

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, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 30th April 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 29.04.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 29-अप्रैल-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 29th April 2023, is available at the NLDC website.

धन्यवाद.

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



Report for previous day

A. Power Supply Position at All India and Regional level

Date of Reporting: 30-Apr-2023

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 20:00 hrs; from RLDCs)	52953	53948	45465	23364	2644	178374
Peak Shortage (MW)	0	0	0	314	47	361
Energy Met (MU)	1191	1293	1134	536	50	4205
Hydro Gen (MU)	182	28	54	41	11	316
Wind Gen (MU)	13	44	31	-	-	88
Solar Gen (MU)*	119.10	43.20	103.43	5.05	0.92	272
Energy Shortage (MU)	1.06	0.00	0.00	1.85	1.27	4.18
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53549	57819	53853	24831	2801	188802
Time Of Maximum Demand Met	19:55	15:28	11:21	18:51	18:43	11:19

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	0.00	1.06	8.23	9.29	66.05	24.66

C. Power Supply Position in States

		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)	(MIC)	(MU)	(MIC)	(17177)	
	Punjab	7388	0	155.5	39.6	-0.3	258	0.00
	Haryana	7546	0	161.5	102.6	-0.8	191	0.00
	Rajasthan	11519	0	231.1	59.3	-6.0	327	0.00
	Delhi	4048	0	89.3	84.7	-1.6	82	0.00
NR	UP	21028	0	409.9	155.3	0.4	347	0.29
	Uttarakhand	2080	0	45.1	27.0	0.5	217	0.00
	HP	1640	0	31.1	15.2	-0.1	56	0.00
	J&K(UT) & Ladakh(UT)	2870	0	59.0	43.7	1.1	168	0.77
	Chandigarh	215	0	4.5	4.6	-0.1	30	0.00
	Railways_NR ISTS	177	0	3.9	3.2	0.7	57	0.00
	Chhattisgarh	4545	0	97.6	39.7	-2.9	346	0.00
	Gujarat	18453	0	410.6	221.6	0.0	1367	0.00
	MP	9025	0	195.0	97.2	-2.1	465	0.00
WR	Maharashtra	23374	0	515.2	204.7	-0.7	924	0.00
	Goa	732	0	15.6	15.4	-0.3	37	0.00
	DNHDDPDCL	1235	0	28.8	29.2	-0.4	58	0.00
	AMNSIL	801	0	17.7	10.8	-0.2	250	0.00
	BALCO	519	0	12.4	12.4	0.0	6	0.00
	Andhra Pradesh	11464	0	222.7	92.2	-1.4	714	0.00
	Telangana	7799	0	169.4	47.7	-0.5	466	0.00
SR	Karnataka	14532	0	275.0	133.3	-1.6	607	0.00
	Kerala	3824	0	86.8	72.1	-0.2	231	0.00
	Tamil Nadu	17267	0	370.7	229.1	-3.3	664	0.00
	Puducherry	433	0	9.9	10.1	-0.9	26	0.00
	Bihar	6299	0	122.0	116.2	-1.2	285	0.19
	DVC	3592	0	77.1	-48.0	0.4	306	0.00
	Jharkhand	1642	0	33.4	27.1	-1.6	199	1.66
$\mathbf{E}\mathbf{R}$	Odisha	5849	0	115.5	41.2	-1.5	388	0.00
	West Bengal	8514	0	186.8	48.2	-4.0	98	0.00
	Sikkim	87	0	1.3	1.5	-0.2	18	0.00
	Railways_ER ISTS	21	0	0.1	0.0	0.1	0	0.00
	Arunachal Pradesh	158	0	2.5	2.5	0.0	25	0.00
	Assam	1674	0	29.8	24.0	-0.4	100	0.00
	Manipur	200	0	2.8	2.7	0.1	26	0.00
NER	Meghalaya	297	15	5.2	3.8	0.0	76	1.27
	Mizoram	119	0	1.9	1.5	-0.1	8	0.00
	Nagaland	142	0	2.4	2.4	-0.1	14	0.00
	Tripura	307	0	5.5	4.8	0.2	53	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	1.2	-12.8	-14.4	-8.7
Day Peak (MW)	239.0	-576.2	-661.0	-589.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	136.5	-212.1	195.1	-121.3	1.8	0.0
Actual(MU)	119.2	-192.3	189.6	-124.9	1.7	-6.8
O/D/U/D(MU)	-17.3	19.8	-5.5	-3.6	-0.1	-6.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4587	8541	3958	1370	425	18881	43
State Sector	6200	13080	3681	1350	264	24574	57
Total	10787	21620	7639	2720	689	43454	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	749	1420	662	693	13	3537	77
Lignite	26	22	61	0	0	109	2
Hydro	182	28	54	41	11	316	7
Nuclear	29	37	69	0	0	136	3
Gas, Naptha & Diesel	13	20	7	0	30	69	2
RES (Wind, Solar, Biomass & Others)	148	88	162	5	1	405	9
Total	1148	1615	1014	740	55	4571	100
Share of RES in total generation (%)	12.94	5.47	15.98	0.74	1.68	8.86]
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.36	9.51	28.09	6.29	22.56	18.75	

H. All India Demand Diversity Fac	ctor
Based on Regional Max Demands	

Based on Regional Max Demands	1.021
Based on State Max Demands	1.066

I. All India Peak	Demand a	and s	shortage at So	olar and N	Non-Solar Hour
	3.7	-	137 (37		

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	188802	11:19	256
Non-Solar hr	182919	19:24	303

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

 $[*]Source: RLDCs \ for \ solar \ connected \ to \ ISTS; \ SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 30-Apr-2023

							Date of Reporting:	30-Apr-2023
Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
_	rt/Export of ER (V							
2	HVDC HVDC	ALIPURDUAR-AGRA PUSAULI B/B	2	0	0 97	0.0	0.0 3.6	0.0 -3.6
3		GAYA-VARANASI	2	331	767	0.0	6.8	-6.8
4	765 kV	SASARAM-FATEHPUR	1	84	415	0.0	5.6	-5.6
5 6	765 kV 400 kV	GAYA-BALIA PUSAULI-VARANASI	1	0	704 101	0.0	11.8 1.4	-11.8 -1.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	79	0.0	2.0	-2.0
8	400 kV 400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	2 2	222	723 640	0.0	6.0 10.0	-6.0 -10.0
10	400 kV	NAUBATPUR-BALIA	2	6	678	0.0	8.8	-8.8
11	400 kV	BIHARSHARIFF-BALIA	2	238	391	0.0	2.5	-2.5
12	400 kV 400 kV	MOTIHARI-GORAKHPUR BIHARSHARIFF-VARANASI	2 2	54 170	466 300	0.0	6.2 2.9	-6.2 -2.9
14	220 kV	SAHUPURI-KARAMNASA	1	0	182	0.0	3.0	-3.0
15 16	132 kV 132 kV	NAGAR UNTARI-RIHAND GARWAH-RIHAND	1	0 25	0	0.0	0.0	0.0
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
T	-t/Ea-t affD (V	W/4L W/D\			ER-NR	0.3	70.4	-70.1
1mpoi	rt/Export of ER (\) 765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1048	0	11.4	0.0	11.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	771	463	2.3	0.0	2.3
3	765 kV 400 kV	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	2 4	0	515 501	0.0	9.5 7.1	-9.5 -7.1
5	400 kV	RANCHI-SIPAT	2	186	173	0.4	0.0	0.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	56	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	121	0 ER-WR	2.8 16.9	0.0 18.3	2.8 -1.4
Impo	rt/Export of ER (V	With SR)			EK-WK	10.9	10.5	-1.4
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	546	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1656	0.0	39.6	-39.6
3	765 kV 400 kV	ANGUL-SRIKAKULAM TALCHER-I/C	2 2	0 257	2848 0	0.0 4.6	53.5 0.0	-53.5 4.6
5		BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
		Wild MED			ER-SR	0.0	105.7	-105.7
Impo	rt/Export of ER (V		2	210	102	1.1	0.4	0.7
2	400 kV 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	2 2	218 700	103 224	1.1 2.8	0.4	0.7 2.8
3	220 kV	ALIPURDUAR-SALAKATI	2	128	23	0.9	0.0	0.9
T		(NICAL NID)			ER-NER	4.7	0.4	4.3
Impo	rt/Export of NER HVDC	(With NR) BISWANATH CHARIALI-AGRA	2	475	0	7.2	0.0	7.2
1	HVDC	DISWANATH CHARIALI-AGKA	. 4	4/5	0 NER-NR	7.2	0.0	7.2
Impo	rt/Export of WR ((With NR)						
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1501	0.0	34.9	-34.9
3	HVDC HVDC	VINDHYACHAL B/B MUNDRA-MOHINDERGARH	2	445 0	0 305	12.1 7.2	0.0	12.1 7.2
4	765 kV	GWALIOR-AGRA	2	0	1675	0.0	28.4	-28.4
5	765 kV	GWALIOR-PHAGI	2	422	1302	0.0	18.9	-18.9
7	765 kV 765 kV	JABALPUR-ORAI GWALIOR-ORAI	2	0 891	626	0.0 15.0	17.9 0.0	-17.9 15.0
8	765 kV	SATNA-ORAI	1	0	922	0.0	18.0	-18.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1842	0	29.0	0.0	29.0
10 11	765 kV 400 kV	VINDHYACHAL-VARANASI ZERDA-KANKROLI	2	0 361	2401 0	6.2	45.9 0.0	-45.9 6.2
12	400 kV	ZERDA -BHINMAL	î	680	0	9.8	0.0	9.8
13 14	400 kV 400 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR	1 2	958 463	0 243	21.9 1.0	0.0	21.9 1.0
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.8	-1.8
17 18	220 kV 220 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	1	63 48	5 11	0.5	0.0	0.5 0.2
19	132 kV	GWALIOR-SAWAI MADHOPUR	î	0	0	0.0	0.0	0.0
20	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
Impo	rt/Export of WR ((With SR)			WR-NR	103.0	165.7	-62.7
1	HVDC	BHADRAWATI B/B		0	1002	0.0	23.9	-23.9
2	HVDC	RAIGARH-PUGALUR	2	0	5010	0.0	93.4	-93.4
3	765 kV 765 kV	SOLAPUR-RAICHUR WARDHA-NIZAMABAD	2 2	533	1514 1796	0.0	10.4 25.3	-10.4 -25.3
5	400 kV	KOLHAPUR-KUDGI	2	1154	0	19.7	0.0	19.7
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7 8	220 kV 220 kV	PONDA-AMBEWADI XELDEM-AMBEWADI	1	0	0 134	2.7	0.0	0.0 2.7
					WR-SR	22.4	153.0	-130.6
		IN	TERNATIONAL EX	CHANGES			Import	+ve)/Export(-ve)
	State	Region		Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange
		a segum		ALIPURDUAR 1,2&3 i.e.		((17)		(MU)
		ER	ALIPURDUAR RECEIPT		187	-61	14	0.34
			HEP 4*180MW)	,				
		ER	400kV TALA-BINAGUR MALBASE - BINAGUR		310	35	191	4.59
		ER	RECEIPT (from TALA H	EP 6*170MW)	310		171	4.37
	DITTURAN		220kV CHUKHA-BIRPA	RA 1&2 (& 220kV	200		4=0	
	BHUTAN	ER	MALBASE - BIRPARA) i (from CHUKHA HEP 4*8		-229	76	-150	-3.60
				·				
		NER	132kV GELEPHU-SALA	KATI	-19	13	-6	-0.15
		NER	132kV MOTANGA-RAN	GIA	34	-17	0	0.01
			1028 I MOTANGA RANGIA					
			132kV MAHENDRANAGAR-TANAKPUR(NHPC)				İ	-1.52
		NR	132kV MAHENDRANAG	AR-TANAKPUR(NHPC)	-69	0	-63	-1.52
			132kV MAHENDRANAG	GAR-TANAKPUR(NHPC)	-69	0	-63	-1.52
	NEPAL.	NR						
	NEPAL		132kV MAHENDRANAG NEPAL IMPORT (FROM		-69 -100	-35	-63 -79	-1.90
	NEPAL	NR ER	NEPAL IMPORT (FROM	1 BIHAR)	-100	-35	-79	-1.90
	NEPAL	NR		1 BIHAR)				
	NEPAL	NR ER ER	NEPAL IMPORT (FROM 400kV DHALKEBAR-MU	1 BIHAR) UZAFFARPUR 1&2	-100 -407	-35 -290	-79 -392	-1.90 -9.40
	NEPAL	NR ER	NEPAL IMPORT (FROM	1 BIHAR) UZAFFARPUR 1&2	-100	-35	-79	-1.90
	NEPAL	NR ER ER	NEPAL IMPORT (FROM 400kV DHALKEBAR-MU	1 BIHAR) UZAFFARPUR 1&2	-100 -407	-35 -290	-79 -392	-1.90 -9.40
E	NEPAL BANGLADESH	NR ER ER ER	NEPAL IMPORT (FROM 400kV DHALKEBAR-MU	I BIHAR) UZAFFARPUR 1&2 C (B'DESH)	-100 -407	-35 -290	-79 -392	-1.90 -9.40
B		NR ER ER	NEPAL IMPORT (FROM 400kV DHALKEBAR-MI BHERAMARA B/B HVD	I BIHAR) UZAFFARPUR 1&2 C (B'DESH)	-100 -407 -507	-35 -290 -166	-79 -392 -466	-1.90 -9.40 -11.18
H		NR ER ER ER	NEPAL IMPORT (FROM 400kV DHALKEBAR-MI BHERAMARA B/B HVD	I BIHAR) UZAFFARPUR 1&2 C (B'DESH) HANPUR (B'DESH) D/C	-100 -407 -507	-35 -290 -166	-79 -392 -466	-1.90 -9.40 -11.18
В		NR ER ER ER (Isolated from Indian Grid)	NEPAL IMPORT (FROM 400kV DHALKEBAR-MU BHERAMARA B/B HVD 400kV GODDA_TPS-RAI	I BIHAR) UZAFFARPUR 1&2 C (B'DESH) HANPUR (B'DESH) D/C	-100 -407 -507 -589	-35 -290 -166	-79 -392 -466 -361	-1.90 -9.40 -11.18 -8.67