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: 01st 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 31.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 31-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 31st 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: 01-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)	71785	54963	47082	26938	3376	204144
Peak Shortage (MW)	210	0	0	377	17	604
Energy Met (MU)	1591	1262	1087	621	67	4628
Hydro Gen (MU)	442	81	92	131	34	780
Wind Gen (MU)	31	215	246	-	-	493
Solar Gen (MU)*	127.48	45.31	104.63	2.07	1.19	281
Energy Shortage (MU)	0.77	0.00	0.00	1.00	0.38	2.15
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	73563	56820	52200	28667	3405	206362
Time Of Maximum Demand Met	23:10	19:47	10:44	23:38	19:34	12:09

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	1.08	3.90	4.98	71.03	23.99

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	14498	0	298.2	174.3	0.9	207	0.00
	Haryana	11160	0	226.5	172.2	-0.4	257	0.00
	Rajasthan	11800	0	259.8	74.9	-4.3	379	0.00
	Delhi	6527	0	131.6	121.1	-1.2	211	0.00
	UP	26543	0	529.7	259.2	-0.7	473	0.00
	Uttarakhand	2251	0	47.4	21.0	-0.1	128	0.00
	HP	1718	0	35.3	0.1	-0.2	74	0.00
	J&K(UT) & Ladakh(UT)	2467	0	51.7	26.9	-1.0	73	0.77
	Chandigarh	367	0	7.1	7.1	0.0	30	0.00
	Railways_NR ISTS	162	0	3.3	3.5	-0.3	23	0.00
WR	Chhattisgarh	5036	0	112.6	50.6	-1.6	224	0.00
	Gujarat	15765	0	347.3	155.8	-6.1	632	0.00
	MP	11558	0	252.3	126.9	-3.6	309	0.00
	Maharashtra	21618	0	474.4	170.0	-0.1	572	0.00
	Goa	607	0	12.6	12.6	-0.1	135	0.00
	DNHDDPDCL	1283	0	29.5	29.5	0.0	54	0.00
	AMNSIL	910	0	20.4	10.3	0.2	273	0.00
	BALCO	521	0	12.4	12.5	-0.1	32	0.00
SR	Andhra Pradesh	9958	0	207.2	58.4	1.1	947	0.00
	Telangana	11109	0	215.1	99.1	-0.4	496	0.00
	Karnataka	10594	0	196.8	41.8	1.9	1120	0.00
	Kerala	3999	0	78.8	58.4	1.3	399	0.00
	Tamil Nadu	17774	0	378.8	156.7	-1.9	1046	0.00
	Puducherry	492	0	10.5	10.2	-0.4	32	0.00
ER	Bihar	7331	0	151.3	142.0	-0.7	367	0.80
	DVC	3415	0	76.5	-35.2	0.1	227	0.00
	Jharkhand	1681	0	39.8	32.6	1.9	146	0.20
	Odisha	6544	0	125.7	48.7	-2.0	374	0.00
	West Bengal	10660	0	226.6	102.0	-0.5	416	0.00
	Sikkim	71	0	1.2	1.4	-0.2	7	0.00
	Railways_ER ISTS	15	0	0.2	0.1	0.0	6	0.00
NER	Arunachal Pradesh	170	0	3.0	2.3	0.2	58	0.00
	Assam	2413	0	46.0	37.5	1.0	241	0.00
	Manipur	187	0	2.8	2.8	0.1	51	0.00
	Meghalaya	304	0	5.2	1.5	-0.1	97	0.38
	Mizoram	108	0	1.9	1.7	-0.1	11	0.00
	Nagaland	144	0	2.1	2.1	-0.2	18	0.00
	Tripura	305	0	5.8	6.0	0.2	76	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	36.4	7.0	-25.0	-18.8
Day Peak (MW)	1848.0	336.0	-1098.0	-791.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	301.6	-285.2	53.7	-63.0	-7.1	0.0
Actual(MU)	281.0	-299.2	70.8	-49.0	-3.5	0.1
O/D/U/D(MU)	-20.6	-14.0	17.1	14.1	3.6	0.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2626	10739	5848	3385	271	22869	38
State Sector	6150	16961	10288	3090	231	36719	62
Total	8776	27699	16136	6475	502	59588	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	718	1233	484	608	13	3056	62
Lignite	25	8	55	0	0	87	2
Hydro	442	81	92	131	34	780	16
Nuclear	29	50	64	0	0	143	3
Gas, Naptha & Diesel	16	16	7	0	29	67	1
RES (Wind, Solar, Biomass & Others)	165	262	376	4	1	809	16
Total	1395	1649	1077	742	78	4942	100

Share of RES in total generation (%)	11.83	15.89	34.94	0.53	1.53	16.36
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	45.60	23.84	49.37	18.14	45.87	35.04

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040
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	206362	12:09	197
Non-Solar hr	204431	19:51	170

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: 01-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	502	0.0	12.3	-12.3
2	HVDC	PUSAULI B/B	-	2	108	0.0	1.8	-1.8
3	765 kV	GAYA-VARANASI	2	766	394	0.8	0.0	0.8
4	765 kV	SASARAM-FATEHPUR	1	0	249	0.0	0.1	-0.1
5	765 kV	GAYA-BALIA	1	0	625	0.0	8.4	-8.4
6	400 kV	PUSAULI-VARANASI	1	0	140	0.0	0.0	0.0
7	400 kV	PUSAULI -ALLAHABAD	1	46	55	0.0	0.0	0.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	775	0.0	12.3	-12.3
9	400 kV	PATNA-BALIA	2	0	485	0.0	1.3	-1.3
10	400 kV	NAUBATPUR-BALIA	2	0	497	0.0	7.3	-7.3
11	400 kV	BIHARSHARIFF-BALIA	2	143	272	0.0	3.0	-3.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	489	0.0	8.0	-8.0
13	400 kV	BIHARSHARIFF-VARANASI	2	272	147	0.0	0.4	-0.4
14	220 kV	SAHUPURI-KARAMNASA	1	14	103	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	0.8	0.0	0.8
17	132 kV	KARMANASA-SAHUPURI	1	0	66	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	1.6	56.2	-54.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1381	0	20.1	0.0	20.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1724	452	23.2	0.0	23.2
3	765 kV	JHARSUGUDA-DURG	2	160	329	0.0	0.7	-0.7
4	400 kV	JHARSUGUDA-RAIGARH	4	132	353	0.0	1.8	-1.8
5	400 kV	RANCHI-SIPAT	2	430	188	2.4	0.0	2.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	134	0.0	2.3	-2.3
7	220 kV	BUDHIPADAR-KORBA	2	140	0	0.7	0.0	0.7
					ER-WR	46.4	4.8	41.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	494	0	6.7	0.0	6.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1635	0.0	36.6	-36.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	3093	0.0	42.2	-42.2
4	400 kV	TALCHER-I/C	2	628	237	5.5	0.0	5.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	6.7	78.8	-72.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	86	337	0.1	3.1	-3.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	310	483	0.0	2.0	-2.0
3	220 kV	ALIPURDUAR-SALAKATI	2	8	111	0.0	1.2	-1.2
					ER-NER	0.1	6.3	-6.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
					NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5044	0.0	83.7	-83.7
2	HVDC	VINDHYACHAL B/B	-	0	486	0.0	5.4	-5.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	974	0.0	8.3	-8.3
4	765 kV	GWALIOR-AGRA	2	0	2385	0.0	29.8	-29.8
5	765 kV	GWALIOR-PHAGI	2	621	1258	2.4	12.7	-10.4
6	765 kV	JABALPUR-ORAI	2	0	985	0.0	23.3	-23.3
7	765 kV	GWALIOR-ORAI	1	778	0	13.2	0.0	13.2
8	765 kV	SATNA-ORAI	1	0	801	0.0	15.5	-15.5
9	765 kV	BANASKANTHA-CHITORGARH	2	639	1252	1.3	13.2	-11.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3180	0.0	55.9	-55.9
11	400 kV	ZERDA-KANKROLI	1	173	190	0.6	1.3	-0.7
12	400 kV	ZERDA -BHINMAL	1	432	250	2.7	1.1	1.5
13	400 kV	VINDHYACHAL -RIHAND	1	952	0	20.3	0.0	20.3
14	400 kV	RAPP-SHUJALPUR	2	269	576	1.6	3.8	-2.2
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
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	41.9	256.2	-214.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	700	317	4.6	5.0	-0.4
2	HVDC	RAIGARH-PUGALUR	2	0	3503	0.0	38.8	-38.8
3	765 kV	SOLAPUR-RAICHUR	2	1388	1863	7.3	6.3	1.0
4	765 kV	WARDHA-NIZAMABAD	2	0	3263	0.0	32.1	-32.1
5	400 kV	KOLHAPUR-KUDGI	2	1465	0	25.1	0.0	25.1
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	107	2.1	0.0	2.1
					WR-SR	39.1	82.1	-43.1

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)	602	-15	390	9.35
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1065	981	1012	24.30
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	223	141	181	4.34
	NER	132kV GELEPHU-SALAKATI	-29	-7	-15	-0.37
	NER	132kV MOTANGA-RANGIA	-66	-35	-50	-1.21
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-51	0	-11	-0.26
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	387	187	302	7.25
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-931	-794	-907	-21.77
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-791	-726	-784	-18.81
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-167	0	-137	-3.28

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 01-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	21.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.69

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	37.38	1.89	0.00	0.00	0.00	0.00	0.00	0.00	39.27
Nepal	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	7.20
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	37.38	1.89	7.20	0.00	0.00	0.00	0.00	0.00	46.47

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	37.38	1.89	0.00	0.00	0.00	0.00	0.00	0.00	39.27
Nepal	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	7.20
Bangladesh	-21.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	15.69	1.89	7.20	0.00	0.00	0.00	0.00	0.00	24.78