



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: 18<sup>th</sup> December 2023

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 17.12.2023.**

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-दिसम्बर-2023 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 17<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-Dec-2023

**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)	50443	54587	38846	18880	2457	165213
Peak Shortage (MW)	0	0	0	51	0	51
Energy Met (MU)	1124	1363	985	390	45	3907
Hydro Gen (MU)	113	27	32	12	11	194
Wind Gen (MU)	10	92	94	-	-	196
Solar Gen (MU)*	110.02	56.68	58.24	2.60	1.16	229
Energy Shortage (MU)	0.00	0.00	0.00	1.98	0.00	1.98
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	58327	68116	50118	20078	2409	194911
Time Of Maximum Demand Met	10:20	10:22	09:18	18:19	19:09	09:54

**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	0.050	0.00	0.00	2.60	2.60	66.71	30.69

**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	7905	0	147.9	48.0	-1.4	101	0.00
	Haryana	7012	0	135.0	83.4	-1.1	204	0.00
	Rajasthan	16416	0	308.8	123.3	-2.1	248	0.00
	Delhi	4097	0	68.7	59.0	0.4	237	0.00
	UP	17924	0	325.7	104.5	-0.8	692	0.00
	Uttarakhand	2187	0	37.7	26.9	-0.2	177	0.00
	HP	1929	0	35.1	29.1	-0.4	71	0.00
	J&K(UT) & Ladakh(UT)	2895	0	58.5	55.1	-1.6	234	0.00
	Chandigarh	209	0	3.6	3.8	-0.3	20	0.00
Railways NR ISTS	167	0	3.5	3.5	-0.1	17	0.00	
WR	Chhattisgarh	4210	0	87.1	25.6	-0.1	297	0.00
	Gujarat	20076	0	378.9	148.7	-0.2	432	0.00
	MP	16444	0	308.4	201.8	-5.5	419	0.00
	Maharashtra	25387	0	518.2	163.4	-3.1	783	0.00
	Goa	627	0	10.1	11.8	-2.2	106	0.00
	DNHDDPDCL	1193	0	28.0	27.5	0.5	47	0.00
	AMNSIL	896	0	19.7	10.5	-0.1	235	0.00
	BALCO	530	0	12.5	12.5	0.0	9	0.00
SR	Andhra Pradesh	9300	0	184.7	58.3	-1.3	653	0.00
	Telangana	11385	0	210.8	105.3	0.6	616	0.00
	Karnataka	13279	0	235.2	102.6	-2.0	757	0.00
	Kerala	3626	0	75.3	65.1	1.3	203	0.00
	Tamil Nadu	13189	0	270.6	148.0	-4.9	354	0.00
	Puducherry	346	0	8.0	7.6	-0.4	15	0.00
ER	Bihar	4374	0	84.3	77.1	1.2	343	0.00
	DVC	3175	0	70.7	-43.4	1.0	339	0.00
	Jharkhand	1677	0	29.3	27.3	-3.1	307	1.98
	Odisha	4254	0	86.5	26.2	-3.1	236	0.00
	West Bengal	5895	0	117.6	22.0	-1.9	168	0.00
	Sikkim	91	0	1.5	1.6	-0.1	11	0.00
Railways ER ISTS	21	0	0.1	0.1	0.0	18	0.00	
NER	Arunachal Pradesh	165	0	2.7	2.7	-0.2	28	0.00
	Assam	1385	0	25.6	19.8	0.5	77	0.00
	Manipur	209	0	2.9	3.1	-0.2	15	0.00
	Meghalaya	330	0	6.4	5.4	-0.2	45	0.00
	Mizoram	131	0	1.9	1.7	-0.3	10	0.00
	Nagaland	147	0	2.4	2.4	-0.2	11	0.00
Tripura	219	0	3.7	2.5	-0.1	14	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-3.5	-3.3	-21.3	-11.1
Day Peak (MW)	-310.0	-224.0	-1027.0	-602.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	221.0	-227.5	133.0	-128.2	1.7	0.0
Actual(MU)	205.2	-216.6	127.4	-122.7	1.4	-5.3
O/D/U/D(MU)	-15.9	11.0	-5.7	5.5	-0.3	-5.3

**F. Generation Outage(MW)**

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6333	11794	6718	5241	205	30291	50
State Sector	9046	11037	6735	3623	190	30631	50
Total	15379	22831	13453	8864	395	60922	100

**G. Sourcewise generation (Gross) (MU)**

	NR	WR	SR	ER	NER	All India	% Share
Coal	681	1458	588	571	13	3311	78
Lignite	25	19	42	0	0	86	2
Hydro	113	27	32	12	11	194	5
Nuclear	21	40	76	0	0	137	3
Gas, Naptha & Diesel	9	9	4	0	24	47	1
RES (Wind, Solar, Biomass & Others)	145	151	184	5	1	485	11
Total	993	1703	926	588	50	4260	100

Share of RES in total generation (%)	14.55	8.85	19.86	0.81	2.33	11.39
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.05	12.82	31.47	2.58	24.57	19.15

**H. All India Demand Diversity Factor**

Based on Regional Max Demands	1.021
Based on State Max Demands	1.043

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	194911	9:54	226
Non-Solar hr	176005	18:19	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 -> 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: 18-Dec-2023

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	857	0.0	12.4	-12.4
4	765 kV	SASARAM-FATEHPUR	1	0	358	0.0	5.3	-5.3
5	765 kV	GAYA-BALIA	1	0	714	0.0	12.6	-12.6
6	400 kV	PUSAULI-VARANASI	1	16	35	0.0	0.2	-0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	64	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	696	0.0	8.8	-8.8
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	644	0.0	10.0	-10.0
11	400 kV	BIHARSHARIFF-BALIA	2	0	371	0.0	5.1	-5.1
12	400 kV	MOTIHARI-GORAKHPUR	2	0	462	0.0	6.8	-6.8
13	400 kV	BIHARSHARIFF-VARANASI	2	0	365	0.0	4.0	-4.0
14	220 kV	SAHUPURI-KARAMNANA	1	42	56	0.0	0.4	-0.4
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
<b>ER-NR</b>						<b>0.0</b>	<b>67.8</b>	<b>-67.8</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	604	413	2.2	0.0	2.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1031	349	7.4	0.0	7.4
3	765 kV	JHARSUGUDA-DURG	2	0	685	0.0	12.2	-12.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	644	0.0	7.8	-7.8
5	400 kV	RANCHI-SIPAT	2	268	190	1.3	0.0	1.3
6	220 kV	BUDHIPADAR-RAIGARH	1	68	52	0.2	0.0	0.2
7	220 kV	BUDHIPADAR-KORBA	2	174	42	1.6	0.0	1.6
<b>ER-WR</b>						<b>12.6</b>	<b>20.0</b>	<b>-7.4</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.3	-12.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1995	0.0	43.6	-43.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2751	0.0	47.6	-47.6
4	400 kV	TALCHER-I/C	2	645	995	0.0	3.4	-3.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>103.6</b>	<b>-103.6</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	268	2	2.7	0.0	2.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	807	0	9.6	0.0	9.6
3	220 kV	ALIPURDUAR-SALAKATI	2	146	0	1.9	0.0	1.9
<b>ER-NER</b>						<b>14.2</b>	<b>0.0</b>	<b>14.2</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	665	0	16.2	0.0	16.2
<b>NER-NR</b>						<b>16.2</b>	<b>0.0</b>	<b>16.2</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	226	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	980	0.0	12.5	-12.5
4	765 kV	GWALIOR-AGRA	2	0	2404	0.0	38.7	-38.7
5	765 kV	GWALIOR-PHAGI	2	0	2277	0.0	35.8	-35.8
6	765 kV	JABALPUR-ORAI	2	0	1086	0.0	36.5	-36.5
7	765 kV	GWALIOR-ORAI	1	1166	0	17.7	0.0	17.7
8	765 kV	SATNA-ORAI	1	0	1113	0.0	22.1	-22.1
9	765 kV	BANASKANTHA-CHITORGARH	2	899	762	6.7	3.1	3.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	3061	0.0	51.9	-51.9
11	400 kV	ZERDA-KANKROLI	1	89	128	0.4	0.5	-0.1
12	400 kV	ZERDA -BHINMAL	1	199	336	0.7	3.0	-2.2
13	400 kV	VINDHYACHAL -RIHAND	1	952	0	21.7	0.0	21.7
14	400 kV	RAPP-SHUJALPUR	2	105	452	0.2	3.6	-3.3
15	220 kV	BHANPURA-RANPUR	1	0	158	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.4	-1.4
17	220 kV	MEHGAON-AURAIYA	1	87	15	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	60	31	0.3	0.1	0.2
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
<b>WR-NR</b>						<b>54.4</b>	<b>211.4</b>	<b>-157.0</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1011	0.0	23.9	-23.9
2	HVDC	RAIGARH-PUGALUR	2	0	1502	0.0	10.3	-10.3
3	765 kV	SOLAPUR-RAICHUR	2	933	1159	6.4	2.3	4.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2342	0.0	28.3	-28.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	28.2	-28.2
6	400 kV	KOLHAPUR-KUDGI	2	1180	0	20.3	0.0	20.3
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	70	0.0	1.7	-1.7
9	220 kV	XELDEM-AMBEWADI	1	1	109	1.0	0.0	1.0
<b>WR-SR</b>						<b>27.8</b>	<b>94.6</b>	<b>-66.9</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)	-140	22	-57	-1.36
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	249	-65	94	2.27
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-255	-132	-166	-3.99
	NER	132kV GELEPHU-SALAKATI	-25	-8	-20	-0.48
	NER	132kV MOTANGA-RANGIA	14	0	4	0.10
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-65	0	-38	-0.90
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-224	-74	-98	-2.35
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-927	-503	-805	-19.33
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-602	-389	-463	-11.12
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-80	-1.93

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 18-Dec-2023

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	4.97	0.00	0.00	0.00	0.00	0.00	4.97
Nepal	0.37	0.00	3.39	0.00	0.00	0.00	0.00	0.00	3.76
Bangladesh	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.10
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.47	0.00	8.36	0.00	0.00	0.00	0.00	0.00	27.83

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
Nepal	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.50
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	1.11	0.00	0.00	0.00	0.00	0.50	0.00	0.00	1.61

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	1.11	0.00	-4.97	0.00	0.00	0.00	0.00	0.00	-3.86
Nepal	-0.37	0.00	-3.39	0.00	0.00	0.50	0.00	0.00	-3.26
Bangladesh	-19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.10
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.36	0.00	-8.36	0.00	0.00	0.50	0.00	0.00	-26.22