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: 21th 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 20.08.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20th 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: 21-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)	73577	55903	43797	25346	3206	201829
Peak Shortage (MW)	1292	0	0	377	35	1704
Energy Met (MU)	1715	1363	1103	579	65	4825
Hydro Gen (MU)	415	106	66	139	33	759
Wind Gen (MU)	9	138	178	-	-	325
Solar Gen (MU)*	104.05	30.41	119.13	2.33	0.96	257
Energy Shortage (MU)	17.37	0.49	0.02	2.16	1.73	21.77
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	75993	62310	52277	26896	3306	214773
Time Of Maximum Demand Met	14:20	09:49	11:57	22:29	18:46	11:56

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	0.029	0.00	0.39	4.35	4.74	82.64	12.61

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	14430	0	323.4	197.3	0.0	243	0.00
	Haryana	11332	0	246.6	186.6	-1.5	176	1.41
	Rajasthan	15462	0	325.2	134.5	-7.0	317	3.48
	Delhi	6745	0	132.8	114.7	-1.4	154	0.00
	UP	25888	240	548.1	268.8	1.8	747	12.18
	Uttarakhand	2111	0	46.5	19.9	0.8	189	0.07
	HP	1497	0	31.0	-4.2	-0.3	105	0.23
	J&K(UT) & Ladakh(UT)	2475	0	51.4	26.7	-1.1	188	0.00
	Chandigarh	324	0	6.6	6.7	-0.1	29	0.00
	Railways_NR ISTS	159	0	3.2	3.3	-0.1	42	0.00
WR	Chhattisgarh	4831	0	109.2	50.3	-1.8	188	0.00
	Gujarat	20547	0	426.8	174.5	0.0	1439	0.00
	MP	10878	0	235.8	107.1	-2.6	551	0.00
	Maharashtra	23620	0	518.9	188.6	-4.7	691	0.49
	Goa	579	0	12.0	11.6	0.0	80	0.00
	DNHDDPDCL	1275	0	29.5	29.5	0.0	44	0.00
	AMNSIL	831	0	18.6	7.2	-0.4	228	0.00
	BALCO	520	0	12.4	12.5	-0.1	3	0.00
SR	Andhra Pradesh	11040	0	225.3	72.5	0.8	575	0.00
	Telangana	10714	0	209.7	86.3	1.2	1101	0.00
	Karnataka	12775	0	236.3	74.4	-0.3	744	0.00
	Kerala	3846	0	76.7	59.7	1.9	271	0.00
	Tamil Nadu	15340	0	344.9	139.6	0.2	708	0.00
	Puducherry	434	10	9.6	8.4	0.5	103	0.02
ER	Bihar	7059	74	150.0	148.1	-3.6	531	1.29
	DVC	3188	0	73.9	-40.5	-0.6	231	0.00
	Jharkhand	1822	0	38.9	32.5	1.3	231	0.87
	Odisha	5043	0	115.2	38.6	-2.8	250	0.00
	West Bengal	9545	0	199.7	78.8	-2.1	185	0.00
	Sikkim	55	0	0.8	0.9	-0.1	8	0.00
	Railways_ER ISTS	22	0	0.1	0.2	0.0	13	0.00
NER	Arunachal Pradesh	163	0	2.8	2.5	-0.2	35	0.00
	Assam	2200	0	43.6	34.9	1.6	234	1.28
	Manipur	186	0	2.7	2.7	-0.1	15	0.00
	Meghalaya	303	25	5.6	0.8	-0.1	71	0.44
	Mizoram	105	0	1.9	1.5	-0.3	6	0.00
	Nagaland	160	0	3.0	2.7	-0.1	15	0.01
	Tripura	319	0	5.8	6.1	0.2	59	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	42.0	8.6	-24.7	-32.5
Day Peak (MW)	1939.3	429.0	-1074.0	-1424.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	384.7	-326.1	76.5	-107.8	-6.4	20.9
Actual(MU)	366.8	-337.5	86.2	-113.3	-6.2	-4.0
O/D/U/D(MU)	-17.9	-11.4	9.7	-5.5	0.2	-24.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3668	12056	8418	4070	255	28466	49
State Sector	6130	12149	7558	3280	157	29273	51
Total	9798	24205	15976	7350	411	57739	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	824	1495	598	616	17	3550	68
Lignite	26	8	41	0	0	76	1
Hydro	415	106	66	139	33	759	15
Nuclear	29	50	53	0	0	132	3
Gas, Naptha & Diesel	25	27	6	0	28	86	2
RES (Wind, Solar, Biomass & Others)	119	170	319	4	1	613	12
Total	1438	1857	1084	759	78	5217	100

Share of RES in total generation (%)	8.26	9.18	29.46	0.48	1.23	11.75
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.14	17.58	40.42	18.81	42.84	28.83

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.027
Based on State Max Demands	1.060

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	214773	11:56	575
Non-Solar hr	203804	19:31	2353

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: 21-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	12.2	-12.2
2	HVDC	PUSAULI B/B	-	2	95	0.0	2.2	-2.2
3	765 kV	GAYA-VARANASI	2	0	401	0.0	4.9	-4.9
4	765 kV	SASARAM-FATEHPUR	1	0	247	0.0	3.7	-3.7
5	765 kV	GAYA-BALIA	1	0	604	0.0	10.5	-10.5
6	400 kV	PUSAULI-VARANASI	1	11	83	0.0	0.9	-0.9
7	400 kV	PUSAULI -ALLAHABAD	1	0	89	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	762	0.0	15.4	-15.4
9	400 kV	PATNA-BALIA	2	0	457	0.0	8.0	-8.0
10	400 kV	NAUBATPUR-BALIA	2	0	533	0.0	10.5	-10.5
11	400 kV	BIHARSHARIFF-BALIA	2	0	236	0.0	4.5	-4.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	413	0.0	8.4	-8.4
13	400 kV	BIHARSHARIFF-VARANASI	2	18	175	0.0	2.1	-2.1
14	220 kV	SAHUPURI-KARAMNASA	1	0	118	0.0	1.8	-1.8
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	65	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.6	86.4	-85.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1596	0	21.0	0.0	21.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1218	328	13.8	0.0	13.8
3	765 kV	JHARSUGUDA-DURG	2	141	221	0.0	0.9	-0.9
4	400 kV	JHARSUGUDA-RAIGARH	4	48	331	0.0	3.2	-3.2
5	400 kV	RANCHI-SIPAT	2	239	169	2.1	0.0	2.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	176	0.0	2.7	-2.7
7	220 kV	BUDHIPADAR-KORBA	2	60	4	0.7	0.0	0.7
					ER-WR	37.6	6.8	30.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	390	0.0	8.7	-8.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1643	0.0	36.0	-36.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2625	0.0	34.3	-34.3
4	400 kV	TALCHER-I/C	2	123	574	0.0	6.7	-6.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	79.0	-79.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	234	0.0	3.2	-3.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	338	0.0	4.6	-4.6
3	220 kV	ALIPURDUAR-SALAKATI	2	0	82	0.0	1.2	-1.2
					ER-NER	0.0	8.9	-8.9
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	5042	0.0	84.3	-84.3
2	HVDC	VINDHYACHAL B/B	-	357	0	1.4	0.0	1.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	978	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	0	2313	0.0	35.8	-35.8
5	765 kV	GWALIOR-PHAGI	2	0	1313	0.0	23.9	-23.9
6	765 kV	JABALPUR-ORAI	2	0	1126	0.0	35.7	-35.7
7	765 kV	GWALIOR-ORAI	1	668	0	13.5	0.0	13.5
8	765 kV	SATNA-ORAI	1	0	1052	0.0	21.1	-21.1
9	765 kV	BANASKANTHA-CHITORGARH	2	961	1082	4.0	9.8	-5.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	3462	0.0	60.9	-60.9
11	400 kV	ZERDA-KANKROLI	1	172	201	0.8	1.6	-0.8
12	400 kV	ZERDA -BHINMAL	1	255	382	1.1	3.5	-2.5
13	400 kV	VINDHYACHAL -RIHAND	1	944	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUJALPUR	2	0	690	0.0	9.1	-9.1
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	107	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	76	9	0.7	0.0	0.7
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	44.3	312.4	-268.1
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	305	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	2004	0.0	29.5	-29.5
3	765 kV	SOLAPUR-RAICHUR	2	1471	2294	9.4	6.8	2.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2795	0.0	27.0	-27.0
5	400 kV	KOLHAPUR-KUDGI	2	1216	0	20.6	0.0	20.6
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	115	2.2	0.0	2.2
					WR-SR	32.2	70.5	-38.3

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)	624	574	593	14.23
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1020	982	983	23.60
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	132	72	95	2.28
	NER	132kV GELEPHU-SALAKATI	29	21	25	0.60
	NER	132kV MOTANGA-RANGIA	68	43	53	1.26
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-22	0	11	0.26
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	451	226	346	8.30
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-923	-812	-895	-21.49
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1424	-1247	-1355	-32.53
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-151	0	-135	-3.24

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 21-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	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Bangladesh	21.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.53
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.61

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	39.78	2.49	0.00	0.00	0.00	0.00	0.00	0.00	42.27
Nepal	0.00	0.00	7.85	0.00	0.00	0.00	0.00	0.00	7.85
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	39.78	2.49	7.85	0.00	0.00	0.00	0.00	0.00	50.12

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	39.78	2.49	0.00	0.00	0.00	0.00	0.00	0.00	42.27
Nepal	-0.08	0.00	7.85	0.00	0.00	0.00	0.00	0.00	7.77
Bangladesh	-21.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.53
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	18.17	2.49	7.85	0.00	0.00	0.00	0.00	0.00	28.51