

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: 25<sup>th</sup> November 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 24.11.2023.**

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 24-नवंबर -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 24<sup>th</sup> November 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 25-Nov-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)	48947	59416	46080	19580	2492	176515
Peak Shortage (MW)	0	0	0	137	0	137
Energy Met (MU)	1092	1474	1047	418	48	4078
Hydro Gen (MU)	117	46	45	19	13	240
Wind Gen (MU)	17	84	40	-	-	142
Solar Gen (MU)*	105.04	53.73	70.76	2.13	1.20	233
Energy Shortage (MU)	0.25	0.00	0.00	1.33	0.00	1.58
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55779	72241	49752	21238	2730	198154
Time Of Maximum Demand Met	10:15	10:47	09:56	17:49	17:14	10:49

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	0.036	0.00	0.95	1.99	2.94	75.50	21.56

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	6941	0	141.6	58.2	0.6	212	0.00
	Haryana	7396	0	140.1	101.8	-0.2	218	0.00
	Rajasthan	16232	0	306.4	110.8	-6.4	134	0.00
	Delhi	3911	0	70.8	60.4	2.2	337	0.00
	UP	16291	0	298.6	105.8	-1.7	1153	0.00
	Uttarakhand	2051	0	39.5	30.2	0.3	130	0.00
	HP	1946	0	34.7	26.6	0.0	56	0.00
	J&K(UT) & Ladakh(UT)	2463	0	53.3	46.3	-0.5	260	0.25
	Chandigarh	203	0	3.6	3.6	0.0	27	0.00
Railways NR ISTS	190	0	3.8	3.7	0.1	21	0.00	
WR	Chhattisgarh	4307	0	89.6	30.9	-1.4	175	0.00
	Gujarat	20607	0	395.3	171.0	-1.8	810	0.00
	MP	16942	0	331.8	200.1	-5.3	646	0.00
	Maharashtra	27776	0	583.1	230.3	0.7	681	0.00
	Goa	722	0	15.3	13.7	1.0	89	0.00
	DNHDDPDCL	1245	0	28.1	28.1	0.0	29	0.00
	AMNSIL	791	0	17.9	8.1	0.1	327	0.00
	BALCO	523	0	12.5	12.5	0.0	8	0.00
SR	Andhra Pradesh	9680	0	201.4	79.7	-0.9	432	0.00
	Telangana	9555	0	194.6	93.2	0.8	565	0.00
	Karnataka	13717	0	256.5	123.1	-0.6	1091	0.00
	Kerala	4095	0	82.2	67.8	1.1	235	0.00
	Tamil Nadu	15076	0	303.3	163.2	-2.4	366	0.00
	Puducherry	416	0	9.1	8.7	-0.2	39	0.00
ER	Bihar	4285	0	83.5	73.3	-0.7	219	0.00
	DVC	3150	0	71.8	-38.9	1.6	390	0.00
	Jharkhand	1661	152	30.6	23.7	-1.8	261	1.33
	Odisha	4839	0	95.1	32.9	-2.4	214	0.00
	West Bengal	6903	0	135.0	18.2	-2.5	84	0.00
	Sikkim	99	0	1.5	1.5	0.0	41	0.00
	Railways ER ISTS	15	0	0.1	0.1	0.0	14	0.00
NER	Arunachal Pradesh	160	0	2.7	2.4	0.2	47	0.00
	Assam	1608	0	28.1	21.3	0.1	111	0.00
	Manipur	196	0	2.8	2.7	0.1	43	0.00
	Meghalaya	337	0	6.2	4.4	-0.1	75	0.00
	Mizoram	131	0	1.9	1.7	-0.2	15	0.00
	Nagaland	146	0	2.4	2.2	0.0	12	0.00
Tripura	235	0	4.0	3.2	-0.3	23	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-3.9	7.5	-14.1	-19.9
Day Peak (MW)	-236.3	391.6	-1043.0	-846.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	209.4	-155.9	149.5	-201.7	-1.3	0.0
Actual(MU)	197.9	-147.0	166.3	-223.4	-0.1	-6.2
O/D/U/D(MU)	-11.5	8.9	16.8	-21.6	1.2	-6.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4691	11749	6418	2466	155	25478	44
State Sector	10266	11314	6769	3820	145	32313	56
Total	14956	23062	13187	6286	300	57791	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	653	1492	632	680	13	3469	78
Lignite	32	13	52	0	0	97	2
Hydro	117	46	45	19	13	240	5
Nuclear	21	53	76	0	0	149	3
Gas, Naptha & Diesel	13	18	4	0	27	62	1
RES (Wind, Solar, Biomass & Others)	139	140	145	4	1	428	10
Total	974	1761	954	702	54	4445	100

Share of RES in total generation (%)	14.28	7.95	15.17	0.50	2.23	9.64
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.44	13.54	27.81	3.23	26.38	18.39

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.018
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	198154	10:49	152
Non-Solar hr	188779	18:00	197

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: 25-Nov-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	1333	0.0	25.9	-25.9
4	765 kV	SASARAM-FATEHPUR	1	0	755	0.0	15.3	-15.3
5	765 kV	GAYA-BALIA	1	0	573	0.0	11.6	-11.6
6	400 kV	PUSAULI-VARANASI	1	36	24	0.3	0.0	0.3
7	400 kV	PUSAULI-ALLAHABAD	1	0	83	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	808	0.0	15.2	-15.2
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	848	0.0	16.9	-16.9
11	400 kV	BIHARSHARIF-BALIA	2	0	401	0.0	7.0	-7.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	562	0.0	11.0	-11.0
13	400 kV	BIHARSHARIF-VARANASI	2	0	515	0.0	9.5	-9.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	135	0.0	2.4	-2.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.2	0.0	0.2
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>0.4</b>	<b>117.3</b>	<b>-116.9</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	159	695	0.0	6.8	-6.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1340	0.0	20.3	-20.3
3	765 kV	JHARSUGUDA-DURG	2	0	1235	0.0	23.7	-23.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	556	0.0	8.0	-8.0
5	400 kV	RANCHI-SIPAT	2	2	440	0.0	6.9	-6.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	147	0.0	1.7	-1.7
7	220 kV	BUDHIPADAR-KORBA	2	128	83	0.7	0.0	0.7
<b>ER-WR</b>						<b>0.7</b>	<b>67.4</b>	<b>-66.7</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	548	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1988	0.0	37.9	-37.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2638	0.0	50.4	-50.4
4	400 kV	TALCHER-I/C	2	603	280	6.5	0.0	6.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>100.8</b>	<b>-100.8</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	245	24	2.7	0.0	2.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	802	0	9.9	0.0	9.9
3	220 kV	ALIPURDUAR-SALAKATI	2	158	0	2.3	0.0	2.3
<b>ER-NER</b>						<b>14.8</b>	<b>0.0</b>	<b>14.8</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	658	0	15.3	0.0	15.3
<b>NER-NR</b>						<b>15.3</b>	<b>0.0</b>	<b>15.3</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	840	0.0	20.1	-20.1
2	HVDC	VINDHYACHAL B/B	-	430	0	2.7	0.0	2.7
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1170	0.0	29.0	-29.0
4	765 kV	GWALIOR-AGRA	2	0	1398	0.0	20.6	-20.6
5	765 kV	GWALIOR-PHAGI	2	0	1947	0.0	30.8	-30.8
6	765 kV	JABALPUR-ORAI	2	0	700	0.0	20.2	-20.2
7	765 kV	GWALIOR-ORAI	1	1008	0	16.8	0.0	16.8
8	765 kV	SATNA-ORAI	1	0	1002	0.0	20.4	-20.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1315	218	15.2	0.0	15.2
10	765 kV	VINDHYACHAL-VARANASI	2	56	1632	0.0	20.3	-20.3
11	400 kV	ZERDA-KANKROLI	1	173	15	2.6	0.0	2.6
12	400 kV	ZERDA -BHINMAL	1	356	210	2.3	0.0	2.3
13	400 kV	VINDHYACHAL -RIHAND	1	954	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	338	249	1.7	1.0	0.8
15	220 kV	BHANPURA-RANPUR	1	0	160	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.5	-1.5
17	220 kV	MEHGAON-AURAIYA	1	122	0	1.6	0.0	1.6
18	220 kV	MALANPUR-AURAIYA	1	95	0	1.0	0.0	1.0
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>66.0</b>	<b>166.4</b>	<b>-100.4</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	492	0.0	11.4	-11.4
2	HVDC	RAIGARH-PUGALUR	2	0	4007	0.0	76.2	-76.2
3	765 kV	SOLAPUR-RAICHUR	2	1489	657	9.2	1.5	7.7
4	765 kV	WARDHA-NIZAMABAD	2	0	1966	0.0	31.2	-31.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	1873	0.0	27.7	-27.7
6	400 kV	KOLHAPUR-KUDGI	2	1404	0	24.3	0.0	24.3
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	72	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	0	108	2.3	0.0	2.3
<b>WR-SR</b>						<b>35.8</b>	<b>148.0</b>	<b>-112.2</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)	-78	-6	-46	-1.10
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	245	153	158	3.80
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-282	-202	-254	-6.11
	NER	132kV GELEPHU-SALAKATI	-36	-18	-23	-0.56
	NER	132kV MOTANGA-RANGIA	9	-1	3	0.08
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.68
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	318	129	241	5.79
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-216	-493	-11.84
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-846	-799	-828	-19.87
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-107	0	-93	-2.24

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 25-Nov-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	11.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	11.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.69

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Nepal	0.00	0.00	7.71	0.00	0.00	0.03	0.00	0.00	7.74
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	0.80	0.00	7.71	0.00	0.00	0.03	0.00	0.00	8.54

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	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Nepal	0.00	0.00	7.71	0.00	0.00	0.03	0.00	0.00	7.74
Bangladesh	-11.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-11.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-10.89	0.00	7.71	0.00	0.00	0.03	0.00	0.00	-3.15