

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: 16th 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 15.11.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-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 15th November 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 16-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)	46308	51137	45348	20274	2578	165645
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1006	1277	1011	414	49	3756
Hydro Gen (MU)	128	24	40	23	14	229
Wind Gen (MU)	21	87	20	-	-	128
Solar Gen (MU)*	102.78	60.06	98.33	2.55	1.10	265
Energy Shortage (MU)	0.71	0.00	0.00	0.00	0.00	0.71
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	50779	62249	47501	20858	2796	179300
Time Of Maximum Demand Met	10:16	10:58	11:58	17:46	17:07	10:15

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	0.034	0.00	0.13	3.46	3.59	72.62	23.79

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	6378	0	126.8	46.8	0.6	320	0.00
	Haryana	5952	0	116.5	91.3	-1.0	158	0.00
	Rajasthan	14793	0	282.3	113.9	-4.6	328	0.00
	Delhi	3554	0	63.7	54.6	-0.2	105	0.00
	UP	15896	0	293.4	98.6	-1.7	384	0.00
	Uttarakhand	1730	0	32.4	22.3	0.2	128	0.00
	HP	1732	0	30.6	22.6	-0.2	37	0.00
	J&K(UT) & Ladakh(UT)	2490	300	53.1	44.5	3.3	441	0.71
	Chandigarh	190	0	3.4	3.5	-0.2	19	0.00
Railways NR ISTS	198	0	3.8	3.8	0.0	29	0.00	
WR	Chhattisgarh	3924	0	84.7	24.3	-0.2	223	0.00
	Gujarat	15210	0	297.3	153.0	-0.2	816	0.00
	MP	16421	0	316.5	198.6	-6.9	412	0.00
	Maharashtra	24087	0	509.9	199.1	-2.1	792	0.00
	Goa	688	0	13.4	12.9	0.0	61	0.00
	DNHDDPDCL	1055	0	22.9	23.0	-0.1	61	0.00
	AMNSIL	920	0	19.6	9.7	0.3	285	0.00
	BALCO	520	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	10268	0	209.0	100.5	-0.4	282	0.00
	Telangana	9988	0	209.8	92.8	0.2	928	0.00
	Karnataka	12565	0	229.5	110.1	1.3	804	0.00
	Kerala	4120	0	81.7	68.5	1.5	294	0.00
	Tamil Nadu	13963	0	272.9	169.4	-2.6	480	0.00
	Puducherry	360	0	7.8	7.5	-0.3	26	0.00
ER	Bihar	4720	0	86.9	77.9	-1.6	211	0.00
	DVC	3093	0	69.9	-38.8	1.3	301	0.00
	Jharkhand	1654	0	30.5	23.0	-1.3	207	0.00
	Odisha	4646	0	95.3	30.2	-0.8	312	0.00
	West Bengal	6691	0	130.3	7.7	-3.3	174	0.00
	Sikkim	69	0	1.1	1.2	-0.1	5	0.00
	Railways ER ISTS	15	0	0.1	0.1	0.0	12	0.00
NER	Arunachal Pradesh	149	0	2.5	2.5	-0.1	33	0.00
	Assam	1621	0	28.4	21.2	0.4	144	0.00
	Manipur	201	0	2.7	2.7	-0.1	17	0.00
	Meghalaya	341	0	6.3	4.8	-0.1	273	0.00
	Mizoram	132	0	2.0	1.8	-0.1	20	0.00
	Nagaland	146	0	2.3	2.2	-0.1	11	0.00
	Tripura	286	0	4.8	4.2	0.0	41	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-0.4	12.4	-24.0	-21.7
Day Peak (MW)	-251.0	509.0	-1075.0	-1139.1

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	173.0	-170.2	156.5	-160.3	1.1	0.0
Actual(MU)	162.5	-173.6	187.4	-183.3	1.3	-5.7
O/D/U/D(MU)	-10.5	-3.4	31.0	-23.0	0.2	-5.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4815	13154	5258	2966	155	26347	40
State Sector	10251	17566	8249	2525	145	38736	60
Total	15066	30720	13507	5491	300	65083	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	587	1314	590	639	12	3143	77
Lignite	29	16	40	0	0	84	2
Hydro	128	24	40	23	14	229	5
Nuclear	20	52	73	0	0	146	4
Gas, Naptha & Diesel	10	6	3	0	27	45	1
RES (Wind, Solar, Biomass & Others)	142	151	151	4	1	448	11
Total	916	1562	897	666	54	4095	100

Share of RES in total generation (%)	15.49	9.64	16.80	0.56	2.03	10.95
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.71	14.48	29.45	3.42	27.55	20.00

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.027
Based on State Max Demands	1.063

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	179300	10:15	0
Non-Solar hr	174980	18:22	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: 16-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	992	0.0	14.3	-14.3
4	765 kV	SASARAM-FATEHPUR	1	0	761	0.0	11.1	-11.1
5	765 kV	GAYA-BALIA	1	0	556	0.0	10.5	-10.5
6	400 kV	PUSAULI-VARANASI	1	43	38	0.0	0.0	0.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	91	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	789	0.0	13.1	-13.1
9	400 kV	PATNA-BALIA	2	0	555	0.0	9.2	-9.2
10	400 kV	NAUBATPUR-BALIA	2	0	592	0.0	9.6	-9.6
11	400 kV	BIHARSHARIFF-BALIA	2	0	334	0.0	5.5	-5.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	474	0.0	7.4	-7.4
13	400 kV	BIHARSHARIFF-VARANASI	2	0	394	0.0	5.7	-5.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	126	0.0	1.8	-1.8
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.4	0.0	0.4
16	132 kV	GARWAH-RIHAND	1	30	0	0.1	0.0	0.1
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	1.4	-1.4
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.5	92.1	-91.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	37	940	0.0	12.4	-12.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	217	1012	0.0	10.3	-10.3
3	765 kV	JHARSUGUDA-DURG	2	0	787	0.0	15.4	-15.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	450	0.0	5.1	-5.1
5	400 kV	RANCHI-SIPAT	2	59	348	0.0	3.7	-3.7
6	220 kV	BUDHIPADAR-RAIGARH	1	23	97	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	2	146	16	1.5	0.0	1.5
ER-WR						1.5	47.9	-46.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	550	0.0	5.8	-5.8
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1991	0.0	40.6	-40.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2758	0.0	56.0	-56.0
4	400 kV	TALCHER-I/C	2	661	431	2.6	0.0	2.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	102.4	-102.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	215	19	2.2	0.0	2.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	691	0	8.5	0.0	8.5
3	220 kV	ALIPURDUAR-SALAKATI	2	125	0	1.8	0.0	1.8
ER-NER						12.5	0.0	12.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	658	0	13.6	0.0	13.6
NER-NR						13.6	0.0	13.6
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	807	0.0	19.0	-19.0
2	HVDC	VINDHYACHAL B/B	-	429	0	10.3	0.0	10.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	496	0.0	12.2	-12.2
4	765 kV	GWALIOR-AGRA	2	0	1573	0.0	24.4	-24.4
5	765 kV	GWALIOR-PHAGI	2	0	2046	0.0	29.7	-29.7
6	765 kV	JABALPUR-ORAI	2	0	683	0.0	20.2	-20.2
7	765 kV	GWALIOR-ORAI	1	1071	0	17.4	0.0	17.4
8	765 kV	SATNA-ORAI	1	0	1075	0.0	20.8	-20.8
9	765 kV	BANASKANTHA-CHITORGARH	2	1271	129	14.1	0.0	14.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	1928	0.0	31.0	-31.0
11	400 kV	ZERDA-KANKROLI	1	166	0	2.3	0.0	2.3
12	400 kV	ZERDA -BHINMAL	1	378	88	2.5	0.0	2.5
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUALPUR	2	286	249	1.5	1.3	0.2
15	220 kV	BHANPURA-RANPUR	1	0	125	0.0	1.9	-1.9
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.7	-1.7
17	220 kV	MEHGAON-AURAIYA	1	112	0	1.8	0.0	1.8
18	220 kV	MALANPUR-AURAIYA	1	81	0	1.1	0.0	1.1
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						72.9	162.2	-89.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	806	0.0	7.7	-7.7
2	HVDC	RAIGARH-PUGALUR	2	0	3009	0.0	60.1	-60.1
3	765 kV	SOLAPUR-RAICHUR	2	1207	1101	0.0	7.0	-7.0
4	765 kV	WARDHA-NIZAMABAD	2	0	2306	0.0	38.3	-38.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2177	0.0	35.8	-35.8
6	400 kV	KOLHAPUR-KUDGI	2	1130	0	16.1	0.0	16.1
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	111	2.1	0.0	2.1
WR-SR						18.2	148.9	-130.7

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)	-54	21	4	0.10
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	167	82	167	5.36
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-257	-208	-235	-5.65
	NER	132kV GELEPHU-SALAKATI	-27	-8	-18	-0.43
	NER	132kV MOTANGA-RANGIA	15	2	10	0.23
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.73
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	509	402	443	10.63
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-931	-650	-876	-21.03
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1139	-809	-903	-21.67
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-144	0	-124	-2.97

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 16-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	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.14
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.14

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
IEX	PXIL	HPX	IEX	PXIL	HPX				
Bhutan	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
Nepal	0.00	0.00	11.47	0.00	0.00	0.92	0.00	0.00	12.39
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	0.92	0.00	11.47	0.00	0.00	0.92	0.00	0.00	13.31

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	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
Nepal	0.00	0.00	11.47	0.00	0.00	0.92	0.00	0.00	12.39
Bangladesh	-21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.14
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-20.22	0.00	11.47	0.00	0.00	0.92	0.00	0.00	-7.83