

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: 20th 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 19.11.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-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 19th November 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 20-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)	45919	54329	42774	19534	2458	165014
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1033	1391	1035	410	45	3913
Hydro Gen (MU)	126	31	34	20	14	224
Wind Gen (MU)	15	74	49	-	-	138
Solar Gen (MU)*	84.12	51.41	95.19	2.53	1.22	234
Energy Shortage (MU)	0.53	0.00	0.00	0.00	0.00	0.53
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52243	68553	49669	20846	2581	190047
Time Of Maximum Demand Met	10:22	10:28	11:47	17:47	17:17	10:28

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	0.032	0.00	0.22	3.54	3.76	76.22	20.02

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	6549	0	121.9	38.6	-1.7	112	0.00
	Haryana	6155	0	119.7	90.0	-2.0	217	0.00
	Rajasthan	15458	0	291.7	128.1	-3.8	297	0.00
	Delhi	3465	0	62.8	53.9	-0.5	206	0.00
	UP	16415	0	310.6	123.5	-3.3	530	0.00
	Uttarakhand	1851	0	35.2	25.3	0.2	83	0.00
	HP	1745	0	31.5	23.5	-0.4	68	0.00
	J&K(UT) & Ladakh(UT)	2446	0	52.9	44.5	2.3	264	0.53
	Chandigarh	170	0	3.1	3.3	-0.3	5	0.00
Railways NR ISTS	192	0	3.8	3.7	0.1	25	0.00	
WR	Chhattisgarh	4126	0	85.7	38.8	-2.7	152	0.00
	Gujarat	18634	0	357.0	169.8	-0.2	382	0.00
	MP	17097	0	330.6	204.7	-3.5	848	0.00
	Maharashtra	25601	0	545.7	216.3	2.0	687	0.00
	Goa	663	0	13.4	12.1	0.8	59	0.00
	DNHDDPDCL	1153	0	26.5	26.4	0.1	35	0.00
	AMNSIL	863	0	19.2	9.5	0.2	320	0.00
	BALCO	523	0	12.5	12.5	0.0	12	0.00
SR	Andhra Pradesh	11542	0	220.2	101.4	-1.7	466	0.00
	Telangana	9761	0	206.9	92.9	-0.7	403	0.00
	Karnataka	12869	0	235.5	107.5	-1.8	922	0.00
	Kerala	3805	0	77.0	64.2	1.2	222	0.00
	Tamil Nadu	13455	0	287.6	160.3	-1.2	493	0.00
	Puducherry	359	0	8.1	7.8	-0.4	21	0.00
ER	Bihar	4498	0	82.0	73.0	-2.5	739	0.00
	DVC	3220	0	69.3	-35.7	0.8	522	0.00
	Jharkhand	1552	0	29.8	24.7	-3.5	146	0.00
	Odisha	4715	0	98.5	31.8	-3.1	302	0.00
	West Bengal	6345	0	128.9	1.1	-2.7	143	0.00
	Sikkim	76	0	1.2	1.3	0.0	40	0.00
Railways ER ISTS	12	0	0.1	0.1	0.0	5	0.00	
NER	Arunachal Pradesh	150	0	2.6	2.4	0.0	49	0.00
	Assam	1496	0	26.5	19.7	-0.5	57	0.00
	Manipur	185	0	2.6	2.7	-0.1	19	0.00
	Meghalaya	315	0	6.1	4.7	-0.1	40	0.00
	Mizoram	121	0	1.6	1.6	-0.4	25	0.00
	Nagaland	140	0	2.2	2.1	-0.2	11	0.00
Tripura	232	0	3.1	3.5	-0.2	29	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-1.8	12.3	-22.3	-19.8
Day Peak (MW)	-268.4	450.0	-1076.0	-876.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	200.7	-142.2	146.5	-202.0	-3.0	0.0
Actual(MU)	198.4	-126.0	155.5	-231.9	-2.3	-6.3
O/D/U/D(MU)	-2.3	16.2	9.0	-29.9	0.7	-6.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5615	10969	5618	2966	155	25322	43
State Sector	10781	14336	6269	2157	145	33688	57
Total	16396	25305	11887	5123	300	59010	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	612	1409	612	690	12	3334	78
Lignite	23	14	53	0	0	90	2
Hydro	126	31	34	20	14	224	5
Nuclear	20	52	76	0	0	148	3
Gas, Naptha & Diesel	10	9	2	0	27	48	1
RES (Wind, Solar, Biomass & Others)	125	127	176	4	1	433	10
Total	915	1642	953	714	54	4277	100

Share of RES in total generation (%)	13.62	7.72	18.43	0.62	2.25	10.11
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.59	12.80	29.91	3.36	27.60	18.81

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.020
Based on State Max Demands	1.041

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	190047	10:28	50
Non-Solar hr	177584	18:16	230

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: 20-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	1235	0.0	18.2	-18.2
4	765 kV	SASARAM-FATEHPUR	1	0	907	0.0	14.9	-14.9
5	765 kV	GAYA-BALIA	1	0	800	0.0	12.9	-12.9
6	400 kV	PUSAULI-VARANASI	1	50	0	0.7	0.0	0.7
7	400 kV	PUSAULI-ALLAHABAD	1	0	96	0.0	1.8	-1.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	957	0.0	16.8	-16.8
9	400 kV	PATNA-BALIA	2	0	805	0.0	14.6	-14.6
10	400 kV	NAUBATPUR-BALIA	2	0	873	0.0	15.3	-15.3
11	400 kV	BIHARSHARIFF-BALIA	2	0	469	0.0	7.9	-7.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	654	0.0	11.2	-11.2
13	400 kV	BIHARSHARIFF-VARANASI	2	0	709	0.0	9.9	-9.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	189	0.0	3.0	-3.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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						1.1	127.6	-126.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	94	1007	0.0	9.9	-9.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	49	1315	0.0	14.6	-14.6
3	765 kV	JHARSUGUDA-DURG	2	0	822	0.0	15.7	-15.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	745	0.0	11.3	-11.3
5	400 kV	RANCHI-SIPAT	2	0	503	0.0	6.3	-6.3
6	220 kV	BUDHIPADAR-RAIGARH	1	29	86	0.0	0.9	-0.9
7	220 kV	BUDHIPADAR-KORBA	2	108	76	0.7	0.0	0.7
ER-WR						0.7	58.8	-58.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	552	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1993	0.0	43.4	-43.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	2690	0.0	55.1	-55.1
4	400 kV	TALCHER-I/C	2	271	167	1.5	0.0	1.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	111.1	-111.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAOON	2	302	0	3.5	0.0	3.5
2	400 kV	ALIPURDUAR-BONGAIGAOON	2	944	0	11.8	0.0	11.8
3	220 kV	ALIPURDUAR-SALAKATI	2	176	0	2.5	0.0	2.5
ER-NER						17.7	0.0	17.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	661	0	16.1	0.0	16.1
NER-NR						16.1	0.0	16.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	5	811	0.0	7.6	-7.6
2	HVDC	VINDHYACHAL B/B	-	432	0	10.3	0.0	10.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1168	0.0	18.7	-18.7
4	765 kV	GWALIOR-AGRA	2	0	1814	0.0	25.9	-25.9
5	765 kV	GWALIOR-PHAGI	2	0	2054	0.0	33.4	-33.4
6	765 kV	JABALPUR-ORAI	2	0	821	0.0	24.7	-24.7
7	765 kV	GWALIOR-ORAI	1	1066	0	18.7	0.0	18.7
8	765 kV	SATNA-ORAI	1	0	1120	0.0	21.8	-21.8
9	765 kV	BANASKANTHA-CHITORGARH	2	1819	151	18.0	0.0	18.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2017	0.0	29.6	-29.6
11	400 kV	ZERDA-KANKROLI	1	222	8	2.5	0.0	2.5
12	400 kV	ZERDA -BHINMAL	1	372	209	0.5	0.0	0.5
13	400 kV	VINDHYACHAL -RIHAND	1	953	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	266	291	1.0	1.8	-0.7
15	220 kV	BHANPURA-RANPUR	1	0	152	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.7	-0.7
17	220 kV	MEHGAON-AURAIYA	1	106	0	1.4	0.0	1.4
18	220 kV	MALANPUR-AURAIYA	1	74	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
WR-NR						75.5	166.5	-91.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	304	0.0	7.3	-7.3
2	HVDC	RAIGARH-PUGALUR	2	0	3006	0.0	48.9	-48.9
3	765 kV	SOLAPUR-RAICHUR	2	1790	915	7.4	5.0	2.5
4	765 kV	WARDHA-NIZAMABAD	2	0	1876	0.0	33.0	-33.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2009	0.0	31.3	-31.3
6	400 kV	KOLHAPUR-KUDGI	2	1554	0	23.8	0.0	23.8
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	115	2.2	0.0	2.2
WR-SR						33.4	125.4	-92.0

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)	-72	33	-25	-0.61
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	119	37	119	4.49
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-265	-208	-236	-5.66
	NER	132kV GELEPHU-SALAKATI	0	-40	-4	-0.10
	NER	132kV MOTANGA-RANGIA	20	-18	2	0.04
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.66
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	450	323	442	10.60
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-599	-815	-19.57
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-876	-807	-826	-19.82
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-140	0	-112	-2.68

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 20-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	19.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.52
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.52

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
Nepal	0.00	0.00	11.47	0.00	0.00	1.10	0.00	0.00	12.57
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	0.87	0.00	11.47	0.00	0.00	1.10	0.00	0.00	13.44

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	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
Nepal	0.00	0.00	11.47	0.00	0.00	1.10	0.00	0.00	12.57
Bangladesh	-19.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.52
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.65	0.00	11.47	0.00	0.00	1.10	0.00	0.00	-6.08