

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: 15th 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 14.10.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14th October 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 15-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)	58864	64891	47599	24982	3236	199572
Peak Shortage (MW)	302	0	0	958	0	1260
Energy Met (MU)	1360	1528	1225	549	59	4721
Hydro Gen (MU)	173	95	70	62	30	431
Wind Gen (MU)	41	37	26	-	-	104
Solar Gen (MU)*	130.20	56.18	114.51	2.79	1.11	305
Energy Shortage (MU)	4.20	0.00	0.00	2.60	0.32	7.12
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	61754	71184	59784	25100	3314	215858
Time Of Maximum Demand Met	11:31	14:45	14:54	20:21	18:04	14:49

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	0.046	0.00	0.76	10.15	10.91	69.69	19.40

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	9319	0	189.7	76.1	0.1	246	0.00
	Haryana	9171	0	198.4	138.7	-0.1	189	1.40
	Rajasthan	14476	0	303.4	87.8	-7.4	19	0.00
	Delhi	4715	0	102.8	77.6	-0.4	297	0.00
	UP	20276	116	436.9	187.7	0.1	1250	1.31
	Uttarakhand	2163	0	42.4	27.1	0.8	214	0.37
	HP	1715	0	33.7	20.0	0.1	73	0.27
	J&K(UT) & Ladakh(UT)	2339	70	45.4	36.0	1.5	361	0.85
	Chandigarh	234	0	4.3	4.3	0.0	22	0.00
Railways NR ISTS	176	0	3.4	3.2	0.3	45	0.00	
WR	Chhattisgarh	5306	0	120.8	60.2	-1.2	174	0.00
	Gujarat	21034	0	426.5	167.2	0.5	420	0.00
	MP	13535	0	297.5	172.7	0.5	795	0.00
	Maharashtra	27784	0	610.8	230.6	0.8	729	0.00
	Goa	731	0	14.7	12.9	1.5	118	0.00
	DNHDDPDCL	1285	0	29.8	30.2	-0.4	6	0.00
	AMNSIL	722	0	15.6	5.7	-0.1	260	0.00
	BALCO	523	0	12.4	12.6	-0.2	7	0.00
SR	Andhra Pradesh	12503	0	236.4	104.2	-0.7	902	0.00
	Telangana	14859	0	289.7	154.0	1.9	668	0.00
	Karnataka	14491	0	259.8	94.7	2.1	695	0.00
	Kerala	3842	0	79.0	61.0	0.8	224	0.00
	Tamil Nadu	16102	0	349.9	226.9	-1.7	415	0.00
	Puducherry	432	0	10.2	9.9	-0.5	26	0.00
ER	Bihar	6219	157	129.3	121.5	1.6	361	1.32
	DVC	3342	0	72.2	-36.7	0.0	247	0.00
	Jharkhand	1672	219	32.9	25.8	-2.1	166	1.28
	Odisha	5235	0	113.3	33.8	-1.8	267	0.00
	West Bengal	9133	0	199.9	70.6	-2.5	154	0.00
	Sikkim	76	0	1.0	1.0	0.1	27	0.00
Railways ER ISTS	20	0	0.0	0.1	-0.1	9	0.00	
NER	Arunachal Pradesh	156	0	2.8	2.4	0.2	42	0.00
	Assam	2114	0	38.0	29.3	0.6	201	0.00
	Manipur	202	0	2.8	2.8	0.0	32	0.00
	Meghalaya	323	0	5.5	1.9	-0.2	29	0.32
	Mizoram	103	0	1.9	0.9	-0.3	4	0.00
	Nagaland	150	0	2.8	2.6	-0.1	13	0.00
Tripura	316	0	5.6	5.5	0.0	27	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	21.2	16.0	-24.5	-12.4
Day Peak (MW)	1167.9	597.0	-1078.0	-550.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	238.9	-302.1	193.1	-117.1	-12.7	0.1
Actual(MU)	222.9	-290.1	208.4	-137.4	-9.0	-5.3
O/D/U/D(MU)	-16.0	12.0	15.3	-20.4	3.7	-5.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3865	9922	4528	3821	240	22376	49
State Sector	7166	9010	5291	2130	129	23726	51
Total	11031	18932	9819	5951	369	46102	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	774	1555	729	680	17	3756	75
Lignite	22	17	50	0	0	88	2
Hydro	173	95	70	62	30	431	9
Nuclear	25	49	71	0	0	144	3
Gas, Naptha & Diesel	47	67	6	0	28	149	3
RES (Wind, Solar, Biomass & Others)	176	94	172	4	1	447	9
Total	1217	1878	1098	746	75	5015	100

Share of RES in total generation (%)	14.49	5.00	15.70	0.49	1.47	8.92
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	30.72	12.68	28.56	8.82	40.96	20.39

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.024
Based on State Max Demands	1.050

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	215858	14:49	99
Non-Solar hr	202573	18:46	1183

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: 15-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	10.6	-10.6
2	HVDC	PUSAULI B/B	-	0	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	392	0.0	3.8	-3.8
4	765 kV	SASARAM-FATEHPUR	1	0	386	0.0	6.6	-6.6
5	765 kV	GAYA-BALIA	1	0	518	0.0	8.9	-8.9
6	400 kV	PUSAULI-VARANASI	1	37	24	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	5	64	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	603	0.0	8.4	-8.4
9	400 kV	PATNA-BALIA	2	0	429	0.0	7.9	-7.9
10	400 kV	NAUBATPUR-BALIA	2	0	441	0.0	7.8	-7.8
11	400 kV	BIHARSHARIF-BALIA	2	31	233	0.0	1.8	-1.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	349	0.0	4.4	-4.4
13	400 kV	BIHARSHARIF-VARANASI	2	0	215	0.0	2.5	-2.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	98	0.0	1.8	-1.8
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						0.5	66.7	-66.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	954	222	7.0	0.0	7.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	807	361	11.7	0.0	11.7
3	765 kV	JHARSUGUDA-DURG	2	0	433	0.0	6.6	-6.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	580	0.0	9.6	-9.6
5	400 kV	RANCHI-SIPAT	2	153	142	1.7	0.0	1.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	206	0.0	3.6	-3.6
7	220 kV	BUDHIPADAR-KORBA	2	111	33	0.6	0.0	0.6
ER-WR						20.9	19.8	1.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	560	0.0	12.7	-12.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1983	0.0	44.9	-44.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	3039	0.0	53.7	-53.7
4	400 kV	TALCHER-I/C	2	276	172	0.0	0.1	-0.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	111.3	-111.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	258	0.0	3.0	-3.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	84	279	0.0	2.1	-2.1
3	220 kV	ALIPURDUAR-SALAKATI	2	3	71	0.0	0.8	-0.8
ER-NER						0.0	5.9	-5.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	655	0.0	16.0	-16.0
NER-NR						0.0	16.0	-16.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	6	2504	0.0	21.8	-21.8
2	HVDC	VINDHYACHAL B/B	-	0	54	0.0	1.2	-1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1911	0.0	38.0	-38.0
4	765 kV	GWALIOR-AGRA	2	0	1473	0.0	23.7	-23.7
5	765 kV	GWALIOR-PHAGI	2	89	1225	0.0	18.3	-18.3
6	765 kV	JABALPUR-ORAI	2	0	846	0.0	29.2	-29.2
7	765 kV	GWALIOR-ORAI	1	621	0	12.1	0.0	12.1
8	765 kV	SATNA-ORAI	1	0	863	0.0	18.6	-18.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1511	183	11.0	0.0	11.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2458	0.0	45.0	-45.0
11	400 kV	ZERDA-KANKROLI	1	248	21	2.0	0.0	2.0
12	400 kV	ZERDA -BHINMAL	1	784	32	5.4	0.0	5.4
13	400 kV	VINDHYACHAL -RIHAND	1	970	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUALPUR	2	328	265	0.0	0.8	-0.8
15	220 kV	BHANPURA-RANPUR	1	0	99	0.0	1.8	-1.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.5	-2.5
17	220 kV	MEHGAON-AURAIYA	1	132	0	2.3	0.0	2.3
18	220 kV	MALANPUR-AURAIYA	1	99	0	1.6	0.0	1.6
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						56.6	201.0	-144.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	21.3	-21.3
2	HVDC	RAIGARH-PUGALUR	2	0	4507	0.0	88.9	-88.9
3	765 kV	SOLAPUR-RAICHUR	2	158	1398	0.1	14.1	-14.0
4	765 kV	WARDHA-NIZAMABAD	2	0	2727	0.0	45.5	-45.5
5	400 kV	KOLHAPUR-KUDGI	2	1210	0	22.8	0.0	22.8
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	119	2.3	0.0	2.3
WR-SR						25.2	169.7	-144.6

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)	287	170	233	5.60	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	769	469	576	13.83	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	53	0	26	0.62	
	NER	132kV GELEPHU-SALAKATI	20	9	12	0.29	
	NER	132kV MOTANGA-RANGIA	62	21	37	0.89	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.49	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	597	505	597	14.46	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-931	-770	-890	-21.37	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-550	-486	-518	-12.43	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-147	0	-129	-3.10	

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 15-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	21.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.23
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.23

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	21.45	0.00	1.44	0.00	0.00	0.00	0.00	0.00	22.89
Nepal	2.63	0.00	11.12	0.00	0.00	1.05	0.00	0.00	14.80
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	24.08	0.00	12.56	0.00	0.00	1.05	0.00	0.00	37.69

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	21.45	0.00	1.44	0.00	0.00	0.00	0.00	0.00	22.89
Nepal	2.63	0.00	11.12	0.00	0.00	1.05	0.00	0.00	14.80
Bangladesh	-21.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.23
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	2.85	0.00	12.56	0.00	0.00	1.05	0.00	0.00	16.46