



सत्यमेव जयते

Government of India

विद्युत मंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

EASTERN REGIONAL POWER COMMITTEE

मासिक प्रगति रिपोर्ट

PROGRESS REPORT FOR THE MONTH OF

नवंबर- 2019

November-2019



14, गोल्फ क्लब रोड, टोलीगंज

14, Golf Club Road, Tollygunge

कोलकाता -700033

Kolkata: 700 033

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
IV	Different Types of work performed by ERPC in Nov'19 & List of Various Meeting held in Nov'19	15
EXHIBITS		
I	Chart: Effective Capacity & Generation Corresponding to Peak Demand Met	16
II	Chart: Net Energy Generation & Reservoir Levels recorded	17
III	Chart: Capacity & Generation pattern of the Peak Day	18
IV	Daily Regional Peak Demand Met & Shortage	19
V	Hourly Load/generation Pattern of Peak Day	20
VI	Hourly Load/generation Pattern of Lean Day	21
VII	Monthly Load Duration Curve	22
VIII	Reservoir Levels	23

Highlights of Eastern Regional Power System for November-2019

- The **Maximum Net Demand** met of **Eastern Region (ER)** during the month of **Nov, 2019** was **19212 MW** which is 5.5% less than the **Nov, 2018** (20322 MW). Individual **Peak Demand (MW)** of most of constituents **decreased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of **Nov, 2019** was **344.02 MU** excluding export, which is 6.58% less than the corresponding period of last year (368.26 MU).
- The **Average regional PLF of thermal units during the month** is **59.43%**, which is 3.25% less than the corresponding period of the last year (**62.68%**).

Haldia registered the highest **PLF** of 90.09%, followed by NTPC (BRBCL) 88.09% and NTPC (NSTPS) 82.65% during the month of **Nov, 2019**.

- **Maximum Net generation** was **22481 MW** against total **Effective Capacity of 38881.06 MW** (including import from Bhutan). At the time of Regional peak (19212 MW on 01.11.2019 at 19.00 hrs.) the generation was 20268 MW and import from CPP was 780 MW, Net export was 1837 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 73.62% of time during the month. **Average frequency** for the month was **50.00 Hz**. The instantaneous maximum and the minimum frequency touched were 50.27 Hz and 49.65 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.19 Hz** and **49.73 Hz** respectively (**refer Annexure-I**).
- The **Maximum Voltage** recorded **428 KV** at Jeerat 400 KV S/s whereas the minimum voltage recorded 388 KV at Biharshariff 400 KV S/s of Power grid.
- The **Maximum Export from ER to outside region** was **8414 MW** (including Nepal and Bangladesh) on **19th Nov, 2019** at 10:00 hrs. Total net energy export during the month was 3456.61 MU (Inc. Transmission loss) MU which corresponds to 26.19 % of ex-bus total generation 13197.86 MU of Eastern Region.
- The import from CPPs was 579.56 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	5143	0	2130.84
WR	1225	3103	-510.784
SR	3339	0	1580.93
NER	918	788	-164.412
BANGLADESH	947	0	408.81
NEPAL (via-CTU)	132		11.23
Total	8414		3456.61
NEPAL by Bihar(NBPDCL)	14.35		

SALIENT FEATURES

(YEAR TO YEAR COMPARISION)

		Nov-19	NOV-2018	CHANGE	% CHANGE
1)	Effective Capacity (end of the Month)				
	THERMAL (MW)	29320	27205	2115	7.77
	HYDRO (MW)	5876 \$	5876	0	0
	DIESEL (MW)	0	0	0	0
	RES (MW)	1489	886	0	0
	TOTAL (MW)	36685	33967	2718	8.00
2)	Peak Demand (MW)	19291	20512	-1221	-5.95
3)	Peak Demand Met (MW)	19212	20322	-1110	-5.46
4)	Shortage (MW)	79	190	-111	-58.42
5)	% Shortage	0.41	0.93	-0.52	-55.96
6)	Average Energy Requirement Per Day (MU)	344.15	371.03	-26.88	-7.25
7)	Average Energy Availability Per Day (MU)	344.02	368.26	-24.24	-6.58
8)	Average Shortage Per Day (MU)	0.12	2.77	-2.65	-95.59
9)	% Shortage	0.04	0.75	-0.71	-95.27
10)	Net Generation for the Month				
	Thermal (MU)	11632.05	11342.80	289.25	2.55
	Hydro (MU)	1497.40 *	1220.99	276.41	22.64
	RES (MU)	68.42	0.00	0.00	-
	Total (MU)	13197.86	12607.73	590.13	4.68
11)	Generation at the Time of Max. Regional Demand Met (01-11-19 at 19.00 Hrs.)				
	Thermal (MW)	15141	16710	-1569	-9.39
	Hydro (MW)	5072 *	3571	1501	42.05
	RES(MW)	54	24	30	126.68
	Total (MW)	20268	20304	-36	-0.18
12)	Inter-Regional Energy Transfer				
	Export (MU)	4131.81	3495.33	636.48	18.21
	Import (MU)	675.20	1159.06	-483.86	-41.75
	Net Exp.(+)/Net Imp.(-) (MU)	3456.61	2336.47	1120.14	47.94
13)	Import From Captive(MU)	579.56	786.54	-206.98	-26.32
14)	Peak Inter Regional Power Transfer				
	Max Export (MW) on 19-11-19 at 10.00Hrs	8414	6170	2244	36.37
	Max Import (MW) on 01-11-19 at 20.00Hrs	3103	3472	-369	-10.63
	Max Net Export(+)/Import (-) (MW)	7952	5259	2693	51.21
15)	Maximum voltage recorded	428	JEERAT	400 kv	s/s
16)	Minimum voltage recorded	388	BIHARSHARIFF	400 kv	s/s

\$ Excludes 2196 MW contribution from HEPs of Bhutan

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

POWER SUPPLY POSITION FOR THE MONTH OF NOV'2019

A) Net Average Energy Per Day

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSPHCL	72.97	72.98	0.01	0.01
JUVNL	24.13	24.16	0.02	0.10
DVC	59.76	59.76	0.00	0.00
ODISHA	70.38	70.38	0.00	0.00
WBSEDCL	89.86	90.10	0.25	0.27
CESC	25.15	25.15	0.00	0.00
SIKKIM	1.61	1.61	0.00	0.00
REGION	344.0	344.15	0.12	0.04

B) Peak Demand in MW:

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSPHCL	4323	4341	18	0.41
JUVNL	1280	1280	0	0.00
DVC	2807	2809	1	0.04
ODISHA	4026	4026	0	0.00
WBSEDCL	5257	5257	0	0.00
CESC	1621	1623	2	0.1
SIKKIM	102	102	0	0.00
REGION	19212	19291	79	0.41

➤ **DIVERSITY FACTOR** **1.01**

➤ **Regional Peak Demand Met on 1-11-2019 at 19.00 hrs. at 49.88 Hz.**

CONSTITUENT-WISE PERFORMANCE DATA NOVEMBER-19

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	Demand
BSPHCL	0.00	50.43	22.45	72.88	0.00	7.06	0.00	7.06	0.00	43.37	22.45	65.82	0.00	2123.28	2189.10	73.0	4323	4323
JUVNL	1.02	214.44	0.00	215.46	0.00	26.15	0.00	26.15	1.02	188.29	0.00	189.31	38.22	496.52	724.04	24.1	1280	1316
DVC	15.24	2855.18	0.00	2870.42	0.10	197.76	0.00	197.86	15.14	2657.42	0.00	2672.56	7.03	-886.82	1792.77	59.8	2807	3092
ODISHA(OPGC+OHPC+TTPS)	431.07	1110.28	26.75	1568.10	1.09	91.35	0.00	92.44	429.98	1018.93	26.75	1475.66	444.70	191.13	2111.49	70.4	4026	4158
WBPDC+WBSEDCL+DPL	113.45	1497.94	16.10	1627.48	0.00	149.90	0.00	149.90	113.45	1348.04	16.10	1477.58	89.61	1128.55	2695.74	89.9	5257	5518
CESC	0.00	341.82	0.00	341.82	0.00	28.45	0.00	28.45	0.00	313.37	0.00	313.37	0.00	441.19	754.56	25.2	1621	1662
HEL	0.00	389.17	0.00	389.17	0.00	27.61	0.00	27.61	0.00	361.56	0.00	361.56	0.00	-361.56				
SIKKIM	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	46.39	48.39	1.6	102	102
NTPC	0.00	4675.90	1.12	4677.02	0.00	348.19	0.00	348.19	0.00	4327.71	1.12	4328.83	0.00	-4328.83				
MPL	0.00	545.24	0.00	545.24	0.00	31.47	0.00	31.47	0.00	513.77	0.00	513.77	0.00	-513.77				
APNRL	0.00	167.88	0.00	167.88	0.00	13.60	0.00	13.60	0.00	154.28	0.00	154.28	0.00	-154.28				
GMR	0.00	366.78	0.00	366.78	0.00	24.69	0.00	24.69	0.00	342.08	0.00	342.08	0.00	-342.08				
JITPL	0.00	386.82	0.00	386.82	0.00	23.58	0.00	23.58	0.00	363.24	0.00	363.24	0.00	-363.24				
NHPC (Inc TLDP= 67.49MU)	242.56	0.00	0.00	242.56	0.00	0.00	0.00	0.00	242.56	0.00	0.00	242.56	0.00	-242.56	0.00			
CHPC(Birpara Receipt)	92.74	0.00	0.00	92.74	0.00	0.00	0.00	0.00	92.74	0.00	0.00	92.74	0.00	-92.74	0.00			
KHPS	6.92	0.00	0.00	6.92	0.00	0.00	0.00	0.00	6.92	0.00	0.00	6.92	0.00	-6.92	0.00			
THPS	91.70	0.00	0.00	91.70	0.00	0.00	0.00	0.00	91.70	0.00	0.00	91.70	0.00	-91.70	0.00			
DAGACHU HPS	26.33	0.00	0.00	26.33	0.00	0.00	0.00	0.00	26.33	0.00	0.00	26.33	0.00	-26.33	0.00			
Mangdechhu HEP	126.69	0.00	0.00	126.69	0.00	0.00	0.00	0.00	126.69	0.00	0.00	126.69	0.00	-126.69	0.00			
CHUZACHEN HPS	18.99	0.00	0.00	18.99	0.00	0.00	0.00	0.00	18.99	0.00	0.00	18.99	0.00	-18.99	0.00			
JORHANG HPS	25.72	0.00	0.00	25.72	0.00	0.00	0.00	0.00	25.72	0.00	0.00	25.72	0.00	-25.72	0.00			
TEESTA-III HPS	261.44	0.00	0.00	261.44	0.00	0.00	0.00	0.00	261.44	0.00	0.00	261.44	0.00	-261.44	0.00			
DIKCHU HPS	17.19	0.00	0.00	17.19	0.00	0.00	0.00	0.00	17.19	0.00	0.00	17.19	0.00	-17.19	0.00			
TASHIDING HPS	27.52	0.00	0.00	27.52	0.00	0.00	0.00	0.00	27.52	0.00	0.00	27.52	0.00	-27.52	0.00			
Total Drawal by HVDC Sahsaram,Alipurduar														4.63	4.63			
Total	1498.58	12601.88	68.42	14168.88	1.18	969.83	0.00	971.01	1497.40	11632.05	68.42	13197.87	579.56	-3456.69	10320.73	344.0	19212	20392

3A

13197.87

10320.73

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

A) Net Average Energy

Month	2018-19					2019-20				
	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (HZ)	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	Shortage (%)	Avg. Freq. (HZ)
APRIL	393.59	396.98	3.39	0.85	49.96	428.71	429.56	0.85	0.20	50.00
MAY	420.52	425.36	4.84	1.14	49.94	451.15	452.79	1.64	0.36	49.99
JUNE	437.39	441.13	3.74	0.85	49.97	461.72	462.87	1.15	0.25	49.99
JULY	425.68	427.31	1.63	0.38	49.97	450.73	451.52	0.79	0.17	50.00
AUGUST	446.36	449.17	2.81	0.63	49.97	460.9	462.13	1.26	0.27	49.99
SEPTEMBER	440.53	448.47	7.94	1.77	49.96	445.43	446.55	1.12	0.25	50.00
OCTOBER	419.33	423.20	3.87	0.91	49.96	391.21	391.33	0.12	0.03	50.00
NOVEMBER	368.99	371.76	2.77	0.75	49.97	344.02	344.15	0.12	0.04	50.00
DECEMBER	340.51	342.17	1.66	0.49	49.96	-	-	-	-	-
JANUARY	355.14	357.42	2.29	0.64	49.98	-	-	-	-	-
FEBRUARY	356.66	357.25	0.59	0.17	49.99	-	-	-	-	-
MARCH	384.42	385.48	1.06	0.27	49.99	-	-	-	-	-

B) Peak in MW:

Month	2018-19					2019-20				
	Demand Met (MW)	Requirement (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)	Demand Met (MW)	Requirement (MW)	Shortage (MW)	Shortage (%)	Avg. Freq. (HZ)
APRIL	21058	21128	70	0.33	49.96	22378	22415	37	0.17	50.00
MAY	21902	22012	111	0.50	49.94	22781	22830	49	0.22	49.99
JUNE	22080	22964	884	3.85	49.97	22808	22867	59	0.26	49.99
JULY	21790	21849	59	0.27	49.97	23154	23246	92	0.40	50.00
AUGUST	22580	22794	215	0.94	49.97	23398	23421	22	0.10	49.99
SEPTEMBER	22286	22815	529	2.32	49.96	23126	23276	150	0.64	50.00
OCTOBER	22733	23093	360	1.56	49.96	21706	21726	20	0.09	50.00
NOVEMBER	20322	20512	190	0.93	49.97	19212	19291	79	0.41	50.00
DECEMBER	18023	18049	25	0.14	49.96	-	-	-	-	-
JANUARY	18702	18783	81	0.43	49.98	-	-	-	-	-
FEBRUARY	18921	18923	2	0.01	49.99	-	-	-	-	-
MARCH	21221	21416	195	0.91	49.99	-	-	-	-	-

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 (2019-20) in MU	Cummulative Net Energy Generation upto Current Month (2019-20) in MU
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	50.43	43.37	125.01	107.59
		Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	584.43	509.24
		Thermal Total	440.00	430.00	50.43	43.37	709.44	616.82
	RES		341.25	341.25	22.45	22.45	183.12	183.12
		Total BIHAR	781.25	771.25	72.88	65.82	892.56	799.94
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	214.44	188.29	1634.86	1432.99
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	1.02	1.02	28.38	28.38
	RES		46.75	46.75	0.00	0.00	0.00	0.00
	Total	176.75	176.75	1.02	1.02	28.38	28.38	
DVC	Thermal	Bokaro-B(3)	210.00	210.00	0.00	0.00	94.03	68.54
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00
		Chandrapura(U7 # 8)	500.00	500.00	266.62	240.33	2242.57	2022.05
		Durgapur(4)	210.00	210.00	56.68	48.96	273.24	229.70
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	465.85	422.00	5159.44	4628.07
		Mezia(U # 7,8)	1000.00	1000.00	446.73	419.94	3353.11	3162.96
		Bokaro-A(1)	500.00	500.00	189.40	178.65	1712.73	1613.37
		Durgapur STPS (U#1,2)	1000.00	1000.00	536.32	508.28	4149.35	3910.31
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	520.38	489.12	3662.29	3436.57
		Koderma STPS (U#1,2)	1000.00	1000.00	373.21	350.38	4272.56	4027.36
	Total Thermal	7100.00	7090.00	2855.18	2657.42	24919.32	23098.71	
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.54	6.51	60.37	60.12
		Panchet (U#1,2)	80.00	80.00	8.59	8.53	92.58	91.98
		Tilaya (U#1,2)	4.00	4.00	0.11	0.1	0.27	0.2
		Hydro Total	147.20	147.20	15.24	15.14	153.22	152.31
	Total DVC	7247.20	7237.20	2870.42	2672.56	25072.54	23251.02	
WEST BENGAL								
WBPDCCL	Thermal	Bandel TPS	380.00	335.00	91.67	81.66	761.45	673.61
		Santalidih TPS(U#5&6)	500.00	500.00	231.24	210.29	2482.90	2279.29
		Kolaghat TPS	1260.00	1260.00	142.05	122.57	2421.68	2137.51
		Bakreswar TPP	1050.00	1050.00	450.52	407.57	4248.33	3847.37
		Sagardighi TPP	1600.00	1600.00	421.87	381.92	4236.85	3843.17
		DPPS (110+300+250 *)	660.00	660.00	160.60	144.02	1631.80	1461.00
		Thermal Total	5450.00	5405.00	1497.94	1348.04	15783.01	14241.96
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	11.39	11.39	165.28	165.28
		Ramam (4x12.73)	51.00	51.00	19.80	19.80	205.71	205.71
		Teesta C.F. (3x3x7.3)	67.30	67.30	5.20	5.20	43.75	43.75
		Purulia PSS (4x225)	900.00	900.00	77.06	77.06	782.95	782.95
		Total Hydro	1053.30	1053.30	113.45	113.45	1197.69	1197.69
		RES	527.29	527.29	16.10	16.10	144.64	144.64
➤ Chandrapura #1 is retired on 17.01.17 ➤ Patratu # 1,2,3,5,8 are retired on 21.12.16								

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 (2019-20) in MU	Cummulative Net Energy Generation upto Current Month (2019-20) 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	18.56	16.95	303.96	275.08
		Budge-Budge (3x250)	750.00	750.00	323.26	296.43	3997.61	3686.88
		Total CESC	1125.00	1125.00	341.82	313.37	4301.57	3961.96
HEL	Thermal	HEL	600.00	600.00	389.17	361.56	3173.70	2933.15
		Total West Bengal	8755.59	8710.59	2358.48	2152.51	24600.61	22479.39
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	162.18	144.02	1160.34	1027.56
		Talcher-II	220.00	220.00	92.05	81.74	983.10	870.42
		Total Thermal	470.00	460.00	254.24	225.77	2143.44	1897.98
OPGC	Thermal	IB TPS	420.00	420.00	227.47	201.49	1788.33	1587.01
		IB TPS U#3(660 MW)	660.00	660.00	278.20	260.81	1294.59	1210.72
		IB TPS U#4(660 MW)			350.38	330.86	1088.48	1003.31
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	46.73	46.52	439.66	437.50
		Hirakud-II (Chiplima)	72.00	72.00	21.77	21.71	184.44	183.47
		Balimela (6x60+2x75)	510.00	510.00	88.07	87.60	1152.62	1145.70
		Rengali (5x50)	250.00	250.00	59.84	59.74	497.43	#VALUE!
		Upper Kolab (4x80)	320.00	320.00	52.81	52.69	544.72	541.66
		Indravati HPS (4x150)	600.00	600.00	137.98	137.86	1675.35	1657.81
		Mckd.(Odisha drawal)	57.38	57.38	23.87	23.87	201.48	201.48
		Total Hydro	2084.88	2084.88	431.07	429.98	4695.69	4663.69
		RES	511.21	511.21	26.75	26.75	195.74	195.74
		Total Odisha	4806.09	4796.09	1568.09	1475.65	10468.17	9886.00
(**) SIKKIM	Hydro	RES	52.18	52.18	2.00	2.00	21.00	21.00
NTPC		MTPS Stg-II	390.00	390.00	177.982	159.17	1488.22	1331.19
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	666.65	613.52	6859.67	6307.82
		FSTPP (U# 6)	500.00	500.00	285.99	266.68	1627.20	1516.21
		KhSTPP (4x210+3x500)	2340.00	2340.00	1389.14	1290.88	10881.38	10072.08
		TSTPP (2x500)	1000.00	1000.00	531.45	486.45	4018.39	3668.81
		BARH STPS II (2X660)	1320.00	1320.00	700.82	657.12	6449.93	6094.92
		BRBCL # I,2,3(3X250 MW)	750	750	475.66	441.48	3055.47	2822.78
		NSTPS	660.00	660.00	392.75	372.58	1311.93	1222.03
		DSTPP			55.46	39.84	55.46	39.84
		Total NTPC	8560.00	8560.00	4675.90	4327.71	35747.65	33075.67
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	28.68	28.68	289.56	289.56
		Teesta (3x170)	510.00	510.00	146.39	146.39	2437.22	2437.22
		TLDP -(4x33+4x40)	292.00	292.00	67.49	67.49	1152.96	1152.96
		Total NHPC	862.00	862.00	242.56	242.56	3879.74	3879.74
		MPL (U#1&2)	1050.00	1050.00	545.24	513.77	4226.45	3971.74
		APNRL (U#1,2)	540.00	540.00	167.88	154.28	1933.72	1762.84
		GMR (2x350)	700.00	700.00	366.76	342.08	2397.56	2220.76
		JITPL (2X600)	1200.00	1200.00	386.82	363.24	3195.77	2987.86
		CHUZACHEN** (2x55)	110.00	110.00	18.99	18.99	431.33	431.33
		JORETHANG (2x48)	96.00	96.00	25.72	25.72	358.23	358.23
		TEESTA URJA St III (6x200)	1200.00	1200.00	261.44	261.44	5341.51	5341.51
		Tashilding (2x48.5)	97.00	97.00	27.52	27.52	391.77	391.77
		DICKCHU (2x48)	96.00	96.00	17.19	17.19	440.18	440.18
		TALCHER SOLAR	10.00	10.00	1.12	1.12	8.90	8.90
		Total Thermal (E.R)	29395.00	29320.00	12601.86	11632.05	104337.91	96003.49
EASTERN REGIONAL		Total Hydro (E.R)	5876.38	5876.38	1154.19	1153.01	16917.74	16884.84
		Total RES	1488.68	1488.68	68.42	68.42	553.40	553.40
		TOTAL (E.R)	36760.06	36685.06	13824.47	12853.47	121809.05	113441.72
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	92.74	92.74	1537.44	1537.44
	Hydro	Kurichu (4x15)	60.00	60.00	6.92	6.92	289.35	289.35
	Hydro	TALA (6x170)	1020.00	1020.00	91.70	91.70	2517.08	2517.08
	Hydro	DAGACHU (2x63)	126.00	126.00	26.33	26.33	333.87	333.87
		MANGDECHU(4x180)	720.00	720.00	126.69	126.69	1261.63	1261.63
		Grand Total	39046.06	38881.06	14168.86	13197.86	127748.43	119381.10

PLANT LOAD FACTOR (PLF) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF NOVEMBER' 2019

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 (2019-20) in MU	Cummulative PLF upto Current Month (%)
BIHAR	Thermal	Barauni (U# 6&7)	220.00	210.00	50.43	33.35	125.01	10.17
		Muzaffarpur Stg-I	220.00	220.00	0.00	0.00	584.43	45.36
		Thermal Total	440.00	430.00	50.43	16.29	709.44	28.17
	RES		341.25	341.25	22.45		183.12	
		Total BIHAR	781.25	771.25	72.88		892.56	
JHARKHAND								
TVNL	Thermal	TVNL	420.00	420.00	214.44	70.91	1634.86	66.47
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	1.02		28.38	
	RES		46.75	46.75	0.00		0.00	
	Total		176.75	176.75	1.02		28.38	
DVC	Thermal	Bokaro-B(3)	210.00	210.00	0.00	0.00	94.03	7.65
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00
		Chandrapura(U7 # 8)	500.00	500.00	266.62	74.06	2242.57	76.59
		Durgapur(4)	210.00	210.00	56.68	37.48	273.24	22.22
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	465.85	48.28	5159.44	65.75
		Mezia(U # 7,8)	1000.00	1000.00	446.73	62.05	3353.11	57.26
		Bokaro-A(1)	500.00	500.00	189.40	52.61	1712.73	58.49
		Durgapur STPS (U#1,2)	1000.00	1000.00	536.32	74.49	4149.35	70.86
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	520.38	60.23	3662.29	52.12
		Koderma STPS (U#1,2)	1000.00	1000.00	373.21	51.83	4272.56	72.96
	Total Thermal	7100.00	7090.00	2855.18	55.93	24919.32	60.02	
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.54		60.37	
		Panchet (U#1,2)	80.00	80.00	8.59		92.58	
		Tilaya (U#1,2)	4.00	4.00	0.11		0.27	
Hydro Total		147.20	147.20	15.24		153.22		
Total DVC	7247.20	7237.20	2870.42		25072.54			
WEST BENGAL								
WBPDC	Thermal	Bandel TPS	380.00	335.00	91.67	38.01	761.45	38.81
		Santalalih TPS(U#5&6)	500.00	500.00	231.24	64.23	2482.90	84.80
		Kolaghat TPS	1260.00	1260.00	142.05	15.66	2421.68	32.82
		Bakreswar TPP	1050.00	1050.00	450.52	59.59	4248.33	69.09
		Sagardighi TPP	1600.00	1600.00	421.87	36.62	4236.85	45.22
		DPPS (110+300+250 *)	660.00	660.00	160.60	33.80	1631.80	42.22
		Thermal Total	5450.00	5405.00	1497.94	38.49	15783.01	49.86
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	11.39		165.28	
		Ramam (4x12.73)	51.00	51.00	19.80		205.71	
		Teesta C.F. (3x3x7.3)	67.30	67.30	5.20		43.75	
		Purulia PSS (4x225)	900.00	900.00	77.06		782.95	
		Total Hydro	1053.30	1053.30	113.45		1197.69	
		RES	527.29	527.29	16.10		144.64	

WBPDC, Bandel TPS Unit #3 & Unit #4 (IC=2X82.5 MW, EC=2X60 MW) decommissioned from 01.04.2018.

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 (2019-20) 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	18.56	19.10	303.96	38.45
		Budge-Budge (3x250)	750.00	750.00	323.26	59.86	3997.61	91.02
		Total CESC	1125.00	1125.00	341.82	42.20	4301.57	65.29
HEL	Thermal		600.00	600.00	389.17	90.09	3173.70	90.33
		Total West Bengal	8755.59	8710.59	2358.48		24600.61	
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	162.18	93.86	1160.34	82.56
		Talcher-II	220.00	220.00	92.05	58.11	983.10	76.31
		Total Thermal	470.00	460.00	254.24	76.76	2143.44	79.57
OPGC	Thermal	IB TPS	420.00	420.00	227.47	75.22	1788.33	72.71
		IB TPS U#3(660 MW)	660.00	660.00	278.20	58.54	1294.59	45.46
		IB TPS U#4(660 MW)			350.38	73.73	1088.48	50.69
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	46.73		439.66	
		Hirakud-II (Chiplima)	72.00	72.00	21.77		184.44	
		Balimela (6x60+2x75)	510.00	510.00	88.07		1152.62	
		Rengali (5x50)	250.00	250.00	59.84		497.43	
		Upper Kolab (4x80)	320.00	320.00	52.81		544.72	
		Indravati HPS (4x150)	600.00	600.00	137.98		1675.35	
		Mckd.(Odisha drawal)	57.38	57.38	23.87		201.48	
		Total Hydro	2084.88	2084.88	431.07		4695.69	
		RES	511.21	511.21	26.75		195.74	
		Total Odisha	4806.09	4796.09	1568.09		10468.17	
(**) SIKKIM	Hydro	RES	52.18	52.18	2.00		21.00	
NTPC		MTPS Stg-II	390	390	177.982	63.38	1488.22	65.16
		FSTPP# I&II (3x200+2x500)	1600.00	1600.00	666.65	57.87	6859.67	73.21
		FSTPP (U# 6)	500.00	500.00	285.99	79.44	1627.20	55.57
		KhSTPP (4x210+3x500)	2340.00	2340.00	1389.14	82.45	10881.38	79.41
		TSTPP (2x500)	1000.00	1000.00	531.45	73.81	4018.39	68.62
		BARH STPS II (2X660)	1320.00	1320.00	700.82	73.74	6449.93	83.44
		BRBCL # I,2,3(3X250 MW)	750.00	750.00	475.66	88.09	3055.47	69.57
		NSTPS	660.00	660.00	392.75	82.65	1311.93	80.24
		DSTPP			55.46		55.46	
		Total NTPC	8560.00	8560.00	4675.90	74.97	35747.65	74.49
NHPC	HYDRO	Rangit (3x20)	60.00	60.00	28.68		289.56	
		Teesta (3x170)	510.00	510.00	146.39		2437.22	
		TLDP -(4x33+4x40)	292.00	292.00	67.49		1152.96	
		Total NHPC	862.00	862.00	242.56		3879.74	
	Thermal	MPL (U#1&2)	1050.00	1050.00	545.24	72.12	4226.45	68.74
		APNRL (U#1,2)	540.00	540.00	167.88	43.18	1933.72	61.15
		GMR (2x350)	700.00	700.00	366.76	72.77	2397.56	58.49
		JITPL (2X600)	1200.00	1200.00	386.82	44.77	3195.77	45.48
		CHUZACHEN** (2x55)	110.00	110.00	18.99		431.33	
		JORETHANG (2x48)	96.00	96.00	25.72		358.23	
		TEESTA URJA St III (6x200)	1200.00	1200.00	261.44		5341.51	
		Tashilding (2x48.5)	97.00	97.00	27.52		391.77	
		DICKCHU (2x48)	96.00	96.00	17.19		440.18	
		TALCHER SOLAR	10.00	10.00	1.12		8.90	
EASTERN REGIONAL		Total Thermal (E.R)	29395.00	29320.00	12601.86	59.43	104337.91	62.60
		Total Hydro (E.R)	5876.38	5876.38	1154.19		16917.74	
		Total RES	1488.68	1488.68	68.42		553.40	
		TOTAL (E.R)	36760.06	36685.06	13824.47		121809.05	
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	92.74		1537.44	
	Hydro	Kurichu (4x15)	60.00	60.00	6.92		289.35	
	Hydro	TALA (6x170)	1020.00	1020.00	91.70		2517.08	
	Hydro	DAGACHU (2x63)	126.00	126.00	26.33		333.87	
	Hydro	MANGDECHU(4x180)	720.00	720.00	126.69		1261.63	
Grand Total			39046.06	38881.06	14168.86		127748.43	

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK
DURING THE MONTH OF NOV'2019 (1-11-2019)

Date 1-Nov-19
Time 19.00 Hrs.
Frequency 49.88 Hz.

(All Fig. in MW)

System/State	Installed Capacity	Effective Capacity	Hydro	Thermal	RES	Total
BSPHCL	781	771	0	0	0	0
JUVNL	597	597	40	232	0	272
DVC	7247	7237	81	2991	0	3072
ODISHA	4806	4796	1575	1395	54	3024
WBSEDCL	6371	6326	521	1848	0	2369
TLDP	292	292	244	0	0	244
HEL HALDIA	600	600	0	552	0	552
CESC	1125	1125	0	466	0	466
DPL	660	660	0	0	0	0
SIKKIM	52	52	0	0	0	0
NTPC	8560	8560	0	5524	0	5524
NHPC	570	570	589	0	0	589
CHUKHA	360	270	204	0	0	204
KURICHU	60	60	30	0	0	30
TALA	1020	1020	202	0	0	202
MPL	1050	1050	0	987	0	987
OPGC (660 MW)	0	0	0	0	0	0
APNRL	540	540	0	250	0	250
Kamalganga (GMR)	700	700	0	414	0	414
JITPL	1200	1200	0	483	0	483
Chuzachen	110	110	112	0	0	112
Jorethang	96	96	63	0	0	63
TEESTA URJA St III	1200	1200	1200	0	0	1200
Tashilding	97	97	65	0	0	65
DICKCHU	96	96	102	0	0	102
<u>Daghachu</u>	126	126	46	0	0	46
<u>Solar</u>	10	10	0	0	0	0
<u>Mangdechu</u>	720	720	0	0	0	0
<u>Total</u>	39046	38881	5072	15141	54	20268
Import From Captive:						780
Export To:						
NER						518
SR						2004
WR						-2845
NR						1491.60
Bangladesh						674.25
Nepal						-5.62
Total						1837

➤ I Net Peak Demand Met (MW) :

19212

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

Hourly Load Generation Data OF ER On Regional Peak Day During The Month of NOV'2019 (1-11-2019)

(All Figures in MW)

Generation				Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	Requirement
1	2321	14059	16379	604	681	2392	15272	-3	0	15272
2	2103	13488	15591	651	681	1463	15459	-5	0	15459
3	1709	13278	14987	657	694	1102	15236	15	0	15251
4	1758	13173	14931	642	697	1158	15112	11	0	15122
5	1770	13495	15265	675	695	1598	15036	25	0	15061
6	1900	14251	16151	730	689	2396	15173	31	0	15204
7	2721	14451	17173	690	678	3928	14612	-8	1	14612
8	2868	14667	17534	563	678	4044	14731	-14	1	14733
9	2511	14584	17095	572	657	3552	14773	-8	0	14773
10	2132	14767	16898	556	434	2894	14994	17	1	15012
11	1992	14727	16719	614	429	2867	14895	39	0	14934
12	1748	14386	16134	552	440	2149	14976	14	0	14991
13	1594	14231	15825	551	429	1977	14829	-14	0	14829
14	1585	13707	15292	501	440	1684	14550	-14	0	14550
15	1824	13557	15381	415	445	1877	14364	25	0	14389
16	2036	14218	16254	475	438	2386	14781	-3	0	14781
17	2869	14713	17582	469	423	3225	15249	23	0	15271
18	4227	14917	19143	661	416	2022	18199	86	0	18285
19	4645	15141	19786	780	482	1837	19212	79	0	19291
20	4337	14930	19267	772	497	1717	18818	8	0	18826
21	4388	14851	19239	765	517	2178	18343	30	0	18373
22	3943	15064	19006	775	500	2860	17421	37	0	17458
23	3721	15269	18989	684	477	3471	16679	55	0	16734
24	3096	15523	18618	664	420	4068	15635	30	0	15665

Hourly Load Generation Data of ER On Regional Lean Day During The Month of NOV'2019 (17-11-2019)

(All Figures in MW)

Generation				Import	Net	Net	Demand	Freq.	Load	
Hrs.	Hydro	Thermal	Total	from Captive	Import From CHPS, KHPS & TALA	Export to other region	Met	Correction	Shed	Requirement
1	750	15862	16612	652	481	4224	13520	-19	7	13528
2	785	14905	15690	616	481	3249	13539	-13	7	13546
3	812	14171	14982	654	479	2808	13306	19	7	13332
4	939	14084	15024	615	478	2843	13274	5	7	13286
5	1029	14498	15527	637	466	3208	13423	0	7	13430
6	1211	15679	16890	648	462	4212	13788	6	7	13802
7	1994	16182	18176	677	439	5605	13687	-8	7	13694
8	2099	16535	18634	670	421	5918	13807	17	9	13833
9	1230	16602	17831	647	419	5456	13442	-16	10	13452
10	1156	16493	17648	671	439	5450	13308	-7	10	13311
11	1064	15782	16846	534	443	4972	12850	-9	10	12851
12	936	15276	16212	519	426	4461	12696	-2	7	12701
13	998	14694	15692	508	437	4261	12375	9	7	12391
14	858	14111	14970	519	451	4063	11876	6	5	11888
15	630	14117	14747	489	446	4372	11311	-8	5	11316
16	890	14412	15302	466	441	4691	11518	10	3	11531
17	2173	15303	17476	478	420	5592	12782	3	3	12788
18	2921	16572	19492	583	414	4985	15505	-3	3	15507
19	3277	17042	20319	603	497	4829	16590	-17	3	16593
20	2768	16622	19390	635	512	4346	16191	-17	3	16193
21	1912	16186	18098	634	517	3693	15557	3	3	15562
22	1429	16356	17785	659	528	4236	14736	8	3	14746
23	937	16185	17122	634	445	4351	13851	12	3	13865
24	815	15891	16706	644	448	4452	13346	0	3	13348

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

FOR THE MONTH OF NOV'2019

POWER CUT / RESTRICTIONS

BSPHCL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.374 MU
JUVNL	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 0.752 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 7.45 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

Nov-19

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	TO	HZ			HZ		HZ				
E	05	10	17	22	24	24	50.1		50.05											
01-Nov	49.98	49.99	49.98	49.93	49.93	49.97	12.00	77.10	10.90	77.10	50.25	13.02.20	49.67	17.40.30	50.10	0:00	49.82	0:00		
02-Nov	49.97	49.98	49.99	49.98	49.97	49.98	6.70	80.30	13.00	80.30	50.18	17.02.40	49.76	21.07.20	50.08	0:00	49.85	0:00		
03-Nov	49.99	49.98	50.00	49.99	49.97	49.99	3.61	80.30	16.09	80.30	50.18	17.02.00	49.78	09.29.00	50.04	0:00	49.89	0:00		
04-Nov	49.97	49.98	49.99	50.01	49.96	49.99	9.60	73.10	17.20	73.10	50.15	13.03.30	49.76	07.11.20	50.07	0:00	49.83	0:00		
05-Nov	49.98	50.02	49.97	49.97	50.02	49.99	8.70	75.10	16.20	75.10	50.17	07.53.10	49.72	18.24.30	50.12	0:00	49.78	0:00		
06-Nov	50.00	50.00	50.01	50.04	49.99	50.01	2.10	74.60	23.30	74.60	50.17	17.47.30	49.81	06.14.30	50.09	0:00	49.89	0:00		
07-Nov	50.02	50.02	50.03	50.05	50.05	50.03	0.00	61.00	39.00	61.00	50.26	13.03.00	49.91	14.14.30	50.19	0:00	49.97	0:00		
08-Nov	50.03	50.01	50.01	50.04	49.99	50.02	2.00	70.60	27.40	70.60	50.23	04.02.10	49.83	09.07.50	50.09	0:00	49.90	0:00		
09-Nov	50.01	50.01	49.99	50.02	49.98	50.00	1.40	79.60	19.00	79.60	50.19	18.02.20	49.85	22.05.50	50.07	0:00	49.93	0:00		
10-Nov	49.98	50.00	50.00	50.03	50.02	50.00	1.80	78.20	20.10	78.20	50.19	18.31.0	49.86	08.49.20	50.09	0:00	49.89	0:00		
11-Nov	50.02	49.99	49.99	50.04	50.00	50.01	0.80	75.30	23.90	75.30	50.15	06.02.20	49.85	15.27.40	50.08	0:00	49.94	0:00		
12-Nov	49.98	50.01	50.00	50.02	49.92	50.00	5.50	73.70	20.80	73.70	50.20	13.25.00	49.82	04.13.50	50.13	0:00	49.89	0:00		
13-Nov	50.00	50.01	50.00	50.02	50.02	50.01	2.84	74.63	22.53	74.63	50.18	13.02.40	49.79	14.29.20	50.08	0:00	49.88	0:00		
14-Nov	50.01	49.98	50.00	50.03	50.02	50.00	4.30	75.70	20.10	75.70	50.17	06.01.20	49.81	04.30.00	50.09	0:00	49.87	0:00		
15-Nov	50.01	49.99	50.00	50.03	50.01	50.00	4.50	68.40	27.10	68.40	50.23	05.02.10	49.78	09.10.40	50.09	0:00	49.88	0:00		
16-Nov	50.03	50.00	49.99	50.01	49.94	50.00	6.40	69.30	24.20	69.30	50.18	13.04.00	49.82	14.25.50	50.12	0:00	49.84	0:00		
17-Nov	50.00	50.00	50.00	50.01	49.99	50.00	2.50	75.90	21.60	75.90	50.19	18.01.10	49.65	20.52.10	50.07	0:00	49.91	0:00		
18-Nov	49.98	49.96	49.98	50.01	49.97	49.98	8.70	79.20	12.10	79.20	50.16	13.03.20	49.71	06.21.00	50.05	0:00	49.73	0:00		
19-Nov	49.99	49.96	49.97	50.02	49.97	49.98	6.40	79.00	14.60	79.00	50.15	17.03.00	49.73	07.15.20	50.06	0:00	49.86	0:00		
20-Nov	49.97	49.96	50.00	50.00	50.01	49.98	6.60	78.80	14.60	78.80	50.23	12.01.30	49.81	07.26.20	50.07	0:00	49.79	0:00		
21-Nov	50.02	50.02	50.00	50.01	50.00	50.01	3.70	65.80	30.60	65.80	50.19	10.02.10	49.80	15.33.00	50.07	0:00	49.87	0:00		
22-Nov	49.98	49.99	49.99	50.01	49.99	49.99	3.20	80.40	16.40	80.40	50.17	17.31.30	49.83	09.21.10	50.10	0:00	49.91	0:00		
23-Nov	50.02	50.03	50.00	50.01	50.01	50.01	1.10	72.50	26.40	72.50	50.22	06:02:10	49.83	19:18:30	50.10	0:00	49.93	0:00		
24-Nov	50.01	50.02	50.01	50.04	50.01	50.02	1.70	68.30	30.00	68.30	50.23	06:03:10	49.84	09:10:50	50.11	0:00	49.91	0:00		
25-Nov	50.04	50.00	49.95	50.03	50.03	50.00	5.30	65.70	29.00	65.70	50.19	00:01:40	49.74	14:15:30	50.09	0:00	49.84	0:00		
26-Nov	50.02	49.99	50.00	50.04	50.06	50.02	2.50	64.80	32.70	64.80	50.27	22:00:50	49.80	15:14:50	50.14	0:00	49.92	0:00		
27-Nov	50.03	50.00	50.01	50.05	50.00	50.02	0.50	66.20	33.30	66.20	50.19	06:02:20	49.86	22:08:00	50.11	0:00	49.93	0:00		
28-Nov	50.02	50.03	50.00	50.03	50.02	50.02	0.40	69.80	29.80	69.80	50.25	22:01:40	49.83	14:16:10	50.13	0:00	49.97	0:00		
29-Nov	50.01	50.01	50.00	49.99	49.96	50.00	3.10	77.40	19.50	77.40	50.19	18:01:10	49.80	17:41:20	50.07	0:00	49.89	0:00		
30-Nov	49.96	50.00	49.99	50.01	50.01	49.99	4.10	77.80	18.10	77.80	50.22	06:02:30	49.78	17:40:50	50.08	0:00	49.89	0:00		
MAX	50.04	50.03	50.03	50.05	50.06	50.03	12.00	80.40	39.00	80.40	50.27	49.91				50.19	49.97			
MIN	49.96	49.96	49.95	49.93	49.92	49.97	0.00	61.00	10.90	61.00	50.15	49.65				50.04	49.73			
AVG	50.00	50.00	49.99	50.02	49.99	50.00	4.07	73.62	22.32	73.62	50.20	49.79				50.09	49.88			

SUMMARY:

Avg. Frequency :

50.0 Hz.

Instantaneous Frequency :

Maximum Frequency : 50.27 Hz at 22:00 Hrs.

Minimum Frequency : 49.65 Hz at 06.21.00 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.19 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.73 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	4.07	73.62	22.32

VOLTAGE ANALYSIS

MAXIMUM & MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF NOV'2019

(All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	416	409	421	397	428	389	417	388

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	425	408	420	401	426	402	415	401

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 (49.2 Hz) (Inst.)	STAGE-II (49.0 Hz) (Inst.)	STAGE-III (48.8 Hz) (Inst.)	STAGE-IV 48.6 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.

A.

WATER LEVEL OF MAJOR HYDEL RESERVOIRS OF THE REGION IN

Nov-19

(All figs.in mtrs.)

Name of the Reservoirs	FRL	MDDL	As on last day of the		As on first day of this month & date	
			(30-11-19)	(30-11-18)		
Hirakud	192	180	191.97	190.69	191.99	01.11.19
Balimela	462	439	460.61	460.25	461.86	01.11.19
Rengali	123	109	123.58	118.17	124.03	01.11.19
Upperkolab	858	844	857.12	855.48	857.29	01.11.19
Indravati	642	625	640.50	638.45	640.83	01.11.19
Subernrekha	590	580	585.98	585.98	588.29	01.11.19

B.

CPP/IPP IMPORT by Eastern Region Constituents during

Nov-19

(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	38.22
West Bengal	53.87	0.00	0	0	0	0	0	35.75	89.61
ODISHA	0	0	30.89	72.34	5.77	0.00	0	335.71	444.70
DVC	0	0	0	0	0	0	7.03	0	7.03
TOTAL	53.87	0.00	30.89	72.34	5.77	0.00	7.03	371.46	579.56

C.

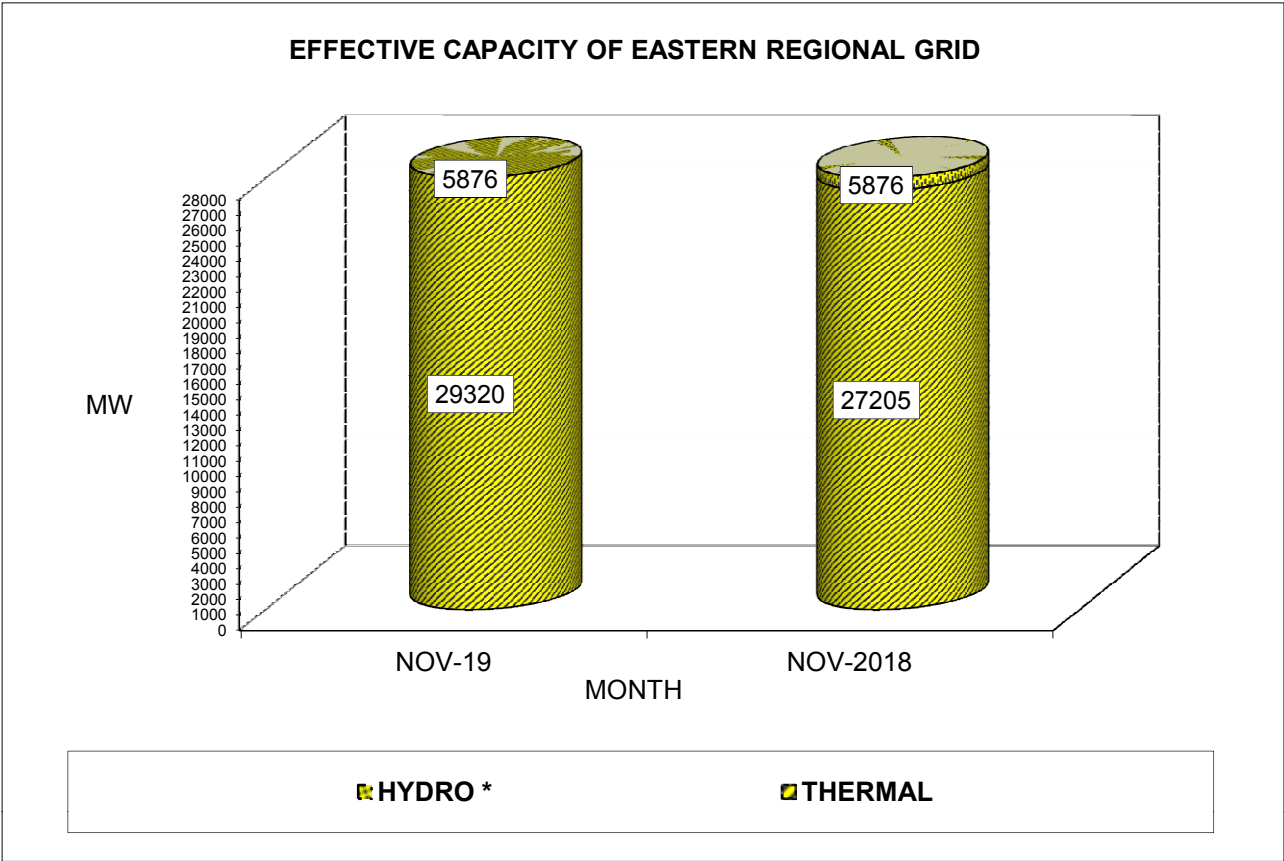
Distribution of Schedule Supply among Key Customers by IPPs during

Nov-19

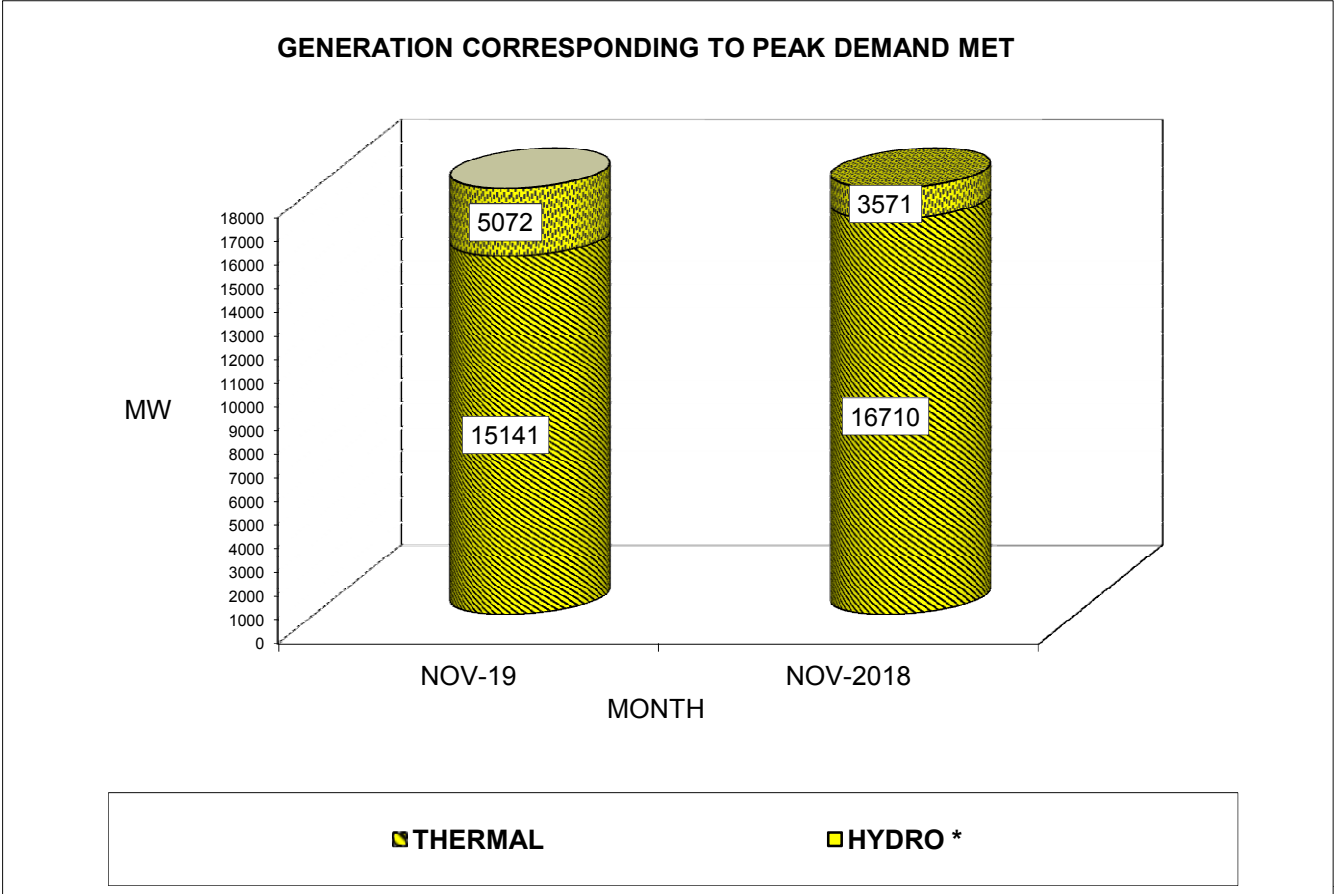
(All figs. are in MU)

IPP	TPDDL	WBSEDCL/ WBPDCL	DVC	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	158.82	147.22	83.79	0.00	0	0	121.80	511.63
Sterlite	0	0	0	0	0.00	0	0.00	0.00
APNRL	0	32.03	0	0.00	0.00	82.84	43.88	158.75
Total	158.82	179.25	83.79	0.00	0.00	82.84	165.68	670.38

Task/ Works performed by ERPC during NOVEMBER, 2019		
Sl.No.	Description	Date of Report
1	RTA for September-2019(Rev-II)	05.11.2019
2	RTA for October-2019	05.11.2019
3	DSM, RRAS, FRAS & AGC Account 071019-131019	05.11.2019
4	RRAS Account 010719-110819 & 260819-290919(MPL)	05.11.2019
5	REA October 2019	05.11.2019
6	DC-MPL-October 2019	05.11.2019
7	DC- Teesta III – October 2019	05.11.2019
8	VAR Account 071019-131019	05.11.2019
9	Bilateral REA for October -2019	05.11.2019
10	REA Bhutan October-19	07.11.2019
11	DSM, RRAS, FRAS & AGC Account 141019-201019	08.11.2019
12	DSM, RRAS, FRAS & AGC Account 211019-271019	08.11.2019
13	VAR Account 141019-201019	08.11.2019
14	VAR Account 211019-271019	08.11.2019
15	AS-3 Format 16.11.19-15.12.19	13.11.2019
16	DSM, RRAS, FRAS & AGC A/c 281019-031119 & Dev of Bhutan Power of Oct'19	15.11.2019
17	SCED Account 120819-180819(Rev-I) & 190819-250819(Rev-I)	15.11.2019
18	RRAS Account 120819-250819 & 300919-271019(MPL)	15.11.2019
19	DSM & RRAS Account 290719-040819(Revision-I)	15.11.2019
20	DSM Account 050819-110819(Revision-II)	15.11.2019
21	DSM Account 300919-061019(Revision-I)	15.11.2019
22	VAR Account 281019-031119	15.11.2019
23	DSM, RRAS, FRAS & AGC Account 041119-101119	26.11.2019
24	DSM Account 220419-280419(Revision-I)	26.11.2019
25	DSM Account 290419-050519(Revision-I)	26.11.2019
26	Progress Report: October 2019	27.11.2019
27	Revised RTA for the period April'19 to September'19(Rev-II)	28.11.2019
28	RTA for October'2019(Rev-I)	28.11.2019
29	Monthly Power supply position of Eastern Region for Oct-2019	06.11.2019
30	Revised Monthly Power Supply position for the Month of Oct-2019	25.11.2019
List of Meetings / Workshops held during NOVEMBER, 2019		
Sl. No.	Description	Date
1	Meeting on NVVN Issue	07.11.2019
2	OCC Shutdown Meeting	13.11.2019
3	163 rd OCC Meeting	15.11.2019
4	Training Programme for Power System Engineers of ER Constituents	18.11.2019 to 22.11.2019
5	85 th PCC Meeting	19.11.2019
6	Meeting on OPGC Issue	20.11.2019
7	2 nd TeST Meeting of ERPC	26.11.2019
8	41 st Commercial Committee Meeting	27.11.2019
9	Review Meeting for National Conference	29.11.2019
10	Hindi Committee Meeting	29.11.2019

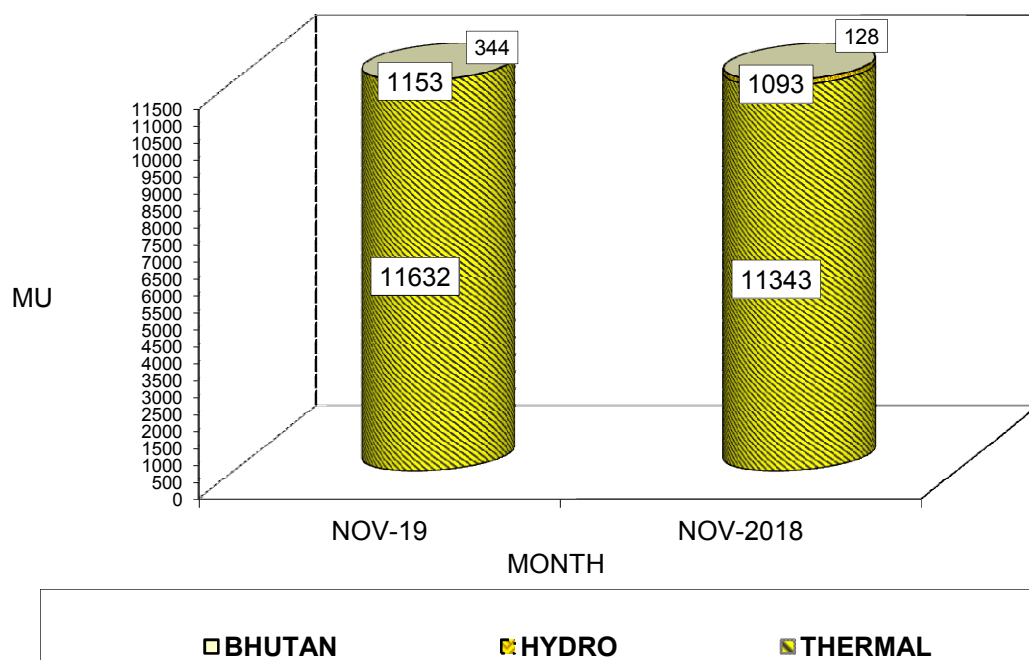


*Excludes 1350 MW contribution from HEPs of Bhutan

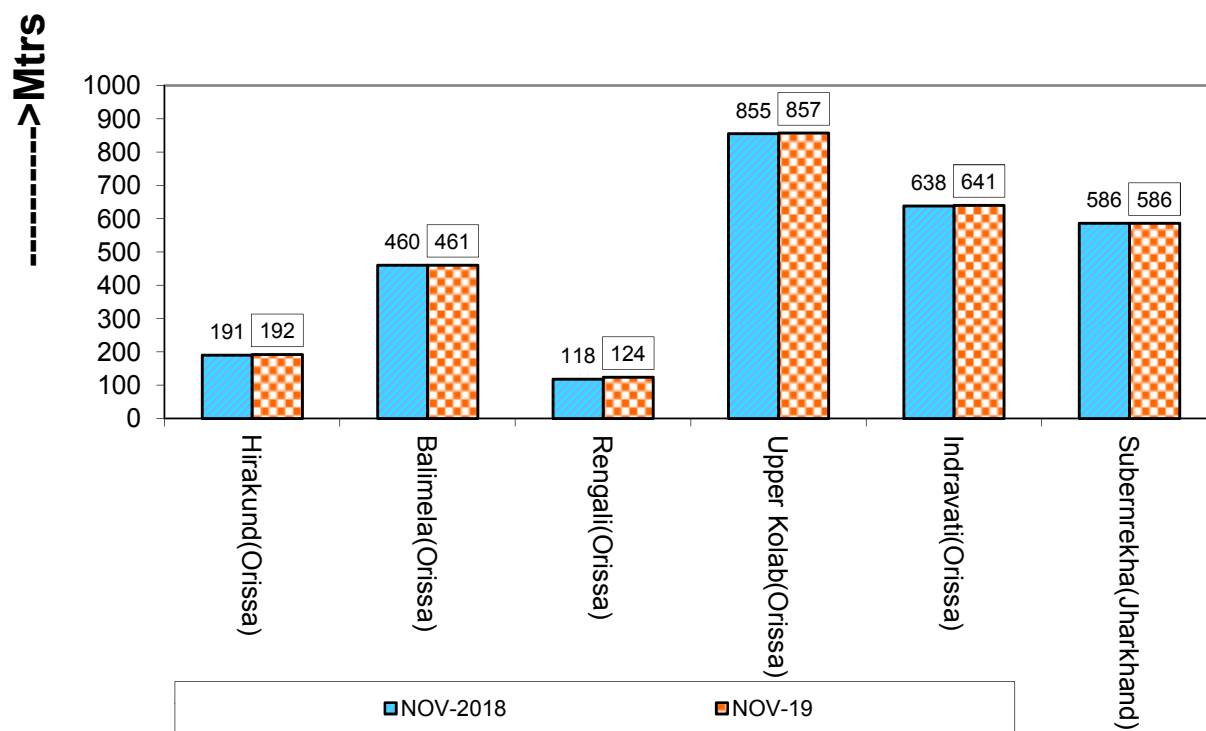


*Includes contribution from HEP of Bhutan

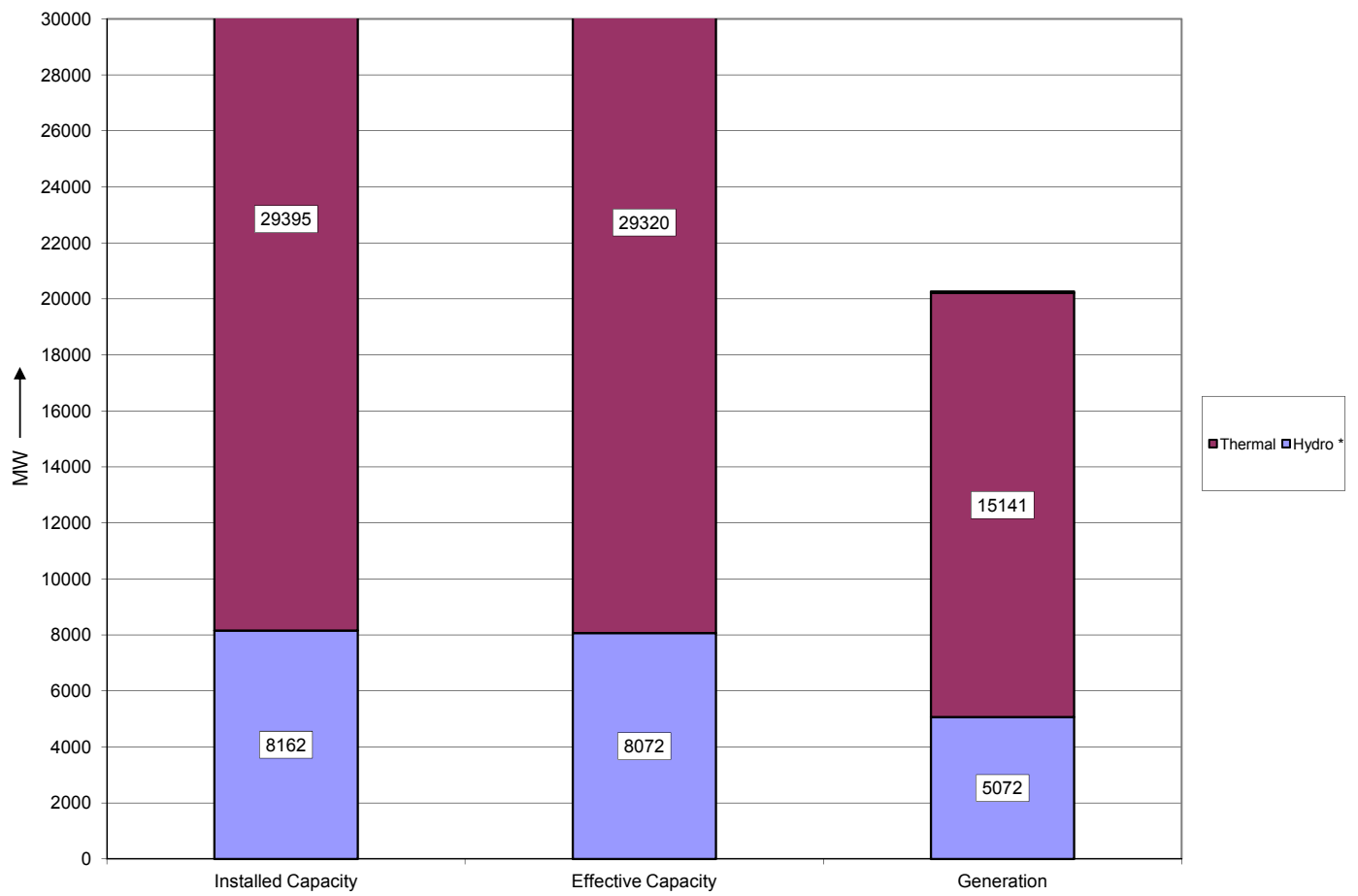
NET ENERGY GENERATION



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

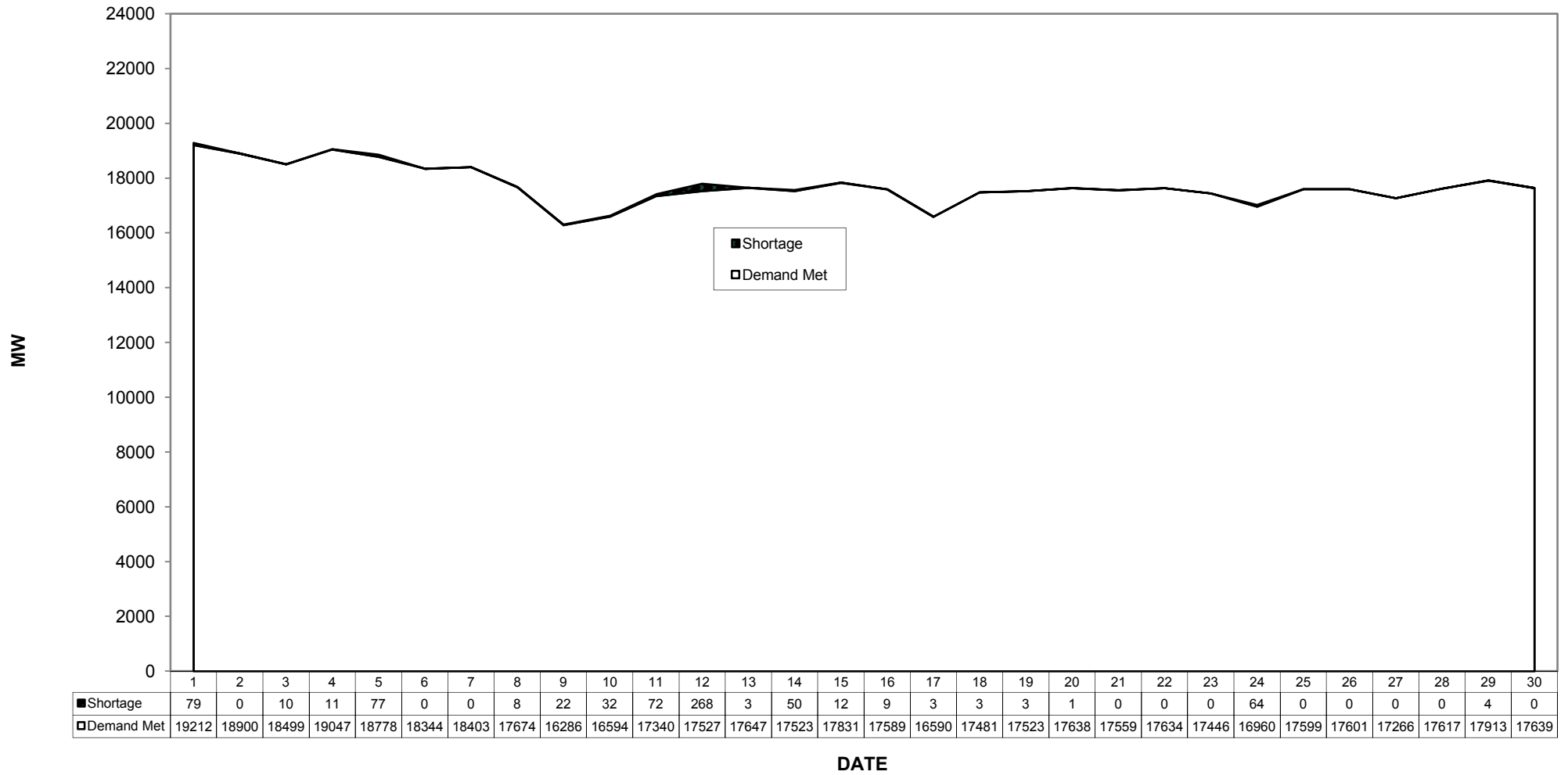


Capacity / Actual Generation Pattern of ER on Peak Day (1-11-2019) at 19.00 hrs.

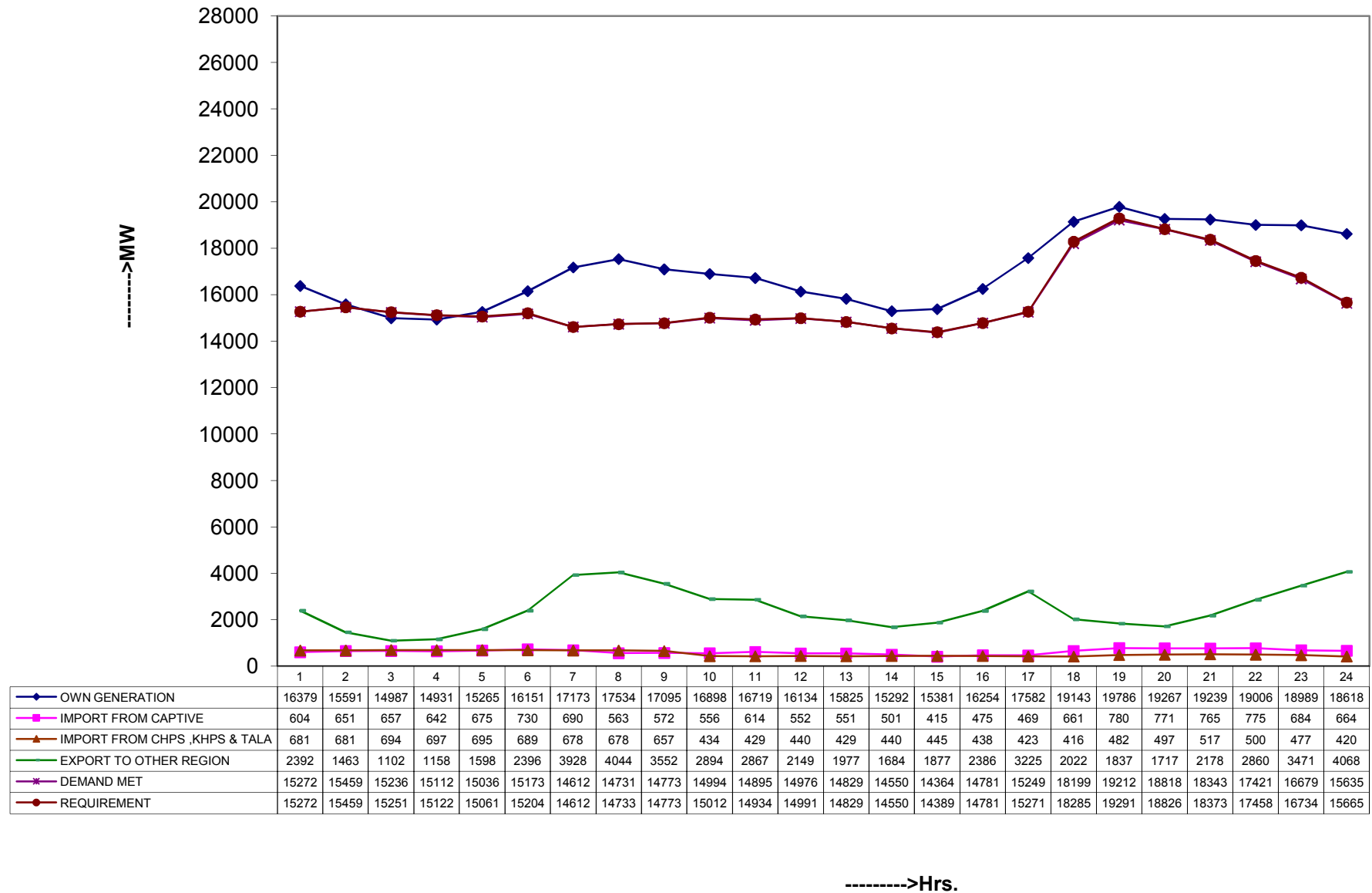


(*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

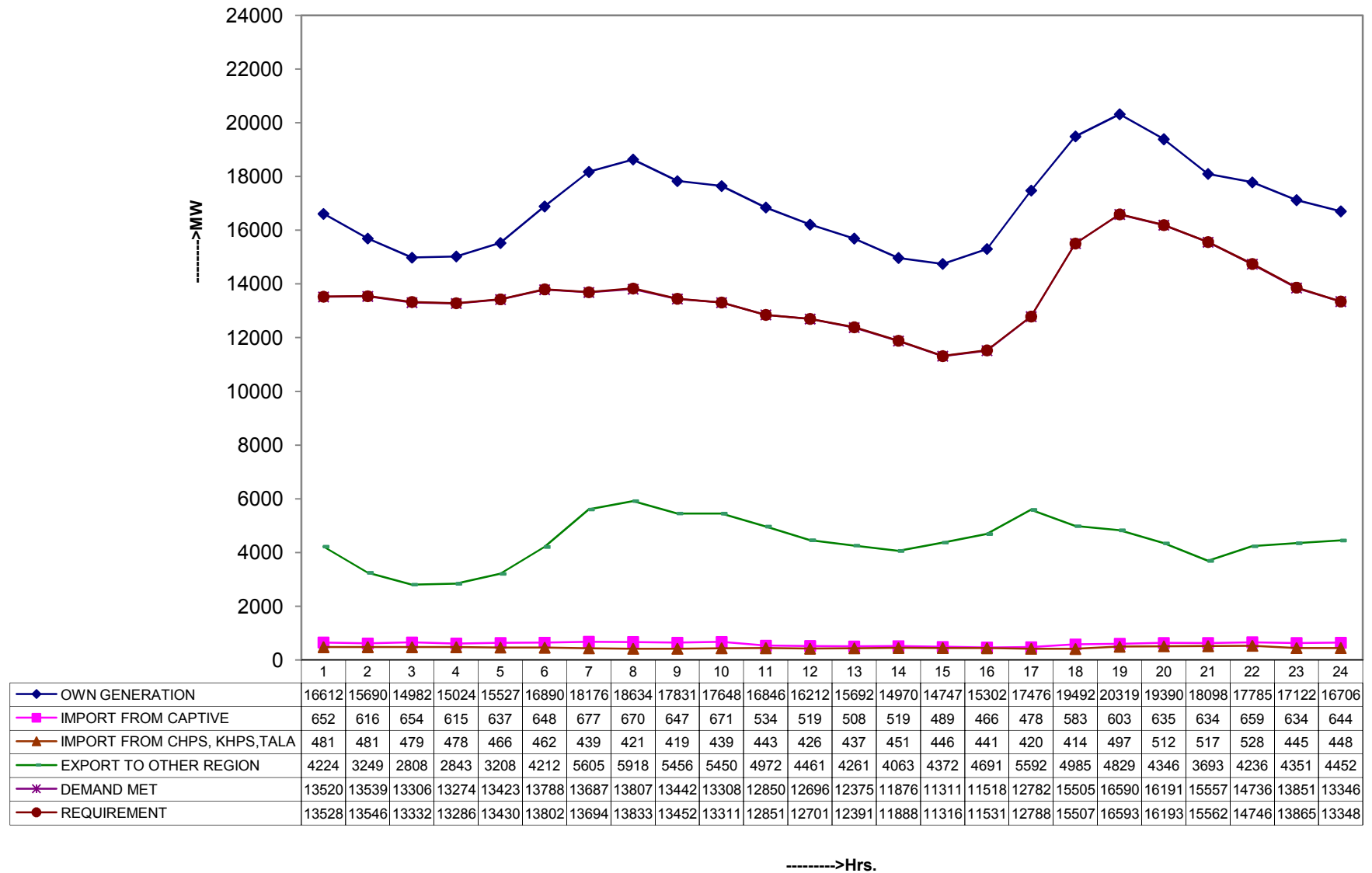
Peak Demand Met / Shortage of Eastern Region For The Month Of NOV'2019



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of NOV'2019 (1-11-2019)

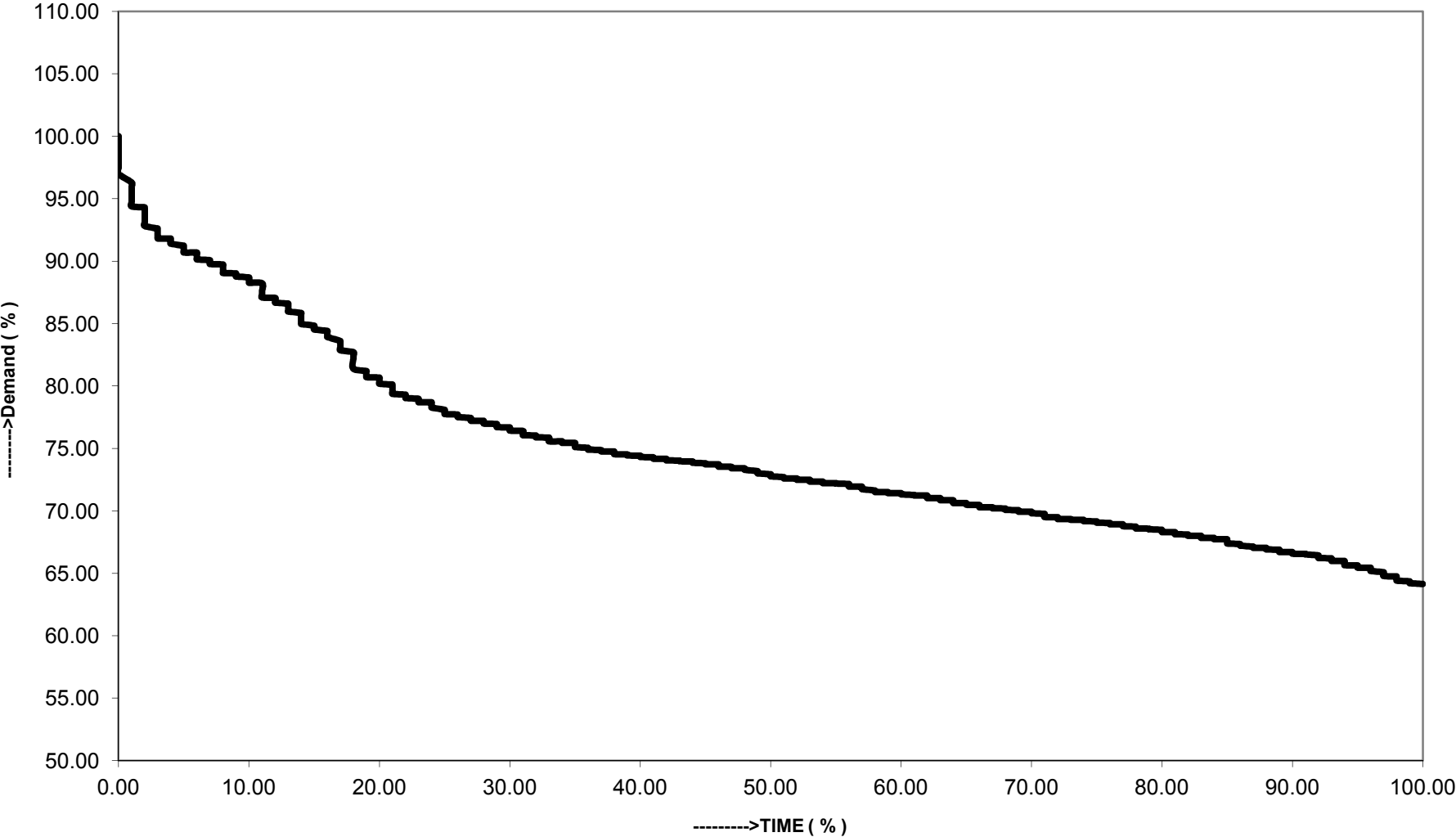


Hourly Load Generation Data of ER On Regional Lean Day During The Month of NOV'2019 (17-11-2019)



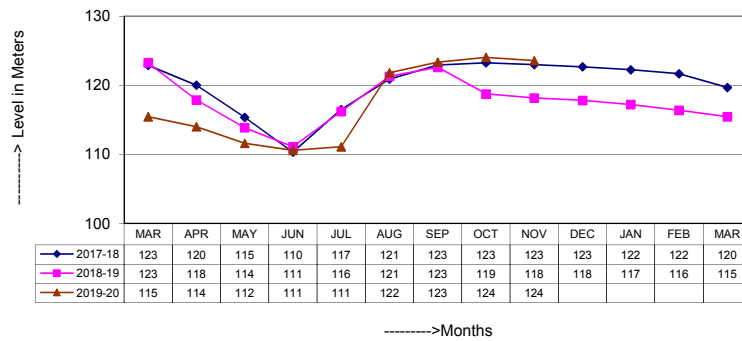
Monthly Load Duration Curve of Eastern Region for NOV-19

Maximum Demand met : 19212 MW
Minimum Demand met: 11311 MW

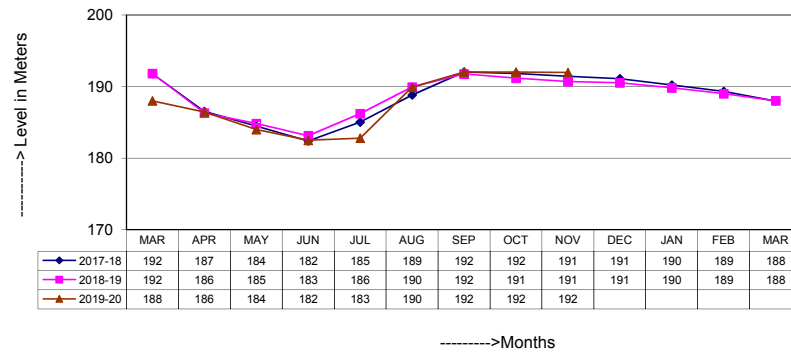


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

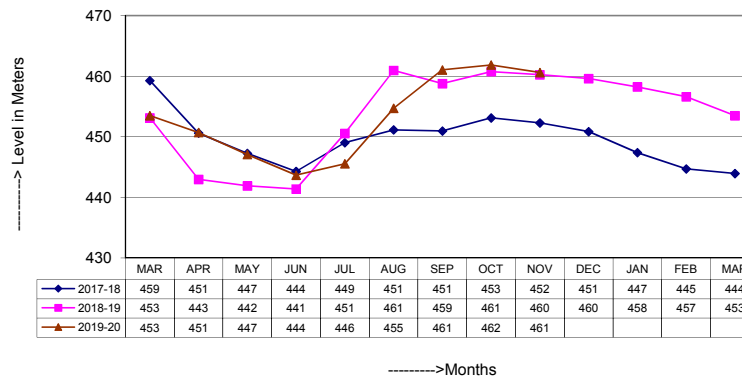
RENGALI RESERVOIR LEVEL



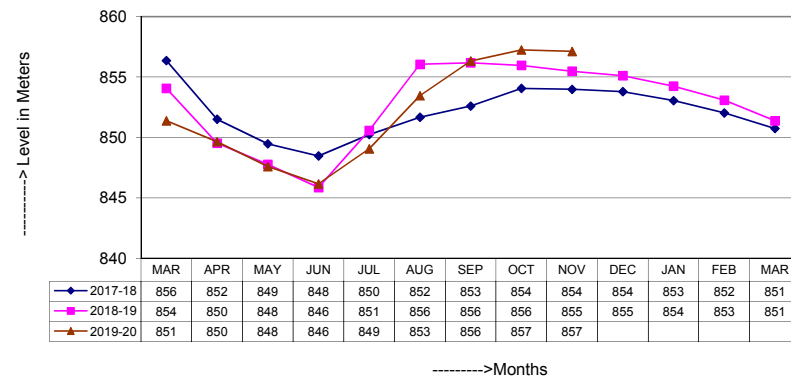
HIRAKUD RESERVOIR LEVEL



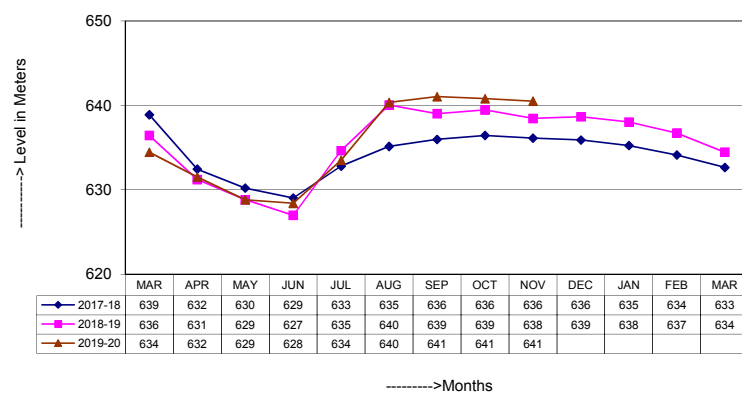
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

