



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: 11th 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 10.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 10-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 10th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 11-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)	57721	54469	44813	27177	3239	187419
Peak Shortage (MW)	450	0	0	0	0	450
Energy Met (MU)	1246	1265	1098	603	62	4274
Hydro Gen (MU)	156	46	64	132	30	428
Wind Gen (MU)	10	151	148	-	-	309
Solar Gen (MU)*	121.33	40.03	94.05	2.74	0.72	259
Energy Shortage (MU)	3.96	0.00	0.00	1.00	0.93	5.89
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	58633	56856	53125	28891	3268	191860
Time Of Maximum Demand Met	22:42	19:49	10:40	23:08	20:30	11:55

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	0.061	0.01	1.68	5.67	7.36	62.81	29.83

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	8067	0	172.2	123.1	-1.6	160	0.00
	Haryana	7588	0	162.3	115.8	-1.8	217	0.02
	Rajasthan	10903	0	238.8	73.6	-1.3	259	0.00
	Delhi	5322	0	107.9	104.5	-2.4	92	0.00
	UP	23516	0	449.3	176.1	0.9	643	0.00
	Uttarakhand	1956	0	39.1	26.3	2.1	387	1.67
	HP	1234	0	23.0	19.7	2.5	810	0.06
	J&K(UT) & Ladakh(UT)	2413	400	46.8	37.0	4.6	794	2.21
	Chandigarh	187	0	4.0	4.0	0.0	73	0.00
Railways_NR ISTS	153	0	3.0	3.4	-0.4	3	0.00	
WR	Chhattisgarh	4974	0	111.0	63.4	-0.6	222	0.00
	Gujarat	15459	0	342.0	164.3	-6.6	652	0.00
	MP	10331	0	224.7	93.2	-2.0	371	0.00
	Maharashtra	23093	0	514.9	176.6	-5.3	772	0.00
	Goa	629	0	12.5	12.6	-0.2	56	0.00
	DNHDDPDCL	1296	0	29.4	29.5	-0.1	87	0.00
	AMNSIL	776	0	17.7	10.4	0.0	228	0.00
	BALCO	521	0	12.4	12.5	-0.1	523	0.00
SR	Andhra Pradesh	10800	0	219.3	61.0	1.0	721	0.00
	Telangana	12335	0	235.1	104.6	1.5	885	0.00
	Karnataka	11454	0	215.0	58.1	3.0	1043	0.00
	Kerala	3862	0	76.3	50.6	2.6	528	0.00
	Tamil Nadu	16331	0	343.1	177.1	-1.3	953	0.00
	Puducherry	433	0	9.5	9.2	-0.4	43	0.00
ER	Bihar	6782	82	142.3	132.5	-1.1	213	1.00
	DVC	3415	0	75.1	-36.4	0.2	238	0.00
	Jharkhand	1857	0	39.5	31.1	0.2	147	0.00
	Odisha	6304	0	124.3	42.2	-0.8	374	0.00
	West Bengal	10523	0	220.2	104.9	-1.3	448	0.00
	Sikkim	96	0	1.4	1.5	-0.1	15	0.00
	Railways_ER ISTS	26	0	0.1	0.3	-0.2	15	0.00
NER	Arunachal Pradesh	141	0	2.7	2.4	0.1	34	0.00
	Assam	2164	0	41.9	35.2	0.4	276	0.00
	Manipur	157	0	2.3	2.4	-0.1	29	0.00
	Meghalaya	320	0	4.9	0.8	0.0	89	0.93
	Mizoram	107	0	1.7	1.6	-0.3	7	0.00
	Nagaland	162	0	2.9	2.7	-0.1	13	0.00
	Tripura	312	0	5.7	5.7	0.5	110	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.3	6.4	-25.5	-9.4
Day Peak (MW)	2032.9	356.0	-1098.0	-899.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	333.0	-299.5	86.3	-115.6	-4.2	0.0
Actual(MU)	308.2	-308.0	116.2	-119.9	-3.6	-7.1
O/D/U/D(MU)	-24.7	-8.6	29.9	-4.2	0.6	-7.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	9784	9711	7198	1210	330	28233	44
State Sector	10345	15654	6543	2710	314	35565	56
Total	20129	25365	13741	3920	644	63798	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	659	1377	625	657	16	3333	72
Lignite	24	14	57	0	0	94	2
Hydro	156	46	64	132	30	428	9
Nuclear	25	47	42	0	0	114	2
Gas, Naptha & Diesel	11	14	7	0	27	58	1
RES (Wind, Solar, Biomass & Others)	138	192	259	4	1	593	13
Total	1012	1690	1053	793	73	4621	100

Share of RES in total generation (%)	13.66	11.37	24.54	0.45	0.98	12.88
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.53	16.85	34.64	17.42	41.99	24.64

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.046
Based on State Max Demands	1.073

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	191860	11:55	82
Non-Solar hr	189643	19:55	585

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: 11-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	2501	0.0	43.9	-43.9
2	HVDC	PUSAULI B/B	-	0	149	0.0	3.6	-3.6
3	765 kV	GAYA-VARANASI	2	542	196	3.4	0.0	3.4
4	765 kV	SASARAM-FATEHPUR	1	134	259	0.0	1.6	-1.6
5	765 kV	GAYA-BALIA	1	0	735	0.0	12.1	-12.1
6	400 kV	PUSAULI-VARANASI	1	0	136	0.0	2.4	-2.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	98	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	719	0.0	9.5	-9.5
9	400 kV	PATNA-BALIA	2	0	532	0.0	9.7	-9.7
10	400 kV	NAUBATPUR-BALIA	2	0	549	0.0	9.8	-9.8
11	400 kV	BIHARSHARIFF-BALIA	2	31	303	0.0	3.8	-3.8
12	400 kV	MOTTHARI-GORAKHPUR	2	0	458	0.0	6.2	-6.2
13	400 kV	BIHARSHARIFF-VARANASI	2	211	122	0.8	0.0	0.8
14	220 kV	SAHUPURI-KARAMNANA	1	15	119	0.0	1.2	-1.2
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	21	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						5.0	104.9	-99.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1648	0	20.1	0.0	20.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1764	0	26.3	0.0	26.3
3	765 kV	JHARSUGUDA-DURG	2	134	449	0.0	2.5	-2.5
4	400 kV	JHARSUGUDA-RAIGARH	4	18	415	0.0	3.6	-3.6
5	400 kV	RANCHI-SIPAT	2	365	81	4.1	0.0	4.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.7	-1.7
7	220 kV	BUDHIPADAR-KORBA	2	93	0	0.9	0.0	0.9
ER-WR						51.4	7.8	43.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	450	0.0	7.4	-7.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1639	0.0	39.2	-39.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	2714	0.0	44.7	-44.7
4	400 kV	TALCHER-I/C	2	0	316	0.0	6.1	-6.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	91.3	-91.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	485	0.0	7.7	-7.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	354	226	1.1	0.0	1.1
3	220 kV	ALIPURDUAR-SALAKATI	2	0	82	0.0	1.3	-1.3
ER-NER						1.1	9.0	-7.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.5	-12.5
NER-NR						0.0	12.5	-12.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5043	0.0	77.1	-77.1
2	HVDC	VINDHYACHAL B/B	-	444	0	8.0	0.0	8.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	254	5.9	0.0	5.9
4	765 kV	GWALIOR-AGRA	2	68	2479	0.0	30.5	-30.4
5	765 kV	GWALIOR-PHAGI	2	22	1671	0.0	21.3	-21.3
6	765 kV	JABALPUR-ORAI	2	0	1219	0.0	28.4	-28.4
7	765 kV	GWALIOR-ORAI	1	682	0	11.5	0.0	11.5
8	765 kV	SATNA-ORAI	1	0	1135	0.0	19.9	-19.9
9	765 kV	BANASKANTHA-CHITORGARH	2	858	1233	3.9	8.0	-4.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3742	0.0	65.9	-65.9
11	400 kV	ZERDA-KANKROLI	1	190	214	1.2	1.1	0.1
12	400 kV	ZERDA -BHINMAL	1	409	336	3.2	1.5	1.7
13	400 kV	VINDHYACHAL -RIHAND	1	955	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUJALPUR	2	197	735	0.6	5.7	-5.1
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	98	0	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	73	10	0.5	0.0	0.5
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						57.4	261.8	-204.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	328	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	3005	0.0	33.6	-33.6
3	765 kV	SOLAPUR-RAICHUR	2	856	2005	5.5	6.7	-1.2
4	765 kV	WARDHA-NIZAMABAD	2	0	3133	0.0	39.4	-39.4
5	400 kV	KOLHAPUR-KUDGI	2	1187	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	105	2.0	0.0	2.0
WR-SR						27.1	86.9	-59.8

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)	655	450	572	13.74
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1030	808	961	23.05
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	173	118	143	3.44
	NER	132kV GELEPHU-SALAKATI	65	11	23	0.56
	NER	132kV MOTANGA-RANGIA	52	0	22	0.53
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-45	-1.09
	ER	NEPAL IMPORT (FROM BIHAR)	-23	0	-5	-0.12
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	452	218	319	7.65
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-926	-808	-904	-21.69
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-899	0	-390	-9.37
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-172	0	-158	-3.78