



**National Load Despatch Centre**  
**राष्ट्रीय भार प्रेषण केंद्र**  
**GRID CONTROLLER OF INDIA LIMITED**  
**ग्रीड 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: 24<sup>th</sup> 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 23.03.2024.**

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-मार्च -2024 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 23<sup>rd</sup> March 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 24-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)	52546	64393	52394	23566	2621	195520
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1170	1525	1358	484	48	4586
Hydro Gen (MU)	139	28	49	19	18	253
Wind Gen (MU)	14	94	37	-	-	144
Solar Gen (MU)*	148.32	85.99	134.38	3.04	0.90	373
Energy Shortage (MU)	0.02	0.00	0.00	0.26	0.00	0.28
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	56363	69336	64669	23981	2708	211750
Time Of Maximum Demand Met	09:44	10:43	11:29	18:48	18:16	11:26

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	0.66	6.03	6.69	81.09	12.22

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	8041	0	164.3	72.6	1.0	270	0.00
	Haryana	7046	0	144.2	109.7	-1.7	71	0.00
	Rajasthan	14400	0	289.8	75.8	-0.3	320	0.00
	Delhi	3750	0	72.6	63.8	1.7	360	0.00
	UP	17960	0	363.5	100.5	-0.3	473	0.00
	Uttarakhand	1988	0	40.8	31.0	-0.3	50	0.00
	HP	1745	0	31.4	22.1	-0.6	55	0.02
	J&K(UT) & Ladakh(UT)	2751	0	56.1	46.8	-0.8	106	0.00
	Chandigarh	189	0	3.4	3.8	-0.4	7	0.00
Railways NR ISTS	205	0	4.1	3.8	0.4	37	0.00	
WR	Chhattisgarh	5608	0	125.1	74.7	-0.4	1220	0.00
	Gujarat	21202	0	442.5	203.9	-0.2	1859	0.00
	MP	12796	0	258.3	135.3	-3.3	2107	0.00
	Maharashtra	27740	0	624.7	220.5	-1.7	997	0.00
	Goa	728	0	14.7	12.8	1.5	55	0.00
	DNHDDPDCL	1277	0	29.3	29.3	0.0	34	0.00
	AMNSIL	903	0	18.2	9.1	-0.2	232	0.00
	BALCO	526	0	12.5	12.6	-0.1	10	0.00
SR	Andhra Pradesh	12515	0	234.1	86.1	-0.6	718	0.00
	Telangana	14160	0	287.1	157.4	-0.4	646	0.00
	Karnataka	15651	0	324.0	160.4	-1.9	557	0.00
	Kerala	4997	0	100.8	82.4	1.5	269	0.00
	Tamil Nadu	19131	0	402.1	235.3	-0.9	531	0.00
	Puducherry	442	0	10.3	9.9	-0.2	28	0.00
ER	Bihar	4893	0	87.0	82.3	-1.6	242	0.26
	DVC	3188	0	71.9	-33.7	-0.1	210	0.00
	Jharkhand	1864	0	34.9	25.2	-2.0	209	0.00
	Odisha	5841	0	129.3	52.5	-0.1	517	0.00
	West Bengal	7875	0	159.2	17.2	-1.1	203	0.00
	Sikkim	103	0	1.6	1.8	-0.2	11	0.00
Railways ER ISTS	12	0	0.2	0.1	0.0	7	0.00	
NER	Arunachal Pradesh	170	0	2.7	2.8	-0.3	46	0.00
	Assam	1513	0	28.1	22.1	0.3	108	0.00
	Manipur	216	0	3.0	3.1	-0.1	31	0.00
	Meghalaya	328	0	6.3	5.8	-0.1	25	0.00
	Mizoram	133	0	1.9	1.7	-0.4	17	0.00
	Nagaland	153	0	2.1	2.3	-0.3	16	0.00
Tripura	235	0	3.8	4.1	-0.1	34	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-4.1	-11.4	-24.9	-21.1
Day Peak (MW)	-302.0	-557.7	-1093.0	-1030.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	115.6	-269.8	308.4	-151.8	-2.3	0.0
Actual(MU)	120.5	-261.2	315.8	-175.3	-5.4	-5.6
O/D/U/D(MU)	4.9	8.6	7.4	-23.6	-3.1	-5.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4854	7301	5418	3467	376	21416	45
State Sector	8106	12183	2480	3857	149	26774	55
Total	12960	19483	7898	7324	525	48189	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	738	1588	746	728	17	3816	77
Lignite	30	22	72	0	0	124	2
Hydro	139	28	49	19	18	253	5
Nuclear	31	60	51	0	0	142	3
Gas, Naptha & Diesel	10	38	6	0	24	78	2
RES (Wind, Solar, Biomass & Others)	181	182	199	4	1	567	11
Total	1129	1918	1123	751	60	4980	100

Share of RES in total generation (%)	16.01	9.47	17.74	0.59	1.50	11.39
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.14	14.11	26.71	2.68	30.96	19.30

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.025
Based on State Max Demands	1.049

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	211750	11:26	0
Non-Solar hr	197269	19:13	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: 24-Mar-2024

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
<b>Import/Export of ER (With NR)</b>								
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	954	0.0	16.3	-16.3
4	765 kV	SASARAM-FATEHPUR	1	0	542	0.0	9.8	-9.8
5	765 kV	GAYA-BALIA	1	0	499	0.0	7.5	-7.5
6	400 kV	PUSAULI-VARANASI	1	0	62	0.0	0.8	-0.8
7	400 kV	PUSAULI-ALLAHABAD	1	12	39	0.0	0.3	-0.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	38	471	0.0	7.2	-7.2
9	400 kV	PATNA-BALIA	2	0	465	0.0	13.4	-13.4
10	400 kV	NAUBATPUR-BALIA	2	0	240	0.0	4.3	-4.3
11	400 kV	BIHARSHARIFF-BALIA	2	68	172	0.0	1.5	-1.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	395	0.0	7.0	-7.0
13	400 kV	BIHARSHARIFF-VARANASI	2	0	252	0.0	3.6	-3.6
14	220 kV	SAHUPURI-KARAMNANA	1	0	86	0.0	1.4	-1.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.1	-0.1
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
<b>ER-NR</b>						<b>0.0</b>	<b>74.5</b>	<b>-74.5</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	955	0	15.0	0.0	15.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1453	0.0	25.8	-25.8
3	765 kV	JHARSUGUDA-DURG	2	0	1094	0.0	22.7	-22.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	540	0.0	9.6	-9.6
5	400 kV	RANCHI-SIPAT	2	0	413	0.0	7.2	-7.2
6	220 kV	BUDHIPADAR-RAIGARH	1	4	115	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	47	23	0.3	0.0	0.3
<b>ER-WR</b>						<b>15.3</b>	<b>66.7</b>	<b>-51.4</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	745	0.0	17.6	-17.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1495	0.0	36.1	-36.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	3082	0.0	63.3	-63.3
4	400 kV	TALCHER-I/C	2	419	0	8.4	0.0	8.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>117.0</b>	<b>-117.0</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	2	6	4.4	0.0	4.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	967	0	15.8	0.0	15.8
3	220 kV	ALIPURDUAR-SALAKATI	2	151	0	1.8	0.0	1.8
<b>ER-NER</b>						<b>22.0</b>	<b>0.0</b>	<b>22.0</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIAL-AGRA	2	656	0	16.0	0.0	16.0
<b>NER-NR</b>						<b>16.0</b>	<b>0.0</b>	<b>16.0</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2519	0.0	60.2	-60.2
2	HVDC	VINDHYACHAL B/B	-	305	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1912	0.0	48.3	-48.3
4	765 kV	GWALIOR-AGRA	2	287	1124	0.7	5.7	-5.0
5	765 kV	GWALIOR-PHAGI	2	716	1341	2.7	15.1	-12.3
6	765 kV	JABALPUR-ORAI	2	270	561	0.0	4.2	-4.2
7	765 kV	GWALIOR-ORAI	1	779	0	12.2	0.0	12.2
8	765 kV	SATNA-ORAI	1	0	982	0.0	17.9	-17.9
9	765 kV	BANASKANTHA-CHITORGARH	2	2656	0	36.3	0.0	36.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	1765	0.0	16.6	-16.6
11	400 kV	ZERDA-KANKROLI	1	495	0	14.2	0.0	14.2
12	400 kV	ZERDA -BHINMAL	1	495	0	0.0	0.0	0.0
13	400 kV	VINDHYACHAL -RIHAND	1	968	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	706	119	6.8	0.2	6.7
15	220 kV	BHANPURA-RANPUR	1	108	138	0.3	1.9	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.9	-0.9
17	220 kV	MEHGAON-AURAIYA	1	109	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	76	0	1.1	0.0	1.1
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
<b>WR-NR</b>						<b>105.2</b>	<b>171.0</b>	<b>-65.8</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1014	0.0	20.4	-20.4
2	HVDC	RAIGARH-PUGALUR	2	0	6023	0.0	108.7	-108.7
3	765 kV	SOLAPUR-RAICHUR	2	397	1678	0.1	22.5	-22.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2673	0.0	51.6	-51.6
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2958	0.0	59.0	-59.0
6	400 kV	KOLHAPUR-KUDGI	2	880	0	13.0	0.0	13.0
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	2.5	0.0	2.5
<b>WR-SR</b>						<b>15.6</b>	<b>262.3</b>	<b>-246.7</b>

**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)	150	-71	24	0.57
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-227	194	-23	-0.56
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-226	-122	-180	-4.31
	NER	132kV GELEPHU-SALAKATI	-28	-1	-11	-0.27
	NER	132kV MOTANGA-RANGIA	24	8	20	0.49
NEPAL	NR	NEPAL IMPORT (FROM UP)	-60	0	-49	-1.17
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-60	0	-49	-1.18
	ER	NEPAL IMPORT (FROM BIHAR)	-169	0	-69	-1.67
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-389	-174	-309	-7.41
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-948	-804	-917	-22.01
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1031	-811	-878	-21.08
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-145	0	-121	-2.90

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 24-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	5.18	0.00	0.00	0.38	0.00	0.00	5.56
Nepal	0.23	0.00	8.52	0.00	0.00	0.25	0.00	0.00	9.00
Bangladesh	22.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.24	0.00	13.70	0.00	0.00	0.63	0.00	0.00	36.57

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Nepal	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.52
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	0.62	0.00	0.00	0.00	0.00	0.52	0.00	0.00	1.14

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	0.62	0.00	-5.18	0.00	0.00	-0.38	0.00	0.00	-4.94
Nepal	-0.23	0.00	-8.52	0.00	0.00	0.27	0.00	0.00	-8.48
Bangladesh	-22.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-22.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-21.62	0.00	-13.70	0.00	0.00	-0.11	0.00	0.00	-35.43