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: 26th July 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 25.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 25-जुलाई-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 25rd July 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:** **26-Jul-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)	73381	56624	42624	26748	3399	202776
Peak Shortage (MW)	335	471	0	523	31	1360
Energy Met (MU)	1678	1294	941	619	66	4598
Hydro Gen (MU)	408	64	84	129	30	715
Wind Gen (MU)	7	123	245	-	-	374
Solar Gen (MU)*	80.37	39.78	59.97	2.41	0.97	184
Energy Shortage (MU)	1.10	1.35	0.00	3.70	0.52	6.67
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	75233	57657	43759	29132	3409	202014
Time Of Maximum Demand Met	00:00	19:43	09:18	22:31	20:06	19:51

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	0.035	0.49	0.53	4.49	5.51	79.24	15.25

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	13253	0	282.7	164.2	-3.2	1686	0.00
	Haryana	11720	0	253.4	193.2	-1.5	299	0.00
	Rajasthan	12713	0	284.7	117.3	-1.1	306	0.00
	Delhi	7220	0	147.3	133.0	-1.4	146	0.00
	UP	28553	0	563.0	285.9	5.0	417	0.01
	Uttarakhand	2239	0	49.1	27.4	0.5	86	0.46
	HP	1701	0	36.1	-1.2	3.4	229	0.06
	J&K(UT) & Ladakh(UT)	2487	0	51.2	26.2	-1.1	413	0.57
	Chandigarh	388	0	7.2	7.4	-0.2	24	0.00
	Railways_NR ISTS	173	0	3.6	3.6	0.0	29	0.00
WR	Chhattisgarh	5061	56	111.6	59.4	-1.7	425	0.71
	Gujarat	16115	0	360.2	152.7	-2.1	873	0.00
	MP	11930	0	261.5	145.0	-1.1	302	0.00
	Maharashtra	22378	0	487.0	177.6	-1.5	965	0.64
	Goa	611	0	12.3	12.2	-0.3	54	0.00
	DNHDDPDCL	1298	0	30.1	30.6	-0.5	255	0.00
	AMNSIL	889	0	19.3	10.5	-0.2	273	0.00
	BALCO	522	0	12.4	12.4	0.0	38	0.00
SR	Andhra Pradesh	8236	0	178.5	32.4	0.4	453	0.00
	Telangana	8500	0	172.8	67.7	0.3	425	0.00
	Karnataka	8425	0	172.3	24.7	-0.1	895	0.00
	Kerala	3566	0	72.1	49.9	0.3	93	0.00
	Tamil Nadu	15827	0	336.0	128.7	1.1	353	0.00
	Puducherry	432	0	9.6	8.9	0.0	28	0.00
ER	Bihar	7503	338	156.6	151.3	-0.2	259	2.71
	DVC	3687	0	78.0	-40.8	-3.4	267	0.00
	Jharkhand	1696	159	39.6	33.1	1.6	156	0.99
	Odisha	6579	0	127.7	41.1	-3.5	318	0.00
	West Bengal	10046	0	215.5	101.9	-2.5	251	0.00
	Sikkim	88	0	1.1	1.2	-0.1	29	0.00
	Railways_ER ISTS	15	0	0.1	0.2	0.0	6	0.00
NER	Arunachal Pradesh	150	0	2.8	2.3	0.2	67	0.00
	Assam	2344	0	44.7	36.3	0.7	159	0.00
	Manipur	194	0	2.7	2.6	0.1	54	0.00
	Meghalaya	308	0	5.3	0.6	-0.2	60	0.52
	Mizoram	112	0	1.8	1.6	-0.2	18	0.00
	Nagaland	160	0	2.9	2.6	-0.1	15	0.00
	Tripura	312	0	5.6	5.5	0.0	57	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	40.4	6.0	-24.8	-17.9
Day Peak (MW)	1971.3	330.0	-1084.0	-774.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	397.9	-262.6	-36.6	-95.3	-3.5	0.0
Actual(MU)	395.6	-256.1	-52.3	-92.1	-1.6	-6.4
O/D/U/D(MU)	-2.3	6.6	-15.7	3.2	1.9	-6.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3286	11071	5938	3360	326	23981	43
State Sector	7315	13613	8273	2250	175	31626	57
Total	10601	24684	14211	5610	501	55606	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	769	1356	532	639	15	3310	67
Lignite	29	10	53	0	0	92	2
Hydro	408	64	84	129	30	715	14
Nuclear	29	52	59	0	0	140	3
Gas, Naptha & Diesel	35	19	7	0	29	90	2
RES (Wind, Solar, Biomass & Others)	94	164	327	4	1	589	12
Total	1365	1664	1061	772	75	4936	100

Share of RES in total generation (%)	6.90	9.84	30.79	0.47	1.30	11.94
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.93	16.82	44.25	17.24	41.68	29.27

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.035
Based on State Max Demands	1.076

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	199610	11:19	22
Non-Solar hr	202014	19:51	1121

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: 26-Jul-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	12.0	-12.0
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	114	692	0.0	8.6	-8.6
4	765 kV	SASARAM-FATEHPUR	1	31	355	0.0	4.6	-4.6
5	765 kV	GAYA-BALIA	1	0	688	0.0	12.1	-12.1
6	400 kV	PUSAULI-VARANASI	1	0	99	0.0	1.4	-1.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	93	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	802	0.0	15.2	-15.2
9	400 kV	PATNA-BALIA	2	0	519	0.0	9.5	-9.5
10	400 kV	NAUBATPUR-BALIA	2	0	527	0.0	9.2	-9.2
11	400 kV	BIHARSHARIFF-BALIA	2	45	223	0.0	3.8	-3.8
12	400 kV	MOTIHARI-GORAKHPUR	2	66	551	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	70	264	0.0	3.7	-3.7
14	220 kV	SAHUPURI-KARAMNASA	1	0	123	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	0.9	0.0	0.9
17	132 kV	KARMANASA-SAHUPURI	1	0	60	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.9	93.8	-92.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	860	750	4.9	0.0	4.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1888	62	24.1	0.0	24.1
3	765 kV	JHARSUGUDA-DURG	2	33	347	0.0	3.8	-3.8
4	400 kV	JHARSUGUDA-RAIGARH	4	0	517	0.0	6.8	-6.8
5	400 kV	RANCHI-SIPAT	2	446	119	3.9	0.0	3.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	145	0.0	3.1	-3.1
7	220 kV	BUDHIPADAR-KORBA	2	76	12	0.3	0.0	0.3
					ER-WR	33.2	13.7	19.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	699	0	13.7	0.0	13.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1653	0.0	34.5	-34.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2485	0.0	33.7	-33.7
4	400 kV	TALCHER-I/C	2	806	352	9.4	0.0	9.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	13.7	68.2	-54.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	14	265	0.0	3.5	-3.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	161	396	0.0	4.3	-4.3
3	220 kV	ALIPURDUAR-SALAKATI	2	12	79	0.0	1.3	-1.3
					ER-NER	0.0	9.1	-9.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.2	-12.2
					NER-NR	0.0	12.2	-12.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5043	0.0	77.5	-77.5
2	HVDC	VINDHYACHAL B/B	-	0	486	0.0	8.5	-8.5
3	HVDC	MUNDRA-MOHINDERGARH	2	0	976	0.0	13.1	-13.1
4	765 kV	GWALIOR-AGRA	2	0	2708	0.0	44.1	-44.1
5	765 kV	GWALIOR-PHAGI	2	0	1739	0.0	33.4	-33.4
6	765 kV	JABALPUR-ORAI	2	0	1284	0.0	44.1	-44.1
7	765 kV	GWALIOR-ORAI	1	711	0	13.6	0.0	13.6
8	765 kV	SATNA-ORAI	1	0	1121	0.0	23.4	-23.4
9	765 kV	BANASKANTHA-CHITORGARH	2	707	1527	1.4	15.0	-13.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	3409	0.0	56.7	-56.7
11	400 kV	ZERDA-KANKROLI	1	107	257	0.2	2.6	-2.4
12	400 kV	ZERDA -BHINMAL	1	208	376	0.7	3.2	-2.6
13	400 kV	VINDHYACHAL -RIHAND	1	956	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	0	766	0.0	10.9	-10.9
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
17	220 kV	MEHGAON-AURAIYA	1	0	0	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	0	0	0.0	0.0	0.0
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	37.7	334.7	-297.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	994	0	19.2	0.0	19.2
2	HVDC	RAIGARH-PUGALUR	2	577	1500	0.0	7.9	-7.9
3	765 kV	SOLAPUR-RAICHUR	2	2279	642	29.1	1.2	27.9
4	765 kV	WARDHA-NIZAMABAD	2	888	2028	2.4	14.0	-11.6
5	400 kV	KOLHAPUR-KUDGI	2	1736	0	31.1	0.0	31.1
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	92	1.6	0.0	1.6
					WR-SR	83.5	23.1	60.4

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)	653	409	492	11.80
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1015	0	970	23.29
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	184	111	151	3.62
	NER	132kV GELEPHU-SALAKATI	25	8	17	0.42
	NER	132kV MOTANGA-RANGIA	64	29	52	1.26
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-55	0	-26	-0.63
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	385	66	276	6.62
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-935	-782	-906	-21.75
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-775	-705	-744	-17.86
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-149	0	-129	-3.10

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 26-Jul-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	0.10	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.87
Bangladesh	21.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.74
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.84	0.00	0.77	0.00	0.00	0.00	0.00	0.00	22.61

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	38.52	1.71	0.00	0.00	0.00	0.00	0.00	0.00	40.23
Nepal	0.00	0.00	6.07	0.00	0.00	0.00	0.00	0.00	6.07
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	38.52	1.71	6.07	0.00	0.00	0.00	0.00	0.00	46.30

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	38.52	1.71	0.00	0.00	0.00	0.00	0.00	0.00	40.23
Nepal	-0.10	0.00	5.30	0.00	0.00	0.00	0.00	0.00	5.20
Bangladesh	-21.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.74
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	16.68	1.71	5.30	0.00	0.00	0.00	0.00	0.00	23.69