



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: 29th 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 28.11.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-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 28th November 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 29-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)	46778	52455	46550	20298	2614	168695
Peak Shortage (MW)	0	0	0	0	7	7
Energy Met (MU)	1016	1206	1045	416	47	3730
Hydro Gen (MU)	107	27	36	18	13	201
Wind Gen (MU)	11	68	49	-	-	129
Solar Gen (MU)*	71.77	41.60	91.96	2.52	1.14	209
Energy Shortage (MU)	0.11	0.00	0.00	0.30	0.02	0.43
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	51794	57413	49729	21533	2759	180012
Time Of Maximum Demand Met	10:26	10:02	11:59	18:00	17:37	18:17

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	0.062	0.07	0.79	4.81	5.67	67.26	27.07

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	7135	0	137.8	58.1	0.2	168	0.00
	Haryana	7172	0	135.0	95.0	0.4	243	0.00
	Rajasthan	13157	0	248.1	108.8	-5.0	324	0.00
	Delhi	3749	0	69.8	59.7	0.8	219	0.00
	UP	16191	0	289.1	107.2	-1.7	1205	0.00
	Uttarakhand	2077	0	40.2	31.0	0.9	163	0.00
	HP	1946	0	33.9	26.4	0.1	75	0.03
	J&K(UT) & Ladakh(UT)	2543	0	54.9	49.7	0.1	122	0.08
	Chandigarh	203	0	3.5	3.6	-0.1	19	0.00
Railways NR ISTS	184	0	3.7	3.7	0.0	16	0.00	
WR	Chhattisgarh	4329	0	85.0	34.4	-1.5	272	0.00
	Gujarat	15293	0	315.6	149.8	-0.4	918	0.00
	MP	11589	0	227.0	133.9	-5.0	358	0.00
	Maharashtra	23545	0	505.7	187.6	-1.2	679	0.00
	Goa	712	0	14.6	13.8	0.2	197	0.00
	DNHDDPDCL	1228	0	28.1	28.3	-0.2	33	0.00
	AMNSIL	770	0	17.3	6.9	0.0	261	0.00
	BALCO	525	0	12.5	12.6	-0.1	9	0.00
SR	Andhra Pradesh	10037	0	201.8	80.8	-0.7	613	0.00
	Telangana	9734	0	198.9	103.1	-0.8	661	0.00
	Karnataka	13714	0	252.4	106.2	-0.5	701	0.00
	Kerala	4246	0	84.6	70.3	1.7	343	0.00
	Tamil Nadu	15296	0	298.3	177.2	-0.7	1185	0.00
	Puducherry	401	0	8.9	8.8	-0.5	15	0.00
ER	Bihar	4491	0	82.1	78.0	-2.0	458	0.00
	DVC	3297	0	70.6	-28.9	1.3	290	0.00
	Jharkhand	1699	0	31.0	23.3	-1.0	223	0.30
	Odisha	5031	0	99.0	27.0	-1.1	388	0.00
	West Bengal	7019	0	131.9	20.8	-2.4	265	0.00
	Sikkim	97	0	1.6	1.6	0.0	10	0.00
Railways ER ISTS	6	0	0.1	0.1	0.0	3	0.00	
NER	Arunachal Pradesh	165	0	2.4	2.3	0.0	63	0.00
	Assam	1586	0	27.5	22.8	-1.4	148	0.00
	Manipur	201	0	2.7	2.7	0.0	37	0.00
	Meghalaya	362	11	6.5	4.7	0.1	116	0.02
	Mizoram	138	0	1.9	1.7	-0.2	28	0.00
	Nagaland	144	0	2.3	2.2	-0.1	17	0.00
Tripura	243	0	4.0	3.9	-0.7	23	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-4.4	4.3	-16.4	-20.0
Day Peak (MW)	-263.5	301.8	-1052.0	-893.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	246.4	-265.1	173.3	-156.9	2.5	0.2
Actual(MU)	237.7	-271.3	197.2	-173.8	2.6	-7.6
O/D/U/D(MU)	-8.7	-6.2	24.0	-17.0	0.1	-7.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6017	9289	5878	2466	271	23921	39
State Sector	11666	14851	7774	3484	181	37955	61
Total	17683	24139	13652	5950	452	61876	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	571	1383	581	642	11	3188	78
Lignite	28	17	50	0	0	95	2
Hydro	107	27	36	18	13	201	5
Nuclear	21	53	76	0	0	150	4
Gas, Naptha & Diesel	10	11	5	0	26	52	1
RES (Wind, Solar, Biomass & Others)	99	112	173	5	1	390	10
Total	836	1603	921	665	51	4076	100

Share of RES in total generation (%)	11.88	6.96	18.83	0.73	2.25	9.58
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	27.16	11.96	30.99	3.40	27.31	18.18

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.056

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	179459	17:59	23
Non-Solar hr	180012	18:17	12

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: 29-Nov-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
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	1425	0.0	14.6	-14.6
4	765 kV	SASARAM-FATEHPUR	1	0	665	0.0	9.8	-9.8
5	765 kV	GAYA-BALIA	1	0	675	0.0	8.9	-8.9
6	400 kV	PUSAULI-VARANASI	1	36	29	0.2	0.0	0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	83	0.0	1.5	-1.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	752	0.0	10.6	-10.6
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	1023	0.0	16.1	-16.1
11	400 kV	BIHARSHARIF-BALIA	2	0	535	0.0	6.5	-6.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	555	0.0	8.6	-8.6
13	400 kV	BIHARSHARIF-VARANASI	2	0	407	0.0	4.4	-4.4
14	220 kV	SAHUPURI-KARAMNANA	1	0	126	0.0	1.8	-1.8
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.3	84.1	-83.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	522	618	0.0	4.8	-4.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	231	680	0.0	4.9	-4.9
3	765 kV	JHARSUGUDA-DURG	2	0	909	0.0	17.0	-17.0
4	400 kV	JHARSUGUDA-RAIGARH	4	124	385	0.0	3.1	-3.1
5	400 kV	RANCHI-SIPAT	2	115	187	0.0	0.0	0.0
6	220 kV	BUDHIPADAR-RAIGARH	1	23	105	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	2	130	43	0.8	0.0	0.8
ER-WR						0.8	30.8	-30.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	545	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1995	0.0	48.1	-48.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2945	0.0	51.8	-51.8
4	400 kV	TALCHER-I/C	2	0	990	0.0	7.5	-7.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	112.3	-112.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	140	33	1.6	0.0	1.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	532	0	6.9	0.0	6.9
3	220 kV	ALIPURDUAR-SALAKATI	2	117	0	1.8	0.0	1.8
ER-NER						10.2	0.0	10.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	665	0	13.0	0.0	13.0
NER-NR						13.0	0.0	13.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2036	0.0	47.2	-47.2
2	HVDC	VINDHYACHAL B/B	-	135	0	3.6	0.0	3.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	299	0.0	4.3	-4.3
4	765 kV	GWALIOR-AGRA	2	0	2103	0.0	36.2	-36.2
5	765 kV	GWALIOR-PHAGI	2	0	1932	0.0	28.5	-28.5
6	765 kV	JABALPUR-ORAI	2	0	976	0.0	15.4	-15.4
7	765 kV	GWALIOR-ORAI	1	982	0	12.0	0.0	12.0
8	765 kV	SATNA-ORAI	1	0	1175	0.0	23.3	-23.3
9	765 kV	BANASKANTHA-CHITORGARH	2	407	708	0.0	2.0	-2.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2409	0.0	44.0	-44.0
11	400 kV	ZERDA-KANKROLI	1	113	111	0.7	0.7	0.1
12	400 kV	ZERDA -BHINMAL	1	2	93	0.0	0.0	0.0
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	20.9	0.0	20.9
14	400 kV	RAPP-SHUALPUR	2	39	411	0.0	3.5	-3.5
15	220 kV	BHANPURA-RANPUR	1	0	137	0.0	2.3	-2.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	61	0	0.5	0.0	0.5
18	220 kV	MALANPUR-AURAIYA	1	36	16	0.1	0.0	0.1
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
WR-NR						37.9	208.4	-170.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	298	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	4512	0.0	61.5	-61.5
3	765 kV	SOLAPUR-RAICHUR	2	858	1509	2.8	8.8	-6.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2633	0.0	37.9	-37.9
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2598	0.0	36.8	-36.8
6	400 kV	KOLHAPUR-KUDGI	2	1210	0	17.6	0.0	17.6
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	70	0.0	0.5	-0.5
9	220 kV	XELDEM-AMBEWADI	1	0	118	2.3	0.0	2.3
WR-SR						22.7	152.7	-130.0

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)	-98	9	-56	-1.33
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	169	123	139	3.33
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-273	-237	-259	-6.21
	NER	132kV GELEPHU-SALAKATI	-28	-9	-18	-0.44
	NER	132kV MOTANGA-RANGIA	17	4	11	0.26
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.99
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	246	12	137	3.29
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-925	-446	-576	-13.81
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-893	-800	-833	-20.00
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-127	0	-106	-2.54

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 29-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	13.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	13.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
Nepal	0.00	0.00	3.97	0.00	0.00	0.10	0.00	0.00	4.07
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	0.78	0.00	3.97	0.00	0.00	0.10	0.00	0.00	4.85

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	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
Nepal	0.00	0.00	3.97	0.00	0.00	0.10	0.00	0.00	4.07
Bangladesh	-13.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-13.94
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-13.16	0.00	3.97	0.00	0.00	0.10	0.00	0.00	-9.09