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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 23rd August 2023

To,

1. कार्यकारी निदेशक, पू.क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033
   Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. 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
3. 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
4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग – 793006
   Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. 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 22.08.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-अगस्त-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उप्लब्ध 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 22nd August 2023, is available at the NLDC website.

धन्यवाद,

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

Report for previous day **Date of Reporting: 23-Aug-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)	71152	59318	48544	24980	2947	206941
Peak Shortage (MW)	280	414	554	1290	204	2742
Energy Met (MU)	1722	1445	1218	586	60	5031
Hydro Gen (MU)	419	119	115	141	36	830
Wind Gen (MU)	42	149	83	-	-	274
Solar Gen (MU)*	132.93	42.98	116.67	4.91	0.29	298
Energy Shortage (MU)	20.26	4.63	12.20	9.66	1.46	48.21
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	78098	66001	60984	26524	3089	230041
Time Of Maximum Demand Met	13:58	10:17	10:44	23:53	18:44	11:24

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	0.041	0.29	1.47	4.71	6.47	74.41	19.12

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	14682	0	322.8	182.1	0.5	211	0.00
	Haryana	12484	0	259.0	182.9	1.8	359	10.44
	Rajasthan	16425	0	341.1	110.5	-1.3	359	7.23
	Delhi	7315	0	147.9	123.0	-3.0	117	0.00
	UP	23766	0	504.2	227.9	-6.1	471	0.00
	Uttarakhand	1873	150	43.1	19.3	0.8	137	1.75
	HP	1655	0	40.7	-0.7	-1.2	65	0.19
	J&K(UT) & Ladakh(UT)	2498	60	53.0	26.3	1.4	290	0.65
	Chandigarh	361	0	7.4	7.7	-0.3	20	0.00
	Railways_NR ISTS	159	0	3.3	2.2	1.1	82	0.00
WR	Chhattisgarh	5271	0	120.9	61.3	0.0	317	0.00
	Gujarat	21540	0	444.2	142.2	1.2	1372	0.00
	MP	11883	0	251.6	119.0	-3.5	341	0.00
	Maharashtra	25392	0	551.3	188.9	-0.1	702	4.63
	Goa	665	0	13.6	13.2	0.0	85	0.00
	DNHDDPDCL	1321	0	30.7	30.5	0.2	84	0.00
	AMNSIL	917	0	20.6	7.4	0.2	279	0.00
	BALCO	521	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	12218	0	233.4	104.5	7.9	1147	1.03
	Telangana	13248	0	252.8	123.4	3.1	945	0.00
	Karnataka	15679	0	260.1	73.0	10.2	1321	11.17
	Kerala	4328	0	87.9	61.4	2.1	411	0.00
	Tamil Nadu	17587	0	373.4	192.5	10.4	2103	0.00
	Puducherry	462	0	10.4	9.9	-0.2	36	0.00
ER	Bihar	6670	124	135.4	131.4	-0.9	239	4.76
	DVC	3477	0	76.2	-36.7	0.7	255	0.00
	Jharkhand	1730	0	36.6	32.4	-0.5	188	3.95
	Odisha	4994	200	112.7	35.0	0.8	335	0.95
	West Bengal	9949	0	223.8	105.5	0.6	376	0.00
	Sikkim	83	0	1.3	1.0	0.3	8	0.00
	Railways_ER ISTS	19	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	145	0	2.8	2.7	-0.3	32	0.00
	Assam	1972	0	38.7	31.4	1.0	270	0.67
	Manipur	182	0	2.5	2.7	-0.2	27	0.00
	Meghalaya	294	51	5.1	0.4	-0.2	43	0.79
	Mizoram	130	0	2.0	1.6	-0.2	11	0.00
	Nagaland	163	0	2.8	2.5	-0.1	26	0.00
	Tripura	314	0	5.8	6.2	0.2	82	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	44.7	9.5	-24.7	-32.1
Day Peak (MW)	2054.0	482.0	-1084.0	-1435.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	270.1	-325.2	175.0	-106.2	-12.9	0.8
Actual(MU)	227.2	-333.2	215.7	-102.7	-13.0	-5.9
O/D/U/D(MU)	-42.8	-8.0	40.7	3.6	-0.1	-6.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1362	11864	6168	2910	255	22558	45
State Sector	4670	11038	7318	3860	181	27066	55
Total	6031	22902	13486	6770	435	49624	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	866	1459	651	612	17	3606	67
Lignite	26	7	46	0	0	80	1
Hydro	419	119	115	141	36	830	15
Nuclear	29	51	46	0	0	126	2
Gas, Naptha & Diesel	63	75	6	0	27	171	3
RES (Wind, Solar, Biomass & Others)	181	195	223	6	0	606	11
Total	1586	1906	1087	759	80	5419	100

Share of RES in total generation (%)	11.44	10.22	20.49	0.82	0.36	11.18
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.72	19.11	35.31	19.44	45.24	28.83

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.020
Based on State Max Demands	1.053

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	230041	11:24	209
Non-Solar hr	210238	19:25	4022

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-Aug-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	802	0.0	15.8	-15.8
2	HVDC	PUSAULI B/B	-	0	94	0.0	2.2	-2.2
3	765 kV	GAYA-VARANASI	2	151	210	0.0	0.5	-0.5
4	765 kV	SASARAM-FATEHPUR	1	0	207	0.0	3.1	-3.1
5	765 kV	GAYA-BALIA	1	0	423	0.0	5.9	-5.9
6	400 kV	PUSAULI-VARANASI	1	0	112	0.0	1.9	-1.9
7	400 kV	PUSAULI -ALLAHABAD	1	11	36	0.0	0.3	-0.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	645	0.0	11.1	-11.1
9	400 kV	PATNA-BALIA	2	0	426	0.0	8.0	-8.0
10	400 kV	NAUBATPUR-BALIA	2	0	429	0.0	8.3	-8.3
11	400 kV	BIHARSHARIFF-BALIA	2	55	154	0.0	1.2	-1.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	377	0.0	6.5	-6.5
13	400 kV	BIHARSHARIFF-VARANASI	2	114	73	0.1	0.0	0.1
14	220 kV	SAHUPURI-KARAMNASA	1	0	101	0.0	1.4	-1.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
17	132 kV	KARMANASA-SAHUPURI	1	0	52	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.6	66.2	-65.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1521	0	24.4	0.0	24.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1061	409	11.2	0.0	11.2
3	765 kV	JHARSUGUDA-DURG	2	124	203	0.0	0.7	-0.7
4	400 kV	JHARSUGUDA-RAIGARH	4	9	416	0.0	4.2	-4.2
5	400 kV	RANCHI-SIPAT	2	203	148	1.4	0.0	1.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	178	0.0	2.8	-2.8
7	220 kV	BUDHIPADAR-KORBA	2	63	8	0.7	0.0	0.7
					ER-WR	37.6	7.7	30.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	651	0.0	14.9	-14.9
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1989	0.0	42.5	-42.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2058	0.0	40.1	-40.1
4	400 kV	TALCHER-I/C	2	78	695	0.0	10.0	-10.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	97.4	-97.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	39	215	0.1	1.5	-1.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	140	237	0.0	1.3	-1.3
3	220 kV	ALIPURDUAR-SALAKATI	2	17	59	0.0	0.5	-0.5
					ER-NER	0.1	3.3	-3.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.9	-16.9
					NER-NR	0.0	16.9	-16.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3018	0.0	37.8	-37.8
2	HVDC	VINDHYACHAL B/B	-	228	0	2.0	0.0	2.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1451	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	341	1517	0.2	19.0	-18.8
5	765 kV	GWALIOR-PHAGI	2	492	1044	1.5	11.2	-9.7
6	765 kV	JABALPUR-ORAI	2	7	759	0.0	19.7	-19.7
7	765 kV	GWALIOR-ORAI	1	537	0	8.9	0.0	8.9
8	765 kV	SATNA-ORAI	1	0	863	0.0	17.0	-17.0
9	765 kV	BANASKANTHA-CHITORGARH	2	422	1017	1.7	8.0	-6.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2626	0.0	44.0	-44.0
11	400 kV	ZERDA-KANKROLI	1	150	115	1.2	0.7	0.5
12	400 kV	ZERDA -BHINMAL	1	381	157	2.7	0.8	2.0
13	400 kV	VINDHYACHAL -RIHAND	1	949	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	317	352	2.0	2.5	-0.5
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.5	-2.5
17	220 kV	MEHGAON-AURAIYA	1	153	0	2.2	0.0	2.2
18	220 kV	MALANPUR-AURAIYA	1	118	0	1.9	0.0	1.9
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	46.5	199.3	-152.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	18.6	-18.6
2	HVDC	RAIGARH-PUGALUR	2	0	5017	0.0	92.2	-92.2
3	765 kV	SOLAPUR-RAICHUR	2	227	1729	0.1	20.0	-19.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2442	0.0	42.5	-42.5
5	400 kV	KOLHAPUR-KUDGI	2	1274	0	19.9	0.0	19.9
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	128	2.3	0.0	2.3
					WR-SR	22.3	173.3	-151.0

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 MANGDECHU HEP 4*180MW)	993	606	772	18.53
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1022	968	979	23.48
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	117	31	67	1.60
	NER	132kV GELEPHU-SALAKATI	27	2	6	0.15
	NER	132kV MOTANGA-RANGIA	62	27	39	0.93
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-3	0	30	0.73
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	485	263	366	8.79
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-815	-893	-21.44
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1435	-1201	-1337	-32.09
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-152	0	-137	-3.28

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 23-Aug-2023

Export From India (in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							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	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
Bangladesh	21.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.47
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.74

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	39.12	2.74	0.00	0.00	0.00	0.00	0.00	0.00	41.86
Nepal	0.00	0.00	8.30	0.00	0.00	0.00	0.00	0.00	8.30
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	39.12	2.74	8.30	0.00	0.00	0.00	0.00	0.00	50.16

Net from India(in MU) **-ve : Export / +ve : Import**

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	39.12	2.74	0.00	0.00	0.00	0.00	0.00	0.00	41.86
Nepal	-0.27	0.00	8.30	0.00	0.00	0.00	0.00	0.00	8.03
Bangladesh	-21.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.47
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	17.38	2.74	8.30	0.00	0.00	0.00	0.00	0.00	28.42