



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: 20<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 19.01.2024.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-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 19<sup>th</sup> January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 20-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)	59232	61106	46594	21166	2604	190702
Peak Shortage (MW)	1672	266	0	627	143	2708
Energy Met (MU)	1321	1483	1171	454	48	4478
Hydro Gen (MU)	98	50	58	25	9	239
Wind Gen (MU)	11	65	35	-	-	111
Solar Gen (MU)*	112.39	62.11	106.03	2.07	1.02	284
Energy Shortage (MU)	22.00	3.51	0.00	3.93	1.54	30.98
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68515	73828	58816	22132	2664	219640
Time Of Maximum Demand Met	12:40	10:55	11:59	19:06	18:20	11:56

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	0.043	0.00	0.56	7.36	7.92	74.74	17.35

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	9461	0	163.8	58.4	1.3	455	0.00
	Haryana	9042	350	163.8	93.1	2.0	431	7.46
	Rajasthan	17517	0	330.4	113.1	-0.2	290	7.41
	Delhi	5769	0	97.0	79.3	2.0	564	0.00
	UP	20565	0	410.3	131.1	-0.7	387	0.00
	Uttarakhand	2414	70	47.1	35.3	1.1	140	2.48
	HP	2076	0	36.9	30.2	1.8	248	0.87
	J&K(UT) & Ladakh(UT)	2917	267	63.1	56.9	1.7	335	3.78
	Chandigarh	323	0	5.5	4.8	0.8	100	0.00
Railways NR ISTS	169	0	3.4	3.4	0.0	38	0.00	
WR	Chhattisgarh	5176	57	104.1	53.7	-1.2	419	0.28
	Gujarat	21616	0	417.3	155.6	-2.3	443	0.00
	MP	16828	31	318.0	188.3	-0.1	988	3.23
	Maharashtra	27597	0	570.3	172.1	4.3	764	0.00
	Goa	659	0	13.5	12.3	0.7	100	0.00
	DNHDDPDCL	1276	0	29.4	29.7	-0.3	25	0.00
	AMNSIL	833	0	18.3	6.6	0.1	256	0.00
	BALCO	520	0	12.4	12.5	-0.1	11	0.00
SR	Andhra Pradesh	11754	0	212.9	95.4	0.1	563	0.00
	Telangana	13647	0	257.5	131.5	-0.1	945	0.00
	Karnataka	15540	0	284.2	122.1	-3.2	541	0.00
	Kerala	4155	0	83.7	64.4	0.7	273	0.00
	Tamil Nadu	15601	0	324.4	185.6	0.8	1272	0.00
	Puducherry	388	0	8.4	8.3	-0.4	25	0.00
ER	Bihar	5341	0	103.9	90.6	1.6	272	0.75
	DVC	3385	0	72.3	-48.3	-0.6	239	0.00
	Jharkhand	1805	0	33.8	22.8	0.9	348	3.18
	Odisha	4826	0	95.9	10.6	-1.0	257	0.00
	West Bengal	6941	0	146.1	17.3	-1.7	232	0.00
	Sikkim	126	0	2.0	2.1	0.0	19	0.00
Railways ER ISTS	9	0	0.1	0.1	0.0	2	0.00	
NER	Arunachal Pradesh	177	0	3.1	2.5	0.4	41	0.00
	Assam	1450	65	27.0	20.8	1.2	179	1.12
	Manipur	241	0	3.1	2.8	0.3	52	0.42
	Meghalaya	326	0	6.3	4.8	-0.1	40	0.00
	Mizoram	152	0	2.4	1.7	-0.1	11	0.00
	Nagaland	130	0	2.2	2.1	0.1	39	0.00
Tripura	232	0	3.9	3.3	-0.2	26	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.3	-9.1	-15.6	-30.0
Day Peak (MW)	-659.0	-477.7	-890.0	-1423.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	277.9	-259.6	156.0	-180.4	6.2	0.0
Actual(MU)	283.9	-271.9	163.5	-188.8	7.3	-6.0
O/D/U/D(MU)	6.0	-12.3	7.5	-8.3	1.1	-6.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8657	10214	4158	4516	676	28220	54
State Sector	5031	10099	6388	2189	281	23987	46
Total	13688	20313	10546	6705	957	52208	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	816	1595	716	688	11	3826	79
Lignite	31	24	60	0	0	115	2
Hydro	98	50	58	25	9	239	5
Nuclear	26	36	76	0	0	139	3
Gas, Naptha & Diesel	18	42	5	0	25	91	2
RES (Wind, Solar, Biomass & Others)	147	132	170	4	1	454	9
Total	1136	1879	1085	716	46	4863	100

Share of RES in total generation (%)	12.97	7.01	15.66	0.55	2.20	9.34
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.87	11.58	27.99	3.18	21.36	16.99

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.028
Based on State Max Demands	1.051

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	219640	11:56	1884
Non-Solar hr	196777	18:44	3763

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: 20-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	351	0.0	1.3	-1.3
2	HVDC	PUSAULI B/B	-	0	49	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	869	0.0	13.9	-13.9
4	765 kV	SASARAM-FATEHPUR	1	0	498	0.0	9.8	-9.8
5	765 kV	GAYA-BALIA	1	0	761	0.0	14.9	-14.9
6	400 kV	PUSAULI-VARANASI	1	17	35	0.0	0.2	-0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	66	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	606	0.0	9.5	-9.5
9	400 kV	PATNA-BALIA	2	0	614	0.0	12.8	-12.8
10	400 kV	NAUBATPUR-BALIA	2	0	665	0.0	13.0	-13.0
11	400 kV	BIHARSHARIF-BALIA	2	0	322	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	516	0.0	10.0	-10.0
13	400 kV	BIHARSHARIF-VARANASI	2	0	415	0.0	7.6	-7.6
14	220 kV	SAHUPURI-KARAMNANA	1	0	110	0.0	1.9	-1.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.3	0.0	0.3
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>0.4</b>	<b>103.1</b>	<b>-102.7</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1365	0.0	18.5	-18.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	616	1126	0.0	10.8	-10.8
3	765 kV	JHARSUGUDA-DURG	2	0	868	0.0	17.2	-17.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	678	0.0	12.2	-12.2
5	400 kV	RANCHI-SIPAT	2	110	370	0.0	4.9	-4.9
6	220 kV	BUDHIPADAR-RAIGARH	1	3	154	0.0	2.0	-2.0
7	220 kV	BUDHIPADAR-KORBA	2	37	159	0.0	1.6	-1.6
<b>ER-WR</b>						<b>0.0</b>	<b>67.1</b>	<b>-67.1</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	668	0.0	15.0	-15.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	15	3	1.0	1.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2886	0.0	52.2	-52.2
4	400 kV	TALCHER-I/C	2	1919	0	43.4	0.0	43.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>1.0</b>	<b>68.2</b>	<b>-67.2</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	98	193	0.6	1.0	-0.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	369	226	2.9	0.0	2.9
3	220 kV	ALIPURDUAR-SALAKATI	2	66	36	0.6	0.0	0.6
<b>ER-NER</b>						<b>4.1</b>	<b>1.0</b>	<b>3.1</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	656	10.8	0.0	10.8
<b>NER-NR</b>						<b>10.8</b>	<b>0.0</b>	<b>10.8</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	3009	0.0	73.1	-73.1
2	HVDC	VINDHYACHAL B/B	-	178	100	4.4	0.0	4.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	978	0.0	18.3	-18.3
4	765 kV	GWALIOR-AGRA	2	0	2939	0.0	37.1	-37.1
5	765 kV	GWALIOR-PHAGI	2	0	1109	0.0	16.9	-16.9
6	765 kV	JABALPUR-ORAI	2	0	1255	0.0	29.5	-29.5
7	765 kV	GWALIOR-ORAI	1	893	0	13.7	0.0	13.7
8	765 kV	SATNA-ORAI	1	0	1144	0.0	21.3	-21.3
9	765 kV	BANASKANTHA-CHITORGARH	2	874	1017	7.2	2.8	4.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3213	0.0	43.6	-43.6
11	400 kV	ZERDA-KANKROLI	1	141	179	0.9	0.5	0.4
12	400 kV	ZERDA -BHINMAL	1	497	461	2.9	2.2	0.7
13	400 kV	VINDHYACHAL -RIHAND	1	981	0	22.4	0.0	22.4
14	400 kV	RAPP-SHUJALPUR	2	128	576	0.5	3.3	-2.9
15	220 kV	BHANPURA-RANPUR	1	164	97	1.2	0.2	1.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	83	14	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	48	36	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>54.5</b>	<b>250.1</b>	<b>-195.6</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	609	0.0	14.4	-14.4
2	HVDC	RAIGARH-PUGALUR	2	0	4010	0.0	49.3	-49.3
3	765 kV	SOLAPUR-RAICHUR	2	658	2268	1.0	19.4	-18.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2756	0.0	39.3	-39.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2813	0.0	41.0	-41.0
6	400 kV	KOLHAPUR-KUDGI	2	1437	0	17.2	0.0	17.2
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	109	2.0	0.0	2.0
<b>WR-SR</b>						<b>20.2</b>	<b>163.4</b>	<b>-143.2</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)	-253	-27	-153	-3.66	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-279	195	-99	-2.38	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-227	-66	-160	-3.84	
	NER	132kV GELEPHU-SALAKATI	-28	-10	-23	-0.54	
	NER	132kV MOTANGA-RANGIA	33	-2	6	0.14	
NEPAL	NR	NEPAL IMPORT (FROM UP)	-67	0	0	0.00	
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-67	0	-60	-1.44	
	ER	NEPAL IMPORT (FROM BIHAR)	-51	0	-6	-0.14	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-427	-97	-314	-7.54	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-780	-344	-562	-13.49	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1424	-908	-1248	-29.96	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-110	0	-88	-2.12	

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 20-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	10.94	0.00	0.00	0.09	0.00	0.00	11.03
Nepal	0.23	0.00	7.07	0.00	0.00	0.07	0.00	0.00	7.37
Bangladesh	13.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.39
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	13.62	0.00	18.01	0.00	0.00	0.16	0.00	0.00	31.79

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
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	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48

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	0.48	0.00	-10.94	0.00	0.00	-0.09	0.00	0.00	-10.55
Nepal	-0.23	0.00	-7.07	0.00	0.00	-0.07	0.00	0.00	-7.37
Bangladesh	-13.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-13.39
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-13.14	0.00	-18.01	0.00	0.00	-0.16	0.00	0.00	-31.31