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: 28th September 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 27.09.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 27-सितम्बर-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 27th September 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: 28-Sep-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)	67369	57007	45315	26497	3170	199358
Peak Shortage (MW)	50	0	100	547	463	1160
Energy Met (MU)	1495	1312	1127	584	68	4586
Hydro Gen (MU)	243	113	78	118	29	581
Wind Gen (MU)	4	27	139	-	-	170
Solar Gen (MU)*	118.15	54.25	103.03	2.54	1.20	279
Energy Shortage (MU)	2.42	0.00	0.40	3.61	1.91	8.34
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68723	61178	54315	27063	3422	204900
Time Of Maximum Demand Met	19:19	18:46	11:49	20:39	17:46	19:12

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	0.049	0.00	1.08	11.46	12.53	75.88	11.58

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	11524	0	239.1	128.2	0.2	182	0.00
	Haryana	10021	0	213.5	149.3	-2.4	75	0.00
	Rajasthan	12958	0	289.8	84.4	-4.0	196	0.00
	Delhi	5640	0	120.5	109.1	-1.4	111	0.00
	UP	25059	0	495.5	206.3	-1.3	786	0.00
	Uttarakhand	2202	0	47.4	26.4	1.3	174	0.15
	HP	1751	0	35.3	14.8	0.2	113	0.00
	J&K(UT) & Ladakh(UT)	2205	94	45.6	25.3	7.3	539	2.27
	Chandigarh	288	0	5.7	5.9	-0.2	25	0.00
	Railways_NR ISTS	158	0	3.2	3.4	-0.2	30	0.00
WR	Chhattisgarh	4732	0	102.5	49.9	-1.3	249	0.00
	Gujarat	18498	0	389.0	160.0	0.0	547	0.00
	MP	12335	0	261.8	121.4	-2.7	337	0.00
	Maharashtra	22536	0	486.6	185.9	-3.1	705	0.00
	Goa	658	0	13.1	12.7	-0.3	83	0.00
	DNHDDPDCL	1298	0	28.0	29.1	-1.1	37	0.00
	AMNSIL	833	0	18.3	6.0	-0.3	250	0.00
	BALCO	520	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	9944	0	213.8	104.9	1.0	1051	0.00
	Telangana	13357	0	239.0	112.4	-0.1	813	0.00
	Karnataka	12481	0	237.0	74.1	2.1	947	0.40
	Kerala	4101	0	81.1	63.4	1.2	319	0.00
	Tamil Nadu	16083	0	345.8	138.5	-4.2	677	0.00
	Puducherry	441	0	10.0	9.5	-0.2	55	0.00
ER	Bihar	6543	278	137.1	129.6	1.9	582	2.44
	DVC	3548	0	77.9	-42.2	0.8	300	0.00
	Jharkhand	1595	222	33.2	27.8	-1.4	233	1.18
	Odisha	5657	0	124.0	54.6	-1.5	389	0.00
	West Bengal	10014	0	210.5	83.5	-2.3	275	0.00
	Sikkim	92	0	1.4	1.4	0.0	12	0.00
	Railways_ER ISTS	17	0	0.2	0.2	0.0	4	0.00
NER	Arunachal Pradesh	179	0	3.1	2.6	0.2	70	0.00
	Assam	2226	155	45.5	36.7	2.4	340	1.73
	Manipur	209	0	2.9	2.8	0.0	36	0.00
	Meghalaya	317	15	5.8	1.0	-0.1	24	0.18
	Mizoram	110	0	1.8	1.4	-0.7	10	0.00
	Nagaland	171	0	3.2	2.7	0.0	12	0.00
	Tripura	342	0	5.9	5.9	0.1	63	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	28.6	11.8	-24.8	-30.7
Day Peak (MW)	1748.5	581.1	-1084.0	-1428.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	315.4	-264.3	86.1	-138.9	1.7	0.0
Actual(MU)	310.4	-278.4	99.4	-139.4	3.2	-4.8
O/D/U/D(MU)	-5.0	-14.1	13.3	-0.6	1.6	-4.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4219	11984	5168	1920	505	23795	49
State Sector	3991	10648	6102	3510	219	24470	51
Total	8210	22632	11270	5430	724	48265	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	828	1407	633	670	16	3553	72
Lignite	34	17	39	0	0	90	2
Hydro	243	113	78	118	29	581	12
Nuclear	25	54	76	0	0	154	3
Gas, Naptha & Diesel	18	32	6	0	26	82	2
RES (Wind, Solar, Biomass & Others)	129	82	270	4	1	487	10
Total	1276	1705	1102	792	72	4947	100

Share of RES in total generation (%)	10.14	4.83	24.52	0.52	1.66	9.85
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.11	14.60	38.47	15.44	42.24	24.72

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.047
Based on State Max Demands	1.076

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	203806	11:20	185
Non-Solar hr	204900	19:12	1614

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: 28-Sep-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	1000	0.0	24.6	-24.6
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.7	-3.7
3	765 kV	GAYA-VARANASI	2	515	622	0.0	4.8	-4.8
4	765 kV	SASARAM-FATEHPUR	1	0	293	0.0	4.4	-4.4
5	765 kV	GAYA-BALIA	1	0	770	0.0	10.8	-10.8
6	400 kV	PUSAULI-VARANASI	1	0	116	0.0	1.7	-1.7
7	400 kV	PUSAULI -ALLAHABAD	1	0	118	0.0	1.7	-1.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	800	0.0	11.9	-11.9
9	400 kV	PATNA-BALIA	2	0	512	0.0	8.3	-8.3
10	400 kV	NAUBATPUR-BALIA	2	0	529	0.0	8.2	-8.2
11	400 kV	BIHARSHARIFF-BALIA	2	45	301	0.0	3.4	-3.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	425	0.0	6.4	-6.4
13	400 kV	BIHARSHARIFF-VARANASI	2	103	278	0.0	2.2	-2.2
14	220 kV	SAHUPURI-KARAMNASA	1	2	230	0.0	0.0	0.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
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	0.5	92.2	-91.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	966	603	4.9	0.0	4.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1283	416	15.9	0.0	15.9
3	765 kV	JHARSUGUDA-DURG	2	27	469	0.0	4.1	-4.1
4	400 kV	JHARSUGUDA-RAIGARH	4	166	417	0.0	2.7	-2.7
5	400 kV	RANCHI-SIPAT	2	301	201	2.5	0.0	2.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	149	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	97	11	0.9	0.0	0.9
					ER-WR	24.3	8.7	15.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	340	0.0	7.5	-7.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1646	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2605	0.0	36.7	-36.7
4	400 kV	TALCHER-I/C	2	0	336	0.0	6.8	-6.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	83.8	-83.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	482	0.0	7.7	-7.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	4	455	0.0	5.2	-5.2
3	220 kV	ALIPURDUAR-SALAKATI	2	0	113	0.0	1.7	-1.7
					ER-NER	0.0	14.6	-14.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	13.2	-13.2
					NER-NR	0.0	13.2	-13.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3012	0.0	72.2	-72.2
2	HVDC	VINDHYACHAL B/B	-	439	0	8.9	0.0	8.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1445	0.0	19.6	-19.6
4	765 kV	GWALIOR-AGRA	2	0	2183	0.0	34.0	-34.0
5	765 kV	GWALIOR-PHAGI	2	292	1477	0.3	20.6	-20.3
6	765 kV	JABALPUR-ORAI	2	0	1184	0.0	36.2	-36.2
7	765 kV	GWALIOR-ORAI	1	709	0	12.2	0.0	12.2
8	765 kV	SATNA-ORAI	1	0	1007	0.0	19.9	-19.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1111	734	2.4	0.0	2.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	2987	0.0	50.8	-50.8
11	400 kV	ZERDA-KANKROLI	1	197	151	1.2	1.2	0.1
12	400 kV	ZERDA -BHINMAL	1	469	302	0.1	0.0	0.1
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	241	544	0.0	4.9	-4.9
15	220 kV	BHANPURA-RANPUR	1	0	93	0.0	1.7	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.6	-2.6
17	220 kV	MEHGAON-AURAIYA	1	112	0	1.4	0.0	1.4
18	220 kV	MALANPUR-AURAIYA	1	79	0	0.8	0.0	0.8
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	49.6	263.5	-213.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	11.9	-11.9
2	HVDC	RAIGARH-PUGALUR	2	0	3504	0.0	48.1	-48.1
3	765 kV	SOLAPUR-RAICHUR	2	1883	1566	12.5	3.3	9.2
4	765 kV	WARDHA-NIZAMABAD	2	396	2734	0.0	26.6	-26.6
5	400 kV	KOLHAPUR-KUDGI	2	1553	0	26.9	0.0	26.9
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	117	2.3	0.0	2.3
					WR-SR	41.7	89.9	-48.2

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)	419	285	338	8.11
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1088	705	753	18.07
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	166	-4	37	0.90
	NER	132kV GELEPHU-SALAKATI	63	0	45	1.07
	NER	132kV MOTANGA-RANGIA	36	0	18	0.42
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-31	0	38	0.92
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	515	410	454	10.90
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-919	-791	-886	-21.26
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1428	-1145	-1278	-30.66
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-165	0	-146	-3.50

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 28-Sep-2023

Export From India (in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							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	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Bangladesh	21.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.35
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.52

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	28.05	1.99	0.00	0.00	0.00	0.00	0.00	0.00	30.04
Nepal	0.00	2.63	9.97	0.00	0.00	0.00	0.00	0.00	12.60
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	28.05	4.62	9.97	0.00	0.00	0.00	0.00	0.00	42.64

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

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	28.05	1.99	0.00	0.00	0.00	0.00	0.00	0.00	30.04
Nepal	-0.17	2.63	9.97	0.00	0.00	0.00	0.00	0.00	12.43
Bangladesh	-21.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.35
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	6.53	4.62	9.97	0.00	0.00	0.00	0.00	0.00	21.12