

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: 23th 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 22.10.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-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 22th October 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 23-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)	49875	61119	47304	21285	2630	182213
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1103	1508	1178	458	51	4298
Hydro Gen (MU)	162	41	54	50	21	327
Wind Gen (MU)	12	37	28	-	-	77
Solar Gen (MU)*	113.50	63.35	118.96	2.81	1.29	300
Energy Shortage (MU)	0.25	0.00	0.00	0.00	0.00	0.25
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52357	69416	56539	21719	2868	197037
Time Of Maximum Demand Met	18:31	11:02	10:42	17:57	17:46	10:51

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	0.036	0.00	0.13	5.57	5.69	74.92	19.38

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	6713	0	138.7	50.5	-0.8	222	0.00
	Haryana	6924	0	145.6	94.3	-1.5	258	0.00
	Rajasthan	13812	0	282.3	97.8	-4.6	139	0.00
	Delhi	3570	0	73.0	60.1	-0.2	130	0.00
	UP	17890	0	336.6	128.4	0.0	1498	0.00
	Uttarakhand	1922	0	36.9	26.3	0.4	177	0.00
	HP	1744	0	32.0	20.8	-0.5	57	0.00
	J&K(UT) & Ladakh(UT)	2459	0	51.2	38.4	4.6	393	0.25
	Chandigarh	175	0	3.1	3.4	-0.3	7	0.00
Railways NR ISTS	168	0	3.4	3.7	-0.3	18	0.00	
WR	Chhattisgarh	4977	0	110.2	55.3	-1.1	213	0.00
	Gujarat	20553	0	422.8	177.6	-0.2	500	0.00
	MP	14380	0	302.5	188.3	-3.9	670	0.00
	Maharashtra	27235	0	599.8	265.6	-2.2	929	0.00
	Goa	662	0	13.6	12.5	1.0	51	0.00
	DNHDDPDCL	1228	0	28.8	28.5	0.3	56	0.00
	AMNSIL	811	0	18.0	9.4	-0.2	247	0.00
	BALCO	522	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	12234	0	233.6	108.1	-2.5	675	0.00
	Telangana	13195	0	279.0	146.4	1.1	600	0.00
	Karnataka	14540	0	259.6	100.0	-2.3	610	0.00
	Kerala	3522	0	75.1	63.6	0.6	164	0.00
	Tamil Nadu	14687	0	321.7	187.3	-0.6	536	0.00
	Puducherry	393	0	9.2	8.9	-0.3	23	0.00
ER	Bihar	5296	0	105.8	95.9	0.9	129	0.00
	DVC	3139	0	68.1	-34.7	0.5	347	0.00
	Jharkhand	1651	0	30.3	24.9	-2.7	181	0.00
	Odisha	4860	0	104.6	32.3	-1.1	346	0.00
	West Bengal	7154	0	148.0	11.7	-1.6	225	0.00
	Sikkim	64	0	0.9	1.0	-0.1	27	0.00
Railways ER ISTS	24	0	0.2	0.1	0.1	20	0.00	
NER	Arunachal Pradesh	146	0	2.6	2.3	0.0	26	0.00
	Assam	1693	0	30.3	22.6	-0.2	226	0.00
	Manipur	192	0	2.7	2.6	0.0	27	0.00
	Meghalaya	317	0	5.8	4.0	-0.2	41	0.00
	Mizoram	111	0	1.8	1.4	-0.2	19	0.00
	Nagaland	144	0	2.5	2.4	-0.1	12	0.00
Tripura	313	0	5.5	4.6	-0.1	20	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	11.0	17.0	-24.6	-14.4
Day Peak (MW)	472.7	654.0	-1041.0	-935.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	162.2	-169.2	152.1	-146.3	-10.8	-12.0
Actual(MU)	159.4	-124.7	167.9	-201.1	-6.9	-5.4
O/D/U/D(MU)	-2.8	44.5	15.8	-54.8	3.9	6.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4784	8442	3508	4126	235	21094	48
State Sector	6361	9938	4169	1880	121	22469	52
Total	11145	18380	7677	6006	356	43563	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	664	1536	726	667	14	3608	77
Lignite	23	19	58	0	0	100	2
Hydro	162	41	54	50	21	327	7
Nuclear	25	54	71	0	0	150	3
Gas, Naptha & Diesel	14	20	5	0	27	67	1
RES (Wind, Solar, Biomass & Others)	131	103	177	4	1	415	9
Total	1018	1772	1092	721	64	4667	100

Share of RES in total generation (%)	12.82	5.80	16.19	0.53	2.01	8.89
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.16	11.13	27.61	7.43	34.82	19.11

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.029
Based on State Max Demands	1.062

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	197037	10:51	0
Non-Solar hr	188735	18:40	0

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: 23-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	701	0.0	17.3	-17.3
2	HVDC	PUSAULI B/B	-	0	49	0.0	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	0	770	0.0	12.1	-12.1
4	765 kV	SASARAM-FATEHPUR	1	0	487	0.0	9.0	-9.0
5	765 kV	GAYA-BALIA	1	0	510	0.0	9.8	-9.8
6	400 kV	PUSAULI-VARANASI	1	31	44	0.1	0.0	0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	79	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	587	0.0	9.8	-9.8
9	400 kV	PATNA-BALIA	2	0	406	0.0	7.9	-7.9
10	400 kV	NAUBATPUR-BALIA	2	0	427	0.0	8.0	-8.0
11	400 kV	BIHARSHARIF-BALIA	2	49	219	0.0	3.3	-3.3
12	400 kV	MOTIHARI-GORAKHPUR	2	0	313	0.0	5.5	-5.5
13	400 kV	BIHARSHARIF-VARANASI	2	0	315	0.0	4.7	-4.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	101	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
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						0.6	91.6	-91.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	297	396	0.0	2.8	-2.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	62	633	0.0	5.0	-5.0
3	765 kV	JHARSUGUDA-DURG	2	0	730	0.0	14.7	-14.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	748	0.0	13.6	-13.6
5	400 kV	RANCHI-SIPAT	2	0	299	0.0	4.7	-4.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	145	0.0	2.4	-2.4
7	220 kV	BUDHIPADAR-KORBA	2	63	111	0.0	0.5	-0.5
ER-WR						0.0	43.8	-43.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	555	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1653	0.0	39.7	-39.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2618	0.0	52.2	-52.2
4	400 kV	TALCHER-I/C	2	279	0	5.1	0.0	5.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	104.5	-104.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	346	0.0	5.4	-5.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	254	214	0.0	1.1	-1.1
3	220 kV	ALIPURDUAR-SALAKATI	2	24	62	0.0	0.7	-0.7
ER-NER						0.0	7.2	-7.2
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	55	0.0	1.2	-1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1170	0.0	29.0	-29.0
4	765 kV	GWALIOR-AGRA	2	304	1114	0.6	12.1	-11.5
5	765 kV	GWALIOR-PHAGI	2	0	1744	0.0	25.7	-25.7
6	765 kV	JABALPUR-ORAI	2	0	545	0.0	17.9	-17.9
7	765 kV	GWALIOR-ORAI	1	987	0	17.0	0.0	17.0
8	765 kV	SATNA-ORAI	1	0	833	0.0	17.4	-17.4
9	765 kV	BANASKANTHA-CHITORGARH	2	2363	0	27.6	0.0	27.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	1750	0.0	31.6	-31.6
11	400 kV	ZERDA-KANKROLI	1	189	0	2.6	0.0	2.6
12	400 kV	ZERDA -BHINMAL	1	785	0	7.3	0.0	7.3
13	400 kV	VINDHYACHAL -RIHAND	1	956	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	570	180	2.7	0.7	2.0
15	220 kV	BHANPURA-RANPUR	1	0	147	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.0	-2.0
17	220 kV	MEHGAON-AURAIYA	1	109	0	1.8	0.0	1.8
18	220 kV	MALANPUR-AURAIYA	1	80	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						82.9	140.4	-57.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	505	0.0	12.1	-12.1
2	HVDC	RAIGARH-PUGALUR	2	0	3008	0.0	72.2	-72.2
3	765 kV	SOLAPUR-RAICHUR	2	1186	256	9.8	0.2	9.6
4	765 kV	WARDHA-NIZAMABAD	2	0	1679	0.0	29.8	-29.8
5	765 kV	WARORA-WARANGAL(NEW)	2	0	1951	0.0	37.0	-37.0
6	400 kV	KOLHAPUR-KUDGI	2	1456	0	28.4	0.0	28.4
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	2.4	0.0	2.4
WR-SR						40.5	151.2	-110.7

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)	157	88	128	3.08
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	362	258	362	9.59
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-114	-69	-95	-2.28
	NER	132kV GELEPHU-SALAKATI	-11	4	-2	-0.05
	NER	132kV MOTANGA-RANGIA	34	0	28	0.66
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-12	0	65	1.57
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	666	546	642	15.40
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-917	-871	-914	-21.94
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-935	-500	-599	-14.37
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-124	0	-109	-2.62

