



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: 23rd 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 22.11.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-नवंबर -2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड 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 22nd November 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 23-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)	49408	59795	46949	19977	2611	178740
Peak Shortage (MW)	213	0	0	367	27	607
Energy Met (MU)	1092	1466	1077	418	47	4100
Hydro Gen (MU)	116	42	49	23	14	244
Wind Gen (MU)	3	35	28	-	-	67
Solar Gen (MU)*	103.97	56.77	79.32	2.55	0.98	244
Energy Shortage (MU)	0.77	0.00	0.00	2.19	0.07	3.03
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	54629	71616	50790	21444	2684	196989
Time Of Maximum Demand Met	10:13	10:24	09:26	17:36	17:19	10:22

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	0.065	0.29	2.12	8.63	11.04	72.83	16.13

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	7193	0	139.6	43.6	-0.8	127	0.00
	Haryana	7385	0	139.4	97.8	-0.4	189	0.00
	Rajasthan	15965	0	301.2	113.2	-3.6	147	0.00
	Delhi	3724	0	71.1	59.6	2.2	307	0.00
	UP	17015	0	308.6	98.4	-2.3	989	0.00
	Uttarakhand	2109	0	39.4	29.9	0.4	161	0.00
	HP	1966	0	34.5	26.9	-0.3	71	0.06
	J&K(UT) & Ladakh(UT)	2427	330	51.0	44.1	1.6	497	0.71
	Chandigarh	203	0	3.6	3.3	0.3	44	0.00
Railways NR ISTS	190	0	3.7	3.7	0.0	22	0.00	
WR	Chhattisgarh	4289	0	89.6	32.0	-0.8	239	0.00
	Gujarat	19962	0	391.0	175.9	-2.0	805	0.00
	MP	17013	0	333.8	201.2	-3.1	748	0.00
	Maharashtra	27451	0	578.0	214.9	0.3	1169	0.00
	Goa	733	0	14.7	13.3	0.8	112	0.00
	DNHDDPDCL	1227	0	27.9	28.0	-0.1	34	0.00
	AMNSIL	843	0	18.4	8.8	0.2	275	0.00
	BALCO	524	0	12.5	12.4	0.1	82	0.00
SR	Andhra Pradesh	10197	0	207.2	99.6	0.4	688	0.00
	Telangana	10205	0	213.3	103.1	0.1	597	0.00
	Karnataka	14002	0	260.0	117.4	1.8	939	0.00
	Kerala	3975	0	82.2	68.9	0.5	303	0.00
	Tamil Nadu	15019	0	305.0	180.8	-1.5	1099	0.00
	Puducherry	414	0	9.1	8.9	-0.4	22	0.00
ER	Bihar	4510	0	84.8	72.7	0.6	530	0.43
	DVC	3427	0	71.5	-44.0	0.9	374	0.00
	Jharkhand	1644	207	30.1	22.3	-1.2	246	1.76
	Odisha	4587	0	93.9	33.8	-1.0	382	0.00
	West Bengal	7043	0	136.3	7.9	-3.2	166	0.00
	Sikkim	95	0	1.5	1.5	0.0	33	0.00
Railways ER ISTS	8	0	0.2	0.1	0.1	5	0.00	
NER	Arunachal Pradesh	158	0	2.7	2.4	0.2	35	0.00
	Assam	1631	0	27.5	21.8	-0.6	97	0.00
	Manipur	182	0	2.6	2.5	0.2	32	0.00
	Meghalaya	331	0	6.3	4.2	-0.1	56	0.07
	Mizoram	137	0	2.0	1.7	-0.2	12	0.00
	Nagaland	141	0	2.2	2.2	-0.1	10	0.00
Tripura	234	0	4.1	3.7	-0.2	5	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-3.6	8.4	-23.0	-20.0
Day Peak (MW)	-225.7	434.4	-1071.0	-924.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	182.1	-154.9	174.3	-200.4	-1.2	0.0
Actual(MU)	171.6	-135.5	191.3	-222.5	-1.7	3.2
O/D/U/D(MU)	-10.5	19.4	17.0	-22.1	-0.5	3.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5963	11874	5428	3266	155	26685	45
State Sector	9761	10939	8509	3057	145	32410	55
Total	15724	22812	13937	6323	300	59095	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	691	1528	650	681	14	3564	80
Lignite	28	13	48	0	0	88	2
Hydro	116	42	49	23	14	244	5
Nuclear	21	53	76	0	0	149	3
Gas, Naptha & Diesel	14	17	4	0	27	61	1
RES (Wind, Solar, Biomass & Others)	125	94	138	4	1	362	8
Total	995	1746	965	707	56	4469	100

Share of RES in total generation (%)	12.56	5.39	14.34	0.56	1.80	8.11
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.29	10.85	27.32	3.79	26.52	16.92

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
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	196989	10:22	0
Non-Solar hr	189571	18:26	331

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: 23-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	1285	0.0	24.8	-24.8
4	765 kV	SASARAM-FATEHPUR	1	0	743	0.0	15.3	-15.3
5	765 kV	GAYA-BALIA	1	0	587	0.0	10.3	-10.3
6	400 kV	PUSAULI-VARANASI	1	29	23	0.1	0.0	0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	74	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	842	0.0	15.3	-15.3
9	400 kV	PATNA-BALIA	2	0	570	0.0	5.5	-5.5
10	400 kV	NAUBATPUR-BALIA	2	0	820	0.0	15.4	-15.4
11	400 kV	BIHARSHARIF-BALIA	2	0	352	0.0	6.4	-6.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	561	0.0	11.0	-11.0
13	400 kV	BIHARSHARIF-VARANASI	2	0	495	0.0	9.5	-9.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	155	0.0	2.7	-2.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	129	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	131	0.0	0.0	0.0
ER-NR						0.4	118.7	-118.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	527	425	0.0	1.4	-1.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1547	0.0	25.4	-25.4
3	765 kV	JHARSUGUDA-DURG	2	0	1263	0.0	17.2	-17.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	464	0.0	6.1	-6.1
5	400 kV	RANCHI-SIPAT	2	0	496	0.0	7.5	-7.5
6	220 kV	BUDHIPADAR-RAIGARH	1	19	122	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	2	146	42	1.4	0.0	1.4
ER-WR						1.4	58.7	-57.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	564	0.0	12.3	-12.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1992	0.0	87.9	-87.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2874	0.0	52.4	-52.4
4	400 kV	TALCHER-I/C	2	259	215	0.6	0.0	0.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	5	0.0	0.0	0.0
ER-SR						0.0	152.6	-152.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	316	51	2.9	0.0	2.9
2	400 kV	ALIPURDUAR-BONGAIGAON	2	966	33	10.4	0.0	10.4
3	220 kV	ALIPURDUAR-SALAKATI	2	173	0	2.2	0.0	2.2
ER-NER						15.5	0.0	15.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	655	0	14.1	0.0	14.1
NER-NR						14.1	0.0	14.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	830	0.0	19.8	-19.8
2	HVDC	VINDHYACHAL B/B	-	432	0	11.9	0.0	11.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1171	0.0	24.6	-24.6
4	765 kV	GWALIOR-AGRA	2	0	1453	0.0	16.7	-16.7
5	765 kV	GWALIOR-PHAGI	2	0	1946	0.0	31.4	-31.4
6	765 kV	JABALPUR-ORAI	2	0	509	0.0	15.7	-15.7
7	765 kV	GWALIOR-ORAI	1	958	0	8.2	0.0	8.2
8	765 kV	SATNA-ORAI	1	0	987	0.0	20.2	-20.2
9	765 kV	BANASKANTHA-CHITORGARH	2	2173	0	26.5	0.0	26.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	1325	0.0	18.2	-18.2
11	400 kV	ZERDA-KANKROLI	1	298	0	3.6	0.0	3.6
12	400 kV	ZERDA -BHINMAL	1	545	149	2.4	0.0	2.4
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUALPUR	2	471	220	2.5	1.0	1.5
15	220 kV	BHANPURA-RANPUR	1	0	155	0.0	2.6	-2.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.5	-1.5
17	220 kV	MEHGAON-AURAIYA	1	144	0	1.8	0.0	1.8
18	220 kV	MALANPUR-AURAIYA	1	109	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						79.9	151.7	-71.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	492	0.0	11.9	-11.9
2	HVDC	RAIGARH-PUGALUR	2	0	4010	0.0	86.4	-86.4
3	765 kV	SOLAPUR-RAICHUR	2	1099	1337	7.2	3.6	3.7
4	765 kV	WARDHA-NIZAMABAD	2	0	2335	0.0	32.4	-32.4
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2373	0.0	31.8	-31.8
6	400 kV	KOLHAPUR-KUDGI	2	1668	0	25.8	0.0	25.8
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	120	2.3	0.0	2.3
WR-SR						35.3	166.1	-130.8

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)	-83	-12	-46	-1.10
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	211	137	148	3.54
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-265	-207	-239	-5.74
	NER	132kV GELEPHU-SALAKATI	-38	-11	-23	-0.56
	NER	132kV MOTANGA-RANGIA	16	0	10	0.23
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.71
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	360	156	279	6.70
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-933	-648	-844	-20.26
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-925	-799	-835	-20.03
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-138	0	-114	-2.73

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 23-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	20.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.33
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	20.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.33

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Nepal	0.00	0.00	7.70	0.00	0.00	0.68	0.00	0.00	8.38
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	0.82	0.00	7.70	0.00	0.00	0.68	0.00	0.00	9.20

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	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Nepal	0.00	0.00	7.70	0.00	0.00	0.68	0.00	0.00	8.38
Bangladesh	-20.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-20.33
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-19.51	0.00	7.70	0.00	0.00	0.68	0.00	0.00	-11.13