



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: 25th 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 24.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 24-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 24rd July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 25-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)	74793	55077	42620	27674	3309	203473
Peak Shortage (MW)	752	0	0	587	63	1402
Energy Met (MU)	1702	1266	987	629	63	4647
Hydro Gen (MU)	406	69	94	137	31	736
Wind Gen (MU)	9	129	263	-	-	401
Solar Gen (MU)*	111.11	43.84	66.47	2.55	0.91	225
Energy Shortage (MU)	5.05	0.00	0.00	5.28	0.50	10.83
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	76426	57312	47918	29428	3385	205996
Time Of Maximum Demand Met	14:53	19:49	09:24	23:41	18:52	14:54

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	0.031	0.00	0.38	2.63	3.01	79.25	17.74

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	13626	0	293.6	167.2	0.0	267	0.00
	Haryana	12075	0	253.9	193.3	-0.4	180	0.00
	Rajasthan	13358	0	286.6	113.3	-0.7	239	1.04
	Delhi	7101	0	146.4	133.5	-1.6	181	0.00
	UP	27822	0	577.5	287.4	0.4	251	2.24
	Uttarakhand	2232	0	47.9	24.7	0.3	167	0.64
	HP	1617	0	33.6	-1.4	1.2	141	0.00
	J&K(UT) & Ladakh(UT)	2493	180	52.5	24.4	1.9	272	1.13
	Chandigarh	363	0	7.1	7.4	-0.3	35	0.00
Railways NR ISTS	180	0	3.4	3.5	-0.1	35	0.00	
WR	Chhattisgarh	4803	0	105.4	52.8	-0.6	211	0.00
	Gujarat	15830	0	352.6	157.2	-3.5	814	0.00
	MP	11684	0	256.2	140.2	-1.9	337	0.00
	Maharashtra	22002	0	478.5	164.6	-3.4	592	0.00
	Goa	566	0	11.7	11.9	-0.6	52	0.00
	DNHDDPDCL	1276	0	29.4	29.4	0.0	37	0.00
	AMNSIL	924	0	20.2	10.7	-0.2	269	0.00
	BALCO	518	0	12.4	12.5	-0.1	29	0.00
SR	Andhra Pradesh	9013	0	190.0	35.6	3.3	870	0.00
	Telangana	10227	0	200.7	86.6	0.9	595	0.00
	Karnataka	9291	0	177.9	8.2	-0.8	1196	0.00
	Kerala	3353	0	70.7	49.1	0.8	281	0.00
	Tamil Nadu	16108	0	337.9	131.8	-5.1	594	0.00
	Puducherry	407	0	9.4	9.1	-0.5	18	0.00
ER	Bihar	7115	599	154.1	146.5	-0.7	297	3.88
	DVC	3491	0	76.8	-40.8	-0.5	286	0.00
	Jharkhand	1738	138	37.5	33.9	0.0	228	1.40
	Odisha	6688	0	135.5	44.8	-1.0	347	0.00
	West Bengal	10328	0	223.6	105.0	-1.2	351	0.00
	Sikkim	91	0	1.3	1.2	0.0	37	0.00
Railways ER ISTS	13	0	0.1	0.1	0.1	6	0.00	
NER	Arunachal Pradesh	148	0	2.7	2.4	-0.1	43	0.00
	Assam	2195	0	41.1	33.8	-0.3	136	0.00
	Manipur	198	0	2.6	2.6	0.0	24	0.00
	Meghalaya	344	0	5.4	0.2	-0.1	51	0.50
	Mizoram	119	0	1.7	1.6	-0.2	11	0.00
	Nagaland	162	0	2.9	2.6	0.1	5	0.00
Tripura	345	0	6.4	6.0	0.5	51	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.2	5.4	-25.3	-17.9
Day Peak (MW)	1964.0	281.0	-1092.0	-784.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	381.3	-266.1	-22.6	-87.8	-4.7	0.0
Actual(MU)	378.9	-267.6	-35.9	-82.3	-3.5	-10.4
O/D/U/D(MU)	-2.3	-1.4	-13.4	5.5	1.2	-10.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3076	10746	6088	2360	326	22596	40
State Sector	6110	15701	9123	2640	175	33748	60
Total	9186	26446	15211	5000	501	56344	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	793	1330	514	634	13	3284	66
Lignite	25	9	53	0	0	88	2
Hydro	406	69	94	137	31	736	15
Nuclear	29	49	61	0	0	139	3
Gas, Naptha & Diesel	33	16	7	0	29	85	2
RES (Wind, Solar, Biomass & Others)	127	174	359	4	1	665	13
Total	1414	1647	1088	775	73	4997	100

Share of RES in total generation (%)	9.01	10.56	33.02	0.47	1.24	13.31
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.79	17.67	47.24	18.19	43.27	30.83

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.041
Based on State Max Demands	1.067

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	205996	14:54	331
Non-Solar hr	205079	19:59	803

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: 25-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	500	0.0	13.4	-13.4
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	180	846	0.0	6.4	-6.4
4	765 kV	SASARAM-FATEHPUR	1	74	314	0.0	3.7	-3.7
5	765 kV	GAYA-BALIA	1	0	709	0.0	7.3	-7.3
6	400 kV	PUSAULI-VARANASI	1	0	113	0.0	1.4	-1.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	89	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	809	0.0	14.0	-14.0
9	400 kV	PATNA-BALIA	2	0	498	0.0	8.9	-8.9
10	400 kV	NAUBATPUR-BALIA	2	0	508	0.0	8.4	-8.4
11	400 kV	BIHARSHARIF-BALIA	2	61	258	0.0	3.7	-3.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	589	0.0	10.7	-10.7
13	400 kV	BIHARSHARIF-VARANASI	2	125	265	0.0	2.4	-2.4
14	220 kV	SAHUPURI-KARAMNANA	1	11	125	0.0	1.5	-1.5
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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.8	85.9	-85.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	910	549	5.3	0.0	5.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1462	322	22.7	0.0	22.7
3	765 kV	JHARSUGUDA-DURG	2	27	283	0.0	1.9	-1.9
4	400 kV	JHARSUGUDA-RAIGARH	4	75	315	0.0	2.3	-2.3
5	400 kV	RANCHI-SIPAT	2	324	139	6.1	0.0	6.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	134	0.0	2.7	-2.7
7	220 kV	BUDHIPADAR-KORBA	2	90	0	0.7	0.0	0.7
ER-WR						34.8	6.9	27.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	391	0	9.7	0.0	9.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1635	0.0	28.6	-28.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2633	0.0	32.8	-32.8
4	400 kV	TALCHER-I/C	2	781	301	5.2	0.0	5.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						9.7	61.5	-51.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	37	281	0.0	3.2	-3.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	72	359	0.0	3.8	-3.8
3	220 kV	ALIPURDUAR-SALAKATI	2	0	93	0.0	1.3	-1.3
ER-NER						0.0	8.2	-8.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.8	-12.8
NER-NR						0.0	12.8	-12.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5046	0.0	96.0	-96.0
2	HVDC	VINDHYACHAL B/B	-	0	486	0.0	12.0	-12.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	974	0.0	4.7	-4.7
4	765 kV	GWALIOR-AGRA	2	0	2568	0.0	42.1	-42.1
5	765 kV	GWALIOR-PHAGI	2	0	1729	0.0	28.9	-28.9
6	765 kV	JABALPUR-ORAI	2	0	1184	0.0	36.2	-36.2
7	765 kV	GWALIOR-ORAI	1	844	0	15.0	0.0	15.0
8	765 kV	SATNA-ORAI	1	0	1131	0.0	22.1	-22.1
9	765 kV	BANASKANTHA-CHITORGARH	2	654	1360	2.3	13.0	-10.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	3371	0.0	60.1	-60.1
11	400 kV	ZERDA-KANKROLI	1	125	215	0.4	2.3	-1.9
12	400 kV	ZERDA -BHINMAL	1	348	322	1.4	2.9	-1.5
13	400 kV	VINDHYACHAL -RIHAND	1	956	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUALPUR	2	99	756	0.1	8.9	-8.8
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
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						41.0	331.3	-290.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	993	0	24.0	0.0	24.0
2	HVDC	RAIGARH-PUGALUR	2	0	1504	0.0	15.7	-15.7
3	765 kV	SOLAPUR-RAICHUR	2	2463	948	25.1	0.9	24.2
4	765 kV	WARDHA-NIZAMABAD	2	861	2400	2.7	16.9	-14.3
5	400 kV	KOLHAPUR-KUDGI	2	1650	0	31.3	0.0	31.3
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	90	1.6	0.0	1.6
WR-SR						84.6	33.5	51.1

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)	598	390	518	12.43	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1046	976	980	23.53	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	192	108	151	3.62	
	NER	132kV GELEPHU-SALAKATI	27	13	19	0.45	
	NER	132kV MOTANGA-RANGIA	51	34	49	1.17	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-43	-1.03	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	351	224	268	6.43	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-818	-911	-21.87	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-785	-710	-746	-17.91	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-160	0	-142	-3.40	