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: 17th 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 16.10.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-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 16th 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: 17-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)	48483	64367	48032	24716	3171	188769
Peak Shortage (MW)	0	0	0	387	33	420
Energy Met (MU)	1141	1469	1205	545	55	4415
Hydro Gen (MU)	166	91	65	63	30	415
Wind Gen (MU)	32	52	31	-	-	115
Solar Gen (MU)*	84.54	57.26	99.91	5.43	1.22	248
Energy Shortage (MU)	1.24	0.00	0.00	2.15	0.26	3.65
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52548	70769	59579	25186	3232	206826
Time Of Maximum Demand Met	00:14	15:09	10:23	19:09	18:00	11:47

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	0.135	4.99	1.11	3.80	9.89	67.89	22.22

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	6697	0	128.3	39.1	-1.1	626	0.00
	Haryana	7676	0	155.1	103.7	-5.7	172	0.00
	Rajasthan	14374	0	277.8	86.3	-10.7	238	0.00
	Delhi	4511	0	95.0	73.5	-1.9	115	0.00
	UP	19429	0	366.9	148.4	-11.3	1269	0.00
	Uttarakhand	1889	0	32.4	21.4	-1.0	365	0.07
	HP	1813	0	30.1	17.6	-0.5	60	0.49
	J&K(UT) & Ladakh(UT)	2354	0	47.6	38.0	0.4	290	0.68
	Chandigarh	204	0	3.8	4.0	-0.3	31	0.00
	Railways_NR ISTS	183	0	3.6	3.6	0.0	19	0.00
WR	Chhattisgarh	5297	0	118.9	58.0	-1.3	236	0.00
	Gujarat	21125	0	389.6	161.8	-2.9	472	0.00
	MP	13638	0	283.9	179.8	-1.8	1118	0.00
	Maharashtra	28075	0	605.5	267.3	-2.0	1238	0.00
	Goa	657	0	14.0	13.2	0.4	62	0.00
	DNHDDPDCL	1297	0	29.4	29.6	-0.2	28	0.00
	AMNSIL	733	0	15.5	5.8	-0.1	262	0.00
	BALCO	523	0	12.4	12.5	-0.1	10	0.00
SR	Andhra Pradesh	12576	0	241.6	116.9	-1.4	823	0.00
	Telangana	14489	0	286.2	153.9	0.2	770	0.00
	Karnataka	15016	0	266.2	103.5	0.2	883	0.00
	Kerala	4009	0	79.5	61.1	1.2	332	0.00
	Tamil Nadu	15557	0	321.7	209.7	-2.0	711	0.00
	Puducherry	435	0	9.8	9.6	-0.5	32	0.00
ER	Bihar	6347	0	129.2	116.5	2.4	776	0.22
	DVC	3434	0	72.0	-28.0	2.1	445	0.00
	Jharkhand	1562	0	32.7	25.1	-2.1	185	1.93
	Odisha	4901	0	112.6	30.8	-0.8	375	0.00
	West Bengal	9189	0	196.9	56.4	-1.7	203	0.00
	Sikkim	82	0	1.1	1.0	0.1	29	0.00
	Railways_ER ISTS	16	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	160	0	2.6	2.3	0.1	35	0.00
	Assam	2087	0	35.2	26.5	0.1	285	0.10
	Manipur	189	0	2.5	2.7	-0.2	21	0.00
	Meghalaya	318	0	5.4	3.0	-0.4	52	0.16
	Mizoram	120	0	1.9	0.9	-0.1	9	0.00
	Nagaland	149	0	2.4	2.4	-0.3	11	0.00
	Tripura	323	0	5.3	5.4	-0.2	21	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	17.7	14.4	-24.4	-12.4
Day Peak (MW)	870.0	553.0	-1073.0	-526.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	137.4	-220.1	209.7	-112.6	-14.5	0.0
Actual(MU)	120.7	-214.4	218.9	-115.4	-9.8	0.0
O/D/U/D(MU)	-16.8	5.6	9.2	-2.8	4.7	0.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3933	8844	4378	4381	205	21741	47
State Sector	6151	10140	5561	2380	129	24361	53
Total	10084	18984	9939	6761	334	46102	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	737	1497	713	673	15	3635	76
Lignite	22	10	49	0	0	81	2
Hydro	166	91	65	63	30	415	9
Nuclear	25	54	70	0	0	148	3
Gas, Naptha & Diesel	37	54	6	0	28	125	3
RES (Wind, Solar, Biomass & Others)	122	110	160	6	1	399	8
Total	1107	1815	1063	742	75	4802	100

Share of RES in total generation (%)	10.97	6.05	15.01	0.87	1.63	8.30
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.18	14.04	27.73	9.35	41.48	20.03

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
Based on State Max Demands	1.070

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206826	11:47	169
Non-Solar hr	194912	18:25	208

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: 17-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	501	0.0	12.0	-12.0
2	HVDC	PUSAULI B/B	-	2	48	0.0	1.0	-1.0
3	765 kV	GAYA-VARANASI	2	368	365	0.0	0.9	-0.9
4	765 kV	SASARAM-FATEHPUR	1	80	333	0.0	4.2	-4.2
5	765 kV	GAYA-BALIA	1	0	480	0.0	5.7	-5.7
6	400 kV	PUSAULI-VARANASI	1	0	88	0.0	0.8	-0.8
7	400 kV	PUSAULI -ALLAHABAD	1	44	42	0.0	0.2	-0.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	255	536	0.0	4.2	-4.2
9	400 kV	PATNA-BALIA	2	0	390	0.0	5.8	-5.8
10	400 kV	NAUBATPUR-BALIA	2	18	407	0.0	5.3	-5.3
11	400 kV	BIHARSHARIFF-BALIA	2	246	193	0.2	0.0	0.2
12	400 kV	MOTIHARI-GORAKHPUR	2	132	297	0.0	2.8	-2.8
13	400 kV	BIHARSHARIFF-VARANASI	2	239	155	0.1	0.0	0.1
14	220 kV	SAHUPURI-KARAMNASA	1	5	90	0.0	1.4	-1.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.4	0.0	0.4
16	132 kV	GARWAH-RIHAND	1	30	0	0.1	0.0	0.1
17	132 kV	KARMANASA-SAHUPURI	1	0	35	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.8	44.3	-43.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1545	0	18.9	0.0	18.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	832	314	9.1	0.0	9.1
3	765 kV	JHARSUGUDA-DURG	2	0	399	0.0	6.7	-6.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	681	0.0	11.6	-11.6
5	400 kV	RANCHI-SIPAT	2	137	136	0.7	0.0	0.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	218	0.0	3.4	-3.4
7	220 kV	BUDHIPADAR-KORBA	2	91	65	0.3	0.0	0.3
					ER-WR	29.0	21.7	7.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	598	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2013	0.0	45.8	-45.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	3022	0.0	60.9	-60.9
4	400 kV	TALCHER-I/C	2	264	253	0.0	0.8	-0.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	119.0	-119.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	8	321	0.0	3.5	-3.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	133	318	0.0	1.3	-1.3
3	220 kV	ALIPURDUAR-SALAKATI	2	33	65	0.0	0.3	-0.3
					ER-NER	0.0	5.0	-5.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	695	0.0	16.5	-16.5
					NER-NR	0.0	16.5	-16.5
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	29.0	-29.0
4	765 kV	GWALIOR-AGRA	2	580	1207	0.0	10.3	-10.3
5	765 kV	GWALIOR-PHAGI	2	444	1093	0.5	14.5	-14.0
6	765 kV	JABALPUR-ORAI	2	90	714	0.0	14.8	-14.8
7	765 kV	GWALIOR-ORAI	1	664	0	0.0	6.9	-6.9
8	765 kV	SATNA-ORAI	1	0	801	0.0	15.5	-15.5
9	765 kV	BANASKANTHA-CHITORGARH	2	1460	142	13.4	0.0	13.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2161	0.0	36.0	-36.0
11	400 kV	ZERDA-KANKROLI	1	247	30	2.4	0.0	2.4
12	400 kV	ZERDA -BHINMAL	1	629	65	5.2	0.0	5.2
13	400 kV	VINDHYACHAL -RIHAND	1	975	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	682	194	5.8	1.0	4.8
15	220 kV	BHANPURA-RANPUR	1	0	108	0.0	1.9	-1.9
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
17	220 kV	MEHGAON-AURAIYA	1	153	0	2.0	0.0	2.0
18	220 kV	MALANPUR-AURAIYA	1	123	0	1.4	0.0	1.4
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	52.7	133.4	-80.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	19.5	-19.5
2	HVDC	RAIGARH-PUGALUR	2	0	3511	0.0	69.8	-69.8
3	765 kV	SOLAPUR-RAICHUR	2	269	1758	0.2	17.7	-17.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2874	0.0	50.4	-50.4
5	400 kV	KOLHAPUR-KUDGI	2	1432	0	20.7	0.0	20.7
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	107	2.2	0.0	2.2
					WR-SR	23.1	157.3	-134.2

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)	318	166	216	5.18
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	544	410	544	13.75
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-242	10	-99	-2.37
	NER	132kV GELEPHU-SALAKATI	12	0	5	0.13
	NER	132kV MOTANGA-RANGIA	54	34	44	1.05
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-18	0	59	1.42
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	571	403	539	12.94
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-921	-748	-882	-21.16
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-526	-491	-518	-12.42
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-152	0	-136	-3.26

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 17-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	21.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	17.32	0.00	1.35	0.00	0.00	0.00	0.00	0.00	18.67
Nepal	2.63	0.00	11.12	0.00	0.00	0.97	0.00	0.00	14.72
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	19.95	0.00	12.47	0.00	0.00	0.97	0.00	0.00	33.39

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	17.32	0.00	1.35	0.00	0.00	0.00	0.00	0.00	18.67
Nepal	2.63	0.00	11.12	0.00	0.00	0.97	0.00	0.00	14.72
Bangladesh	-21.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.13
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-1.18	0.00	12.47	0.00	0.00	0.97	0.00	0.00	12.26