

## National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र GRID CONTROLLER OF INDIA LIMITED ग्रिड कंटोलर ऑफ इंडिया लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

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दिनांक: **21**th June 2023

Ref: POSOCO/NLDC/SO/Daily PSP Report

То,

1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033 Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033

2. 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

3. 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

4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग – 793006 Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya

5. 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 20.06.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-जून-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट पर उप्लब्ध 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 20<sup>th</sup> June 2023, is available at the NLDC website.

धन्यवाद.

## ग्रिड कंट्रलर ऑफ इंडिया लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Date of Reporting: 21-Jun-2023

## Report for previous day

A. Power Supply Position at All India and Regional level

A. I ower Supply I ostron at An India and Regional	icvei					
	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 20:00 hrs; from RLDCs)	68263	60684	47012	25113	2659	203731
Peak Shortage (MW)	80	0	0	0	9	89
Energy Met (MU)	1546	1459	1157	579	49	4790
Hydro Gen (MU)	377	33	46	115	29	600
Wind Gen (MU)	63	130	118	-	-	311
Solar Gen (MU)*	133.98	57.23	105.04	3.15	0.57	300
Energy Shortage (MU)	1.64	2.00	0.00	0.52	1.20	5.36
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71327	64709	53769	27625	2689	214640
Time Of Maximum Demand Met	22:18	15:21	12:34	23:28	18:43	14:47

B. Frequency Profile (%) Region All India FVI < 49.7 49.7 - 49.8 49.8 - 49.9 < 49.9 49.9 - 50.05 > 50.05 0.035 0.00 0.00 3.48 22.50 3.48 74.02

C. Power Supply Position in States

	obition in States		T T					
		Max.Demand	Shortage during	<b>Energy Met</b>	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the day (MW)	maximum Demand (MW)	(MU)	Schedule (MU)	(MU)	(MW)	Shortage (MU)
	Punjab	14834	0	291.6	159.4	0.5	346	0.00
	Harvana	10739	245	230.3	166.0	1.0	408	1.06
	Rajasthan		0	247.5	31.6	-4.9	97	0.00
		11616	0			-4.9	240	0.00
ND	Delhi UP	6304	ů	128.7 498.2	114.6	-1.3	513	
NR	Uttarakhand	24616 2409	0	<u>498.2</u> 52.5	245.8 24.7	-2.8		0.00
	Uttaraknand HP						45	
		1541	1	32.7	-3.8	0.4	176	0.06
	J&K(UT) & Ladakh(UT)	2427	0	52.8	25.9	0.6	175	0.52
	Chandigarh	381	0	7.4	7.2	0.2	39	0.00
	Railways_NR ISTS	195	0	4.0	3.3	0.7	54	0.00
	Chhattisgarh	5289	0	120.4	64.0	-0.4	385	0.20
	Gujarat	17370	0	385.6	170.9	-4.6	573	0.00
	MP	11427	0	243.3	113.8	-4.2	266	0.00
WR	Maharashtra	28469	0	633.4	229.2	3.2	1035	1.80
	Goa	729	0	15.2	14.6	0.1	153	0.00
	DNHDDPDCL	1299	0	30.3	30.3	0.0	78	0.00
	AMNSIL	858	0	18.3	7.6	0.1	284	0.00
	BALCO	522	0	12.4	12.3	0.1	70	0.00
	Andhra Pradesh	11742	0	235.7	81.0	0.1	900	0.00
	Telangana	11417	0	230.1	110.3	-0.3	637	0.00
$\mathbf{SR}$	Karnataka	12742	0	253.5	85.1	-0.3	881	0.00
	Kerala	4048	0	82.6	66.1	2.2	291	0.00
	Tamil Nadu	16398	0	345.7	178.1	-3.2	394	0.00
	Puducherry	409	0	9.3	9.3	-0.7	44	0.00
	Bihar	6397	0	133.8	126.4	-2.3	318	0.52
	DVC	3538	0	76.2	-46.6	-0.6	337	0.00
	Jharkhand	1692	0	37.0	30.2	-1.8	160	0.00
ER	Odisha	5836	0	123.8	53.4	-2.8	309	0.00
	West Bengal	10128	0	206.8	76.9	-2.2	568	0.00
	Sikkim	88	0	1.2	1.3	-0.1	28	0.00
	Railways_ER ISTS	22	0	0.2	0.3	-0.1	0	0.00
	Arunachal Pradesh	142	0	2.7	2.5	-0.1	44	0.00
	Assam	1695	0	30.8	24.5	-0.1	165	0.00
	Manipur	167	0	2.3	2.4	-0.1	16	0.00
NER	Meghalaya	326	9	4.6	1.9	-0.3	51	1.20
111214	Mizoram	106	0	1.6	1.6	-0.4	7	0.00
	Nagaland	154	0	2.6	2.3	-0.1	14	0.00
	ragaianu	134	Ü	2.0	2.3	-0.1	17	0.00

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

Tripura

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.3	5.2	-25.1	-23.5
Day Peak (MW)	1956.0	6.5	-1100.0	-1124.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	224.8	-185.8	134.8	-158.8	-15.0	0.0
Actual(MU)	193.8	-184.3	168.6	-165.9	-14.4	-2.2
O/D/LI/D(MLI)	-31.0	1.5	33.8	-7 1	0.7	-2.2

F. Generation Outage(MW)

11 Generation Guage(1111)								
	NR	WR	SR	ER	NER	TOTAL	% Share	
Central Sector	1011	9765	6138	1150	455	18519	46	
State Sector	6105	10644	3978	1050	220	21996	54	
Total	7116	20409	10116	2200	675	40515	100	

4.5

5.1

0.0

94

0.00

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	757	1448	657	687	14	3563	69
Lignite	28	17	60	0	0	106	2
Hydro	377	33	46	115	29	600	12
Nuclear	29	32	51	0	0	112	2
Gas, Naptha & Diesel	42	49	6	0	28	126	2
RES (Wind, Solar, Biomass & Others)	204	188	244	3	1	640	12
Total	1437	1767	1065	805	71	5146	100
Share of RES in total generation (%)	14.17	10.63	22.93	0.42	0.80	12.46	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	42.42	14.32	32.07	14.91	41.62	26.35	

H. All India Demand Diversity Factor

11. 111 India Bemana Biversity Tuetor	
Based on Regional Max Demands	1.025
Based on State Max Demands	1.063
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I. All India Peak Demand and shortage at Solar and Non-Solar Hour

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	214640	14:47	47
Non-Solar hr	209069	22:16	965

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

<sup>\*\*</sup>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

<sup>\*</sup>Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

## INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 21-Jun-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) ALIPURDUAR-AGRA	2	0	1001	0.0	23.6	-23.6
2 HVDC	PUSAULI B/B		0	97	0.0	2.3	-2.3
3 765 kV 4 765 kV	GAYA-VARANASI SASARAM-FATEHPUR	2	163 57	303 412	0.0	3.0 5.7	-3.0 -5.7
5 765 kV	GAYA-BALIA	1	0	782	0.0	10.7	-10.7
6 400 kV 7 400 kV	PUSAULI-VARANASI PUSAULI -ALLAHABAD	1	0 4	107 87	0.0	1.5 0.8	-1.5 -0.8
8 400 kV 9 400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	2 2	0	1003 690	0.0	15.2 12.2	-15.2 -12.2
10 400 kV	NAUBATPUR-BALIA	2	0	722	0.0	12.3	-12.2
11 400 kV 12 400 kV	BIHARSHARIFF-BALIA MOTIHARI-GORAKHPUR	2 2	0	457 550	0.0	7.2 10.3	-7.2 -10.3
13 400 kV	BIHARSHARIFF-VARANASI	2	77	306	0.0	3.9	-3.9
14 220 kV 15 132 kV	SAHUPURI-KARAMNASA NAGAR UNTARI-RIHAND	1	0	207 0	0.0	4.1 0.0	-4.1 0.0
16 132 kV	GARWAH-RIHAND	1	25	0	1.0	0.0	1.0
17 132 kV 18 132 kV	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	1	0	64 0	0.0	0.0	0.0
				ER-NR	1.0	112.7	-111.8
Import/Export of ER (	With WR)  JHARSUGUDA-DHARAMJAIGARH	4	1721	0	27.7	0.0	27.7
2 765 kV	NEW RANCHI-DHARAMJAIGARH	2	908	853	2.9	0.0	2.9
3 765 kV 4 400 kV	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	2 4	0	808 576	0.0	8.2 8.1	-8.2 -8.1
5 400 kV	RANCHI-SIPAT	2	121	295	0.0	2.0	-2.0
6 220 kV 7 220 kV	BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA	1 2	0 103	44 0	0.0 1.3	1.7 0.0	-1.7 1.3
7 220 K V	BEDIM ADAK-KORDA		103	ER-WR	31.8	20.1	11.8
Import/Export of ER (		1 2	0	220	0.0	4.9	4.0
1 HVDC 2 HVDC	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	2 2	0	229 1984	0.0	45.6	-4.9 -45.6
3 765 kV 4 400 kV	ANGUL-SRIKAKULAM TALCHER-I/C	2 2	0	3220 713	0.0	53.5 12.9	-53.5 -12.9
5 220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
Import/E-mort of ED	With NED			ER-SR	0.0	104.0	-104.0
Import/Export of ER (	With NER) BINAGURI-BONGAIGAON	2	186	260	0.9	0.0	0.9
2 400 kV	ALIPURDUAR-BONGAIGAON	2	452	233	3.3	0.0	3.3
3 220 kV	ALIPURDUAR-SALAKATI	2	49	90 ER-NER	0.0 4.3	0.2 0.2	-0.2 4.1
Import/Export of NER							
1 HVDC	BISWANATH CHARIALI-AGRA	2	0	504 NER-NR	0.0	12.1 12.1	-12.1 -12.1
Import/Export of WR	(With NR)			NEK-NK	0.0	12,1	-12.1
1 HVDC	CHAMPA-KURUKSHETRA	2	0	2016	0.0	46.8	-46.8
2 HVDC 3 HVDC	VINDHYACHAL B/B MUNDRA-MOHINDERGARH	2	448 311	152 979	6.0 0.0	0.5 6.7	5.5 -6.7
4 765 kV	GWALIOR-AGRA	2	469	2115	0.7	18.6	-17.9
5 765 kV 6 765 kV	GWALIOR-PHAGI JABALPUR-ORAI	2 2	591 202	1343 959	2.6	9.6 15.1	-7.0 -15.1
7 765 kV	GWALIOR-ORAI	1	519	0	6.6	0.0	6.6
8 765 kV 9 765 kV	SATNA-ORAI BANASKANTHA-CHITORGARH	1 2	0 2318	1044 135	0.0 30.0	18.9 0.1	-18.9 29.9
10 765 kV	VINDHYACHAL-VARANASI	2	0	3034	0.0	46.6	-46.6
11 400 kV 12 400 kV	ZERDA-KANKROLI ZERDA -BHINMAL	1	620 917	0 14	8.1 8.0	0.0	8.1 8.0
13 400 kV	VINDHYACHAL -RIHAND	1	961	0	21.8	0.0	21.8
14 400 kV 15 220 kV	RAPP-SHUJALPUR BHANPURA-RANPUR	2 1	678 0	316 0	7.4 0.0	1.0 0.0	6.4 0.0
16 220 kV	BHANPURA-MORAK MEHGAON-AURAIYA	1	0	30	0.0	2.0	-2.0
17 220 kV 18 220 kV	MALANPUR-AURAIYA	1	82 75	40 44	1.0 0.8	0.0	1.0 0.8
19 132 kV 20 132 kV	GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR	1 2	0	0	0.0	0.0	0.0
20 132 KV	RAJGHA1-LALIIFUR	2	U	WR-NR	93.0	165.9	-72.9
Import/Export of WR							
1 HVDC 2 HVDC	BHADRAWATI B/B RAIGARH-PUGALUR	2	0	1009 4017	0.0	17.5 70.7	-17.5 -70.7
3 765 kV	SOLAPUR-RAICHUR	2	1189	1692	6.9	6.3	0.7
4 765 kV 5 400 kV	WARDHA-NIZAMABAD KOLHAPUR-KUDGI	2 2	0 1508	2993 0	0.0 25.4	40.0 0.0	-40.0 25.4
6 220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7 220 kV 8 220 kV	PONDA-AMBEWADI XELDEM-AMBEWADI	1 1	0	0 123	0.0 2.3	0.0	0.0 2.3
				WR-SR	34.7	134.4	-99.6
	IN	TERNATIONAL EXC	CHANGES			Import	+ve)/Export(-ve)
State	Region		Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
	ER	400kV MANGDECHHU-A ALIPURDUAR RECEIPT HEP 4*180MW)	(from MANGDECHU	685	492	631	15.14
	ER	HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H	) i.e. BINAGURI	1100	0	1043	25.03
BHUTAN	ER	220kV CHUKHA-BIRPA MALBASE - BIRPARA) i (from CHUKHA HEP 4*8	RA 1&2 (& 220kV .e. BIRPARA RECEIPT	212	140	168	4.04
	NER	132kV GELEPHU-SALAI		-33	-13	-24	-0.57
	NER	132kV MOTANGA-RANG	GIA	-20	-11	-15	-0.37
	NR	132kV MAHENDRANAG	AR-TANAKPUR(NHPC)	-75	0	-42	-1.00
NEPAL	ER	NEPAL IMPORT (FROM	I BIHAR)	-61	-5	-28	-0.68
	ER	400kV DHALKEBAR-MU	UZAFFARPUR 1&2	142	0	142	6.91
	ER	BHERAMARA B/B HVD	C (B'DESH)	-930	-779	-897	-21.53
BANGLADESH	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAH	HANPUR (B'DESH) D/C	-1124	-686	-979	-23.49
	NER	132kV COMILLA-SURA	IMANI NAGAR 1&2	-170	0	-149	-3.57
	l	1				1	