

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: 18th October 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 17.10.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-अक्टूबर-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 17th October 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-Oct-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 20:00 hrs; from RLDCs)	52052	63938	48956	23720	3089	191755
Peak Shortage (MW)	0	0	0	1211	16	1227
Energy Met (MU)	1053	1520	1206	535	58	4372
Hydro Gen (MU)	177	76	65	65	26	409
Wind Gen (MU)	31	46	22	-	-	98
Solar Gen (MU)*	99.44	58.43	114.08	5.34	1.23	279
Energy Shortage (MU)	0.12	0.79	0.00	6.28	0.31	7.50
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53373	70576	58366	24587	3206	200887
Time Of Maximum Demand Met	18:45	15:16	10:47	20:58	18:05	11:27

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	0.056	0.22	1.67	8.04	9.93	69.83	20.24

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	6868	0	133.9	42.5	-1.1	252	0.00
	Haryana	7288	0	146.2	91.5	-2.0	231	0.00
	Rajasthan	13367	0	266.2	66.9	-8.5	191	0.00
	Delhi	4022	0	81.7	66.0	-2.1	59	0.00
	UP	17736	0	300.2	99.7	-2.8	1393	0.00
	Uttarakhand	1923	0	37.2	23.1	0.3	203	0.00
	HP	1794	0	32.9	19.9	0.0	55	0.00
	J&K(UT) & Ladakh(UT)	2480	0	47.8	36.6	0.1	204	0.12
	Chandigarh	207	0	3.7	4.1	-0.5	9	0.00
Railways NR ISTS	177	0	3.4	3.5	0.0	24	0.00	
WR	Chhattisgarh	5266	0	120.1	58.7	-0.5	190	0.00
	Gujarat	20953	0	422.5	163.1	-2.1	623	0.00
	MP	13124	0	286.7	187.6	-5.4	722	0.00
	Maharashtra	28206	0	618.7	282.9	-3.4	1020	0.79
	Goa	699	0	14.3	13.1	0.8	95	0.00
	DNHDDPDCL	1295	0	29.9	30.1	-0.2	38	0.00
	AMNSIL	738	0	15.1	6.5	-0.5	304	0.00
	BALCO	523	0	12.4	12.5	-0.1	30	0.00
SR	Andhra Pradesh	12513	0	244.7	127.4	-0.5	1087	0.00
	Telangana	14349	0	283.6	156.3	-1.5	479	0.00
	Karnataka	14651	0	267.0	103.0	-2.1	634	0.00
	Kerala	3946	0	80.7	62.2	0.7	290	0.00
	Tamil Nadu	15709	0	320.0	200.7	-3.1	629	0.00
	Puducherry	454	0	10.0	9.5	-0.3	47	0.00
ER	Bihar	5589	367	113.9	100.9	2.8	346	1.72
	DVC	3333	0	72.4	-30.1	0.3	310	0.00
	Jharkhand	1513	171	32.2	23.8	-1.0	220	4.56
	Odisha	5182	0	116.4	35.3	-1.1	384	0.00
	West Bengal	9244	0	199.1	59.4	-2.5	133	0.00
	Sikkim	82	0	1.2	0.9	0.3	41	0.00
	Railways ER ISTS	32	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	149	0	2.5	2.2	0.1	48	0.00
	Assam	2098	0	36.7	27.6	0.8	250	0.16
	Manipur	201	0	2.7	2.7	0.0	30	0.00
	Meghalaya	326	16	5.7	3.2	-0.2	73	0.15
	Mizoram	122	0	1.9	0.8	-0.1	23	0.00
	Nagaland	160	0	2.6	2.5	-0.1	17	0.00
	Tripura	352	0	6.0	5.1	0.6	87	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	16.1	14.2	-24.0	-12.5
Day Peak (MW)	693.0	583.0	-1070.0	-536.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	77.0	-185.6	210.8	-95.4	-6.8	0.0
Actual(MU)	47.0	-178.0	226.7	-89.0	-4.3	2.4
O/D/U/D(MU)	-30.0	7.5	15.9	6.4	2.5	2.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4635	9129	3968	4831	205	22768	50
State Sector	5786	8954	5091	2480	290	22601	50
Total	10421	18083	9059	7311	495	45369	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	697	1569	706	617	14	3603	76
Lignite	22	16	47	0	0	85	2
Hydro	177	76	65	65	26	409	9
Nuclear	25	54	70	0	0	148	3
Gas, Naptha & Diesel	22	44	6	0	27	99	2
RES (Wind, Solar, Biomass & Others)	134	105	168	6	1	415	9
Total	1077	1864	1063	688	69	4760	100

Share of RES in total generation (%)	12.42	5.66	15.84	0.92	1.79	8.72
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.13	12.60	28.55	10.41	39.85	20.43

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.045
Based on State Max Demands	1.078

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	200887	11:27	0
Non-Solar hr	197596	18:31	1716

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: 18-Oct-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	501	0.0	12.4	-12.4
2	HVDC	PUSAULI B/B	-	0	166	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	357	209	2.8	0.0	2.8
4	765 kV	SASARAM-FATEHPUR	1	24	303	0.0	2.6	-2.6
5	765 kV	GAYA-BALIA	1	0	314	0.0	3.6	-3.6
6	400 kV	PUSAULI-VARANASI	1	0	96	0.0	1.2	-1.2
7	400 kV	PUSAULI-ALLAHABAD	1	37	71	0.1	0.0	0.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	193	253	0.0	0.5	-0.5
9	400 kV	PATNA-BALIA	2	27	199	0.0	1.9	-1.9
10	400 kV	NAUBATPUR-BALIA	2	63	190	0.0	1.4	-1.4
11	400 kV	BIHARSHARIFF-BALIA	2	223	45	2.4	0.0	2.4
12	400 kV	MOTIHARI-GORAKHPUR	2	75	147	0.0	0.2	-0.2
13	400 kV	BIHARSHARIFF-VARANASI	2	163	58	2.1	0.0	2.1
14	220 kV	SAHUPURI-KARAMNANA	1	15	104	0.0	0.8	-0.8
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	35	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						7.8	25.8	-18.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1334	0	20.6	0.0	20.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1006	253	9.6	0.0	9.6
3	765 kV	JHARSUGUDA-DURG	2	0	490	0.0	8.2	-8.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	737	0.0	11.0	-11.0
5	400 kV	RANCHI-SIPAT	2	198	165	0.5	0.0	0.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	217	0.0	3.8	-3.8
7	220 kV	BUDHIPADAR-KORBA	2	118	50	1.0	0.0	1.0
ER-WR						31.6	23.0	8.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	549	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1994	0.0	48.1	-48.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2718	0.0	53.2	-53.2
4	400 kV	TALCHER-I/C	2	0	435	0.0	3.1	-3.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	113.7	-113.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	357	0.0	5.6	-5.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	370	0.0	4.8	-4.8
3	220 kV	ALIPURDUAR-SALAKATI	2	10	63	0.0	0.7	-0.7
ER-NER						0.0	11.2	-11.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	695	0.0	16.7	-16.7
NER-NR						0.0	16.7	-16.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	5	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	0	54	0.0	1.2	-1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	25.6	-25.6
4	765 kV	GWALIOR-AGRA	2	763	709	2.0	6.0	-3.9
5	765 kV	GWALIOR-PHAGI	2	267	1080	0.4	10.3	-9.8
6	765 kV	JABALPUR-ORAI	2	162	333	0.0	5.8	-5.8
7	765 kV	GWALIOR-ORAI	1	718	0	12.2	0.0	12.2
8	765 kV	SATNA-ORAI	1	0	655	0.0	13.0	-13.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1856	0	22.6	0.0	22.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	2126	0.0	31.4	-31.4
11	400 kV	ZERDA-KANKROLI	1	274	0	3.8	0.0	3.8
12	400 kV	ZERDA -BHINMAL	1	729	0	8.9	0.0	8.9
13	400 kV	VINDHYACHAL -RIHAND	1	966	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	521	14	6.3	0.0	6.3
15	220 kV	BHANPURA-RANPUR	1	0	107	0.0	1.8	-1.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	123	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	100	0	1.5	0.0	1.5
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						81.8	97.3	-15.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	23.8	-23.8
2	HVDC	RAIGARH-PUGALUR	2	0	4761	0.0	94.0	-94.0
3	765 kV	SOLAPUR-RAICHUR	2	959	595	5.2	2.0	3.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2155	0.0	35.7	-35.7
5	765 kV	WARORA-PG-WARANGAL	2	0	2068	0.0	31.6	-31.6
6	400 kV	KOLHAPUR-KUDGI	2	1477	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	110	2.3	0.0	2.3
WR-SR						33.2	187.0	-153.8

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)	195	111	158	3.79
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	641	441	625	14.99
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-192	-58	-154	-3.69
	NER	132kV GELEPHU-SALAKATI	9	3	4	0.09
	NER	132kV MOTANGA-RANGIA	46	27	40	0.95
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.16
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	583	317	543	13.02
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-919	-770	-880	-21.13
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-536	-508	-521	-12.50
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-151	0	-119	-2.86

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 18-Oct-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	21.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.04

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	16.23	0.00	1.37	0.00	0.00	0.00	0.00	0.00	17.60
Nepal	2.63	0.00	11.12	0.00	0.00	0.87	0.00	0.00	14.62
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	18.86	0.00	12.49	0.00	0.00	0.87	0.00	0.00	32.22

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	16.23	0.00	1.37	0.00	0.00	0.00	0.00	0.00	17.60
Nepal	2.63	0.00	11.12	0.00	0.00	0.87	0.00	0.00	14.62
Bangladesh	-21.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-2.18	0.00	12.49	0.00	0.00	0.87	0.00	0.00	11.18