

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: 23rd March 2024

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 22.03.2024.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-मार्च -2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंकें 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 22nd March 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 23-Mar-2024

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 19:00 hrs; from RLDCs)	53791	64979	52897	22934	2660	197261
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1169	1523	1366	469	48	4575
Hydro Gen (MU)	137	28	49	19	19	251
Wind Gen (MU)	16	91	39	-	-	146
Solar Gen (MU)*	159.98	87.11	129.50	3.97	1.02	382
Energy Shortage (MU)	0.26	0.00	0.00	0.00	0.00	0.26
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	57096	70021	65985	23110	2673	214313
Time Of Maximum Demand Met	10:24	11:08	12:14	18:45	18:02	11:11

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	0.49	5.34	5.82	81.72	12.46

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	7717	0	157.9	54.8	0.8	250	0.00
	Haryana	7180	0	144.8	105.2	-0.7	139	0.00
	Rajasthan	14912	0	292.8	70.9	-0.7	247	0.00
	Delhi	4090	0	76.2	67.4	0.6	288	0.00
	UP	17820	0	361.5	100.1	0.3	533	0.00
	Uttarakhand	2079	0	42.3	30.6	0.5	119	0.00
	HP	1727	0	31.2	21.2	-0.8	20	0.26
	J&K(UT) & Ladakh(UT)	2784	0	54.5	45.2	-0.9	238	0.00
	Chandigarh	208	0	3.7	3.9	-0.2	21	0.00
Railways NR ISTS	203	0	4.0	3.8	0.2	35	0.00	
WR	Chhattisgarh	5502	0	120.2	66.5	1.0	256	0.00
	Gujarat	21186	0	444.0	200.9	-1.2	449	0.00
	MP	12769	0	257.1	140.8	-6.1	426	0.00
	Maharashtra	28084	0	625.1	223.1	0.0	685	0.00
	Goa	753	0	15.7	12.8	2.5	48	0.00
	DNHDDPDCL	1283	0	29.5	29.4	0.1	42	0.00
	AMNSIL	928	0	19.3	9.0	0.4	294	0.00
BALCO	527	0	12.5	12.5	0.0	10	0.00	
SR	Andhra Pradesh	12350	0	230.7	81.6	-1.2	434	0.00
	Telangana	14233	0	285.8	160.4	0.0	621	0.00
	Karnataka	16850	0	331.4	160.4	0.1	543	0.00
	Kerala	4947	0	101.6	84.2	1.7	270	0.00
	Tamil Nadu	19409	0	406.4	240.4	0.5	490	0.00
	Puducherry	432	0	10.0	9.8	-0.3	24	0.00
ER	Bihar	4730	0	86.9	81.1	-0.3	182	0.00
	DVC	3230	0	70.6	-30.2	0.3	469	0.00
	Jharkhand	1852	0	35.9	24.9	-1.2	160	0.00
	Odisha	5929	0	127.1	49.6	-0.8	465	0.00
	West Bengal	7523	0	146.7	13.4	-1.2	224	0.00
	Sikkim	112	0	1.8	1.9	-0.1	17	0.00
Railways ER ISTS	12	0	0.1	0.2	0.0	5	0.00	
NER	Arunachal Pradesh	160	0	2.8	3.5	-0.7	9	0.00
	Assam	1563	0	27.3	22.0	0.5	129	0.00
	Manipur	213	0	3.1	3.2	-0.1	22	0.00
	Meghalaya	331	0	6.2	5.9	-0.2	38	0.00
	Mizoram	129	0	2.0	1.8	-0.2	5	0.00
	Nagaland	152	0	2.3	2.2	0.0	25	0.00
Tripura	238	0	3.9	4.0	-0.2	15	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-1.7	-13.8	-22.8	-20.7
Day Peak (MW)	-328.0	-584.7	-1077.0	-1021.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	88.6	-245.3	318.7	-159.8	-2.1	0.0
Actual(MU)	85.8	-238.5	336.3	-186.0	-4.1	-6.5
O/D/U/D(MU)	-2.8	6.8	17.7	-26.2	-2.0	-6.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5234	8261	5168	3467	376	22505	46
State Sector	7516	12113	2750	4417	128	26923	54
Total	12750	20373	7918	7883	504	49428	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	754	1566	735	719	17	3791	76
Lignite	30	22	74	0	0	126	3
Hydro	137	28	49	19	19	251	5
Nuclear	31	60	51	0	0	142	3
Gas, Naptha & Diesel	12	38	6	0	23	79	2
RES (Wind, Solar, Biomass & Others)	195	181	198	5	1	581	12
Total	1160	1894	1113	744	60	4971	100

Share of RES in total generation (%)	16.84	9.55	17.78	0.71	1.70	11.68
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.35	14.21	26.84	2.99	33.10	19.60

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
Based on State Max Demands	1.045

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	214313	11:11	34
Non-Solar hr	198393	19:25	0

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 -> 07:00 to 17:00hrs 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: 23-Mar-2024

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)								
1	HVDC	ALIPURDUAR-AGRA	2	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1041	0.0	15.8	-15.8
4	765 kV	SASARAM-FATEHPUR	1	0	627	0.0	10.9	-10.9
5	765 kV	GAYA-BALIA	1	0	501	0.0	6.7	-6.7
6	400 kV	PUSAULI-VARANASI	1	0	67	0.0	0.9	-0.9
7	400 kV	PUSAULI-ALLAHABAD	1	20	37	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	76	579	0.0	6.4	-6.4
9	400 kV	PATNA-BALIA	2	0	614	0.0	12.1	-12.1
10	400 kV	NAUBATPUR-BALIA	2	0	313	0.0	4.9	-4.9
11	400 kV	BIHARSHARIFF-BALIA	2	150	234	0.0	1.5	-1.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	505	0.0	7.4	-7.4
13	400 kV	BIHARSHARIFF-VARANASI	2	5	342	0.0	4.0	-4.0
14	220 kV	SAHUPURI-KARAMNANA	1	0	79	0.0	1.3	-1.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.0	74.2	-74.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	865	0	10.7	0.0	10.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1811	0.0	28.8	-28.8
3	765 kV	JHARSUGUDA-DURG	2	0	1263	0.0	24.9	-24.9
4	400 kV	JHARSUGUDA-RAIGARH	4	0	558	0.0	8.8	-8.8
5	400 kV	RANCHI-SIPAT	2	0	501	0.0	8.1	-8.1
6	220 kV	BUDHIPADAR-RAIGARH	1	1	150	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	75	8	0.8	0.0	0.8
ER-WR						11.5	72.1	-60.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	745	0.0	17.4	-17.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1496	0.0	36.1	-36.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	3079	0.0	62.6	-62.6
4	400 kV	TALCHER-I/C	2	415	0	8.4	0.0	8.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	116.1	-116.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	2	6	2.4	0.0	2.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	967	0	14.6	0.0	14.6
3	220 kV	ALIPURDUAR-SALAKATI	2	153	0	2.2	0.0	2.2
ER-NER						19.2	0.0	19.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	659	0	16.0	0.0	16.0
NER-NR						16.0	0.0	16.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2506	0.0	58.1	-58.1
2	HVDC	VINDHYACHAL B/B	-	308	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	2361	0.0	34.2	-34.2
4	765 kV	GWALIOR-AGRA	2	621	1213	3.9	4.4	-0.5
5	765 kV	GWALIOR-PHAGI	2	1017	1019	5.2	11.4	-6.3
6	765 kV	JABALPUR-ORAI	2	361	568	0.6	0.3	0.3
7	765 kV	GWALIOR-ORAI	1	704	0	10.6	0.0	10.6
8	765 kV	SATNA-ORAI	1	0	931	0.0	16.1	-16.1
9	765 kV	BANASKANTHA-CHITORGARH	2	2572	0	32.5	0.0	32.5
10	765 kV	VINDHYACHAL-VARANASI	2	80	1633	0.0	13.0	-13.0
11	400 kV	ZERDA-KANKROLI	1	493	0	6.9	0.0	6.9
12	400 kV	ZERDA -BHINMAL	1	493	0	6.8	0.0	6.8
13	400 kV	VINDHYACHAL -RIHAND	1	966	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUALPUR	2	845	64	9.1	0.0	9.1
15	220 kV	BHANPURA-RANPUR	1	0	147	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.9	-0.9
17	220 kV	MEHGAON-AURAIYA	1	117	0	2.0	0.0	2.0
18	220 kV	MALANPUR-AURAIYA	1	81	0	3.2	0.0	3.2
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
WR-NR						110.2	140.8	-30.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1012	0.0	24.0	-24.0
2	HVDC	RAIGARH-PUGALUR	2	0	6030	0.0	128.7	-128.7
3	765 kV	SOLAPUR-RAICHUR	2	96	1668	0.0	23.8	-23.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2810	0.0	51.7	-51.7
5	765 kV	WARORA-WARANGAL(NEW)	2	0	3056	0.0	58.2	-58.2
6	400 kV	KOLHAPUR-KUDGI	2	1179	0	15.5	0.0	15.5
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	0	124	2.4	0.0	2.4
WR-SR						18.0	286.4	-268.4

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)	184	-135	38	0.90
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-169	156	48	1.14
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-198	-131	-159	-3.83
	NER	132kV GELEPHU-SALAKATI	-24	-9	-15	-0.36
	NER	132kV MOTANGA-RANGIA	35	14	20	0.49
NEPAL	NR	NEPAL IMPORT (FROM UP)	-67	0	-52	-1.24
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-67	0	-54	-1.29
	ER	NEPAL IMPORT (FROM BIHAR)	-178	-30	-110	-2.65
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-407	-176	-358	-8.59
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-945	-318	-840	-20.16
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1021	-802	-861	-20.66
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-132	0	-111	-2.67

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 23-Mar-2024

Export From India (in MU)

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	5.46	0.00	0.00	0.00	0.00	0.00	5.46
Nepal	0.20	0.00	9.87	0.00	0.00	0.00	0.00	0.00	10.07
Bangladesh	20.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	20.76	0.00	15.33	0.00	0.00	0.00	0.00	0.00	36.09

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49
Nepal	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.16
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	3.49	0.00	0.00	0.00	0.00	0.16	0.00	0.00	3.65

Net from India(in MU)

-ve : Export / +ve : Import

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	3.49	0.00	-5.46	0.00	0.00	0.00	0.00	0.00	-1.97
Nepal	-0.20	0.00	-9.87	0.00	0.00	0.16	0.00	0.00	-9.91
Bangladesh	-20.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-20.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-17.27	0.00	-15.33	0.00	0.00	0.16	0.00	0.00	-32.44