

## 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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Ref: POSOCO/NLDC/SO/Daily PSP Report

То,

दिनांक: 17<sup>th</sup> May 2023

- 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 16.05.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-मई-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 16<sup>th</sup> May 2023, is available at the NLDC website.

धन्यवाद.

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



Date of Reporting: 17-May-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 64257 61514 50706 24519 2271 203267 20:00 hrs; from RLDCs) Peak Shortage (MW) 261 0 0 36 17 314 Energy Met (MU) 1481 1199 1398 546 4669 45 Hydro Gen (MU) 205 35 83 53 8 384 Wind Gen (MU) 50 188 89 327 Solar Gen (MU)\* 339 0.92 130.77 65.94 135.75 5.35 Energy Shortage (MU) 10.66 0.32 2.34 0.69 1.22 15.23 Maximum Demand Met During the Day (MW) 67555 55920 25851 2557 215113 64645 (From NLDC SCADA) Time Of Maximum Demand Met 15:22 20:48 15:17 23:41 18:50 15:19

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	0.058	0.24	0.61	8.93	9.79	71.79	18.42	

C. Power Supply Position in States

Tower Suppry 1		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MU)	Schedule	(MU)	(MW)	Shortage (MU)
		day (MW)	Demand (MW)	(MC)	(MU)	\ -/	,	
	Punjab	9824	0	198.0	81.9	-0.9	98	0.00
	Haryana	9043	875	182.2	123.1	-3.0	188	2.68
	Rajasthan	14278	0	276.9	52.5	-1.7	476	3.82
	Delhi	5691	0	117.7	105.2	-0.3	228	0.00
NR	UP	23954	120	479.0	209.4	-1.3	359	3.45
	Uttarakhand	2242	0	48.4	30.1	-0.1	84	0.02
	HP	1531	0	31.1	10.5	0.1	119	0.00
	J&K(UT) & Ladakh(UT)	2798	0	55.4	37.9	0.0	166	0.69
	Chandigarh	297	0	5.8	5.6	0.2	32	0.00
	Railways_NR ISTS	177	0	3.8	3.3	0.6	36	0.00
	Chhattisgarh	4808	0	108.6	44.7	-1.4	237	0.00
	Gujarat	20697	0	444.4	174.4	-3.0	566	0.00
	MP	11922	0	262.4	141.5	-3.0	306	0.00
WR	Maharashtra	26818	0	591.1	207.9	-1.8	851	0.32
	Goa	743	0	15.5	15.7	-0.6	52	0.00
	DNHDDPDCL	1231	0	28.5	29.0	-0.5	64	0.00
	AMNSIL	843	0	17.8	10.7	0.0	216	0.00
	BALCO	519	0	12.4	12.5	-0.1	6	0.00
	Andhra Pradesh	11939	0	245.1	92.9	3.4	792	1.52
	Telangana	9521	0	195.9	66.3	0.9	644	0.00
$\mathbf{SR}$	Karnataka	13477	0	263.6	83.7	3.6	1053	0.82
	Kerala	4862	0	98.0	68.9	0.1	193	0.00
	Tamil Nadu	17618	0	384.9	222.3	5.2	1170	0.00
	Puducherry	488	0	11.1	10.4	0.0	68	0.00
	Bihar	6341	0	130.3	120.3	-2.5	156	0.10
	DVC	3657	0	77.5	-45.3	0.6	332	0.00
	Jharkhand	1839	0	33.8	29.1	-3.8	181	0.58
$\mathbf{E}\mathbf{R}$	Odisha	6591	0	118.5	52.6	-3.9	395	0.00
	West Bengal	9528	0	185.1	52.1	-3.1	405	0.00
	Sikkim	77	0	1.0	1.1	-0.1	31	0.00
	Railways_ER ISTS	12	0	0.1	0.2	-0.1	0	0.00
	Arunachal Pradesh	151	0	2.6	2.3	0.2	43	0.00
	Assam	1457	0	27.0	22.7	-0.9	55	0.00
	Manipur	167	0	2.2	2.2	0.0	26	0.00
NER	Meghalaya	329	17	4.4	3.2	-0.1	89	1.22
	Mizoram	111	0	1.6	1.7	-0.3	16	0.00
	Nagaland	146	0	2.4	2.2	-0.1	25	0.00
	Tripura	288	0	5.2	5.5	0.4	63	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	2.1	-11.4	-21.0	-10.4
Day Peak (MW)	302.1	-586.7	-1106.0	-538.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	229.3	-258.7	137.8	-109.7	1.2	0.0
Actual(MU)	207.9	-254.7	172.9	-132.8	2,2	-4.3
O/D/LI/D(MLI)	-21 4	4.0	35.1	-23 1	1.0	-43

F. Generation Outage(MW)

1. Generation Gatage(1717)								
	NR	WR	SR	ER	NER	TOTAL	% Share	
Central Sector	3895	9062	5858	1080	425	20320	46	
State Sector	5605	10992	6178	710	287	23771	54	
Total	9499	20054	12036	1790	712	44091	100	

G. Sourcewise generation (Gross) (MU)

G. Sourcewise generation (Gross) (MC)							
	NR	WR	SR	ER	NER	All India	% Share
Coal	804	1494	660	703	15	3675	73
Lignite	19	17	54	0	0	90	2
Hydro	205	35	83	50	8	381	8
Nuclear	28	45	52	0	0	124	2
Gas, Naptha & Diesel	22	24	6	0	27	79	2
RES (Wind, Solar, Biomass & Others)	192	255	251	5	1	705	14
Total	1270	1870	1104	758	51	5053	100
Share of RES in total generation (%)	15.15	13.66	22.69	0.71	1.81	13.94	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	33.49	17.92	34.85	7.28	17.85	23.94	

H. All India Demand Diversity Factor	
Based on Regional Max Demands	1.006
Based on State Max Demands	1.050

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	215113	15:19	626
Non-Solar hr	207357	22:44	4279

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

<sup>\*\*</sup>Note: All generation MU figures are gross

<sup>\*\*\*</sup>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: 17-May-2023

			T				Date of Reporting:	17-May-2023
Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Impo	ort/Export of ER (V	With NR)	1		l		1	
1		ALIPURDUAR-AGRA	2	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B		0	97	0.0	2.5	-2.5
3		GAYA-VARANASI	2	226	439	0.0	4.0	-4.0
4	765 kV	SASARAM-FATEHPUR	1	55	296	0.0	3.5	-3.5
6		GAYA-BALIA PUSAULI-VARANASI	1	0	741 77	0.0	13.2 1.0	-13.2 -1.0
7		PUSAULI-VAKANASI PUSAULI -ALLAHABAD	1	0	93	0.0	1.3	-1.3
8		MUZAFFARPUR-GORAKHPUR	2	56	713	0.0	8.7	-8.7
9	400 kV	PATNA-BALIA	2	0	665	0.0	11.5	-11.5
10	400 kV	NAUBATPUR-BALIA	2	0	688	0.0	11.3	-11.3
11		BIHARSHARIFF-BALIA	2	16	406	0.0	4.5	-4.5
12		MOTIHARI-GORAKHPUR	2	0	463	0.0	7.3	-7.3
13 14		BIHARSHARIFF-VARANASI SAHUPURI-KARAMNASA	2	129 0	218 184	0.0	1.7 3.1	-1.7 -3.1
15		NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16		GARWAH-RIHAND	i	25	0	0.5	0.0	0.5
17		KARMANASA-SAHUPURI	î	0	58	0.0	0.0	0.0
18		KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.5	73.7	-73.2
Impo	ort/Export of ER (V	With WR)			•		•	
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1047	483	0.0	1.8	-1.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	533	468	2.7	0.0	2.7
3	765 kV	JHARSUGUDA-DURG	2	0	371	0.0	6.6	-6.6
4	400 kV	JHARSUGUDA-RAIGARH	4	84	246	0.0	1.9	-1.9
5		RANCHI-SIPAT	2	156	187	0.2	0.0	0.2
7		BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA	1 2	0 149	99	3.2	1.6 0.0	-1.6 3.2
	220 KV	DUDHIFADAR-KUKBA		149	ER-WR	6.1	11.8	-5.8
Impo	pt/Export of FD (	With CD)			ER-WK	0.1	11.0	-3.6
1111p0	ort/Export of ER (V	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1982	0.0	44.0	-12.5 -44.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2756	0.0	51.9	-44.0 -51.9
4	400 kV	TALCHER-I/C	2	225	219	0.4	0.0	0.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	108.4	-108.4
Impo	ort/Export of ER (V							
1	400 kV	BINAGURI-BONGAIGAON	2	210	66	1.7	0.1	1.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	661	141	5.2	0.0	5.2
3	220 kV	ALIPURDUAR-SALAKATI	2	131	0	1.6	0.0	1.6
L					ER-NER	8.4	0.1	8.3
Impo	ort/Export of NER							
1	HVDC	BISWANATH CHARIALI-AGRA	2	481	0	10.1	0.0	10.1
					NER-NR	10.1	0.0	10.1
Impo	ort/Export of WR (	With NR)						
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3464	0.0	65.1	-65.1
2	HVDC	VINDHYACHAL B/B		451	0	12.2	0.0	12.2
3		MUNDRA-MOHINDERGARH	2	0	790	0.0	14.7	-14.7
4		GWALIOR-AGRA	2	0	1618	0.0	28.2	-28.2
5		GWALIOR-PHAGI	2	421	909	0.0	7.5 22.7	-7.5
7		JABALPUR-ORAI	2	0	721	0.0	0.0	-22.7
8		GWALIOR-ORAI SATNA-ORAI	1	547 0	0 929	8.7 0.0	19.9	8.7 -19.9
9		BANASKANTHA-CHITORGARH	2	834	563	7.3	0.0	7.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2646	0.0	51.2	-51.2
11	400 kV	ZERDA-KANKROLI	1	214	78	2.5	0.0	2.5
12	400 kV	ZERDA -BHINMAL	1	519	150	6.0	0.0	6.0
13	400 kV	VINDHYACHAL -RIHAND	1	963	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	425	197	2.7	0.0	2.7
15		BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16 17		BHANPURA-MORAK	1	70	30	0.0	2.6	-2.6 0.7
18	220 kV 220 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	1	52	10	0.7	0.0	0.7
19	132 kV	GWALIOR-SAWAI MADHOPUR	i	0	0	0.0	0.0	0.0
20		RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
					WR-NR	62.6	211.8	-149.2
Impo	ort/Export of WR (	With SR)				0210		- 171-
1		BHADRAWATI B/B	-	304	1009	4.1	6.7	-2.5
2	HVDC	RAIGARH-PUGALUR	2	0	6021	0.0	93.8	-93.8
3	765 kV	SOLAPUR-RAICHUR	2	1075	1972	0.0	4.4	-4.4
4		WARDHA-NIZAMABAD	2	0	2520	0.0	35.3	-35.3
5	400 kV	KOLHAPUR-KUDGI	2	1361	0	22.3	0.0	22.3
7	220 kV 220 kV	KOLHAPUR-CHIKODI PONDA-AMBEWADI	2	0	0	0.0	0.0	0.0
8	220 kV 220 kV	XELDEM-AMBEWADI	1	0	125	2.5	0.0	2.5
-	220 R V	ALLEGITANDE NADI		U	WR-SR	29.0	140.1	-111.1
=				OFF. 1. 1. 10 11	WN.	47.0		
		IN	TERNATIONAL EX	CHANGES			Import(	+ve)/Export(-ve)
	State	Region	Line	Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange
<u> </u>			400kV MANGDECHHU-			(		(MU)
1		ER	ALIPURDUAR RECEIPT		156	31	39	0.93
Ì		ER	HEP 4*180MW)	. (IIOIII MAMODECHU	150	31	39	0.93
Ì			400kV TALA-BINAGUR	I 1,2,4 (& 400kV			1	
1		ER	MALBASE - BINAGUR	, , ,	189	99	145	3.48
Ì			RECEIPT (from TALA H 220kV CHUKHA-BIRPA					
Ì								
Ì	BHUTAN	ER	MALBASE - BIRPARA) i		-156	-33	-119	-2.85
1			(from CHUKHA HEP 4*8	84MW)				
Ì		NER	132kV GELEPHU-SALA	KATI	-18	0	-8	-0.19
Ì		NEK	102K T GELEI HU-SALA		-10	U	-0	*0.19
Ì								
Ì		NER	132kV MOTANGA-RANG	GIA	43	7	31	0.75
L						<u> </u>		
Ì		NR	132kV MAHENDRANAG	GAR-TANAKPUR(NHPC)	-76	0	-60	-1.45
Ì								
1	NEDAT	ED	NEDAL IMBODE (EDG)	A DILLA D)	121	0	-79	1.00
NEPAL ER		NEPAL IMPORT (FROM	i biliak)	-131	-8	-19	-1.89	
		1						
Ì	ER 400kV DHALKEBAR-MUZAFFARPUR 1&2			-380	-84	-335	-8.03	
L					230			5100
Ì		ER	BHERAMARA B/B HVD	C (B'DESH)	-930	-642	-725	-17.41
1			ļ				1	
	DANCE A PEGE	ER	400LY COPP :	HANDID (DIPPORT TO			/22	
	BANGLADESH	(Isolated from Indian Grid)	400kV GODDA_TPS-RAI	HANPUK (B'DESH) D/C	-539	-327	-433	-10.39
Ì			1					
		NER	132kV COMILLA-SURA	JMANI NAGAR 1&2	-176	0	-151	-3.62
		NEK	152K COMILLA-SUKA	JULIA INGAR 182	-1/0	U	-131	-3.04