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: 11 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 10.09.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 10-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 10 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: 11-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)	65090	56261	41879	27001	3461	193692
Peak Shortage (MW)	0	0	0	79	11	90
Energy Met (MU)	1469	1330	1035	591	66	4490
Hydro Gen (MU)	322	27	47	122	32	551
Wind Gen (MU)	21	231	249	-	-	501
Solar Gen (MU)*	126.87	47.47	98.49	2.60	0.98	276
Energy Shortage (MU)	0.24	0.00	0.00	0.56	1.48	2.28
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65989	59275	48816	27371	3362	196402
Time Of Maximum Demand Met	00:00	09:21	09:23	21:46	19:20	19:20

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	0.028	0.00	0.03	3.61	3.65	83.44	12.92

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	14588	0	338.1	222.1	-1.0	169	0.00
	Haryana	9497	0	201.7	171.0	-3.2	90	0.00
	Rajasthan	15228	0	335.0	130.1	-2.7	268	0.00
	Delhi	4526	0	96.6	81.9	-3.3	65	0.00
	UP	18684	0	366.3	176.5	-3.7	248	0.00
	Uttarakhand	1732	0	38.1	16.1	-1.7	101	0.00
	HP	1575	0	32.9	7.6	0.3	151	0.00
	J&K(UT) & Ladakh(UT)	2521	0	51.2	25.8	2.9	228	0.24
	Chandigarh	294	0	6.0	6.4	-0.5	16	0.00
	Railways_NR ISTS	157	0	3.1	3.7	-0.6	0	0.00
WR	Chhattisgarh	4851	0	112.5	49.7	-0.9	299	0.00
	Gujarat	19255	0	423.3	167.9	-3.6	470	0.00
	MP	10707	0	226.5	130.0	-4.1	347	0.00
	Maharashtra	22323	0	495.7	172.1	-3.3	593	0.00
	Goa	619	0	13.1	12.7	0.3	60	0.00
	DNHDDPDCL	1245	0	28.7	28.5	0.2	58	0.00
	AMNSIL	812	0	17.5	5.8	0.1	277	0.00
	BALCO	522	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	10176	0	216.0	70.9	-3.1	502	0.00
	Telangana	10367	0	195.0	100.5	-1.0	679	0.00
	Karnataka	11719	0	218.5	56.0	-1.3	692	0.00
	Kerala	3403	0	70.2	59.2	0.6	265	0.00
	Tamil Nadu	14672	0	325.9	121.6	-9.8	264	0.00
	Puducherry	398	0	9.4	9.3	-0.7	68	0.00
ER	Bihar	7027	0	139.9	136.1	-1.6	357	0.14
	DVC	3346	0	76.9	-37.0	0.0	250	0.00
	Jharkhand	1818	0	40.0	30.8	2.6	236	0.42
	Odisha	5913	0	133.9	60.1	-1.7	283	0.00
	West Bengal	9558	0	199.3	74.0	-2.8	268	0.00
	Sikkim	59	0	0.8	1.0	-0.2	21	0.00
	Railways_ER ISTS	14	0	0.2	0.2	0.0	4	0.00
NER	Arunachal Pradesh	173	0	3.2	3.0	-0.3	29	0.00
	Assam	2341	0	43.6	34.9	0.7	220	1.40
	Manipur	187	0	2.7	2.8	-0.2	16	0.00
	Meghalaya	304	11	5.6	1.3	-0.2	60	0.08
	Mizoram	107	0	1.8	1.4	-0.8	3	0.00
	Nagaland	155	0	2.9	2.6	-0.1	12	0.00
	Tripura	327	0	5.8	5.6	0.2	48	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	32.2	9.8	-26.0	-33.1
Day Peak (MW)	1656.0	393.0	-1097.0	-1476.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	371.0	-271.2	7.2	-103.7	-3.3	0.0
Actual(MU)	335.8	-261.4	12.1	-89.9	0.7	-2.6
O/D/U/D(MU)	-35.2	9.8	4.9	13.9	4.0	-2.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3883	9936	3748	1000	355	18921	40
State Sector	7101	11454	6622	3329	155	28660	60
Total	10984	21390	10370	4329	510	47582	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	659	1295	551	621	12	3138	65
Lignite	25	13	42	0	0	81	2
Hydro	322	27	47	122	32	551	11
Nuclear	30	54	76	0	0	159	3
Gas, Naptha & Diesel	19	27	6	0	28	80	2
RES (Wind, Solar, Biomass & Others)	155	282	375	4	1	817	17
Total	1210	1698	1097	747	73	4826	100

Share of RES in total generation (%)	12.81	16.62	34.13	0.53	1.34	16.92
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	41.91	21.36	45.36	16.91	44.98	31.64

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.042
Based on State Max Demands	1.075

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	194401	10:30	0
Non-Solar hr	196402	19:20	230

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: 11-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	1750	0.0	37.6	-37.6
2	HVDC	PUSAULI B/B	-	0	297	0.0	7.5	-7.5
3	765 kV	GAYA-VARANASI	2	802	242	6.0	0.0	6.0
4	765 kV	SASARAM-FATEHPUR	1	305	202	0.9	0.0	0.9
5	765 kV	GAYA-BALIA	1	0	653	0.0	10.2	-10.2
6	400 kV	PUSAULI-VARANASI	1	0	209	0.0	4.1	-4.1
7	400 kV	PUSAULI -ALLAHABAD	1	0	168	0.0	3.0	-3.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	4	601	0.0	6.2	-6.2
9	400 kV	PATNA-BALIA	2	0	588	0.0	7.9	-7.9
10	400 kV	NAUBATPUR-BALIA	2	0	626	0.0	7.8	-7.8
11	400 kV	BIHARSHARIFF-BALIA	2	170	291	0.0	1.3	-1.3
12	400 kV	MOTIHARI-GORAKHPUR	2	11	353	0.0	4.1	-4.1
13	400 kV	BIHARSHARIFF-VARANASI	2	299	134	2.0	0.0	2.0
14	220 kV	SAHUPURI-KARAMNASA	1	0	0	0.0	0.5	-0.5
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
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	9.5	90.0	-80.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	795	615	0.8	0.0	0.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1641	0	24.5	0.0	24.5
3	765 kV	JHARSUGUDA-DURG	2	170	317	0.0	2.4	-2.4
4	400 kV	JHARSUGUDA-RAIGARH	4	190	291	0.0	1.7	-1.7
5	400 kV	RANCHI-SIPAT	2	392	72	5.0	0.0	5.0
6	220 kV	BUDHIPADAR-RAIGARH	1	59	95	0.0	0.7	-0.7
7	220 kV	BUDHIPADAR-KORBA	2	100	0	1.2	0.0	1.2
					ER-WR	31.5	4.7	26.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	338	0.0	5.6	-5.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1255	0.0	30.1	-30.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2052	0.0	28.9	-28.9
4	400 kV	TALCHER-I/C	2	174	497	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	64.6	-64.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	547	0.0	9.7	-9.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	30	398	5.3	0.0	5.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	116	0.0	2.0	-2.0
					ER-NER	5.3	11.7	-6.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	704	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	4522	0.0	82.5	-82.5
2	HVDC	VINDHYACHAL B/B	-	437	247	4.0	1.6	2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1448	0.0	28.0	-28.0
4	765 kV	GWALIOR-AGRA	2	0	2035	0.0	28.3	-28.3
5	765 kV	GWALIOR-PHAGI	2	384	1721	0.7	23.2	-22.5
6	765 kV	JABALPUR-ORAI	2	0	889	0.0	29.0	-29.0
7	765 kV	GWALIOR-ORAI	1	952	0	13.9	0.0	13.9
8	765 kV	SATNA-ORAI	1	0	949	0.0	17.2	-17.2
9	765 kV	BANASKANTHA-CHITORGARH	2	455	947	0.0	8.1	-8.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3345	0.0	67.1	-67.1
11	400 kV	ZERDA-KANKROLI	1	126	133	0.5	1.1	-0.6
12	400 kV	ZERDA -BHINMAL	1	140	347	0.0	3.2	-3.2
13	400 kV	VINDHYACHAL -RIHAND	1	0	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	265	552	0.0	5.2	-5.2
15	220 kV	BHANPURA-RANPUR	1	0	91	0.0	1.6	-1.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	86	0	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	61	3	0.6	0.0	0.6
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	42.6	298.3	-255.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	498	0	8.1	0.0	8.1
2	HVDC	RAIGARH-PUGALUR	2	0	1012	0.0	24.9	-24.9
3	765 kV	SOLAPUR-RAICHUR	2	2212	792	23.1	0.9	22.2
4	765 kV	WARDHA-NIZAMABAD	2	82	2157	0.0	18.7	-18.7
5	400 kV	KOLHAPUR-KUDGI	2	1941	0	32.8	0.0	32.8
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	113	2.3	0.0	2.3
					WR-SR	66.2	44.5	21.7

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)	598	370	486	11.65
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	896	655	763	18.30
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	119	33	59	1.42
	NER	132kV GELEPHU-SALAKATI	47	9	34	0.82
	NER	132kV MOTANGA-RANGIA	0	0	0	0.00
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-22	0	14	0.34
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	415	308	395	9.47
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-939	-862	-936	-22.48
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1476	-1246	-1377	-33.06
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-158	0	-146	-3.50

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 11-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.50
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.50

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	28.59	2.06	0.00	0.00	0.00	0.00	0.00	0.00	30.65
Nepal	0.00	2.38	9.22	0.00	0.00	0.00	0.00	0.00	11.60
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	28.59	4.44	9.22	0.00	0.00	0.00	0.00	0.00	42.25

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	28.59	2.06	0.00	0.00	0.00	0.00	0.00	0.00	30.65
Nepal	0.00	2.38	9.22	0.00	0.00	0.00	0.00	0.00	11.60
Bangladesh	-22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-22.50
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	6.09	4.44	9.22	0.00	0.00	0.00	0.00	0.00	19.75