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: 10th 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 09.10.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-अक्टूबर-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 09th 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: 10-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)	60787	64571	48151	24383	2928	200820
Peak Shortage (MW)	3055	367	1605	1654	30	6711
Energy Met (MU)	1422	1472	1226	560	55	4735
Hydro Gen (MU)	199	64	101	81	38	482
Wind Gen (MU)	44	76	23	-	-	143
Solar Gen (MU)*	133.09	66.57	110.63	5.36	0.87	317
Energy Shortage (MU)	28.98	1.43	6.77	12.12	0.29	49.59
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	67013	68058	61730	25585	3077	219781
Time Of Maximum Demand Met	12:46	15:40	12:19	19:01	18:01	11:43

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	0.097	1.69	4.62	12.79	19.10	67.84	13.07

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	10245	0	214.8	87.9	-0.4	266	0.00
	Haryana	9537	213	204.2	140.7	2.2	361	8.42
	Rajasthan	14639	0	307.5	77.0	-5.2	138	0.00
	Delhi	5500	0	114.6	88.4	-0.3	141	0.00
	UP	21891	0	447.7	172.8	-0.9	1618	18.43
	Uttarakhand	2259	0	43.8	27.9	0.8	189	0.63
	HP	1746	0	34.8	17.5	1.8	198	0.01
	J&K(UT) & Ladakh(UT)	2232	206	46.3	30.9	4.8	525	1.49
	Chandigarh	265	0	5.2	4.6	0.6	75	0.00
	Railways_NR ISTS	165	0	3.3	2.9	0.5	52	0.00
WR	Chhattisgarh	5139	10	116.9	61.9	2.2	469	1.37
	Gujarat	20787	0	413.1	143.2	-1.1	792	0.00
	MP	13034	0	284.2	162.9	-2.2	778	0.00
	Maharashtra	26620	0	582.8	200.4	-3.9	816	0.00
	Goa	682	40	14.5	11.9	2.1	118	0.06
	DNHDDPDCL	1302	0	29.7	29.6	0.1	31	0.00
	AMNSIL	869	0	18.0	4.6	0.2	280	0.00
	BALCO	522	0	12.4	12.6	-0.2	3	0.00
SR	Andhra Pradesh	12381	0	242.3	124.0	3.7	910	0.00
	Telangana	14898	0	278.4	146.1	3.7	1681	0.00
	Karnataka	15403	0	256.5	91.0	4.8	1751	6.77
	Kerala	4191	0	84.1	57.5	1.1	287	0.00
	Tamil Nadu	16741	0	354.9	207.0	0.4	724	0.00
	Puducherry	458	0	10.2	9.8	-0.3	40	0.00
ER	Bihar	6046	388	126.1	114.0	3.2	649	10.77
	DVC	3370	0	73.0	-41.5	0.1	305	0.00
	Jharkhand	1535	192	34.1	24.4	-2.2	144	1.35
	Odisha	5350	0	123.8	43.3	0.2	374	0.00
	West Bengal	9367	0	201.8	85.8	2.6	611	0.00
	Sikkim	73	0	0.9	1.0	-0.1	22	0.00
	Railways_ER ISTS	14	0	0.1	0.1	0.0	0	0.00
NER	Arunachal Pradesh	140	0	2.5	2.4	-0.2	15	0.00
	Assam	1920	0	34.6	25.7	0.1	157	0.00
	Manipur	196	0	2.6	2.8	-0.2	22	0.00
	Meghalaya	294	30	5.4	1.3	-0.2	116	0.29
	Mizoram	129	0	1.9	1.1	-0.3	22	0.00
	Nagaland	157	0	2.7	2.5	-0.2	8	0.00
	Tripura	303	0	5.3	5.5	-0.2	31	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	30.9	14.4	-24.4	-12.3
Day Peak (MW)	1601.0	579.0	-1082.0	-525.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	240.8	-315.1	207.4	-109.5	-23.7	0.0
Actual(MU)	219.8	-332.3	233.8	-103.1	-22.0	-3.7
O/D/U/D(MU)	-21.0	-17.2	26.3	6.5	1.7	-3.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2797	8117	6238	3746	355	21252	47
State Sector	5481	7863	6816	3210	129	23499	53
Total	8277	15980	13054	6956	484	44750	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	809	1564	706	641	17	3738	73
Lignite	22	14	31	0	0	67	1
Hydro	199	64	101	81	38	482	9
Nuclear	24	53	68	0	0	146	3
Gas, Naptha & Diesel	52	92	6	0	29	179	4
RES (Wind, Solar, Biomass & Others)	182	144	164	7	1	498	10
Total	1288	1933	1077	729	85	5111	100

Share of RES in total generation (%)	14.13	7.45	15.22	0.92	1.05	9.73
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.47	13.54	30.94	11.99	45.57	22.03

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.025
Based on State Max Demands	1.048

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	219781	11:43	118
Non-Solar hr	204493	18:49	6203

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: 10-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	502	0.0	12.0	-12.0
2	HVDC	PUSAULI B/B	-	0	95	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	290	334	0.0	0.2	-0.2
4	765 kV	SASARAM-FATEHPUR	1	0	310	0.0	5.2	-5.2
5	765 kV	GAYA-BALIA	1	0	429	0.0	7.9	-7.9
6	400 kV	PUSAULI-VARANASI	1	0	74	0.0	1.1	-1.1
7	400 kV	PUSAULI -ALLAHABAD	1	0	76	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	593	0.0	8.5	-8.5
9	400 kV	PATNA-BALIA	2	0	327	0.0	5.4	-5.4
10	400 kV	NAUBATPUR-BALIA	2	0	334	0.0	5.0	-5.0
11	400 kV	BIHARSHARIFF-BALIA	2	109	172	0.0	1.1	-1.1
12	400 kV	MOTIHARI-GORAKHPUR	2	0	290	0.0	4.2	-4.2
13	400 kV	BIHARSHARIFF-VARANASI	2	111	144	0.0	0.4	-0.4
14	220 kV	SAHUPURI-KARAMNASA	1	0	73	0.0	1.2	-1.2
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
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	0.6	55.9	-55.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	882	37	10.3	0.0	10.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	922	248	7.9	0.0	7.9
3	765 kV	JHARSUGUDA-DURG	2	0	342	0.0	5.6	-5.6
4	400 kV	JHARSUGUDA-RAIGARH	4	29	329	0.0	3.3	-3.3
5	400 kV	RANCHI-SIPAT	2	218	97	1.0	0.0	1.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	178	0.0	2.9	-2.9
7	220 kV	BUDHIPADAR-KORBA	2	98	35	0.8	0.0	0.8
					ER-WR	20.1	11.8	8.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	560	0.0	12.7	-12.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1993	0.0	46.5	-46.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2699	0.0	49.7	-49.7
4	400 kV	TALCHER-I/C	2	246	170	0.0	1.4	-1.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	108.9	-108.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	235	224	2.0	0.7	1.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	417	194	4.9	0.0	4.9
3	220 kV	ALIPURDUAR-SALAKATI	2	74	51	0.5	0.0	0.5
					ER-NER	7.4	0.7	6.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	705	0.0	17.0	-17.0
					NER-NR	0.0	17.0	-17.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2509	0.0	58.0	-58.0
2	HVDC	VINDHYACHAL B/B	-	46	0	1.2	0.0	1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1727	0.0	43.5	-43.5
4	765 kV	GWALIOR-AGRA	2	0	1052	0.0	15.7	-15.7
5	765 kV	GWALIOR-PHAGI	2	664	826	3.2	9.2	-6.0
6	765 kV	JABALPUR-ORAI	2	0	555	0.0	16.7	-16.7
7	765 kV	GWALIOR-ORAI	1	562	0	10.0	0.0	10.0
8	765 kV	SATNA-ORAI	1	0	813	0.0	17.4	-17.4
9	765 kV	BANASKANTHA-CHITORGARH	2	998	289	5.6	0.0	5.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	2510	0.0	42.9	-42.9
11	400 kV	ZERDA-KANKROLI	1	184	44	1.4	0.1	1.3
12	400 kV	ZERDA -BHINMAL	1	591	119	4.3	0.0	4.3
13	400 kV	VINDHYACHAL -RIHAND	1	953	0	22.5	0.0	22.5
14	400 kV	RAPP-SHUJALPUR	2	398	152	1.9	0.0	1.9
15	220 kV	BHANPURA-RANPUR	1	0	96	0.0	1.4	-1.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.5	-2.5
17	220 kV	MEHGAON-AURAIYA	1	154	0	2.8	0.0	2.8
18	220 kV	MALANPUR-AURAIYA	1	116	0	2.0	0.0	2.0
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	54.9	207.3	-152.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1008	0.0	23.7	-23.7
2	HVDC	RAIGARH-PUGALUR	2	0	6017	0.0	107.4	-107.4
3	765 kV	SOLAPUR-RAICHUR	2	16	1791	0.0	19.3	-19.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2608	0.0	47.7	-47.7
5	400 kV	KOLHAPUR-KUDGI	2	1416	0	23.7	0.0	23.7
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	127	2.4	0.0	2.4
					WR-SR	26.1	198.1	-172.0

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)	473	263	349	8.39
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1024	765	848	20.35
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	55	8	33	0.80
	NER	132kV GELEPHU-SALAKATI	13	1	9	0.22
	NER	132kV MOTANGA-RANGIA	54	35	45	1.09
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-6	0	49	1.18
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	585	441	551	13.23
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-923	-746	-883	-21.19
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-525	-492	-514	-12.34
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-159	0	-135	-3.24

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 10-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.14
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.14

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.30
Nepal	2.63	0.00	11.47	0.00	0.00	0.34	0.00	0.00	14.44
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	30.93	0.00	11.47	0.00	0.00	0.34	0.00	0.00	42.74

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	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.30
Nepal	2.63	0.00	11.47	0.00	0.00	0.34	0.00	0.00	14.44
Bangladesh	-21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.14
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	9.79	0.00	11.47	0.00	0.00	0.34	0.00	0.00	21.60