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: 03rd October 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 02.10.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 02-ऑक्टोबर -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 02nd October 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: 03-Oct-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)	59602	58555	43735	23549	3397	188838
Peak Shortage (MW)	165	0	0	567	0	732
Energy Met (MU)	1335	1305	1039	501	64	4245
Hydro Gen (MU)	213	72	63	113	23	486
Wind Gen (MU)	4	62	158	-	-	225
Solar Gen (MU)*	131.70	60.60	95.14	1.69	1.05	290
Energy Shortage (MU)	1.98	0.00	0.00	1.50	0.00	3.48
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	60720	61007	49868	23870	3276	190972
Time Of Maximum Demand Met	19:24	18:55	10:49	18:18	18:08	19:16

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	0.028	0.00	0.02	4.74	4.77	82.93	12.30

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	11211	0	230.6	123.1	0.2	681	0.00
	Haryana	7770	0	173.5	122.1	-2.2	453	0.00
	Rajasthan	13002	0	284.2	72.8	-4.0	328	0.00
	Delhi	4600	0	89.5	78.5	-1.8	135	0.00
	UP	22003	0	436.5	201.4	-1.6	1143	0.00
	Uttarakhand	1853	0	39.4	21.8	0.5	195	0.00
	HP	1387	0	27.4	10.5	-0.8	138	0.09
	J&K(UT) & Ladakh(UT)	2328	138	46.1	31.9	1.3	276	1.89
	Chandigarh	226	0	4.5	4.9	-0.4	30	0.00
	Railways_NR ISTS	181	0	3.7	3.6	0.1	80	0.00
WR	Chhattisgarh	4425	0	100.4	46.9	-2.3	155	0.00
	Gujarat	19079	0	399.5	182.8	-0.4	573	0.00
	MP	11972	0	254.3	139.9	-5.4	444	0.00
	Maharashtra	22591	0	481.6	192.3	-0.7	431	0.00
	Goa	614	0	10.3	10.3	-0.6	47	0.00
	DNHDDPDCL	1151	0	26.6	27.1	-0.5	32	0.00
	AMNSIL	853	0	19.5	10.8	-0.3	254	0.00
	BALCO	521	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	9715	0	207.3	58.1	-0.7	595	0.00
	Telangana	11861	0	235.2	113.6	0.4	776	0.00
	Karnataka	11643	0	214.4	74.9	2.4	1586	0.00
	Kerala	3631	0	71.0	48.2	0.7	221	0.00
	Tamil Nadu	14473	0	302.7	146.4	-1.2	815	0.00
	Puducherry	397	0	8.9	8.7	-0.5	14	0.00
ER	Bihar	5435	567	111.4	104.0	-3.0	327	1.50
	DVC	3201	0	68.1	-36.0	1.0	597	0.00
	Jharkhand	1520	0	29.7	21.0	-1.9	169	0.00
	Odisha	5652	0	119.0	56.0	-2.6	342	0.00
	West Bengal	8116	0	172.0	55.0	-2.2	295	0.00
	Sikkim	62	0	0.9	1.0	-0.1	12	0.00
	Railways_ER ISTS	18	0	0.2	0.2	0.0	8	0.00
NER	Arunachal Pradesh	164	0	3.0	2.7	0.0	64	0.00
	Assam	2258	0	42.2	32.9	1.4	190	0.00
	Manipur	199	0	2.8	2.8	0.0	59	0.00
	Meghalaya	338	0	5.8	4.4	-0.2	39	0.00
	Mizoram	118	0	1.8	0.9	-0.2	60	0.00
	Nagaland	166	0	3.0	2.6	-0.1	20	0.00
	Tripura	299	0	5.8	5.9	0.0	60	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	25.4	13.2	-25.3	-23.8
Day Peak (MW)	1369.0	559.0	-1089.0	-1329.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	144.0	-193.8	70.0	-153.2	1.4	-131.7
Actual(MU)	258.6	-207.4	90.2	-157.7	6.2	-10.1
O/D/U/D(MU)	114.6	-13.5	20.2	-4.5	4.8	121.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4659	10374	7768	1470	505	24775	49
State Sector	5651	9942	6642	3690	121	26046	51
Total	10310	20316	14410	5160	626	50821	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	670	1325	565	609	13	3181	70
Lignite	29	20	38	0	0	87	2
Hydro	213	72	63	113	23	486	11
Nuclear	22	54	76	0	0	152	3
Gas, Naptha & Diesel	13	31	6	0	28	78	2
RES (Wind, Solar, Biomass & Others)	143	124	281	3	1	552	12
Total	1090	1625	1029	726	65	4535	100

Share of RES in total generation (%)	12.39	7.63	27.31	0.47	1.62	12.01
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	34.69	15.38	40.83	16.10	37.55	25.96

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040
Based on State Max Demands	1.073

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	186259	11:07	176
Non-Solar hr	190972	19:16	732

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: 03-Oct-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	1303	0.0	29.7	-29.7
2	HVDC	PUSAULI B/B	-	2	97	0.0	2.2	-2.2
3	765 kV	GAYA-VARANASI	2	331	871	0.0	8.8	-8.8
4	765 kV	SASARAM-FATEHPUR	1	0	531	0.0	6.7	-6.7
5	765 kV	GAYA-BALIA	1	0	781	0.0	11.7	-11.7
6	400 kV	PUSAULI-VARANASI	1	66	69	0.0	0.5	-0.5
7	400 kV	PUSAULI -ALLAHABAD	1	0	111	0.0	1.7	-1.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	913	0.0	12.5	-12.5
9	400 kV	PATNA-BALIA	2	0	596	0.0	8.9	-8.9
10	400 kV	NAUBATPUR-BALIA	2	0	633	0.0	8.7	-8.7
11	400 kV	BIHARSHARIFF-BALIA	2	80	362	0.0	4.1	-4.1
12	400 kV	MOTIHARI-GORAKHPUR	2	0	551	0.0	7.1	-7.1
13	400 kV	BIHARSHARIFF-VARANASI	2	142	396	0.0	4.1	-4.1
14	220 kV	SAHUPURI-KARAMNASA	1	4	136	0.0	2.0	-2.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.3	0.0	0.3
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.3	108.6	-108.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1221	292	10.3	0.0	10.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	887	149	13.1	0.0	13.1
3	765 kV	JHARSUGUDA-DURG	2	4	467	0.0	5.9	-5.9
4	400 kV	JHARSUGUDA-RAIGARH	4	144	428	0.0	3.6	-3.6
5	400 kV	RANCHI-SIPAT	2	222	170	1.3	0.0	1.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	164	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	105	10	0.9	0.0	0.9
					ER-WR	25.6	11.1	14.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	392	0.0	8.2	-8.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	39.7	-39.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2479	0.0	41.5	-41.5
4	400 kV	TALCHER-I/C	2	270	651	1.7	0.0	1.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	89.4	-89.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	511	0.0	9.3	-9.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	384	0.0	5.4	-5.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	115	0.0	1.9	-1.9
					ER-NER	0.0	16.6	-16.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	513	0.0	12.3	-12.3
					NER-NR	0.0	12.3	-12.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1510	0.0	36.1	-36.1
2	HVDC	VINDHYACHAL B/B	-	45	0	1.2	0.0	1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	788	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	1718	0.0	25.8	-25.8
5	765 kV	GWALIOR-PHAGI	2	227	1423	0.5	20.3	-19.9
6	765 kV	JABALPUR-ORAI	2	0	972	0.0	30.1	-30.1
7	765 kV	GWALIOR-ORAI	1	683	0	11.5	0.0	11.5
8	765 kV	SATNA-ORAI	1	0	987	0.0	19.6	-19.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1359	268	12.7	0.0	12.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	2514	0.0	44.7	-44.7
11	400 kV	ZERDA-KANKROLI	1	230	68	2.3	0.2	2.1
12	400 kV	ZERDA -BHINMAL	1	511	191	2.8	0.0	2.8
13	400 kV	VINDHYACHAL -RIHAND	1	964	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	244	468	0.0	3.3	-3.3
15	220 kV	BHANPURA-RANPUR	1	0	93	0.0	1.7	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
17	220 kV	MEHGAON-AURAIYA	1	102	0	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	72	0	2.4	0.0	2.4
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	55.5	203.5	-147.9
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	1501	0.0	48.6	-48.6
3	765 kV	SOLAPUR-RAICHUR	2	1293	1151	8.5	4.0	4.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2338	0.0	15.0	-15.0
5	400 kV	KOLHAPUR-KUDGI	2	1211	0	20.5	0.0	20.5
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	112	1.9	0.0	1.9
					WR-SR	30.9	74.8	-43.9

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)	327	226	252	6.05
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	900	583	712	17.09
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	68	-38	34	0.81
	NER	132kV GELEPHU-SALAKATI	21	5	12	0.29
	NER	132kV MOTANGA-RANGIA	64	35	49	1.18
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.29
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	610	459	539	12.94
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-828	-916	-21.99
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1330	-559	-993	-23.84
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-160	0	-140	-3.36

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 03-Oct-2023

Export From India (in MU)

Country	GNA (ISGS/PPA)	T-GNA							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	0.10	0.00	0.00	0.00	0.00	0.00	0.10
Bangladesh	4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.84
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	4.84	0.00	0.10	0.00	0.00	0.00	0.00	0.00	4.94

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	24.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.62
Nepal	0.00	0.00	11.01	0.00	0.00	0.05	0.00	0.00	11.06
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	24.62	0.00	11.01	0.00	0.00	0.05	0.00	0.00	35.68

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

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	24.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.62
Nepal	0.00	0.00	10.90	0.00	0.00	0.05	0.00	0.00	10.95
Bangladesh	-4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-4.84
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	19.78	0.00	10.90	0.00	0.00	0.05	0.00	0.00	30.73