



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: 31 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 30.07.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 30-जुलाई-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रांभांप्रेंकें 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 30th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 31-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)	68237	52176	43816	27529	3161	194919
Peak Shortage (MW)	0	0	0	132	19	151
Energy Met (MU)	1459	1200	1012	607	65	4342
Hydro Gen (MU)	444	69	73	137	34	757
Wind Gen (MU)	29	209	229	-	-	466
Solar Gen (MU)*	120.32	43.88	111.13	1.94	1.17	278
Energy Shortage (MU)	0.08	0.00	0.00	0.31	0.49	0.88
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69584	53619	46558	28751	3257	195133
Time Of Maximum Demand Met	22:21	19:52	10:19	23:08	18:46	20:38

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	0.104	0.00	0.41	2.23	2.64	66.80	30.56

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	12470	0	269.1	170.0	-0.6	242	0.00
	Haryana	9437	0	197.1	147.2	1.1	259	0.00
	Rajasthan	10911	0	243.9	75.3	-2.9	301	0.00
	Delhi	5978	0	113.4	105.9	-1.3	132	0.00
	UP	25784	0	500.7	245.9	0.9	680	0.00
	Uttarakhand	2014	0	42.9	16.9	-0.8	126	0.08
	HP	1539	0	32.9	-1.2	-0.4	153	0.00
	J&K(UT) & Ladakh(UT)	2429	0	50.0	26.4	-1.6	157	0.00
	Chandigarh	303	0	6.0	6.5	-0.5	22	0.00
Railways_NR ISTS	149	0	3.1	3.6	-0.5	0	0.00	
WR	Chhattisgarh	4734	0	105.8	51.0	-1.2	478	0.00
	Gujarat	14589	0	327.1	149.4	0.0	1056	0.00
	MP	11304	0	244.0	120.5	-1.9	677	0.00
	Maharashtra	20164	0	451.0	160.6	0.6	750	0.00
	Goa	575	0	11.5	11.4	-0.2	44	0.00
	DNHDDPDCL	1259	0	28.9	28.6	0.3	74	0.00
	AMNSIL	831	0	19.0	10.5	-0.5	229	0.00
	BALCO	521	0	12.4	12.5	-0.1	40	0.00
SR	Andhra Pradesh	9306	0	199.3	48.1	0.5	716	0.00
	Telangana	10340	0	210.1	97.3	2.1	630	0.00
	Karnataka	8806	0	166.3	27.0	0.8	587	0.00
	Kerala	3572	0	70.7	54.7	0.9	315	0.00
	Tamil Nadu	15886	0	355.7	143.6	-4.1	801	0.00
	Puducherry	455	0	9.8	9.9	-0.8	84	0.00
ER	Bihar	6928	0	144.7	135.0	0.3	357	0.09
	DVC	3424	0	74.7	-28.7	1.0	345	0.00
	Jharkhand	1634	0	36.6	30.9	0.8	157	0.21
	Odisha	6742	0	131.9	51.9	-1.8	525	0.00
	West Bengal	10235	0	218.1	92.9	0.4	663	0.00
	Sikkim	60	0	0.8	0.9	-0.2	6	0.00
	Railways_ER ISTS	15	0	0.2	0.1	0.0	8	0.00
NER	Arunachal Pradesh	167	0	2.9	2.4	0.1	38	0.00
	Assam	2235	0	43.0	35.5	0.5	201	0.00
	Manipur	189	0	2.8	2.9	-0.1	11	0.00
	Meghalaya	297	40	5.4	1.8	-0.1	136	0.49
	Mizoram	98	0	1.7	1.6	-0.2	16	0.00
	Nagaland	152	0	2.6	2.5	-0.2	10	0.00
	Tripura	334	0	6.2	5.6	0.2	53	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	40.2	7.5	-25.0	-18.1
Day Peak (MW)	1844.0	417.0	-1091.0	-780.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	266.5	-244.2	25.5	-39.6	-8.1	0.0
Actual(MU)	252.0	-243.9	27.4	-35.0	-6.6	-6.1
O/D/U/D(MU)	-14.5	0.3	1.9	4.6	1.5	-6.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5899	12031	6648	2885	271	27734	42
State Sector	7915	17843	9213	2740	180	37891	58
Total	13814	29874	15861	5625	451	65624	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	623	1156	484	566	13	2842	61
Lignite	22	7	56	0	0	85	2
Hydro	444	69	73	137	34	757	16
Nuclear	29	50	64	0	0	143	3
Gas, Naptha & Diesel	10	9	7	0	29	55	1
RES (Wind, Solar, Biomass & Others)	153	256	364	4	1	778	17
Total	1282	1546	1047	706	78	4660	100

Share of RES in total generation (%)	11.96	16.53	34.78	0.53	1.53	16.70
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	48.84	24.25	47.86	19.94	45.22	36.02

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.034
Based on State Max Demands	1.055

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	187200	11:54	26
Non-Solar hr	195133	20:38	19

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: 31-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	12.0	-12.0
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	699	526	0.0	0.1	-0.1
4	765 kV	SASARAM-FATEHPUR	1	191	295	0.0	1.8	-1.8
5	765 kV	GAYA-BALIA	1	47	696	0.0	6.0	-6.0
6	400 kV	PUSAULI-VARANASI	1	0	116	0.0	1.8	-1.8
7	400 kV	PUSAULI -ALLAHABAD	1	0	68	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	794	0.0	13.1	-13.1
9	400 kV	PATNA-BALIA	2	101	452	0.0	3.8	-3.8
10	400 kV	NAUBATPUR-BALIA	2	171	461	0.0	3.7	-3.7
11	400 kV	BIHARSHARIFF-BALIA	2	227	262	0.0	0.3	-0.3
12	400 kV	MOTTHARI-GORAKHPUR	2	0	446	0.0	7.5	-7.5
13	400 kV	BIHARSHARIFF-VARANASI	2	262	184	0.0	0.4	-0.4
14	220 kV	SAHUPURI-KARAMNANA	1	11	109	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	0.8	0.0	0.8
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						0.8	54.9	-54.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1862	0	27.1	0.0	27.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1827	150	24.9	0.0	24.9
3	765 kV	JHARSUGUDA-DURG	2	414	277	0.9	0.0	0.9
4	400 kV	JHARSUGUDA-RAIGARH	4	189	492	0.0	4.2	-4.2
5	400 kV	RANCHI-SIPAT	2	431	139	4.6	0.0	4.6
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.2	-2.2
7	220 kV	BUDHIPADAR-KORBA	2	133	0	0.9	0.0	0.9
ER-WR						58.6	6.4	52.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	592	0	10.1	0.0	10.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1597	0.0	35.2	-35.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	2628	0.0	41.2	-41.2
4	400 kV	TALCHER-I/C	2	632	613	1.1	0.0	1.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						10.1	76.4	-66.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	155	247	0.5	1.6	-1.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	239	349	0.0	1.7	-1.7
3	220 kV	ALIPURDUAR-SALAKATI	2	27	89	0.0	0.9	-0.9
ER-NER						0.5	4.2	-3.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
NER-NR						0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3020	0.0	50.5	-50.5
2	HVDC	VINDHYACHAL B/B	-	0	295	0.0	6.0	-6.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	299	0.0	7.4	-7.4
4	765 kV	GWALIOR-AGRA	2	0	2671	0.0	34.6	-34.6
5	765 kV	GWALIOR-PHAGI	2	710	1754	3.4	17.3	-13.8
6	765 kV	JABALPUR-ORAI	2	0	1081	0.0	26.3	-26.3
7	765 kV	GWALIOR-ORAI	1	990	0	14.1	0.0	14.1
8	765 kV	SATNA-ORAI	1	0	894	0.0	14.8	-14.8
9	765 kV	BANASKANTHA-CHITORGARH	2	281	1141	0.5	12.4	-11.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3167	0.0	49.8	-49.8
11	400 kV	ZERDA-KANKROLI	1	61	155	0.2	1.5	-1.3
12	400 kV	ZERDA -BHINMAL	1	210	239	1.2	1.1	0.1
13	400 kV	VINDHYACHAL -RIHAND	1	955	0	17.3	0.0	17.3
14	400 kV	RAPP-SHUJALPUR	2	235	730	1.0	5.8	-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	1.5	-1.5
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						37.7	228.9	-191.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	1000	0	14.5	0.0	14.5
2	HVDC	RAIGARH-PUGALUR	2	0	1002	0.0	16.5	-16.5
3	765 kV	SOLAPUR-RAICHUR	2	1802	1063	11.3	4.4	6.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2430	0.0	31.1	-31.1
5	400 kV	KOLHAPUR-KUDGI	2	1479	0	25.3	0.0	25.3
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	112	2.1	0.0	2.1
WR-SR						53.1	51.9	1.2

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 MANGDECHU HEP 4*180MW)	619	568	570	13.69	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1068	1005	1017	24.41	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	204	134	163	3.91	
	NER	132kV GELEPHU-SALAKATI	-28	-19	-23	-0.56	
	NER	132kV MOTANGA-RANGIA	-64	-33	-50	-1.21	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-63	0	-20	-0.47	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	480	193	332	7.96	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-934	-862	-923	-22.16	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-781	-688	-755	-18.12	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-157	0	-118	-2.82	

