

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: 21th 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 20.10.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20th October 2023, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रोल ऑफ इंडिया लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day

Date of Reporting: 21-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)	52740	64926	48554	23365	3055	192640
Peak Shortage (MW)	0	0	0	205	29	234
Energy Met (MU)	1149	1536	1249	502	57	4493
Hydro Gen (MU)	159	55	65	57	23	359
Wind Gen (MU)	8	40	25	-	-	74
Solar Gen (MU)*	125.37	59.74	114.25	2.81	1.24	303
Energy Shortage (MU)	0.70	0.00	0.00	1.21	0.17	2.08
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55161	70971	62200	23550	3201	209025
Time Of Maximum Demand Met	18:34	15:50	11:53	18:01	17:30	11:30

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	0.028	0.00	0.16	3.01	3.17	80.44	16.39

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	7443	0	148.2	42.0	0.7	167	0.00
	Haryana	7592	0	161.0	108.5	-0.7	160	0.06
	Rajasthan	14219	0	284.2	105.5	-2.0	262	0.00
	Delhi	4067	0	79.7	62.2	-0.9	131	0.00
	UP	18047	0	345.9	106.9	-0.3	810	0.00
	Uttarakhand	2041	0	39.1	26.1	0.9	169	0.14
	HP	1836	0	33.5	21.1	-0.4	91	0.00
	J&K(UT) & Ladakh(UT)	2470	0	50.3	37.1	4.5	509	0.50
	Chandigarh	202	0	3.6	3.6	0.0	16	0.00
	Railways NR ISTS	160	0	3.4	3.5	-0.1	44	0.00
WR	Chhattisgarh	5133	0	116.2	54.4	0.0	201	0.00
	Gujarat	21147	0	427.2	170.1	-2.2	510	0.00
	MP	13951	0	301.3	184.5	-4.7	492	0.00
	Maharashtra	27992	0	615.6	271.7	-6.6	569	0.00
	Goa	721	0	14.9	13.6	1.2	141	0.00
	DNHDDPDCL	1274	0	29.2	29.5	-0.3	33	0.00
	AMNSIL	924	0	19.6	9.1	0.0	292	0.00
	BALCO	520	0	12.4	12.5	-0.1	7	0.00
	Andhra Pradesh	12892	0	247.2	117.2	-2.5	811	0.00
	Telangana	14703	0	284.4	154.0	-1.6	700	0.00
SR	Karnataka	15785	0	277.3	111.6	-1.5	662	0.00
	Kerala	4082	0	82.3	64.1	0.8	272	0.00
	Tamil Nadu	16587	0	348.4	208.5	-0.9	549	0.00
	Puducherry	451	0	9.5	9.7	-0.2	30	0.00
	Bihar	5460	0	111.3	101.1	0.1	232	0.12
ER	DVC	3336	0	71.9	-28.9	0.3	254	0.00
	Jharkhand	1653	0	32.8	25.7	-1.6	288	1.09
	Odisha	5054	0	108.3	31.0	-2.1	306	0.00
	West Bengal	8428	0	176.7	39.2	-3.0	197	0.00
	Sikkim	78	0	1.1	0.8	0.3	40	0.00
	Railways ER ISTS	17	0	0.1	0.2	0.0	12	0.00
NER	Arunachal Pradesh	164	0	2.7	2.2	0.3	56	0.00
	Assam	1992	0	35.8	26.8	0.7	215	0.00
	Manipur	195	0	2.7	2.8	-0.1	36	0.00
	Meghalaya	308	29	5.8	3.6	-0.2	75	0.17
	Mizoram	133	0	2.1	1.4	0.0	10	0.00
	Nagaland	147	0	2.7	2.4	-0.1	12	0.00
	Tripura	310	0	5.4	4.5	-0.4	16	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	12.5	15.0	-22.3	-12.3
Day Peak (MW)	614.1	594.0	-1037.0	-542.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	138.0	-214.2	190.3	-109.0	-5.2	0.0
Actual(MU)	126.6	-184.7	188.5	-139.0	-5.5	-14.0
OD/U/D(MU)	-11.4	29.5	-1.8	-30.0	-0.3	-14.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4654	7169	3968	4151	205	20146	47
State Sector	8406	8655	3539	1580	129	22309	53
Total	13060	15824	7507	5731	334	42455	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	729	1605	782	645	16	3777	77
Lignite	20	19	47	0	0	87	2
Hydro	159	55	65	57	23	359	7
Nuclear	25	54	71	0	0	149	3
Gas, Naptha & Diesel	24	38	5	0	28	95	2
RES (Wind, Solar, Biomass & Others)	137	101	168	4	1	412	8
Total	1095	1871	1138	706	68	4879	100

Share of RES in total generation (%)	12.53	5.42	14.78	0.54	1.81	8.44
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.36	11.22	26.69	8.63	35.16	18.86

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.028
Based on State Max Demands	1.059

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	209025	11:30	0
Non-Solar hr	199007	18:32	464

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: 21-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	11.6	-11.6
2	HVDC	PUSALI B/B	-	0	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	430	0.0	6.0	-6.0
4	765 kV	SASARAM-FATEHPUR	1	0	350	0.0	4.6	-4.6
5	765 kV	GAYA-BALIA	1	0	385	0.0	6.9	-6.9
6	400 kV	PUSALI-VARANASI	1	7	46	0.0	0.3	-0.3
7	400 kV	PUSALI-ALLAHABAD	1	1	57	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	387	0.0	5.4	-5.4
9	400 kV	PATNA-BALIA	2	0	313	0.0	5.9	-5.9
10	400 kV	NAUBATPUR-BALIA	2	0	323	0.0	5.9	-5.9
11	400 kV	BIHARSHARIFF-BALIA	2	86	113	0.0	0.7	-0.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	202	0.0	3.2	-3.2
13	400 kV	BIHARSHARIFF-VARANASI	2	10	197	0.0	2.4	-2.4
14	220 kV	SAHUPURI-KARAMNANA	1	0	113	0.0	1.6	-1.6
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-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.5	56.6	-56.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	531	202	4.2	0.0	4.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	774	272	9.7	0.0	9.7
3	765 kV	JHARSUGUDA-DURG	2	0	617	0.0	11.3	-11.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	774	0.0	13.1	-13.1
5	400 kV	RANCHI-SIPAT	2	156	188	0.8	0.0	0.8
6	220 kV	BUDHIPADAR-RAIGARH	1	2	209	0.0	2.9	-2.9
7	220 kV	BUDHIPADAR-KORBA	2	97	41	0.9	0.0	0.9
ER-WR						15.6	27.3	-11.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZIWIKA B/B	2	0	556	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1996	0.0	48.1	-48.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2510	0.0	47.9	-47.9
4	400 kV	TALCHER-UC	2	0	176	0.0	3.2	-3.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	108.6	-108.6
Import/Export of ER (With NER)								
1	400 kV	BJNAGURI-BONGAIGAON	2	0	356	0.0	4.6	-4.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	67	325	0.0	2.7	-2.7
3	220 kV	ALIPURDUAR-SALAKATI	2	14	70	0.0	0.6	-0.6
ER-NER						0.0	7.9	-7.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	604	0.0	14.5	-14.5
NER-NR						0.0	14.5	-14.5
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	20.4	-20.4
4	765 kV	GWALIOR-AGRA	2	227	1081	0.1	12.9	-12.8
5	765 kV	GWALIOR-PHAGI	2	0	1606	0.0	25.0	-25.0
6	765 kV	JABALPUR-ORAI	2	0	713	0.0	19.5	-19.5
7	765 kV	GWALIOR-ORAI	1	930	0	16.1	0.0	16.1
8	765 kV	SATNA-ORAI	1	0	834	0.0	16.9	-16.9
9	765 kV	BANASKANTHA-CHITTORGARH	2	2127	0	22.3	0.0	22.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2256	0.0	34.9	-34.9
11	400 kV	ZERDA-KANKROLI	1	308	0	3.3	0.0	3.3
12	400 kV	ZERDA-BHIMAL	1	700	111	4.9	0.0	4.9
13	400 kV	VINDHYACHAL-RIHAND	1	970	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	462	212	2.4	1.2	1.2
15	220 kV	BHANUPURA-RANPUR	1	0	150	0.0	2.4	-2.4
16	220 kV	BHANUPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	117	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	94	0	1.3	0.0	1.3
19	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
20	132 kV	RAIGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
WR-NR						74.4	136.6	-62.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	24.0	-24.0
2	HVDC	RAIGARH-PUGALUR	2	0	4010	0.0	85.3	-85.3
3	765 kV	SOLAPUR-RAICHUR	2	944	418	8.4	0.5	7.9
4	765 kV	WARDHA-NIZAMABAD	2	0	1774	0.0	26.7	-26.7
5	765 kV	WARORA-NARANJAL(NEW)	2	0	2125	0.0	34.5	-34.5
6	400 kV	KOLHAPUR-KUDGI	2	1534	0	29.0	0.0	29.0
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	NELDEM-AMBEWADI	1	1	120	1.2	0.0	1.2
WR-SR						38.6	170.9	-132.4
INTERNATIONAL EXCHANGES								
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Import(+ve)/Export(-ve) Energy Exchange (MU)		
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 Lc. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	164	83	143	3.43		
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) l.c. BINAGURI RECEIPT (from TALA HEP 6*170MW)	462	229	456	10.94		
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) l.c. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-233	-41	-116	-2.77		
	NER	132kV GELEPHU-SALAKATI	7	0	1	0.03		
	NER	132kV MOTANGA-RANGIA	43	0	35	0.85		
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.37		
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00		
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	594	508	568	13.62		
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-924	-726	-831	-19.94		
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAIHANPUR (B'DESH) D/C	-542	-474	-514	-12.34		
	NER	132kV COMILA-SURAJMANI NAGAR 1&2	-113	0	-100	-2.40		

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 21-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	21.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.11
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.11

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	12.21	0.00	1.24	0.00	0.00	0.00	0.00	0.00	13.45
Nepal	2.63	0.00	11.54	0.00	0.00	0.43	0.00	0.00	14.60
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	14.84	0.00	12.78	0.00	0.00	0.43	0.00	0.00	28.05

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	12.21	0.00	1.24	0.00	0.00	0.00	0.00	0.00	13.45
Nepal	2.63	0.00	11.54	0.00	0.00	0.43	0.00	0.00	14.60
Bangladesh	-21.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.11
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-6.27	0.00	12.78	0.00	0.00	0.43	0.00	0.00	6.94