



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: 29th 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 28.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-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 28th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 29-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)	65750	53638	44766	27902	3323	195379
Peak Shortage (MW)	200	0	0	124	17	341
Energy Met (MU)	1508	1258	980	639	66	4451
Hydro Gen (MU)	429	69	81	142	35	755
Wind Gen (MU)	32	227	238	-	-	497
Solar Gen (MU)*	85.50	42.09	101.59	4.63	0.80	235
Energy Shortage (MU)	0.93	0.00	0.00	0.25	0.42	1.60
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69241	56032	45629	29641	3392	197665
Time Of Maximum Demand Met	00:00	09:37	19:24	20:35	19:06	19:52

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	0.022	0.00	0.00	0.46	0.46	83.49	16.05

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	11563	0	261.4	156.7	-3.0	236	0.00
	Haryana	9563	0	203.8	155.9	-2.5	259	0.00
	Rajasthan	11235	0	249.4	76.7	-8.2	378	0.00
	Delhi	6073	0	125.0	112.6	-2.7	133	0.00
	UP	25811	0	524.1	273.6	-1.5	425	0.00
	Uttarakhand	2165	0	47.0	20.5	-0.2	154	0.00
	HP	1774	0	36.3	1.3	1.7	197	0.08
	J&K(UT) & Ladakh(UT)	2480	0	51.5	28.5	-1.1	134	0.85
	Chandigarh	293	0	6.5	7.0	-0.6	2	0.00
Railways_NR ISTS	155	0	3.2	3.6	-0.4	0	0.00	
WR	Chhattisgarh	4908	0	110.3	62.3	-2.4	178	0.00
	Gujarat	16132	0	360.9	149.1	-3.9	713	0.00
	MP	12006	0	253.9	138.0	-3.3	557	0.00
	Maharashtra	21131	0	458.8	161.2	-1.6	623	0.00
	Goa	623	0	12.3	12.3	-0.3	27	0.00
	DNHDDPDCL	1279	0	29.4	29.5	-0.1	45	0.00
	AMNSIL	926	0	20.4	10.0	0.0	254	0.00
	BALCO	521	0	12.4	12.5	-0.1	38	0.00
SR	Andhra Pradesh	8502	0	184.6	31.9	-1.5	628	0.00
	Telangana	8325	0	169.1	66.1	1.0	1213	0.00
	Karnataka	9478	0	175.3	24.7	-1.2	651	0.00
	Kerala	3698	0	73.8	53.0	1.4	380	0.00
	Tamil Nadu	17162	0	366.8	153.5	-2.2	690	0.00
	Puducherry	472	0	10.6	10.1	-0.2	44	0.00
ER	Bihar	7484	0	161.3	152.5	-1.9	194	0.00
	DVC	3580	0	78.6	-25.6	-0.1	207	0.00
	Jharkhand	1855	124	40.9	34.6	1.4	169	0.25
	Odisha	6643	0	130.9	45.3	-1.4	301	0.00
	West Bengal	10202	0	225.9	101.2	-1.3	343	0.00
	Sikkim	84	0	1.1	1.1	0.0	29	0.00
	Railways_ER ISTS	12	0	0.1	0.1	0.0	0	0.00
NER	Arunachal Pradesh	149	0	2.4	2.4	-0.1	79	0.00
	Assam	2244	0	43.8	36.4	0.2	182	0.00
	Manipur	192	0	2.9	2.6	0.3	39	0.00
	Meghalaya	320	4	5.5	1.1	-0.2	58	0.42
	Mizoram	115	0	1.9	1.5	0.0	26	0.00
	Nagaland	166	0	3.0	2.6	-0.1	24	0.00
	Tripura	311	0	6.1	5.5	0.3	152	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.8	7.1	-25.4	-18.1
Day Peak (MW)	1903.0	231.0	-1075.0	-778.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	315.7	-250.1	-17.2	-45.1	-3.3	0.0
Actual(MU)	274.7	-255.0	-4.9	-16.9	-1.3	-3.4
O/D/U/D(MU)	-41.0	-4.9	12.3	28.2	2.0	-3.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3554	10306	5938	3020	271	23089	40
State Sector	6465	16203	9453	2080	171	34372	60
Total	10019	26509	15391	5100	442	57460	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	686	1187	475	576	12	2936	62
Lignite	23	5	50	0	0	78	2
Hydro	429	69	81	142	35	755	16
Nuclear	29	50	64	0	0	143	3
Gas, Naptha & Diesel	32	12	5	0	26	75	2
RES (Wind, Solar, Biomass & Others)	110	270	372	6	1	759	16
Total	1309	1593	1047	724	73	4746	100

Share of RES in total generation (%)	8.41	16.96	35.54	0.89	1.09	16.00
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.40	24.43	49.37	20.44	48.35	34.92

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.031
Based on State Max Demands	1.060

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	192932	11:02	31
Non-Solar hr	197665	19:52	344

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: 29-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	501	0.0	12.4	-12.4	
2	HVDC	PUSAULI B/B	-	0	107	0.0	2.7	-2.7	
3	765 kV	GAYA-VARANASI	2	826	135	6.4	0.0	6.4	
4	765 kV	SASARAM-FATEHPUR	1	306	140	2.4	0.0	2.4	
5	765 kV	GAYA-BALIA	1	0	610	0.0	7.9	-7.9	
6	400 kV	PUSAULI-VARANASI	1	0	122	0.0	2.2	-2.2	
7	400 kV	PUSAULI -ALLAHABAD	1	7	70	0.0	0.4	-0.4	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	701	0.0	10.5	-10.5	
9	400 kV	PATNA-BALIA	2	54	332	0.0	3.6	-3.6	
10	400 kV	NAUBATPUR-BALIA	2	126	320	0.0	2.7	-2.7	
11	400 kV	BIHARSHARIFF-BALIA	2	207	145	0.0	0.6	-0.6	
12	400 kV	MOTTHARI-GORAKHPUR	2	0	439	0.0	5.8	-5.8	
13	400 kV	BIHARSHARIFF-VARANASI	2	314	114	1.1	0.0	1.1	
14	220 kV	SAHUPURI-KARAMNANA	1	14	100	0.0	1.0	-1.0	
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	37	0.0	0.0	0.0	
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0	
						ER-NR	10.6	49.7	-39.1
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1757	80	19.3	0.0	19.3	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	2047	93	34.2	0.0	34.2	
3	765 kV	JHARSUGUDA-DURG	2	227	251	1.1	0.0	1.1	
4	400 kV	JHARSUGUDA-RAIGARH	4	28	424	0.0	4.0	-4.0	
5	400 kV	RANCHI-SIPAT	2	476	97	6.5	0.0	6.5	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.1	-2.1	
7	220 kV	BUDHIPADAR-KORBA	2	85	0	0.4	0.0	0.4	
						ER-WR	61.5	6.2	55.4
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	483	0	9.5	0.0	9.5	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1983	0.0	35.5	-35.5	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2501	0.0	36.1	-36.1	
4	400 kV	TALCHER-I/C	2	737	583	2.1	0.0	2.1	
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0	
						ER-SR	9.5	71.6	-62.1
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	0	306	0.0	3.2	-3.2	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	146	466	0.0	4.7	-4.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	100	0.0	1.5	-1.5	
						ER-NER	0.0	9.4	-9.4
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	3537	0.0	55.6	-55.6	
2	HVDC	VINDHYACHAL B/B	-	0	488	0.0	10.7	-10.7	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	974	0.0	11.9	-11.9	
4	765 kV	GWALIOR-AGRA	2	44	2498	0.0	33.1	-33.1	
5	765 kV	GWALIOR-PHAGI	2	619	1146	1.4	14.1	-12.7	
6	765 kV	JABALPUR-ORAI	2	0	1078	0.0	32.2	-32.2	
7	765 kV	GWALIOR-ORAI	1	690	0	10.3	0.0	10.3	
8	765 kV	SATNA-ORAI	1	0	945	0.0	16.5	-16.5	
9	765 kV	BANASKANTHA-CHITORGARH	2	205	1368	0.1	15.8	-15.7	
10	765 kV	VINDHYACHAL-VARANASI	2	0	3334	0.0	64.2	-64.2	
11	400 kV	ZERDA-KANKROLI	1	78	199	0.2	1.3	-1.1	
12	400 kV	ZERDA -BHINMAL	1	343	294	1.6	0.7	0.9	
13	400 kV	VINDHYACHAL -RIHAND	1	952	0	20.0	0.0	20.0	
14	400 kV	RAPP-SHUJALPUR	2	232	515	0.8	3.6	-2.9	
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	34.4	261.7	-227.4
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	993	0	20.4	0.0	20.4	
2	HVDC	RAIGARH-PUGALUR	2	0	2006	0.0	13.4	-13.4	
3	765 kV	SOLAPUR-RAICHUR	2	2004	899	15.2	3.1	12.0	
4	765 kV	WARDHA-NIZAMABAD	2	358	2145	0.4	20.5	-20.1	
5	400 kV	KOLHAPUR-KUDGI	2	1633	0	26.5	0.0	26.5	
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	110	2.0	0.0	2.0	
						WR-SR	64.5	37.0	27.5

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)	600	569	594	14.25	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1045	991	1001	24.02	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	199	108	150	3.59	
	NER	132kV GELEPHU-SALAKATI	30	20	24	0.58	
	NER	132kV MOTANGA-RANGIA	66	39	54	1.30	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-74	0	-4	-0.10	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	305	205	301	7.22	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-930	-923	-930	-22.32	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-778	-723	-754	-18.09	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-145	0	-128	-3.06	