

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 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 19.10.2023.

महोदय/Dear Sir,

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

धन्यवाद,

Report for previous day

Date of Reporting: 20-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)	52662	65453	49545	23994	3047	194701
Peak Shortage (MW)	201	0	0	264	30	495
Energy Met (MU)	1130	1552	1240	523	58	4503
Hydro Gen (MU)	161	56	72	60	24	373
Wind Gen (MU)	4	36	21	-	-	61
Solar Gen (MU)*	127.41	59.43	116.71	2.88	1.13	308
Energy Shortage (MU)	2.35	0.00	0.00	1.41	0.21	3.97
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	54397	71717	61553	24392	3153	206736
Time Of Maximum Demand Met	18:32	15:02	12:21	18:40	17:36	10:25

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	0.052	0.00	2.13	8.29	10.42	73.29	16.29

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	7168	0	146.0	47.3	-0.5	166	0.00
	Haryana	7722	0	159.4	104.4	-0.7	94	0.56
	Rajasthan	13721	0	276.6	96.8	-2.1	242	0.59
	Delhi	4078	0	79.7	62.4	-1.3	118	0.00
	UP	18016	0	342.0	98.7	-1.6	1242	0.00
	Uttarakhand	2016	0	38.4	25.9	0.4	186	0.30
	HP	1826	0	32.9	20.9	-0.5	53	0.00
	J&K(UT) & Ladakh(UT)	2326	0	47.6	37.8	1.3	346	0.90
	Chandigarh	201	0	3.6	3.8	-0.2	25	0.00
Railways NR ISTS	179	0	3.5	3.5	0.0	46	0.00	
WR	Chhattisgarh	5226	0	117.3	57.2	-2.0	179	0.00
	Gujarat	21280	0	431.5	164.3	2.4	688	0.00
	MP	13823	0	299.8	178.8	-2.4	513	0.00
	Maharashtra	28181	0	626.2	279.0	2.2	571	0.00
	Goa	732	0	15.0	13.5	1.2	95	0.00
	DNHDDPDCL	1279	0	29.6	30.1	-0.5	30	0.00
	AMNSIL	878	0	19.7	9.8	-0.4	285	0.00
	BALCO	520	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	13039	0	247.3	130.0	-1.6	556	0.00
	Telangana	14550	0	283.1	153.5	0.1	629	0.00
	Karnataka	15442	0	276.6	105.8	-0.3	1149	0.00
	Kerala	4068	0	82.6	63.3	0.1	251	0.00
	Tamil Nadu	16406	0	340.5	201.9	-0.7	603	0.00
	Puducherry	445	0	10.2	9.8	-0.2	41	0.00
ER	Bihar	5593	0	112.8	101.8	0.4	336	0.00
	DVC	3200	0	71.3	-31.7	1.0	264	0.00
	Jharkhand	1542	264	32.5	25.8	-1.9	293	1.41
	Odisha	5048	0	116.7	36.5	-2.0	369	0.00
	West Bengal	8892	0	188.5	49.5	-2.9	147	0.00
	Sikkim	85	0	1.2	0.8	0.4	50	0.00
Railways ER ISTS	12	0	0.2	0.2	0.0	6	0.00	
NER	Arunachal Pradesh	155	0	2.6	2.3	0.1	66	0.00
	Assam	2010	0	37.3	26.7	2.3	276	0.00
	Manipur	195	0	2.7	2.7	-0.1	37	0.00
	Meghalaya	319	9	5.6	3.3	-0.3	61	0.21
	Mizoram	126	0	1.8	1.4	-0.3	10	0.00
	Nagaland	152	0	2.7	2.5	0.0	10	0.00
Tripura	298	0	5.5	4.9	-0.4	51	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	13.5	15.4	-23.8	-12.4
Day Peak (MW)	605.0	610.0	-1058.0	-521.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	108.0	-197.9	189.2	-93.6	-5.8	0.0
Actual(MU)	87.1	-165.9	193.0	-117.5	-6.9	-10.2
O/D/U/D(MU)	-20.9	32.0	3.8	-23.9	-1.2	-10.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4164	8464	3968	4811	205	21611	48
State Sector	8866	9222	3391	2180	129	23787	52
Total	13030	17685	7359	6991	334	45398	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	753	1615	761	641	18	3787	77
Lignite	19	19	47	0	0	85	2
Hydro	161	56	72	60	24	373	8
Nuclear	25	54	71	0	0	149	3
Gas, Naptha & Diesel	24	37	6	0	29	96	2
RES (Wind, Solar, Biomass & Others)	137	98	168	4	1	408	8
Total	1119	1878	1124	706	72	4898	100

Share of RES in total generation (%)	12.26	5.21	14.93	0.61	1.61	8.34
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.85	11.04	27.63	9.11	35.66	19.00

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040
Based on State Max Demands	1.067

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206736	10:25	130
Non-Solar hr	199417	18:34	936

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-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	12.3	-12.3
2	HVDC	PUSAULI B/B	-	0	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	175	310	0.0	1.9	-1.9
4	765 kV	SASARAM-FATEHPUR	1	0	315	0.0	5.7	-5.7
5	765 kV	GAYA-BALIA	1	0	388	0.0	5.0	-5.0
6	400 kV	PUSAULI-VARANASI	1	4	73	0.0	0.8	-0.8
7	400 kV	PUSAULI-ALLAHABAD	1	26	50	0.0	0.3	-0.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	122	331	0.0	3.8	-3.8
9	400 kV	PATNA-BALIA	2	0	281	0.0	4.6	-4.6
10	400 kV	NAUBATPUR-BALIA	2	0	289	0.0	4.4	-4.4
11	400 kV	BIHARSHARIFF-BALIA	2	98	76	0.0	0.1	-0.1
12	400 kV	MOTIHARI-GORAKHPUR	2	67	168	0.0	2.0	-2.0
13	400 kV	BIHARSHARIFF-VARANASI	2	99	147	0.0	0.2	-0.2
14	220 kV	SAHUPURI-KARAMNANA	1	2	73	0.0	1.1	-1.1
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	43.4	-42.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	781	120	7.9	0.0	7.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	988	54	10.5	0.0	10.5
3	765 kV	JHARSUGUDA-DURG	2	0	606	0.0	11.4	-11.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	678	0.0	12.2	-12.2
5	400 kV	RANCHI-SIPAT	2	194	94	1.0	0.0	1.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	215	0.0	3.9	-3.9
7	220 kV	BUDHIPADAR-KORBA	2	106	29	0.9	0.0	0.9
ER-WR						20.2	27.4	-7.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	560	0.0	13.1	-13.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1994	0.0	45.9	-45.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2531	0.0	47.9	-47.9
4	400 kV	TALCHER-I/C	2	255	211	0.0	1.0	-1.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	106.8	-106.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	360	0.0	4.2	-4.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	57	264	0.0	1.4	-1.4
3	220 kV	ALIPURDUAR-SALAKATI	2	18	61	0.0	0.2	-0.2
ER-NER						0.0	5.9	-5.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	604	0.0	14.4	-14.4
NER-NR						0.0	14.4	-14.4
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	786	0.0	14.9	-14.9
4	765 kV	GWALIOR-AGRA	2	467	1147	0.8	11.0	-10.2
5	765 kV	GWALIOR-PHAGI	2	21	1395	0.0	21.5	-21.5
6	765 kV	JABALPUR-ORAI	2	128	601	0.0	13.6	-13.6
7	765 kV	GWALIOR-ORAI	1	860	0	17.0	0.0	17.0
8	765 kV	SATNA-ORAI	1	0	704	0.0	14.2	-14.2
9	765 kV	BANASKANTHA-CHITORGARH	2	1876	0	23.0	0.0	23.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2124	0.0	32.0	-32.0
11	400 kV	ZERDA-KANKROLI	1	262	0	3.3	0.0	3.3
12	400 kV	ZERDA -BHINMAL	1	634	80	5.2	0.0	5.2
13	400 kV	VINDHYACHAL -RIHAND	1	958	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	536	193	3.3	1.0	2.3
15	220 kV	BHANPURA-RANPUR	1	0	148	0.0	2.6	-2.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	122	0	2.1	0.0	2.1
18	220 kV	MALANPUR-AURAIYA	1	93	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						78.5	114.3	-35.8
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	4012	0.0	93.8	-93.8
3	765 kV	SOLAPUR-RAICHUR	2	1076	471	10.3	0.8	9.5
4	765 kV	WARDHA-NIZAMABAD	2	0	1967	0.0	28.3	-28.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2115	0.0	33.0	-33.0
6	400 kV	KOLHAPUR-KUDGI	2	1652	0	29.9	0.0	29.9
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	119	2.3	0.0	2.3
WR-SR						42.5	179.8	-137.4

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)	0	0	0	3.19
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	13.04
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-3.57
	NER	132kV GELEPHU-SALAKATI	6	0	0	0.00
	NER	132kV MOTANGA-RANGIA	45	24	35	0.85
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.10
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	610	420	597	14.32
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-918	-748	-884	-21.21
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-521	-503	-515	-12.36
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-140	0	-108	-2.60

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 20-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	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.20
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.20

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	12.14	0.00	1.28	0.00	0.00	0.00	0.00	0.00	13.42
Nepal	2.63	0.00	11.24	0.00	0.00	0.47	0.00	0.00	14.34
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	14.77	0.00	12.52	0.00	0.00	0.47	0.00	0.00	27.76

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	12.14	0.00	1.28	0.00	0.00	0.00	0.00	0.00	13.42
Nepal	2.63	0.00	11.24	0.00	0.00	0.47	0.00	0.00	14.34
Bangladesh	-21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.20
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-6.43	0.00	12.52	0.00	0.00	0.47	0.00	0.00	6.56