

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

नवंबर - 2022

November-2022



14, गोल्फ क्लब रोड, टोलीगंज

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## Highlights of Eastern Regional Power System for November- 2022

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of Nov, 2022 was **21741 MW** which is 3.72% more than the Nov, 2021 (20961 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 Nov, 2022 was **418.14 MU** (excluding export), which is 7.55% more than the corresponding period of last year (388.80 MU).
- The **Average regional PLF of thermal units during the month is 74.43 %**, which is 6.08% more than the corresponding period of the last year (**68.35%**).

Sagardighi TPP (WBPDCL) registered the highest PLF of 98.89%, followed by Bakreswar TPP (WBPDCL) 93.76% and MPL (IPP) 93.62% during the month of Nov, 2022.

- **Maximum Net generation** was **29336.80 MW** against total **Effective Capacity of 42203.41 MW** (including import from Bhutan). At the time of Regional peak (**21741 MW** on 01.11.2022 at 19.00 hrs.), the generation was **28770 MW**, import from CPP was 1383 MW and Net export was 8392 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 76.99% of time during the month. **Average frequency** for the month was **49.99 Hz**. The instantaneous maximum and minimum frequency were 50.27 Hz and 49.44 Hz, respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.17 Hz** and **49.67 Hz** respectively (refer Annexure-I).
- At 400 kV voltage level, the **maximum Voltage** recorded was 413 KV at Binaguri 400 KV S/s whereas the minimum voltage recorded 392 KV at Muzaffarpur 400 KV S/s of Power grid.
- The **Maximum Export from ER to outside region was 11520 MW (including Nepal and Bangladesh) on 17<sup>th</sup> Nov, 2022 at 08:00 hrs.** Total net energy export during the month was **6346.46 MU (Inc.Transmission loss)** which corresponds to 35.70 % of Ex-bus total generation 17774.75 MU of Eastern Region.
- The import from CPPs was 1115.82 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	5777	0	3166.23
WR	2419	909	509.59
SR	3946	0	1932.43
NER	1103	181	298.67
BANGLADESH			603.39
NEPAL (via-CTU)			-163.84
Chukha, Kurichu, Tala			0
<b>Total</b>			<b>6346.46</b>
NEPAL by Bihar(NBPDCL)			0.049

**SALIENT FEATURES**

( YEAR TO YEAR COMPARISON )

		Nov-22	NOV-2021	CHANGE	% CHANGE
1) Effective Capacity (end of the Month)					
THERMAL	(MW)	32500	31830	670	2.10
HYDRO	(MW)	5990	\$ 5990	0	0
DIESEL	(MW)	0	0	0	0
RES	(MW)	1518	1518	0	0
TOTAL	(MW)	40007	39337	670	1.70
2) Peak Demand ( MW )		22225	20998	1227	5.84
3) Peak Demand Met ( MW )		21741	20961	780	3.72
4) Shortage ( MW )		484	37	447	0.00
5) % Shortage		2.18	0.18	2.00	0.00
6) Average Energy Requirement Per Day ( MU )		422.38	390.35	32.03	8.21
7) Average Energy Availability Per Day ( MU )		418.14	388.80	29.34	7.55
8) Average Shortage Per Day ( MU )		4.24	1.55	2.69	--
9) % Shortage		1.00	0.40	0.60	--
10) Net Generation for the Month					
Thermal ( MU )		16166.49	14431.40	1735.09	12.02
Hydro ( MU )		1487.12	* 1772.40	-285.28	-16.10
RES (MU)		121.15	96.17	0.00	-
Total ( MU )		17774.75	16299.97	1474.78	9.05
11) Generation at the Time of Max. Regional Demand Met ( 01-11-22 at 19.00 Hrs. )					
Thermal ( MW )		23440	22735	705	3.10
Hydro ( MW )		5283	* 4774	509	10.67
RES( MW )		47	67	-20	-29.19
Total ( MW )		28770	27576	1194	4.33
12) Inter-Regional Energy Transfer					
Export ( MU )		6510.30	5502.11	1008.19	18.32
Import ( MU )		163.84	43.09	120.75	280.23
Net Exp.(+)/Net Imp.(-) ( MU )		6346.46	5459.02	887.44	16.26
13) Import From Captive(MU)		1115.82	823.10	292.72	35.56
14) Peak Inter Regional Power Transfer					
Max Export ( MW ) on 17-11-22 at 08.00Hrs		11520	10757	763	7.10
Max Import ( MW ) on 12-11-22 at 02.00Hrs		909	1393	-484	-34.75
Max Net Export(+)/Import (-) ( MW )		11520	10757	763	7.10
15) Maximum voltage recorded		413	BINAGURI	400 kv s/s	
16) Minimum voltage recorded		392	MUZAFFARPUR	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 NOV'2022

**A ) Net Average Energy Per Day**

<b>System</b>	<b>Requirement Met (MU/Day)</b>	<b>Requirement (MU/Day)</b>	<b>Shortage (MU/Day)</b>	<b>% Shortage</b>
<b>BSPHCL</b>	82.42	82.89	0.47	0.57
<b>JUVNL</b>	31.84	35.60	3.76	10.56
<b>DVC</b>	68.30	68.33	0.03	0.04
<b>ODISHA</b>	103.00	103.04	0.04	0.04
<b>WBSIEDCL</b>	105.85	105.91	0.06	0.06
<b>CESC</b>	24.96	24.97	0.01	0.04
<b>SIKKIM</b>	1.65	1.65	0.00	0.04
<b>REGION</b>	<b>418.14</b>	<b>422.38</b>	<b>4.24</b>	<b>1.00</b>

**B) Peak Demand in MW:**

<b>System</b>	<b>Demand Met (MW)</b>	<b>Demand (MW)</b>	<b>Shortage (MW)</b>	<b>% Shortage</b>
<b>BSPHCL</b>	4704	5002	298	5.95
<b>JUVNL</b>	1635	2128	493	23.16
<b>DVC</b>	3093	3093	0	0.00
<b>ODISHA</b>	5527	5527	0	0.00
<b>WBSIEDCL</b>	6071	6071	0	0.00
<b>CESC</b>	1584	1588	4	0.3
<b>SIKKIM</b>	115	116	1	0.86
<b>REGION</b>	<b>21741</b>	<b>22225</b>	<b>484</b>	<b>2.18</b>

➤ **DIVERSITY FACTOR : 1.05**

➤ **Regional Peak Demand Met on 1-11-2022 at 19.00 hrs. at 50.01 Hz.**

**CONSTITUENT-WISE PERFORMANCE DATA NOV-2022**

SYSTEM	Gross Generation(MU)				Auxiliary power Consumption(MU)				Net Generation (MU)				Import from Captive (MU)	Exchange Net Import(+) Net Export(-)	Energy Consumption(MU)	Per Day Cons.(MU)	Net Peak Demand Met (MW)	Gross Peak Demand Met (MW)	
	HYDRO	Thermal	RES (Hy+Solar)	Total	HYDRO	Thermal	Solar	Total	HYDRO	Thermal	Solar	Total							
BSPHCL	0.00	321.48	28.49	349.97	0.00	28.36	0.00	28.36	0.00	293.12	28.49	321.60	0.00	2150.95	2472.55	82.4	4704	4755	
JUVNL	3.16	352.87	0.00	356.03	0.01	32.79	0.00	32.79	3.16	320.09	0.00	323.24	35.71	596.21	955.16	31.8	1635	1679	
DVC	6.10	3483.00	0.00	3489.11	0.00	237.20	0.00	237.20	6.10	3245.80	0.00	3251.91	11.03	-1214.02	2048.91	68.3	3093	3450	
ODISHA(OPGC+OHPC+TTPS)	403.10	992.03	66.00	1461.13	1.24	69.23	0.00	70.47	401.86	922.80	66.00	1390.65	805.44	893.78	3089.87	103.0	5527	5635	
WBPDC+WBSEDCL+DPL	179.66	3141.89	24.51	3346.05	0.00	261.46	0.00	261.46	179.66	2880.43	24.51	3084.60	263.64	-172.82	3175.42	105.8	6071	6500	
CESC	0.00	346.45	0.00	346.45	0.00	27.21	0.00	27.21	0.00	319.24	0.00	319.24	0.00	429.58	748.82	25.0	1584	1644	
HEL	0.00	358.20	0.00	358.20	0.00	26.73	0.00	26.73	0.00	331.47	0.00	331.47	0.00	-331.47					
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	48.38	49.38	1.6	115	115	
NTPC	0.00	6621.09	1.15	6622.25	0.00	456.93	0.00	456.93	0.00	6164.16	1.15	6165.31	0.00	-6165.31					
MPL	0.00	707.77	0.00	707.77	0.00	38.36	0.00	38.36	0.00	669.41	0.00	669.41	0.00	-669.41					
APNRL	0.00	152.06	0.00	152.06	0.00	13.65	0.00	13.65	0.00	138.41	0.00	138.41	0.00	-138.41					
GMR	0.00	335.13	0.00	335.13	0.00	22.09	0.00	22.09	0.00	313.04	0.00	313.04	0.00	-313.04					
JITPL	0.00	605.08	0.00	605.08	0.00	36.56	0.00	36.56	0.00	568.52	0.00	568.52	0.00	-568.52					
NHPC (Inc TLDP= 83.21 MU)	239.97	0.00	0.00	239.97	0.00	0.00	0.00	0.00	239.97	0.00	0.00	239.97	0.00	-239.97	0.00				
CHUZACHEN HPS	18.31	0.00	0.00	18.31	0.00	0.00	0.00	0.00	18.31	0.00	0.00	18.31	0.00	-18.31	0.00				
DIKCHU HPS	19.88	0.00	0.00	19.88	0.00	0.00	0.00	0.00	19.88	0.00	0.00	19.88	0.00	-19.88	0.00				
JORHANG HPS	21.38	0.00	0.00	21.38	0.00	0.00	0.00	0.00	21.38	0.00	0.00	21.38	0.00	-21.38	0.00				
TASHIDING HPS	17.68	0.00	0.00	17.68	0.00	0.00	0.00	0.00	17.68	0.00	0.00	17.68	0.00	-17.68	0.00				
TEESTA-III HPS	305.10	0.00	0.00	305.10	0.00	0.00	0.00	0.00	305.10	0.00	0.00	305.10	0.00	-305.10	0.00				
RONGNICHU HEP	17.04	0.00	0.00	17.04	0.00	0.00	0.00	0.00	17.04	0.00	0.00	17.04	0.00	-17.04	0.00				
CHPC(Birpara Receipt)	75.66	0.00	0.00	75.66	0.00	0.00	0.00	0.00	75.66	0.00	0.00	75.66	0.00	-75.66	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	29.35	0.00	0.00	29.35	0.00	0.00	0.00	0.00	29.35	0.00	0.00	29.35	0.00	-29.35	0.00				
Mangdechhu HEP	151.97	0.00	0.00	151.97	0.00	0.00	0.00	0.00	151.97	0.00	0.00	151.97	0.00	-151.97	0.00				
Total Drawal by HVDC Sahsaram,Alipurduar & Others															3.99	3.99			
Total	1488.36	17417.05	121.15	19026.56	1.24	1250.56	0.00	1251.81	1487.12	16166.49	121.15	17774.75	1115.82	-6346.47	12544.10	418.1	21741	23249	

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	-	-	-	-	-
JANUARY	409.39	412.33	2.94	0.71	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	-	-	-	-	-
JANUARY	21204	21396	191	0.89	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 NOV -2022

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	0.00	33.38	24.69
	Thermal	Barauni (U# 8)	250.00	250.00	157.50	143.11	1089.21	989.96
		Barauni (U# 9)	250.00	250.00	163.98	150.01	1204.91	1087.84
	(Dedicated for Bihar)	Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	0.00	0.00
		Thermal Total	940.00	930.00	321.48	293.12	2327.50	2102.49
	RES		354.91	354.91	28.49	28.49	175.63	175.63
		<b>Total BIHAR</b>	<b>1294.91</b>	<b>1284.91</b>	<b>349.97</b>	<b>321.60</b>	<b>2503.12</b>	<b>2278.12</b>
<b>JHARKHAND</b>								
TVNL	Thermal	TVNL	420.00	420.00	226.92	204.85	1750.02	1563.12
TPCL		JOJOBERA	240.00	240.00	125.95	115.24	726.53	663.39
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	3.16	3.16	158.01	157.96
	RES		60.41	60.41	0.00	0.00	0.00	0.00
		<b>Total</b>	<b>190.41</b>	<b>190.41</b>	<b>3.16</b>	<b>3.16</b>	<b>158.01</b>	<b>157.96</b>
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	0.00	0.00	-4.33
		Chandrapura( U7 # 8)	500.00	500.00	325.70	294.49	2417.40	2175.80
		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	720.86	645.80	5535.58	4934.73
		Mejia( U # 7,8)	1000.00	1000.00	604.65	569.12	4668.74	4401.27
		Bokaro-A(1)	500.00	500.00	330.95	312.79	2481.17	2338.89
		Durgapur STPS (U#1,2)	1000.00	1000.00	576.70	547.74	4449.14	4201.89
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	286.09	267.62	3714.60	3469.79
	Koderma STPS (U#1,2)	1000.00	1000.00	638.05	608.24	4673.07	4411.62	
		<b>Total Thermal</b>	<b>6750.00</b>	<b>6750.00</b>	<b>3483.00</b>	<b>3245.80</b>	<b>28074.81</b>	<b>26041.13</b>
	Hydro	Maithon (U#1,2,3)	63.20	63.20	2.38	2.38	82.74	82.52
Panchet (U#1,2)		80.00	80.00	3.72	3.72	120.04	119.13	
Tilaiya (U#1,2)		4.00	4.00	0.00	0.0	0.01	-0.1	
<b>Hydro Total</b>		<b>147.20</b>	<b>147.20</b>	<b>6.10</b>	<b>6.10</b>	<b>202.79</b>	<b>201.58</b>	
	<b>Total DVC</b>	<b>6897.20</b>	<b>6897.20</b>	<b>3489.11</b>	<b>3251.91</b>	<b>28277.60</b>	<b>26242.71</b>	
<b>WEST BENGAL</b>								
WBPDCCL	Thermal	Bandel TPS	320.00	275.00	178.44	162.81	1200.53	1081.19
		Santalidih TPS(U#5&6)	500.00	500.00	310.70	285.67	2544.18	2332.72
		Kolaghat TPS	840.00	840.00	505.91	453.44	3137.24	2775.33
		Bakreswar TPP	1050.00	1050.00	708.81	650.45	5506.36	5030.54
		Sagardighi TPP	1600.00	1600.00	1139.19	1060.24	7969.13	7372.19
		DPPS (300+250 )	<b>550.00</b>	<b>550.00</b>	<b>298.83</b>	<b>267.83</b>	<b>1710.25</b>	<b>1534.65</b>
		<b>Thermal Total</b>	<b>4860.00</b>	<b>4815.00</b>	<b>3141.89</b>	<b>2880.43</b>	<b>22067.69</b>	<b>20126.62</b>
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	13.40	13.40	154.35	154.35
		Rammam (4x12.73)	51.00	51.00	17.49	17.49	206.30	206.30
		Teesta C.F. (3x3x7.5)	67.50	67.50	14.37	14.37	92.02	92.02
		Purulia PSS (4x225)	900.00	900.00	134.40	134.40	960.63	960.63
		<b>Total Hydro</b>	<b>1053.50</b>	<b>1053.50</b>	<b>179.66</b>	<b>179.66</b>	<b>1413.30</b>	<b>1413.30</b>
	RES		500.76	500.76	24.51	24.51	142.53	142.53



PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF NOV -2022

ORGANISATION	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	4.52	4.14	571.15	522.55
		Budge-Budge (3x250)	750.00	750.00	341.93	315.10	3642.34	3350.46
		Total CESC	1125.00	1125.00	346.45	319.24	4213.50	3873.01
HEL	Thermal	HEL	600.00	600.00	358.20	331.47	3014.91	2778.03
		Total West Bengal	8139.26	8094.26	4050.71	3735.31	30851.92	28333.48
OPGC	Thermal	IB TPS	420.00	420.00	245.88	217.95	1739.43	1531.01
		IB TPS U#3(660 MW)	660.00	660.00	355.97	336.27	3063.95	2889.78
		IB TPS U#4(660 MW)	660.00	660.00	390.17	368.58	2816.24	2658.92
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	56.20	56.04	820.43	818.54
		Hirakud-II (Chiplima)	72.00	72.00	34.45	34.35	273.83	273.09
		Balimela (6x60+2x75)	510.00	510.00	89.74	89.17	821.32	816.29
		Rengali (5x50)	250.00	250.00	53.61	53.51	621.26	620.55
		Upper Kolab (4x80)	320.00	320.00	35.51	35.38	296.34	295.35
		Indravati HPS (4x150)	600.00	600.00	112.55	112.36	1042.60	1030.98
		Mckd.(Odisha drawal)	57.38	57.38	21.04	21.04	154.53	154.53
		Total Hydro	2084.88	2084.88	403.10	401.86	4030.31	4009.32
		RES	539.57	539.57	66.00	66.00	457.98	457.98
		Total Odisha	4364.45	4364.45	1461.13	1390.65	12107.90	11547.00
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00	1.00	13.00	13.00
NTPC		MTPS Stg-II	390.00	390.00	273.43	248.55	1918.16	1730.69
		FSTPP# I&II ( 3x200+2x500)	1600.00	1600.00	531.21	483.79	6326.68	5800.32
		FSTPP (U# 6)	500.00	500.00	309.74	287.14	1659.13	1544.14
		KhSTPP (4x210+3x500)	2340.00	2340.00	1376.91	1279.56	10614.23	9844.66
		TSTPP (2x500)	1000.00	1000.00	663.38	614.69	4779.92	4419.84
		BARH STPS II (2X660)	1320.00	1320.00	614.23	572.55	5985.61	5642.68
		BARH STPS I (1X660)	660.00	660.00	364.46	341.55	2673.20	2501.36
		BRBCL # 1,2,3,4(4X250 MW)	1000	1000	627.35	580.48	4642.42	4281.91
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	961.65	914.44	8324.34	7902.77
		NSTPS infirm			0.00	0.00	75.63	69.22
		DSTPP #1&2	1600.00	1600.00	898.73	841.40	6978.16	6528.19
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		Total NTPC	12390.00	12390.00	6621.09	6164.16	53977.47	50265.79
		NHPC	HYDRO	Rangit (3x20)	60.00	60.00	26.91	26.91
Teesta (3x170)	510.00			510.00	150.88	150.88	2488.75	2488.75
TLDP( 4x33+4x40) for WBSEDCL	292.00			292.00	62.18	62.18	1215.83	1215.83
Total NHPC	862.00			862.00	239.97	239.97	3995.83	3995.83
MPL (U#1&2)	1050.00			1050.00	707.77	669.41	5378.16	5076.97
APNRL (U#1,2)	540.00			540.00	152.06	138.41	2323.78	2117.10
GMR (2x350)	700.00			700.00	335.13	313.04	2892.81	2687.83
JITPL (2X600)	1200.00			1200.00	605.08	568.52	4903.41	4608.52
CHUZACHEN** (2x55)	110.00			110.00	18.31	18.31	461.13	461.13
JORETHANG (2x48)	96.00			96.00	21.38	21.38	391.15	391.15
TEESTA URJA St III (6x200)	1200.00			1200.00	305.10	305.10	5445.56	5445.56
Tashilding (2x48.5)	97.00			97.00	17.68	17.68	407.88	407.88
DICKCHU (2x48)	96.00			96.00	19.88	19.88	496.55	496.55
RONGNICHU HEP (2x56.5)					17.04	17.04	397.16	397.16
TALCHER SOLAR	10.00			10.00	1.15	1.15	8.60	8.60
Total Thermal (E.R)		32555.00	32500.00	17417.05	16166.49	139270.20	128983.70	
Total Hydro (E.R)		5989.58	5989.58	1231.37	1230.13	17399.68	17377.42	
Total RES		1517.83	1517.83	121.15	121.15	797.73	797.73	
EASTERN REGIONAL		<b>TOTAL (E.R)</b>	40062.41	40007.41	18769.57	17517.76	157467.61	147158.86
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	75.66	75.66	1569.83	1569.83
		Kurichu (4x15)	60.00	60.00	0.00	0.00	28.65	28.65
		TALA (6x170)	1020.00	1020.00	0.00	0.00	2417.33	2417.33
		DAGACHU (2x63)	126.00	126.00	29.35	29.35	360.02	360.02
		MANGDECHU(4x180 )	720.00	720.00	151.97	151.97	2594.34	2594.34
		<b>Grand Total</b>	42348.41	42203.41	19026.56	17774.75	164437.79	154129.04

PLANT LOAD FACTOR ( PLF ) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF NOV' 2022

ORGANISATION	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	0.00	0.00	33.38	1.05	
	Thermal	Barauni (U# 8)	250.00	250.00	157.50	87.50	1089.21	74.40	
		Barauni (U# 9)	250.00	250.00	163.98	91.10	1204.91	82.30	
	(Dedicated for Bihar)	Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	0.00	0.00	
	RES	Thermal Total	940.00	930.00	321.48	48.01	2327.50	42.36	
			RES	354.91	354.91	28.49		175.63	
		<b>Total BIHAR</b>	<b>1294.91</b>	<b>1284.91</b>	<b>349.97</b>		<b>2503.12</b>		
<b>JHARKHAND</b>									
TVNL	Thermal	TVNL	420.00	420.00	226.92	75.04	1750.02	71.15	
		JOJOBBERA	240.00	240.00	125.95	72.89	726.53	82.44	
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	3.16		158.01		
	RES		60.41	60.41	0.00		0.00		
		<b>Total</b>	<b>190.41</b>	<b>190.41</b>	<b>3.16</b>		<b>158.01</b>		
DVC	Thermal	Bokaro-B(3)	0.00	0.00	0.00	0.00	0.00	0.00	
		Chandrapura( U7 # 8)	500.00	500.00	325.70	90.47	2417.40	82.56	
		Durgapur(4)	210.00	210.00	0.00	0.00	135.12	10.99	
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	720.86	74.72	5535.58	70.54	
		Mejia( U # 7,8)	1000.00	1000.00	604.65	83.98	4668.74	79.73	
		Bokaro-A(1)	500.00	500.00	330.95	91.93	2481.17	84.74	
		Durgapur STPS (U#1,2)	1000.00	1000.00	576.70	80.10	4449.14	75.98	
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	286.09	33.11	3714.60	52.86	
	Koderma STPS (U#1,2)	1000.00	1000.00	638.05	88.62	4673.07	79.80		
		<b>Total Thermal</b>	<b>6750.00</b>	<b>6750.00</b>	<b>3483.00</b>	<b>71.67</b>	<b>28074.81</b>	<b>71.03</b>	
	Hydro	Maithon (U#1,2,3)	63.20	63.20	2.38		82.74		
Panchet (U#1,2)		80.00	80.00	3.72		120.04			
Tilaiya (U#1,2)		4.00	4.00	0.00		0.01			
<b>Hydro Total</b>		<b>147.20</b>	<b>147.20</b>	<b>6.10</b>		<b>202.79</b>			
	<b>Total DVC</b>	<b>6897.20</b>	<b>6897.20</b>	<b>3489.11</b>		<b>28277.60</b>			
<b>WEST BENGAL</b>									
WBPDCCL	Thermal	Bandel TPS	320.00	275.00	178.44	90.12	1200.53	74.55	
		Santaldih TPS(U#5&6)	500.00	500.00	310.70	86.31	2544.18	86.89	
		Kolaghat TPS	840.00	840.00	505.91	83.65	3137.24	63.78	
		Bakreswar TPP	1050.00	1050.00	708.81	93.76	5506.36	89.55	
		Sagardighi TPP	1600.00	1600.00	1139.19	98.89	7969.13	85.05	
		DPPS (300+250 )	550.00	550.00	298.83	75.46	1710.25	53.10	
		<b>Thermal Total</b>	<b>4860.00</b>	<b>4815.00</b>	<b>3141.89</b>	<b>90.63</b>	<b>22067.69</b>	<b>78.26</b>	
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	13.40		154.35		
		Rammam (4x12.73)	51.00	51.00	17.49		206.30		
		Teesta C.F. (3x3x7.5)	67.50	67.50	14.37		92.02		
		Purulia PSS (4x225)	900.00	900.00	134.40		960.63		
		<b>Total Hydro</b>	<b>1053.50</b>	<b>1053.50</b>	<b>179.66</b>		<b>1413.30</b>		
	RES	500.76	500.76	24.51		142.53			
DE- COMMISSIONED	1.WBPDCCL,Bandel TPS Unit #1 ( IC=1X60 MW,EC=1X60 MW) decommissioned from 21.02.2022. 2.WBPDCCL,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.								
	COMMISSIONED	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 NOV' 2022

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	4.52	4.65	571.15	72.25
		Budge-Budge (3x250)	750.00	750.00	341.93	63.32	3642.34	82.93
		<b>Total CESC</b>	1125.00	1125.00	346.45	42.77	4213.50	63.96
HEL	Thermal	HEL	600.00	600.00	358.20	82.92	3014.91	85.81
		<b>Total West Bengal</b>	<b>8139.26</b>	<b>8094.26</b>	<b>4050.71</b>		<b>30851.92</b>	
OPGC	Thermal	IB TPS	420.00	420.00	245.88	81.31	1739.43	70.72
		IB TPS U#3(660 MW)	660.00	660.00	355.97	74.91	3063.95	79.28
		IB TPS U#4(660 MW)	660.00	660.00	390.17	82.11	2816.24	72.87
OHPC	Hydro	Hirakud-I (Buria)	275.50	275.50	56.20		820.43	
		Hirakud-II (Chiplima)	72.00	72.00	34.45		273.83	
		Balimela (6x60+2x75)	510.00	510.00	89.74		821.32	
		Rengali (5x50)	250.00	250.00	53.61		621.26	
		Upper Kolab (4x80)	320.00	320.00	35.51		296.34	
		Indravati HPS (4x150)	600.00	600.00	112.55		1042.60	
		Mckd.(Odisha drawal)	57.38	57.38	21.04		154.53	
		<b>Total Hydro</b>	2084.88	2084.88	403.10		4030.31	
		RES	539.57	539.57	66.00		457.98	
		<b>Total Odisha</b>	4364.45	4364.45	1461.13		12107.90	
(**) SIKKIM	Hydro	RES	52.18	52.18	1.00		13.00	
NTPC		MTPS Stg-II	390.00	390.00	273.43	97.37	1918.16	83.99
		FSTPP# I&II ( 3x200+2x500)	1600.00	1600.00	531.21	46.11	6326.68	67.52
		FSTPP (U# 6)	500.00	500.00	309.74	86.04	1659.13	56.66
		KhSTPP (4x210+3x500)	2340.00	2340.00	1376.91	81.73	10614.23	77.46
		TSTPP (2x500)	1000.00	1000.00	663.38	92.14	4779.92	81.62
		BARH STPS II (2X660)	1320.00	1320.00	614.23	64.63	5985.61	77.43
		BARH STPS I (1X660)	660.00	660.00	364.46	76.70	2673.20	69.17
		BRBCL # 1,2,3,4(4X250 MW)	1000.00	1000.00	627.35	87.13	4642.42	79.28
		BRBCL # 4 infirm			0.00	0.00	0.00	0.00
		NSTPS U# I&2	1980.00	1980.00	961.65	67.46	8324.34	78.32
		NSTPS infirm					75.63	
		DSTPP #1&2	1600.00	1600.00	898.73	78.02	6978.16	74.48
		DSTPP #2 infirm	0.00	0.00	0.00	0.00	0.00	0.00
		<b>Total NTPC</b>	12390.00	12390.00	6621.09	74.22	53977.47	75.29
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	26.91		291.25	
		Teesta (3x170)	510.00	510.00	150.88		2488.75	
		TLDP( 4x33+4x40) for WBSUEDCL	292.00	292.00	62.18		1215.83	
		<b>Total NHPC</b>	862.00	862.00	239.97		3995.83	
	Thermal	MPL (U#1&2)	1050.00	1050.00	707.77	93.62	5378.16	87.47
		APNRL (U#1,2)	540.00	540.00	152.06	39.11	2323.78	73.49
		GMR (2x350)	700.00	700.00	335.13	66.49	2892.81	70.57
		JITPL (2X600)	1200.00	1200.00	605.08	70.03	4903.41	69.78
		CHUZACHEN** (2x55)	110.00	110.00	18.31		461.13	
		JORETHANG (2x48)	96.00	96.00	21.38		391.15	
		TEESTA URJA St III (6x200)	1200.00	1200.00	305.10		5445.56	
		Tashilding (2x48.5)	97.00	97.00	17.68		407.88	
		DICKCHU (2x48)	96.00	96.00	19.88		496.55	
		RONGNICHU HEP (2x56.5)			17.04		397.16	
TALCHER SOLAR	10.00	10.00	1.15		8.60			
<b>Total Thermal (E.R)</b>	<b>32555.00</b>	<b>32500.00</b>	<b>17417.05</b>	<b>74.43</b>	<b>139270.20</b>	<b>73.70</b>		
EASTERN REGIONAL		<b>Total Hydro (E.R)</b>	5989.58	5989.58	1231.37		17399.68	
		<b>Total RES</b>	1517.83	1517.83	121.15		797.73	
		<b>TOTAL (E.R)</b>	<b>40062.41</b>	<b>40007.41</b>	<b>18769.57</b>		<b>157467.61</b>	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	75.66		1569.83	
		Kurichu (4x15)	60.00	60.00	0.00		28.65	
		TALA (6x170)	1020.00	1020.00	0.00		2417.33	
		DAGACHU (2x63)	126.00	126.00	29.35		360.02	
		MANGDECHU(4x180 )	720.00	720.00	151.97		2594.34	
		<b>Grand Total</b>	<b>42348.41</b>	<b>42203.41</b>	<b>19026.56</b>		<b>164437.79</b>	

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK DURING THE MONTH  
OF NOV'2022 (1-11-2022)

Date 1-Nov-22  
Time 19.00 Hrs.  
Frequency 50.01 Hz.

System/State	Installed	Effective				(All Fig. in MW )
	Capacity	Capacity	Hydro	Thermal	RES	Net Gen
BSPHCL	1295	1285	0	460	0	460
JUVNL	850	850	108	459	0	567
DVC	6897	6897	86	4846	0	4931
ODISHA	4364	4364	1371	1348	47	2766
WBSEDCL	5864	5819	915	4149	0	5065
TLDP	292	292	221	0	0	221
HEL HALDIA	600	600	0	531	0	531
CEESC	1125	1125	0	664	0	664
DPL	550	550	0	0	0	0
SIKKIM	52	52	0	0	0	0
NTPC	12390	12390	0	8039	0	8039
NHPC	570	570	561	0	0	561
CHUKHA	360	270	158	0	0	158
KURICHU	60	60	31	0	0	31
TALA	1020	1020	181	0	0	181
MPL	1050	1050	0	931	0	931
OPGC (660 MW)	0	0	0	0	0	0
APNRL	540	540	0	234	0	234
Kamalganga (GMR)	700	700	0	654	0	654
JITPL	1200	1200	0	1126	0	1126
RONGNICHU HEP (2x56.5)	113	113	93	0	0	93
Chuzachen	110	110	50	0	0	50
Jorethang	96	96	36	0	0	36
TEESTA URJA St III	1200	1200	1184	0	0	1184
Tashilding	97	97	32	0	0	32
DICKCHU	96	96	95	0	0	95
<u>Daghachu</u>	126	126	50	0	0	50
<u>Solar</u>	10	10	0	0	0	0
<u>Mangdechu</u>	720	720	111	0	0	111
<u>Total</u>	42348	42203	5283	23440	47	28770
Import From Captive:						1363
Export To:						
NER						557
SR						2704
WR						636
NR						3642
Bangladesh						929
Nepal						-75
<b>Total</b>						<b>8392</b>
➤ <b>Regional Net Peak Demand Met ( MW ) :</b>						<b>21741</b>

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

**Hourly Load Generation Data OF ER on Regional Peak Day During The Month of NOV'2022 (1-11-2022)**

( All Figures in MW )

Hrs.	Generation			Import from Captive	Net Import From Hydro of Bhutan	Net Export to other region	Demand Met	Freq. Correction	Load Shed	Requirement
	Hydro	Thermal	Total							
1	1550	20294	21844	1360	686	5268	18621	-7	0	18621
2	1244	20222	21466	1355	684	5010	18495	0	0	18495
3	1039	20099	21139	1342	685	4766	18400	8	0	18408
4	1054	20142	21196	1314	678	5072	18117	-2	0	18117
5	1072	20462	21534	1311	671	5447	18068	-3	0	18068
6	2276	21109	23384	1428	652	7390	18074	6	0	18080
7	3054	21831	24885	1468	632	8936	18049	55	293	18397
8	3374	22272	25646	1440	618	9562	18142	86	329	18557
9	3247	22251	25498	1344	619	9091	18370	23	196	18588
10	2627	21977	24604	1303	631	8032	18507	5	63	18574
11	2107	21813	23920	1339	630	7084	18805	21	0	18826
12	1814	21817	23631	1308	624	6733	18830	16	0	18846
13	1366	21240	22606	1323	639	5843	18724	25	0	18749
14	1294	20246	21540	1321	648	5182	18327	3	0	18330
15	1277	21484	22761	1323	645	6463	18266	26	0	18291
16	2097	22113	24210	1316	631	7301	18855	3	117	18975
17	3708	22687	26395	1342	590	9366	18961	40	116	19117
18	5007	23292	28299	1374	542	8827	21388	60	494	21942
19	4801	23440	28240	1363	530	8392	21741	-10	494	22225
20	4727	22898	27625	1408	547	8286	21293	-13	504	21784
21	3890	22718	26608	1395	570	7695	20878	-13	0	20878
22	2602	22696	25298	1412	596	7229	20077	-11	0	20077
23	2034	22500	24534	1396	617	7084	19463	-5	0	19463
24	1643	22341	23984	1380	632	6802	19194	69	166	19429

**Hourly Load Generation Data of ER On Regional Lean Day During The Month of NOV'2022 (28-11-2022)**

( All Figures in MW )

Hrs.	Generation			Import from Captive	Net Import From Hydro of Bhutan	Net Export to other region	Demand Met	Freq. Correction	Load Shed	Requirement
	Hydro	Thermal	Total							
1	660	20472	21132	1545	241	7754	15164	5	0	15169
2	637	19680	20317	1495	237	7264	14785	35	1	14821
3	501	19203	19704	1485	234	6735	14688	9	1	14699
4	713	18959	19672	1489	235	6764	14632	6	1	14639
5	773	19977	20750	1499	228	7157	15320	-9	1	15321
6	1030	22400	23430	1578	200	8974	16233	4	1	16238
7	1804	23622	25427	1681	150	10347	16911	46	715	17672
8	2810	23978	26787	1615	147	11153	17397	21	545	17963
9	2345	24018	26363	1608	154	10859	17265	-2	390	17654
10	1378	24196	25574	1604	164	9923	17418	6	288	17712
11	1139	23908	25047	1556	188	9451	17340	8	133	17481
12	1100	23688	24788	1471	187	8967	17478	-6	0	17478
13	838	23354	24191	1406	202	8395	17404	73	0	17477
14	699	23027	23726	1408	209	8520	16824	3	0	16827
15	513	23199	23712	1475	209	9320	16076	10	0	16086
16	1148	23340	24489	1466	203	9854	16303	29	0	16332
17	1484	23535	25019	1551	184	10045	16708	35	599	17343
18	2946	23715	26662	1688	136	9458	19029	58	599	19686
19	3492	23689	27181	1814	147	10119	19024	2	767	19792
20	2774	23299	26073	1691	170	9366	18568	-8	605	19164
21	2107	22896	25003	1647	167	8939	17878	-11	504	18371
22	1073	22731	23804	1663	191	8930	16728	6	0	16734
23	802	22225	23027	1680	220	8808	16120	25	0	16145
24	592	21933	22525	1638	231	8559	15835	18	0	15853

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

FOR THE MONTH OF NOV'2022

**POWER CUT / RESTRICTIONS**

<b>BSPHCL</b>	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 13.07 MU
<b>JUVNL</b>	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 112.42 MU
<b>DVC</b>	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 0.00 MU
<b>ODISHA</b>	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.00 MU
<b>WEST BENGAL</b>	NO NOTIFIED CUTS/RESTRICTIONS. However there was loadshedding of 0.37 MU

**POWER SUPPLY TO AGRICULTURAL SECTOR**

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

FREQUENCY DETAILS FOR THE MONTH OF Nov-22

DATE	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	
01-Nov	50.00	49.95	49.97	50.00	49.95	49.98	9.56	79.81	10.63	79.81	50.15	14:00:50	49.67	07:35:40	50.06	0:00	49.76	0:00
02-Nov	49.96	49.95	49.99	49.99	49.98	49.97	10.05	79.78	10.17	79.78	50.14	06:02:10	49.62	07:17:30	50.05	0:00	49.79	0:00
03-Nov	49.98	49.96	49.99	50.01	49.99	49.99	6.77	80.30	12.93	80.30	50.15	15:02:20	49.68	07:17:40	50.07	0:00	49.80	0:00
04-Nov	50.00	49.96	50.01	49.99	49.96	49.99	6.53	77.20	16.27	77.20	50.21	14:02:00	49.74	06:43:50	50.10	0:00	49.87	0:00
05-Nov	49.98	50.00	49.95	49.92	49.92	49.96	13.76	74.52	11.72	74.52	50.18	06:01:00	49.46	17:42:20	50.08	0:00	49.67	0:00
06-Nov	50.00	49.98	49.98	49.98	49.98	49.99	7.20	76.78	16.02	76.78	50.25	14:04:20	49.71	12:58:10	50.11	0:00	49.83	0:00
07-Nov	50.00	49.99	49.94	49.99	49.98	49.98	11.63	74.86	13.51	74.86	50.21	06:02:40	49.77	16:52:10	50.07	0:00	49.84	0:00
08-Nov	49.97	49.97	49.99	49.99	49.98	49.98	8.29	78.91	12.80	78.91	50.15	16:02:50	49.44	18:30:50	50.06	0:00	49.81	0:00
09-Nov	49.99	49.96	49.99	50.01	49.99	49.99	4.97	79.41	15.63	79.41	50.13	16:02:20	49.79	13:44:50	50.08	0:00	49.85	0:00
10-Nov	50.00	49.99	50.00	50.00	49.95	50.00	2.34	78.29	19.38	78.29	50.16	06:02:20	49.78	23:09:20	50.07	0:00	49.87	0:00
11-Nov	50.00	49.97	50.01	50.04	50.01	50.00	2.08	75.65	22.27	75.65	50.21	18:01:20	49.76	08:06:40	50.10	0:00	49.86	0:00
12-Nov	50.00	50.03	50.00	50.00	49.96	50.00	3.19	73.00	23.81	73.00	50.26	06:02:20	49.75	17:44:30	50.09	0:00	49.91	0:00
13-Nov	50.01	50.01	50.02	50.02	50.00	50.01	0.58	77.43	21.99	77.43	50.24	06:03:00	49.87	22:09:40	50.13	0:00	49.96	0:00
14-Nov	50.02	50.01	49.96	50.03	49.97	50.00	9.07	71.24	19.69	71.24	50.18	04:03:10	49.74	13:18:00	50.08	0:00	49.84	0:00
15-Nov	49.97	49.93	49.97	50.02	50.00	49.98	9.13	74.72	16.15	74.72	50.17	18:00:50	49.76	06:28:10	50.07	0:00	49.83	0:00
16-Nov	49.99	49.98	50.00	50.02	50.00	50.00	3.53	77.45	19.02	77.45	50.18	18:01:20	49.78	06:35:10	50.10	0:00	49.83	0:00
17-Nov	50.00	50.00	50.01	49.99	49.99	50.00	3.17	77.86	18.97	77.86	50.22	14:03:20	49.81	16:44:40	50.09	0:00	49.83	0:00
18-Nov	49.98	49.98	49.99	50.01	50.01	49.99	5.34	75.79	18.88	75.79	50.21	06:01:50	49.77	00:07:40	50.09	0:00	49.86	0:00
19-Nov	49.99	49.99	50.00	49.99	50.01	50.00	3.33	79.12	17.55	79.12	50.16	06:01:20	49.78	17:24:50	50.09	0:00	49.87	0:00
20-Nov	50.01	50.00	50.00	50.02	50.08	50.01	3.23	66.16	30.61	66.16	50.27	06:02:50	49.80	08:35:30	50.15	0:00	49.87	0:00
21-Nov	50.02	49.97	49.97	50.00	49.93	49.98	6.76	78.45	14.79	78.45	50.26	00:00:20	49.70	13:44:40	50.07	0:00	49.86	0:00
22-Nov	49.99	49.99	49.95	49.97	49.96	49.97	13.36	74.72	11.92	74.72	50.16	06:02:30	49.76	06:27:40	50.16	0:00	49.86	0:00
23-Nov	49.99	49.99	49.99	49.98	49.96	49.98	8.61	75.71	15.68	75.71	50.23	13:05:20	49.76	22:10:50	50.16	0:00	49.85	0:00
24-Nov	49.99	49.98	49.97	49.98	49.98	49.98	6.68	82.04	11.28	82.04	50.16	05:33:00	49.78	17:46:10	50.06	0:00	49.87	0:00
25-Nov	50.00	49.98	50.01	50.01	49.99	50.00	2.84	77.94	19.22	77.94	50.21	06:01:20	49.81	06:44:10	50.12	0:00	49.88	0:00
26-Nov	50.01	50.01	50.00	49.99	49.96	50.00	2.82	81.86	15.31	81.86	50.27	06:03:40	49.80	22:06:00	50.10	0:00	49.90	0:00
27-Nov	49.97	49.97	49.99	50.01	49.99	49.99	5.80	80.05	14.16	80.05	50.21	16:02:50	49.77	08:08:10	50.10	0:00	49.87	0:00
28-Nov	49.98	49.97	49.96	49.99	49.96	49.97	9.97	78.95	11.08	78.95	50.20	06:01:10	49.75	17:25:10	50.07	0:00	49.82	0:00
29-Nov	49.99	49.94	49.95	49.98	50.00	49.97	16.16	70.96	12.88	70.96	50.19	06:02:00	49.66	17:44:00	50.08	0:00	49.82	0:00
30-Nov	49.99	49.98	49.99	49.99	50.00	49.99	4.22	80.73	15.05	80.73	50.19	06:01:40	49.78	03:55:10	50.07	0:00	49.85	0:00
MAX	50.02	50.03	50.02	50.04	50.08	50.01	16.16	82.04	30.61	82.04	50.27		49.87		50.17		49.96	
MIN	49.96	49.93	49.94	49.92	49.92	49.96	0.58	66.16	10.17	66.16	50.13		49.44		50.05		49.67	
AVG	49.99	49.98	49.98	50.00	49.98	49.99	6.70	76.99	16.31	76.99	50.20		49.73		50.09		49.84	

SUMMARY:

Avg. Frequency : 49.99 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.27 Hz at 06:02 Hrs.

Minimum Frequency : 49.44 Hz at 18:30 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.17 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	6.70	76.99	16.31

## VOLTAGE ANALYSIS

## MAXIMUM &amp; MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 KV S/S IN THE MONTH OF NOV'2022

( All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	413	402	405	399	413	401	413	404

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	403	392	403	396	409	403	408	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
<b>TOTAL</b>	<b>820</b>	<b>830</b>	<b>830</b>	<b>840</b>	<b>3320</b>

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**  
Nov-22

(All figs.in mtrs.)

Name of the Reservoirs	FRL	MDDL	As on last day of the		As on first day of this month & date	
			(30-11-22)	(30-11-21)		
Hirakud	192	180	191.33	191.81	191.80	01.11.22
Balimela	462	439	451.65	452.11	452.63	01.11.22
Rengali	123	109	122.06	122.42	122.99	01.11.22
Upperkolab	858	844	855.59	851.95	855.72	01.11.22
Indravati	642	625	637.94	631.59	638.69	01.11.22
Subernrekha	590	580	586.92	587.08	587.11	01.11.22

B. **CPP/IPP IMPORT by Eastern Region Constituents during** Nov-22

(All figs. are in MU)

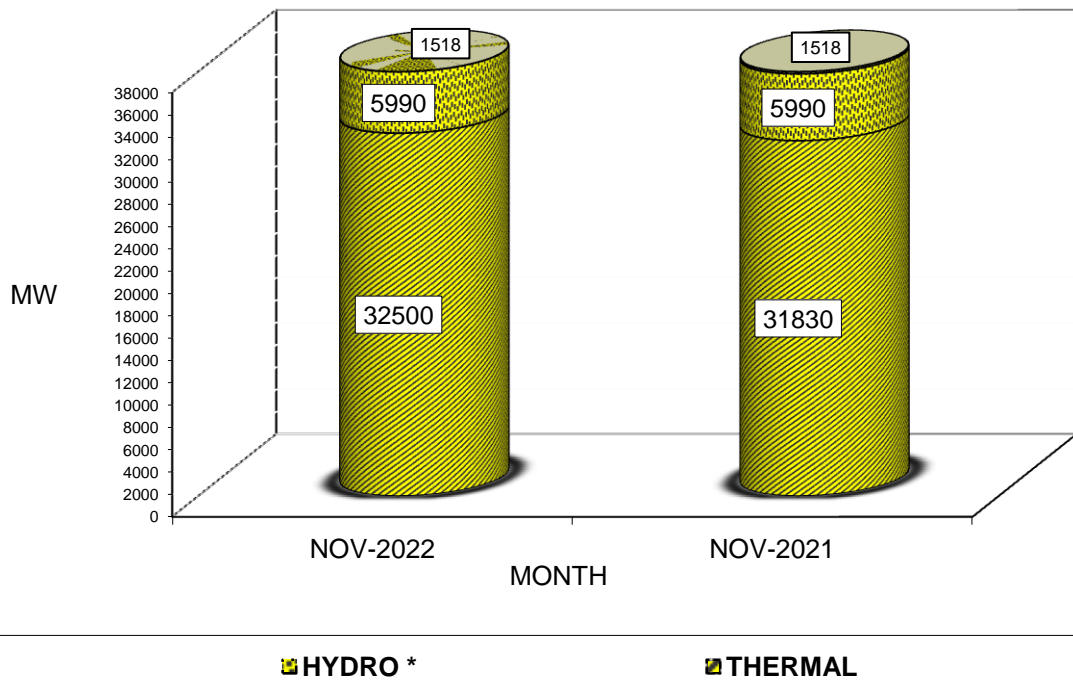
System	Tata Power	Crescent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
JUVNL	0	0	0	0	0	0	0	0	35.71
West Bengal	73.82	25.15	0	0	0	0	0	164.66	263.64
ODISHA	0	0	21.22	301.29	2.05	0.00	0	480.88	805.44
DVC	0	0	0	0	0	0	11.03	0	11.03
<b>TOTAL</b>	73.82	25.15	21.22	301.29	2.05	0.00	11.03	645.54	1115.82

C. **Distribution of Schedule Supply among Key Customers by IPPs during** Nov-22

(All figs. are in MU)

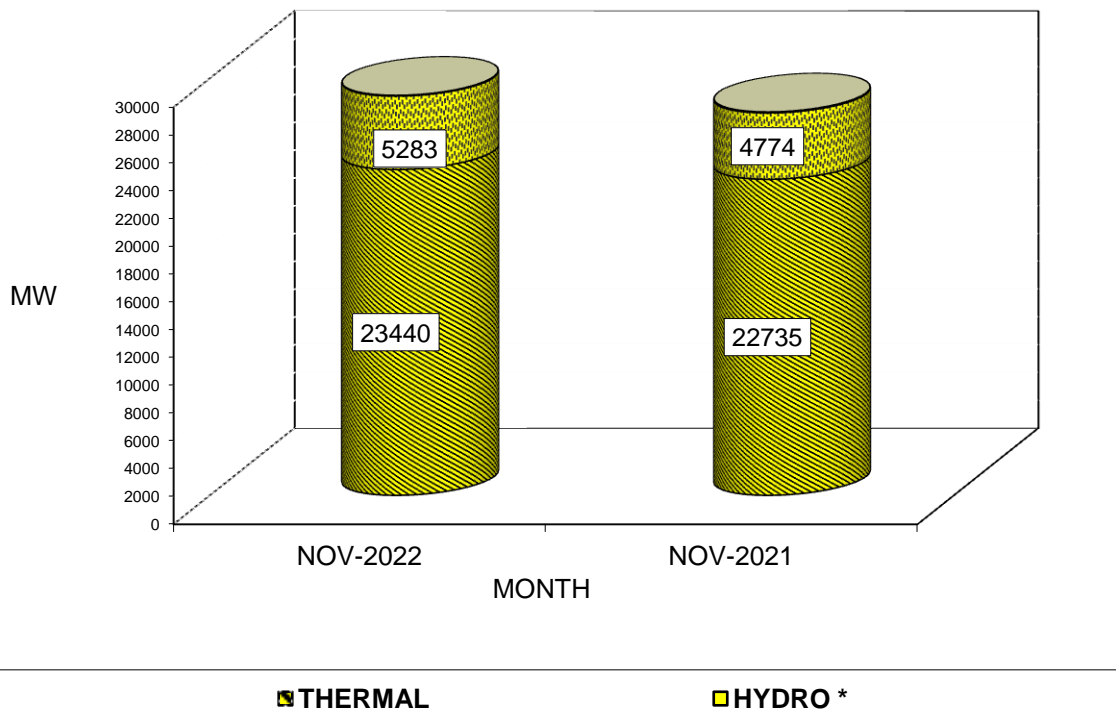
IPP	TPDDL	WBSEDCL/ WBPDCCL	DVC	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	201.98	201.94	99.11	0.00	0	0	163.09	666.12
Sterlite	0	0	0	0	0.00	0	0.00	0.00
APNRL	0	19.30	0	1.00	0.00	0.00	119.70	140.00
<b>Total</b>	201.98	221.24	99.11	1.00	0.00	0.00	282.79	806.12

**EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID**



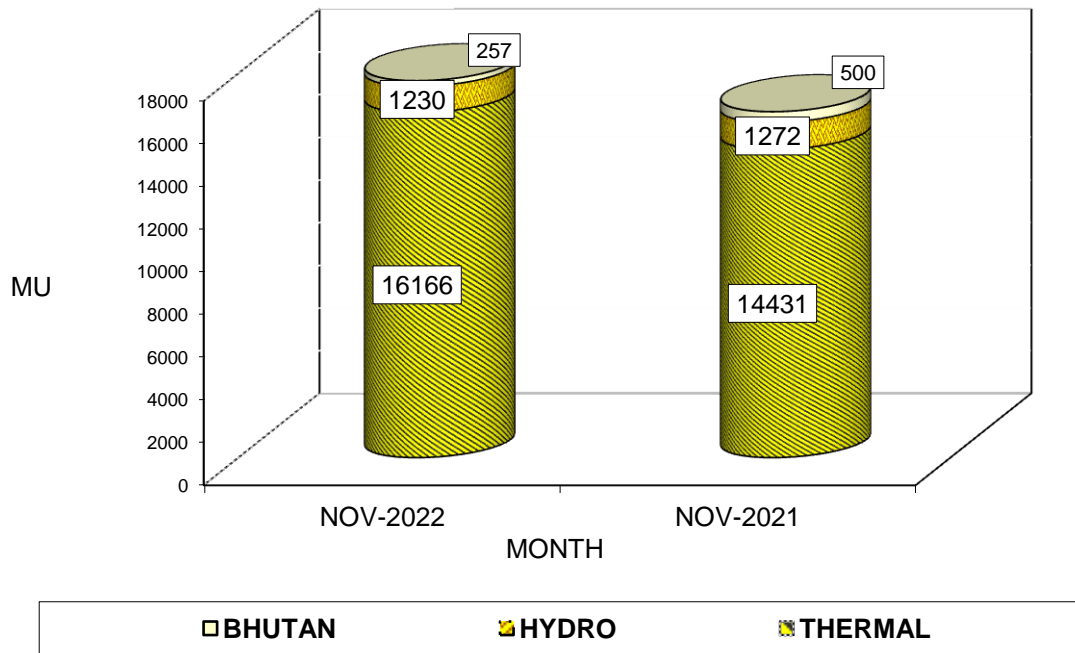
\*Excludes contribution from HEPs of Bhutan

**GENERATION CORRESPONDING TO PEAK DEMAND MET**

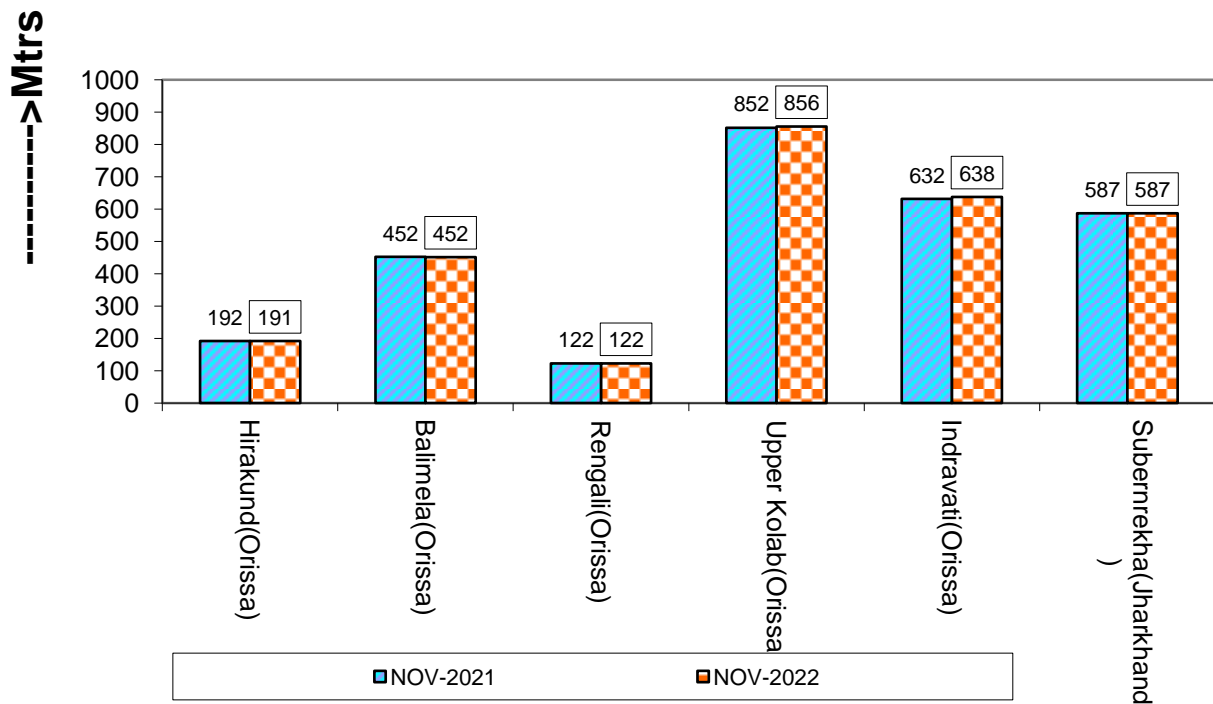


\*Includes contribution from HEP of Bhutan

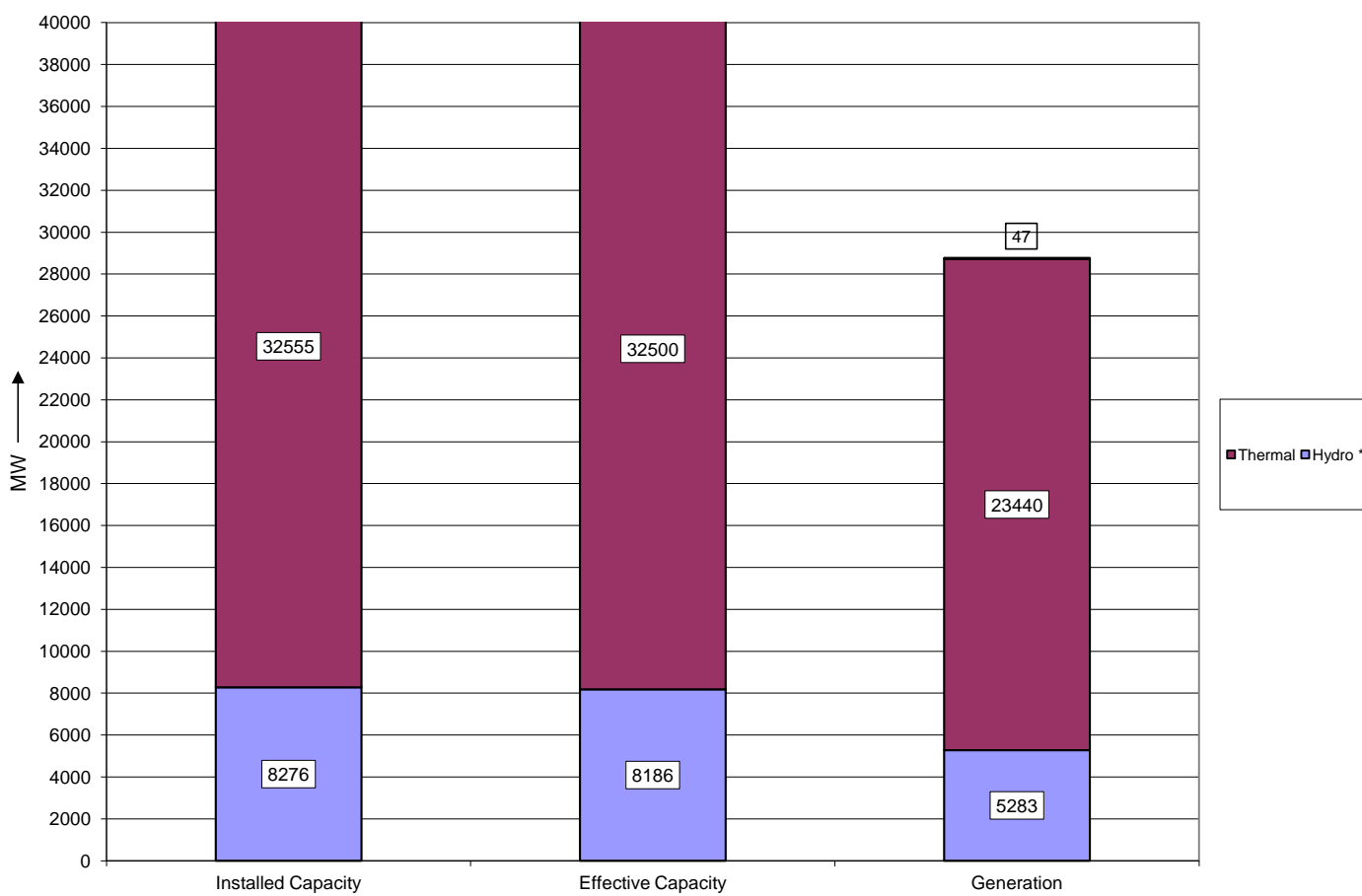
**NET ENERGY GENERATION**



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

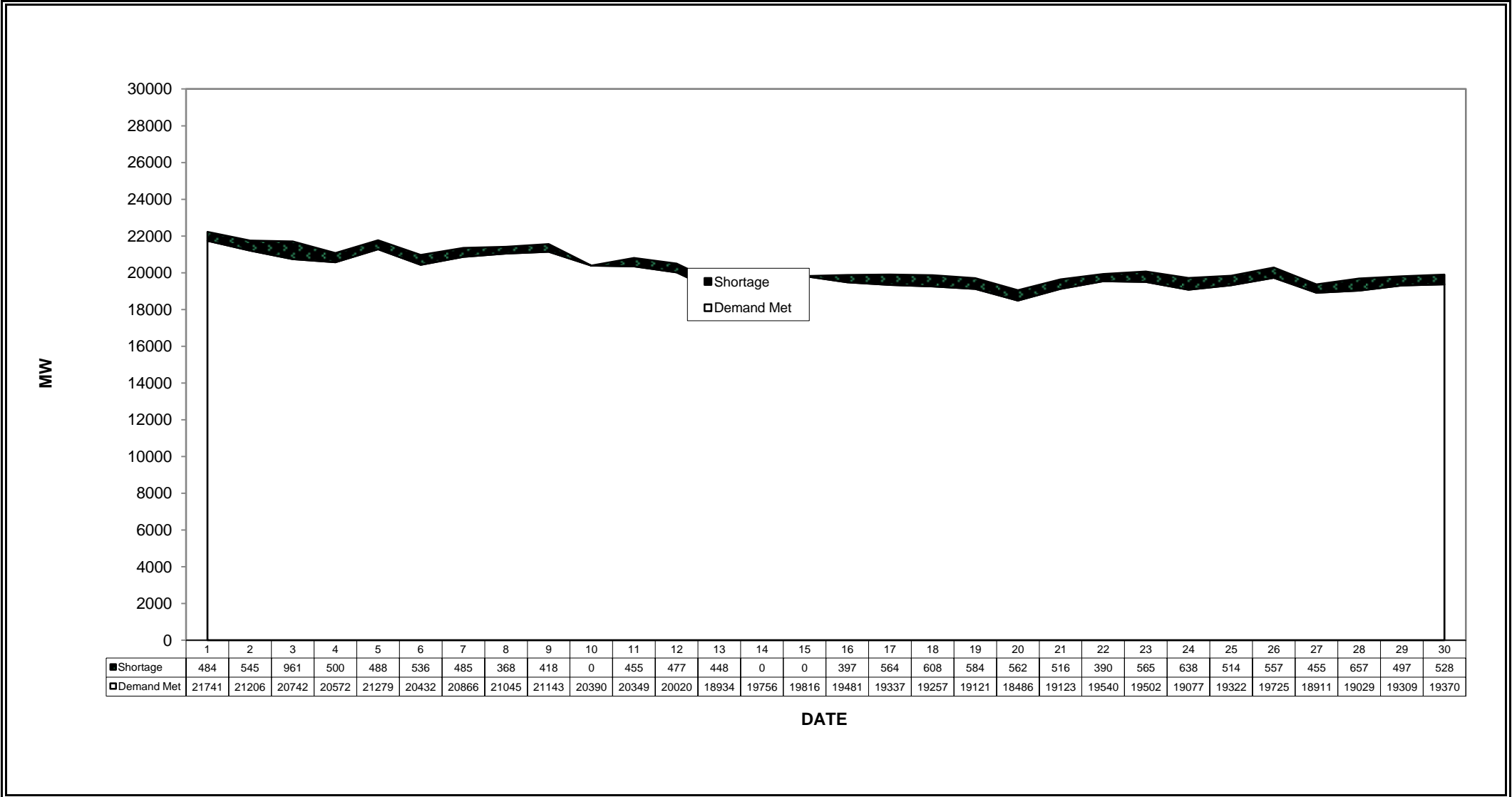


**Capacity / Actual Generation Pattern of ER on Peak Day (1-11-2022) at 19.00 hrs.**

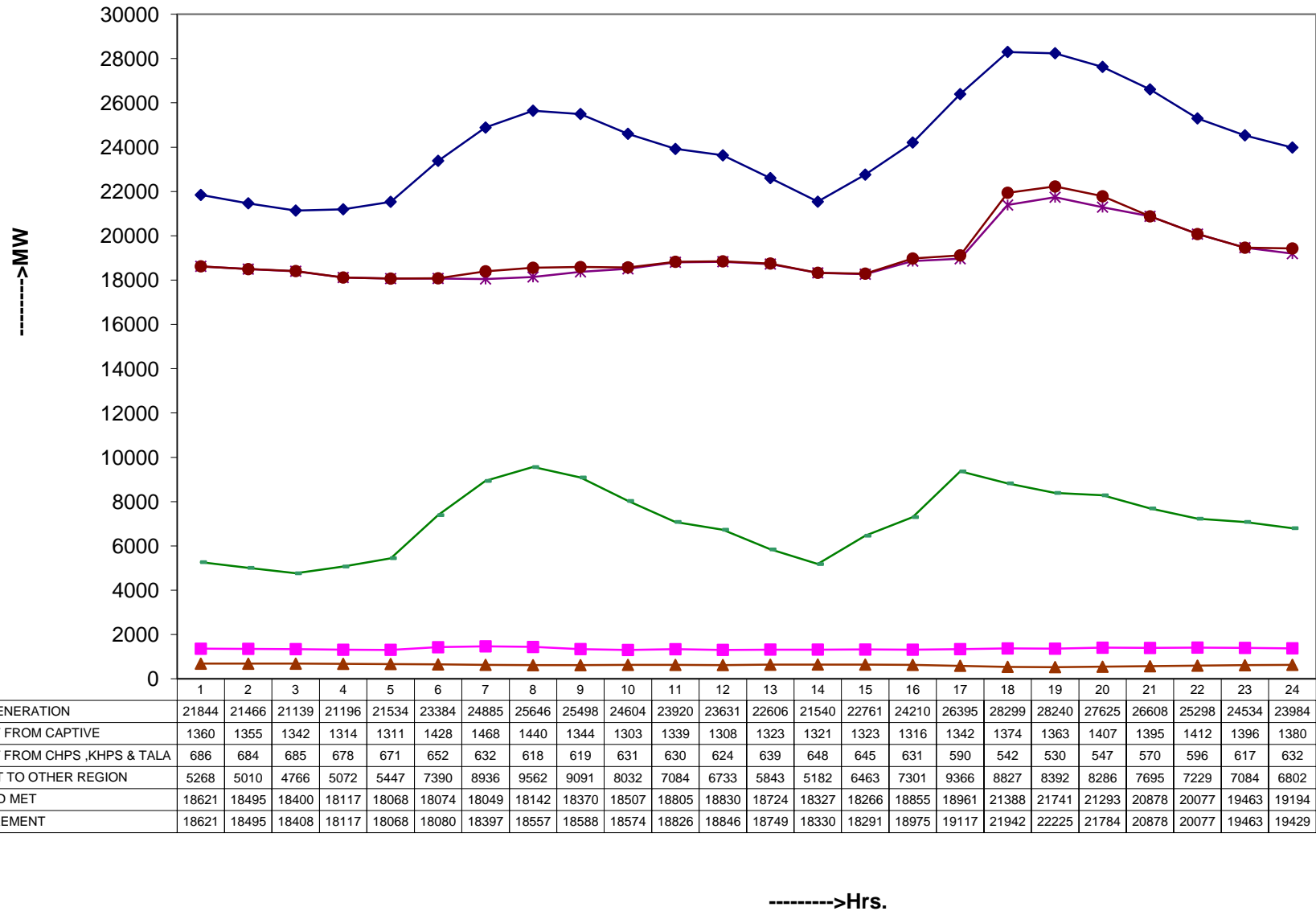


(\*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

Peak Demand Met / Shortage of Eastern Region For The Month Of NOV'2022

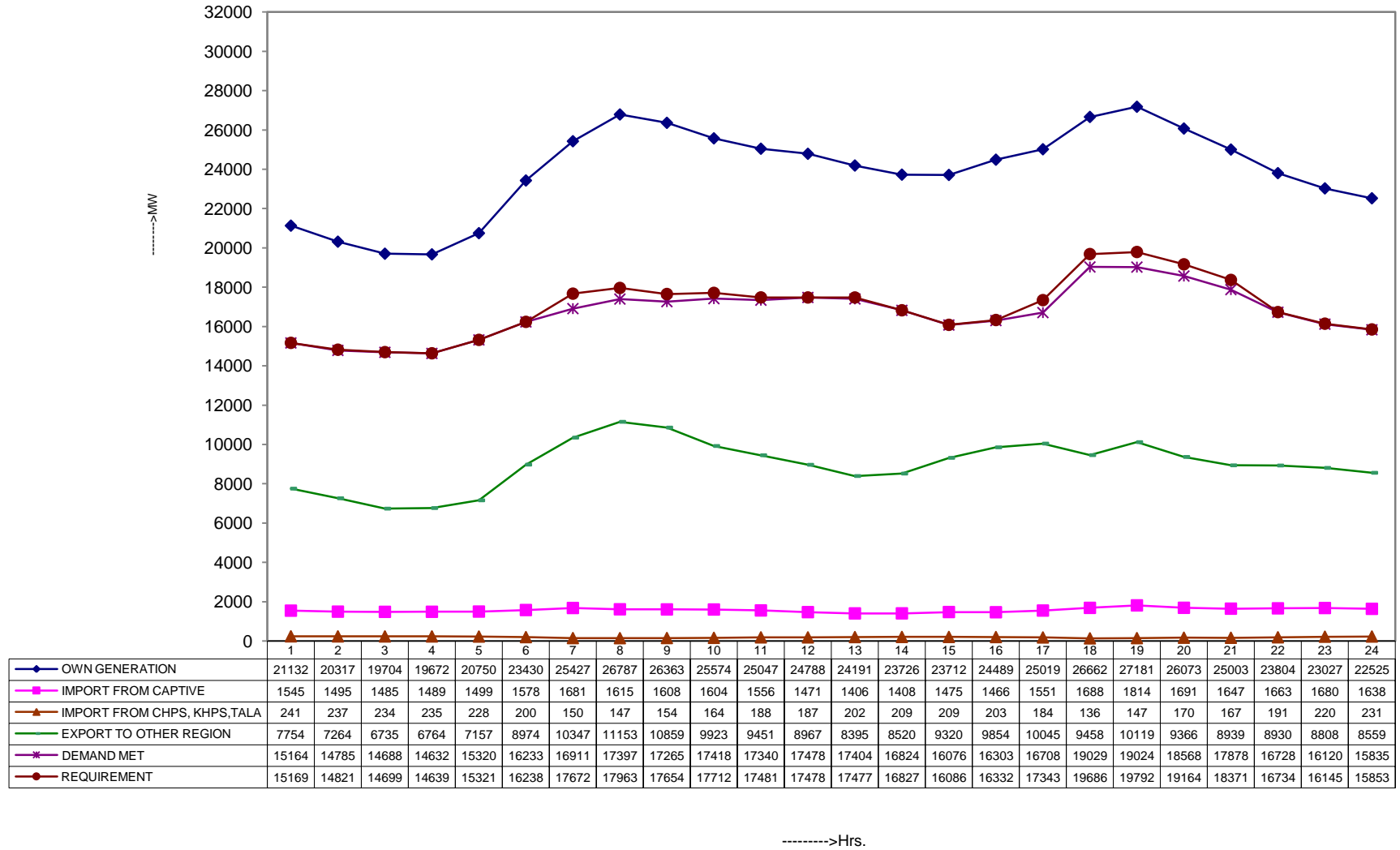


Hourly Load Generation Data OF ER on Regional Peak Day During The Month of NOV'2022 (1-11-2022)





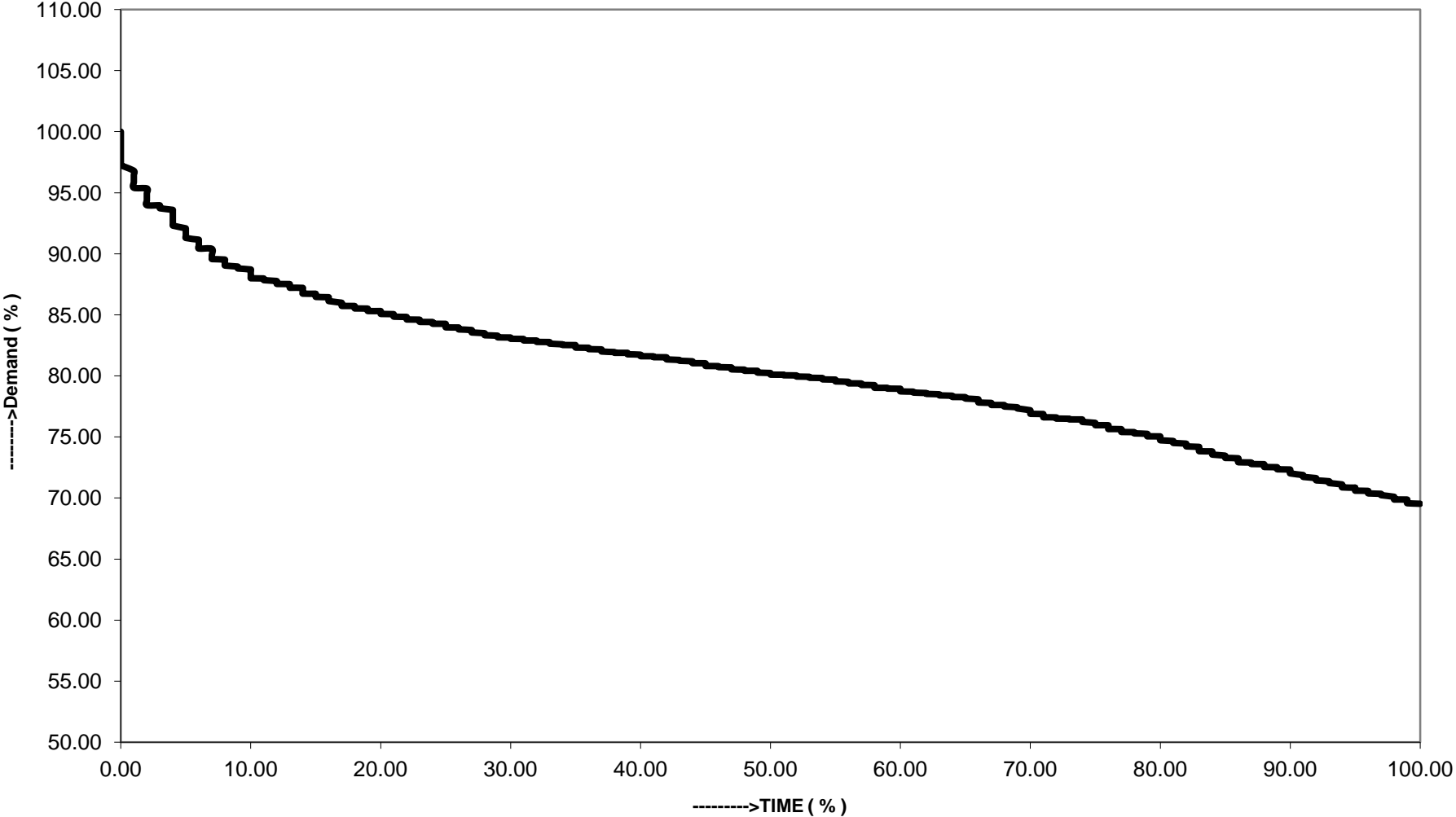
Hourly Load Generation Data of ER On Regional Lean Day During The Month of NOV'2022 (28-11-2022)





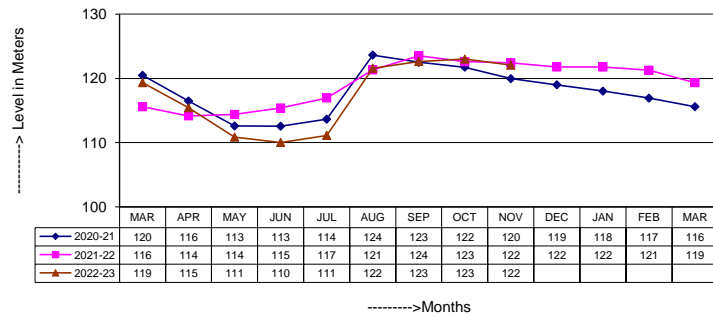
Monthly Load Duration Curve of Eastern Region for NOV-2022

Maximum Demand met : 21741 MW  
Minimum Demand met: 14632 MW

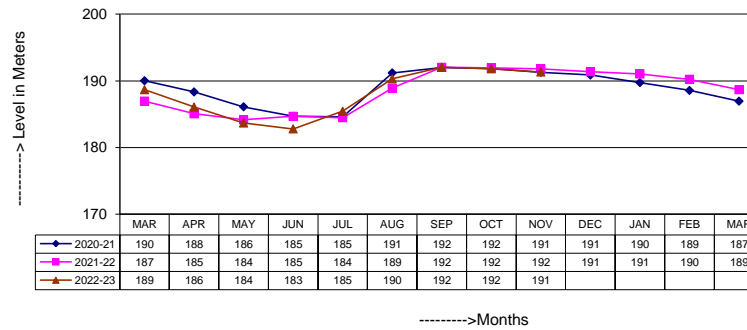


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

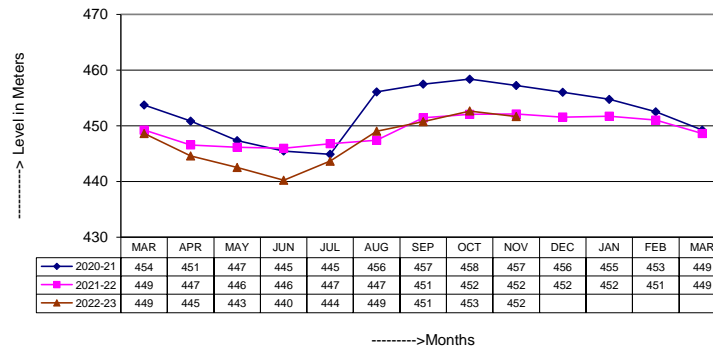
RENGALI RESERVOIR LEVEL



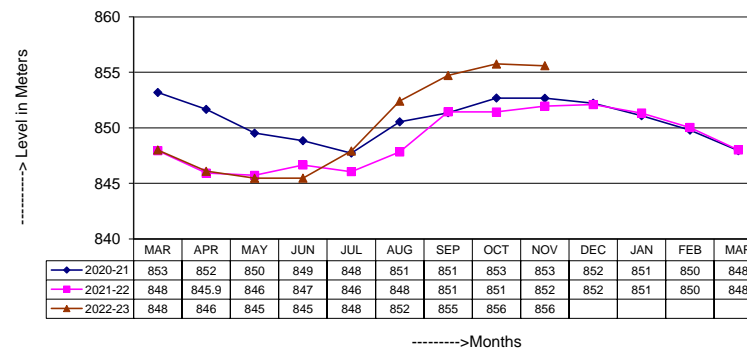
HIRAKUD RESERVOIR LEVEL



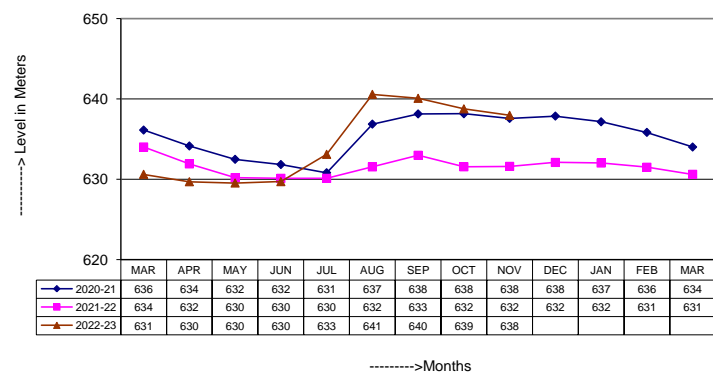
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

