



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: 15<sup>th</sup> January 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 14.01.2024.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रांभांप्रेके 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 14<sup>th</sup> January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 15-Jan-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)	58556	54501	40154	20563	2457	176231
Peak Shortage (MW)	52	0	0	355	0	407
Energy Met (MU)	1229	1365	1074	442	47	4157
Hydro Gen (MU)	94	31	38	19	10	192
Wind Gen (MU)	8	39	40	-	-	88
Solar Gen (MU)*	105.70	67.94	111.39	5.29	1.05	291
Energy Shortage (MU)	0.43	0.00	0.00	3.08	0.14	3.65
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63667	67340	54783	21528	2599	207217
Time Of Maximum Demand Met	10:33	10:53	09:26	18:10	18:02	10:28

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	0.055	0.53	1.49	6.26	8.29	74.56	17.15

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	8005	0	152.6	59.6	-0.9	487	0.00
	Haryana	7879	0	146.6	89.1	-1.8	196	0.00
	Rajasthan	16821	0	320.8	123.0	-1.9	354	0.00
	Delhi	5442	0	85.8	72.1	0.3	317	0.00
	UP	20918	0	372.1	116.0	0.7	734	0.00
	Uttarakhand	2223	0	42.2	32.5	-0.2	222	0.15
	HP	1958	0	34.4	29.7	-0.2	116	0.16
	J&K(UT) & Ladakh(UT)	3062	0	66.7	62.0	-0.2	151	0.12
	Chandigarh	282	0	4.9	5.0	-0.2	14	0.00
Railways NR ISTS	197	0	3.3	3.0	0.2	33	0.00	
WR	Chhattisgarh	5142	0	106.6	43.9	-1.4	232	0.00
	Gujarat	15589	0	325.4	142.2	1.7	2504	0.00
	MP	16603	0	300.1	181.8	-5.0	692	0.00
	Maharashtra	27163	0	562.6	181.7	2.3	977	0.00
	Goa	627	0	12.7	12.0	0.2	43	0.00
	DNHDDPDCL	1213	0	25.0	27.0	-2.0	47	0.00
	AMNSIL	912	0	20.3	10.1	0.3	269	0.00
	BALCO	522	0	12.5	12.5	0.0	12	0.00
SR	Andhra Pradesh	11569	0	205.3	69.5	-0.7	553	0.00
	Telangana	13295	0	242.1	114.1	-1.5	459	0.00
	Karnataka	14293	0	258.7	114.0	-0.8	880	0.00
	Kerala	3759	0	74.6	63.4	0.4	194	0.00
	Tamil Nadu	13541	0	285.2	155.9	-3.0	516	0.00
	Puducherry	344	0	7.7	7.5	-0.5	21	0.00
ER	Bihar	5251	10	99.8	94.3	-0.9	296	0.63
	DVC	3392	0	73.2	-44.4	0.2	277	0.00
	Jharkhand	1644	0	31.7	22.7	-0.7	285	2.45
	Odisha	4662	0	96.1	20.1	-1.5	448	0.00
	West Bengal	6399	0	139.9	24.0	0.6	218	0.00
	Sikkim	107	0	1.5	1.7	-0.2	26	0.00
Railways ER ISTS	14	0	0.1	0.1	0.0	3	0.00	
NER	Arunachal Pradesh	164	0	2.4	2.7	-0.4	36	0.00
	Assam	1412	0	26.6	21.1	0.6	88	0.00
	Manipur	212	0	3.0	3.1	-0.2	31	0.05
	Meghalaya	338	0	6.3	5.8	-0.1	89	0.09
	Mizoram	132	0	2.2	1.5	-0.1	26	0.00
	Nagaland	136	0	2.4	2.3	0.0	21	0.00
Tripura	235	0	4.1	3.3	-0.2	22	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-12.8	-8.4	-22.0	-16.4
Day Peak (MW)	-731.0	-465.0	-938.0	-764.8

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	278.1	-253.2	120.7	-147.6	1.9	0.0
Actual(MU)	274.3	-253.4	126.6	-155.6	-0.6	-8.8
O/D/U/D(MU)	-3.9	-0.2	5.9	-8.0	-2.6	-8.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7413	8402	4708	4266	201	24990	46
State Sector	7186	13539	4835	3807	281	29648	54
Total	14599	21941	9543	8073	482	54638	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	739	1542	665	659	17	3621	80
Lignite	26	20	62	0	0	108	2
Hydro	94	31	38	19	10	192	4
Nuclear	26	24	76	0	0	126	3
Gas, Naptha & Diesel	16	10	6	0	25	57	1
RES (Wind, Solar, Biomass & Others)	137	110	176	8	1	431	10
Total	1038	1737	1023	685	54	4537	100

Share of RES in total generation (%)	13.24	6.31	17.16	1.10	1.96	9.51
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.81	9.48	28.33	3.83	21.41	16.53

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.013
Based on State Max Demands	1.039

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207217	10:28	697
Non-Solar hr	181034	18:44	240

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.

Executive Director-NLDC

**INTER-REGIONAL EXCHANGES**

Import=(+ve) /Export =(-ve) for NET (MU)

Date of Reporting: 15-Jan-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	49	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	841	0.0	12.1	-12.1
4	765 kV	SASARAM-FATEHPUR	1	0	423	0.0	6.8	-6.8
5	765 kV	GAYA-BALIA	1	0	885	0.0	13.9	-13.9
6	400 kV	PUSAULI-VARANASI	1	9	53	0.0	0.5	-0.5
7	400 kV	PUSAULI-ALLAHABAD	1	5	57	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	847	0.0	8.9	-8.9
9	400 kV	PATNA-BALIA	2	0	719	0.0	12.3	-12.3
10	400 kV	NAUBATPUR-BALIA	2	0	766	0.0	13.0	-13.0
11	400 kV	BIHARSHARIFF-BALIA	2	0	444	0.0	5.4	-5.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	628	0.0	9.7	-9.7
13	400 kV	BIHARSHARIFF-VARANASI	2	0	380	0.0	3.8	-3.8
14	220 kV	SAHUPURI-KARAMNANA	1	14	157	0.0	1.5	-1.5
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
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
<b>ER-NR</b>						<b>0.5</b>	<b>90.0</b>	<b>-89.4</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	36	1109	0.0	14.3	-14.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	678	645	0.0	3.8	-3.8
3	765 kV	JHARSUGUDA-DURG	2	0	720	0.0	14.4	-14.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	600	0.0	8.3	-8.3
5	400 kV	RANCHI-SIPAT	2	119	275	0.0	2.2	-2.2
6	220 kV	BUDHIPADAR-RAIGARH	1	1	144	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	99	94	0.7	0.0	0.7
<b>ER-WR</b>						<b>0.7</b>	<b>44.7</b>	<b>-44.0</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	327	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1294	0.0	31.3	-31.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2510	0.0	46.5	-46.5
4	400 kV	TALCHER-I/C	2	620	0	13.6	0.0	13.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>85.1</b>	<b>-85.1</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	260	29	3.1	0.0	3.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	866	0	11.7	0.0	11.7
3	220 kV	ALIPURDUAR-SALAKATI	2	120	0	1.1	0.0	1.1
<b>ER-NER</b>						<b>15.9</b>	<b>0.0</b>	<b>15.9</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIAL-AGRA	2	663	0	16.4	0.0	16.4
<b>NER-NR</b>						<b>16.4</b>	<b>0.0</b>	<b>16.4</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	4013	0.0	70.5	-70.5
2	HVDC	VINDHYACHAL B/B	-	90	0	2.4	0.0	2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1452	0.0	30.6	-30.6
4	765 kV	GWALIOR-AGRA	2	0	2814	0.0	37.1	-37.1
5	765 kV	GWALIOR-PHAGI	2	0	1295	0.0	19.5	-19.5
6	765 kV	JABALPUR-ORAI	2	0	1189	0.0	28.3	-28.3
7	765 kV	GWALIOR-ORAI	1	959	0	15.2	0.0	15.2
8	765 kV	SATNA-ORAI	1	0	1159	0.0	21.2	-21.2
9	765 kV	BANASKANTHA-CHITORGARH	2	1214	485	12.9	0.7	12.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	3388	0.0	50.4	-50.4
11	400 kV	ZERDA-KANKROLI	1	228	99	1.6	0.3	1.4
12	400 kV	ZERDA -BHINMAL	1	421	316	3.1	1.2	1.9
13	400 kV	VINDHYACHAL -RIHAND	1	969	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	263	580	1.0	3.7	-2.7
15	220 kV	BHANPURA-RANPUR	1	132	145	0.1	2.3	-2.2
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	80	18	0.9	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	54	41	0.4	0.1	0.3
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>59.7</b>	<b>267.2</b>	<b>-207.5</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	307	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	606	0.0	14.7	-14.7
3	765 kV	SOLAPUR-RAICHUR	2	743	1588	2.3	12.7	-10.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2464	0.0	37.7	-37.7
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2467	0.0	37.6	-37.6
6	400 kV	KOLHAPUR-KUDGI	2	1241	0	16.7	0.0	16.7
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	67	0.0	0.6	-0.6
9	220 kV	XELDEM-AMBEWADI	1	0	110	2.1	0.0	2.1
<b>WR-SR</b>						<b>21.1</b>	<b>110.6</b>	<b>-89.5</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 MANGDECHU HEP 4*180MW)	0	0	0	-3.29
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	-4.36
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-4.31
	NER	132kV GELEPHU-SALAKATI	-35	0	-33	-0.79
	NER	132kV MOTANGA-RANGIA	-11	0	0	-0.01
NEPAL	NR	NEPAL IMPORT (FROM UP)	0	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	-1.38
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-393	-109	-291	-6.99
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-822	-443	-820	-19.67
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-765	-408	-682	-16.37
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-116	0	-95	-2.28

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 15-Jan-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	9.48	0.00	0.00	2.56	0.00	0.00	12.04
Nepal	0.25	0.00	7.63	0.00	0.00	0.10	0.00	0.00	7.98
Bangladesh	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.60
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.85	0.00	17.11	0.00	0.00	2.66	0.00	0.00	39.62

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49

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	0.49	0.00	-9.48	0.00	0.00	-2.56	0.00	0.00	-11.55
Nepal	-0.25	0.00	-7.63	0.00	0.00	-0.10	0.00	0.00	-7.98
Bangladesh	-19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.60
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-19.36	0.00	-17.11	0.00	0.00	-2.66	0.00	0.00	-39.13