00	110.00	10.29		492.59	
		JORETHANG (2x48)	96.00	96.00	10.40		431.53	
		TEESTA URJA St III (6x200)	1200.00	1200.00	164.00		6103.42	
		Tashilding (2x48.5)	97.00	97.00	3.12		443.24	
		DICKCHU (2x48)	96.00	96.00	14.75		537.44	
		RONGNICHU HEP (2x56.5)			10.32		429.12	
		TALCHER SOLAR	10.00	10.00	1.05		13.04	
		Total Thermal (E.R)	32785.00	32730.00	19698.03	80.89	214161.28	75.63
EASTERN REGIONAL		Total Hydro (E.R)	5989.58	5989.58	780.44		20605.56	
		Total RES	1517.83	1517.83	140.93		1359.04	
		TOTAL (E.R)	40292.41	40237.41	20619.39		236125.88	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	0.09		1569.95	
	Hydro	Kurichu (4x15)	60.00	60.00	0.00		28.65	
	Hydro	TALA (6x170)	1020.00	1020.00	0.00		2417.33	
	Hydro	DAGACHU (2x63)	126.00	126.00	12.98		422.43	
		MANGDECHU(4x180)	720.00	720.00	10.95		2648.51	
		Grand Total	42578.41	42433.41	20643.41		243212.74	

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK DURING THE MONTH OF MAR'2023 (4-3-2023)

Date	4-Mar-23					
Time	19.00	Hrs.				
Frequency	50.00	Hz.				
						(All Fig. in MW)
	Installed	Effective				Net Gen
System/State	Capacity	Capacity	Hydro	Thermal	RES	Total
BSPHCL	1075	1065	0	457	0.05	457
JUVNL	850	850	68	337	0	405
DVC	6687	6687	0	4973	0	4973
ODISHA	4364	4364	798	1126	20	1945
WBSIEDCL	5864	5819	924	3989	0	4913
TLDP	292	292	144	0	0	144
HEL HALDIA	600	600	0	550	0	550
CESC	1125	1125	0	761	0	761
DPL	550	550	0	0	0	0
SIKKIM	52	52	0	0	0	0
NTPC	13050	13050	0	10477	0	10477
NHPC	570	570	575	0	0	575
CHUKHA	360	270	32	0	0	32
KURICHU	60	60	-3	0	0	-3
TALA	1020	1020	21	0	0	21
MPL	1050	1050	0	972	0	972
OPGC (660 MW)	0	0	0	0	0	0
APNRL	540	540	0	487	0	487
Kamalganga (GMR)	700	700	0	657	0	657
JITPL	1200	1200	0	1117	0	1117
RONGNICHU HEP (2x56.5)	113	113	69	0	0	69
Chuzachen	110	110	30	0	0	30
Jorethang	96	96	23	0	0	23
TEESTA URJA St III	1200	1200	707	0	0	707
Tashilding	97	97	32	0	0	32
DICKCHU	96	96	0	0	0	0
<u>Daghachu</u>	126	126	16	0	0	16
<u>Solar</u>	10	10	0	0	0	0
<u>Mangdechhu</u>	720	720	-37	0	0	-37
<u>Total</u>	42578	42433	3399	25902	20	29322
Import From Captive:						2063
Export To:						
NER						-263
SR						2806
WR						613
NR						3336
Bangladesh						779
Nepal						334
Total						7606
➤ Regional Net Peak Demand Met (MW) :						23779
Indicates Export(+)/Import(-) of Power						

Hourly Load Generation Data OF ER on Regional Peak Day During The Month of MAR'2023 (4-3-2023)

(All Figures in MW)

Generation				Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	Total	from Captive	Import From Hydro of Bhutan	Export to other region	Met	Correction	Shed	Requirement
1	394	24566	24961	2031	-271	7020	19701	5	0	19707
2	249	24392	24641	2047	-325	6259	20103	16	0	20119
3	238	24570	24808	1999	-330	6489	19988	23	0	20011
4	246	24593	24839	1981	-332	6766	19722	0	46	19768
5	243	24765	25008	2007	-322	6800	19892	7	46	19945
6	287	24892	25179	2058	-257	6543	20437	13	268	20718
7	1243	25023	26266	2081	6	7339	21014	-31	311	21294
8	1878	25241	27120	2061	28	7957	21252	-15	246	21483
9	1600	25265	26866	2059	30	7967	20988	-2	204	21190
10	939	25353	26292	2016	-145	7255	20908	42	386	21337
11	835	25242	26077	1996	-358	6734	20981	-26	245	21200
12	917	25568	26485	1941	-366	6742	21317	11	0	21328
13	1021	25704	26724	1819	-330	7502	20711	22	0	20733
14	1010	25386	26396	1851	-334	7896	20016	86	0	20102
15	636	25921	26557	1852	-330	8126	19953	86	37	20076
16	703	25720	26423	1914	-228	7858	20250	32	0	20282
17	1023	25714	26737	2020	32	7959	20830	-69	0	20830
18	1394	25740	27134	2050	25	7766	21443	-24	0	21443
19	3390	25902	29292	2063	29	7606	23779	2	216	23997
20	3410	25676	29086	2058	31	7710	23463	-23	163	23604
21	2429	25648	28077	2029	-74	7439	22593	-22	224	22795
22	1679	25943	27621	2068	-314	7706	21669	11	423	22103
23	953	25991	26944	2083	-269	7838	20920	-9	162	21073
24	687	26016	26702	2037	-235	8155	20349	-9	0	20349

Hourly Load Generation Data of ER On Regional Lean Day During The Month of MAR'2023 (19-3-2023)

(All Figures in MW)

Generation				Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	Total	from Captive	Import From Hydro of Bhutan	Export to other region	Met	Correction	Shed	Requirement
1	316	21148	21463	1715	-85	7698	15395	1	17	15413
2	530	19537	20066	1845	-72	6502	15338	42	17	15397
3	383	18346	18728	1863	25	5752	14864	20	17	14900
4	222	18150	18371	1872	28	5551	14720	3	17	14739
5	214	18573	18788	1852	19	5858	14801	-1	19	14818
6	203	20192	20395	1882	64	6985	15356	-5	166	15517
7	1328	21889	23217	1982	68	8861	16406	-13	167	16561
8	1324	22465	23790	1983	64	8896	16940	-37	155	17059
9	873	21086	21959	1842	47	6596	17252	-54	12	17264
10	435	19677	20112	1831	19	4770	17192	-60	197	17328
11	421	19198	19620	1734	-264	3567	17522	-77	8	17529
12	497	19393	19890	1606	-252	3691	17553	31	237	17821
13	600	19146	19746	1544	-177	3759	17354	23	75	17452
14	502	18296	18797	1586	-201	3100	17082	-76	5	17087
15	495	17862	18356	1565	-224	3118	16580	-25	13	16593
16	464	17817	18281	1541	-234	3501	16086	4	26	16116
17	784	17983	18767	1596	-253	3638	16472	14	25	16511
18	1054	18375	19428	1650	-236	3490	17351	-21	186	17516
19	2613	19835	22448	1750	2	4582	19617	3	273	19893
20	3202	21285	24487	1810	28	6711	19614	-24	42	19632
21	2326	21124	23450	1810	31	6274	19017	2	51	19070
22	1512	21866	23378	1814	28	6747	18472	2	9	18483
23	1173	21355	22528	1847	28	7374	17030	0	10	17040
24	926	19956	20882	1809	27	6530	16188	-3	17	16203

NOTIFIED POWER CUTS/RESTRICTIONS ON INDUSTRIES & POWER SUPPLY TO AGRICULTURE SECTOR

FOR THE MONTH OF MAR'2023

POWER CUT / RESTRICTIONS

BSPHCL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 18.15 MU
JUVNL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 71.85 MU
DVC	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 0.00 MU
ODISHA	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.00 MU
WEST BENGAL	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 4.76 MU

POWER SUPPLY TO AGRICULTURAL SECTOR

STATE	HOURS OF SUPPLY (AVERAGE / DAY)
BIHAR	18 HRS.00 MINS.
JHARKHAND	ABOUT 20 to 22 HRS.
ODISHA	24 HRS.
WEST BENGAL	23 HRS.

FREQUENCY DETAILS FOR THE MONTH OF

Mar-23

D A T E																		
	H O U R S										INST. FREQ.				15 MIN. INTEGRATED			
	00 TO 05	05 TO 10	10 TO 17	17 TO 22	22 TO 24	00 TO 24	<49.9 50.1	49.9 TO 50.1	>50.05 50.05	49.9 TO 50.05	MAX HZ	HRS.	MIN HZ	HRS.	MAX HZ	HRS.	MIN HZ	HRS.
01-Mar	50.00	50.01	50.02	50.01	50.01	50.01	3.60	64.39	32.01	64.39	50.30	18:02:20	49.79	18:13:30	50.17	0:00	49.93	0:00
02-Mar	50.03	50.04	49.97	49.97	49.98	50.00	8.45	64.87	26.68	64.87	50.36	18:02:10	49.69	22:09:20	50.21	0:00	49.84	0:00
03-Mar	49.97	50.00	50.00	50.00	49.97	49.99	7.44	67.56	25.00	67.56	50.30	18:02:30	49.76	18:47:50	50.16	0:00	49.83	0:00
04-Mar	49.99	50.00	49.97	50.01	50.01	49.99	11.27	62.80	25.93	62.80	50.48	18:02:50	49.69	21:07:20	50.19	0:00	49.84	0:00
05-Mar	50.00	50.04	50.00	50.00	49.95	50.00	4.58	67.14	28.28	67.14	50.30	06:02:40	49.79	22:07:20	50.13	0:00	49.90	0:00
06-Mar	50.00	50.02	50.01	50.06	49.93	50.01	5.36	58.52	36.12	58.52	50.38	18:02:40	49.76	22:22:30	50.23	0:00	49.87	0:00
07-Mar	49.99	50.04	49.89	50.03	50.03	49.98	14.78	55.96	29.26	55.96	50.31	06:01:30	49.56	15:16:10	50.11	0:00	49.71	0:00
08-Mar	49.98	50.05	50.02	49.99	49.98	50.01	3.55	66.33	30.12	66.33	50.36	06:03:10	49.80	21:07:00	50.22	0:00	49.91	0:00
09-Mar	50.01	50.00	50.00	50.00	49.99	50.00	4.91	66.02	29.07	66.02	50.27	22:00:40	49.80	14:43:00	50.13	0:00	49.90	0:00
10-Mar	49.94	49.97	49.99	50.00	49.98	49.98	10.64	66.68	22.69	66.68	50.27	18:01:10	49.71	06:13:00	50.12	0:00	49.86	0:00
11-Mar	49.96	50.01	49.97	50.00	49.99	49.98	9.47	69.77	20.76	69.77	50.27	22:00:50	49.79	18:40:50	50.11	0:00	49.84	0:00
12-Mar	49.96	50.01	49.98	49.97	49.97	49.98	11.49	66.93	21.58	66.93	50.26	17:03:30	49.72	21:06:40	50.13	0:00	49.83	0:00
13-Mar	50.01	50.00	49.95	50.02	49.98	49.99	8.83	65.06	26.11	65.06	50.31	18:03:40	49.66	14:35:40	50.14	0:00	49.74	0:00
14-Mar	49.98	50.01	49.98	50.04	49.99	50.00	6.05	68.32	25.63	68.32	50.40	18:03:20	49.81	15:54:10	50.17	0:00	49.86	0:00
15-Mar	49.99	49.97	49.96	50.03	49.97	49.98	8.83	70.87	20.30	70.87	50.26	17:02:10	49.82	09:05:20	50.09	0:00	49.82	0:00
16-Mar	50.02	49.99	50.00	50.02	50.02	50.01	4.04	63.61	32.35	63.61	50.31	18:03:10	49.72	00:12:00	50.13	0:00	49.91	0:00
17-Mar	50.01	49.93	50.00	49.99	50.00	49.99	9.90	68.56	21.54	68.56	50.29	22:00:50	49.74	09:07:50	50.15	0:00	49.83	0:00
18-Mar	49.97	49.98	50.03	49.96	50.03	49.99	10.53	61.99	27.48	61.99	50.35	13:02:50	49.78	08:35:10	50.27	0:00	49.86	0:00
19-Mar	49.98	50.06	50.03	50.01	50.00	50.02	4.27	62.27	33.46	62.27	50.30	10:00:40	49.72	01:36:00	50.21	0:00	49.87	0:00
20-Mar	49.99	50.00	50.00	50.00	50.00	50.00	8.31	60.68	31.01	60.68	50.32	15:02:00	49.70	12:19:50	50.27	0:00	49.80	0:00
21-Mar	49.97	50.00	49.99	50.00	49.99	49.99	9.50	65.69	24.81	65.69	50.26	18:03:00	49.67	14:43:00	50.27	0:00	49.76	0:00
22-Mar	49.98	49.96	50.02	49.98	49.93	49.98	10.51	66.33	23.16	66.33	50.32	18:03:10	49.68	08:34:30	50.15	0:00	49.86	0:00
23-Mar	49.94	49.98	49.98	50.02	49.96	49.98	13.46	66.39	20.15	66.39	50.36	18:02:10	49.68	05:48:10	50.15	0:00	49.80	0:00
24-Mar	49.98	50.02	49.97	49.97	49.99	49.98	11.01	65.42	23.58	65.42	50.26	18:03:00	49.70	21:11:10	50.12	0:00	49.82	0:00
25-Mar	49.96	49.98	49.93	49.98	50.00	49.96	16.12	69.79	14.09	69.79	50.23	18:02:50	49.74	14:34:50	50.06	0:00	49.84	0:00
26-Mar	49.97	50.02	49.97	49.98	49.96	49.98	8.36	72.47	19.18	72.47	50.27	18:02:40	49.74	11:48:40	50.11	0:00	49.86	0:00
27-Mar	49.97	50.02	49.98	49.99	49.97	49.99	8.28	70.36	21.37	70.36	50.30	18:04:20	49.70	22:08:00	50.17	0:00	49.82	0:00
28-Mar	49.97	49.98	49.97	50.00	49.94	49.97	12.75	71.79	15.46	71.79	50.32	18:03:00	49.73	10:46:30	50.11	0:00	49.79	0:00
29-Mar	49.94	49.88	49.96	50.01	49.97	49.95	22.03	61.31	16.66	61.31	50.37	18:03:00	49.63	05:26:10	50.16	0:00	49.72	0:00
30-Mar	49.97	49.93	50.03	50.02	49.97	49.99	10.60	60.09	29.31	60.09	50.31	14:03:10	49.57	09:44:50	50.22	0:00	49.67	0:00
31-Mar	49.98	49.98	50.01	50.01	49.99	50.00	5.57	66.71	27.72	66.71	50.30	18:04:00	49.75	21:06:00	50.21	0:00	49.88	0:00
MAX	50.03	50.06	50.03	50.06	50.03	50.02	22.03	72.47	36.12	72.47	50.48		49.82		50.27		49.93	
MIN	49.94	49.88	49.89	49.96	49.93	49.95	3.55	55.96	14.09	55.96	50.23		49.56		50.06		49.67	
AVG	49.98	50.00	49.99	50.00	49.98	49.99	9.18	65.63	25.19	65.63	50.31		49.72		50.16		49.83	

SUMMARY:

Avg. Frequency :

49.99 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.48 Hz at 18:02 Hrs.

Minimum Frequency : 49.56 Hz at 15:16 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.27 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.67 Hz On 00/01/00 at 00:00 Hrs

Frequency Distribution in % of Time			
Hz	<49.9	49.9-50.05	>50.05
% of Time	9.18	65.63	25.19

ANNEXURE-II

VOLTAGE ANALYSIS

MAXIMUM & MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF MAR'2023

(All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	421	399	411	399	420	396	424	399

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	420	393	412	388	413	402	416	399

ANNEXURE-III

DETAILS OF CONSTITUENT WISE LOAD SHEDDING IMPLEMENTED THROUGH UFRs IN THE EASTERN REGION

Expected Load Relief through UFRs by ER Constituent:

(All Fig. are in MW)

STATES/ UTILITIES	STAGE-I (49.4 Hz) (Inst.)	STAGE-II (49.2 Hz) (Inst.)	STAGE-III (49.0 Hz) (Inst.)	STAGE-IV 48.8 Hz (Inst.)	Total Load Relief by Control Area
BIHAR	98	99	99	101	397
JHARKHAND	61	62	61	62	246
DVC	134	135.5	136	137	542.5
ODISHA	181.5	183.5	184	186	735
WEST BENGAL (incl. CESC)	345.5	350	350	354	1399.5
TOTAL	820	830	830	840	3320

As decided in the National Power Committee (NPC) meeting held on 16.07.2013 and subsequently in the 89th OCC meeting of ERPC to implement the scheme w.e.f. 30.09.2013. Revised UFR Scheme (Stg-I 49.4Hz. Stg-II 49.2 Hz Stg-III 49.0 Hz and Stg-IV 48.8 Hz) implemented from March/ April-2020

A.

WATER LEVEL OF MAJOR HYDEL RESERVOIRS OF THE REGION IN

Mar-23

(All figs.in mtrs.)

Name of the Reservoirs	FRL	MDDL	As on last day of the		As on first day of this month & date	
			(31-03-23)	(31-03-22)		
Hirakud	192	180	187.69	188.68	188.85	01.03.23
Balimela	462	439	445.43	448.60	447.48	01.03.23
Rengali	123	109	117.69	119.35	118.64	01.03.23
Upperkolab	858	844	851.48	848.01	852.86	01.03.23
Indravati	642	625	634.62	630.60	635.80	01.03.23
Subernrekha	590	580	585.46	585.03	586.13	01.03.23

B.

CPP/IPP IMPORT by Eastern Region Constituents during

Mar-23

(All figs. are in MU)

System	Tata Power	Crescent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
JUVNL	0	0	0	0	0	0	0	0	39.58
West Bengal	80.02	27.08	0	0	0	0	0	183.17	290.26
ODISHA	0	0	30.42	335.81	2.04	10.23	0	618.85	997.35
DVC	0	0	0	0	0	0	3.63	0	3.63
TOTAL	80.02	27.08	30.42	335.81	2.04	10.23	3.63	802.01	1330.82

C.

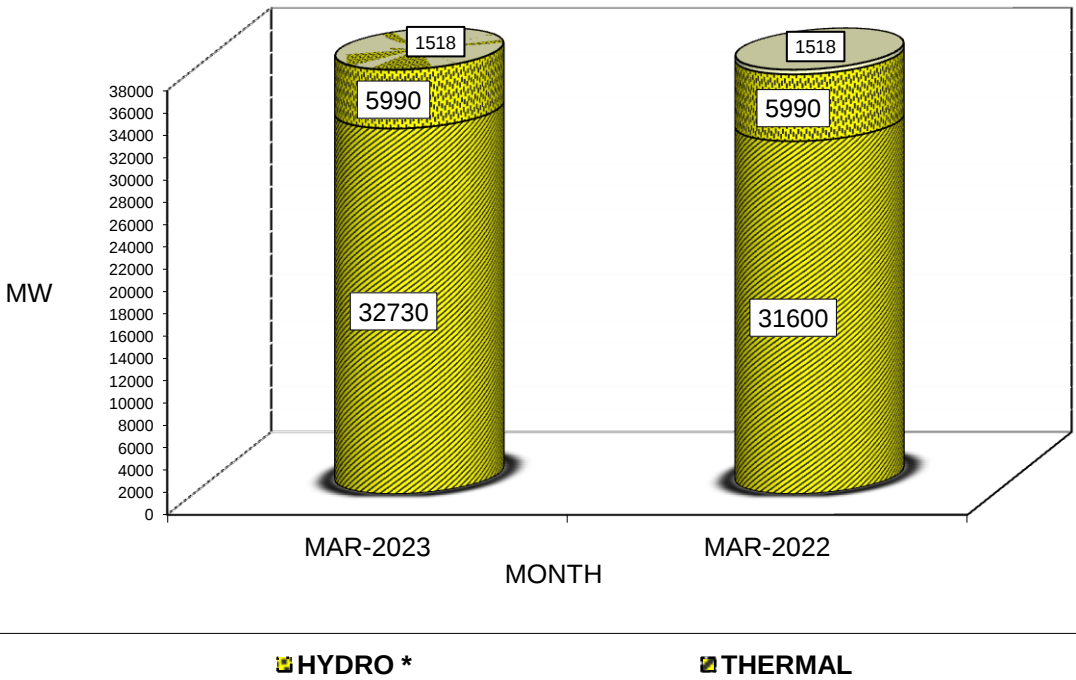
Distribution of Schedule Supply among Key Customers by IPPs during

Mar-23

(All figs. are in MU)

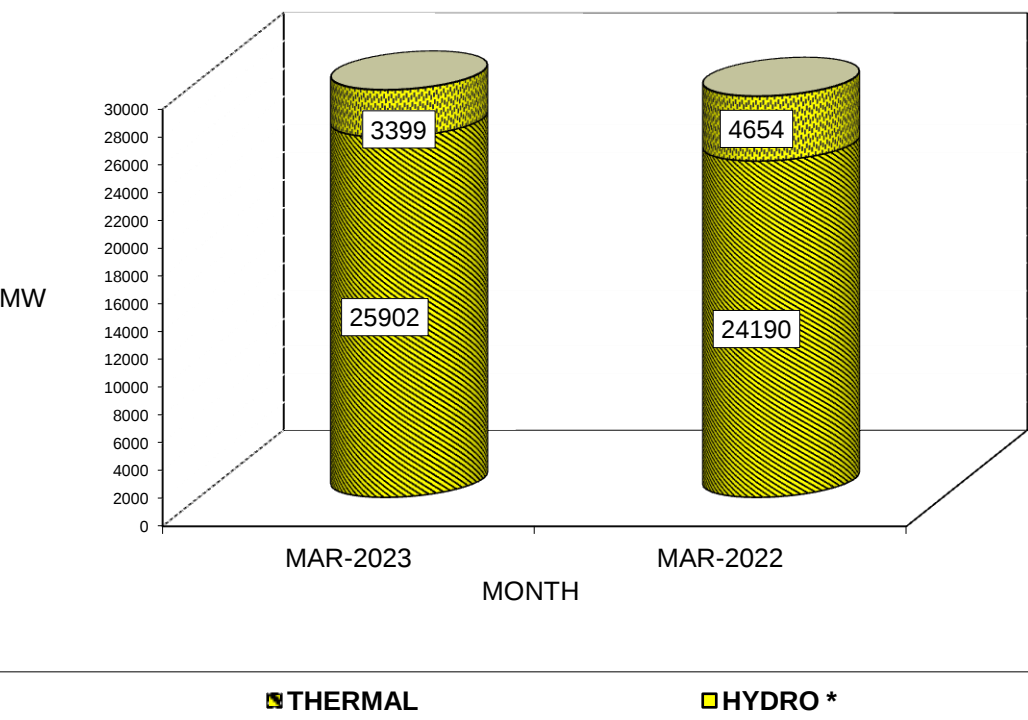
IPP	TPDDL	WBSEDCL/ WBPCL	DVC	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	186.85	178.08	94.52	0.00	0	0	154.06	613.51
Sterlite								0.00
APNRL								0.00
Total	186.85	178.08	94.52	0.00	0.00	0.00	154.06	613.51

EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID

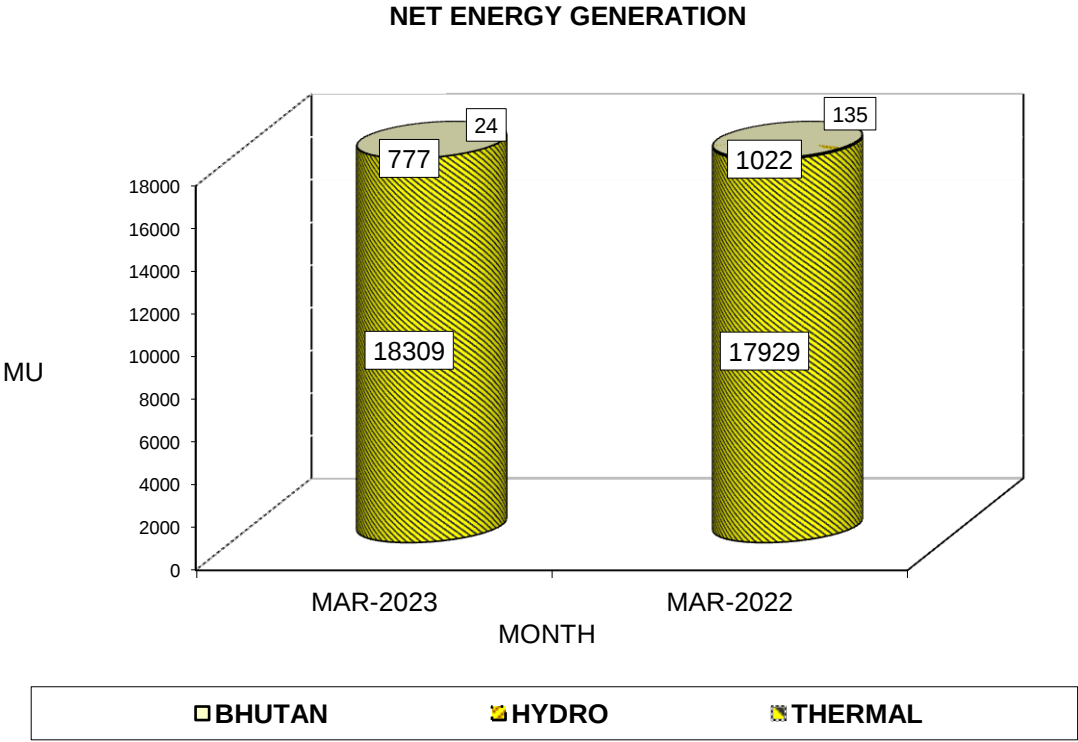


*Excludes contribution from HEPs of Bhutan

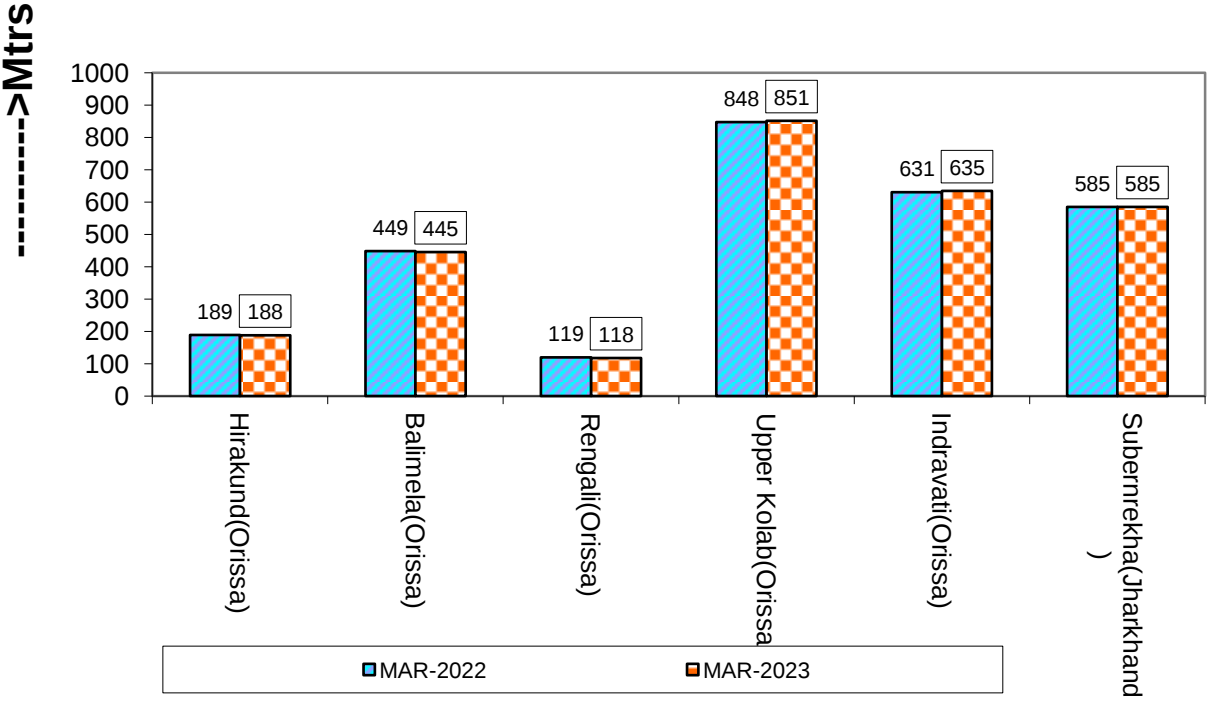
GENERATION CORRESPONDING TO PEAK DEMAND MET

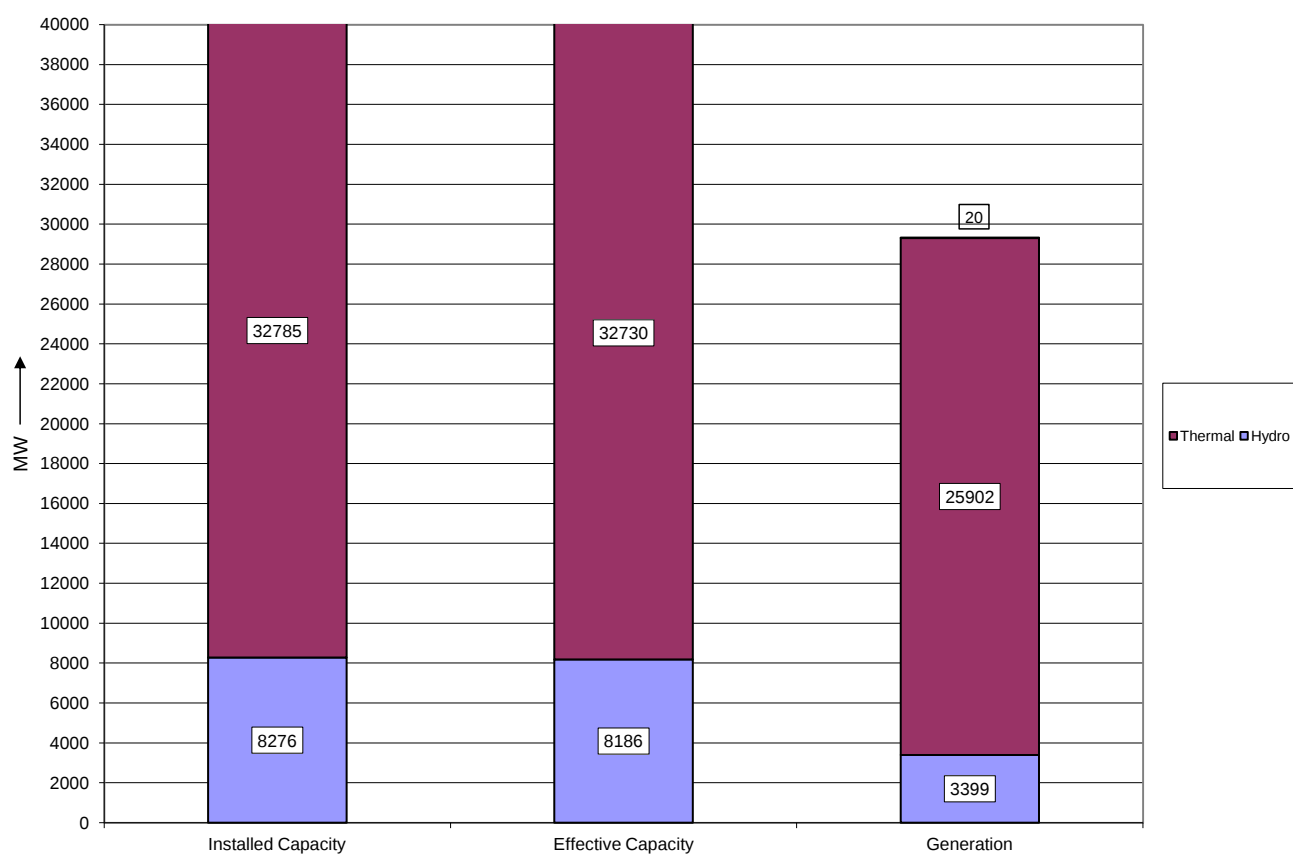


*Includes contribution from HEP of Bhutan



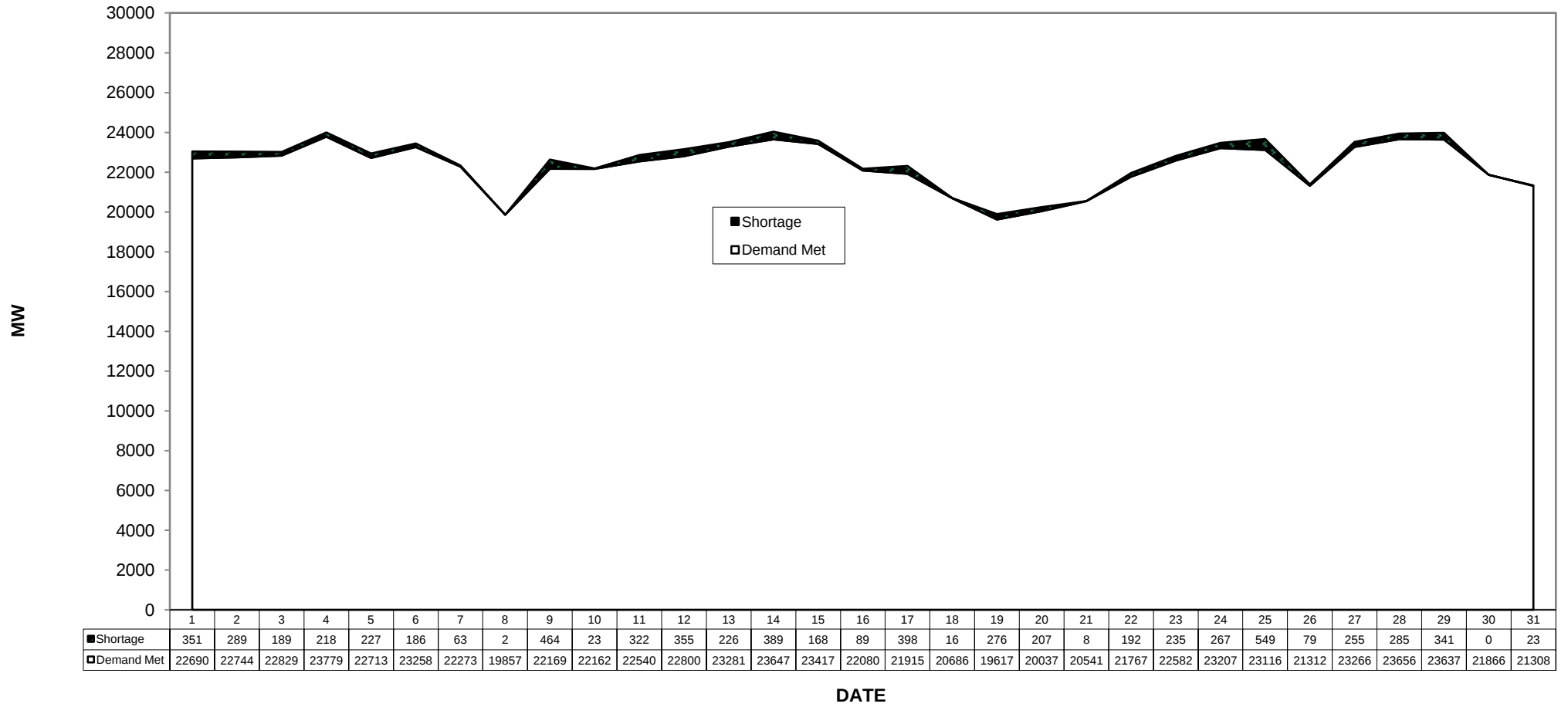
RESERVOIR LEVEL OF HPS OF ER (RECORDED ON LAST DAY OF MONTH)



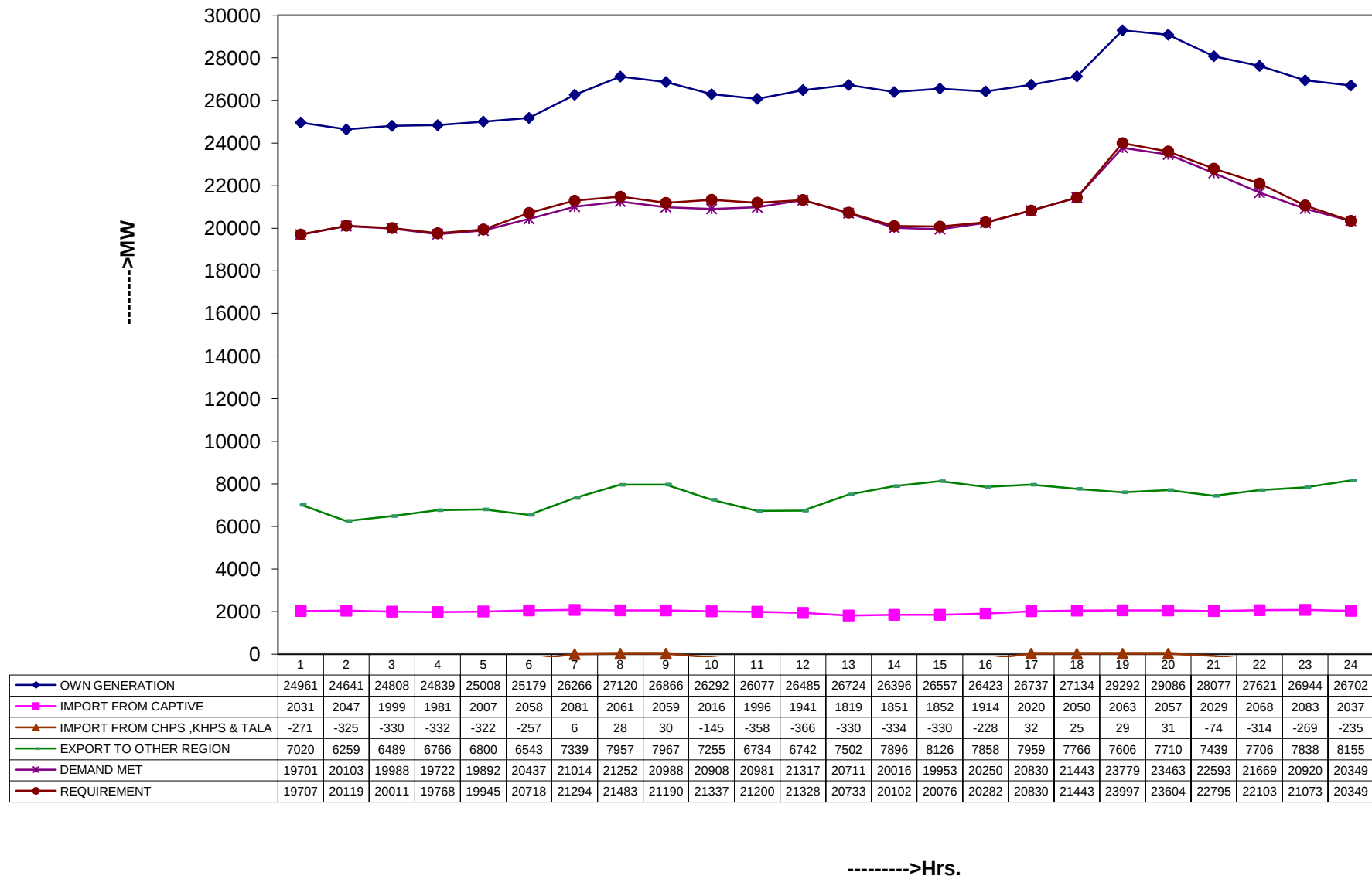
Capacity / Actual Generation Pattern of ER on Peak Day (4-3-2023) at 19.00 hrs.

(*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

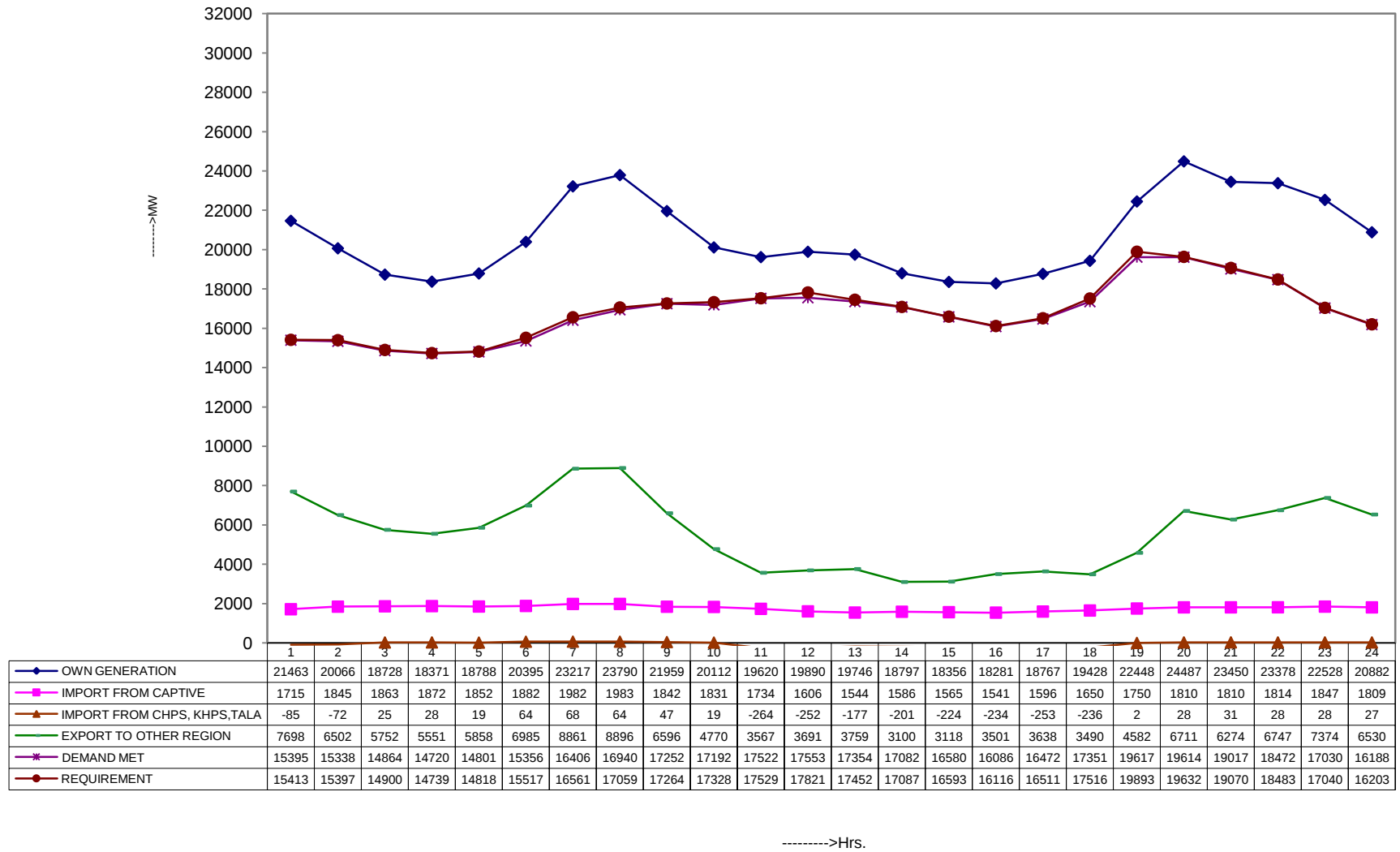
Peak Demand Met / Shortage of Eastern Region For The Month Of MAR'2023



Hourly Load Generation Data OF ER on Regional Peak Day During The Month of MAR'2023 (4-3-2023)

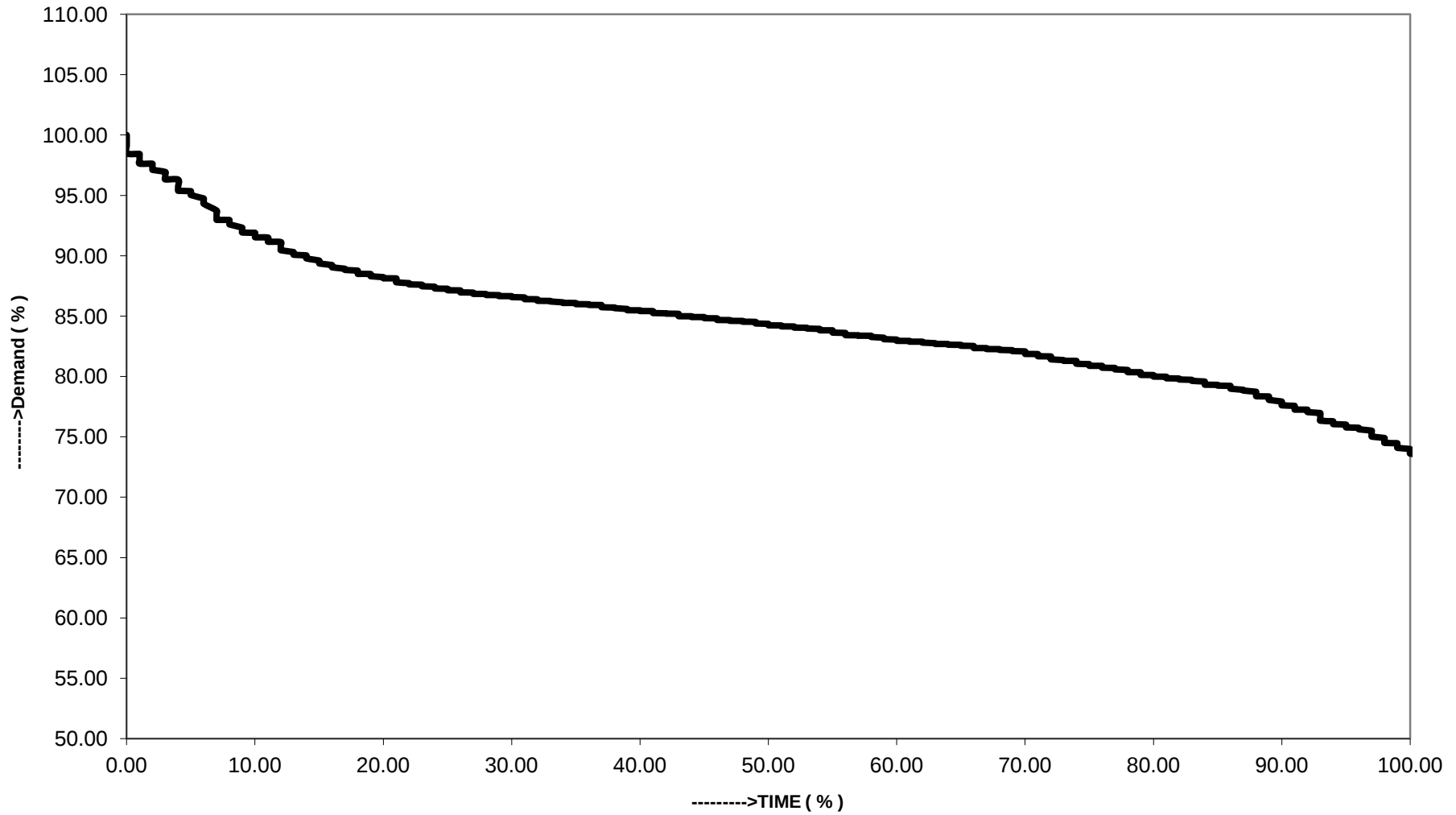


Hourly Load Generation Data of ER On Regional Lean Day During The Month of MAR'2023 (19-3-2023)



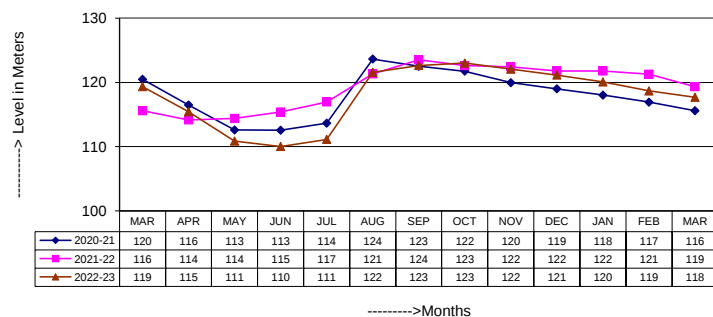
Monthly Load Duration Curve of Eastern Region for MAR-2023

Maximum Demand met : 23779 MW
Minimum Demand met: 14720 MW

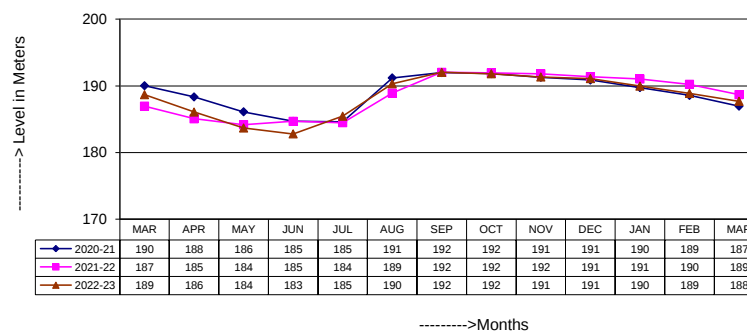


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

RENGALI RESERVOIR LEVEL



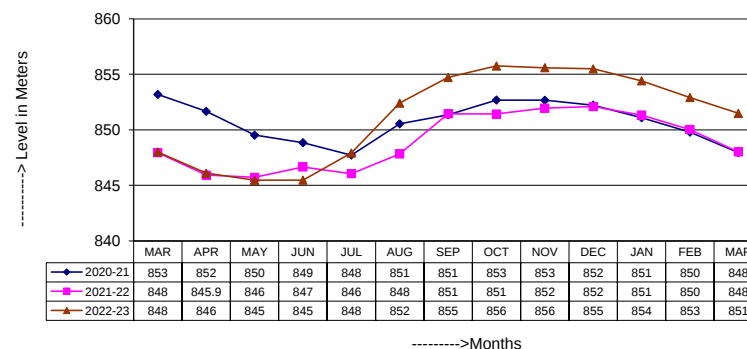
HIRAKUD RESERVOIR LEVEL



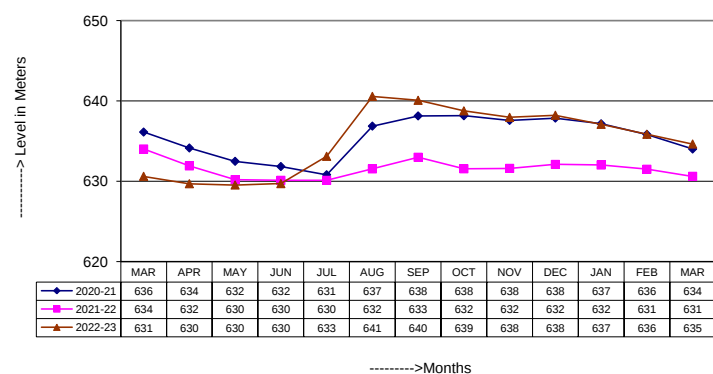
BALIMELA RESERVOIR LEVEL



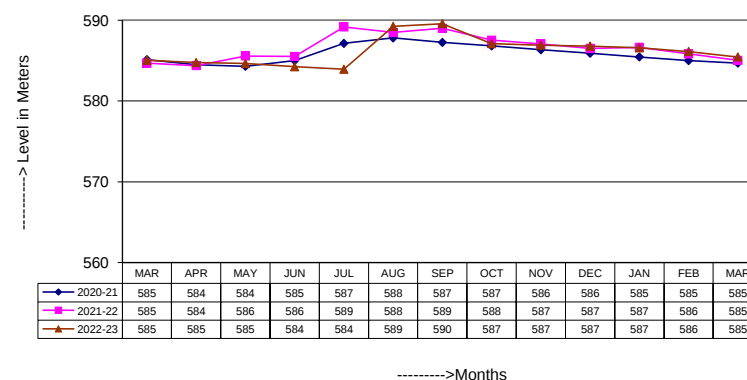
UPPER KOLAB RESERVOIR LEVEL



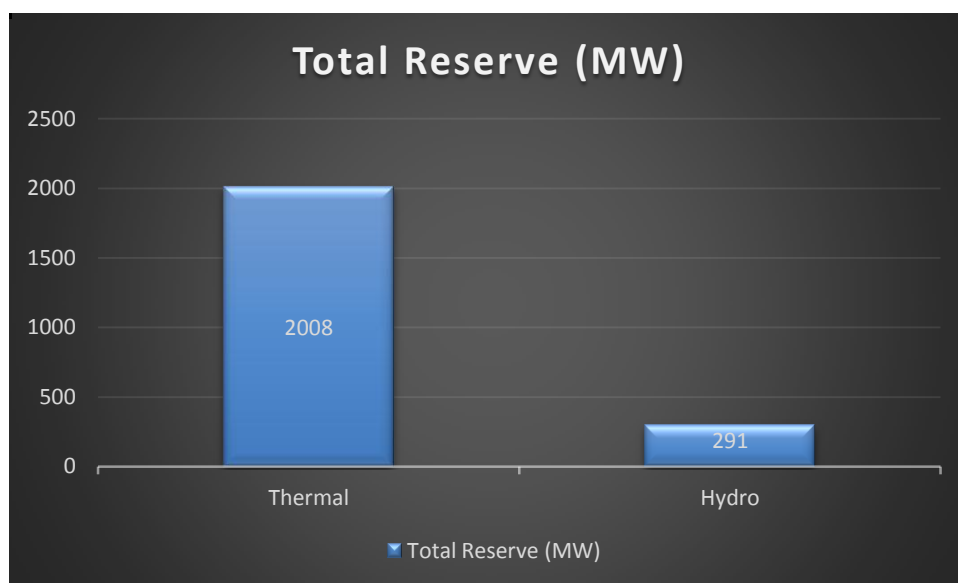
INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL



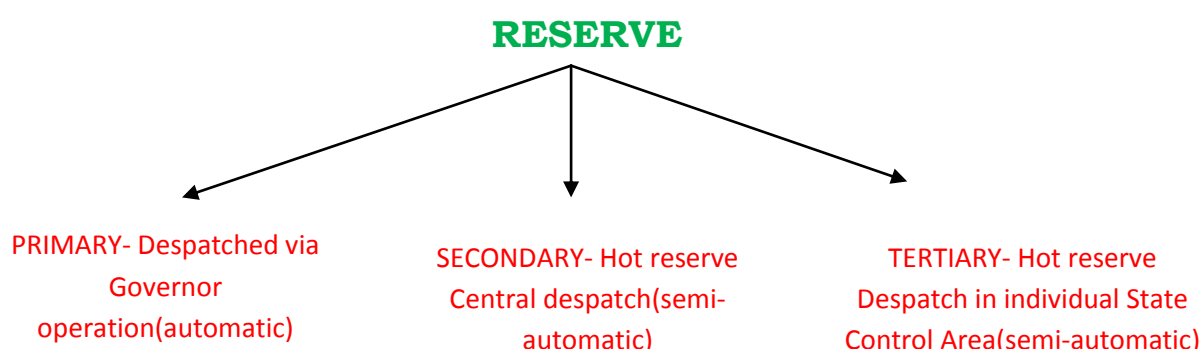
REPORT ON GENERATION RESERVES IN EASTERN REGION FOR MAR'23



GENESIS

In an ever changing power scenario of the country having generation reserves is like a “BRAHMASTRA” in the hand of the Grid operators. During system exigency like loss of generation, high drawal, grid disturbances, tripping of important corridors this reserve can be dispatched by the system operator and provides immediate relief to the stressed out grid.

Hon’ble CERC in its report on Spinning Reserve dated. Sep’2015 and subsequent order dated. 13.10.2015 laid out the broad guidelines for quantum of different types of reserves in the Indian power system.



Hon’ble CERC outlined the following requirement:

Primary: 4000MW on all India basis

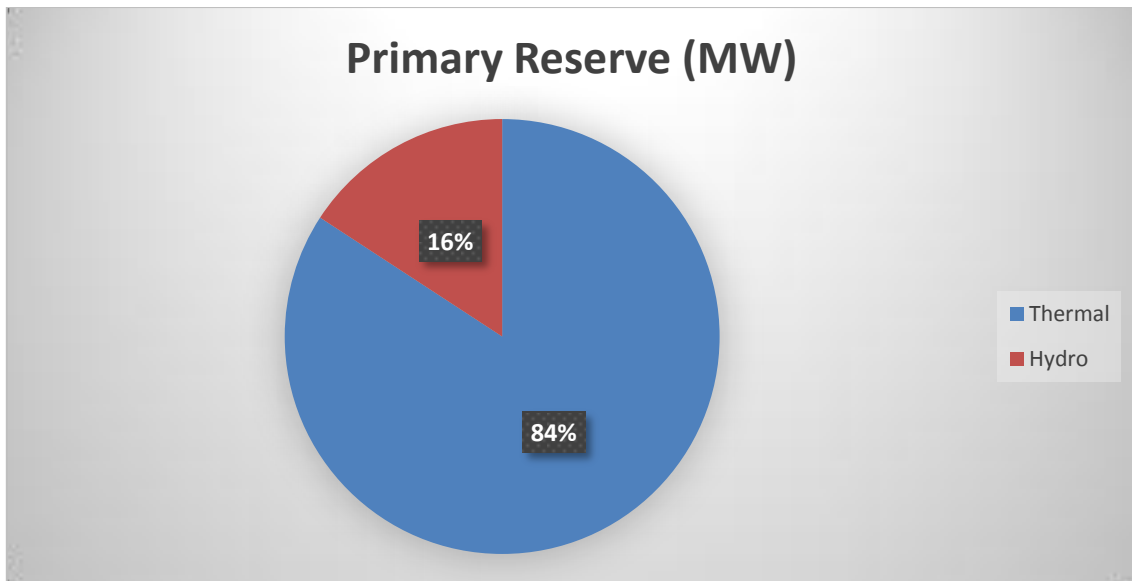
Secondary: Minimum 660MW(for Eastern Region) corresponding to largest unit size in the region

Tertiary: Quantum to be maintained in de-centralized fashion by each state control area for at least 50% of the largest generating unit available in the state control area.

On 31.12.2022 the following are the reserves available in the Eastern Region including only on-bar units which have FGMO/RGMO:

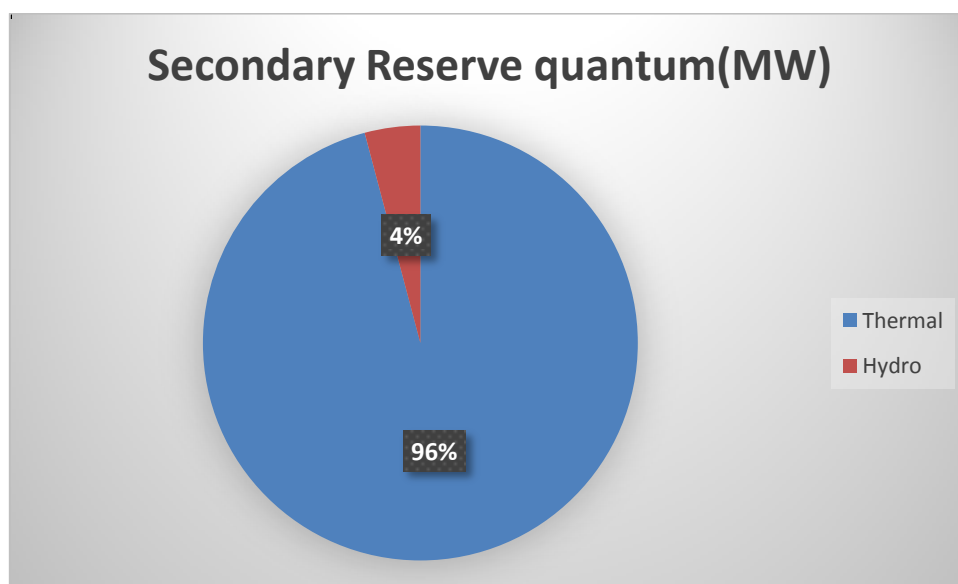
PRIMARY

Category	Installed Capacity(MW)	Reserve quantum(MW)	Reserve quantum as percentage of IC(%)
Thermal	28310	1416	5
Hydro	5215	266	5.09
Total	33525	1681	5.01



SECONDARY

Category	Installed Capacity(MW)	Secondary Reserve quantum(MW)	Reserve quantum as percentage of IC(%)
Thermal	11400	592.5	5.20
Hydro	576	25.5	4.43
Total	11976	618	5.16

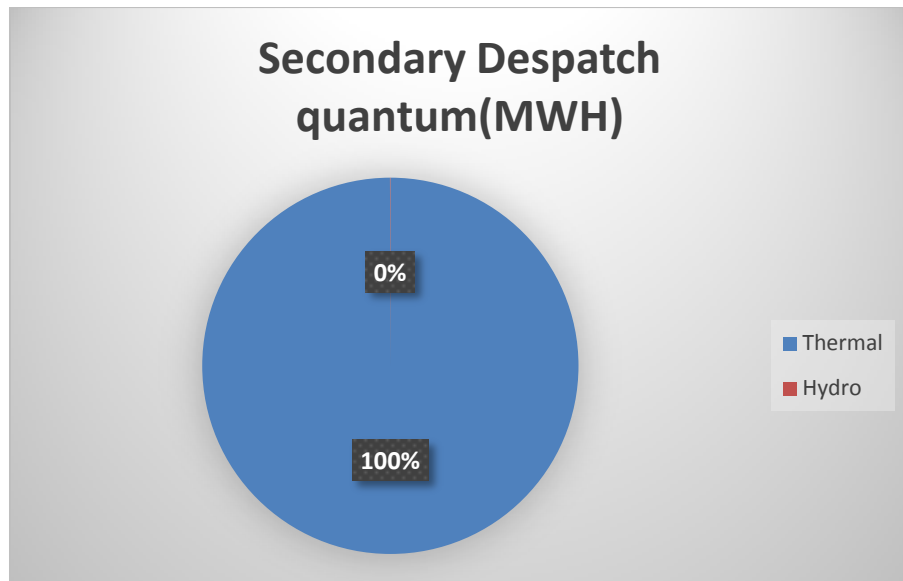


Actual Despatch of Secondary Reserve

Name of Reserve Provider	Installed Capacity (MW)	Net RRAS (MWH)	Net SCED (MWH)	Net SRAS (MWH)	Total Despatch under Ancillary Service(MWH)	Reserve Despatch as % of Installed Capacity
BARH	1320	5606.3	27787.2	16660.8	50054.3	5.10
BARH-I	660	5026.2	13219.7	3007.6	21253.4	4.33
BRBCL	1000	14385.9	10054.4	0.0	24440.3	3.28
Darlipali_NTPC	1600	831.2	602.9	0.0	1434.06	0.12
FSTPP I & II	1600	8443.4	39426.1	17068.7	64938.2	5.46
FSTPP-III	500	2900.5	18326.7	11403.6	32630.8	8.77
KHSTPP-I	840	5423.9	16740.5	0.0	22164.4	3.55
KHSTPP-II	1500	7429.0	36002.3	28081.6	71512.9	6.41
MPL	1050	12073.1	12632.3	34003.2	58708.7	7.52
MTPS-II	390	2693.3	6255.2	7618.6	16567.1	5.71
NPGC	660	13731.2	34073.9	35182.4	82987.5	16.90
TSTPP-I	1000	7212.8	6519.6	13767.5	27500	3.70
Teesta-V	510	0.0	0.0	1223.3	1223.26	0.32

Category wise Despatch of Secondary Reserve

Category	Installed Capacity(MW)	Secondary Despatch quantum(MWH)	Reserve quantum as percentage of IC(%)
Thermal	11400	474191.4099	5.59
Hydro	510	1223.2601	0.32
Total	11910	475414.67	5.37



Tertiary Reserve under implementation in Eastern Region.