



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: 17<sup>th</sup> 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 16.07.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-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 16<sup>th</sup> July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 17-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)	66841	52586	44215	25270	3048	191960
Peak Shortage (MW)	210	0	0	66	10	286
Energy Met (MU)	1458	1241	1074	555	60	4388
Hydro Gen (MU)	339	50	53	115	32	589
Wind Gen (MU)	43	153	169	-	-	364
Solar Gen (MU)*	129.72	43.42	92.81	1.76	0.70	268
Energy Shortage (MU)	0.48	0.00	0.00	1.40	0.89	2.77
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69059	54053	50408	27289	3087	195668
Time Of Maximum Demand Met	22:21	09:10	10:53	20:22	19:35	22:16

**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	0.023	0.00	0.00	2.95	2.95	83.83	13.22

**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	12132	0	276.6	166.0	-3.6	142	0.00
	Haryana	9294	0	192.9	147.7	-0.4	269	0.00
	Rajasthan	12281	0	275.2	86.6	-1.9	425	0.00
	Delhi	5721	0	113.8	108.9	-0.8	68	0.00
	UP	25044	0	470.0	233.2	-2.8	358	0.00
	Uttarakhand	1846	75	39.5	21.1	1.1	289	0.38
	HP	1429	0	29.9	3.1	0.1	102	0.00
	J&K(UT) & Ladakh(UT)	2413	0	51.5	24.7	0.6	213	0.10
	Chandigarh	321	0	6.0	5.9	0.2	57	0.00
Railways NR ISTS	144	0	3.0	3.5	-0.5	0	0.00	
WR	Chhattisgarh	4569	0	103.0	55.7	-2.7	173	0.00
	Gujarat	15890	0	356.2	133.9	0.0	721	0.00
	MP	10106	0	220.3	100.5	-3.5	387	0.00
	Maharashtra	22057	0	489.1	179.1	-6.6	431	0.00
	Goa	591	0	12.2	11.7	0.0	44	0.00
	DNHDDPDCL	1256	0	29.2	29.0	0.2	55	0.00
	AMNSIL	811	0	18.1	11.3	0.2	0	0.00
	BALCO	521	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	9978	0	211.3	59.5	-0.6	474	0.00
	Telangana	11895	0	239.7	124.1	0.2	791	0.00
	Karnataka	10580	0	202.9	54.3	-0.3	717	0.00
	Kerala	3619	0	73.2	53.3	1.8	428	0.00
	Tamil Nadu	15128	0	337.4	153.4	-1.2	503	0.00
	Puducherry	430	0	9.7	9.3	-0.4	57	0.00
ER	Bihar	6420	66	135.5	126.8	-1.5	185	1.40
	DVC	3500	0	74.5	-34.3	-0.3	410	0.00
	Jharkhand	1662	0	35.5	30.4	0.1	95	0.00
	Odisha	6337	0	121.7	37.6	-0.1	277	0.00
	West Bengal	9318	0	187.1	76.8	-2.2	183	0.00
	Sikkim	61	0	0.8	0.2	0.6	74	0.00
	Railways ER ISTS	16	0	0.1	0.4	-0.2	3	0.00
NER	Arunachal Pradesh	140	0	2.8	2.3	0.1	65	0.00
	Assam	2165	0	39.9	33.1	-0.1	149	0.00
	Manipur	167	0	2.4	2.5	0.0	25	0.00
	Meghalaya	310	10	5.0	0.7	-0.1	38	0.89
	Mizoram	110	0	1.7	1.6	-0.3	23	0.00
	Nagaland	147	0	2.8	2.5	-0.1	11	0.00
	Tripura	318	0	5.8	5.1	0.4	76	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	42.0	9.5	-25.5	-14.7
Day Peak (MW)	1811.0	394.0	-1104.0	-664.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	300.0	-303.6	112.4	-101.5	-7.4	0.0
Actual(MU)	260.0	-299.8	137.7	-97.3	-7.0	-6.5
O/D/U/D(MU)	-40.0	3.8	25.3	4.1	0.4	-6.5

**F. Generation Outage(MW)**

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3938	10966	7818	2360	306	25388	46
State Sector	6555	14273	6513	2820	212	30373	54
Total	10493	25239	14331	5180	518	55761	100

**G. Sourcewise generation (Gross) (MU)**

	NR	WR	SR	ER	NER	All India	% Share
Coal	688	1336	566	596	13	3199	68
Lignite	24	15	55	0	0	94	2
Hydro	339	50	53	115	32	589	12
Nuclear	29	47	46	0	0	122	3
Gas, Naptha & Diesel	17	11	7	0	29	63	1
RES (Wind, Solar, Biomass & Others)	179	197	279	2	1	658	14
Total	1277	1657	1005	713	74	4725	100

Share of RES in total generation (%)	14.03	11.89	27.74	0.32	0.96	13.92
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	42.86	17.75	37.63	16.43	43.78	28.97

**H. All India Demand Diversity Factor**

Based on Regional Max Demands	1.042
Based on State Max Demands	1.066

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	189837	11:18	33
Non-Solar hr	195668	22:16	224

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: 17-Jul-2023

SI No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
<b>Import/Export of ER (With NR)</b>								
1	HVDC	ALIPURDUAR-AGRA	2	0	1000	0.0	23.8	-23.8
2	HVDC	PUSAULI B/B	-	0	144	0.0	0.8	-0.8
3	765 kV	GAYA-VARANASI	2	619	464	0.3	0.0	0.3
4	765 kV	SASARAM-FATEHPUR	1	129	333	0.0	2.4	-2.4
5	765 kV	GAYA-BALIA	1	0	636	0.0	8.6	-8.6
6	400 kV	PUSAULI-VARANASI	1	38	101	0.0	0.5	-0.5
7	400 kV	PUSAULI-ALLAHABAD	1	48	78	0.0	0.4	-0.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	679	0.0	11.7	-11.7
9	400 kV	PATNA-BALIA	2	0	387	0.0	6.4	-6.4
10	400 kV	NAUBATPUR-BALIA	2	37	434	0.0	5.8	-5.8
11	400 kV	BIHARSHARIFF-BALIA	2	119	193	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	510	0.0	7.2	-7.2
13	400 kV	BIHARSHARIFF-VARANASI	2	245	200	0.0	0.4	-0.4
14	220 kV	SAHUPURI-KARAMNUSA	1	0	126	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHANE	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
<b>ER-NR</b>						<b>0.9</b>	<b>71.9</b>	<b>-71.0</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1683	0	27.0	0.0	27.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1240	716	16.8	0.0	16.8
3	765 kV	JHARSUGUDA-DURG	2	169	524	0.0	1.7	-1.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	405	0.0	3.8	-3.8
5	400 kV	RANCHI-SIPAT	2	260	224	2.9	0.0	2.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.3	-2.3
7	220 kV	BUDHIPADAR-KORBA	2	92	0	1.2	0.0	1.2
<b>ER-WR</b>						<b>47.9</b>	<b>7.8</b>	<b>40.2</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	445	0.0	10.0	-10.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1640	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2544	0.0	41.8	-41.8
4	400 kV	TALCHER-I/C	2	0	916	0.0	10.1	-10.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>91.4</b>	<b>-91.4</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	26	244	0.0	2.8	-2.8
2	400 kV	ALIPURDUAR-BONGAIGAON	2	226	0	0.0	0.7	-0.7
3	220 kV	ALIPURDUAR-SALAKATI	2	0	56	0.0	0.9	-0.9
<b>ER-NER</b>						<b>0.0</b>	<b>4.4</b>	<b>-4.4</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGR/	2	0	503	0.0	12.0	-12.0
<b>NER-NR</b>						<b>0.0</b>	<b>12.0</b>	<b>-12.0</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4028	0.0	61.4	-61.4
2	HVDC	VINDHYACHAL B/B	-	437	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	261	0	2.8	0.0	2.8
4	765 kV	GWALIOR-AGRA	2	68	2229	0.0	30.1	-30.1
5	765 kV	GWALIOR-PHAGI	2	668	1587	2.5	20.5	-18.0
6	765 kV	JABALPUR-ORAI	2	0	1079	0.0	27.7	-27.7
7	765 kV	GWALIOR-ORAI	1	661	0	9.6	0.0	9.6
8	765 kV	SATNA-ORAI	1	0	1105	0.0	20.5	-20.5
9	765 kV	BANASKANTHA-CHITORGARH	2	566	1078	1.4	9.9	-8.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3215	0.0	57.9	-57.9
11	400 kV	ZERDA-KANKROLI	1	143	187	0.6	1.2	-0.6
12	400 kV	ZERDA-BHINMAL	1	417	284	3.4	1.2	2.2
13	400 kV	VINDHYACHAL -RIHAND	1	965	0	20.5	0.0	20.5
14	400 kV	RAPP-SHUJALPUR	2	311	650	1.5	6.0	-4.5
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	125	0	1.5	0.0	1.5
18	220 kV	MALANPUR-AURAIYA	1	94	0	0.9	0.0	0.9
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
<b>WR-NR</b>						<b>56.8</b>	<b>238.4</b>	<b>-181.6</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	18.6	-18.6
2	HVDC	RAIGARH-PUGALUR	2	0	5013	0.0	41.4	-41.4
3	765 kV	SOLAPUR-RAICHUR	2	1240	1340	5.0	7.4	-2.5
4	765 kV	WARDHA-NIZAMABAI	2	0	2530	0.0	37.2	-37.2
5	400 kV	KOLHAPUR-KUDGI	2	1210	0	19.5	0.0	19.5
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	114	2.1	0.0	2.1
<b>WR-SR</b>						<b>26.6</b>	<b>104.6</b>	<b>-78.0</b>

INTERNATIONAL EXCHANGES					Import(+ve)/Export(-ve) Energy Exchange (MU)		
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)		
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	629	629	629	15.63	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1054	0	1004	24.09	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	156	113	136	3.28	
	NER	132kV GELEPHU-SALAKATI	0	0	0	0.00	
	NER	132kV MOTANGA-RANGIA	-62	-32	-44	-1.05	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-42	0	-14	-0.34	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	436	275	408	9.79	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-938	-791	-930	-22.33	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-664	-450	-611	-14.66	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	166	0	-133	-3.19	

