



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: 03rd 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 02.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 02-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 02nd July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 03-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)	67317	52503	42599	24630	3086	190135
Peak Shortage (MW)	885	0	0	0	0	885
Energy Met (MU)	1472	1207	1073	547	58	4357
Hydro Gen (MU)	402	45	40	132	23	641
Wind Gen (MU)	29	88	209	-	-	325
Solar Gen (MU)*	136.43	48.26	100.21	2.63	0.68	288
Energy Shortage (MU)	5.11	0.00	0.00	0.51	1.08	6.70
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69384	53575	50039	26290	3098	194770
Time Of Maximum Demand Met	22:05	19:55	12:45	23:22	20:38	22:20

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	0.073	1.15	2.49	8.90	12.53	71.55	15.91

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	14182	0	306.7	203.9	-0.7	142	0.00
	Haryana	10528	0	223.8	167.6	0.6	214	0.00
	Rajasthan	11832	0	260.8	74.0	-2.0	252	0.00
	Delhi	6170	0	116.8	113.4	-2.4	64	0.00
	UP	22951	680	428.4	197.9	-0.4	467	4.67
	Uttarakhand	2014	0	41.8	15.3	0.3	123	0.11
	HP	1480	24	30.7	-11.9	-0.2	50	0.24
	J&K(UT) & Ladakh(UT)	2421	0	53.8	24.9	0.8	159	0.09
	Chandigarh	328	0	6.2	6.2	0.0	31	0.00
Railways_NR ISTS	163	0	3.5	3.5	0.0	15	0.00	
WR	Chhattisgarh	4913	0	109.7	62.7	-0.9	285	0.00
	Gujarat	14621	0	323.1	178.5	0.0	990	0.00
	MP	9869	0	208.9	88.5	-3.4	309	0.00
	Maharashtra	22248	0	495.5	160.0	-6.8	624	0.00
	Goa	558	0	11.3	11.3	-0.5	64	0.00
	DNHDDPDCL	1166	0	27.4	27.3	0.1	52	0.00
	AMNSIL	864	0	19.0	9.5	-0.1	248	0.00
	BALCO	518	0	12.3	12.5	-0.2	0	0.00
	Andhra Pradesh	11584	0	239.1	58.3	-0.9	612	0.00
SR	Telangana	9962	0	205.0	94.7	0.1	572	0.00
	Karnataka	11135	0	211.4	53.5	1.4	738	0.00
	Kerala	3502	0	71.7	59.3	2.0	318	0.00
	Tamil Nadu	15217	0	337.2	146.2	-6.9	231	0.00
	Puducherry	405	0	9.0	8.7	-0.3	45	0.00
	Bihar	5740	0	109.7	102.5	-1.8	232	0.51
ER	DVC	3314	0	74.0	-33.8	-0.5	275	0.00
	Jharkhand	1612	0	34.2	27.5	-1.7	82	0.00
	Odisha	5928	0	137.9	43.3	0.2	435	0.00
	West Bengal	9529	0	190.5	62.4	-0.6	568	0.00
	Sikkim	64	0	1.0	1.2	-0.2	4	0.00
	Railways_ER ISTS	23	0	0.2	0.4	-0.2	12	0.00
NER	Arunachal Pradesh	143	0	2.6	2.4	0.0	38	0.00
	Assam	2026	0	37.9	31.1	0.1	155	0.00
	Manipur	176	0	2.5	2.6	0.0	16	0.00
	Meghalaya	310	0	4.9	1.4	-0.2	21	1.08
	Mizoram	104	0	1.9	1.6	-0.1	13	0.00
	Nagaland	151	0	2.7	2.4	-0.1	8	0.00
	Tripura	294	0	5.0	4.6	0.6	100	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	40.3	7.7	-25.6	-13.5
Day Peak (MW)	1899.2	316.3	-1099.0	-628.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	287.2	-210.2	65.9	-144.5	1.7	0.0
Actual(MU)	242.3	-201.6	85.7	-135.4	4.3	-4.7
O/D/U/D(MU)	-44.9	8.6	19.8	9.1	2.6	-4.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4689	13191	7478	2470	818	28646	46
State Sector	8980	16878	5818	1850	241	33766	54
Total	13669	30069	13296	4320	1059	62412	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	669	1270	586	610	13	3149	67
Lignite	27	12	51	0	0	90	2
Hydro	402	45	40	132	23	641	14
Nuclear	29	47	46	0	0	123	3
Gas, Naptha & Diesel	10	10	6	0	23	48	1
RES (Wind, Solar, Biomass & Others)	172	137	325	12	1	646	14
Total	1309	1520	1055	754	60	4697	100

Share of RES in total generation (%)	13.13	9.00	30.85	1.56	1.14	13.80
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	46.08	15.02	38.98	19.38	39.64	30.10

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.039
Based on State Max Demands	1.068

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	189484	14:49	375
Non-Solar hr	194770	22:20	965

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: 03-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	1502	0.0	35.0	-35.0
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.3	-2.3
3	765 kV	GAYA-VARANASI	2	590	520	0.0	1.1	-1.1
4	765 kV	SASARAM-FATEHPUR	1	46	419	0.0	4.8	-4.8
5	765 kV	GAYA-BALIA	1	0	754	0.0	9.3	-9.3
6	400 kV	PUSAULI-VARANASI	1	0	107	0.0	1.4	-1.4
7	400 kV	PUSAULI -ALLAHABAD	1	2	92	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	892	0.0	12.8	-12.8
9	400 kV	PATNA-BALIA	2	0	574	0.0	8.8	-8.8
10	400 kV	NAUBATPUR-BALIA	2	0	614	0.0	9.1	-9.1
11	400 kV	BIHARSHARIF-BALIA	2	0	389	0.0	4.8	-4.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	502	0.0	7.1	-7.1
13	400 kV	BIHARSHARIF-VARANASI	2	208	283	0.0	1.5	-1.5
14	220 kV	SAHUPURI-KARMANASA	1	6	105	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	0.6	0.0	0.6
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.6	100.0	-99.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1701	0	25.8	0.0	25.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1463	345	17.8	0.0	17.8
3	765 kV	JHARSUGUDA-DURG	2	144	262	0.0	1.0	-1.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	385	0.0	5.1	-5.1
5	400 kV	RANCHI-SIPAT	2	258	181	2.1	0.0	2.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	2	92	0	0.9	0.0	0.9
ER-WR						46.6	8.1	38.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	555	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	27.7	-27.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2621	0.0	44.5	-44.5
4	400 kV	TALCHER-I/C	2	298	936	0.0	7.9	-7.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	84.7	-84.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	416	0.0	6.6	-6.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	158	285	0.0	2.3	-2.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	96	0.0	1.3	-1.3
ER-NER						0.0	10.2	-10.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	307	0.0	7.3	-7.3
NER-NR						0.0	7.3	-7.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4021	0.0	41.4	-41.4
2	HVDC	VINDHYACHAL B/B	-	444	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	265	0	6.0	0.0	6.0
4	765 kV	GWALIOR-AGRA	2	0	2363	0.0	29.2	-29.2
5	765 kV	GWALIOR-PHAGI	2	58	1952	0.0	22.9	-22.9
6	765 kV	JABALPUR-ORAI	2	0	1226	0.0	29.5	-29.5
7	765 kV	GWALIOR-ORAI	1	664	0	10.2	0.0	10.2
8	765 kV	SATNA-ORAI	1	0	1196	0.0	21.4	-21.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1390	443	10.3	0.0	10.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	3319	0.0	57.9	-57.9
11	400 kV	ZERDA-KANKROLI	1	222	85	2.1	0.0	2.1
12	400 kV	ZERDA -BHINMAL	1	477	135	5.2	0.0	5.2
13	400 kV	VINDHYACHAL -RIHAND	1	964	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	214	760	0.0	4.6	-4.6
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	82	0	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	57	19	0.3	0.1	0.2
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						68.7	209.4	-140.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	505	0.0	9.5	-9.5
2	HVDC	RAIGARH-PUGALUR	2	0	2003	0.0	19.0	-19.0
3	765 kV	SOLAPUR-RAICHUR	2	1925	593	11.6	0.0	11.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2099	0.0	30.5	-30.5
5	400 kV	KOLHAPUR-KUDGI	2	1563	0	23.1	0.0	23.1
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	2.1	0.0	2.1
WR-SR						36.8	59.0	-22.3

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)	716	531	626	15.03
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1043	981	985	23.65
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	158	111	133	3.19
	NER	132kV GELEPHU-SALAKATI	-33	-21	-28	-0.67
	NER	132kV MOTANGA-RANGIA	-58	-19	-40	-0.95
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-61	0	-14	-0.33
	ER	NEPAL IMPORT (FROM BIHAR)	-5	0	0	-0.01
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	382	285	335	8.03
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-939	-866	-925	-22.19
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-628	-445	-563	-13.50
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-160	0	-140	-3.36