

Report for previous day

Date of Reporting: 24-Jul-2023

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 20:00 hrs; from RLDCs)	70144	53268	41060	27555	3178	195205
Peak Shortage (MW)	230	0	0	571	14	815
Energy Met (MU)	1585	1218	978	601	62	4444
Hydro Gen (MU)	381	65	71	141	31	689
Wind Gen (MU)	21	103	285	-	-	410
Solar Gen (MU)*	118.26	37.98	76.87	2.59	0.97	237
Energy Shortage (MU)	0.94	0.00	0.00	2.78	0.49	4.21
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	74361	54211	45740	28503	3212	196625
Time Of Maximum Demand Met	22:44	19:48	11:00	22:46	20:15	20:59

B. Frequency Profile (%)

Region	FVI	< 49.7	49.7 - 49.8	49.8 - 49.9	< 49.9	49.9 - 50.05	> 50.05
All India	0.034	0.00	0.29	3.24	3.53	76.24	20.23

C. Power Supply Position in States

Region	States	Max.Demand Met during the day (MW)	Shortage during maximum Demand (MW)	Energy Met (MU)	Drawal Schedule (MU)	OD(+)/UD(-) (MU)	Max OD (MW)	Energy Shortage (MU)
NR	Punjab	12081	0	265.8	152.2	-1.0	279	0.00
	Haryana	10693	0	225.2	173.6	0.7	290	0.00
	Rajasthan	12885	0	277.9	100.2	-3.8	325	0.00
	Delhi	6792	0	136.2	125.1	-1.5	86	0.00
	UP	27609	0	548.9	284.6	-1.3	380	0.00
	Uttarakhand	2035	0	45.0	25.2	0.1	167	0.00
	HP	1505	13	26.6	-2.5	0.3	226	0.19
	J&K(UT) & Ladakh(UT)	2402	50	49.8	22.6	1.0	267	0.75
	Chandigarh	325	0	6.2	6.5	-0.3	35	0.00
Railways NR ISTS	161	0	3.3	3.5	-0.2	6	0.00	
WR	Chhattisgarh	4574	0	101.2	53.5	-2.2	191	0.00
	Gujarat	14971	0	339.3	161.7	0.0	693	0.00
	MP	11092	0	241.5	133.3	-3.7	254	0.00
	Maharashtra	20704	0	463.5	154.8	-1.9	784	0.00
	Goa	541	0	10.8	10.8	-0.4	50	0.00
	DNHDDPDCL	1249	0	29.0	28.9	0.1	46	0.00
	AMNSIL	888	0	20.2	10.0	0.5	294	0.00
	BALCO	520	0	12.4	12.5	-0.1	31	0.00
SR	Andhra Pradesh	8984	0	191.3	22.9	-2.2	743	0.00
	Telangana	9952	0	203.4	88.1	-1.0	453	0.00
	Karnataka	9074	0	170.5	13.9	-3.5	546	0.00
	Kerala	3167	0	67.1	52.5	0.3	261	0.00
	Tamil Nadu	14980	0	336.8	133.9	-11.7	292	0.00
	Puducherry	410	0	9.2	9.1	-0.6	35	0.00
ER	Bihar	7143	339	152.4	141.1	0.3	327	2.05
	DVC	3370	0	74.6	-30.9	0.2	312	0.00
	Jharkhand	1586	114	36.1	33.2	0.3	151	0.73
	Odisha	6682	0	131.0	45.9	-2.1	373	0.00
	West Bengal	9840	0	206.4	89.4	-1.2	317	0.00
	Sikkim	54	0	0.7	0.8	-0.1	9	0.00
Railways ER ISTS	14	0	0.2	0.2	0.0	6	0.00	
NER	Arunachal Pradesh	149	0	2.4	2.5	-0.3	42	0.00
	Assam	2145	0	41.0	33.6	-0.1	154	0.00
	Manipur	188	0	2.7	2.7	-0.1	28	0.00
	Meghalaya	312	0	5.3	0.6	-0.1	167	0.49
	Mizoram	98	0	1.6	1.6	-0.4	4	0.00
	Nagaland	151	0	2.6	2.5	-0.1	18	0.00
Tripura	323	0	6.0	5.5	0.3	61	0.00	

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	39.8	6.2	-25.3	-17.9
Day Peak (MW)	1802.5	313.0	-1088.0	-768.7

E. Import/Export by Regions (in MU) - Import(+ve)/Export(-ve); OD(+)/UD(-)

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	345.9	-247.7	-17.5	-74.7	-6.0	0.0
Actual(MU)	322.6	-233.2	-35.6	-55.7	-5.9	-7.8
O/D/U/D(MU)	-23.3	14.5	-18.1	19.0	0.1	-7.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2946	11546	6518	2360	271	23641	41
State Sector	6645	15201	9103	3480	175	34603	59
Total	9590	26746	15621	5840	446	58244	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	723	1279	496	579	14	3090	65
Lignite	27	10	50	0	0	87	2
Hydro	381	65	71	141	31	689	14
Nuclear	29	52	60	0	0	141	3
Gas, Naptha & Diesel	32	14	7	0	29	81	2
RES (Wind, Solar, Biomass & Others)	146	142	395	4	1	689	14
Total	1338	1561	1079	725	75	4778	100

Share of RES in total generation (%)	10.95	9.11	36.65	0.60	1.29	14.43
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	41.57	16.60	48.73	20.11	43.22	31.80

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.047
Based on State Max Demands	1.066

I. All India Peak Demand and shortage at Solar and Non-Solar Hour

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	191622	12:40	99
Non-Solar hr	196625	20:59	815

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

**Note: All generation MU figures are gross

***Godda (Jharkhand) -> Bangladesh power exchange is through the radial connection (isolated from Indian Grid)

Solar Hours -> 06:00 to 18:00hrs and rest are Non-Solar Hours

*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

Executive Director-NLDC

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)

Date of Reporting: 24-Jul-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
1	HVDC	ALIPURDUAR-AGRA	2	0	1001	0.0	22.9	-22.9
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	649	356	2.2	0.0	2.2
4	765 kV	SASARAM-FATEHPUR	1	176	249	0.0	1.2	-1.2
5	765 kV	GAYA-BALIA	1	0	710	0.0	10.4	-10.4
6	400 kV	PUSAULI-VARANASI	1	0	116	0.0	1.6	-1.6
7	400 kV	PUSAULI-ALLAHABAD	1	1	93	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	812	0.0	13.0	-13.0
9	400 kV	PATNA-BALIA	2	0	433	0.0	6.2	-6.2
10	400 kV	NAUBATPUR-BALIA	2	0	431	0.0	5.8	-5.8
11	400 kV	BIHARSHARIF-BALIA	2	90	266	0.0	2.9	-2.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	515	0.0	7.8	-7.8
13	400 kV	BIHARSHARIF-VARANASI	2	239	218	0.0	0.2	-0.2
14	220 kV	SAHUPURI-KARAMNANA	1	45	123	0.0	0.9	-0.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.9	0.0	0.9
17	132 kV	KARMANASA-SAHUPURI	1	0	54	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						3.1	76.5	-73.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1186	394	10.5	0.0	10.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1608	0	28.2	0.0	28.2
3	765 kV	JHARSUGUDA-DURG	2	250	359	0.3	0.0	0.3
4	400 kV	JHARSUGUDA-RAIGARH	4	207	271	0.0	0.8	-0.8
5	400 kV	RANCHI-SIPAT	2	454	17	4.8	0.0	4.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	111	0	1.1	0.0	1.1
ER-WR						44.9	2.6	42.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	391	0	5.7	0.0	5.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1144	0.0	27.8	-27.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2185	0.0	27.1	-27.1
4	400 kV	TALCHER-I/C	2	249	404	0.3	0.0	0.3
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						5.7	54.8	-49.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	7	247	0.0	3.0	-3.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	181	189	0.0	0.7	-0.7
3	220 kV	ALIPURDUAR-SALAKATI	2	11	68	0.0	0.7	-0.7
ER-NER						0.0	4.4	-4.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	0	502	0.0	11.9	-11.9
NER-NR						0.0	11.9	-11.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5046	0.0	81.8	-81.8
2	HVDC	VINDHYACHAL B/B	-	0	486	0.0	4.4	-4.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	0	0.0	0.0	0.0
4	765 kV	GWALIOR-AGRA	2	0	2670	0.0	39.7	-39.7
5	765 kV	GWALIOR-PHAGI	2	173	1875	0.1	23.8	-23.6
6	765 kV	JABALPUR-ORAI	2	0	1036	0.0	31.1	-31.1
7	765 kV	GWALIOR-ORAI	1	887	0	15.0	0.0	15.0
8	765 kV	SATNA-ORAI	1	0	993	0.0	18.9	-18.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1146	1224	4.9	7.9	-3.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3478	0.0	70.4	-70.4
11	400 kV	ZERDA-KANKROLI	1	174	211	0.9	1.5	-0.6
12	400 kV	ZERDA -BHINMAL	1	515	311	3.6	2.0	1.6
13	400 kV	VINDHYACHAL -RIHAND	1	956	0	20.5	0.0	20.5
14	400 kV	RAPP-SHUALPUR	2	198	774	0.3	7.6	-7.2
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	0	0	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	0	0	0.0	0.0	0.0
19	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
20	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
WR-NR						45.2	291.0	-245.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	993	0	15.8	0.0	15.8
2	HVDC	RAIGARH-PUGALUR	2	0	1500	0.0	15.3	-15.3
3	765 kV	SOLAPUR-RAICHUR	2	2513	329	30.7	0.1	30.5
4	765 kV	WARDHA-NIZAMABAD	2	572	1786	1.3	10.9	-9.6
5	400 kV	KOLHAPUR-KUDGI	2	1759	0	31.7	0.0	31.7
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	93	1.6	0.0	1.6
WR-SR						81.0	26.3	54.7

INTERNATIONAL EXCHANGES					Import(+ve)/Export(-ve)		
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)	
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	646	569	593	14.23	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1045	0	997	23.93	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	190	106	138	3.32	
	NER	132kV GELEPHU-SALAKATI	-29	-17	-24	-0.57	
	NER	132kV MOTANGA-RANGIA	-59	-21	-47	-1.12	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-75	0	-47	-1.14	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	388	178	304	7.30	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-934	-839	-918	-22.03	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-769	-704	-746	-17.91	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-154	0	-135	-3.25	