



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: 22nd August 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 21.08.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-अगस्त-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 21st August 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 22-Aug-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)	72602	58599	46350	25300	3130	205981
Peak Shortage (MW)	5656	0	1926	1334	193	9109
Energy Met (MU)	1720	1409	1185	589	64	4966
Hydro Gen (MU)	418	112	116	139	34	819
Wind Gen (MU)	8	124	105	-	-	237
Solar Gen (MU)*	129.66	39.03	127.99	5.18	0.63	302
Energy Shortage (MU)	58.75	0.41	15.45	11.65	2.91	89.17
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	78456	64506	59217	26650	3356	226242
Time Of Maximum Demand Met	14:13	10:52	12:28	00:00	18:48	10:54

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	0.083	0.89	4.81	12.35	18.05	72.89	9.06

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	14462	0	318.3	183.2	-1.1	169	0.00
	Haryana	12679	0	256.3	184.2	0.7	357	8.50
	Rajasthan	15998	0	325.1	120.3	1.2	359	16.95
	Delhi	7186	0	147.8	125.8	-1.2	347	0.00
	UP	24735	1330	528.7	240.7	-1.5	423	30.43
	Uttarakhand	1988	185	45.6	19.6	1.1	196	2.28
	HP	1633	0	34.3	-1.8	-0.6	51	0.59
	J&K(UT) & Ladakh(UT)	2515	0	53.6	27.7	0.3	179	0.00
	Chandigarh	405	0	7.6	7.8	-0.2	14	0.00
Railways_NR ISTS	157	0	3.2	3.1	0.1	73	0.00	
WR	Chhattisgarh	5168	0	114.5	54.0	-1.3	261	0.00
	Gujarat	20881	0	431.7	155.4	-0.8	1594	0.00
	MP	11591	0	246.4	118.7	-3.4	428	0.00
	Maharashtra	24880	0	542.7	189.9	-2.8	637	0.41
	Goa	650	0	13.3	12.3	0.6	104	0.00
	DNHDDPDCL	1311	0	30.1	29.5	0.6	127	0.00
	AMNSIL	858	0	17.8	5.9	-0.2	269	0.00
	BALCO	521	0	12.4	12.0	0.4	88	0.00
	Andhra Pradesh	11472	0	227.1	91.3	5.1	1061	6.62
SR	Telangana	12321	0	234.3	94.5	5.4	1259	0.00
	Karnataka	15060	200	260.6	62.7	5.1	893	4.10
	Kerala	4221	0	84.9	61.2	2.0	282	0.00
	Tamil Nadu	17479	0	367.7	193.3	5.5	1937	4.43
	Puducherry	433	50	10.0	9.3	0.0	68	0.30
	Bihar	6947	0	148.6	141.3	1.5	412	6.96
ER	DVC	3548	0	75.9	-39.7	0.6	266	0.00
	Jharkhand	1713	215	38.5	30.1	3.1	247	4.69
	Odisha	5015	0	106.0	29.6	-2.2	209	0.00
	West Bengal	9732	0	218.4	95.1	0.2	386	0.00
	Sikkim	84	0	1.2	1.0	0.2	34	0.00
	Railways_ER ISTS	15	0	0.2	0.2	0.0	0	0.00
	Arunachal Pradesh	159	0	3.0	2.5	0.0	24	0.00
NER	Assam	2198	0	42.2	32.6	1.9	258	2.49
	Manipur	171	0	2.7	2.7	0.1	23	0.00
	Meghalaya	290	0	5.3	0.4	-0.1	38	0.42
	Mizoram	122	0	2.0	1.5	-0.1	15	0.00
	Nagaland	165	0	2.7	2.5	0.0	21	0.00
	Tripura	329	0	6.2	6.2	0.6	68	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	42.0	8.8	-25.0	-33.1
Day Peak (MW)	1862.0	370.9	-1082.0	-1433.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	315.8	-342.8	147.7	-110.4	-10.2	0.1
Actual(MU)	292.8	-354.7	172.3	-105.4	-8.6	-3.6
O/D/U/D(MU)	-23.0	-11.9	24.6	5.1	1.6	-3.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1793	11864	7568	3570	255	25049	48
State Sector	5130	10757	7218	3340	155	26599	52
Total	6923	22621	14786	6910	409	51649	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	870	1495	620	618	17	3620	68
Lignite	27	8	44	0	0	79	1
Hydro	418	112	116	139	34	819	15
Nuclear	29	50	46	0	0	125	2
Gas, Naptha & Diesel	35	53	6	0	29	124	2
RES (Wind, Solar, Biomass & Others)	144	166	258	7	1	576	11
Total	1523	1884	1091	764	80	5342	100

Share of RES in total generation (%)	9.47	8.80	23.69	0.85	0.79	10.78
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.82	17.42	38.57	19.08	42.67	28.45

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.026
Based on State Max Demands	1.056

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	226242	10:54	716
Non-Solar hr	208364	19:20	9640

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: 22-Aug-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	501	0.0	12.0	-12.0
2	HVDC	PUSAULI B/B	-	0	95	0.0	2.2	-2.2
3	765 kV	GAYA-VARANASI	2	276	330	0.0	3.0	-3.0
4	765 kV	SASARAM-FATEHPUR	1	208	252	0.0	3.8	-3.8
5	765 kV	GAYA-BALIA	1	0	567	0.0	8.7	-8.7
6	400 kV	PUSAULI-VARANASI	1	0	97	0.0	1.3	-1.3
7	400 kV	PUSAULI -ALLAHABAD	1	47	85	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	705	0.0	11.5	-11.5
9	400 kV	PATNA-BALIA	2	0	437	0.0	6.2	-6.2
10	400 kV	NAUBATPUR-BALIA	2	0	503	0.0	9.7	-9.7
11	400 kV	BIHARSHARIFF-BALIA	2	25	184	0.0	2.7	-2.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	436	0.0	7.3	-7.3
13	400 kV	BIHARSHARIFF-VARANASI	2	121	134	0.0	0.7	-0.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	124	0.0	1.6	-1.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
17	132 kV	KARMANASA-SAHUPURI	1	0	17	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.6	71.4	-70.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1339	0	21.4	0.0	21.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1223	221	15.6	0.0	15.6
3	765 kV	JHARSUGUDA-DURG	2	99	197	0.0	1.2	-1.2
4	400 kV	JHARSUGUDA-RAIGARH	4	12	393	0.0	4.5	-4.5
5	400 kV	RANCHI-SIPAT	2	243	121	1.6	0.0	1.6
6	220 kV	BUDHIPADAR-RAIGARH	1	0	180	0.0	3.0	-3.0
7	220 kV	BUDHIPADAR-KORBA	2	68	6	0.6	0.0	0.6
ER-WR						39.2	8.7	30.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	655	0.0	11.5	-11.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1939	0.0	38.8	-38.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2313	0.0	40.6	-40.6
4	400 kV	TALCHER-I/C	2	115	687	0.0	7.0	-7.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	90.9	-90.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	230	0.0	2.3	-2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	315	0.0	3.4	-3.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	79	0.0	1.0	-1.0
ER-NER						0.0	6.6	-6.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.8	-16.8
NER-NR						0.0	16.8	-16.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3038	0.0	57.2	-57.2
2	HVDC	VINDHYACHAL B/B	-	46	0	1.2	0.0	1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	23.3	-23.3
4	765 kV	GWALIOR-AGRA	2	0	2268	0.0	28.8	-28.8
5	765 kV	GWALIOR-PHAGI	2	394	1253	0.3	16.6	-16.3
6	765 kV	JABALPUR-ORAI	2	0	1107	0.0	30.2	-30.2
7	765 kV	GWALIOR-ORAI	1	656	0	11.3	0.0	11.3
8	765 kV	SATNA-ORAI	1	0	1041	0.0	20.0	-20.0
9	765 kV	BANASKANTHA-CHITORGARH	2	982	1031	3.1	10.1	-7.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3210	0.0	53.2	-53.2
11	400 kV	ZERDA-KANKROLI	1	208	172	0.8	1.5	-0.7
12	400 kV	ZERDA -BHINMAL	1	402	344	1.5	3.1	-1.6
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	245	604	0.5	5.3	-4.8
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.5	-2.5
17	220 kV	MEHGAON-AURAIYA	1	116	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	83	5	0.7	0.0	0.7
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						42.9	251.8	-208.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	16.7	-16.7
2	HVDC	RAIGARH-PUGALUR	2	0	4011	0.0	65.3	-65.3
3	765 kV	SOLAPUR-RAICHUR	2	670	1992	0.3	16.6	-16.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2492	0.0	39.6	-39.6
5	400 kV	KOLHAPUR-KUDGI	2	1256	0	19.6	0.0	19.6
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	113	2.3	0.0	2.3
WR-SR						22.1	138.2	-116.1

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)	720	577	619	14.86
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1023	0	984	23.62
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	112	37	82	1.96
	NER	132kV GELEPHU-SALAKATI	27	3	16	0.38
	NER	132kV MOTANGA-RANGIA	54	35	50	1.20
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-49	0	12	0.29
	ER	NEPAL IMPORT (FROM BIHAR)	-28	-3	-9	-0.21
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	448	241	362	8.69
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-926	-806	-902	-21.65
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1433	-1298	-1378	-33.06
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-156	0	-140	-3.35

