

## 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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 24<sup>th</sup> August 2023

To,

- 1. 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
- 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 23.08.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-अगस्त-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 23<sup>rd</sup> August 2023, is available at the NLDC website.

धन्यवाद,

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



Date of Reporting: 24-Aug-2023

#### Report for previous day

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)	67842	60287	50706	25520	3049	207404
Peak Shortage (MW)	75	227	0	0	223	525
Energy Met (MU)	1558	1440	1269	570	61	4898
Hydro Gen (MU)	392	109	80	137	39	758
Wind Gen (MU)	85	212	116	-	-	414
Solar Gen (MU)*	124.87	41.47	115.17	2,22	0.79	285
Energy Shortage (MU)	2.08	1.70	0.00	0.64	1.14	5.56
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68960	64638	61084	26488	3294	216520
Time Of Maximum Demand Met	22:17	10:12	10:25	00:00	18:41	11:45

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	0.035	0.00	0.00	1.75	1.75	67.64	30.61

C. Power Supply Position in States

		Max.Demand	Shortage during	<b>Energy Met</b>	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MII)	Schedule	(MII)	(MXX)	Shortage (M
		day (MW)	Demand (MW)	(MU)	(MU)	(MU)	(MW)	
	Punjab	14942	0	331.5	196.1	-0.9	282	0.00
	Haryana	10446	0	232.4	177.7	-3.9	155	1.00
	Rajasthan	14928	0	331.4	79.4	-7.6	197	0.00
	Delhi	6331	0	129.7	105.6	-2.9	103	0.00
NR	UP	20689	0	397.7	186.8	-3.6	152	0.00
	Uttarakhand	1987	0	43.4	19.1	0.2	151	0.15
	HP	1536	0	31.3	-1.4	0.6	258	0.02
	J&K(UT) & Ladakh(UT)	2522	0	51.6	26.5	0.4	310	0.91
	Chandigarh	281	0	6.0	7.0	-1.0	0	0.00
	Railways_NR ISTS	157	0	3.2	3.3	-0.1	55	0.00
	Chhattisgarh	5377	0	123.0	67.2	-2.2	262	0.00
	Gujarat	21189	0	445.3	147.9	0.4	644	0.00
	MP	11367	0	241.3	100.9	-3.7	622	0.00
$\mathbf{W}\mathbf{R}$	Maharashtra	24824	658	554.3	210.8	-1.5	926	1.70
	Goa	662	0	13.8	13.5	-0.1	93	0.00
	DNHDDPDCL	1327	0	30.5	30.7	-0.2	35	0.00
	AMNSIL	882	0	19.2	7.3	-0.3	225	0.00
	BALCO	522	0	12.4	12.4	0.0	12	0.00
	Andhra Pradesh	11636	0	236.5	96.4	2.8	440	0.00
	Telangana	13060	0	258.9	138.7	-1.6	584	0.00
$\mathbf{SR}$	Karnataka	16272	0	291.0	108.5	3.3	803	0.00
	Kerala	4366	0	89.3	74.3	2.0	326	0.00
	Tamil Nadu	17549	0	383.3	192.1	-2.1	742	0.00
	Puducherry	474	0	10.5	10.0	-0.2	34	0.00
	Bihar	6663	0	136.5	133.3	-1.7	349	0.42
	DVC	3361	0	74.1	-36.7	0.0	289	0.00
	Jharkhand	1713	0	38.7	33.8	-0.4	279	0.22
ER	Odisha	5042	0	111.4	47.1	-1.2	294	0.00
	West Bengal	9742	0	208.4	92.8	-2.0	332	0.00
	Sikkim	82	0	1.3	1.2	0.1	21	0.00
	Railways_ER ISTS	18	0	0.1	0.1	0.0	7	0.00
	Arunachal Pradesh	154	0	2.8	2.7	-0.4	9	0.00
	Assam	2203	70	39.9	31.5	1.1	232	0.71
	Manipur	186	0	2.6	2.7	-0.1	16	0.00
NER	Meghalaya	308	13	5.3	1.0	-0.2	48	0.43
	Mizoram	120	0	1.7	1.5	-0.4	16	0.00
	Nagaland	162	0	2.9	2.6	0.1	16	0.00
	Tripura	306	0	5.6	6.0	0.2	49	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.1	10.2	-24.6	-31.7
Day Peak (MW)	1997.0	433.0	-1084.0	-1429.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	225.7	-328.8	228.1	-109.5	-15.5	0.0
Actual(MU)	183.5	-327.6	261.6	-115.4	-13.8	-11.7
O/D/LI/D(MLI)	-42.2	1.2	33.5	-5.8	17	-11 7

F. Generation Outage(MW)

1. Generation Gutage(1.177)							
	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2313	10960	5718	2860	255	22105	45
State Sector	5025	12479	5928	3850	195	27476	55
Total	7338	23439	11646	6710	449	49581	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	747	1403	645	605	15	3414	65
Lignite	26	10	46	0	0	82	2
Hydro	392	109	80	137	39	758	14
Nuclear	29	51	47	0	0	127	2
Gas, Naptha & Diesel	52	55	3	0	27	137	3
RES (Wind, Solar, Biomass & Others)	216	256	260	4	1	737	14
Total	1463	1885	1080	746	82	5254	100
Share of RES in total generation (%)	14.79	13.60	24.04	0.47	0.97	14.02	]
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.58	22.09	35.79	18.88	49.34	30.86	

H. All India Demand Diversity Factor

11. 111 India Bellana Biversity Tuctor	V .					
Based on Regional Max Demands	1.036					
Based on State Max Demands	1.080					
•						

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	216520	11:45	112
Non-Solar hr	211641	19:24	816

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

\*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: 24-Aug-2023

Г Т							Date of Reporting:	24-Aug-2023
Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Impor	rt/Export of ER (V							
1		ALIPURDUAR-AGRA	2	0	801 95	0.0	20.1	-20.1
3		PUSAULI B/B GAYA-VARANASI	2	0 537	276	0.0	0.6	-2.3 -0.6
4	765 kV	SASARAM-FATEHPUR	1	83	226	0.0	2.8	-2.8
5		GAYA-BALIA	1	46	402	0.0	3.9	-3.9
7		PUSAULI-VARANASI PUSAULI -ALLAHABAD	1	0 10	111 82	0.0	1.7 0.5	-1.7 -0.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	614	0.0	10.6	-10.6
9	400 kV	PATNA-BALIA	2	0	499	0.0	9.1	-9.1
10 11	400 kV 400 kV	NAUBATPUR-BALIA	2 2	0 221	517 119	0.0	9.2 0.4	-9.2
12		BIHARSHARIFF-BALIA MOTIHARI-GORAKHPUR	2	0	399	0.0	7.8	-0.4 -7.8
13	400 kV	BIHARSHARIFF-VARANASI	2	247	119	0.0	0.0	0.0
14		SAHUPURI-KARAMNASA	1	0	100	0.0	1.5 0.0	-1.5
15 16		NAGAR UNTARI-RIHAND GARWAH-RIHAND	1	0 30	0	0.0	0.0	0.0 0.5
17		KARMANASA-SAHUPURI	1	0	39	0.0	0.0	0.0
18		KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
_					ER-NR	0.5	70.4	-69.8
Impor	rt/Export of ER (V		1	2252		24.4	0.0	24.4
2	765 kV 765 kV	JHARSUGUDA-DHARAMJAIGARH NEW RANCHI-DHARAMJAIGARH	4 2	2253 983	0 785	34.4 3.8	0.0	34.4 3.8
3	765 kV	JHARSUGUDA-DURG	2	133	192	0.0	0.7	-0.7
4	400 kV	JHARSUGUDA-RAIGARH	4	79	413	0.0	4.6	-4.6
5		RANCHI-SIPAT BUDHIPADAR-RAIGARH	2	168 0	240 189	1.5 0.0	0.0 2.9	1.5 -2.9
7		BUDHIPADAR-KAIGAKH BUDHIPADAR-KORBA	2	76	9	0.8	0.0	0.8
	220 K 1	BODIM: IB: IN HOUB!	-	70	ER-WR	40.4	8.2	32.2
Impor	rt/Export of ER (V						•	
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	655	0.0	14.9	-14.9
3	HVDC 765 kV	TALCHER-KOLAR BIPOLE	2 2	0	1981 2840	0.0	46.7 47.0	-46.7
4	765 kV 400 kV	ANGUL-SRIKAKULAM TALCHER-I/C	2 2	0	2840 705	0.0	14.9	-47.0 -14.9
5		BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
L					ER-SR	0.0	108.6	-108.6
	rt/Export of ER (V			1 440	***		1 44	
2	400 kV 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	2 2	120 324	295 363	0.7 0.0	2.1 0.2	-1.5 -0.2
3		ALIPURDUAR-SALAKATI	2 2	324 40	95	0.0	0.5	-0.2
					ER-NER	0.7	2.8	-2.1
Impor	rt/Export of NER							
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.9	-16.9
-	ATE A SAME	YYYA NYD)			NER-NR	0.0	16.9	-16.9
Impor	rt/Export of WR ( HVDC	CHAMPA-KURUKSHETRA	1 1	Ι ο	1301	0.0	26.2	-26.2
2	HVDC	VINDHYACHAL B/B	2	0 442	0	8.6	0.0	-26.2 8.6
3		MUNDRA-MOHINDERGARH	2	0	1450	0.0	32.1	-32.1
4	765 kV	GWALIOR-AGRA	2	288	2010	0.4	17.1	-16.7
5		GWALIOR-PHAGI	2	724	892	3.3	9.5 9.5	-6.2
7		JABALPUR-ORAI GWALIOR-ORAI	2	257 630	732	9.5	9.5	-9.5 9.5
8		SATNA-ORAI	1	0	854	0.0	16.2	-16.2
9	765 kV	BANASKANTHA-CHITORGARH	2	691	1113	3.7	8.4	-4.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	3013	0.0	42.3	-42.3
11 12	400 kV 400 kV	ZERDA-KANKROLI ZERDA -BHINMAL	1	276 639	107 39	2.2 7.1	0.4	1.8 7.1
13	400 KV 400 kV	VINDHYACHAL -RIHAND	1	947	0	7.1 21.6	0.0	7.1 21.6
14	400 kV	RAPP-SHUJALPUR	2	504	368	3.6	1.9	1.7
15		BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16		BHANPURA-MORAK MEHCAON AURAIYA	1	0	30	0.0	2.6	-2.6
17 18	220 kV 220 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	1	148 116	0	2.4 1.7	0.0	2.4 1.7
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
T	-4/E	Wide CD)			WR-NR	64.2	166.1	-102.0
	rt/Export of WR (				1007	0.0	24.0	24.0
2	HVDC HVDC	BHADRAWATI B/B RAIGARH-PUGALUR	2	0	1007 6031	0.0	24.0 108.0	-24.0 -108.0
3	765 kV	SOLAPUR-RAICHUR	2	503	2488	0.5	28.6	-28.1
4	765 kV	WARDHA-NIZAMABAD	2	0	3051	0.0	52.5	-52.5
5	400 kV	KOLHAPUR-KUDGI	2	1228	0	16.9	0.0	16.9
7	220 kV 220 kV	KOLHAPUR-CHIKODI PONDA-AMBEWADI	2	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	1	120	2.3	0.0	2.3
					WR-SR	19.7	213.0	-193.4
		IN	TERNATIONAL EX	CHANGES			Import	+ve)/Export(-ve)
	State	Region		Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange
	Sau	Kegion	400kV MANGDECHHU-		MIGA (IVI VV)		Aig (MIII)	(MU)
		ER	ALIPURDUAR RECEIPT		746	523	689	16.54
			HEP 4*180MW)	•				2007
			400kV TALA-BINAGUR				000	
		ER	MALBASE - BINAGUR		1028	973	980	23.52
			RECEIPT (from TALA H 220kV CHUKHA-BIRPA	RA 1&2 (& 220kV				
	BHUTAN	ER	MALBASE - BIRPARA) i	i.e. BIRPARA RECEIPT	113	16	78	1.86
			(from CHUKHA HEP 4*8	84MW)				
		NER	132kV GELEPHU-SALA	KATI	22	0	5	0.11
		a 140-aa						
			12013/ MOTANCE - P	CIA			42	
		NER	132kV MOTANGA-RANG	GIA	62	24	43	1.02
							1	
		NR	132kV MAHENDRANAG	GAR-TANAKPUR(NHPC)	-53	0	20	0.48
	NEPAL	ER	NEPAL IMPORT (FROM	1 BIHAR)	0	0	0	0.00
				*	-	<u> </u>		
			400LV DV 4 1 1255 - 5	UZAEEADDUD 100	10.5	242	40.4	0.50
		ER	400kV DHALKEBAR-MU	UZAFFAKPUR 1&2	486	362	404	9.70
		ER	BHERAMARA B/B HVD	C (B'DESH)	-937	-807	-897	-21.54
В	ANGLADESH	ER	400kV GODDA_TPS-RAI	HANPUR (B'DESH) D/C	-1429	-1247	-1319	-31.65
		(Isolated from Indian Grid)		(= = = 522) 27 0	-174/	-147/	====	-01100
		NIED	122LV COMILE A SUB-	IMANI NACAD 192	147		120	2.10
		NER	132kV COMILLA-SURA	JIMANI NAGAR 1&2	-147	0	-129	-3.10
i			i				i	

#### CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 24-Aug-2023

**Export From India (in MU)** 

					STOA				
	(ISGS/LTA/MTOA)				COLLE	ECTIVE			
Country	PPA	BILATERAL	IDAM			RTM			TOTAL
		TOTAL	IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepal	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Bangladesh	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.50
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.58

Import by India(in MU)

			STOA							
	(ISGS/LTA/MTOA)				COLLE	ECTIVE				
Country	PPA	BILATERAL		IDAM			RTM			
		TOTAL	IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	40.04	2.75	0.00	0.00	0.00	0.00	0.00	0.00	42.79	
Nepal	0.00	0.00	8.56	0.00	0.00	0.00	0.00	0.00	8.56	
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Import	40.04	2.75	8.56	0.00	0.00	0.00	0.00	0.00	51.35	

Net from India(in MU) -ve : Export / +ve : Import

-ve: Export / ve: Import									
		STOA							
	(ISGS/LTA/MTOA)		COLLECTIVE						
Country	PPA	BILATERAL	IDAM			RTM			TOTAL
		TOTAL	IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	40.04	2.75	0.00	0.00	0.00	0.00	0.00	0.00	42.79
Nepal	-0.08	0.00	8.56	0.00	0.00	0.00	0.00	0.00	8.48
Bangladesh	-21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.50
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	18.46	2.75	8.56	0.00	0.00	0.00	0.00	0.00	29.77