

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: 21th 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., डोंगतेिह, 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 20.03.2024.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20th March 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 21-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)	53680	62298	52231	18734	2518	189461
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1196	1467	1344	420	48	4475
Hydro Gen (MU)	122	27	35	14	8	205
Wind Gen (MU)	24	75	45	-	-	144
Solar Gen (MU)*	162.92	83.97	137.38	1.96	0.43	387
Energy Shortage (MU)	1.08	0.00	0.00	0.00	0.00	1.08
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	59778	67168	64531	19946	2607	212150
Time Of Maximum Demand Met	10:23	11:02	10:24	09:27	18:13	10:23

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	0.24	3.48	3.73	78.38	17.89

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	10096	0	184.7	86.6	-0.1	178	0.00
	Haryana	7647	0	151.9	107.7	-0.6	182	0.00
	Rajasthan	15385	0	295.6	65.1	-0.2	286	0.00
	Delhi	3860	0	74.8	64.2	2.5	323	0.00
	UP	17204	0	352.3	107.8	-0.4	483	0.00
	Uttarakhand	2049	0	41.3	27.9	0.5	123	0.00
	HP	1875	0	33.2	25.1	-0.1	74	0.03
	J&K(UT) & Ladakh(UT)	2782	0	54.9	47.3	-1.2	159	1.05
	Chandigarh	215	0	3.5	3.6	-0.1	22	0.00
Railways_NR ISTS	185	0	3.8	3.8	0.1	17	0.00	
WR	Chhattisgarh	4274	0	95.5	33.6	-0.3	605	0.00
	Gujarat	20831	0	435.6	168.3	-0.3	906	0.00
	MP	12851	0	254.1	152.2	-6.3	465	0.00
	Maharashtra	27029	0	607.3	200.2	-2.8	574	0.00
	Goa	720	0	14.6	11.8	2.4	54	0.00
	DNHDDPDCL	1275	0	29.2	29.3	-0.1	55	0.00
	AMNSIL	840	0	18.6	8.2	0.3	291	0.00
BALCO	524	0	12.5	12.5	0.0	11	0.00	
SR	Andhra Pradesh	12443	0	225.9	84.7	-3.4	357	0.00
	Telangana	13557	0	271.2	160.5	-1.0	689	0.00
	Karnataka	16335	0	328.1	156.9	-5.0	608	0.00
	Kerala	5037	0	101.2	85.6	1.4	290	0.00
	Tamil Nadu	18839	0	407.9	244.4	-2.7	423	0.00
	Puducherry	431	0	9.9	9.7	-0.4	28	0.00
ER	Bihar	3701	0	69.4	65.4	-1.5	276	0.00
	DVC	3351	0	70.4	-34.3	0.7	282	0.00
	Jharkhand	1468	0	31.4	21.9	-2.8	174	0.00
	Odisha	4990	0	102.9	29.5	-3.5	374	0.00
	West Bengal	7007	0	144.3	16.0	-3.6	217	0.00
	Sikkim	109	0	1.4	1.8	-0.4	43	0.00
Railways_ER ISTS	14	0	0.1	0.2	-0.1	10	0.00	
NER	Arunachal Pradesh	165	0	3.0	2.9	0.0	47	0.00
	Assam	1450	0	27.2	22.2	0.1	101	0.00
	Manipur	210	0	2.9	3.1	-0.2	11	0.00
	Meghalaya	352	0	6.1	5.6	-0.2	72	0.00
	Mizoram	124	0	2.0	1.6	-0.1	34	0.00
	Nagaland	144	0	2.3	2.3	0.0	18	0.00
Tripura	241	0	4.0	4.4	0.0	35	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-11.6	-15.6	-25.2	-21.6
Day Peak (MW)	-696.0	-653.5	-1099.0	-1045.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	137.0	-289.5	313.3	-168.3	7.6	0.0
Actual(MU)	139.3	-284.1	323.7	-191.5	6.7	-5.8
O/D/U/D(MU)	2.4	5.3	10.5	-23.2	-0.8	-5.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5349	8966	4568	2442	376	21701	49
State Sector	5916	10838	2070	3297	120	22240	51
Total	11265	19803	6638	5739	496	43940	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	732	1566	726	701	17	3742	77
Lignite	30	23	76	0	0	129	3
Hydro	122	27	35	14	8	205	4
Nuclear	31	59	52	0	0	142	3
Gas, Naptha & Diesel	12	34	4	0	24	75	2
RES (Wind, Solar, Biomass & Others)	207	161	213	4	0	586	12
Total	1134	1871	1105	709	49	4878	100

Share of RES in total generation (%)	18.23	8.61	19.30	0.50	0.87	12.00
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.79	13.26	27.12	2.49	16.50	19.15

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.008
Based on State Max Demands	1.035

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	212150	10:23	0
Non-Solar hr	191635	19:15	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: 21-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	4	1089	0.0	14.0	-14.0
4	765 kV	SASARAM-FATEHPUR	1	0	645	0.0	11.1	-11.1
5	765 kV	GAYA-BALIA	1	0	510	0.0	7.4	-7.4
6	400 kV	PUSAULI-VARANASI	1	22	53	0.0	0.5	-0.5
7	400 kV	PUSAULI-ALLAHABAD	1	5	71	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	187	651	0.0	5.3	-5.3
9	400 kV	PATNA-BALIA	2	0	633	0.0	15.0	-15.0
10	400 kV	NAUBATPUR-BALIA	2	0	326	0.0	4.9	-4.9
11	400 kV	BIHARSHARIF-BALIA	2	180	195	0.0	0.2	-0.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	589	0.0	8.7	-8.7
13	400 kV	BIHARSHARIF-VARANASI	2	28	342	0.0	3.8	-3.8
14	220 kV	SAHUPURI-KARAMNANA	1	0	90	0.0	1.2	-1.2
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-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.0	73.9	-73.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	447	546	0.2	0.0	0.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1343	0.0	18.7	-18.7
3	765 kV	JHARSUGUDA-DURG	2	0	1188	0.0	19.9	-19.9
4	400 kV	JHARSUGUDA-RAIGARH	4	39	440	0.0	4.0	-4.0
5	400 kV	RANCHI-SIPAT	2	0	379	0.0	4.9	-4.9
6	220 kV	BUDHIPADAR-RAIGARH	1	22	113	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	109	0	1.4	0.0	1.4
ER-WR						1.6	48.6	-47.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	624	0.0	14.8	-14.8
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1993	0.0	46.1	-46.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	3018	0.0	62.1	-62.1
4	400 kV	TALCHER-I/C	2	401	677	0.0	4.7	-4.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	123.0	-123.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	6	1.6	0.0	1.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	679	0	7.2	0.0	7.2
3	220 kV	ALIPURDUAR-SALAKATI	2	102	0	1.2	0.0	1.2
ER-NER						9.9	0.0	9.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	656	0	16.1	0.0	16.1
NER-NR						16.1	0.0	16.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1492	0.0	35.7	-35.7
2	HVDC	VINDHYACHAL B/B	-	304	0	2.7	0.0	2.7
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1454	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	26	1399	0.0	14.8	-14.8
5	765 kV	GWALIOR-PHAGI	2	592	1530	1.6	15.7	-14.1
6	765 kV	JABALPUR-ORAI	2	3	718	0.0	13.0	-13.0
7	765 kV	GWALIOR-ORAI	1	689	0	11.3	0.0	11.3
8	765 kV	SATNA-ORAI	1	0	1061	0.0	19.7	-19.7
9	765 kV	BANASKANTHA-CHITORGARH	2	1768	0	26.0	0.0	26.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	1789	0.0	28.4	-28.4
11	400 kV	ZERDA-KANKROLI	1	355	0	5.3	0.0	5.3
12	400 kV	ZERDA-BHINMAL	1	355	0	5.3	0.0	5.3
13	400 kV	VINDHYACHAL-RIHAND	1	964	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUJALPUR	2	584	207	5.8	0.7	5.1
15	220 kV	BHANPURA-RANPUR	1	0	137	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	96	0	1.5	0.0	1.5
18	220 kV	MALANPUR-AURAIYA	1	62	0	0.7	0.0	0.7
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
WR-NR						81.7	167.6	-85.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1011	0.0	18.1	-18.1
2	HVDC	RAIGARH-PUGALUR	2	0	6024	0.0	123.1	-123.1
3	765 kV	SOLAPUR-RAICHUR	2	0	1563	0.0	20.5	-20.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2589	0.0	47.8	-47.8
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2878	0.0	54.5	-54.5
6	400 kV	KOLHAPUR-KUDGI	2	1224	0	16.6	0.0	16.6
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	120	2.3	0.0	2.3
WR-SR						18.9	264.0	-245.1

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)	-220	143	-95	-2.27
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-296	139	-147	-3.53
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-360	-147	-245	-5.89
	NER	132kV GELEPHU-SALAKATI	-30	0	-16	-0.39
	NER	132kV MOTANGA-RANGIA	26	-2	20	0.49
NEPAL	NR	NEPAL IMPORT (FROM UP)	-68	0	-53	-1.28
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-68	0	-54	-1.30
	ER	NEPAL IMPORT (FROM BIHAR)	-169	-33	-100	-2.39
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-485	-257	-443	-10.63
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-951	-800	-911	-21.85
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1045	-809	-901	-21.63
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-148	0	-140	-3.37

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 21-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	11.43	0.00	0.00	1.11	0.00	0.00	12.54
Nepal	0.20	0.00	11.48	0.00	0.00	0.00	0.00	0.00	11.68
Bangladesh	21.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.86
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.06	0.00	22.91	0.00	0.00	1.11	0.00	0.00	46.08

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
Nepal	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.06
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	0.33	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.39

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	0.33	0.00	-11.43	0.00	0.00	-1.11	0.00	0.00	-12.21
Nepal	-0.20	0.00	-11.48	0.00	0.00	0.06	0.00	0.00	-11.62
Bangladesh	-21.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.86
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-21.73	0.00	-22.91	0.00	0.00	-1.05	0.00	0.00	-45.69