



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: 02nd 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 01.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-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 01st July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 02-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)	67100	51690	46722	24407	3111	193030
Peak Shortage (MW)	120	0	0	0	3	123
Energy Met (MU)	1466	1200	1140	534	60	4400
Hydro Gen (MU)	395	44	46	122	24	632
Wind Gen (MU)	29	150	199	-	-	378
Solar Gen (MU)*	129.31	37.25	117.62	2.80	0.83	288
Energy Shortage (MU)	0.54	0.00	0.00	1.48	1.10	3.12
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68504	54047	53428	25625	3151	196142
Time Of Maximum Demand Met	22:17	19:41	12:45	23:26	18:52	22:25

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	0.045	0.00	0.43	8.41	8.84	72.61	18.55

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	14202	0	309.4	209.0	-1.8	207	0.00
	Haryana	11063	0	227.3	176.8	0.2	312	0.00
	Rajasthan	11627	0	255.1	73.1	-2.3	267	0.00
	Delhi	5634	0	117.1	113.3	-2.0	147	0.00
	UP	22244	0	415.4	187.1	-0.3	443	0.06
	Uttarakhand	2024	0	44.1	17.6	0.6	132	0.00
	HP	1624	0	34.9	-9.6	-0.3	129	0.13
	J&K(UT) & Ladakh(UT)	2458	90	52.4	26.0	0.2	144	0.35
	Chandigarh	307	0	6.2	6.4	-0.2	18	0.00
Railways_NR ISTS	189	0	3.6	3.6	0.1	28	0.00	
WR	Chhattisgarh	4790	0	105.3	59.9	-0.6	480	0.00
	Gujarat	14935	0	325.3	171.0	0.0	754	0.00
	MP	9530	0	204.5	77.5	-4.3	267	0.00
	Maharashtra	22091	0	494.1	155.1	-7.3	514	0.00
	Goa	619	0	12.4	12.5	-0.5	45	0.00
	DNHDDPDCL	1211	0	28.4	28.4	0.0	128	0.00
	AMNSIL	790	0	17.7	8.3	-0.1	309	0.00
	BALCO	519	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	11560	0	240.0	68.7	-0.1	703	0.00
	Telangana	10356	0	209.8	90.1	1.3	489	0.00
	Karnataka	12037	0	224.9	57.9	1.3	898	0.00
	Kerala	3921	0	78.5	63.8	2.0	409	0.00
	Tamil Nadu	17381	0	376.9	173.2	-3.7	568	0.00
	Puducherry	470	0	10.4	9.9	-0.3	54	0.00
ER	Bihar	5839	0	109.7	101.4	-1.8	257	1.00
	DVC	3385	0	75.1	-34.2	0.7	312	0.00
	Jharkhand	1653	0	33.8	26.4	-0.7	230	0.49
	Odisha	5751	0	123.5	41.9	-0.4	209	0.00
	West Bengal	9067	0	190.3	70.9	-1.9	247	0.00
	Sikkim	70	0	1.2	1.5	-0.3	1	0.00
	Railways_ER ISTS	20	0	0.1	0.4	-0.2	8	0.00
NER	Arunachal Pradesh	158	0	2.8	2.6	0.0	22	0.00
	Assam	2075	0	39.9	33.0	0.4	113	0.00
	Manipur	182	0	2.6	2.6	0.0	15	0.00
	Meghalaya	332	3	5.1	1.6	-0.1	75	1.10
	Mizoram	122	0	1.9	1.7	-0.2	16	0.00
	Nagaland	150	0	2.7	2.4	-0.1	23	0.00
	Tripura	257	0	4.6	3.9	0.2	75	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	40.8	4.2	-25.2	-11.7
Day Peak (MW)	1989.0	270.0	-1081.0	-607.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	298.0	-236.0	84.0	-149.1	3.1	0.0
Actual(MU)	255.5	-239.0	111.5	-133.9	5.1	-0.8
O/D/U/D(MU)	-42.5	-3.0	27.5	15.2	2.0	-0.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4720	13551	6978	2120	818	28187	46
State Sector	8680	16563	5260	2150	241	32893	54
Total	13400	30114	12238	4270	1059	61080	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	662	1238	612	597	14	3122	66
Lignite	28	12	56	0	0	97	2
Hydro	395	44	46	122	24	632	13
Nuclear	30	47	46	0	0	123	3
Gas, Naptha & Diesel	10	8	6	0	23	47	1
RES (Wind, Solar, Biomass & Others)	163	188	333	3	1	689	15
Total	1288	1538	1099	723	61	4709	100

Share of RES in total generation (%)	12.67	12.22	30.33	0.46	1.36	14.67
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	45.65	18.15	38.71	17.41	40.34	30.73

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.043
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	195423	11:50	110
Non-Solar hr	196142	22:25	231

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: 02-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	1501	0.0	35.5	-35.5
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	694	359	0.8	0.0	0.8
4	765 kV	SASARAM-FATEHPUR	1	53	380	0.0	4.5	-4.5
5	765 kV	GAYA-BALIA	1	0	636	0.0	7.9	-7.9
6	400 kV	PUSAULI-VARANASI	1	0	117	0.0	1.5	-1.5
7	400 kV	PUSAULI -ALLAHABAD	1	15	85	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	729	0.0	10.7	-10.7
9	400 kV	PATNA-BALIA	2	0	571	0.0	9.2	-9.2
10	400 kV	NAUBATPUR-BALIA	2	0	595	0.0	9.3	-9.3
11	400 kV	BIHARSHARIFF-BALIA	2	20	274	0.0	1.9	-1.9
12	400 kV	MOTTHARI-GORAKHPUR	2	0	441	0.0	6.8	-6.8
13	400 kV	BIHARSHARIFF-VARANASI	2	256	201	0.0	0.5	-0.5
14	220 kV	SAHUPURI-KARAMNANA	1	21	102	0.0	1.1	-1.1
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-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						1.4	92.2	-90.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1646	0	20.6	0.0	20.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1486	528	16.4	0.0	16.4
3	765 kV	JHARSUGUDA-DURG	2	195	295	0.0	1.6	-1.6
4	400 kV	JHARSUGUDA-RAIGARH	4	67	331	0.0	2.9	-2.9
5	400 kV	RANCHI-SIPAT	2	311	220	1.6	0.0	1.6
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	106	0	0.8	0.0	0.8
ER-WR						39.4	6.0	33.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	550	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1652	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2523	0.0	48.1	-48.1
4	400 kV	TALCHER-I/C	2	0	839	0.0	9.3	-9.3
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	100.2	-100.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	374	0.0	7.0	-7.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	1	230	0.0	2.6	-2.6
3	220 kV	ALIPURDUAR-SALAKATI	2	0	87	0.0	1.3	-1.3
ER-NER						0.0	10.8	-10.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	309	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	3528	0.0	66.5	-66.5
2	HVDC	VINDHYACHAL B/B	-	444	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	264	0	6.0	0.0	6.0
4	765 kV	GWALIOR-AGRA	2	0	2473	0.0	31.4	-31.4
5	765 kV	GWALIOR-PHAGI	2	234	1809	0.6	19.3	-18.7
6	765 kV	JABALPUR-ORAI	2	0	989	0.0	22.5	-22.5
7	765 kV	GWALIOR-ORAI	1	916	0	13.1	0.0	13.1
8	765 kV	SATNA-ORAI	1	0	1096	0.0	19.0	-19.0
9	765 kV	BANASKANTHA-CHITORGARH	2	951	673	5.0	3.0	2.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3284	0.0	59.7	-59.7
11	400 kV	ZERDA-KANKROLI	1	221	112	1.7	0.3	1.4
12	400 kV	ZERDA -BHINMAL	1	504	144	4.6	0.3	4.3
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	337	684	1.5	4.7	-3.2
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	83	9	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	60	27	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						67.2	229.3	-162.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	376	505	1.0	9.7	-8.7
2	HVDC	RAIGARH-PUGALUR	2	0	4514	0.0	27.7	-27.7
3	765 kV	SOLAPUR-RAICHUR	2	1428	1008	7.3	4.0	3.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2320	0.0	33.7	-33.7
5	400 kV	KOLHAPUR-KUDGI	2	1264	0	21.1	0.0	21.1
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	119	2.1	0.0	2.1
WR-SR						31.6	75.1	-43.6

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)	647	488	547	13.12	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1037	965	977	23.45	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	156	19	104	2.51	
	NER	132kV GELEPHU-SALAKATI	31	18	23	0.56	
	NER	132kV MOTANGA-RANGIA	59	35	47	1.12	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-53	0	-9	-0.22	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	323	0	185	4.45	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-928	-824	-922	-22.13	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-607	-390	-487	-11.69	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-153	0	-128	-3.06	