



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

सितंबर- 2019

September-2019



14, गोल्फ क्लब रोड, टोलीगंज  
14, Golf Club Road, Tollygunge  
कोलकाता -700033  
Kolkata: 700 033

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## Highlights of Eastern Regional Power System for September-2019

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of Sep, 2019 was **23126 MW** which is 3.77% more than the Sep, 2018 (22286 MW). Individual **Peak Demand (MW)** of most of constituents **increased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of Sep, 2019 was **445.4 MU** excluding export, which is 1.11% more than the corresponding period of last year (440.53 MU).
- **The Average regional PLF of thermal units during the month is 59.26%**, which is 1.03% more than the corresponding period of the last year (**58.23%**).

CESC (Budge-Budge) registered the highest **PLF** of 96.66%, followed by Haldia 93.46% WBPDC (Santalidih TPS) 92.46% and NTPC (FSTPP III) 86.01% during the month of **Sep, 2019**.

- **Maximum Net generation** was **26139 MW** against total **Effective Capacity of 38728.30 MW** (including import from Bhutan). At the time of Regional peak (23126 MW on 20.09.2019 at 21.00 hrs.) the generation was 24982 MW and import from CPP was 793 MW, Net export was 2649 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 75.24% 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 49.62 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.21 Hz** and **49.70 Hz** respectively (**refer Annexure-I**).
- The **Maximum Voltage** recorded **424 KV** at Maithon 400 KV S/s whereas the minimum voltage recorded 386 KV at Jeerat 400 KV S/s of Power grid.
- **The Maximum Export from ER to outside region was 7655 MW (including Nepal and Bangladesh) on 26<sup>th</sup> Sep, 2019 at 23:00 hrs. Total net energy export during the month was 2828.12 MU (Inc.Transmission loss) MU which is corresponds to 18.23 % of ex-bus total generation 15512.51 MU of Eastern Region.**
- **The import from CPPs was 681.76 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	4972	0	2501.16
WR	0	3631	-1421.18
SR	2343	502	480.68
NER	1631	296	488.86
BANGLADESH	940		654.20
NEPAL (via-CTU)	239		124.41
<b>Total(Net)</b>	<b>6566</b>	<b>2005</b>	<b>2828.12</b>
NEPAL by Bihar(NBPDCL)			12.54

**SALIENT FEATURES**

( YEAR TO YEAR COMPARISON )

		Sep-19	SEP-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)	1336	886	0	0
TOTAL	(MW)	36532	33967	2565	7.55
2) Peak Demand ( MW )		23276	22815	461	2.02
3) Peak Demand Met ( MW )		23126	22286	840	3.77
4) Shortage ( MW )		150	529	-379	-71.70
5) % Shortage		0.64	2.32	-1.68	-72.27
6) Average Energy Requirement Per Day ( MU )		446.55	448.47	-1.92	-0.43
7) Average Energy Availability Per Day ( MU )		445.43	440.53	4.90	1.11
8) Average Shortage Per Day ( MU )		1.12	7.94	-6.82	-85.90
9) % Shortage		0.25	1.77	-1.52	-85.84
10) Net Generation for the Month					
Thermal ( MU )		11451.37	10490.32	961.05	9.16
Hydro ( MU )		4020.82	* 3596.11	424.71	11.81
RES (MU)		40.32	0.00	0.00	-
Total ( MU )		15512.51	14116.43	1396.08	9.89
11) Generation at the Time of Max. Regional Demand Met ( 20-09-19 at 21.00 Hrs. )					
Thermal ( MW )		17981	15135	2846	18.80
Hydro ( MW )		6944	* 5137	1807	35.18
RES( MW )		56	56	0	0.38072619
Total ( MW )		24981	20329	4652	22.89
12) Inter-Regional Energy Transfer					
Export ( MU )		4249.30	3483.76	765.54	21.97
Import ( MU )		1421.18	1991.88	-570.70	-28.65
Net Exp.(+)/Net Imp.(-) ( MU )		2828.12	1491.88	1336.24	89.57
13) Import From Captive(MU)		681.76	591.35	90.41	15.29
14) Peak Inter Regional Power Transfer					
Max Export ( MW ) on 27-09-19 at 23.00Hrs		7655	6681	974	14.58
Max Import ( MW ) on 09-09-19 at 04.00Hrs		3631	5715	-2084	-36.47
Max Net Export(+)/Import (-) ( MW )		6566	5310	1256	23.65
15) Maximum voltage recorded		424	MAITHON	400 kv	s/s
16) Minimum voltage recorded		386	JEERAT	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 SEP'2019

**A ) Net Average Energy Per Day**

System	Demand Met (MU/Day)	Requirement (MU/Day)	Shortage (MU/Day)	% Shortage
BSPHCL	99.60	100.22	0.62	0.62
JUVNL	24.72	24.79	0.08	0.31
DVC	59.91	59.91	0.00	0.00
ODISHA	94.52	94.52	0.00	0.00
WBSEDCL	131.12	131.58	0.46	0.35
CESC	34.09	34.09	0.00	0.00
SIKKIM	1.43	1.43	0.00	0.00
<b>REGION</b>	<b>445.4</b>	<b>446.55</b>	<b>1.12</b>	<b>0.25</b>

**B) Peak Demand in MW:**

System	Demand Met (MW)	Requirement (MW)	Shortage (MW)	% Shortage
BSPHCL	5789	5835	46	0.79
JUVNL	1328	1328	0	0.00
DVC	2868	2881	12	0.43
ODISHA	5292	5292	0	0.00
WBSEDCL	7117	7137	19	0.27
CESC	1876	1881	5	0.2
SIKKIM	93	93	0	0.00
<b>REGION</b>	<b>23126</b>	<b>23276</b>	<b>150</b>	<b>0.64</b>

➤ **DIVERSITY FACTOR**                      **1.05**

➤ **Regional Peak Demand Met on 20-9-2019 at 21.00 hrs. at 49.92 Hz.**

**CONSTITUENT-WISE PERFORMANCE DATA SEPTEMBER-19**

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	83.49	16.89	100.37	0.00	12.15	0.00	12.15	0.00	71.33	16.89	88.22	0.00	2899.72	2987.94	99.6	5789	5810
JUVNL	6.14	197.26	0.00	203.40	0.00	24.65	0.00	24.65	6.14	172.61	0.00	178.75	52.86	509.95	741.55	24.7	1328	1362
DVC	23.47	2631.21	0.00	2654.68	0.13	207.07	0.00	207.20	23.34	2424.14	0.00	2447.48	11.96	-662.15	1797.29	59.9	2868	3163
ODISHA(OPGC+OHPC+TTPS)	773.11	694.24	19.49	1486.83	6.79	71.63	0.00	78.42	766.31	622.61	19.49	1408.41	522.38	904.73	2835.52	94.5	5292	5435
WBPDC+WBSEDCL+DPL	179.93	1783.32	0.00	1963.24	0.00	176.30	0.00	176.30	179.93	1607.01	0.00	1786.94	94.56	2052.01	3933.51	131.1	7117	7459
CESC	0.00	561.58	0.00	561.58	0.00	43.39	0.00	43.39	0.00	518.19	0.00	518.19	0.00	504.42	1022.61	34.1	1876	1949
HEL	0.00	403.75	0.00	403.75	0.00	30.59	0.00	30.59	0.00	373.16	0.00	373.16	0.00	-373.16				
SIKKIM	0.00	0.00	3.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00	0.00	40.00	43.00	1.4	93	93
NTPC	0.00	4563.57	0.95	4564.52	0.00	338.38	0.00	338.38	0.00	4225.19	0.95	4226.14	0.00	-4226.14				
MPL	0.00	543.23	0.00	543.23	0.00	32.44	0.00	32.44	0.00	510.79	0.00	510.79	0.00	-510.79				
APNRL	0.00	258.08	0.00	258.08	0.00	22.39	0.00	22.39	0.00	235.69	0.00	235.69	0.00	-235.69				
GMR	0.00	191.65	0.00	191.65	0.00	18.05	0.00	18.05	0.00	173.60	0.00	173.60	0.00	-173.60				
JITPL	0.00	335.82	0.00	335.82	0.00	21.26	0.00	21.26	0.00	314.56	0.00	314.56	0.00	-314.56				
OPGC U#4(660 MW)	0.00	221.49	0.00	221.49	0.00	19.01	0.00	19.01	0.00	202.48	0.00	202.48	0.00	-202.48				
NHPC (Inc TLDP= 190.31 MU)	589.04	0.00	0.00	589.04	0.00	0.00	0.00	0.00	589.04	0.00	0.00	589.04	0.00	-589.04	0.00			
CHPC(Birpara Receipt)	265.29	0.00	0.00	265.29	0.00	0.00	0.00	0.00	265.29	0.00	0.00	265.29	0.00	-265.29	0.00			
KHPS	64.71	0.00	0.00	64.71	0.00	0.00	0.00	0.00	64.71	0.00	0.00	64.71	0.00	-64.71	0.00			
THPS	533.93	0.00	0.00	533.93	0.00	0.00	0.00	0.00	533.93	0.00	0.00	533.93	0.00	-533.93	0.00			
DAGACHU HPS	69.30	0.00	0.00	69.30	0.00	0.00	0.00	0.00	69.30	0.00	0.00	69.30	0.00	-69.30	0.00			
Mangdechhu HEP	339.36	0.00	0.00	339.36	0.00	0.00	0.00	0.00	339.36	0.00	0.00	339.36	0.00	-339.36	0.00			
CHUZACHEN HPS	81.38	0.00	0.00	81.38	0.00	0.00	0.00	0.00	81.38	0.00	0.00	81.38	0.00	-81.38	0.00			
JORHANG HPS	66.95	0.00	0.00	66.95	0.00	0.00	0.00	0.00	66.95	0.00	0.00	66.95	0.00	-66.95	0.00			
TEESTA-III HPS	881.02	0.00	0.00	881.02	0.00	0.00	0.00	0.00	881.02	0.00	0.00	881.02	0.00	-881.02	0.00			
DIKCHU HPS	77.46	0.00	0.00	77.46	0.00	0.00	0.00	0.00	77.46	0.00	0.00	77.46	0.00	-77.46	0.00			
TASHIDING HPS	76.65	0.00	0.00	76.65	0.00	0.00	0.00	0.00	76.65	0.00	0.00	76.65	0.00	-76.65	0.00			
Total Drawal by HVDC Sahsaram,Alipurduar														1.35	1.35			
<b>Total</b>	<b>4027.74</b>	<b>12468.67</b>	<b>40.32</b>	<b>16536.73</b>	<b>6.92</b>	<b>1017.30</b>	<b>0.00</b>	<b>1024.22</b>	<b>4020.82</b>	<b>11451.36</b>	<b>40.32</b>	<b>15512.50</b>	<b>681.75</b>	<b>-2831.50</b>	<b>13362.76</b>	<b>445.4</b>	<b>23126</b>	<b>24132</b>

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	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MU/Day)	(MU/Day)	(MU/Day)	(%)	(HZ)	(MU/Day)	(MU/Day)	(MU/Day)	(%)	(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	-	-	-	-	-
NOVEMBER	368.99	371.76	2.77	0.75	49.97	-	-	-	-	-
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	Requirement	Shortage	Shortage	Avg. Freq.	Demand Met	Requirement	Shortage	Shortage	Avg. Freq.
	(MW)	(MW)	(MW)	(%)	(HZ)	(MW)	(MW)	(MW)	(%)	(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	-	-	-	-	-
NOVEMBER	20322	20512	190	0.93	49.97	-	-	-	-	-
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	-	-	-	-	-

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF SEPTEMBER-2019

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	41.06	35.31	53.19	45.82
		Muzaffarpur Stg-I	220.00	220.00	42.43	36.02	553.29	483.25
		<b>Thermal Total</b>	<b>440.00</b>	<b>430.00</b>	<b>83.49</b>	<b>71.33</b>	<b>606.48</b>	<b>529.07</b>
	RES		327.90	327.90	16.89	16.89	143.07	143.07
		<b>Total BIHAR</b>	<b>767.90</b>	<b>757.90</b>	<b>100.37</b>	<b>88.22</b>	<b>749.54</b>	<b>672.14</b>
<b>JHARKHAND</b>								
TVNL	Thermal	TVNL	420.00	420.00	197.26	172.61	1217.88	1068.61
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	6.14	6.14	7.50	7.50
	RES		39.00	39.00	0.00	0.00	0.00	0.00
		<b>Total</b>	<b>169.00</b>	<b>169.00</b>	<b>6.14</b>	<b>6.14</b>	<b>7.50</b>	<b>7.50</b>
DVC	Thermal	Bokaro-B(3)	210.00	210.00	5.95	5.95	94.03	68.78
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00
		Chandrapura( U7 # 8)	500.00	500.00	194.34	173.27	1747.06	1577.19
		Durgapur(4)	210.00	210.00	58.51	50.04	212.86	178.91
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	567.96	507.11	4095.93	3672.60
		Mezia( U # 7,8)	1000.00	1000.00	356.42	335.47	2653.79	2504.66
		Bokaro-A(1)	500.00	500.00	116.90	100.14	1507.23	1423.97
		Durgapur STPS (U#1,2)	1000.00	1000.00	281.33	262.46	3167.83	2985.04
	Raghunathpur TPS (U#1,2)	1200.00	1200.00	431.07	404.25	2771.27	2600.69	
	Koderma STPS (U#1,2)	1000.00	1000.00	618.73	585.45	3475.03	3279.47	
		<b>Total Thermal</b>	<b>7100.00</b>	<b>7090.00</b>	<b>2631.21</b>	<b>2424.14</b>	<b>19725.02</b>	<b>18291.30</b>
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.25	6.22	15.30	15.11
		Panchet (U#1,2)	80.00	80.00	17.22	17.13	52.93	52.52
		Tilaya (U#1,2)	4.00	4.00	0.00	0.0	0.00	0.0
<b>Hydro Total</b>		<b>147.20</b>	<b>147.20</b>	<b>23.47</b>	<b>23.34</b>	<b>68.24</b>	<b>67.58</b>	
	<b>Total DVC</b>	<b>7247.20</b>	<b>7237.20</b>	<b>2654.68</b>	<b>2447.48</b>	<b>19793.26</b>	<b>18358.88</b>	
<b>WEST BENGAL</b>								
WBPDC	Thermal	Bandel TPS	380.00	335.00	33.81	27.66	525.88	461.80
		Santalidih TPS(U#5&6)	500.00	500.00	332.87	306.05	1978.24	1819.37
		Kolaghat TPS	1260.00	1260.00	263.16	229.03	2070.20	1832.00
		Bakreswar TPP	1050.00	1050.00	499.35	449.68	3310.27	3000.91
		Sagardighi TPP	1600.00	1600.00	497.56	452.88	3274.15	2972.75
		DPPS (110+300+250 *)	<b>660.00</b>	<b>660.00</b>	<b>156.58</b>	<b>141.72</b>	<b>1271.50</b>	<b>1139.13</b>
		<b>Thermal Total</b>	<b>5450.00</b>	<b>5405.00</b>	<b>1783.32</b>	<b>1607.01</b>	<b>12430.25</b>	<b>11225.96</b>
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	22.46	22.46	130.26	130.26
		Ramam (4x12.73)	51.00	51.00	36.60	36.60	150.85	150.85
		Teesta C.F. (3x3x7.3)	67.30	67.30	10.00	10.00	27.17	27.17
		Purulia PSS (4x225)	900.00	900.00	110.87	110.87	606.47	606.47
		<b>Total Hydro</b>	<b>1053.30</b>	<b>1053.30</b>	<b>179.93</b>	<b>179.93</b>	<b>914.75</b>	<b>914.75</b>
		RES	407.15	407.15	0.00	0.00	0.48	0.48
	∨	Chandrapura #1 is retired on 17.01.17						
	∨	Patratu # 1,2,3,5,8 are retired on 21.12.16						



PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF SEPTEMBER-2019

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 ( 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	39.63	36.15	249.69	225.85
		Budge-Budge (3x250)	750.00	750.00	521.95	482.04	3180.43	2935.32
		Total CESC	1125.00	1125.00	561.58	518.19	3430.13	3161.18
HEL	Thermal	HEL	600.00	600.00	403.75	373.16	2398.89	2214.36
		Total West Bengal	8635.45	8590.45	2928.57	2678.29	19174.50	17516.72
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	119.69	104.73	885.24	785.45
		Talcher-II	220.00	220.00	94.91	82.19	779.91	692.14
		Total Thermal	470.00	460.00	214.60	186.92	1665.14	1477.59
OPGC	Thermal	IB TPS	420.00	420.00	220.47	195.42	1356.90	1205.39
		IB TPS U#3(660 MW)	660.00	660.00	259.16	240.27	645.81	602.75
		IB TPS U#4(660 MW)	660.00	660.00	221.49	202.48	514.75	477.41
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	92.99	92.77	295.74	293.98
		Hirakud-II (Chiplima)	72.00	72.00	25.08	25.01	134.87	134.04
		Balimela (6x60+2x75)	510.00	510.00	109.45	108.96	884.65	878.87
		Rengali (5x50)	250.00	250.00	130.47	130.33	305.01	303.81
		Upper Kolab (4x80)	320.00	320.00	66.09	65.97	415.29	412.65
		Indravati HPS (4x150)	600.00	600.00	325.17	319.42	1288.04	1274.74
		Mckd.(Odisha drawal)	57.38	57.38	23.87	23.87	153.74	153.74
		Total Hydro	2084.88	2084.88	773.11	766.32	3477.33	3451.81
		RES	499.76	499.76	19.49	19.49	145.45	145.45
		Total Odisha	4794.64	4784.64	1486.83	1389.41	7290.63	6885.66
(**) SIKKIM	Hydro	RES	52.11	52.11	3.00	3.00	16.00	16.00
NTPC		MTPS Stg-II	390.00	390.00	190.1725	169.96	1114.15	996.54
		FSTPP# I&II ( 3x200+2x500)	1600.00	1600.00	873.33	804.79	5610.62	5165.80
		FSTPP (U# 6)	500.00	500.00	309.62	290.46	1058.68	987.53
		KhSTPP (4x210+3x500)	2340.00	2340.00	1431.12	1327.41	8126.22	7516.72
		TSTPP (2x500)	1000.00	1000.00	333.37	297.79	3032.60	2771.44
		BARH STPS II (2X660)	1320.00	1320.00	784.12	741.26	5041.23	4772.45
		BRBCL # 1,2,3(3X250 MW)	750	750	331.02	304.58	2215.39	2047.07
		NPGC			310.81	288.95	524.90	473.58
		Total NTPC	8560.00	8560.00	4563.57	4225.20	26723.79	24731.15
		NHPC	HYDRO	Rangit (3x20)	60.00	60.00	39.39	39.39
Teesta (3x170)	510.00			510.00	359.34	359.34	1980.53	1980.53
TLDP -( 4x33+4x40)	292.00			292.00	190.31	190.31	925.43	925.43
Total NHPC	862.00			862.00	589.04	589.04	3122.84	3122.84
MPL (U#1&2)	1050.00			1050.00	543.23	510.79	3124.57	2934.55
APNRL (U#1,2)	540.00			540.00	258.08	235.69	1553.00	1413.51
GMR (2x350)	700.00			700.00	191.65	173.60	1895.46	1756.28
JITPL (2X600)	1200.00			1200.00	335.82	314.56	2442.74	2280.73
CHUZACHEN** (2x55)	110.00			110.00	81.38	81.38	361.57	361.57
JORETHANG (2x48)	96.00			96.00	66.95	66.95	275.34	275.34
TEESTA URJA St III (6x200)	1200.00			1200.00	881.02	881.02	4534.68	4534.68
Tashilding (2x48.5)	97.00			97.00	77.46	77.46	303.05	303.05
DICKCHU (2x48)	96.00			96.00	76.65	76.65	372.65	372.65
TALCHER SOLAR	10.00			10.00	0.95	0.95	6.68	6.68
Total Thermal (E.R)	29395.00			29320.00	12468.67	11451.37	79730.80	73369.80
EASTERN REGIONAL		Total Hydro (E.R)	5876.38	5876.38	2755.15	2748.23	13437.94	13411.76
		Total RES	1335.92	1335.92	40.32	40.32	311.68	311.68
		<b>TOTAL (E.R)</b>	<b>36607.30</b>	<b>36532.30</b>	<b>15264.14</b>	<b>14239.92</b>	<b>93480.41</b>	<b>87093.24</b>
BHUTAN	Hydro	CHPC(4x90)	360.00	270.00	265.29	265.29	1208.17	1208.17
		Kurichu (4x15)	60.00	60.00	64.71	64.71	271.69	271.69
		TALA (6x170)	1020.00	1020.00	533.93	533.93	2090.35	2090.35
		DAGACHU (2x63)	126.00	126.00	69.30	69.30	254.11	254.11
		MANGDECHU(4x180 )	720.00	720.00	339.36	339.36	883.67	883.67
		<b>Grand Total</b>	<b>38893.30</b>	<b>38728.30</b>	<b>16536.73</b>	<b>15512.51</b>	<b>98188.41</b>	<b>91801.24</b>

PLANT LOAD FACTOR ( PLF ) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF SEPTEMBER' 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	41.06	27.15	53.19	5.77	
		Muzaffarpur Stg-I	220.00	220.00	42.43	26.79	553.29	57.26	
		<b>Thermal Total</b>	<b>440.00</b>	<b>430.00</b>	<b>83.49</b>	<b>26.97</b>	<b>606.48</b>	<b>32.11</b>	
	RES		327.90	327.90	16.89		143.07		
	<b>Total BIHAR</b>		<b>767.90</b>	<b>757.90</b>	<b>100.37</b>		<b>749.54</b>		
<b>JHARKHAND</b>									
TVNL	Thermal	TVNL	420.00	420.00	197.26	65.23	1217.88	66.02	
JSEB	Hydro	Subarnrekha (U#1,2)	130.00	130.00	6.14		7.50		
		RES		39.00	39.00	0.00		0.00	
	<b>Total</b>		<b>169.00</b>	<b>169.00</b>	<b>6.14</b>		<b>7.50</b>		
DVC	Thermal	Bokaro-B(3)	210.00	210.00	5.95	3.94	94.03	10.19	
		Chandrapura (3)	140.00	130.00	0.00	0.00	0.00	0.00	
		Chandrapura( U7 # 8)	500.00	500.00	194.34	53.98	1747.06	79.56	
		Durgapur(4)	210.00	210.00	58.51	38.70	212.86	23.08	
		Mezia(1,2,3,4,5,6)	1340.00	1340.00	567.96	58.87	4095.93	69.60	
		Mezia( U # 7,8)	1000.00	1000.00	356.42	49.50	2653.79	60.42	
		Bokaro-A(1)	500.00	500.00	116.90	32.47	1507.23	68.64	
		Durgapur STPS (U#1,2)	1000.00	1000.00	281.33	39.07	3167.83	72.13	
		Raghunathpur TPS (U#1,2)	1200.00	1200.00	431.07	49.89	2771.27	52.58	
	Koderma STPS (U#1,2)	1000.00	1000.00	618.73	85.93	3475.03	79.12		
	<b>Total Thermal</b>		<b>7100.00</b>	<b>7090.00</b>	<b>2631.21</b>	<b>51.54</b>	<b>19725.02</b>	<b>63.34</b>	
	Hydro	Maithon (U#1,2,3)	63.20	63.20	6.25		15.30		
		Panchet (U#1,2)	80.00	80.00	17.22		52.93		
Tilaya (U#1,2)		4.00	4.00	0.00		0.00			
<b>Hydro Total</b>			<b>147.20</b>	<b>147.20</b>	<b>23.47</b>		<b>68.24</b>		
<b>Total DVC</b>		<b>7247.20</b>	<b>7237.20</b>	<b>2654.68</b>		<b>19793.26</b>			
<b>WEST BENGAL</b>									
WBPDC	Thermal	Bandel TPS	380.00	335.00	33.81	14.02	525.88	35.74	
		Santalalih TPS(U#5&6)	500.00	500.00	332.87	92.46	1978.24	90.08	
		Kolaghat TPS	1260.00	1260.00	263.16	29.01	2070.20	37.41	
		Bakreswar TPP	1050.00	1050.00	499.35	66.05	3310.27	71.78	
		Sagardighi TPP	1600.00	1600.00	497.56	43.19	3274.15	46.59	
		DPPS (110+300+250 *)	<b>660.00</b>	<b>660.00</b>	<b>156.58</b>	<b>32.95</b>	<b>1271.50</b>	<b>43.86</b>	
		<b>Thermal Total</b>		<b>5450.00</b>	<b>5405.00</b>	<b>1783.32</b>	<b>45.82</b>	<b>12430.25</b>	<b>52.36</b>
WBSEDCL	Hydro	Jaldhaka (3x9+2x4)	35.00	35.00	22.46		130.26		
		Ramam (4x12.73)	51.00	51.00	36.60		150.85		
		Teesta C.F. (3x3x7.3)	67.30	67.30	10.00		27.17		
		Purulia PSS (4x225)	900.00	900.00	110.87		606.47		
		<b>Total Hydro</b>		<b>1053.30</b>	<b>1053.30</b>	<b>179.93</b>		<b>914.75</b>	
		RES		407.15	407.15	0.00		0.48	

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	39.63	40.77	249.69	42.11
		Budge-Budge (3x250)	750.00	750.00	521.95	96.66	3180.43	96.55
		<b>Total CESC</b>	<b>1125.00</b>	<b>1125.00</b>	<b>561.58</b>	<b>69.33</b>	<b>3430.13</b>	<b>69.42</b>
HEL	Thermal		<b>600.00</b>	<b>600.00</b>	<b>403.75</b>	<b>93.46</b>	<b>2398.89</b>	<b>91.03</b>
		<b>Total West Bengal</b>	<b>8635.45</b>	<b>8590.45</b>	<b>2928.57</b>		<b>19174.50</b>	
ODISHA (NTPC)	Thermal	Talcher-I	250.00	240.00	119.69	69.27	885.24	83.98
		Talcher-II	220.00	220.00	94.91	59.92	779.91	80.72
		<b>Total Thermal</b>	<b>470.00</b>	<b>460.00</b>	<b>214.60</b>	<b>64.80</b>	<b>1665.14</b>	<b>82.42</b>
OPGC	Thermal	IB TPS	<b>420.00</b>	<b>420.00</b>	<b>220.47</b>	<b>72.91</b>	<b>1356.90</b>	<b>73.56</b>
		IB TPS U#3(660 MW)	<b>660.00</b>	<b>660.00</b>	<b>259.16</b>	<b>54.54</b>	<b>645.81</b>	<b>30.60</b>
		IB TPS U#4(660 MW)			<b>221.49</b>	<b>46.61</b>	<b>514.75</b>	<b>37.77</b>
OHPC	Hydro	Hirakud-I (Burla)	275.50	275.50	92.99		295.74	
		Hirakud-II (Chiplima)	72.00	72.00	25.08		134.87	
		Balimela (6x60+2x75)	510.00	510.00	109.45		884.65	
		Rengali (5x50)	250.00	250.00	130.47		305.01	
		Upper Kolab (4x80)	320.00	320.00	66.09		415.29	
		Indravati HPS (4x150)	600.00	600.00	325.17		1288.04	
		Mckd.(Odisha drawal)	57.38	57.38	23.87		153.74	
		<b>Total Hydro</b>	<b>2084.88</b>	<b>2084.88</b>	<b>773.11</b>		<b>3477.33</b>	
		RES	499.76	499.76	19.49		145.45	
		<b>Total Odisha</b>	<b>4794.64</b>	<b>4784.64</b>	<b>1486.83</b>		<b>7290.63</b>	
(**) SIKKIM	Hydro	RES	52.11	52.11	3.00		16.00	
NTPC		MTPS Stg-II	390	390	190.1725	67.73	1114.15	65.05
		FSTPP# I&II ( 3x200+2x500)	1600.00	1600.00	873.33	75.81	5610.62	79.84
		FSTPP (U# 6)	500.00	500.00	309.62	86.01	1058.68	48.21
		KhSTPP (4x210+3x500)	2340.00	2340.00	1431.12	84.94	8126.22	79.07
		TSTPP (2x500)	1000.00	1000.00	333.37	46.30	3032.60	69.05
		BARH STPS II (2X660)	1320.00	1320.00	784.12	82.50	5041.23	86.96
		BRBCL # 1,2,3(3X250 MW)	750.00	750.00	331.02	61.30	2215.39	67.26
		NPGC			310.81	77.29	524.90	77.29
		<b>Total NTPC</b>	<b>8560.00</b>	<b>8560.00</b>	<b>4563.57</b>	<b>74.93</b>	<b>26723.79</b>	<b>75.53</b>
		NHPC	HYDRO	Rangit (3x20)	60.00	60.00	39.39	
Teesta (3x170)	510.00			510.00	359.34		1980.53	
TLDP -( 4x33+4x40)	292.00			292.00	190.31		925.43	
<b>Total NHPC</b>	<b>862.00</b>			<b>862.00</b>	<b>589.04</b>		<b>3122.84</b>	
	Thermal	MPL (U#1&2)	1050.00	1050.00	543.23	71.86	3124.57	67.75
		APNRL (U#1,2)	540.00	540.00	258.08	66.38	1553.00	65.48
		GMR (2x350)	700.00	700.00	191.65	38.02	1895.46	61.65
		JITPL (2X600)	1200.00	1200.00	335.82	38.87	2442.74	46.35
		CHUZACHEN** (2x55)	110.00	110.00	81.38		361.57	
		JORETHANG (2x48)	96.00	96.00	66.95		275.34	
		TEESTA URJA St III (6x200)	1200.00	1200.00	881.02		4534.68	
		Tashilding (2x48.5)	97.00	97.00	77.46		303.05	
		DICKCHU (2x48)	96.00	96.00	76.65		372.65	
		TALCHER SOLAR	10.00	10.00	0.95		6.68	
<b>Total Thermal (E.R)</b>	<b>29395.00</b>	<b>29320.00</b>	<b>12468.67</b>	<b>59.26</b>	<b>79730.80</b>	<b>64.49</b>		
EASTERN REGIONAL		<b>Total Hydro (E.R)</b>	<b>5876.38</b>	<b>5876.38</b>	<b>2755.15</b>		<b>13437.94</b>	
		<b>Total RES</b>	<b>1335.92</b>	<b>1335.92</b>	<b>40.32</b>		<b>311.68</b>	
		<b>TOTAL (E.R)</b>	<b>36607.30</b>	<b>36532.30</b>	<b>15264.14</b>		<b>93480.41</b>	
BHUTAN	Hydro	CHPC(4x90)	<b>360.00</b>	270.00	265.29		1208.17	
		Kurichu (4x15)	<b>60.00</b>	60.00	64.71		271.69	
		TALA (6x170)	<b>1020.00</b>	1020.00	533.93		2090.35	
		DAGACHU (2x63)	<b>126.00</b>	126.00	69.30		254.11	
		MANGDECHU(4x180 )	<b>720.00</b>	<b>720.00</b>	<b>339.36</b>		<b>883.67</b>	
		<b>Grand Total</b>	<b>38893.30</b>	<b>38728.30</b>	<b>16536.73</b>		<b>98188.41</b>	

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK  
DURING THE MONTH OF SEP'2019 (20-9-2019)

Date **20-Sep-19**  
Time **21.00** Hrs.  
Frequency **49.92** Hz.

(All Fig. in MW )

System/State	Installed Capacity	Effective Capacity	Hydro	Thermal	RES	Total
BSPHCL	768	758	0	0	0	0
JUVNL	589	589	42	259	0	301
DVC	7247	7237	61	3461	0	3522
ODISHA	4795	4785	1451	1394	56	2901
WBSEDCL	6250	6205	936	2812	0	3748
TLDP	292	292	290	0	0	290
HEL HALDIA	600	600	0	546	0	546
CESC	1125	1125	0	834	0	834
DPL	660	660	0	0	0	0
SIKKIM	52	52	0	0	0	0
NTPC	8560	8560	0	6536	0	6536
NHPC	570	570	562	0	0	562
CHUKHA	360	270	369	0	0	369
KURICHU	60	60	85	0	0	85
TALA	1020	1020	742	0	0	742
MPL	1050	1050	0	985	0	985
OPGC (660 MW)	0	0	0	375	0	375
APNRL	540	540	0	350	0	350
Kamalganga (GMR)	700	700	0	-5	0	-5
JITPL	1200	1200	0	435	0	435
Chuzachen	110	110	119	0	0	119
Jorethang	96	96	100	0	0	100
TEESTA URJA St III	1200	1200	1308	0	0	1308
Tashilding	97	97	110	0	0	110
DICKCHU	96	96	114	0	0	114
<u>Daghachu</u>	126	126	80	0	0	80
<u>Solar</u>	10	10	0	0	0	0
<u>Mangdechu</u>	720	720	575	0	0	575
<u>Total</u>	38893	38728	6944	17981	56	24982
Import From Captive:						793
Export To:						
NER						678
SR						121
WR						-2289
NR						3037.12
Bangladesh						921.45
Nepal						179.20
<b>Total</b>						<b>2649</b>
➤ I Net Peak Demand Met ( MW ) :						<b>23126</b>

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

**Hourly Load Generation Data OF ER On Regional Peak Day During The Month of SEP'2019 (20-9-2019)**

( 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	4055	17801	21856	783	1774	2639	21774	25	10	21809
2	3845	17703	21548	767	1889	2905	21299	-4	1	21300
3	3780	17615	21395	773	1889	3051	21006	7	1	21015
4	3889	17252	21141	772	1877	2921	20869	-7	2	20872
5	3791	17176	20967	775	1862	2941	20662	22	2	20686
6	3853	17313	21165	779	1818	3658	20104	35	12	20151
7	3709	17645	21354	811	1784	4693	19256	47	31	19334
8	3784	17657	21440	764	1801	4979	19026	2	39	19067
9	3851	17464	21314	784	1741	4785	19055	-13	39	19080
10	3777	17516	21294	783	1640	4373	19344	3	195	19542
11	3784	17506	21290	801	1636	4248	19479	2	19	19500
12	3722	17376	21097	785	1633	3651	19864	-12	7	19871
13	3849	17139	20988	781	1634	3502	19901	33	12	19946
14	3836	16635	20471	786	1569	3363	19463	0	3	19466
15	4093	16945	21037	792	1556	3905	19480	7	5	19493
16	4040	17233	21272	790	1660	4473	19251	19	5	19274
17	3935	17112	21047	751	1705	4524	18979	15	5	18999
18	3822	17519	21340	754	1742	4547	19288	10	5	19303
19	4961	17871	22832	784	1750	2889	22477	96	106	22680
20	4999	17990	22989	778	1852	2771	22847	30	103	22980
21	5150	17981	23131	793	1850	2649	23126	63	87	23276
22	5162	18012	23173	782	1796	2893	22858	36	108	23002
23	5165	17810	22975	802	1864	3030	22612	22	103	22736
24	4854	17913	22768	776	1916	3070	22389	45	88	22522

**Hourly Load Generation Data of ER On Regional Lean Day During The Month of SEP'2019 (28-9-2019)**

( 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	3579	13595	17174	623	1837	3831	15803	-15	1	15805
2	3443	13200	16643	627	1915	3792	15393	-13	1	15394
3	3272	13013	16286	607	1934	3850	14977	-22	4	14981
4	3325	12978	16303	599	1979	4087	14795	-6	11	14799
5	3374	12978	16352	595	1991	4328	14611	1	12	14624
6	3371	13170	16541	626	1990	4677	14480	16	11	14508
7	3482	13280	16763	593	1982	5195	14143	-16	11	14153
8	3672	13136	16808	486	1998	5084	14208	-12	18	14214
9	3732	13217	16949	472	2005	5100	14326	-1	28	14353
10	3547	13264	16811	444	1990	5211	14033	-14	19	14039
11	3356	13433	16789	460	1976	5091	14134	-19	16	14149
12	3276	13501	16778	480	1883	5083	14058	-17	4	14062
13	3147	13290	16437	456	1726	4784	13835	-17	2	13838
14	3042	13263	16305	494	1735	4789	13745	-20	2	13747
15	3233	13174	16407	500	1733	5170	13470	31	1	13501
16	3319	13481	16800	434	1737	5147	13824	1	1	13826
17	3351	13952	17304	495	1664	5163	14299	-5	3	14302
18	3754	14669	18423	545	1646	4655	15960	-10	4	15964
19	4532	15093	19624	637	1634	4265	17630	5	3	17638
20	4318	15149	19467	660	1654	3972	17810	-36	0	17810
21	4254	15035	19289	663	1742	4385	17310	-35	0	17310
22	3744	14755	18499	676	1760	4607	16327	-10	1	16328
23	3429	14052	17480	653	1770	4272	15631	-25	0	15631
24	3419	13494	16913	653	1814	4277	15102	-22	0	15102

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

FOR THE MONTH OF SEP'2019

**POWER CUT / RESTRICTIONS**

<b>BSPHCL</b>	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 18.59 MU
<b>JUVNL</b>	NO NOTIFIED CUTS/RESTRICTIONS However there was loadshedding of 2.29 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 13.82 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

Sep-19

D A T E	H O U R S										INST. FREQ.				15 MIN. INTEGRATED			
	00	05	10	17	22	00	<49.9	49.9	>50.05	49.9	MAX	HRS.	MIN	HRS.	MAX	HRS.	MIN	HRS.
	TO	TO	TO	TO	TO	TO		TO	TO		HZ		HZ		HZ		HZ	
01-Sep	49.99	50.03	50.03	50.01	50.02	50.02	0.40	71.90	27.70	71.90	50.19	06:02:30	49.83	01:18:20	50.13	0:00	49.93	0:00
02-Sep	50.01	50.01	49.99	50.03	49.99	50.01	4.30	70.30	25.30	70.30	50.15	16:03:30	49.78	14:10:50	50.08	0:00	49.83	0:00
03-Sep	49.97	50.02	49.99	49.98	50.01	49.99	6.70	76.80	16.60	76.80	50.15	06:04:00	49.75	19:17:20	50.08	0:00	49.87	0:00
04-Sep	49.98	50.01	50.00	49.99	50.00	50.00	3.10	80.50	16.40	80.50	50.16	10:02:00	49.79	18:51:10	50.08	0:00	49.87	0:00
05-Sep	50.00	50.02	50.00	50.00	49.99	50.00	1.90	81.10	17.00	81.10	50.27	08:04:40	49.84	14:24:00	50.17	0:00	49.91	0:00
06-Sep	49.99	50.00	50.01	49.98	50.00	50.00	1.60	84.70	13.70	84.70	50.16	12:01:30	49.79	20:38:00	50.08	0:00	49.88	0:00
07-Sep	50.01	49.99	49.99	50.00	50.02	50.00	2.10	82.20	15.70	82.20	50.13	19:36:30	49.82	18:49:50	50.06	0:00	49.91	0:00
08-Sep	50.02	50.02	50.04	49.97	49.97	50.01	4.10	72.40	23.50	72.40	50.14	12:34:10	49.80	18:13:00	50.09	0:00	49.90	0:00
09-Sep	49.99	49.95	49.96	49.92	49.98	49.96	15.30	77.90	6.90	77.90	50.12	06:01:30	49.62	18:50:20	50.06	0:00	49.76	0:00
10-Sep	50.00	49.98	49.99	49.97	49.97	49.99	8.00	77.90	14.10	77.90	50.13	17:03:00	49.76	22:07:40	50.07	0:00	49.87	0:00
11-Sep	49.98	50.00	49.98	50.00	50.00	49.99	9.00	78.20	12.80	78.20	50.16	13:02:20	49.76	14:56:00	50.08	0:00	49.83	0:00
12-Sep	49.96	49.97	50.01	50.00	50.01	49.99	5.40	80.80	13.80	80.80	50.16	16:05:00	49.79	00:13:20	50.09	0:00	49.85	0:00
13-Sep	50.01	49.98	50.00	49.98	50.01	50.00	4.20	76.10	19.70	76.10	50.16	11:03:00	49.79	17:50:20	50.09	0:00	49.88	0:00
14-Sep	50.00	50.00	50.02	49.99	50.00	50.00	1.60	79.50	18.90	79.50	50.16	08:02:50	49.82	21:07:10	50.11	0:00	49.87	0:00
15-Sep	49.98	50.02	50.02	49.97	50.01	50.00	3.60	78.80	17.60	78.80	50.18	16:03:20	49.75	18:13:10	50.13	0:00	49.90	0:00
16-Sep	50.01	49.99	49.99	49.95	49.99	49.99	6.90	80.60	12.50	80.60	50.13	13:03:50	49.81	18:55:20	50.08	0:00	49.81	0:00
17-Sep	50.01	50.01	50.00	50.00	50.02	50.01	2.60	75.70	21.70	75.70	50.14	22:02:00	49.62	17:49:20	50.08	0:00	49.88	0:00
18-Sep	50.02	49.95	49.99	49.96	49.97	49.98	8.60	76.70	14.70	76.70	50.14	10:01:30	49.67	18:44:10	50.07	0:00	49.70	0:00
19-Sep	50.00	49.99	50.01	49.98	50.00	50.00	3.30	81.70	15.00	81.70	50.17	13:02:20	49.76	18:46:20	50.07	0:00	49.80	0:00
20-Sep	49.99	49.98	49.99	49.94	49.96	49.97	9.30	82.30	8.40	82.30	50.15	16:01:50	49.64	18:53:20	50.05	0:00	49.80	0:00
21-Sep	49.95	49.98	50.01	49.97	50.00	49.98	6.90	78.80	14.30	78.80	50.16	15:01:00	49.79	18:42:40	50.09	0:00	49.72	0:00
22-Sep	49.98	50.03	50.02	49.98	50.02	50.01	2.70	74.70	22.60	74.70	50.17	08:03:40	49.75	18:32:20	50.10	0:00	49.87	0:00
23-Sep	50.00	49.97	49.98	50.01	50.02	49.99	4.30	78.50	17.20	78.50	50.15	22:00:50	49.75	06:13:40	50.10	0:00	49.83	0:00
24-Sep	50.01	49.99	50.01	50.03	50.01	50.01	1.10	75.50	23.40	75.50	50.16	13:01:50	49.85	00:03:20	50.10	0:00	49.92	0:00
25-Sep	50.01	50.00	50.02	50.04	50.04	50.02	1.70	70.50	27.70	70.50	50.19	22:02:20	49.83	15:43:00	50.14	0:00	49.91	0:00
26-Sep	50.03	50.03	50.04	49.98	50.02	50.02	2.90	66.20	30.90	66.20	50.22	10:03:50	49.72	18:43:20	50.16	0:00	49.79	0:00
27-Sep	50.03	50.01	50.02	50.02	50.02	50.02	1.00	69.10	29.90	69.10	50.18	13:51:40	49.83	18:40:30	50.13	0:00	49.89	0:00
28-Sep	50.02	50.01	50.01	50.03	50.04	50.02	1.50	65.20	33.30	65.20	50.21	13:01:30	49.81	14:53:50	50.11	0:00	49.88	0:00
29-Sep	50.05	50.05	50.05	49.99	50.03	50.04	3.30	52.30	44.40	52.30	50.25	13:41:20	49.75	17:54:30	50.21	0:00	49.84	0:00
30-Sep	50.05	49.97	49.99	49.97	50.04	50.00	9.90	60.30	29.80	60.30	50.19	13:01:40	49.64	18:40:40	50.10	0:00	49.74	0:00
MAX	50.05	50.05	50.05	50.04	50.04	50.04	15.30	84.70	44.40	84.70	50.27		49.85		50.21		49.93	
MIN	49.95	49.95	49.96	49.92	49.96	49.96	0.40	52.30	6.90	52.30	50.12		49.62		50.05		49.70	
AVG	50.00	50.00	50.01	49.99	50.01	50.00	4.58	75.24	20.18	75.24	50.17		49.77		50.10		49.85	

**SUMMARY:**Avg. Frequency : **50.0 Hz.****Instantaneous Frequency :**

Maximum Frequency : 50.27 Hz at 08:04 Hrs.

Minimum Frequency : 49.62 Hz at 18:50 Hrs.

**15 Minutes Integrated Frequency :**

Maximum Frequency : 50.21 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.70 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	4.58	75.24	20.18

## VOLTAGE ANALYSIS

## MAXIMUM &amp; MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF SEP'2019

( All figs. in kV)

PGCIL	BINAGURI		MAITHON		JEERAT		BIHARSHARIFF	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	421	401	424	405	422	386	423	399

PGCIL	MUZAFFARPUR		JAMSHEDPUR		ROURKELA		JEYPORE	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	417	389	415	397	413	406	424	409

## 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
<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.



A.

## WATER LEVEL OF MAJOR HYDEL RESERVOIRS OF THE REGION IN

Sep-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	
			(30-09-19)	(30-09-18)		
Hirakud	192	180	192.02	191.76	189.87	01.09.19
Balimela	462	439	461.04	458.78	454.67	01.09.19
Rengali	123	109	123.35	122.60	122.08	01.09.19
Upperkolab	858	844	856.33	856.18	853.43	01.09.19
Indravati	642	625	641.03	639.01	640.38	01.09.19
Subernrekha	590	580	588.75	586.71	587.62	01.09.19

B.

## CPP/IPP IMPORT by Eastern Region Constituents during Sep-19

(All figs. are in MU)

System	Tata Power	Cresent Power	JSPL, Angul	Sterlite	Jindal	NALCO	TISCO	Others	Total
JUVNL	0	0	0	0	0	0	0	0	52.86
West Bengal	57.15	11.50	0	0	0	0	0	25.91	94.55
ODISHA	0	0	35.82	148.33	0.00	60.97	0	277.27	522.39
DVC	0	0	0	0	0	0	11.96	0	11.96
<b>TOTAL</b>	<b>57.15</b>	<b>11.50</b>	<b>35.82</b>	<b>148.33</b>	<b>0.00</b>	<b>60.97</b>	<b>11.96</b>	<b>303.18</b>	<b>681.76</b>

C.

## Distribution of Schedule Supply among Key Customers by IPPs during

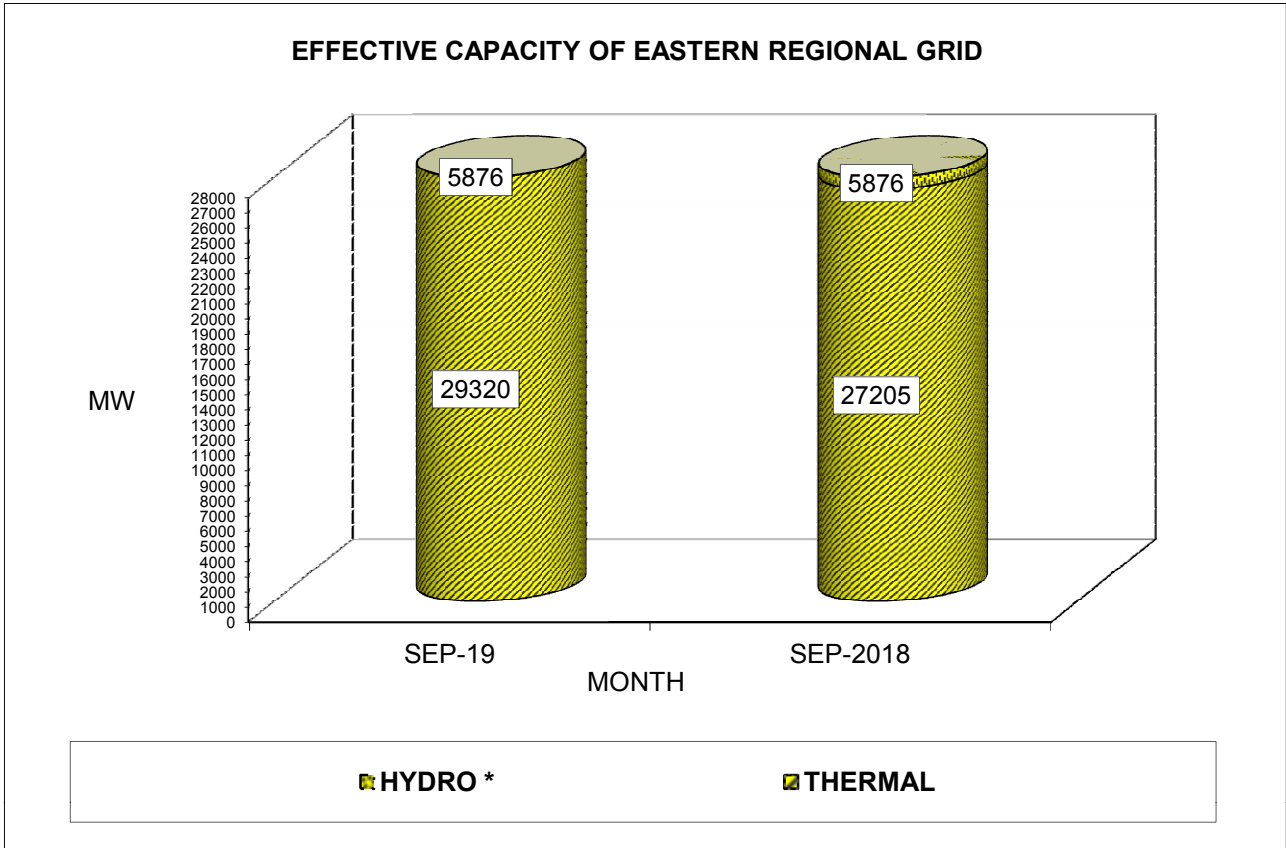
Sep-19

(All figs. are in MU)

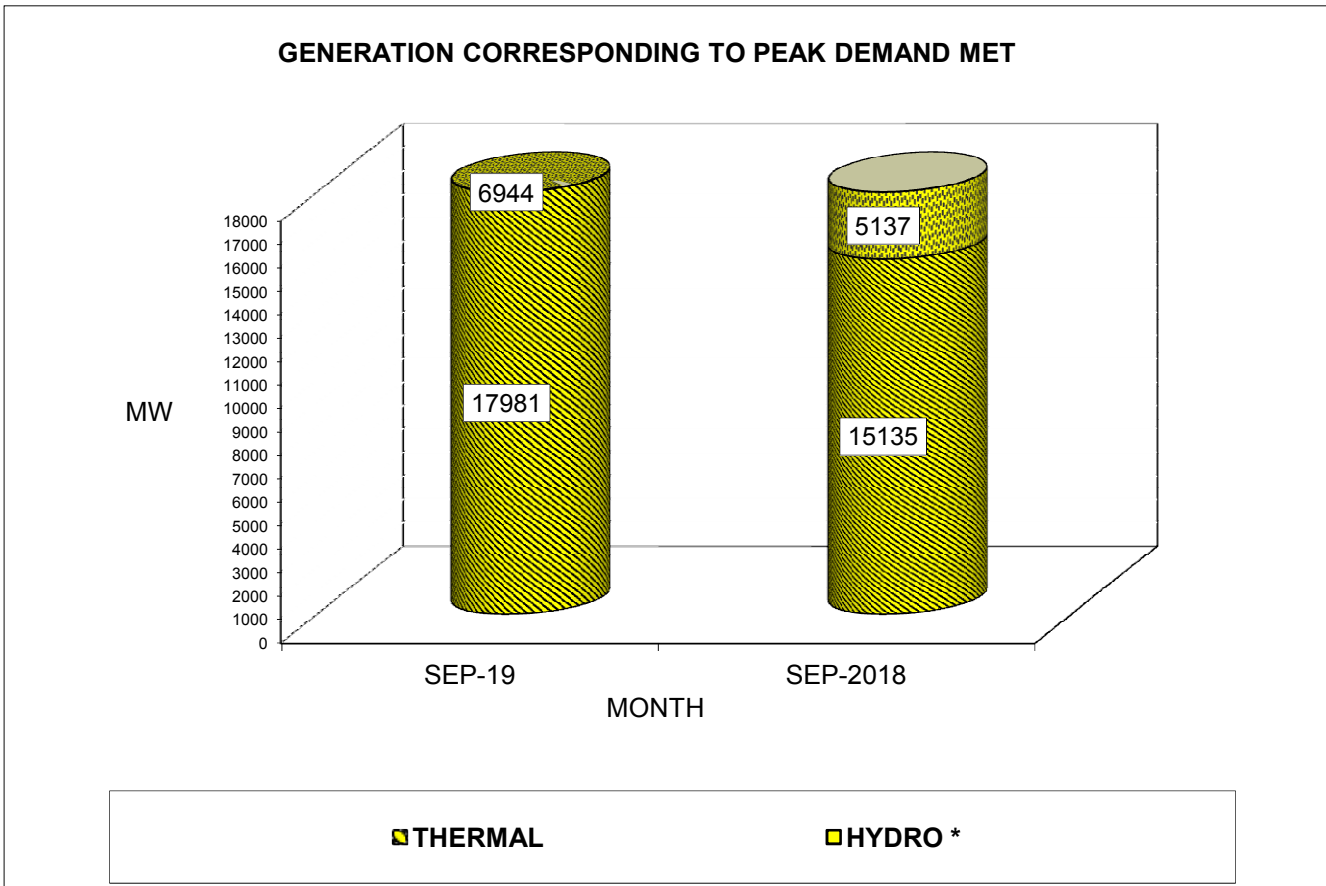
IPP	TPDDL	WBSEDCL/ WBPDCCL	DVC	Sale at IEX/NPCL	ODISHA	JSEB	CTU/Others	Total (Excl. Tr. Loss)
MPL	160.44	89.15	98.10	0.00	0	0	160.16	507.85
Sterlite	0	0	0	0	0.00	0	0.00	0.00
APNRL	0	44.51	0	6.57	0.00	128.67	68.01	247.76
<b>Total</b>	<b>160.44</b>	<b>133.66</b>	<b>98.10</b>	<b>6.57</b>	<b>0.00</b>	<b>128.67</b>	<b>228.17</b>	<b>755.61</b>

<b>Task/ Works performed by ERPC during SEPTEMBER, 2019</b>		
<b>Sl. No.</b>	<b>Period</b>	<b>Date of Report</b>
1	DSM Account 050819-110819(Revision-I)	02.09.2019
2	RTA August-2019	04.09.2019
3	REA August 2019	04.09.2019
4	DC-MPL-August 2019	04.09.2019
5	Nabinagar STPP share allocation w.e.f 06.09.2019	04.09.2019
6	Bilateral REA for August -2019	05.09.2019
7	AS-3 format of NPGC from 06.09.19-15.09.19	05.09.2019
8	DC- Teesta III – August 2019	05.09.2019
9	Progress Report-July 2019	05.09.2019
10	DSM Account 010419-070419(Revision-III)	09.09.2019
11	DSM Account 080419-140419(Revision-II)	09.09.2019
12	DSM Account 150419-210419(Revision-I)	09.09.2019
13	REA Bhutan August-19	09.09.2019
14	DSM, RRAS & FRAS Account 120819-180819	11.09.2019
15	SCED Account 120819-180819	11.09.2019
16	VAR Account 120819-180819	11.09.2019
17	AS-3 Format 16.09.19-15.10.19	12.09.2019
18	RTDA for the month of January-19, February-19 & March-19 & Adjustment of NPGC_Infirm	12.09.2019
19	DSM, RRAS, FRAS & AGC Account 190819-250819	17.09.2019
20	SCED Account 190819-250819	17.09.2019
21	VAR Account 190819-250819	17.09.2019
22	FARAKKA-III Re-allocation of share w.e.f 27.09.2019	26.09.2019
23.	Provisional Monthly Power Supply position for the Month of August-19	06.09.2019
24.	Revised Monthly Power Supply position for the Month of August-19	30.09.2019
25.	Monthly Progress Report For the Month of August-19	30.09.2019

<b>List of Meetings / Workshops held during SEPTEMBER, 2019</b>			
<b>Sl. No.</b>	<b>Description</b>	<b>Date</b>	<b>Venue</b>
1	Simulator Training	02.09.2019 to 06.09.2019	BkTPS, WBPDC
2	Special Meeting on Connection of U#4 (660 MW) of OPGC to STU N/W of Odisha	05.09.2019	ERPC, Kolkata
3	Celebration of Hindi week	13.09.2019 to 19.09.2019	ERPC, Kolkata
4	OCC Shutdown Meeting	16.09.2019	ERLDC, Kolkata
5	Meeting on Coal Issues	18.09.2019	ERPC, Kolkata
6	161 <sup>st</sup> OCC Meeting	20.09.2019	Barh STPS, NTPC
7	Special Meeting on Mangdechhu HEP	25.09.2019	ERPC, Kolkata
8	Meeting with CPWD	26.09.2019	ERPC, Kolkata
9	83 <sup>rd</sup> PCC Meeting	27.09.2019	ERPC, Kolkata
10	Hindi Workshop	30.09.2019	ERPC, Kolkata

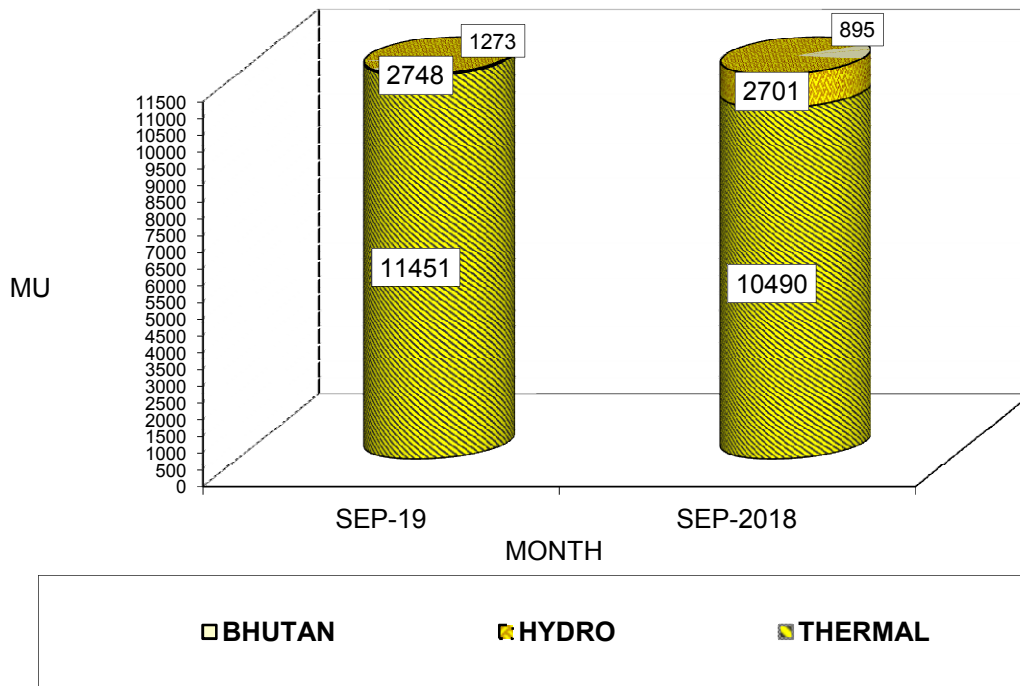


\*Excludes 1350 MW contribution from HEPs of Bhutan

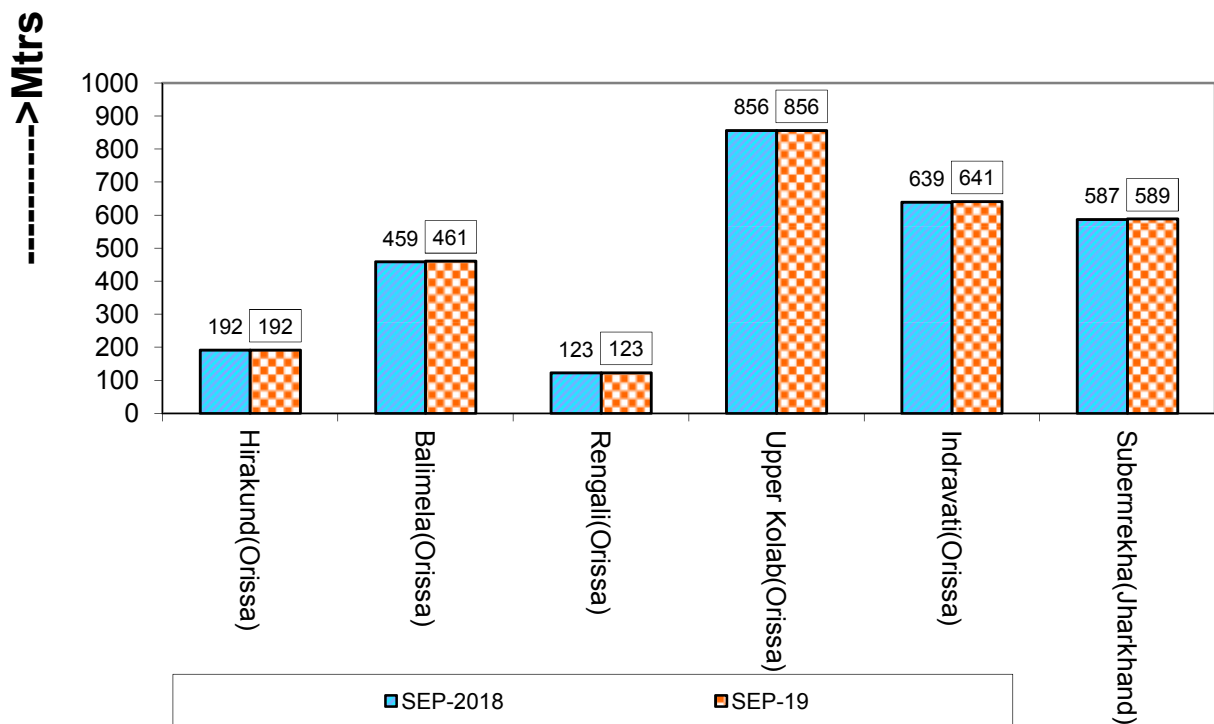


\*Includes contribution from HEP of Bhutan

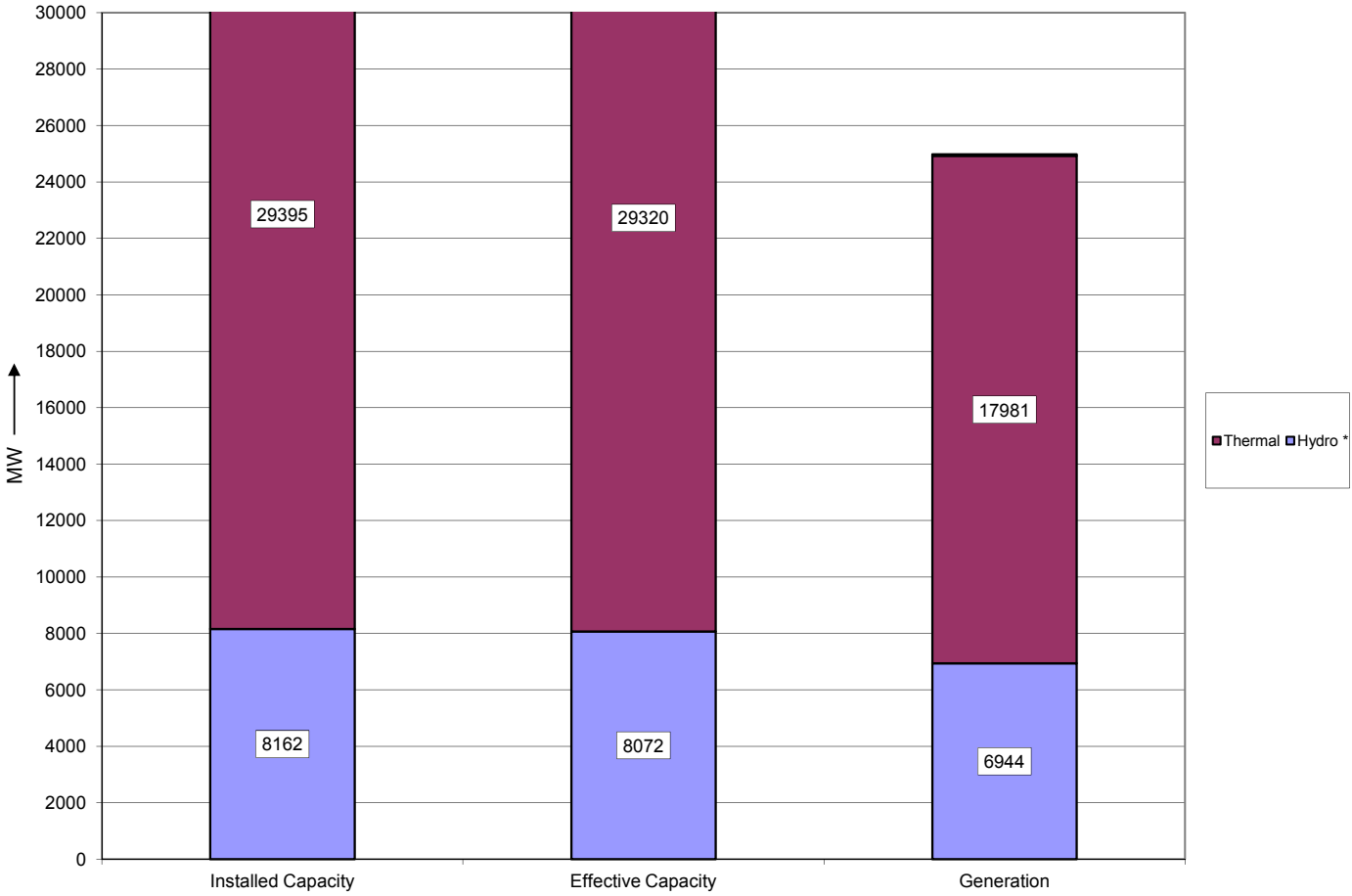
**NET ENERGY GENERATION**



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

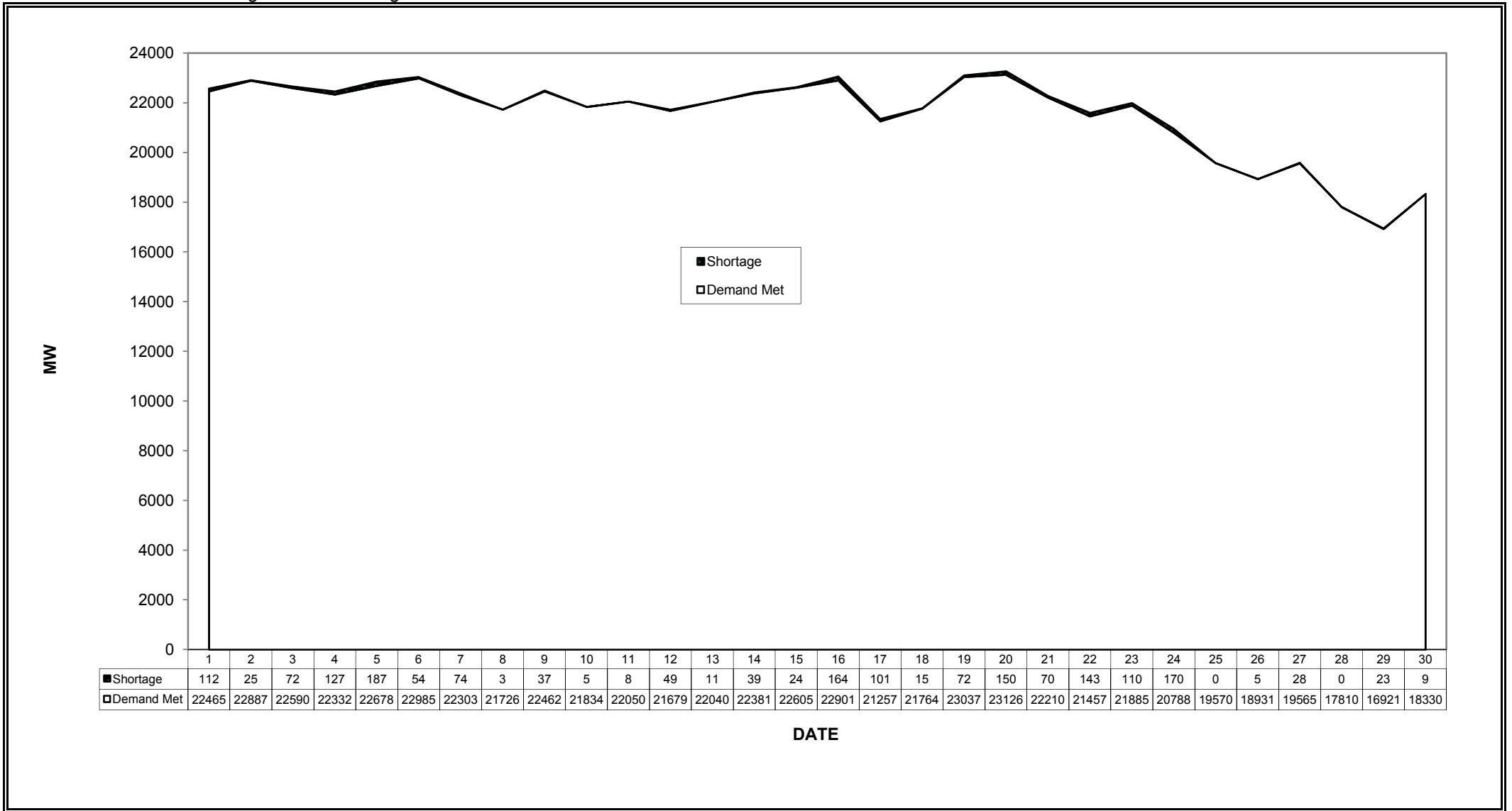


Capacity / Actual Generation Pattern of ER on Peak Day (20-9-2019) at 21.00 hrs.

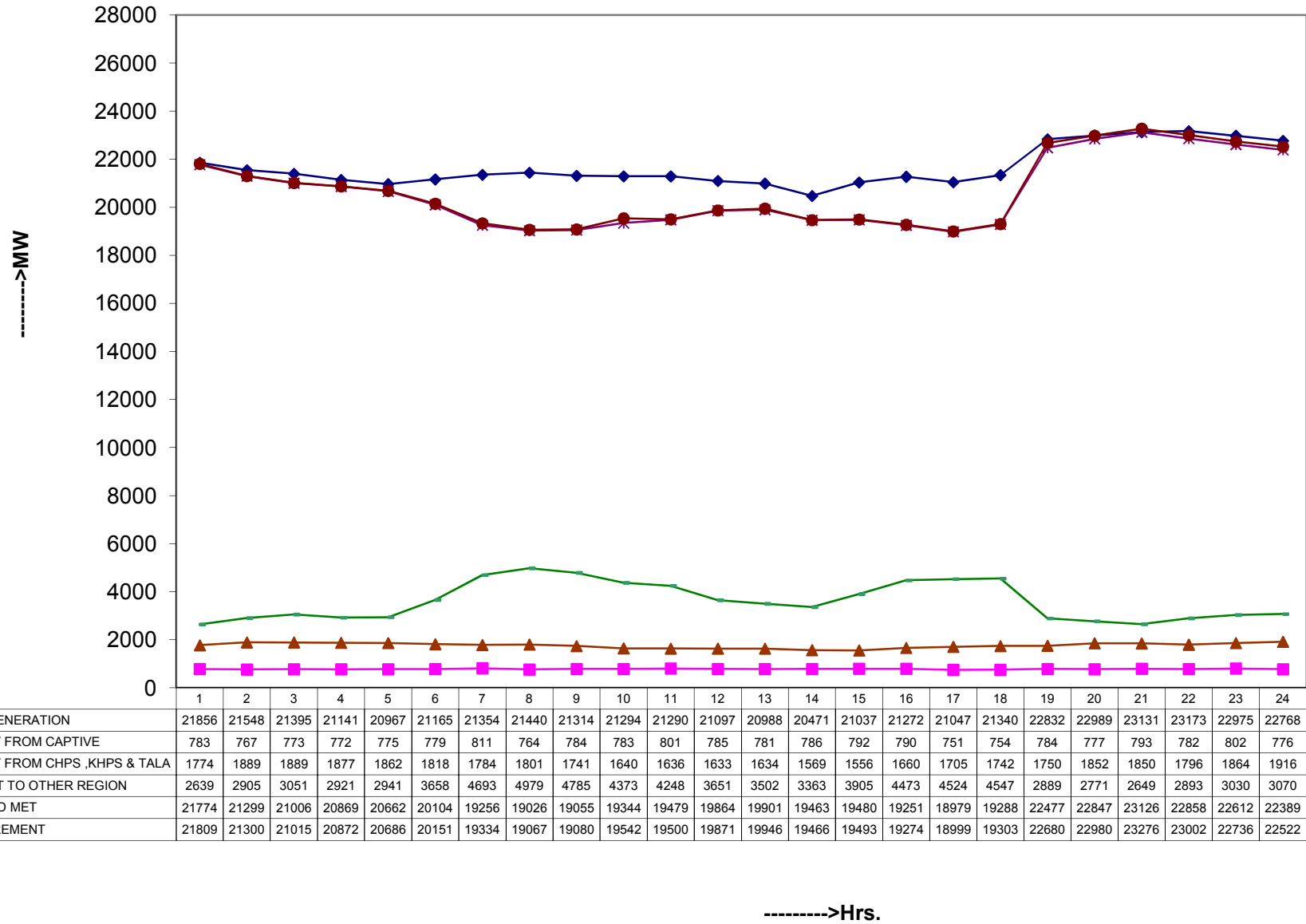


(\*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

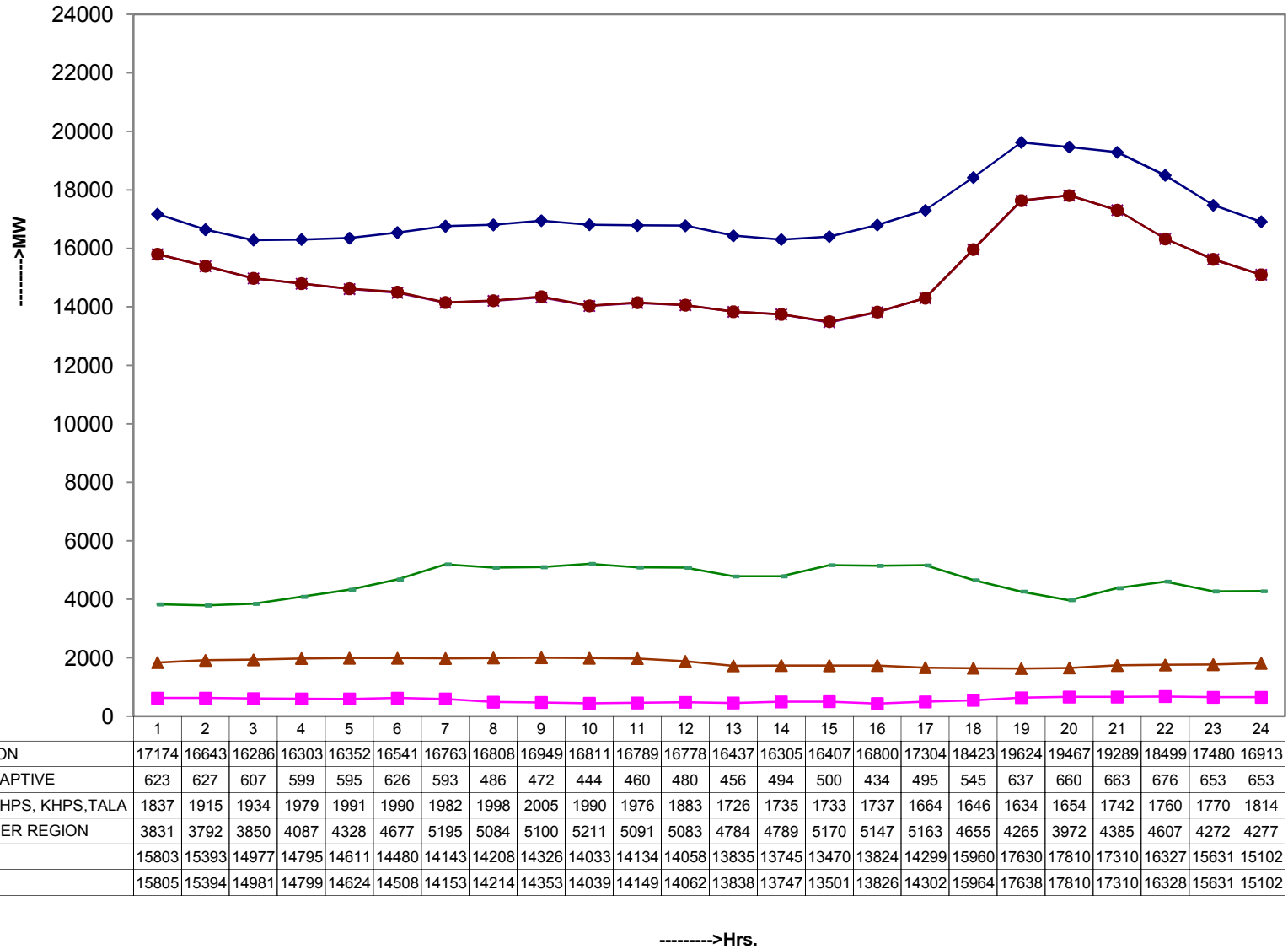
Peak Demand Met / Shortage of Eastern Region For The Month Of SEP'2019



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of SEP'2019 (20-9-2019)



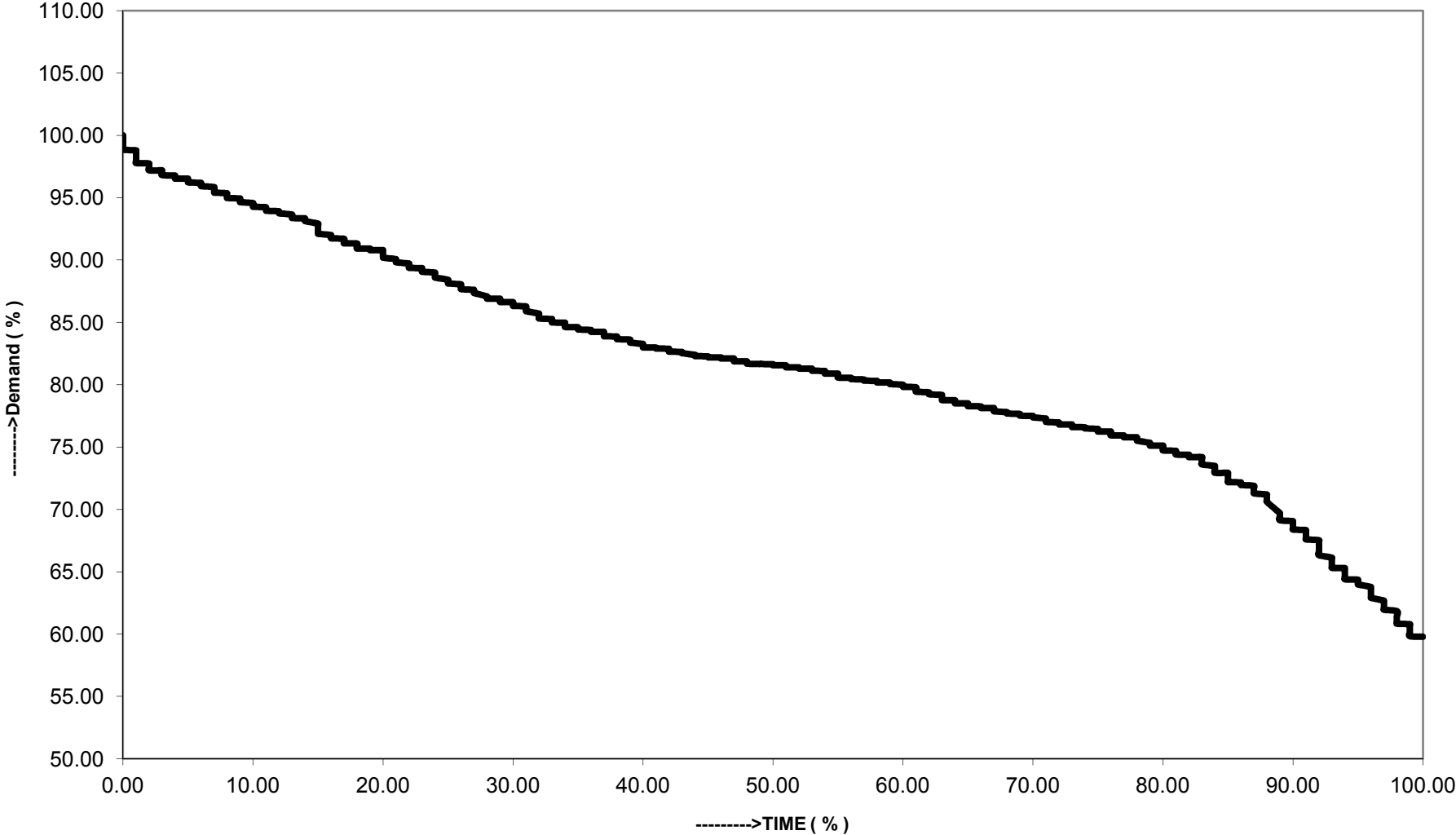
Hourly Load Generation Data of ER On Regional Lean Day During The Month of SEP'2019 (28-9-2019)





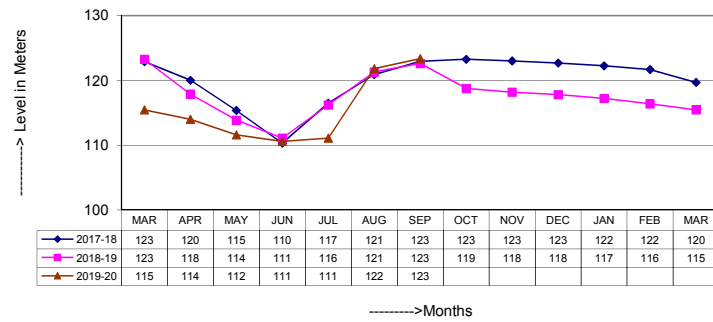
Monthly Load Duration Curve of Eastern Region for SEP-19

Maximum Demand met : 23126 MW  
Minimum Demand met: 13470 MW

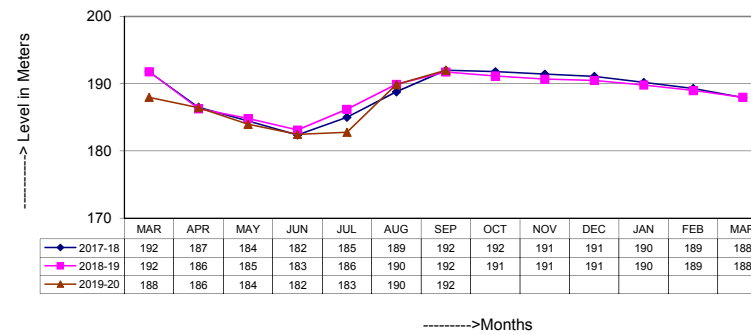


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

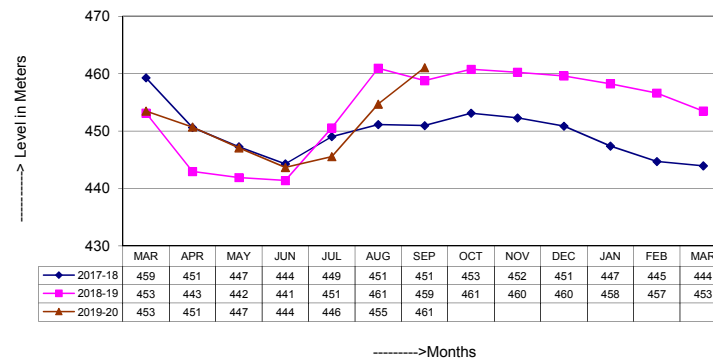
RENGALI RESERVOIR LEVEL



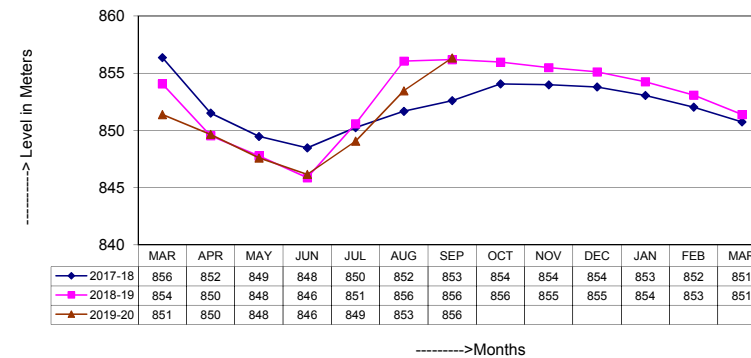
HIRAKUD RESERVOIR LEVEL



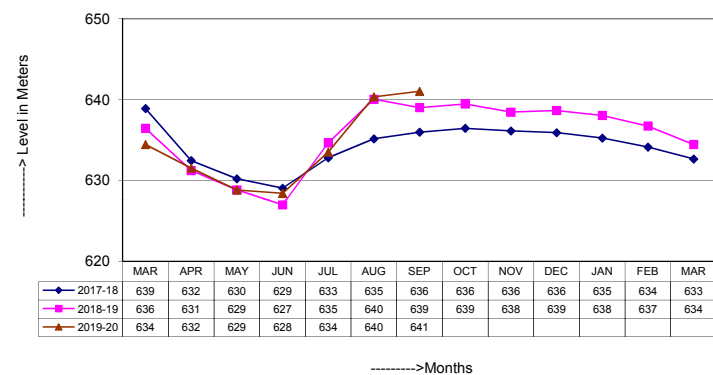
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

