



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रीड कंट्रोलर ऑफ इंडिया लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम)
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016
बी-9, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 16th July 2023

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- कार्यकारी निदेशक, ऊ.क्षे.भा.प्रे.के., 18/ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली - 110016
Executive Director, NRLDC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi - 110016
- कार्यकारी निदेशक, प.क्षे.भा.प्रे.के., एफ3-, एम आई डी सी क्षेत्र, अंधेरी, मुंबई -400093
Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
- कार्यकारी निदेशक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतेह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- कार्यकारी निदेशक, द.क्षे.भा.प्रे.के., 29, रेस कोर्स क्रॉस रोड, बंगलुरु -560009
Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 15.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-जुलाई-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रांभांप्रेके की वेबसाइट पर उपलब्ध है।

As per article 5.5.1 of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 15th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 16-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)	66470	54240	48175	26515	3298	198698
Peak Shortage (MW)	398	0	0	120	45	563
Energy Met (MU)	1525	1305	1134	568	65	4596
Hydro Gen (MU)	339	55	63	130	33	620
Wind Gen (MU)	58	178	182	-	-	418
Solar Gen (MU)*	134.50	43.94	109.31	1.25	1.09	290
Energy Shortage (MU)	1.66	0.22	0.00	1.74	0.84	4.46
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	67994	57283	53196	27359	3420	203098
Time Of Maximum Demand Met	22:38	09:57	09:52	00:00	19:12	11:34

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	0.032	0.00	0.00	3.44	3.44	76.98	19.58

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	14440	0	303.8	177.0	-1.8	175	0.00
	Haryana	10075	0	219.3	160.8	-1.0	211	0.00
	Rajasthan	13206	0	286.5	86.5	-1.1	321	0.61
	Delhi	5714	0	120.5	114.7	0.2	130	0.00
	UP	23620	0	459.4	214.0	-1.2	380	0.00
	Uttarakhand	1894	75	40.8	21.1	0.9	238	0.56
	HP	1597	0	33.0	4.9	-0.3	74	0.01
	J&K(UT) & Ladakh(UT)	2460	0	52.1	25.4	0.5	201	0.48
	Chandigarh	323	0	6.5	6.6	-0.1	31	0.00
	Railways_NR ISTS	152	0	3.2	3.5	-0.3	3	0.00
WR	Chhattisgarh	5183	6	112.1	64.5	-1.6	183	0.22
	Gujarat	16858	0	371.6	136.2	-6.5	567	0.00
	MP	11163	0	226.9	104.0	-2.2	463	0.00
	Maharashtra	23327	0	520.7	172.4	0.2	617	0.00
	Goa	634	0	13.1	13.0	-0.4	48	0.00
	DNHDDPDCL	1287	0	30.2	30.1	0.1	48	0.00
	AMNSIL	797	0	17.7	11.5	-0.4	0	0.00
	BALCO	520	0	12.4	12.5	-0.1	8	0.00
	Andhra Pradesh	9936	0	216.3	64.1	1.1	816	0.00
	Telangana	12489	0	251.2	145.4	-1.4	639	0.00
SR	Karnataka	12359	0	222.9	62.3	-0.2	564	0.00
	Kerala	3847	0	77.8	55.0	1.4	317	0.00
	Tamil Nadu	16302	0	355.5	163.0	-1.4	1277	0.00
	Puducherry	475	0	10.5	9.8	-0.1	42	0.00
	Bihar	6341	78	132.4	124.4	-2.1	242	1.74
	DVC	3342	0	76.0	-40.8	0.0	270	0.00
	Jharkhand	1586	0	36.9	32.4	-0.3	81	0.00
ER	Odisha	6274	0	109.4	37.4	-2.5	298	0.00
	West Bengal	9630	0	211.7	96.5	-2.0	499	0.00
	Sikkim	77	0	1.1	1.2	0.0	63	0.00
	Railways_ER ISTS	14	0	0.3	0.3	0.0	2	0.00
	Arunachal Pradesh	160	0	2.6	2.3	0.0	29	0.00
	Assam	2274	0	43.9	36.4	1.1	156	0.00
NER	Manipur	180	0	2.7	2.7	0.0	28	0.00
	Meghalaya	310	0	5.1	0.5	-0.1	59	0.84
	Mizoram	114	0	1.7	1.5	-0.2	24	0.00
	Nagaland	159	0	2.9	2.6	-0.2	10	0.00
	Tripura	310	0	5.7	5.9	-0.1	54	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.7	10.0	-25.2	-14.7
Day Peak (MW)	1932.4	442.0	-1100.0	-637.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	316.7	-336.2	143.0	-118.9	-4.6	0.0
Actual(MU)	268.9	-348.6	177.7	-102.1	-2.8	-6.9
O/D/U/D(MU)	-47.8	-12.3	34.7	16.8	1.8	-6.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4385	10859	7818	2305	305	25672	45
State Sector	8415	12703	6883	2820	232	31053	55
Total	12800	23562	14701	5125	537	56725	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	724	1400	551	600	14	3289	67
Lignite	24	16	55	0	0	96	2
Hydro	339	55	63	130	33	620	13
Nuclear	29	47	46	0	0	122	2
Gas, Naptha & Diesel	21	28	6	0	27	83	2
RES (Wind, Solar, Biomass & Others)	198	223	309	3	1	733	15
Total	1335	1770	1030	733	75	4943	100

Share of RES in total generation (%)	14.82	12.59	30.00	0.34	1.45	14.83
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	42.39	18.36	40.56	18.10	44.94	29.84

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.030
Based on State Max Demands	1.080

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	203098	11:34	32
Non-Solar hr	199719	19:40	678

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: 16-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	1003	0.0	24.8	-24.8	
2	HVDC	PUSAULI B/B	-	0	146	0.0	2.8	-2.8	
3	765 kV	GAYA-VARANASI	2	711	409	1.2	0.0	1.2	
4	765 kV	SASARAM-FATEHPUR	1	150	266	0.0	2.0	-2.0	
5	765 kV	GAYA-BALIA	1	0	603	0.0	7.7	-7.7	
6	400 kV	PUSAULI-VARANASI	1	38	134	0.0	1.7	-1.7	
7	400 kV	PUSAULI -ALLAHABAD	1	18	103	0.0	1.0	-1.0	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	743	0.0	11.9	-11.9	
9	400 kV	PATNA-BALIA	2	10	479	0.0	6.6	-6.6	
10	400 kV	NAUBATPUR-BALIA	2	61	491	0.0	6.2	-6.2	
11	400 kV	BIHARSHARIFF-BALIA	2	152	197	0.0	2.0	-2.0	
12	400 kV	MOTIHARI-GORAKHPUR	2	0	463	0.0	6.8	-6.8	
13	400 kV	BIHARSHARIFF-VARANASI	2	277	178	0.1	0.0	0.1	
14	220 kV	SAHUPURI-KARMANASA	1	11	116	0.0	1.3	-1.3	
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0	
16	132 kV	GARWAH-RIHAND	1	30	0	0.7	0.0	0.7	
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0	
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0	
						ER-NR	2.0	74.6	-72.6
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1687	0	24.4	0.0	24.4	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1321	737	16.4	0.0	16.4	
3	765 kV	JHARSUGUDA-DURG	2	209	392	0.0	2.1	-2.1	
4	400 kV	JHARSUGUDA-RAIGARH	4	168	309	0.0	1.6	-1.6	
5	400 kV	RANCHI-SIPAT	2	341	239	2.9	0.0	2.9	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.3	-2.3	
7	220 kV	BUDHIPADAR-KORBA	2	111	0	1.2	0.0	1.2	
						ER-WR	44.9	6.0	38.9
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	444	0.0	10.0	-10.0	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1983	0.0	38.9	-38.9	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2871	0.0	43.8	-43.8	
4	400 kV	TALCHER-I/C	2	160	1233	0.0	8.1	-8.1	
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0	
						ER-SR	0.0	92.7	-92.7
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	0	337	0.0	4.1	-4.1	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	238	262	0.0	2.6	-2.6	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	76	0.0	1.3	-1.3	
						ER-NER	0.0	8.0	-8.0
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1	
						NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3031	0.0	72.4	-72.4	
2	HVDC	VINDHYACHAL B/B	-	441	0	12.1	0.0	12.1	
3	HVDC	MUNDRA-MOHINDERGARH	2	262	0	6.0	0.0	6.0	
4	765 kV	GWALIOR-AGRA	2	0	2221	0.0	31.3	-31.3	
5	765 kV	GWALIOR-PHAGI	2	268	1618	0.7	19.6	-18.9	
6	765 kV	JABALPUR-ORAI	2	0	1088	0.0	28.3	-28.3	
7	765 kV	GWALIOR-ORAI	1	593	0	9.7	0.0	9.7	
8	765 kV	SATNA-ORAI	1	0	1102	0.0	21.8	-21.8	
9	765 kV	BANASKANTHA-CHITORGARH	2	415	1168	0.6	12.1	-11.5	
10	765 kV	VINDHYACHAL-VARANASI	2	0	3222	0.0	56.6	-56.6	
11	400 kV	ZERDA-KANKROLI	1	155	172	0.5	1.1	-0.6	
12	400 kV	ZERDA -BHINMAL	1	482	158	4.8	0.6	4.2	
13	400 kV	VINDHYACHAL -RIHAND	1	963	0	21.6	0.0	21.6	
14	400 kV	RAPP-SHUJALPUR	2	232	634	1.2	5.4	-4.2	
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0	
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3	
17	220 kV	MEHGAON-AURAIYA	1	127	0	1.7	0.0	1.7	
18	220 kV	MALANPUR-AURAIYA	1	96	0	1.0	0.0	1.0	
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	59.9	251.4	-191.5
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	311	306	2.1	5.1	-3.0	
2	HVDC	RAIGARH-PUGALUR	2	0	5018	0.0	92.8	-92.8	
3	765 kV	SOLAPUR-RAICHUR	2	812	1945	2.9	5.8	-2.9	
4	765 kV	WARDHA-NIZAMABAD	2	0	3360	0.0	43.0	-43.0	
5	400 kV	KOLHAPUR-KUDGI	2	1240	0	21.4	0.0	21.4	
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	117	2.2	0.0	2.2	
						WR-SR	28.6	146.7	-118.1

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)	658	626	643	15.42
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1054	0	1000	24.00
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	249	123	151	3.62
	NER	132kV GELEPHU-SALAKATI	0	0	0	0.00
	NER	132kV MOTANGA-RANGIA	-65	-28	-57	-1.37
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-51	0	-10	-0.24
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	493	276	425	10.20
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-931	-784	-898	-21.55
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-638	-519	-611	-14.66
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-169	0	-150	-3.60