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: 16th 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 15.10.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-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 15th 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: 16-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)	56959	61759	44284	24425	2993	190420
Peak Shortage (MW)	0	0	0	301	16	317
Energy Met (MU)	1270	1489	1152	528	56	4494
Hydro Gen (MU)	171	91	60	60	27	408
Wind Gen (MU)	24	48	25	-	-	98
Solar Gen (MU)*	123.71	58.24	115.04	2.85	1.05	301
Energy Shortage (MU)	1.07	0.00	0.00	1.08	0.18	2.33
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	57485	67940	55668	24419	3068	200980
Time Of Maximum Demand Met	19:15	14:45	11:57	18:36	17:50	14:57

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	0.034	0.00	0.47	5.66	6.13	78.01	15.85

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	7385	0	148.2	58.8	-3.9	259	0.00
	Haryana	8573	0	173.7	118.6	-1.4	208	0.42
	Rajasthan	14689	0	303.3	87.0	-4.1	293	0.00
	Delhi	4523	0	96.1	72.3	-0.6	185	0.00
	UP	21640	0	430.2	181.3	-2.0	1458	0.00
	Uttarakhand	1855	0	37.7	24.7	-0.1	142	0.16
	HP	1533	0	29.9	17.3	-0.6	37	0.04
	J&K(UT) & Ladakh(UT)	1841	0	43.7	38.7	-4.2	456	0.45
	Chandigarh	202	0	3.8	3.9	-0.2	24	0.00
	Railways_NR ISTS	190	0	3.6	3.5	0.1	34	0.00
WR	Chhattisgarh	5189	0	119.1	59.0	-1.9	137	0.00
	Gujarat	19710	0	407.7	165.1	-0.2	341	0.00
	MP	13395	0	294.7	175.9	-2.6	691	0.00
	Maharashtra	27156	0	597.0	239.6	-1.1	1211	0.00
	Goa	615	0	13.5	12.5	0.7	53	0.00
	DNHDDPDCL	1244	0	28.7	28.9	-0.2	28	0.00
	AMNSIL	686	0	15.6	6.6	0.1	240	0.00
	BALCO	521	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	12443	0	239.6	112.6	-0.5	625	0.00
	Telangana	14261	0	283.4	155.0	-1.6	831	0.00
	Karnataka	13458	0	246.6	93.5	0.6	959	0.00
	Kerala	3642	0	72.1	57.8	1.3	268	0.00
	Tamil Nadu	13620	0	300.2	174.0	-1.4	369	0.00
	Puducherry	392	0	9.9	8.9	-0.3	37	0.00
ER	Bihar	6238	0	126.6	122.8	-2.4	482	0.00
	DVC	3281	0	71.3	-29.6	0.8	319	0.00
	Jharkhand	1597	200	33.2	25.5	-2.1	174	1.08
	Odisha	5168	0	111.7	30.7	-2.7	310	0.00
	West Bengal	8729	0	184.2	45.5	-3.3	264	0.00
	Sikkim	61	0	0.9	1.0	-0.1	12	0.00
	Railways_ER ISTS	29	0	0.2	0.2	0.0	18	0.00
NER	Arunachal Pradesh	137	0	2.6	2.4	0.0	27	0.00
	Assam	1951	0	35.4	27.7	0.9	206	0.00
	Manipur	194	0	2.6	3.1	-0.5	13	0.00
	Meghalaya	302	16	5.5	2.3	-0.2	87	0.18
	Mizoram	114	0	1.9	0.7	-0.2	7	0.00
	Nagaland	150	0	2.7	2.5	-0.1	11	0.00
	Tripura	305	0	5.1	5.3	-0.1	39	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	20.0	15.0	-24.5	-12.6
Day Peak (MW)	944.5	576.0	-1079.0	-547.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	201.8	-234.5	167.0	-122.4	-11.9	0.0
Actual(MU)	186.8	-212.9	177.9	-148.9	-7.7	-4.8
O/D/U/D(MU)	-15.0	21.6	10.9	-26.5	4.2	-4.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4274	10329	4878	4171	290	23941	50
State Sector	6276	10398	5041	2380	129	24223	50
Total	10550	20726	9919	6551	419	48164	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	768	1526	708	670	15	3687	76
Lignite	24	15	42	0	0	82	2
Hydro	171	91	60	60	27	408	8
Nuclear	25	54	71	0	0	149	3
Gas, Naptha & Diesel	29	30	6	0	27	93	2
RES (Wind, Solar, Biomass & Others)	150	109	169	4	1	432	9
Total	1166	1824	1056	734	70	4850	100

Share of RES in total generation (%)	12.85	5.97	15.98	0.51	1.49	8.91
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.60	13.87	28.33	8.71	40.30	20.40

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.037
Based on State Max Demands	1.079

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	200980	14:57	6
Non-Solar hr	192065	19:10	317

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: 16-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	11.2	-11.2
2	HVDC	PUSAULI B/B	-	0	48	0.0	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	191	451	0.0	4.4	-4.4
4	765 kV	SASARAM-FATEHPUR	1	0	340	0.0	5.7	-5.7
5	765 kV	GAYA-BALIA	1	0	522	0.0	9.2	-9.2
6	400 kV	PUSAULI-VARANASI	1	9	65	0.0	0.5	-0.5
7	400 kV	PUSAULI -ALLAHABAD	1	18	61	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	585	0.0	8.5	-8.5
9	400 kV	PATNA-BALIA	2	0	405	0.0	7.7	-7.7
10	400 kV	NAUBATPUR-BALIA	2	0	418	0.0	7.5	-7.5
11	400 kV	BIHARSHARIFF-BALIA	2	109	227	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	60	305	0.0	4.4	-4.4
13	400 kV	BIHARSHARIFF-VARANASI	2	118	223	0.0	1.9	-1.9
14	220 kV	SAHUPURI-KARAMNASA	1	0	101	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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	0.5	66.6	-66.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	817	90	8.1	0.0	8.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	785	26	8.4	0.0	8.4
3	765 kV	JHARSUGUDA-DURG	2	0	401	0.0	7.2	-7.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	670	0.0	11.4	-11.4
5	400 kV	RANCHI-SIPAT	2	142	74	0.7	0.0	0.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	198	0.0	3.7	-3.7
7	220 kV	BUDHIPADAR-KORBA	2	73	50	0.1	0.0	0.1
					ER-WR	17.3	22.3	-5.0
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	1996	0.0	46.6	-46.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2870	0.0	55.4	-55.4
4	400 kV	TALCHER-I/C	2	263	185	0.0	1.8	-1.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	114.7	-114.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	35	384	0.0	3.8	-3.8
2	400 kV	ALIPURDUAR-BONGAIGAON	2	182	458	0.0	3.3	-3.3
3	220 kV	ALIPURDUAR-SALAKATI	2	20	93	0.0	0.8	-0.8
					ER-NER	0.0	8.0	-8.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	696	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	6	0	0.1	0.0	0.1
2	HVDC	VINDHYACHAL B/B	-	0	53	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	0	1474	0.0	21.8	-21.8
5	765 kV	GWALIOR-PHAGI	2	340	1268	0.7	16.8	-16.1
6	765 kV	JABALPUR-ORAI	2	0	847	0.0	26.7	-26.7
7	765 kV	GWALIOR-ORAI	1	662	0	12.4	0.0	12.4
8	765 kV	SATNA-ORAI	1	0	868	0.0	17.6	-17.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1440	269	10.9	0.0	10.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2395	0.0	42.6	-42.6
11	400 kV	ZERDA-KANKROLI	1	196	19	1.7	0.0	1.7
12	400 kV	ZERDA -BHINMAL	1	500	121	2.9	0.0	2.9
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	417	249	2.2	2.3	-0.1
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	88	0	1.7	0.0	1.7
18	220 kV	MALANPUR-AURAIYA	1	59	0	1.0	0.0	1.0
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	55.8	162.1	-106.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	15.4	-15.4
2	HVDC	RAIGARH-PUGALUR	2	0	4041	0.0	69.5	-69.5
3	765 kV	SOLAPUR-RAICHUR	2	354	1274	0.0	9.6	-9.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2465	0.0	43.4	-43.4
5	400 kV	KOLHAPUR-KUDGI	2	1509	0	24.3	0.0	24.3
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	110	2.3	0.0	2.3
					WR-SR	26.6	137.9	-111.3

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)	314	213	235	5.65
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	575	500	553	13.28
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-24	12	-6	-0.15
	NER	132kV GELEPHU-SALAKATI	15	0	7	0.17
	NER	132kV MOTANGA-RANGIA	52	0	42	1.00
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-25	0	58	1.40
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	601	508	568	13.63
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-924	-752	-884	-21.22
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-547	-495	-526	-12.63
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-155	0	-138	-3.32

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 16-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	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.25
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.25

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	19.48	0.00	1.37	0.00	0.00	0.00	0.00	0.00	20.85
Nepal	2.63	0.00	11.14	0.00	0.00	1.05	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	22.11	0.00	12.51	0.00	0.00	1.05	0.00	0.00	35.67

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	19.48	0.00	1.37	0.00	0.00	0.00	0.00	0.00	20.85
Nepal	2.63	0.00	11.14	0.00	0.00	1.05	0.00	0.00	14.82
Bangladesh	-21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.25
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	0.86	0.00	12.51	0.00	0.00	1.05	0.00	0.00	14.42