



National Load Despatch Centre

राष्ट्रीय भार प्रेषण केंद्र

GRID CONTROLLER OF INDIA LIMITED

ग्रिड 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: 20<sup>th</sup> June 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 19.06.2023.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-जून-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 19<sup>th</sup> June 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 20-Jun-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)	66642	60411	48527	24959	2653	203192
Peak Shortage (MW)	150	0	0	0	31	181
Energy Met (MU)	1511	1428	1166	572	45	4722
Hydro Gen (MU)	361	27	49	105	27	570
Wind Gen (MU)	45	135	124	-	-	304
Solar Gen (MU)*	134.71	50.67	108.08	5.20	0.35	299
Energy Shortage (MU)	0.63	0.17	0.00	1.32	1.02	3.14
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68934	63352	55852	26704	2692	213661
Time Of Maximum Demand Met	22:40	15:03	14:54	00:09	18:57	14:49

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	0.049	0.00	0.39	3.18	3.58	72.94	23.48

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	13793	0	264.1	146.8	-1.4	342	0.00
	Haryana	10129	0	216.6	158.6	-2.1	112	0.00
	Rajasthan	10280	0	221.3	27.4	-5.3	453	0.00
	Delhi	6255	0	125.2	111.6	-2.0	151	0.00
	UP	25680	0	541.4	262.9	-2.2	301	0.00
	Uttarakhand	2401	0	52.5	25.0	-1.2	118	0.04
	HP	1535	5	31.3	-3.3	0.3	142	0.05
	J&K(UT) & Ladakh(UT)	2453	90	48.2	21.2	1.2	265	0.54
	Chandigarh	363	0	6.9	7.0	-0.1	31	0.00
Railways_NR ISTS	183	0	3.9	3.3	0.5	46	0.00	
WR	Chhattisgarh	5213	0	120.6	62.2	1.2	414	0.17
	Gujarat	17131	0	364.0	157.8	-7.0	845	0.00
	MP	10896	0	242.2	116.3	-4.3	546	0.00
	Maharashtra	28474	0	627.3	220.1	5.5	1223	0.00
	Goa	707	0	14.3	14.4	-0.6	85	0.00
	DNHDDPDCL	1291	0	29.6	29.9	-0.3	75	0.00
	AMNSIL	791	0	17.3	8.6	-0.1	281	0.00
	BALCO	520	0	12.4	12.4	0.0	522	0.00
SR	Andhra Pradesh	11734	0	243.9	88.4	0.9	793	0.00
	Telangana	11375	0	221.2	109.6	0.1	600	0.00
	Karnataka	14198	0	269.1	88.2	2.9	1318	0.00
	Kerala	4103	0	81.3	63.8	2.1	549	0.00
	Tamil Nadu	16693	0	341.1	169.8	-4.4	839	0.00
	Puducherry	423	0	9.2	9.1	-0.6	47	0.00
ER	Bihar	6468	0	139.1	131.6	-2.2	339	1.32
	DVC	3594	0	78.6	-44.2	0.5	378	0.00
	Jharkhand	1707	0	37.7	30.7	-1.9	216	0.00
	Odisha	6054	0	118.2	52.6	-4.5	336	0.00
	West Bengal	9640	0	197.2	70.8	-2.2	523	0.00
	Sikkim	88	0	1.3	1.4	0.0	25	0.00
	Railways_ER ISTS	14	0	0.1	0.2	-0.1	0	0.00
NER	Arunachal Pradesh	150	0	2.5	2.5	-0.2	106	0.00
	Assam	1689	0	27.9	20.8	0.5	123	0.00
	Manipur	159	0	2.4	2.4	-0.1	16	0.00
	Meghalaya	289	4	4.5	0.9	-0.3	77	1.02
	Mizoram	104	0	1.6	1.6	-0.3	27	0.00
	Nagaland	137	0	2.3	2.2	-0.3	17	0.00
	Tripura	240	0	4.0	4.9	-0.1	58	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	42.1	4.0	-25.1	-24.3
Day Peak (MW)	2041.0	279.0	-1097.0	-1121.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	219.1	-207.8	131.4	-125.1	-17.6	0.0
Actual(MU)	183.7	-212.2	165.6	-125.2	-16.7	-4.8
O/D/U/D(MU)	-35.3	-4.5	34.3	-0.1	0.9	-4.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1888	10943	5638	1150	455	20074	47
State Sector	6195	10729	4033	1050	220	22226	53
Total	8083	21672	9671	2200	675	42300	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	769	1445	667	665	14	3560	70
Lignite	28	17	60	0	0	105	2
Hydro	361	27	49	105	27	570	11
Nuclear	29	32	51	0	0	112	2
Gas, Naptha & Diesel	40	56	7	0	28	130	3
RES (Wind, Solar, Biomass & Others)	187	187	243	6	0	623	12
Total	1414	1763	1077	776	70	5087	100

Share of RES in total generation (%)	13.24	10.60	22.57	0.72	0.50	12.25
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.82	13.93	31.88	14.53	39.77	25.65

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.018
Based on State Max Demands	1.062

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	213661	14:49	39
Non-Solar hr	207804	22:41	312

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: 20-Jun-2023

Sl 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	1001	0.0	24.2	-24.2
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.1	-2.1
3	765 kV	GAYA-VARANASI	2	538	255	2.1	0.0	2.1
4	765 kV	SASARAM-FATEHPUR	1	138	344	0.0	2.9	-2.9
5	765 kV	GAYA-BALIA	1	0	698	0.0	10.1	-10.1
6	400 kV	PUSAULI-VARANASI	1	4	123	0.0	1.7	-1.7
7	400 kV	PUSAULI -ALLAHABAD	1	17	77	0.0	0.4	-0.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	1018	0.0	14.9	-14.9
9	400 kV	PATNA-BALIA	2	0	655	0.0	10.3	-10.3
10	400 kV	NAUBATPUR-BALIA	2	0	686	0.0	10.5	-10.5
11	400 kV	BIHARSHARIFF-BALIA	2	0	446	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	570	0.0	8.4	-8.4
13	400 kV	BIHARSHARIFF-VARANASI	2	172	298	0.0	1.7	-1.7
14	220 kV	SAHUPURI-KARAMNANA	1	2	215	0.0	3.6	-3.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.9	0.0	0.9
17	132 kV	KARMANASA-SAHUPURI	1	0	67	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>3.0</b>	<b>96.7</b>	<b>-93.7</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1855	0	22.4	0.0	22.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1299	583	6.0	0.0	6.0
3	765 kV	JHARSUGUDA-DURG	2	2	367	0.0	2.9	-2.9
4	400 kV	JHARSUGUDA-RAIGARH	4	0	438	0.0	6.2	-6.2
5	400 kV	RANCHI-SIPAT	2	246	212	0.8	0.0	0.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	70	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	123	0	1.6	0.0	1.6
<b>ER-WR</b>						<b>30.7</b>	<b>11.0</b>	<b>19.7</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	243	223	5.4	0.0	5.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1987	0.0	45.5	-45.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	3035	0.0	53.9	-53.9
4	400 kV	TALCHER-I/C	2	0	873	0.0	12.9	-12.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>5.4</b>	<b>99.4</b>	<b>-93.9</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	266	142	1.7	0.3	1.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	576	62	7.1	0.0	7.1
3	220 kV	ALIPURDUAR-SALAKATI	2	87	46	0.7	0.0	0.7
<b>ER-NER</b>						<b>9.4</b>	<b>0.3</b>	<b>9.1</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	8.4	-8.4
<b>NER-NR</b>						<b>0.0</b>	<b>8.4</b>	<b>-8.4</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3023	0.0	52.5	-52.5
2	HVDC	VINDHYACHAL B/B	-	450	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	977	0.0	12.9	-12.9
4	765 kV	GWALIOR-AGRA	2	304	1832	0.2	18.1	-17.9
5	765 kV	GWALIOR-PHAGI	2	722	1048	3.6	8.5	-4.9
6	765 kV	JABALPUR-ORAI	2	119	896	0.0	14.1	-14.1
7	765 kV	GWALIOR-ORAI	1	440	0	6.3	0.0	6.3
8	765 kV	SATNA-ORAI	1	0	973	0.0	19.0	-19.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1687	0	26.5	0.0	26.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3295	0.0	56.3	-56.3
11	400 kV	ZERDA-KANKROLI	1	363	0	6.3	0.0	6.3
12	400 kV	ZERDA-BHINMAL	1	794	12	12.8	0.0	12.8
13	400 kV	VINDHYACHAL -RIHAND	1	964	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUJALPUR	2	596	168	6.2	0.3	5.9
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.0	-2.0
17	220 kV	MEHGAON-AURAIYA	1	116	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	87	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>97.9</b>	<b>183.7</b>	<b>-85.8</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	505	0.0	9.3	-9.3
2	HVDC	RAIGARH-PUGALUR	2	0	6023	0.0	82.8	-82.8
3	765 kV	SOLAPUR-RAICHUR	2	1610	1116	6.8	5.9	0.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2766	0.0	42.5	-42.5
5	400 kV	KOLHAPUR-KUDGI	2	1469	0	24.8	0.0	24.8
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	2	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	115	2.2	0.0	2.2
<b>WR-SR</b>						<b>33.8</b>	<b>140.5</b>	<b>-106.7</b>

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)	653	344	502	12.04	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1142	1041	1063	25.51	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	214	91	151	3.63	
	NER	132kV GELEPHU-SALAKATI	30	7	16	0.38	
	NER	132kV MOTANGA-RANGIA	39	6	23	0.54	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-72	0	-50	-1.20	
	ER	NEPAL IMPORT (FROM BIHAR)	-78	-31	-46	-1.10	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	87	0	87	5.22	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-931	-756	-901	-21.62	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1121	-823	-1012	-24.29	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-166	0	-146	-3.50	