

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: 05th 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., डोंगतेिह, 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 04.10.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-अक्टूबर-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 04th October 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 05-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)	62892	61821	48485	22992	3170	199360
Peak Shortage (MW)	224	1357	1140	0	230	2951
Energy Met (MU)	1367	1376	1219	494	61	4517
Hydro Gen (MU)	206	83	92	84	28	493
Wind Gen (MU)	22	61	95	-	-	179
Solar Gen (MU)*	137.38	66.64	116.78	1.99	0.88	324
Energy Shortage (MU)	4.22	3.01	2.68	0.50	0.88	11.29
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63430	63870	58834	23277	3267	203442
Time Of Maximum Demand Met	19:13	18:45	10:55	19:08	17:40	10:54

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	0.093	1.42	4.88	14.79	21.10	68.48	10.43

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	10672	0	217.9	89.7	0.0	258	0.00
	Haryana	9236	0	195.6	130.4	-0.6	94	0.00
	Rajasthan	13703	0	291.7	88.7	-3.4	404	0.00
	Delhi	4869	0	101.4	88.0	0.2	149	0.00
	UP	22140	0	425.7	169.1	-3.1	676	0.04
	Uttarakhand	2058	70	44.5	28.5	0.2	136	0.20
	HP	1671	0	34.1	17.7	-0.1	163	0.23
	J&K(UT) & Ladakh(UT)	2280	238	48.0	32.0	4.6	503	3.75
	Chandigarh	252	0	5.1	5.3	-0.2	18	0.00
Railways NR ISTS	160	0	3.4	3.5	-0.1	30	0.00	
WR	Chhattisgarh	4479	0	99.4	45.9	-0.8	185	0.00
	Gujarat	20093	0	423.8	184.3	-0.6	547	0.00
	MP	12185	0	258.9	110.4	-3.6	331	0.00
	Maharashtra	24771	798	520.4	207.3	-2.4	707	3.01
	Goa	682	0	13.7	12.0	1.2	149	0.00
	DNHDDPDCL	1285	0	29.7	29.5	0.2	54	0.00
	AMNSIL	813	0	18.0	9.3	-0.3	247	0.00
	BALCO	522	0	12.5	12.5	0.0	7	0.00
SR	Andhra Pradesh	10825	0	222.7	101.5	3.2	1772	0.00
	Telangana	13669	0	269.0	133.5	-0.8	560	0.00
	Karnataka	14522	0	264.2	108.9	3.5	1742	2.68
	Kerala	4026	0	79.6	58.1	0.8	306	0.00
	Tamil Nadu	17193	0	373.0	174.5	3.0	1130	0.00
	Puducherry	457	0	10.2	9.6	-0.1	73	0.00
ER	Bihar	5314	0	105.7	97.7	-1.3	383	0.50
	DVC	3177	0	69.1	-21.3	1.0	332	0.00
	Jharkhand	1560	0	30.0	19.7	-1.2	278	0.00
	Odisha	5457	0	118.6	50.5	-1.4	363	0.00
	West Bengal	7948	0	169.4	57.7	-1.5	367	0.00
	Sikkim	59	0	0.9	0.2	0.7	58	0.00
Railways ER ISTS	14	0	0.2	0.2	0.0	12	0.00	
NER	Arunachal Pradesh	168	0	3.1	2.7	0.0	50	0.00
	Assam	2105	0	39.9	31.0	1.6	232	0.85
	Manipur	186	0	2.8	2.8	-0.1	19	0.00
	Meghalaya	328	0	5.8	2.1	-0.3	139	0.03
	Mizoram	123	0	1.9	1.2	-0.2	9	0.00
	Nagaland	162	0	2.9	2.7	-0.1	12	0.00
Tripura	275	0	5.0	4.6	-0.1	92	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	36.0	15.8	-24.2	-25.7
Day Peak (MW)	2080.1	511.0	-1052.0	-1370.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	243.8	-257.2	162.9	-148.5	-1.1	0.0
Actual(MU)	218.3	-263.3	197.4	-156.6	-3.7	-7.8
O/D/U/D(MU)	-25.5	-6.1	34.6	-8.2	-2.6	-7.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4159	12078	6758	3766	505	27265	51
State Sector	5946	10279	6282	3710	129	26346	49
Total	10105	22357	13040	7476	634	53611	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	782	1453	657	617	16	3526	73
Lignite	30	17	35	0	0	83	2
Hydro	206	83	92	84	28	493	10
Nuclear	25	53	66	0	0	143	3
Gas, Naptha & Diesel	19	24	6	0	27	77	2
RES (Wind, Solar, Biomass & Others)	165	130	239	4	1	539	11
Total	1227	1760	1095	704	72	4859	100

Share of RES in total generation (%)	13.45	7.37	21.84	0.51	1.24	11.08
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	32.25	15.09	36.23	12.43	39.72	24.17

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	203442	10:54	238
Non-Solar hr	199745	19:08	2951

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: 05-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	1302	0.0	22.3	-22.3
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	0	647	0.0	8.4	-8.4
4	765 kV	SASARAM-FATEHPUR	1	0	418	0.0	6.8	-6.8
5	765 kV	GAYA-BALIA	1	0	546	0.0	9.0	-9.0
6	400 kV	PUSAULI-VARANASI	1	17	69	0.0	0.8	-0.8
7	400 kV	PUSAULI-ALLAHABAD	1	0	107	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	663	0.0	9.4	-9.4
9	400 kV	PATNA-BALIA	2	0	489	0.0	8.1	-8.1
10	400 kV	NAUBATPUR-BALIA	2	0	508	0.0	8.1	-8.1
11	400 kV	BIHARSHARIF-BALIA	2	16	233	0.0	2.6	-2.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	364	0.0	5.4	-5.4
13	400 kV	BIHARSHARIF-VARANASI	2	25	256	0.0	2.2	-2.2
14	220 kV	SAHUPURI-KARAMNANA	1	2	92	0.0	1.2	-1.2
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
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						0.4	88.0	-87.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1150	418	7.0	0.0	7.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	866	579	4.8	0.0	4.8
3	765 kV	JHARSUGUDA-DURG	2	0	526	0.0	8.8	-8.8
4	400 kV	JHARSUGUDA-RAIGARH	4	0	486	0.0	5.5	-5.5
5	400 kV	RANCHI-SIPAT	2	108	215	0.0	0.9	-0.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	160	0.0	2.3	-2.3
7	220 kV	BUDHIPADAR-KORBA	2	103	20	1.0	0.0	1.0
ER-WR						12.8	17.5	-4.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	557	0.0	11.4	-11.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1987	0.0	39.5	-39.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2787	0.0	51.9	-51.9
4	400 kV	TALCHER-I/C	2	552	160	5.5	0.0	5.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	102.7	-102.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	334	0.0	4.4	-4.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	151	276	0.0	1.7	-1.7
3	220 kV	ALIPURDUAR-SALAKATI	2	0	78	0.0	1.0	-1.0
ER-NER						0.0	7.1	-7.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
NER-NR						0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2006	0.0	44.5	-44.5
2	HVDC	VINDHYACHAL B/B	-	45	0	1.1	0.0	1.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1451	0.0	34.7	-34.7
4	765 kV	GWALIOR-AGRA	2	429	1275	0.4	15.8	-15.4
5	765 kV	GWALIOR-PHAGI	2	350	1488	0.9	19.6	-18.7
6	765 kV	JABALPUR-ORAI	2	0	772	0.0	20.6	-20.6
7	765 kV	GWALIOR-ORAI	1	672	0	11.6	0.0	11.6
8	765 kV	SATNA-ORAI	1	0	912	0.0	18.6	-18.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1515	0	20.1	0.0	20.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	2262	0.0	35.5	-35.5
11	400 kV	ZERDA-KANKROLI	1	277	0	3.6	0.0	3.6
12	400 kV	ZERDA -BHINMAL	1	555	62	5.6	0.0	5.6
13	400 kV	VINDHYACHAL -RIHAND	1	975	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUALPUR	2	373	417	0.0	1.6	-1.6
15	220 kV	BHANPURA-RANPUR	1	0	85	0.0	1.5	-1.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	127	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	98	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	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
WR-NR						68.7	194.6	-125.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1008	0.0	22.0	-22.0
2	HVDC	RAIGARH-PUGALUR	2	0	5510	0.0	81.7	-81.7
3	765 kV	SOLAPUR-RAICHUR	2	654	1697	1.4	15.8	-14.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2654	0.0	42.1	-42.1
5	400 kV	KOLHAPUR-KUDGI	2	1205	0	16.2	0.0	16.2
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	114	2.3	0.0	2.3
WR-SR						19.9	161.7	-141.9

INTERNATIONAL EXCHANGES					Import(+ve)/Export(-ve) Energy Exchange (MU)		
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)		
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	665	305	442	10.61	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1050	755	919	22.05	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	178	3	65	1.56	
	NER	132kV GELEPHU-SALAKATI	33	8	19	0.46	
	NER	132kV MOTANGA-RANGIA	69	36	55	1.32	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-103	0	-12	-0.29	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	614	511	614	16.11	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-920	-785	-890	-21.36	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1370	-807	-1069	-25.66	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-132	0	-118	-2.82	

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 05-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	0.00
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.65
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.65

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL	
		BILATERAL TOTAL	COLLECTIVE							
			IDAM			RTM				
			IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	30.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.59
Nepal	0.00	0.00	11.42	0.00	0.00	0.34	0.00	0.00	0.00	11.76
Bangladesh	0.00	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	0.00
Total Import	30.59	0.00	11.42	0.00	0.00	0.34	0.00	0.00	0.00	42.35

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	30.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.59
Nepal	0.00	0.00	11.42	0.00	0.00	0.34	0.00	0.00	0.00	11.76
Bangladesh	-4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-4.65
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	25.94	0.00	11.42	0.00	0.00	0.34	0.00	0.00	0.00	37.70