

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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सं/No: ERPC/Reporting/MPR/2022-23/ 1552

दिनांक/Date: 28.02.2023
01.03.

सेवा में : (संलग्न सूची के अनुसार)

To: As per enclosed list.

विषय : जनवरी-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 January, 2023
on ERPC website.

महोदय / Sir ,

पूर्वी क्षेत्रीय विद्युत समिति की जनवरी -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
January, 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

(Sanatan Sarvesh)

कार्यकारी अभियंता

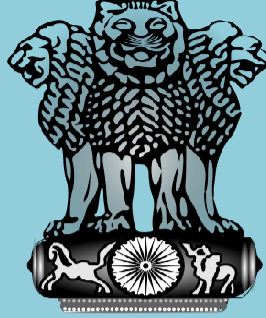
Executive Engr.

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सत्यमेव जयते

Government of India

विद्युतमंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

PROGRESS REPORT FOR THE MONTH OF

जनवरी - 2023

January-2023



14, गोल्फ क्लब रोड, टोलीगंज

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Highlights of Eastern Regional Power System for January- 2023

- The **Maximum Net Demand** met of **Eastern Region (ER)** during the month of **Jan, 2023** was **22095 MW** which is 4.20% more than the **Jan, 2022** (21204 MW). Individual **Peak Demand (MW)** of all the constituents (except Sikkim) **increased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of **Jan, 2023** was **440.92 MU** (excluding export), which is 7.70% more than the corresponding period of last year (409.39 MU).
- The **Average regional PLF of thermal units during the month** is **78.37 %**, which is 5.72% more than the corresponding period of the last year (**72.65%**).
Bakreswar TPP (WBPDCCL) registered the highest PLF of 101.80%, followed by Sagardighi TPP (WBPDCCL) 100.65% and Santaldih TPS (WBPDCCL) 100.27% during the month of **Jan, 2023**.
- **Maximum Net generation** was **29595.51 MW** against total **Effective Capacity of 42203.41 MW** (including import from Bhutan). At the time of Regional peak (**22095 MW** on 25.01.2023 at 19.00 hrs.), the generation was **29111 MW**, import from CPP was 1901 MW and Net export was 8917 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 58.70% of time during the month. **Average frequency** for the month was **49.99 Hz**. The instantaneous maximum and minimum frequency were 50.49 Hz and 49.42 Hz, respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.30 Hz** and **49.46 Hz** respectively (refer Annexure-I).
- At 400 kV voltage level, the **maximum Voltage** recorded was 424 KV at Jeerat 400 KV S/s whereas the minimum voltage recorded 387 KV at Jamshedpur 400 KV S/s of Power grid.
- The **Maximum Export from ER to outside region** was **11736 MW** (including Nepal and Bangladesh) on 08th Jan, 2023 at 17:00 hrs. Total net energy export during the month was **6245.87 MU** (Inc.Transmission loss) which corresponds to 33.37 % of Ex-bus total generation 18716.02 MU of Eastern Region.
- The import from CPPs was 1198.43 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	5695	10	2817.06
WR	3232	920	803.47
SR	4604	0	2097.73
NER	116	939	-345.97
BANGLADESH			594.50
NEPAL (via-CTU)			204.10
Chukha, Kurichu, Tala			74.98
Total			6245.87
NEPAL by Bihar(NBPDCL)			52.35

SALIENT FEATURES

(YEAR TO YEAR COMPARISION)

		Jan-23		JAN-2022	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)					
	THERMAL (MW)	32500		32080	420	1.31
	HYDRO (MW)	5990	\$	5990	0	0
	DIESEL (MW)	0		0	0	0
	RES (MW)	1518		1518	0	0
	TOTAL (MW)	40007		39587	420	1.06
2)	Peak Demand (MW)	22461		21396	1065	4.98
3)	Peak Demand Met (MW)	22095		21204	891	4.20
4)	Shortage (MW)	366		191	175	0.00
5)	% Shortage	1.63		0.89	0.74	0.00
6)	Average Energy Requirement Per Day (MU)	444.61		412.33	32.28	7.83
7)	Average Energy Availability Per Day (MU)	440.92		409.39	31.53	7.70
8)	Average Shortage Per Day (MU)	3.69		2.94	0.75	--
9)	% Shortage	0.83		0.71	0.12	--
10)	Net Generation for the Month					
	Thermal (MU)	17711.65		16102.27	1609.38	9.99
	Hydro (MU)	867.56	*	739.14	128.42	17.37
	RES (MU)	136.81		113.84	0.00	-
	Total (MU)	18716.02		16955.25	1760.77	10.38
11)	Generation at the Time of Max. Regional Demand Met (25-01-23 at 19.00 Hrs.)					
	Thermal (MW)	25541		24425	1116	4.57
	Hydro (MW)	3555	*	3519	36	1.03
	RES(MW)	14		23	-9	-38.99
	Total (MW)	29111		27967	1144	4.09
12)	Inter-Regional Energy Transfer					
	Export (MU)	6591.84		5513.62	1078.22	19.56
	Import (MU)	345.97		42.19	303.78	720.04
	Net Exp.(+)/Net Imp.(-) (MU)	6245.87		5471.43	774.44	14.15
13)	Import From Captive(MU)	1198.43		1207.23	-8.80	-0.73
14)	Peak Inter Regional Power Transfer					
	Max Export (MW) on 08-01-23 at 17.00Hrs	11736		11144	592	5.31
	Max Import (MW) on 30-01-23 at 03.00Hrs	1358		1932	-574	-29.73
	Max Net Export(+)/Import (-) (MW)	10850		10614	236	2.23
15)	Maximum voltage recorded	424		JEERAT	400 kv	s/s
16)	Minimum voltage recorded	387		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 JAN'2023

A) Net Average Energy Per Day

System	Requirement Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSPHCL	96.47	97.57	1.09	1.12
JUVNL	35.03	37.51	2.48	6.62
DVC	72.77	72.80	0.03	0.05
ODISHA	97.35	97.40	0.04	0.05
WBSEDCL	115.12	115.22	0.10	0.08
CESC	22.14	22.15	0.01	0.05
SIKKIM	1.97	1.97	0.00	0.05
REGION	440.92	444.61	3.69	0.83

B) Peak Demand in MW:

System	Demand Met (MW)	Demand (MW)	Shortage (MW)	% Shortage
BSPHCL	5586	5794	208	3.58
JUVNL	1775	2061	287	13.90
DVC	3339	3339	0	0.00
ODISHA	5221	5221	0	0.00
WBSEDCL	5913	5916	3	0.05
CESC	1301	1303	2	0.1
SIKKIM	123	123	0	0.00
REGION	22095	22461	366	1.63

➤ DIVERSITY FACTOR : 1.05

➤ Regional Peak Demand Met on 25-1-2023 at 19.00 hrs. at 50.01 Hz.

CONSTITUENT-WISE PERFORMANCE DATA JAN-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(+) Net Export(-)	Consumption(MU)	Cons.(MU)	Demand Met (MW)	Demand Met (MW)
BSPHCL	0.00	344.22	51.07	395.29	0.00	31.20	0.00	31.20	0.00	313.02	51.07	364.09	0.00	2626.59	2990.68	96.5	5586	5638
JUVNL	1.44	403.48	0.00	404.92	0.01	34.54	0.00	34.54	1.44	368.95	0.00	370.38	37.16	678.30	1085.84	35.0	1775	1821
DVC	8.16	3827.77	0.00	3835.94	0.00	250.47	0.00	250.47	8.16	3577.30	0.00	3585.47	4.40	-1334.11	2255.76	72.8	3339	3700
ODISHA(OPGC+OHPC+ITPS)	315.26	904.42	66.45	1286.13	1.25	68.68	0.00	69.93	314.01	835.74	66.45	1216.20	869.00	932.77	3017.97	97.4	5221	5345
WBPDC+WBSEDCL+DPL	228.30	3379.41	17.24	3624.94	0.00	275.86	0.00	275.86	228.30	3103.54	17.24	3349.08	287.86	-68.14	3568.80	115.1	5913	6313
CESC	0.00	470.49	0.00	470.49	0.00	34.89	0.00	34.89	0.00	435.60	0.00	435.60	0.00	250.74	686.33	22.1	1301	1360
HEL	0.00	195.16	0.00	195.16	0.00	16.72	0.00	16.72	0.00	178.44	0.00	178.44	0.00	-178.44				
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	59.94	60.94	2.0	123	123
NTPC	0.00	7481.16	1.05	7482.21	0.00	504.57	0.00	504.57	0.00	6976.59	1.05	6977.64	0.00	-6977.64				
MPL	0.00	469.61	0.00	469.61	0.00	28.08	0.00	28.08	0.00	441.53	0.00	441.53	0.00	-441.53				
APNRL	0.00	318.71	0.00	318.71	0.00	25.25	0.00	25.25	0.00	293.46	0.00	293.46	0.00	-293.46				
GMR	0.00	488.36	0.00	488.36	0.00	29.03	0.00	29.03	0.00	459.33	0.00	459.33	0.00	-459.33				
JITPL	0.00	772.08	0.00	772.08	0.00	43.94	0.00	43.94	0.00	728.14	0.00	728.14	0.00	-728.14				
NHPC (Inc TLDP= 37.84 MU)	96.77	0.00	0.00	96.77	0.00	0.00	0.00	0.00	96.77	0.00	0.00	96.77	0.00	-96.77	0.00			
CHUZACHEN HPS	6.97	0.00	0.00	6.97	0.00	0.00	0.00	0.00	6.97	0.00	0.00	6.97	0.00	-6.97	0.00			
DIKCHU HPS	8.21	0.00	0.00	8.21	0.00	0.00	0.00	0.00	8.21	0.00	0.00	8.21	0.00	-8.21	0.00			
JORHANG HPS	9.82	0.00	0.00	9.82	0.00	0.00	0.00	0.00	9.82	0.00	0.00	9.82	0.00	-9.82	0.00			
TASHIDING HPS	9.57	0.00	0.00	9.57	0.00	0.00	0.00	0.00	9.57	0.00	0.00	9.57	0.00	-9.57	0.00			
TEESTA-III HPS	155.00	0.00	0.00	155.00	0.00	0.00	0.00	0.00	155.00	0.00	0.00	155.00	0.00	-155.00	0.00			
RONGNICHU HEP	7.71	0.00	0.00	7.71	0.00	0.00	0.00	0.00	7.71	0.00	0.00	7.71	0.00	-7.71	0.00			
CHPC(Birpara Receipt)	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			
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	16.08	0.00	0.00	16.08	0.00	0.00	0.00	0.00	16.08	0.00	0.00	16.08	0.00	-16.08	0.00			
Mangdechhu HEP	5.52	0.00	0.00	5.52	0.00	0.00	0.00	0.00	5.52	0.00	0.00	5.52	0.00	-5.52	0.00			
Total Drawal by HVDC Sahsaram,Alipurduar & Others														2.24	2.24			
Total	868.82	19054.87	136.81	20060.50	1.25	1343.22	0.00	1344.47	867.56	17711.65	136.81	18716.02	1198.43	-6245.88	13668.58	440.92	22095	23952

3A

18716.02

13668.58

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	-	-	-	-	-
MARCH	474.37	479.88	5.51	1.15	49.97	-	-	-	-	-

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	-	-	-	-	-
MARCH	24582	24762	180	0.73	49.97	-	-	-	-	-

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JAN -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	0.00	-0.74	33.38	23.60
	Thermal	Barauni (U# 8)	250.00	250.00	171.28	155.86	1435.32	1304.87
		Barauni (U# 9)	250.00	250.00	172.94	157.90	1551.43	1404.38
		(Dedicated for Bihar)	Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	0.00
	RES	Thermal Total	940.00	930.00	344.22	313.02	3020.13	2732.85
			354.91	354.91	51.07	51.07	273.13	273.13
		Total BIHAR	1294.91	1284.91	395.29	364.09	3293.25	3005.98
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	241.85	220.47	2221.22	1989.37
TPCL		JOJOBERA	240.00	240.00	161.63	148.48	1018.36	931.17
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	1.44	1.44	159.95	159.89
	RES		60.41	60.41	0.00	0.00	0.00	0.00
		Total	190.41	190.41	1.44	1.44	159.95	159.89
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	-0.32	0.00	-4.97
		Chandrapura(U7 # 8)	500.00	500.00	344.82	312.94	3095.27	2789.78
		Durgapur(4)	210.00	210.00	0.00	0.00	135.12	111.48
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	719.62	641.77	6988.82	6231.75
		Mejia(U # 7,8)	1000.00	1000.00	705.16	670.42	6007.36	5672.20
		Bokaro-A(1)	500.00	500.00	331.07	312.70	3148.81	2969.43
		Durgapur STPS (U#1,2)	1000.00	1000.00	653.15	623.01	5762.39	5454.33
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	378.63	352.61	4382.24	4091.96
		Koderma STPS (U#1,2)	1000.00	1000.00	695.32	664.17	6034.71	5710.71
		Total Thermal	6750.00	6750.00	3827.77	3577.30	35554.72	33026.67
	Hydro	Maithon (U#1,2,3)	63.20	63.20	4.54	4.54	90.20	89.98
		Panchet (U#1,2)	80.00	80.00	2.33	2.33	124.86	123.95
		Tilaiya (U#1,2)	4.00	4.00	1.29	1.3	1.31	1.2
		Hydro Total	147.20	147.20	8.16	8.16	216.38	215.16
			Total DVC	6897.20	6897.20	3835.94	3585.47	35771.10
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	320.00	275.00	181.10	165.20	1526.27	1378.11
		Santalidih TPS(U#5&6)	500.00	500.00	373.00	345.11	3285.28	3017.82
		Kolaghat TPS	840.00	840.00	498.66	447.31	4079.59	3619.33
		Bakreswar TPP	1050.00	1050.00	795.23	731.02	6992.65	6394.85
		Sagardighi TPP	1600.00	1600.00	1198.15	1114.57	10310.78	9551.08
		DPPS (300+250)	550.00	550.00	333.27	300.34	2289.22	2055.97
		Thermal Total	4860.00	4815.00	3379.41	3103.54	28483.78	26017.15
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	3.53	3.53	167.11	167.11
		Rammam (4x12.73)	51.00	51.00	9.57	9.57	228.78	228.78
		Teesta C.F. (3x3x7.5)	67.50	67.50	12.65	12.65	118.46	118.46
		Purulia PSS (4x225)	900.00	900.00	202.55	202.55	1325.68	1325.68
		Total Hydro	1053.50	1053.50	228.30	228.30	1840.03	1840.03
		RES	500.76	500.76	17.24	17.24	181.70	181.70

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JAN -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
CESEC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00
		Southern (2x67.5)	135.00	135.00	0.00	0.00	571.91	522.62
		Budge-Budge (3x250)	750.00	750.00	470.49	435.60	4450.21	4096.44
		Total CESC	1125.00	1125.00	470.49	435.60	5022.11	4619.06
HEL	Thermal	HEL	600.00	600.00	195.16	178.44	3542.89	3264.36
		Total West Bengal	8139.26	8094.26	4290.60	3963.12	39070.51	35922.30
OPGC	Thermal	IB TPS	420.00	420.00	269.21	239.76	2276.03	2008.75
		IB TPS U#3(660 MW)	660.00	660.00	330.32	309.93	3805.21	3588.16
		IB TPS U#4(660 MW)	660.00	660.00	304.88	286.06	3545.22	3345.87
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	25.35	25.22	869.39	867.25
		Hirakud-II (Chiplima)	72.00	72.00	16.04	15.95	303.62	302.70
		Balimela (6x60+2x75)	510.00	510.00	41.17	40.68	924.66	918.63
		Rengali (5x50)	250.00	250.00	36.56	36.46	696.73	695.80
		Upper Kolab (4x80)	320.00	320.00	71.61	71.34	388.85	387.47
		Indravati HPS (4x150)	600.00	600.00	105.99	105.81	1157.04	1144.72
		Mckd.(Odisha drawal)	57.38	57.38	18.55	18.55	196.76	196.76
		Total Hydro	2084.88	2084.88	315.26	314.01	4537.05	4513.33
		RES	539.57	539.57	66.45	66.45	590.46	590.46
		Total Odisha	4364.45	4364.45	1286.13	1216.20	14753.96	14046.56
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00	1.00	15.00	15.00
NTPC		MTPS Stg-II	390.00	390.00	273.12	248.14	2464.21	2226.85
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	886.33	818.73	7909.82	7255.97
		FSTPP (U# 6)	500.00	500.00	294.61	272.81	2094.72	1947.71
		KhSTPP (4x210+3x500)	2340.00	2340.00	1244.42	1150.88	13056.32	12104.40
		TSTPP (2x500)	1000.00	1000.00	724.68	672.28	6230.11	5766.29
		BARH STPS II (2X660)	1320.00	1320.00	848.77	802.68	7704.60	7268.08
		BARH STPS I (1X660)	660.00	660.00	358.93	335.16	3401.98	3182.39
		BRBCL # 1,2,3,4(4X250 MW)	1000	1000	580.12	535.61	5869.56	5415.47
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	1048.51	991.45	10223.94	9697.06
		NSTPS infirm			0.00	0.00	75.63	69.22
		DSTPP #1&2	1600.00	1600.00	1115.49	1049.59	9223.20	8641.33
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		NKSTPP_INF			106.18	99.27	106.18	99.27
		Total NTPC	12390.00	12390.00	7481.16	6976.59	68360.28	63674.05
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	4.39	4.39	310.81	310.81
		Teesta (3x170)	510.00	510.00	74.93	74.93	2662.00	2662.00
		TLDP(4x33+4x40) for WBSEDCL	292.00	292.00	17.45	17.45	1270.28	1270.28
		Total NHPC	862.00	862.00	96.77	96.77	4243.08	4243.08
		MPL (U#1&2)	1050.00	1050.00	469.61	441.53	6562.83	6194.65
		APNRL (U#1,2)	540.00	540.00	318.71	293.46	2967.25	2710.00
		GMR (2x350)	700.00	700.00	488.36	459.33	3781.36	3521.68
		JITPL (2X600)	1200.00	1200.00	772.08	728.14	6428.56	6046.93
		CHUZACHEN** (2x55)	110.00	110.00	6.97	6.97	479.28	479.28
		JORETHANG (2x48)	96.00	96.00	9.82	9.82	414.92	414.92
		TEESTA URJA St III (6x200)	1200.00	1200.00	155.00	155.00	5812.04	5812.04
		Tashilding (2x48.5)	97.00	97.00	9.57	9.57	432.69	432.69
		DICKCHU (2x48)	96.00	96.00	8.21	8.21	516.78	516.78
		RONGNICHU HEP (2x56.5)			7.71	7.71	415.48	415.48
		TALCHER SOLAR	10.00	10.00	1.05	1.05	10.78	10.78
		Total Thermal (E.R)	32555.00	32500.00	19054.87	17711.65	176589.94	163670.73
		Total Hydro (E.R)	5989.58	5989.58	847.21	845.96	19067.67	19042.68
		Total RES	1517.83	1517.83	136.81	136.81	1071.07	1071.07
EASTERN REGIONAL		TOTAL (E.R)	40062.41	40007.41	20038.89	18694.42	196728.68	183784.48
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	0.00	0.00	1569.83	1569.83
	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	16.08	16.08	397.28	397.28
		MANGDECHU(4x180)	720.00	720.00	5.52	5.52	2632.92	2632.92
		Grand Total	42348.41	42203.41	20060.50	18716.02	203774.69	190830.49

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

ORGANI- SATION	TYPE	POWER	INSTALLED	EFFECTIVE	Gross	PLF	Cummulative Gross	Cummulative PLF
		STATION	CAPACITY	CAPACITY	Energy	of Current	Energy Generation	upto Current
			(in MW)	(in MW)	Generation	Month	upto Current Month	Month
					in MU	(%)	(2022-23) in MU	(%)
BIHAR	NTPC	Barauni (U# 6,7)	220.00	210.00	0.00	0.00	33.38	0.84
	Thermal	Barauni (U# 8)	250.00	250.00	171.28	92.09	1435.32	78.18
		Barauni (U# 9)	250.00	250.00	172.94	92.98	1551.43	84.50
	(Dedicated	Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	0.00	0.00
	for Bihar)	Thermal Total	940.00	930.00	344.22	49.75	3020.13	43.92
	RES		354.91	354.91	51.07		273.13	
		Total BIHAR	1294.91	1284.91	395.29		3293.25	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	241.85	77.40	2221.22	72.01
		JOJOBERA	240.00	240.00	161.63	90.52	1018.36	96.09
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	1.44		159.95	
	RES		60.41	60.41	0.00		0.00	
		Total	190.41	190.41	1.44		159.95	
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	0.00	0.00	0.00
		Chandrapura(U7 # 8)	500.00	500.00	344.82	92.69	3095.27	84.29
		Durgapur(4)	210.00	210.00	0.00	0.00	135.12	8.76
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	719.62	72.18	6988.82	71.02
		Mejia(U # 7,8)	1000.00	1000.00	705.16	94.78	6007.36	81.80
		Bokaro-A(1)	500.00	500.00	331.07	89.00	3148.81	85.75
		Durgapur STPS (U#1,2)	1000.00	1000.00	653.15	87.79	5762.39	78.46
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	378.63	42.41	4382.24	49.73
		Koderma STPS (U#1,2)	1000.00	1000.00	695.32	93.46	6034.71	82.17
		Total Thermal	6750.00	6750.00	3827.77	76.22	35554.72	71.72
	Hydro	Maithon (U#1,2,3)	63.20	63.20	4.54		90.20	
		Panchet (U#1,2)	80.00	80.00	2.33		124.86	
		Tilaiya (U#1,2)	4.00	4.00	1.29		1.31	
		Hydro Total	147.20	147.20	8.16		216.38	
			Total DVC	6897.20	6897.20	3835.94		35771.10
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	320.00	275.00	181.10	88.51	1526.27	75.57
		Santalidih TPS(U#5&6)	500.00	500.00	373.00	100.27	3285.28	89.47
		Kolaghat TPS	840.00	840.00	498.66	79.79	4079.59	66.13
		Bakreswar TPP	1050.00	1050.00	795.23	101.80	6992.65	90.68
		Sagardighi TPP	1600.00	1600.00	1198.15	100.65	10310.78	87.75
		DPPS (300+250)	550.00	550.00	333.27	81.44	2289.22	56.68
		Thermal Total	4860.00	4815.00	3379.41	94.33	28483.78	80.55
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	3.53		167.11	
		Rammam (4x12.73)	51.00	51.00	9.57		228.78	
		Teesta C.F. (3x3x7.5)	67.50	67.50	12.65		118.46	
		Purulia PSS (4x225)	900.00	900.00	202.55		1325.68	
		Total Hydro	1053.50	1053.50	228.30		1840.03	
		RES	500.76	500.76	17.24		181.70	
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.							
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							

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF JAN' 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 (%)
			(in MW)	(in MW)				
CESC	Thermal	Titagarh (4x60)	240.00	240.00	0.00	0.00	0.00	0.00
		Southern (2x67.5)	135.00	135.00	0.00	0.00	571.91	57.68
		Budge-Budge (3x250)	750.00	750.00	470.49	84.32	4450.21	80.80
		Total CESC	1125.00	1125.00	470.49	56.21	5022.11	60.79
HEL	Thermal	HEL	600.00	600.00	195.16	43.72	3542.89	80.40
		Total West Bengal	8139.26	8094.26	4290.60		39070.51	
OPGC	Thermal	IB TPS	420.00	420.00	269.21	86.15	2276.03	73.79
		IB TPS U#3(660 MW)	660.00	660.00	330.32	67.27	3805.21	78.51
		IB TPS U#4(660 MW)	660.00	660.00	304.88	62.09	3545.22	73.14
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	25.35		869.39	
		Hirakud-II (Chiplima)	72.00	72.00	16.04		303.62	
		Balimela (6x60+2x75)	510.00	510.00	41.17		924.66	
		Rengali (5x50)	250.00	250.00	36.56		696.73	
		Upper Kolab (4x80)	320.00	320.00	71.61		388.85	
		Indravati HPS (4x150)	600.00	600.00	105.99		1157.04	
		Mckd.(Odisha drawal)	57.38	57.38	18.55		196.76	
		Total Hydro	2084.88	2084.88	315.26		4537.05	
		RES	539.57	539.57	66.45		590.46	
		Total Odisha	4364.45	4364.45	1286.13		14753.96	
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00		15.00	
NTPC		MTPS Stg-II	390.00	390.00	273.12	94.13	2464.21	86.04
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	886.33	74.46	7909.82	67.32
		FSTPP (U# 6)	500.00	500.00	294.61	79.20	2094.72	57.05
		KhSTPP (4x210+3x500)	2340.00	2340.00	1244.42	71.48	13056.32	75.98
		TSTPP (2x500)	1000.00	1000.00	724.68	97.40	6230.11	84.83
		BARH STPS II (2X660)	1320.00	1320.00	848.77	86.43	7704.60	79.48
		BARH STPS I (1X660)	660.00	660.00	358.93	73.10	3401.98	70.19
		BRBCL # 1,2,3,4(4X250 MW)	1000.00	1000.00	580.12	77.97	5869.56	79.92
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	1048.51	71.18	10223.94	75.32
		NSTPS infirm					75.63	
		DSTPP #1&2	1600.00	1600.00	1115.49	93.71	9223.20	78.49
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		NKSTPP_INF			106.18		106.18	
		Total NTPC	12390.00	12390.00	7481.16	81.16	68360.28	75.73
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	4.39		310.81	
		Teesta (3x170)	510.00	510.00	74.93		2662.00	
		TLDP(4x33+4x40) for WBSEDCL	292.00	292.00	17.45		1270.28	
		Total NHPC	862.00	862.00	96.77		4243.08	
	Thermal	MPL (U#1&2)	1050.00	1050.00	469.61	60.11	6562.83	85.11
		APNRL (U#1,2)	540.00	540.00	318.71	79.33	2967.25	74.82
		GMR (2x350)	700.00	700.00	488.36	93.77	3781.36	73.56
		JITPL (2X600)	1200.00	1200.00	772.08	86.48	6428.56	72.95
		CHUZACHEN** (2x55)	110.00	110.00	6.97		479.28	
		JORETHANG (2x48)	96.00	96.00	9.82		414.92	
		TEESTA URJA St III (6x200)	1200.00	1200.00	155.00		5812.04	
		Tashilding (2x48.5)	97.00	97.00	9.57		432.69	
		DICKCHU (2x48)	96.00	96.00	8.21		516.78	
		RONGNICHU HEP (2x56.5)			7.71		415.48	
		TALCHER SOLAR	10.00	10.00	1.05		10.78	
		Total Thermal (E.R)	32555.00	32500.00	19054.87	78.37	176589.94	74.36
		Total Hydro (E.R)	5989.58	5989.58	847.21		19067.67	
		Total RES	1517.83	1517.83	136.81		1071.07	
		TOTAL (E.R)	40062.41	40007.41	20038.89		196728.68	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	0.00		1569.83	
	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	16.08		397.28	
		MANGDECHU(4x180)	720.00	720.00	5.52		2632.92	
Grand Total			42348.41	42203.41	20060.50		203774.69	

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK DURING THE MONTH
OF JAN'2023 (25-1-2023)

Date	25-Jan-23					
Time	19.00	Hrs.				
Frequency	50.01	Hz.				
						(All Fig. in MW)
	Installed	Effective				Net Gen
System/State	Capacity	Capacity	Hydro	Thermal	RES	Total
BSPHCL	1295	1285	0	451	0	451
JUVNL	850	850	0	490	0	490
DVC	6897	6897	45	5134	0	5178
ODISHA	4364	4364	1336	1165	14	2515
WBSEDCL	5864	5819	919	4174	0	5092
TLDP	292	292	0	0	0	0
HEL HALDIA	600	600	0	275	0	275
CESC	1125	1125	0	683	0	683
DPL	550	550	0	0	0	0
SIKKIM	52	52	0	0	0	0
NTPC	12390	12390	0	10416	0	10416
NHPC	570	570	514	0	0	514
CHUKHA	360	270	54	0	0	54
KURICHU	60	60	-13	0	0	-13
TALA	1020	1020	30	0	0	30
MPL	1050	1050	0	478	0	478
OPGC (660 MW)	0	0	0	0	0	0
APNRL	540	540	0	494	0	494
Kamalganga (GMR)	700	700	0	655	0	655
JITPL	1200	1200	0	1128	0	1128
RONGNICHU HEP (2x56.5)	113	113	71	0	0	71
Chuzachen	110	110	27	0	0	27
Jorethang	96	96	0	0	0	0
TEESTA URJA St III	1200	1200	564	0	0	564
Tashilding	97	97	0	0	0	0
DICKCHU	96	96	50	0	0	50
<u>Daghachu</u>	126	126	20	0	0	20
<u>Solar</u>	10	10	0	0	0	0
<u>Mangdechu</u>	720	720	-61	0	0	-61
<u>Total</u>	42348	42203	3555	25541	14	29111
Import From Captive:						1901
Export To:						
NER						-608
SR						2859
WR						1097
NR						4538
Bangladesh						875
Nepal						156
Total						8917
➤ Regional Net Peak Demand Met (MW) :						22095

Indicates Export(+)/Import(-) of Power

Hourly Load Generation Data OF ER on Regional Peak Day During The Month of JAN'2023 (25-1-2023)

(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	293	23627	23920	1420	-286	7406	17647	3	0	17650
2	326	22807	23133	1383	-252	6968	17296	-15	65	17346
3	244	22452	22696	1335	-137	6984	16910	-3	0	16910
4	207	21504	21711	1355	-130	6057	16879	7	10	16896
5	293	22014	22308	1394	-133	6310	17259	-9	10	17260
6	537	23996	24533	1622	-125	8352	17678	28	10	17716
7	1097	24823	25919	1738	-7	8606	19044	12	342	19398
8	2075	25565	27640	1736	26	8676	20726	-44	116	20798
9	2536	25489	28025	1723	28	8540	21237	-61	15	21252
10	2188	25504	27692	1831	30	8703	20850	-44	14	20864
11	1533	25484	27017	1867	28	8714	20197	-30	2	20199
12	1129	25265	26394	1778	20	8409	19783	-7	1	19784
13	668	24616	25284	1801	-119	7365	19601	9	276	19885
14	573	24266	24839	1831	-325	6916	19428	-25	26	19429
15	446	24681	25127	1694	-311	7618	18892	-28	0	18892
16	416	24847	25263	1752	-151	8235	18630	-44	71	18657
17	924	25000	25924	1830	30	8787	18998	-40	63	19021
18	2655	25385	28041	1860	27	9192	20735	-16	0	20735
19	3539	25541	29081	1901	30	8917	22095	-4	370	22461
20	3307	25225	28531	1932	28	8830	21660	-15	340	21985
21	2428	25046	27474	1900	31	8497	20908	-24	340	21225
22	802	24655	25457	1838	-73	7619	19603	0	246	19849
23	678	24278	24956	1768	-327	7529	18868	54	84	19007
24	778	23875	24653	1598	-321	7575	18355	14	0	18369

Hourly Load Generation Data of ER On Regional Lean Day During The Month of JAN'2023 (2-1-2023)

(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	257	20864	21120	1306	-193	6936	15298	-4	0	15298
2	190	19695	19885	1301	-214	5801	15171	-1	0	15171
3	141	19267	19408	1286	-210	5720	14765	-1	0	14765
4	141	19192	19333	1238	-205	5687	14679	-8	0	14679
5	265	20154	20419	1318	-207	6624	14907	-14	0	14907
6	744	22701	23445	1338	-10	9942	14830	-30	190	14991
7	1112	23839	24951	1548	32	10629	15902	-47	360	16215
8	2205	24692	26896	1604	38	10850	17688	2	325	18015
9	2323	24482	26805	1580	36	9796	18626	-5	182	18803
10	2117	24438	26555	1626	39	9098	19123	12	250	19385
11	1558	24211	25769	1598	35	8752	18650	-57	120	18713
12	457	24705	25162	1595	30	8412	18375	58	0	18433
13	402	24518	24920	1478	36	7943	18492	32	127	18652
14	405	23986	24392	1427	36	7728	18127	-2	109	18234
15	384	24082	24466	1461	39	8455	17510	57	193	17760
16	927	24562	25489	1485	31	9394	17610	59	1	17670
17	1298	24664	25962	1597	37	9693	17903	61	0	17964
18	2626	24837	27462	1580	36	8973	20106	62	225	20392
19	3531	24751	28282	1550	38	9324	20547	13	261	20821
20	2630	24729	27359	1576	42	8926	20051	65	306	20422
21	1602	24476	26078	1583	38	8476	19223	10	92	19325
22	764	23794	24558	1516	39	7787	18327	-40	0	18327
23	352	23678	24029	1389	-18	8149	17252	9	0	17261
24	325	23146	23471	1363	-151	8147	16536	32	0	16567

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

FOR THE MONTH OF JAN'2023

POWER CUT / RESTRICTIONS

BSPHCL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 32.54 MU
JUVNL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 76.46 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 1.33 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

Jan-23

D A T E	H O U R S										INST. FREQ.				15 MIN. INTEGRATED			
	00	05	10	17	22	00	49.9	>50.05	49.9		MAX	HRS.	MIN	HRS.	MAX	HRS.	MIN	HRS.
	TO	TO	TO	TO	TO	TO	<49.9	TO	TO		HZ		HZ		HZ		HZ	
	05	10	17	22	24	24		50.1	50.05									
01-Jan	49.99	50.03	50.03	49.97	50.00	50.01	9.18	56.76	34.06	56.76	50.30	16:06:30	49.66	20:12:10	50.19	0:00	49.78	0:00
02-Jan	50.01	50.03	49.95	49.97	49.97	49.98	16.64	56.67	26.69	56.67	50.36	06:04:10	49.74	11:49:20	50.15	0:00	49.79	0:00
03-Jan	49.99	49.89	50.00	49.98	49.97	49.97	16.45	61.57	21.98	61.57	50.23	13:06:30	49.50	05:53:50	50.10	0:00	49.60	0:00
04-Jan	50.03	49.98	50.02	49.98	50.03	50.01	10.65	51.61	37.74	51.61	50.30	17:02:10	49.67	07:14:00	50.21	0:00	49.80	0:00
05-Jan	49.99	50.00	49.97	49.95	50.01	49.98	13.30	62.96	23.74	62.96	50.34	06:03:30	49.65	17:45:40	50.15	0:00	49.78	0:00
06-Jan	49.95	49.87	49.95	49.95	49.93	49.93	30.59	55.23	14.18	55.23	50.21	17:01:50	49.52	07:29:40	50.08	0:00	49.64	0:00
07-Jan	49.98	49.95	49.92	49.97	50.03	49.96	22.59	58.49	18.92	58.49	50.32	22:00:20	49.44	12:47:50	50.10	0:00	49.72	0:00
08-Jan	49.98	50.00	50.02	49.99	50.03	50.00	4.91	67.38	27.71	67.38	50.31	06:02:10	49.80	19:17:00	50.18	0:00	49.89	0:00
09-Jan	50.02	49.97	49.78	49.97	49.99	49.93	29.92	48.01	22.07	48.01	50.26	05:02:20	49.42	14:45:00	50.15	0:00	49.53	0:00
10-Jan	49.98	50.02	50.00	49.90	49.99	49.98	16.76	56.76	26.48	56.76	50.29	13:04:20	49.57	18:37:10	50.26	0:00	49.72	0:00
11-Jan	49.98	49.94	50.01	49.97	50.01	49.98	11.86	64.07	24.06	64.07	50.29	17:02:30	49.56	06:44:30	50.18	0:00	49.75	0:00
12-Jan	50.00	49.94	50.02	50.03	50.03	50.00	8.63	60.03	31.33	60.03	50.36	17:02:40	49.69	09:15:00	50.25	0:00	49.80	0:00
13-Jan	49.96	49.90	50.00	50.03	49.94	49.97	17.47	58.37	24.17	58.37	50.37	17:03:10	49.49	09:11:10	50.19	0:00	49.59	0:00
14-Jan	50.00	50.03	49.99	50.05	49.95	50.01	8.21	55.19	36.61	55.19	50.43	17:03:00	49.52	15:54:30	50.27	0:00	49.61	0:00
15-Jan	50.01	50.04	50.03	50.01	50.05	50.03	3.09	56.27	40.64	56.27	50.33	17:02:50	49.83	17:53:10	50.22	0:00	49.88	0:00
16-Jan	50.02	50.04	50.03	50.02	50.02	50.03	2.05	58.18	39.77	58.18	50.37	17:03:20	49.67	19:18:20	50.22	0:00	49.95	0:00
17-Jan	50.02	50.04	49.96	49.99	49.96	50.00	11.01	58.41	30.58	58.41	50.26	17:02:20	49.77	22:08:00	50.15	0:00	49.83	0:00
18-Jan	49.99	49.98	49.93	50.04	49.97	49.98	14.85	63.22	21.93	63.22	50.38	17:02:30	49.50	14:28:30	50.16	0:00	49.85	0:00
19-Jan	50.00	49.99	49.89	50.04	49.94	49.97	17.31	56.16	26.53	56.16	50.35	06:02:30	49.42	15:51:30	50.20	0:00	49.58	0:00
20-Jan	49.96	49.78	49.98	49.97	50.02	49.94	30.39	46.35	23.25	46.35	50.34	13:01:50	49.77	08:35:00	50.25	0:00	49.46	0:00
21-Jan	49.98	49.99	50.01	50.04	49.98	50.00	5.21	68.80	26.00	68.80	50.33	17:04:40	49.73	09:07:00	50.24	0:00	49.85	0:00
22-Jan	49.97	50.00	50.01	50.02	49.98	50.00	7.05	64.88	28.07	64.88	50.47	06:02:30	49.81	09:39:50	50.30	0:00	49.81	0:00
23-Jan	50.01	50.02	50.01	50.06	49.99	50.02	4.27	63.51	32.22	63.51	50.49	17:03:20	49.81	14:13:00	50.30	0:00	49.89	0:00
24-Jan	49.99	49.97	49.96	49.98	49.94	49.97	17.26	60.86	21.88	60.86	50.24	07:02:50	49.61	14:25:40	50.15	0:00	49.70	0:00
25-Jan	50.01	50.03	50.04	50.02	49.95	50.02	4.76	58.31	36.93	58.31	50.30	15:05:00	49.71	06:13:00	50.21	0:00	49.86	0:00
26-Jan	49.95	49.98	50.00	50.00	50.08	49.99	11.86	61.16	26.98	61.16	50.46	17:03:50	49.65	21:05:10	50.27	0:00	49.81	0:00
27-Jan	50.02	50.04	50.02	49.94	49.98	50.01	8.92	60.88	30.20	60.88	50.37	06:03:20	49.57	21:15:10	50.24	0:00	49.70	0:00
28-Jan	49.97	50.00	49.98	50.01	49.93	49.98	10.79	63.07	26.15	63.07	50.25	19:58:10	49.66	22:22:20	50.13	0:00	49.75	0:00
29-Jan	49.91	49.99	50.01	50.03	49.99	49.99	18.70	52.57	28.73	52.57	50.42	18:03:30	49.71	10:08:50	50.30	0:00	49.79	0:00
30-Jan	50.00	49.95	50.02	49.99	50.02	49.99	12.74	60.60	26.66	60.60	50.25	12:02:30	49.52	09:08:10	50.12	0:00	49.68	0:00
31-Jan	50.02	49.97	49.95	50.04	50.10	49.98	15.02	53.52	31.46	53.52	50.28	17:04:20	49.65	09:19:30	50.21	0:00	49.75	0:00
MAX	50.03	50.04	50.04	50.06	50.10	50.03	30.59	68.80	40.64	68.80	50.49		49.83		50.30		49.95	
MIN	49.91	49.78	49.78	49.90	49.93	49.93	2.05	46.35	14.18	46.35	50.21		49.42		50.08		49.46	
AVG	49.99	49.98	49.98	50.00	49.99	49.99	13.30	58.70	27.99	58.70	50.33		49.63		50.20		49.75	

SUMMARY:

Avg. Frequency :

49.99 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.49 Hz at 17:03 Hrs.

Minimum Frequency : 49.42 Hz at 14:45 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.30 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.46 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	13.30	58.70	27.99

VOLTAGE ANALYSIS

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

(All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	423	398	411	396	424	390	423	397

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	418	392	409	387	414	401	417	399

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

Jan-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	
			(31-01-23)	(31-01-22)		
Hirakud	192	180	189.97	191.03	191.07	01.01.23
Balimela	462	439	449.28	451.71	450.34	01.01.23
Rengali	123	109	120.07	121.78	121.11	01.01.23
Upperkolab	858	844	854.41	851.33	855.48	01.01.23
Indravati	642	625	637.07	632.01	638.21	01.01.23
Subernrekha	590	580	586.59	586.65	586.80	01.01.23

B.

CPP/IPP IMPORT by Eastern Region Constituents during

Jan-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	37.16
West Bengal	56.34	27.02	0	0	0	0	0	204.50	287.86
ODISHA	0	0	44.18	240.84	3.35	10.13	0	570.51	869.00
DVC	0	0	0	0	0	0	4.40	0	4.40
TOTAL	56.34	27.02	44.18	240.84	3.35	10.13	4.40	775.01	1198.43

C.

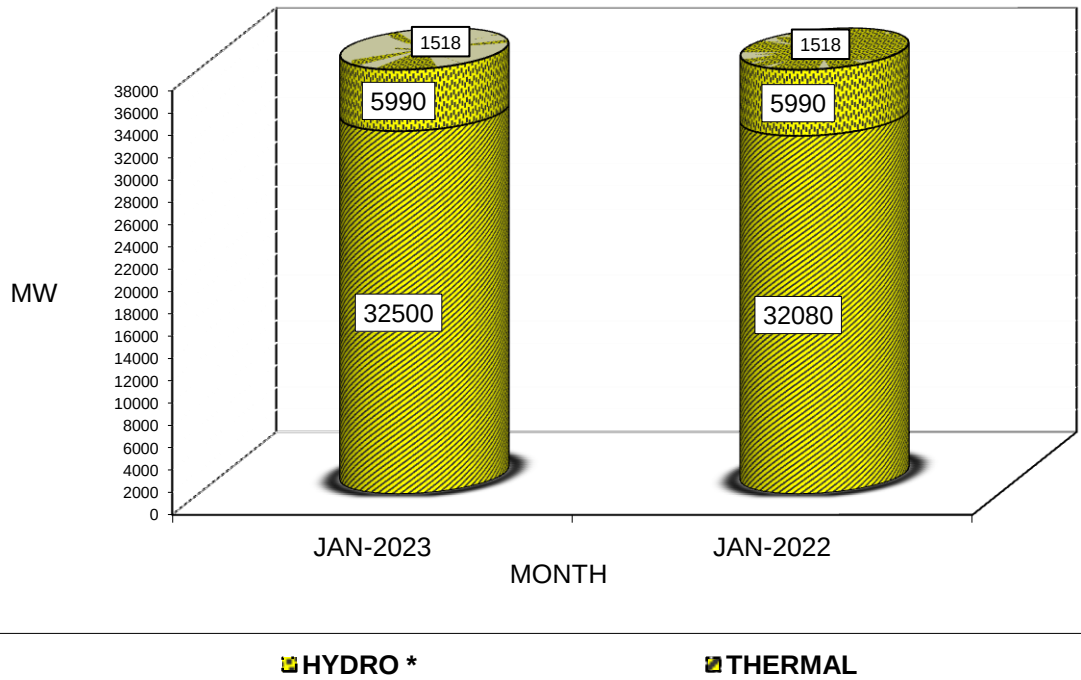
Distribution of Schedule Supply among Key Customers by IPPs during

Jan-23

(All figs. are in MU)

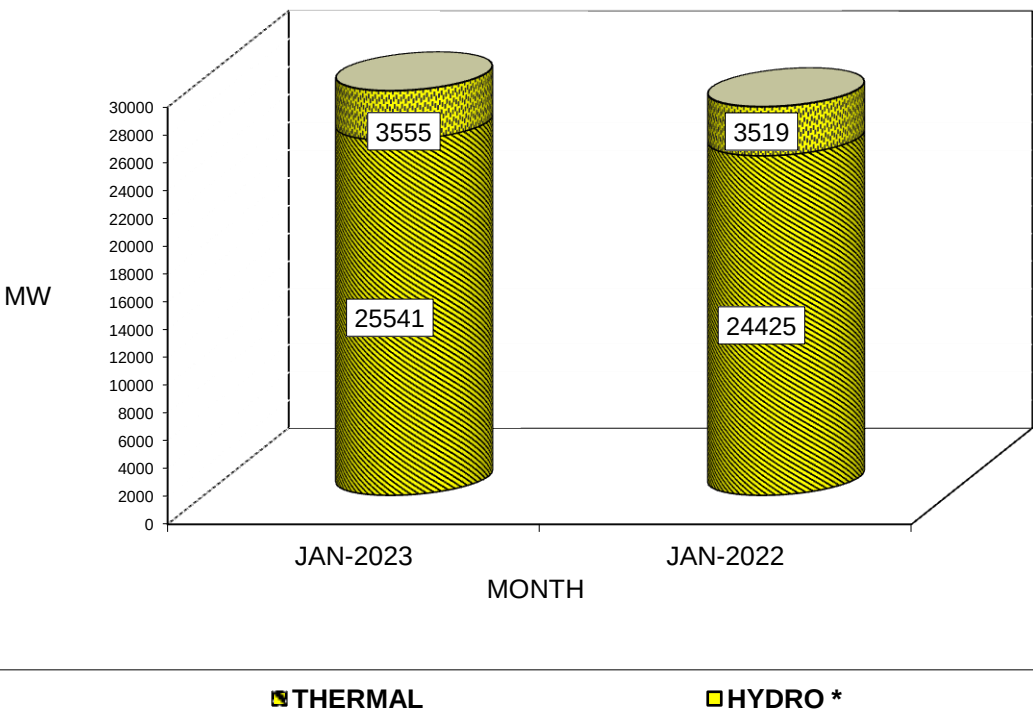
IPP	TPDDL	WBSEDCL/ WBPDCCL	DVC	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	0.00	0.00	0.00	0.00	0	0	0.00	0.00
Sterlite	0	0	0	0	0.00	0	0.00	0.00
APNRL	0	0.00	0	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID

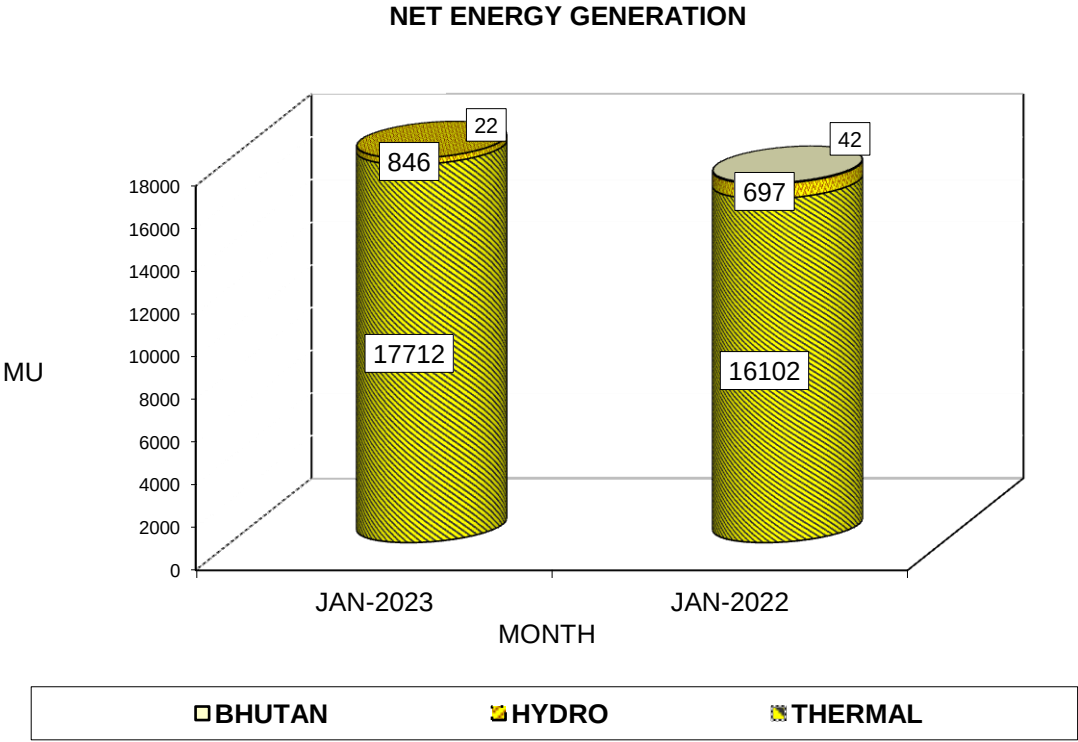


*Excludes contribution from HEPs of Bhutan

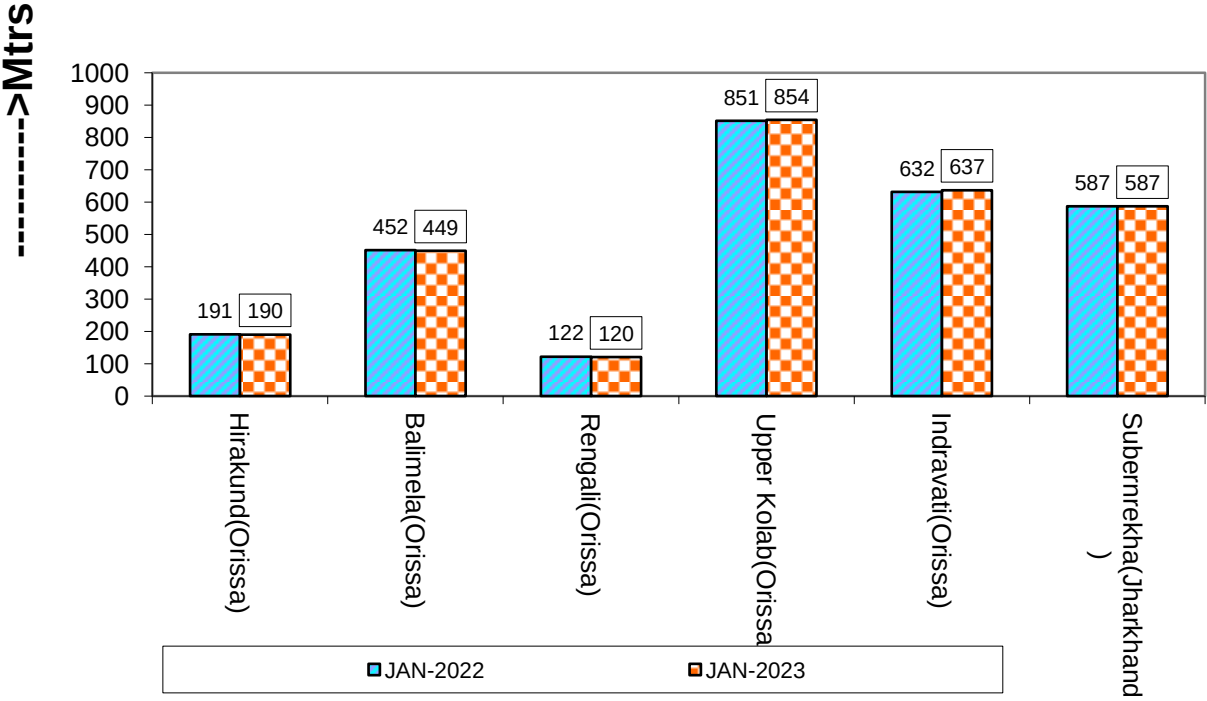
GENERATION CORRESPONDING TO PEAK DEMAND MET

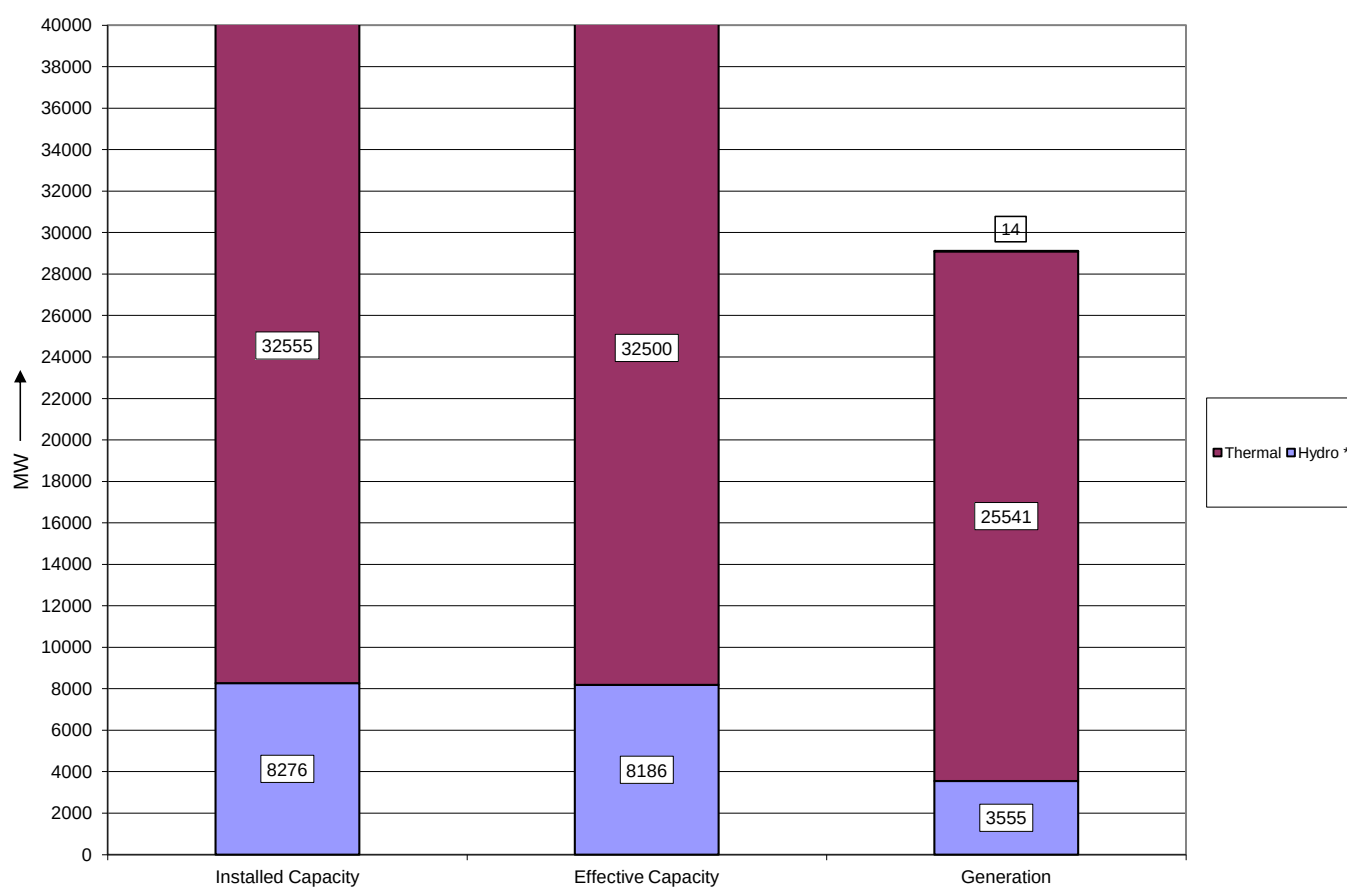


*Includes contribution from HEP of Bhutan



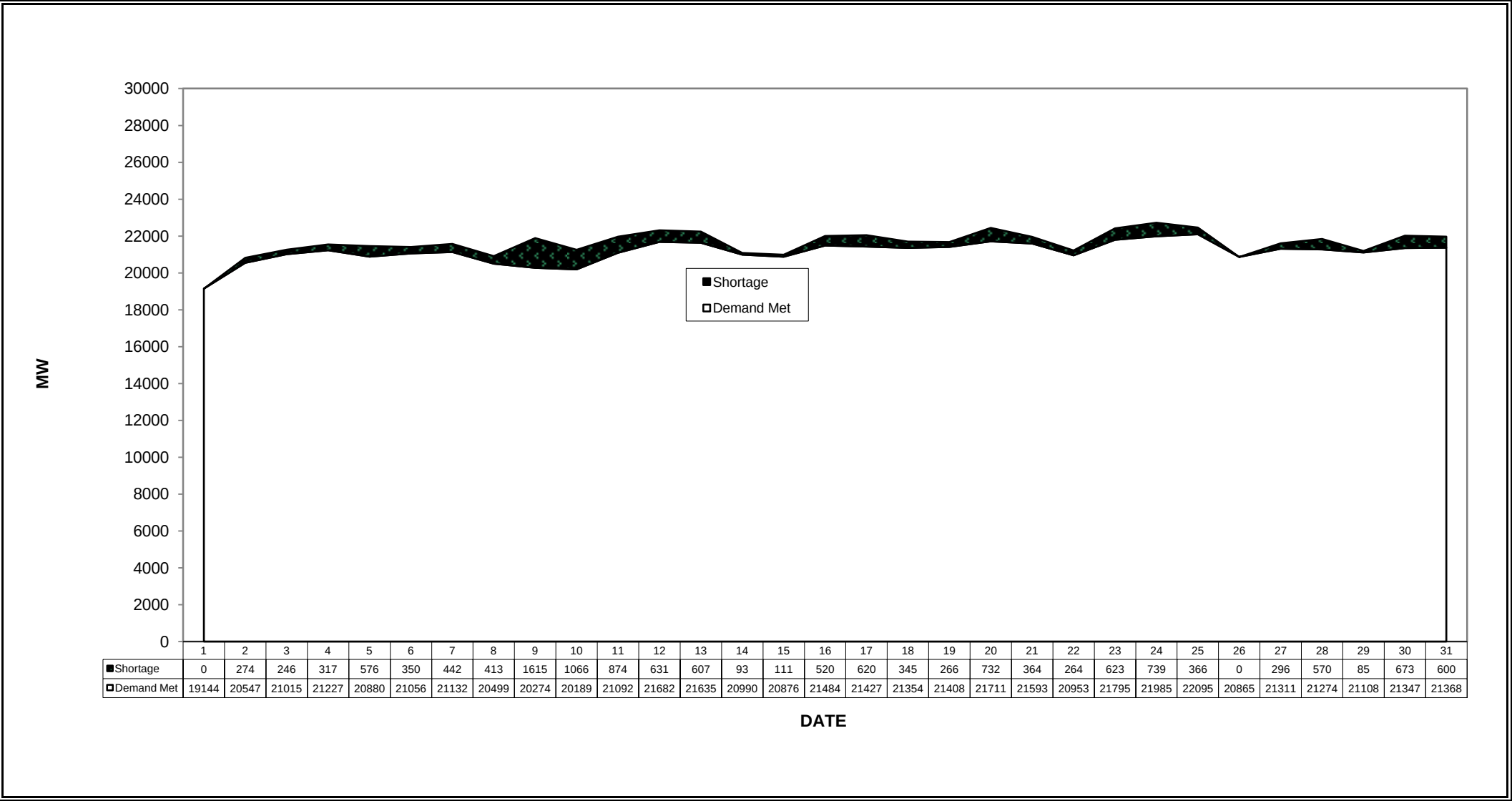
RESERVOIR LEVEL OF HPS OF ER (RECORDED ON LAST DAY OF MONTH)



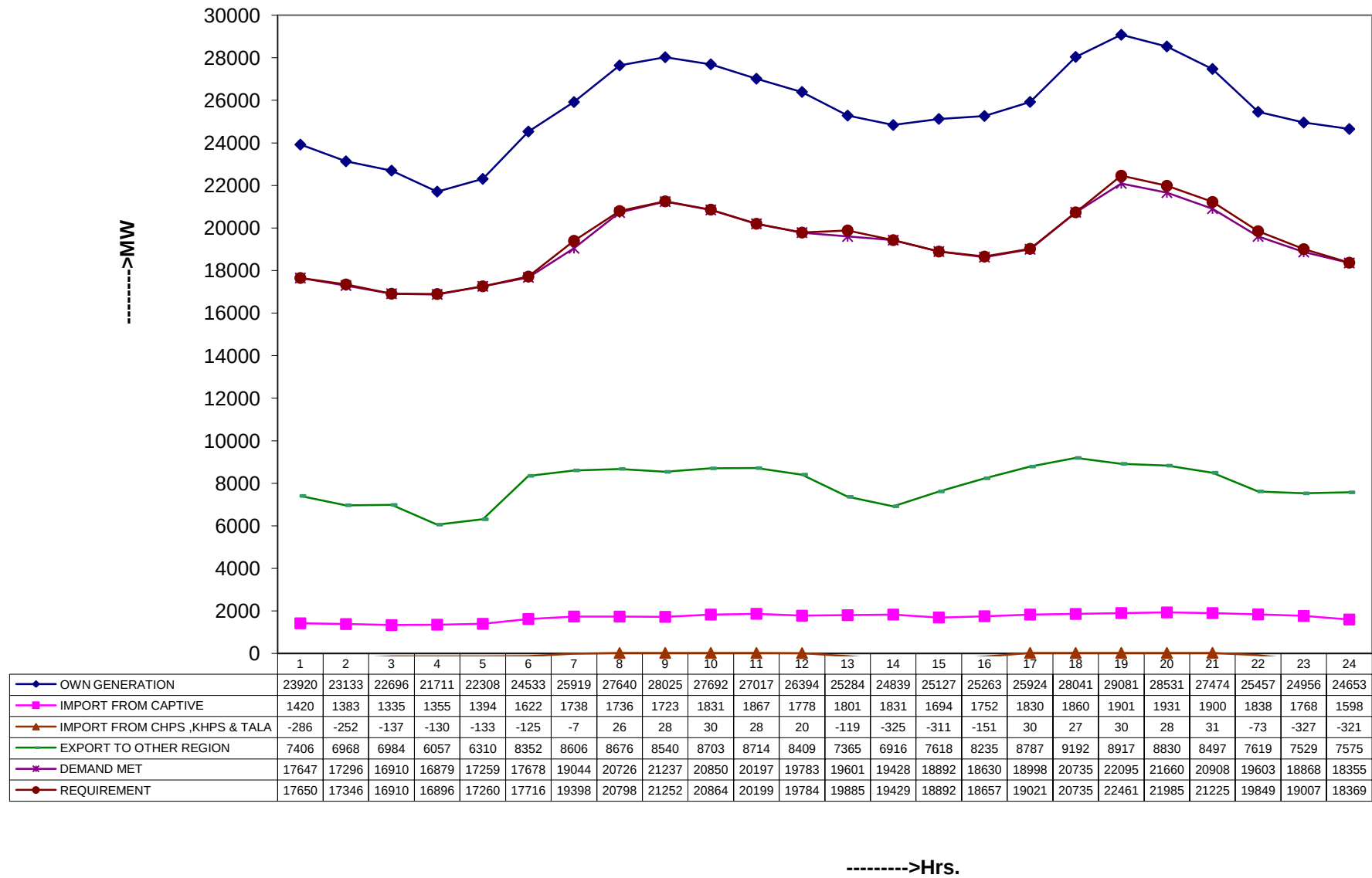
Capacity / Actual Generation Pattern of ER on Peak Day (25-1-2023) at 19.00 hrs.

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

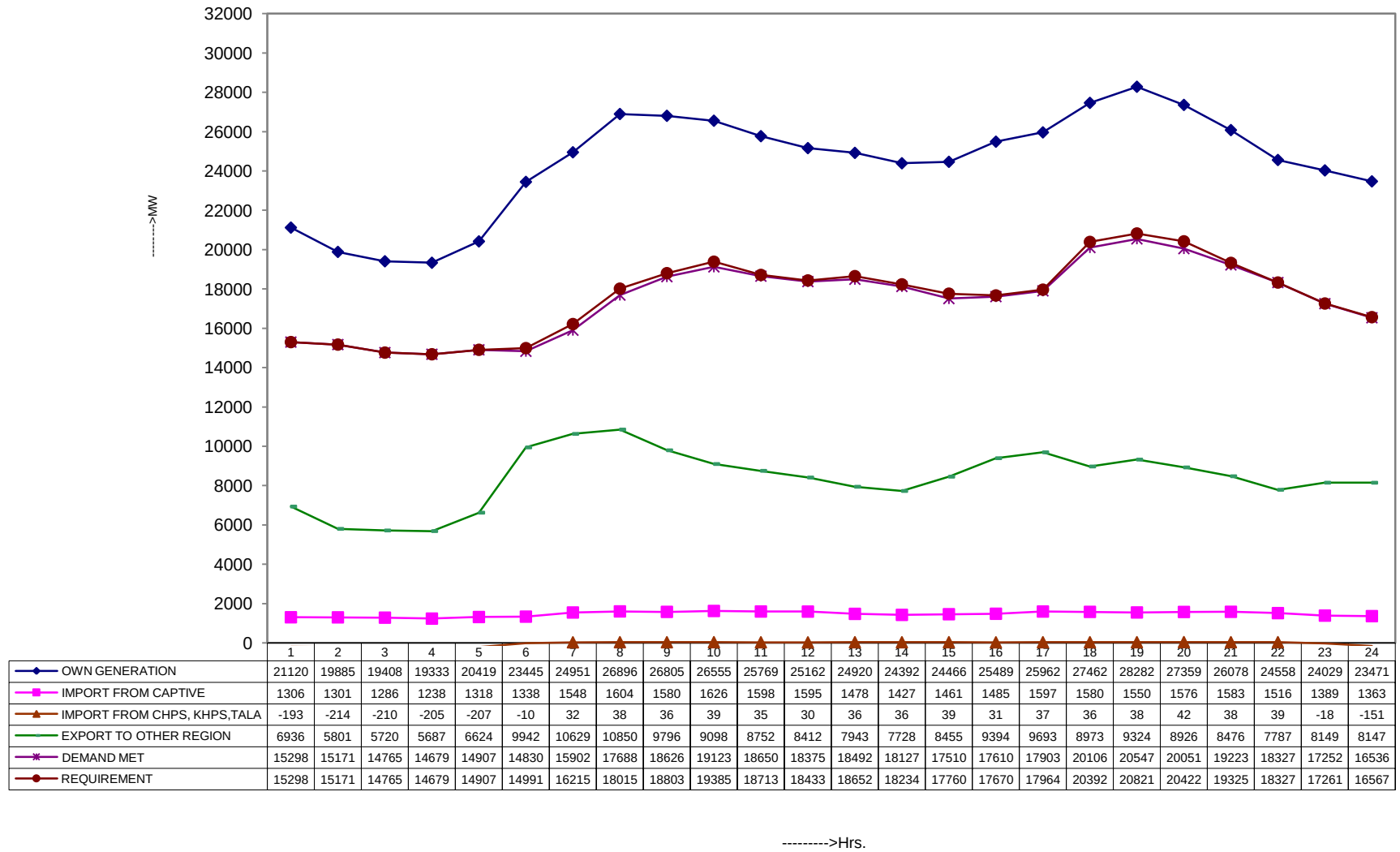
Peak Demand Met / Shortage of Eastern Region For The Month Of JAN'2023



Hourly Load Generation Data OF ER on Regional Peak Day During The Month of JAN'2023 (25-1-2023)

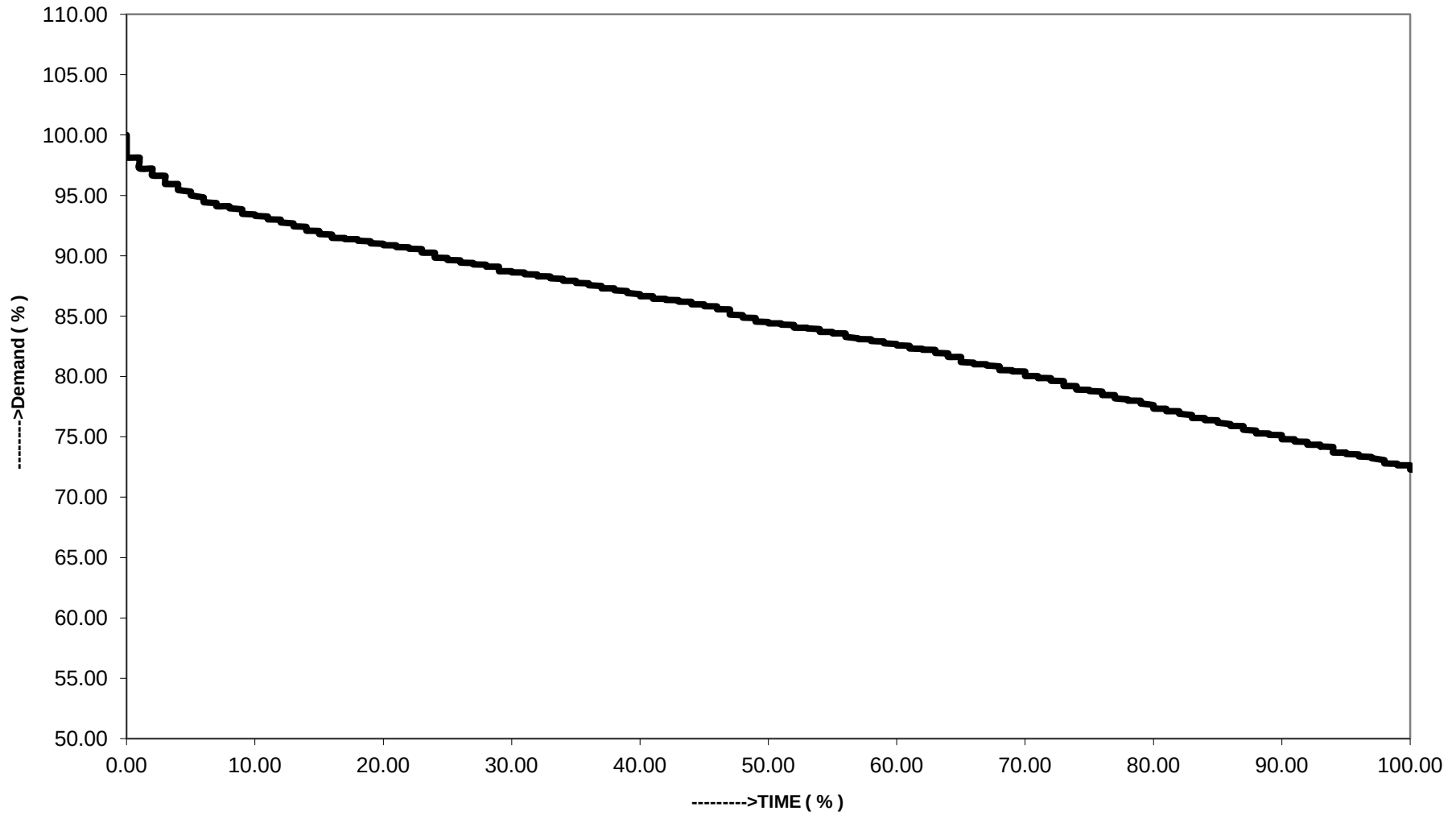


Hourly Load Generation Data of ER On Regional Lean Day During The Month of JAN'2023 (2-1-2023)



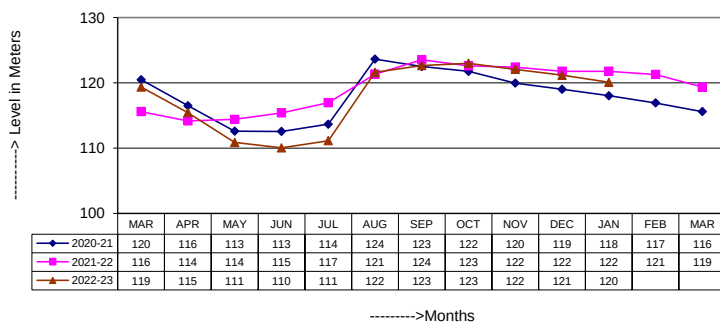
Monthly Load Duration Curve of Eastern Region for JAN-2023

Maximum Demand met : 22095 MW
Minimum Demand met: 14679 MW

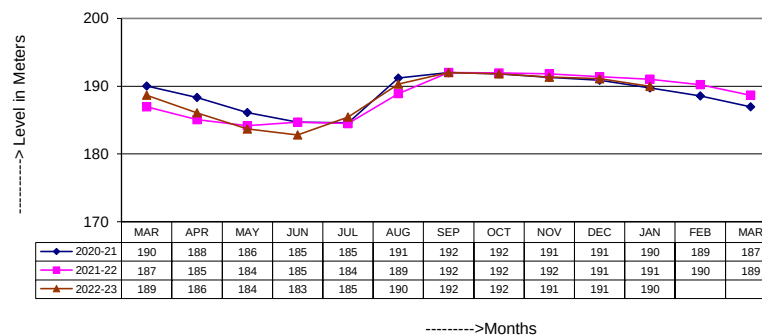


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

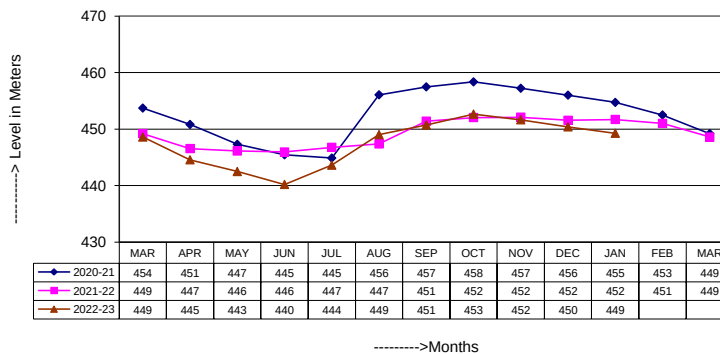
RENGALI RESERVOIR LEVEL



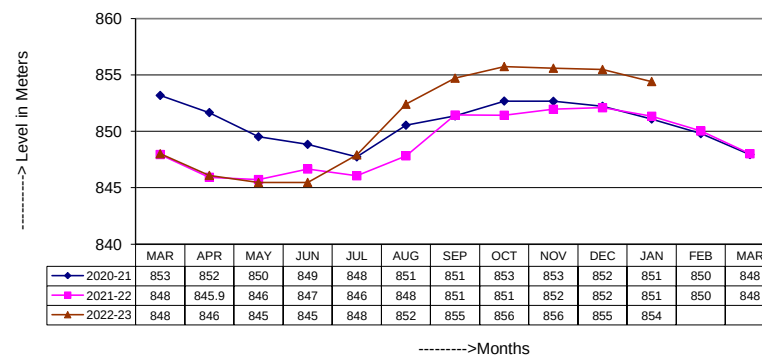
HIRAKUD RESERVOIR LEVEL



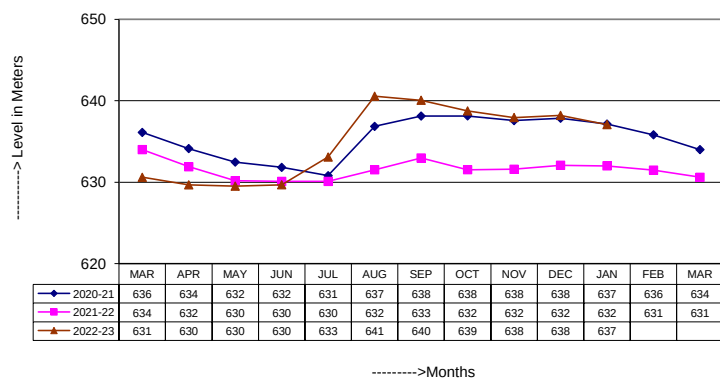
BALIMELA RESERVOIR LEVEL



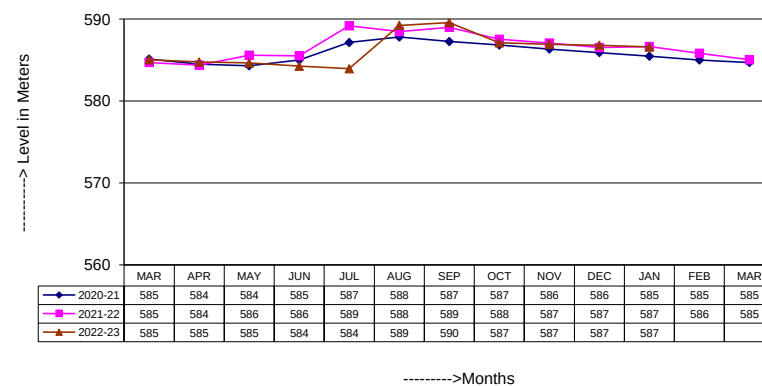
UPPER KOLAB RESERVOIR LEVEL



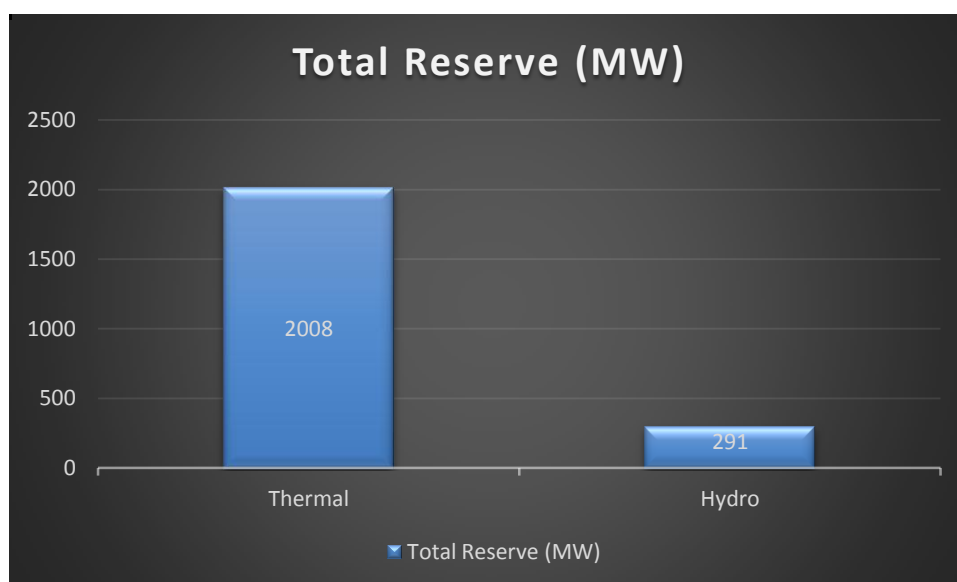
INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL



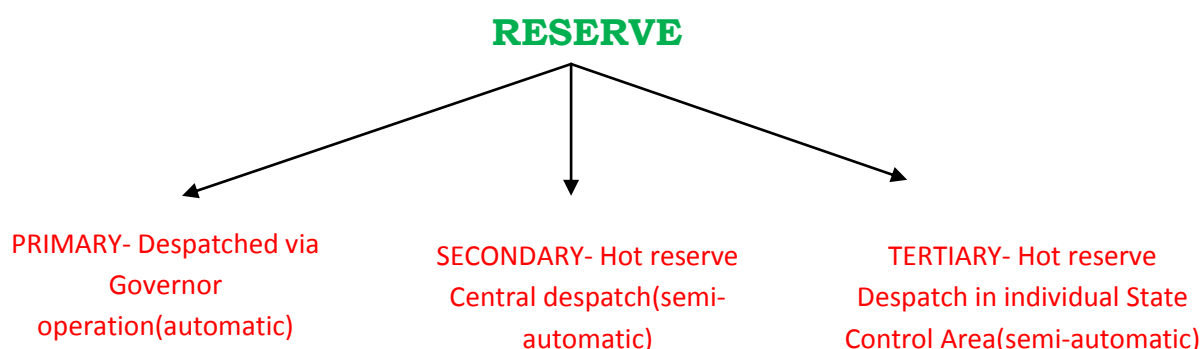
REPORT ON GENERATION RESERVES IN EASTERN REGION FOR DEC'22



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

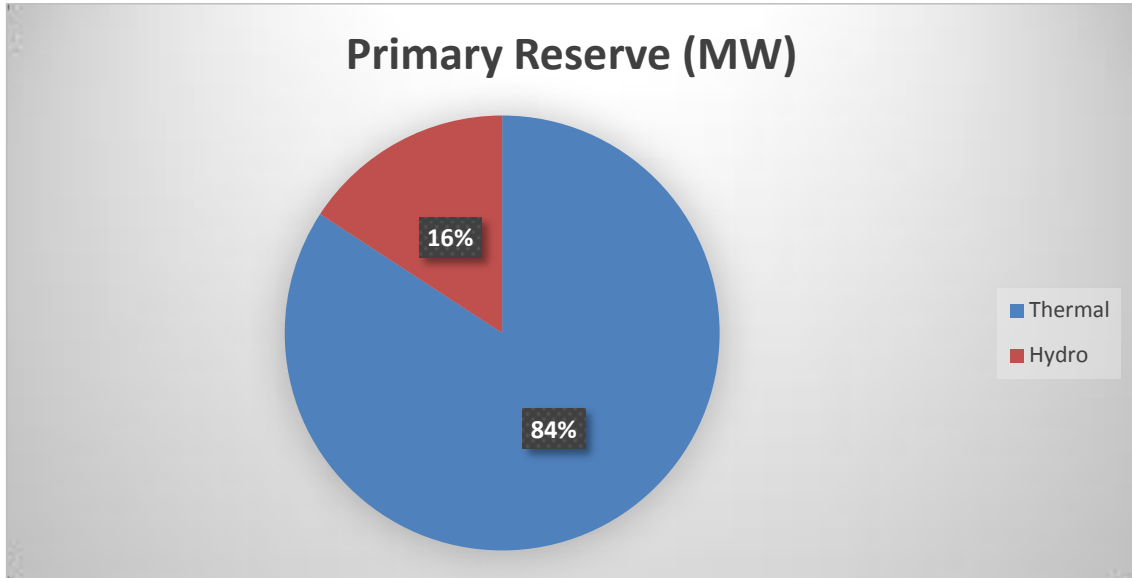
Secondary: Minimum 660MW(for Eastern Region) corresponding to largest unit size in the region

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	11 400	592.5	5.20
Hydro	576	25.5	4.43
Total	11 976	618	5.16

