



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: 10th 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 09.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-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 09th July 2023, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day

Date of Reporting: 10-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)	54879	50641	42012	25547	3223	176302
Peak Shortage (MW)	670	0	0	429	15	1114
Energy Met (MU)	1174	1197	1030	571	62	4034
Hydro Gen (MU)	237	38	48	139	31	493
Wind Gen (MU)	8	135	170	-	-	313
Solar Gen (MU)*	116.50	30.36	108.44	2.72	1.00	259
Energy Shortage (MU)	1.60	0.00	0.00	1.97	1.04	4.61
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55565	52538	47902	28475	3229	179616
Time Of Maximum Demand Met	00:00	19:45	12:30	23:27	19:52	22:32

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	0.033	0.00	0.66	3.61	4.27	79.83	15.90

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	6839	0	150.4	101.1	-2.1	301	0.00
	Haryana	7417	0	148.6	111.3	-2.3	191	0.00
	Rajasthan	10377	0	234.5	76.2	-2.5	308	0.00
	Delhi	4838	0	101.4	97.6	-2.3	176	0.00
	UP	22264	0	422.0	194.2	-2.4	339	0.00
	Uttarakhand	1675	0	36.1	20.2	1.0	308	0.56
	HP	1482	0	30.3	12.6	11.2	756	0.01
	J&K(UT) & Ladakh(UT)	2120	0	43.9	19.6	1.4	366	1.03
	Chandigarh	200	0	3.9	3.9	0.0	45	0.00
	Railways NR ISTS	136	0	2.9	3.6	-0.6	0	0.00
WR	Chhattisgarh	4597	0	102.4	59.6	-1.8	202	0.00
	Gujarat	14494	0	321.0	173.7	0.0	871	0.00
	MP	10059	0	217.9	108.0	-3.8	462	0.00
	Maharashtra	21433	0	485.7	167.0	-4.0	596	0.00
	Goa	581	0	11.6	11.5	-0.3	60	0.00
	DNHDDPDCL	1263	0	28.7	28.9	-0.2	87	0.00
	AMNSIL	787	0	17.4	10.1	0.3	253	0.00
	BALCO	520	0	12.4	12.5	-0.1	0	0.00
	Andhra Pradesh	10639	0	217.1	53.4	-0.3	1255	0.00
	Telangana	11026	0	215.9	95.6	-0.1	645	0.00
SR	Karnataka	9527	0	188.3	43.3	0.6	637	0.00
	Kerala	3487	0	67.3	46.6	1.4	331	0.00
	Tamil Nadu	14934	0	331.6	152.8	-6.5	364	0.00
	Puducherry	430	0	9.6	9.5	-0.6	63	0.00
	Bihar	6710	145	139.6	133.3	-2.2	333	1.97
ER	DVC	3248	0	71.1	-26.9	-0.8	320	0.00
	Jharkhand	1775	0	36.5	29.6	-1.8	121	0.00
	Odisha	6304	0	122.8	40.6	0.0	223	0.00
	West Bengal	10119	0	199.5	81.1	-0.6	353	0.00
	Sikkim	61	0	1.0	1.1	-0.2	16	0.00
	Railways ER ISTS	18	0	0.2	0.3	-0.2	7	0.00
NER	Arunachal Pradesh	152	0	2.5	2.3	0.0	96	0.00
	Assam	2178	0	42.6	35.5	0.7	107	0.00
	Manipur	154	0	2.3	2.5	-0.2	9	0.00
	Meghalaya	303	15	5.0	1.4	-0.3	32	1.04
	Mizoram	96	0	1.8	1.6	-0.2	6	0.00
	Nagaland	156	0	2.9	2.7	-0.2	17	0.00
	Tripura	306	0	5.4	5.3	0.3	63	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.3	4.4	-25.9	-14.7
Day Peak (MW)	1801.5	286.0	-1105.0	-633.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	265.4	-213.9	52.1	-99.7	-3.8	0.0
Actual(MU)	242.5	-215.3	62.2	-95.1	-1.9	-7.7
O/D/U/D(MU)	-22.9	-1.4	10.1	4.7	1.9	-7.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	12044	8901	6978	1410	351	29684	46
State Sector	9840	15804	6753	2000	241	34638	54
Total	21884	24705	13731	3410	592	64322	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	572	1252	586	585	13	3008	69
Lignite	21	14	55	0	0	90	2
Hydro	237	38	48	139	31	492	11
Nuclear	25	47	46	0	0	118	3
Gas, Naptha & Diesel	7	10	7	0	27	51	1
RES (Wind, Solar, Biomass & Others)	131	166	294	4	1	595	14
Total	993	1526	1035	728	72	4354	100

Share of RES in total generation (%)	13.20	10.87	28.37	0.54	1.39	13.72
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.56	16.41	37.43	19.96	44.93	27.78

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.045
Based on State Max Demands	1.072

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	174643	11:56	84
Non-Solar hr	179616	22:32	450

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

**Note: All generation MU figures are gross

***Godha (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: 10-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	37.9	-37.9	
2	HVDC	PUSAULI B/B	-	0	149	0.0	7.5	-7.5	
3	765 kV	GAYA-VARANASI	2	744	217	5.3	0.0	5.3	
4	765 kV	SASARAM-FATEHPUR	1	201	217	0.0	0.0	0.0	
5	765 kV	GAYA-BALIA	1	0	746	0.0	9.7	-9.7	
6	400 kV	PUSAULI-VARANASI	1	0	141	0.0	2.3	-2.3	
7	400 kV	PUSAULI-ALLAHABAD	1	0	108	0.0	1.3	-1.3	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	732	0.0	9.8	-9.8	
9	400 kV	PATNA-BALIA	2	0	549	0.0	7.7	-7.7	
10	400 kV	NAUBATPUR-BALIA	2	0	561	0.0	7.6	-7.6	
11	400 kV	BIHARSHARIFF-BALIA	2	82	238	0.0	2.5	-2.5	
12	400 kV	MOTIHARI-GORAKHPUR	2	7	428	0.0	5.0	-5.0	
13	400 kV	BIHARSHARIFF-VARANASI	2	262	136	1.5	0.0	1.5	
14	220 kV	SAHUPUR-KARAMNUSA	1	14	120	0.0	1.3	-1.3	
15	132 kV	NAGARUNTARI-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	0	0.0	0.0	0.0	
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0	
						ER-NR	7.6	92.5	-85.0
Import/Export of ER (With WR)									
1	765 kV	JHARSI-GUDA-DHARAMJAIGARH	4	1442	0	21.3	0.0	21.3	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1732	120	26.0	0.0	26.0	
3	765 kV	JHARSI-GUDA-DURG	2	289	468	0.0	1.5	-1.5	
4	400 kV	JHARSI-GUDA-RAIGARH	4	47	375	0.0	4.3	-4.3	
5	400 kV	RANCHI-SIPAT	2	369	63	4.9	0.0	4.9	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.8	-1.8	
7	220 kV	BUDHIPADAR-KORBA	2	78	0	0.4	0.0	0.4	
						ER-WR	52.6	7.5	45.1
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	459	0.0	10.2	-10.2	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1637	0.0	34.1	-34.1	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2334	0.0	35.7	-35.7	
4	400 kV	TALCHER-I/C	2	212	843	0.0	6.2	-6.2	
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0	
						ER-SR	0.0	80.0	-80.0
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	0	394	0.0	6.3	-6.3	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	163	252	0.0	1.3	-1.3	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	108	0.0	1.6	-1.6	
						ER-NER	0.0	9.1	-9.1
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.2	-12.2	
						NER-NR	0.0	12.2	-12.2
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5044	0.0	63.7	-63.7	
2	HVDC	VINDHYACHAL B/B	-	227	0	6.1	0.0	6.1	
3	HVDC	MUNDRAMOHINDERGARH	2	263	0	5.9	0.0	5.9	
4	765 kV	GWALIOR-AGRA	2	216	2739	0.3	23.3	-23.0	
5	765 kV	GWALIOR-PHAGI	2	506	1927	1.6	19.2	-17.6	
6	765 kV	JABALPUR-ORAI	2	18	1146	0.0	22.0	-22.0	
7	765 kV	GWALIOR-ORAI	1	951	0	12.5	0.0	12.5	
8	765 kV	SATNA-ORAI	1	0	1111	0.0	16.0	-16.0	
9	765 kV	BANASKANTHA-CHITORGARH	2	1071	859	9.1	3.6	5.6	
10	765 kV	VINDHYACHAL-VARANASI	2	0	3804	0.0	65.2	-65.2	
11	400 kV	ZERDA-KANKROLI	1	195	147	2.0	0.6	1.4	
12	400 kV	ZERDA-BHINMAL	1	465	232	4.2	0.9	3.4	
13	400 kV	VINDHYACHAL-RIHAND	1	958	0	19.8	0.0	19.8	
14	400 kV	RAPP-SHUJALPUR	2	254	785	1.8	5.0	-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	2.2	-2.2	
17	220 kV	MEHGAON-AURAIYA	1	97	0	1.1	0.0	1.1	
18	220 kV	MALANPUR-AURAIYA	1	71	0	0.6	0.0	0.6	
19	132 kV	GWALIORSAWAI 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	65.1	221.6	-156.5
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	0	405	0.0	7.5	-7.5	
2	HVDC	RAIGARH-PUGAUR	2	0	3005	0.0	23.2	-23.2	
3	765 kV	SOLAPUR-RAICHUR	2	2213	692	17.8	0.9	17.0	
4	765 kV	WARDHA-NIZAMABAD	2	0	2203	0.0	25.2	-25.2	
5	400 kV	KOLHAPUR-KIDGI	2	1444	0	23.7	0.0	23.7	
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	107	2.0	0.0	2.0	
						WR-SR	43.5	56.8	-13.3

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Import(+ve)/Export(-ve) Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	642	586	642	15.60
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1042	0	991	23.79
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	177	124	177	5.46
	NER	132kV GELEPHU-SALAKATI	-44	-24	-34	-0.81
	NER	132kV MOTANGA-RANGIA	-50	-21	-30	-0.72
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-71	0	-39	-0.93
	ER	NEPAL IMPORT (FROM BIHAR)	-30	0	-17	-0.40
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	387	176	238	5.72
	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-922	-924	-22.17
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-633	-588	-612	-14.70
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-173	0	-158	-3.78

