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: 22th 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 21.10.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-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 21th 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: 22-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)	53010	63842	47719	22200	2958	189729
Peak Shortage (MW)	0	0	0	0	7	7
Energy Met (MU)	1151	1536	1218	480	56	4441
Hydro Gen (MU)	164	47	58	46	22	338
Wind Gen (MU)	12	34	28	-	-	74
Solar Gen (MU)*	120.51	63.93	117.08	2.91	1.28	306
Energy Shortage (MU)	0.26	0.00	0.00	0.07	0.05	0.38
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55826	71219	60384	22289	3172	204716
Time Of Maximum Demand Met	18:26	15:17	11:54	18:13	17:31	10:44

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	0.030	0.00	0.35	3.34	3.69	81.51	14.80

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	7407	0	149.3	51.4	0.3	275	0.00
	Haryana	7735	0	161.4	109.1	-0.6	176	0.00
	Rajasthan	14273	0	288.8	100.4	-2.0	437	0.00
	Delhi	3812	0	76.4	58.8	-0.8	159	0.00
	UP	18558	0	345.9	122.3	-1.5	780	0.00
	Uttarakhand	1967	0	38.6	27.0	-0.1	201	0.03
	HP	1855	0	33.7	22.7	-0.4	63	0.00
	J&K(UT) & Ladakh(UT)	2447	0	49.8	37.4	4.2	399	0.23
	Chandigarh	190	0	3.5	3.8	-0.3	9	0.00
	Railways_NR ISTS	166	0	3.4	3.6	-0.2	26	0.00
WR	Chhattisgarh	5059	0	112.5	54.3	-0.9	245	0.00
	Gujarat	21689	0	436.2	182.5	-0.2	634	0.00
	MP	14333	0	305.1	192.7	-5.1	335	0.00
	Maharashtra	27651	0	607.4	269.4	-6.0	734	0.00
	Goa	734	0	15.1	13.9	0.9	88	0.00
	DNHDDPDCL	1291	0	29.5	29.6	-0.1	36	0.00
	AMNSIL	858	0	18.0	8.5	-0.1	259	0.00
	BALCO	521	0	12.4	12.5	-0.1	12	0.00
SR	Andhra Pradesh	12352	0	242.3	117.8	-2.3	353	0.00
	Telangana	13915	0	263.3	131.1	-1.6	693	0.00
	Karnataka	15411	0	274.4	107.2	0.1	587	0.00
	Kerala	4088	0	82.7	69.1	0.6	245	0.00
	Tamil Nadu	15975	0	345.2	208.2	-1.3	334	0.00
	Puducherry	424	0	9.9	9.6	-0.4	18	0.00
ER	Bihar	5482	0	109.2	99.9	-0.4	250	0.00
	DVC	3254	0	71.2	-34.2	0.5	276	0.00
	Jharkhand	1544	65	31.7	26.4	-2.6	162	0.07
	Odisha	4584	0	108.3	35.8	-1.7	365	0.00
	West Bengal	7659	0	158.8	22.5	-2.8	137	0.00
	Sikkim	73	0	1.1	0.9	0.2	32	0.00
	Railways_ER ISTS	17	0	0.2	0.2	0.0	12	0.00
NER	Arunachal Pradesh	156	0	2.7	2.2	0.3	59	0.00
	Assam	1941	0	34.9	26.7	0.1	101	0.00
	Manipur	200	0	2.7	2.6	0.1	22	0.00
	Meghalaya	332	0	5.8	3.4	-0.2	240	0.05
	Mizoram	129	0	2.0	1.5	-0.1	20	0.00
	Nagaland	152	0	2.6	2.3	0.0	22	0.00
	Tripura	308	0	5.4	4.4	-0.1	17	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	10.8	16.6	-23.9	-12.3
Day Peak (MW)	601.0	635.0	-1046.0	-524.7

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	166.7	-203.3	169.0	-130.9	-1.5	0.0
Actual(MU)	156.1	-166.5	182.9	-176.9	-1.4	-5.8
O/D/U/D(MU)	-10.6	36.8	13.9	-46.0	0.1	-5.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4654	7142	3508	4126	205	19634	45
State Sector	8621	9968	3959	1580	121	24248	55
Total	13275	17109	7467	5706	326	43882	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	698	1596	752	667	15	3728	77
Lignite	23	19	53	0	0	95	2
Hydro	164	47	58	46	22	338	7
Nuclear	25	54	71	0	0	149	3
Gas, Naptha & Diesel	25	34	5	0	28	91	2
RES (Wind, Solar, Biomass & Others)	137	100	176	4	1	418	9
Total	1072	1850	1115	717	66	4820	100

Share of RES in total generation (%)	12.80	5.41	15.79	0.54	1.93	8.68
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	30.46	10.87	27.31	6.97	35.73	18.79

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.039
Based on State Max Demands	1.067

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	204716	10:44	0
Non-Solar hr	197127	18:31	155

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: 22-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	701	0.0	13.9	-13.9
2	HVDC	PUSAULI B/B	-	0	49	0.0	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	0	631	0.0	10.4	-10.4
4	765 kV	SASARAM-FATEHPUR	1	0	448	0.0	8.3	-8.3
5	765 kV	GAYA-BALIA	1	0	470	0.0	9.5	-9.5
6	400 kV	PUSAULI-VARANASI	1	29	23	0.1	0.0	0.1
7	400 kV	PUSAULI -ALLAHABAD	1	0	77	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	476	0.0	7.8	-7.8
9	400 kV	PATNA-BALIA	2	0	352	0.0	7.1	-7.1
10	400 kV	NAUBATPUR-BALIA	2	0	368	0.0	7.1	-7.1
11	400 kV	BIHARSHARIFF-BALIA	2	21	156	0.0	1.9	-1.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	259	0.0	4.5	-4.5
13	400 kV	BIHARSHARIFF-VARANASI	2	0	246	0.0	4.0	-4.0
14	220 kV	SAHUPURI-KARAMNASA	1	2	94	0.0	1.5	-1.5
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.2	0.0	0.2
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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	**0.7**	**78.3**	**-77.6**
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	497	409	3.1	3.2	-0.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	461	440	0.1	0.0	0.1
3	765 kV	JHARSUGUDA-DURG	2	0	662	0.0	13.1	-13.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	652	0.0	11.8	-11.8
5	400 kV	RANCHI-SIPAT	2	59	248	0.0	1.9	-1.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	133	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	2	95	80	0.2	0.0	0.2
					ER-WR	**3.4**	**32.0**	**-28.7**
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	555	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1986	0.0	40.0	-40.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2699	0.0	50.3	-50.3
4	400 kV	TALCHER-I/C	2	264	160	0.0	4.8	-4.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	**0.0**	**102.9**	**-102.9**
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	432	0.0	7.2	-7.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	144	390	0.0	4.5	-4.5
3	220 kV	ALIPURDUAR-SALAKATI	2	4	87	0.0	1.2	-1.2
					ER-NER	**0.0**	**12.8**	**-12.8**
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	705	0.0	14.8	-14.8
					NER-NR	**0.0**	**14.8**	**-14.8**
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	5	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	0	54	0.0	1.2	-1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1169	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	176	1158	0.1	13.3	-13.2
5	765 kV	GWALIOR-PHAGI	2	0	1665	0.0	27.2	-27.2
6	765 kV	JABALPUR-ORAI	2	0	676	0.0	21.7	-21.7
7	765 kV	GWALIOR-ORAI	1	962	0	15.9	0.0	15.9
8	765 kV	SATNA-ORAI	1	0	906	0.0	19.1	-19.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1960	0	25.3	0.0	25.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2280	0.0	38.4	-38.4
11	400 kV	ZERDA-KANKROLI	1	280	0	3.9	0.0	3.9
12	400 kV	ZERDA -BHINMAL	1	620	0	6.2	0.0	6.2
13	400 kV	VINDHYACHAL -RIHAND	1	961	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	456	166	2.5	1.1	1.4
15	220 kV	BHANPURA-RANPUR	1	0	151	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	119	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	92	0	1.3	0.0	1.3
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	**79.2**	**146.2**	**-67.0**
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1005	0.0	12.4	-12.4
2	HVDC	RAIGARH-PUGALUR	2	0	4012	0.0	81.0	-81.0
3	765 kV	SOLAPUR-RAICHUR	2	901	501	5.2	1.0	4.2
4	765 kV	WARDHA-NIZAMABAD	2	0	1939	0.0	30.1	-30.1
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2290	0.0	37.6	-37.6
6	400 kV	KOLHAPUR-KUDGI	2	1490	0	26.5	0.0	26.5
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	0	120	2.4	0.0	2.4
					WR-SR	**34.2**	**162.2**	**-128.0**

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)	155	97	123	2.95
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	407	256	373	8.94
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-101	-51	-82	-1.98
	NER	132kV GELEPHU-SALAKATI	9	0	2	0.04
	NER	132kV MOTANGA-RANGIA	48	0	36	0.87
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.52
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	635	558	630	15.12
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-917	-752	-893	-21.42
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-525	-495	-514	-12.35
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-129	0	-105	-2.52

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 22-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	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.48
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.48

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	11.45	0.00	1.22	0.00	0.00	0.00	0.00	0.00	12.67
Nepal	2.63	0.00	12.19	0.00	0.00	0.00	0.00	0.00	14.82
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	14.08	0.00	13.41	0.00	0.00	0.00	0.00	0.00	27.49

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	11.45	0.00	1.22	0.00	0.00	0.00	0.00	0.00	12.67
Nepal	2.63	0.00	12.19	0.00	0.00	0.00	0.00	0.00	14.82
Bangladesh	-21.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.48
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-7.40	0.00	13.41	0.00	0.00	0.00	0.00	0.00	6.01