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: **14th** 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 13.08.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-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 13th 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: 14-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)	74350	57817	47071	23900	3147	206285
Peak Shortage (MW)	0	17	0	0	41	58
Energy Met (MU)	1715	1412	1154	554	61	4896
Hydro Gen (MU)	424	100	70	132	36	761
Wind Gen (MU)	74	242	148	-	-	464
Solar Gen (MU)*	127.41	40.77	124.27	2.28	0.73	295
Energy Shortage (MU)	0.09	0.44	0.00	0.00	0.30	0.83
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	76915	63260	54699	27103	3148	219375
Time Of Maximum Demand Met	00:08	10:29	12:49	20:38	18:46	12:51

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	0.019	0.00	0.00	1.78	1.78	87.08	11.13

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	14593	0	329.1	192.4	0.0	198	0.00
	Haryana	11799	0	249.5	185.9	-1.0	208	0.00
	Rajasthan	16350	0	347.2	109.4	-4.2	279	0.00
	Delhi	6069	0	122.8	104.8	-2.4	231	0.00
	UP	26084	0	529.7	251.5	-2.2	302	0.00
	Uttarakhand	1907	0	43.6	17.0	0.0	94	0.00
	HP	1545	0	31.8	-1.7	-0.8	81	0.00
	J&K(UT) & Ladakh(UT)	2442	0	51.6	24.9	1.0	216	0.09
	Chandigarh	320	0	6.3	6.4	-0.1	28	0.00
	Railways_NR ISTS	160	0	3.2	3.5	-0.3	23	0.00
WR	Chhattisgarh	5669	0	132.2	69.6	-1.2	412	0.44
	Gujarat	18136	0	396.1	115.5	-1.2	662	0.00
	MP	12197	0	266.2	129.3	-3.7	290	0.00
	Maharashtra	24904	0	545.1	195.1	-2.8	563	0.00
	Goa	589	0	12.6	12.4	-0.2	53	0.00
	DNHDDPDCL	1265	0	27.1	29.6	-2.5	57	0.00
	AMNSIL	896	0	20.3	8.4	0.0	256	0.00
	BALCO	520	0	12.4	12.5	-0.1	32	0.00
SR	Andhra Pradesh	11622	0	229.9	98.3	-1.1	530	0.00
	Telangana	12916	0	274.4	129.7	0.7	805	0.00
	Karnataka	13600	0	245.9	76.2	-1.6	517	0.00
	Kerala	3880	0	77.7	62.3	0.6	414	0.00
	Tamil Nadu	14606	0	316.4	143.4	-3.2	363	0.00
	Puducherry	422	0	9.5	9.1	-0.4	65	0.00
ER	Bihar	6673	0	135.4	130.1	0.0	290	0.00
	DVC	3368	0	73.3	-41.7	-0.9	243	0.00
	Jharkhand	1712	0	39.0	33.2	0.9	92	0.00
	Odisha	5639	0	120.7	39.9	-1.2	255	0.00
	West Bengal	8348	0	184.7	59.6	-2.5	107	0.00
	Sikkim	72	0	1.2	1.0	0.2	28	0.00
	Railways_ER ISTS	16	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	146	0	2.7	2.7	-0.5	5	0.00
	Assam	2148	0	40.2	32.2	0.8	198	0.00
	Manipur	192	0	2.6	2.7	-0.1	30	0.00
	Meghalaya	283	0	5.5	1.5	-0.3	36	0.30
	Mizoram	105	0	1.8	1.5	-0.3	15	0.00
	Nagaland	156	0	2.8	2.6	0.0	17	0.00
	Tripura	272	0	5.4	5.7	0.0	58	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	38.8	9.2	-25.0	-30.1
Day Peak (MW)	1932.0	399.0	-1093.0	-1379.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	293.0	-310.0	175.9	-146.5	-12.4	0.0
Actual(MU)	265.8	-304.2	190.4	-143.6	-12.3	-3.9
O/D/U/D(MU)	-27.2	5.8	14.4	3.0	0.1	-3.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1856	11991	7758	2860	305	24769	48
State Sector	5005	12066	7098	2520	152	26841	52
Total	6860	24057	14856	5380	457	51610	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	806	1372	538	625	14	3355	64
Lignite	25	11	43	0	0	80	2
Hydro	424	100	70	132	36	761	15
Nuclear	29	50	71	0	0	150	3
Gas, Naptha & Diesel	43	26	6	0	30	105	2
RES (Wind, Solar, Biomass & Others)	207	284	303	4	1	799	15
Total	1535	1843	1030	762	81	5251	100

Share of RES in total generation (%)	13.50	15.43	29.37	0.54	0.91	15.22
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.04	23.55	43.01	17.93	45.44	32.58

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.026
Based on State Max Demands	1.055

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	219375	12:51	0
Non-Solar hr	215797	0:13	235

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: 14-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	501	0.0	12.4	-12.4
2	HVDC	PUSAULI B/B	-	3	97	0.0	2.0	-2.0
3	765 kV	GAYA-VARANASI	2	404	424	0.0	3.6	-3.6
4	765 kV	SASARAM-FATEHPUR	1	75	333	0.0	4.2	-4.2
5	765 kV	GAYA-BALIA	1	0	592	0.0	8.4	-8.4
6	400 kV	PUSAULI-VARANASI	1	11	109	0.0	1.1	-1.1
7	400 kV	PUSAULI -ALLAHABAD	1	2	80	0.0	0.6	-0.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	838	0.0	15.8	-15.8
9	400 kV	PATNA-BALIA	2	0	539	0.0	10.2	-10.2
10	400 kV	NAUBATPUR-BALIA	2	0	556	0.0	10.5	-10.5
11	400 kV	BIHARSHARIFF-BALIA	2	51	281	0.0	3.6	-3.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	493	0.0	9.0	-9.0
13	400 kV	BIHARSHARIFF-VARANASI	2	164	215	0.0	1.9	-1.9
14	220 kV	SAHUPURI-KARAMNASA	1	18	119	0.0	1.6	-1.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
17	132 kV	KARMANASA-SAHUPURI	1	0	36	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.6	85.1	-84.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1980	0	31.2	0.0	31.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	776	910	3.8	0.0	3.8
3	765 kV	JHARSUGUDA-DURG	2	56	354	0.0	3.0	-3.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	456	0.0	5.9	-5.9
5	400 kV	RANCHI-SIPAT	2	186	280	0.0	0.2	-0.2
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	3.5	-3.5
7	220 kV	BUDHIPADAR-KORBA	2	122	3	0.2	0.0	0.2
					ER-WR	35.2	12.6	22.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	546	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1985	0.0	41.5	-41.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2554	0.0	47.0	-47.0
4	400 kV	TALCHER-I/C	2	0	1153	0.0	19.7	-19.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	100.9	-100.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	113	191	0.0	1.3	-1.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	235	271	0.0	1.0	-1.0
3	220 kV	ALIPURDUAR-SALAKATI	2	28	73	0.0	0.7	-0.7
					ER-NER	0.0	2.9	-2.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.7	-16.7
					NER-NR	0.0	16.7	-16.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2774	0.0	41.3	-41.3
2	HVDC	VINDHYACHAL B/B	-	439	0	11.0	0.0	11.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1450	0.0	20.1	-20.1
4	765 kV	GWALIOR-AGRA	2	159	2097	0.1	25.0	-24.9
5	765 kV	GWALIOR-PHAGI	2	418	1239	1.2	13.1	-11.9
6	765 kV	JABALPUR-ORAI	2	0	1027	0.0	24.4	-24.4
7	765 kV	GWALIOR-ORAI	1	541	0	9.5	0.0	9.5
8	765 kV	SATNA-ORAI	1	0	994	0.0	18.8	-18.8
9	765 kV	BANASKANTHA-CHITORGARH	2	0	1714	0.0	19.7	-19.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	2911	0.0	47.7	-47.7
11	400 kV	ZERDA-KANKROLI	1	88	238	0.2	1.6	-1.4
12	400 kV	ZERDA -BHINMAL	1	395	270	3.3	1.1	2.1
13	400 kV	VINDHYACHAL -RIHAND	1	952	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUJALPUR	2	211	518	0.6	3.8	-3.2
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	160	0	2.5	0.0	2.5
18	220 kV	MALANPUR-AURAIYA	1	123	0	1.7	0.0	1.7
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	51.5	219.1	-167.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1003	0.0	11.4	-11.4
2	HVDC	RAIGARH-PUGALUR	2	0	5518	0.0	68.5	-68.5
3	765 kV	SOLAPUR-RAICHUR	2	848	1604	1.7	11.7	-10.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2817	0.0	44.3	-44.3
5	400 kV	KOLHAPUR-KUDGI	2	1209	0	19.0	0.0	19.0
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	47	0.0	0.4	-0.4
8	220 kV	XELDEM-AMBEWADI	1	0	109	2.1	0.0	2.1
					WR-SR	22.8	136.4	-113.6

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 MANGDECHU HEP 4*180MW)	592	399	458	10.99
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1056	970	989	23.73
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	212	2	104	2.51
	NER	132kV GELEPHU-SALAKATI	22	9	16	0.38
	NER	132kV MOTANGA-RANGIA	66	31	48	1.14
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-66	0	12	0.28
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	465	220	370	8.89
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-941	-815	-906	-21.75
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1379	-1182	-1255	-30.13
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-152	0	-134	-3.22

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 14-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	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Bangladesh	21.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.75
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.78

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	35.90	2.63	0.00	0.00	0.00	0.00	0.00	0.00	38.53
Nepal	0.00	0.00	9.44	0.00	0.00	0.00	0.00	0.00	9.44
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	35.90	2.63	9.44	0.00	0.00	0.00	0.00	0.00	47.97

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	35.90	2.63	0.00	0.00	0.00	0.00	0.00	0.00	38.53
Nepal	-0.03	0.00	9.44	0.00	0.00	0.00	0.00	0.00	9.41
Bangladesh	-21.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.75
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	14.12	2.63	9.44	0.00	0.00	0.00	0.00	0.00	26.19