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: 13th 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 12.09.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 12-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 12th 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: 13-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)	70990	60828	46762	26587	3319	208486
Peak Shortage (MW)	970	0	0	233	270	1473
Energy Met (MU)	1584	1445	1144	616	67	4856
Hydro Gen (MU)	339	34	73	123	31	600
Wind Gen (MU)	34	183	190	-	-	407
Solar Gen (MU)*	130.16	54.43	113.17	1.79	1.15	301
Energy Shortage (MU)	3.17	0.00	0.00	2.25	0.72	6.14
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	72619	63933	54066	28421	3533	212715
Time Of Maximum Demand Met	22:13	19:03	09:55	00:00	18:33	11:55

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	0.033	0.00	0.43	6.58	7.01	82.02	10.97

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	14454	0	322.8	208.7	-0.4	251	0.00
	Haryana	11008	0	234.1	186.9	0.8	222	2.19
	Rajasthan	15822	0	338.4	121.8	-3.4	285	0.00
	Delhi	5654	0	116.3	105.9	-2.6	99	0.00
	UP	23093	0	429.3	196.8	-1.1	400	0.00
	Uttarakhand	2209	0	46.8	24.0	0.9	182	0.24
	HP	1701	0	36.5	10.5	0.1	157	0.00
	J&K(UT) & Ladakh(UT)	2354	0	49.3	25.1	1.6	198	0.74
	Chandigarh	369	0	7.4	7.0	0.4	52	0.00
	Railways_NR ISTS	169	0	3.3	3.5	-0.3	8	0.00
WR	Chhattisgarh	5198	0	116.1	61.1	-0.5	171	0.00
	Gujarat	21911	0	475.1	194.1	-0.2	824	0.00
	MP	11382	0	240.0	128.4	-2.5	385	0.00
	Maharashtra	24182	0	540.1	190.6	-3.1	548	0.00
	Goa	704	0	14.2	14.3	-0.2	53	0.00
	DNHDDPDCL	1297	0	30.0	29.9	0.1	59	0.00
	AMNSIL	767	0	17.3	5.3	-0.3	274	0.00
	BALCO	521	0	12.4	12.4	0.0	38	0.00
SR	Andhra Pradesh	10366	0	220.1	71.4	-3.9	406	0.00
	Telangana	11806	0	228.0	108.6	0.5	606	0.00
	Karnataka	13502	0	252.6	84.6	-0.2	582	0.00
	Kerala	3968	0	78.6	63.7	0.9	311	0.00
	Tamil Nadu	16842	0	354.4	151.2	-4.7	798	0.00
	Puducherry	440	0	9.9	9.4	-0.2	40	0.00
ER	Bihar	7087	0	154.6	147.0	2.0	285	0.91
	DVC	3722	0	80.6	-43.1	-0.4	214	0.00
	Jharkhand	1747	0	41.7	29.7	3.9	197	1.35
	Odisha	5584	0	123.3	49.3	-2.0	406	0.00
	West Bengal	9970	0	214.5	96.4	-3.5	186	0.00
	Sikkim	83	0	1.3	1.3	-0.1	18	0.00
	Railways_ER ISTS	22	0	0.2	0.2	0.0	15	0.00
NER	Arunachal Pradesh	174	0	3.1	2.9	-0.1	59	0.00
	Assam	2401	0	45.0	36.9	0.4	320	0.46
	Manipur	193	0	2.8	2.7	0.1	24	0.00
	Meghalaya	310	22	5.1	0.4	0.0	40	0.26
	Mizoram	110	0	1.8	1.5	-0.1	32	0.00
	Nagaland	172	0	3.1	2.7	0.0	11	0.00
	Tripura	336	0	6.2	5.9	0.4	54	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	33.8	7.8	-25.4	-32.2
Day Peak (MW)	1513.8	447.0	-1105.0	-1474.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	365.3	-278.8	49.7	-134.2	-2.0	0.0
Actual(MU)	342.6	-275.7	65.8	-140.8	0.5	-7.5
O/D/U/D(MU)	-22.7	3.2	16.1	-6.6	2.5	-7.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3789	9936	4658	1160	405	19947	42
State Sector	6776	11204	6072	2886	157	27095	58
Total	10565	21140	10730	4046	562	47042	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	737	1470	621	695	15	3539	68
Lignite	30	14	40	0	0	84	2
Hydro	339	34	73	123	31	600	12
Nuclear	29	53	76	0	0	159	3
Gas, Naptha & Diesel	18	33	7	0	27	85	2
RES (Wind, Solar, Biomass & Others)	171	239	333	3	1	747	14
Total	1325	1844	1149	821	74	5213	100

Share of RES in total generation (%)	12.90	12.95	28.96	0.37	1.55	14.32
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.72	17.68	41.94	15.32	43.13	28.88

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.046
Based on State Max Demands	1.088

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	212715	11:55	0
Non-Solar hr	211601	19:17	1801

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: 13-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	1001	0.0	24.7	-24.7
2	HVDC	PUSAULI B/B	-	0	297	0.0	7.3	-7.3
3	765 kV	GAYA-VARANASI	2	534	378	0.0	0.4	-0.4
4	765 kV	SASARAM-FATEHPUR	1	152	291	0.0	3.0	-3.0
5	765 kV	GAYA-BALIA	1	0	655	0.0	10.8	-10.8
6	400 kV	PUSAULI-VARANASI	1	0	192	0.0	3.8	-3.8
7	400 kV	PUSAULI -ALLAHABAD	1	0	167	0.0	3.3	-3.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	571	0.0	9.5	-9.5
9	400 kV	PATNA-BALIA	2	0	536	0.0	7.9	-7.9
10	400 kV	NAUBATPUR-BALIA	2	0	553	0.0	9.7	-9.7
11	400 kV	BIHARSHARIFF-BALIA	2	109	184	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	356	0.0	6.4	-6.4
13	400 kV	BIHARSHARIFF-VARANASI	2	211	148	0.0	0.0	0.0
14	220 kV	SAHUPURI-KARAMNASA	1	0	0	0.0	0.0	0.0
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	34	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.5	89.0	-88.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	480	994	0.0	3.4	-3.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1366	241	19.1	0.0	19.1
3	765 kV	JHARSUGUDA-DURG	2	0	443	0.0	6.4	-6.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	471	0.0	5.5	-5.5
5	400 kV	RANCHI-SIPAT	2	242	170	2.1	0.0	2.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	149	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	42	37	0.1	0.0	0.1
					ER-WR	21.3	17.2	4.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	136	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1635	0.0	31.3	-31.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2752	0.0	44.2	-44.2
4	400 kV	TALCHER-I/C	2	177	318	1.8	0.0	1.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	78.2	-78.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	520	0.0	8.0	-8.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	153	502	0.0	7.3	-7.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	125	0.0	2.0	-2.0
					ER-NER	0.0	17.3	-17.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	17.2	-17.2
					NER-NR	0.0	17.2	-17.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4540	0.0	87.0	-87.0
2	HVDC	VINDHYACHAL B/B	-	437	53	4.3	0.5	3.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	0	1771	0.0	28.2	-28.2
5	765 kV	GWALIOR-PHAGI	2	0	1635	0.0	25.2	-25.2
6	765 kV	JABALPUR-ORAI	2	0	986	0.0	31.7	-31.7
7	765 kV	GWALIOR-ORAI	1	704	0	12.6	0.0	12.6
8	765 kV	SATNA-ORAI	1	0	1004	0.0	21.6	-21.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1479	554	5.4	0.0	5.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3292	0.0	59.8	-59.8
11	400 kV	ZERDA-KANKROLI	1	272	48	2.2	0.1	2.1
12	400 kV	ZERDA -BHINMAL	1	430	182	2.3	0.0	2.3
13	400 kV	VINDHYACHAL -RIHAND	1	935	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	201	516	0.0	5.2	-5.2
15	220 kV	BHANPURA-RANPUR	1	0	95	0.0	1.5	-1.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.8	-1.8
17	220 kV	MEHGAON-AURAIYA	1	95	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	71	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	50.8	298.6	-247.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	300	0	7.2	0.0	7.2
2	HVDC	RAIGARH-PUGALUR	2	0	3005	0.0	32.9	-32.9
3	765 kV	SOLAPUR-RAICHUR	2	1214	1093	8.4	3.3	5.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2494	0.0	35.3	-35.3
5	400 kV	KOLHAPUR-KUDGI	2	1709	0	30.9	0.0	30.9
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	118	2.3	0.0	2.3
					WR-SR	48.8	71.4	-22.6

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)	617	469	556	13.35
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	865	693	754	18.09
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	81	-5	49	1.17
	NER	132kV GELEPHU-SALAKATI	15	0	4	0.09
	NER	132kV MOTANGA-RANGIA	7	0	48	1.14
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.16
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	449	262	372	8.93
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-941	-826	-913	-21.91
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1474	-1200	-1342	-32.22
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-164	0	-147	-3.52

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 13-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	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Bangladesh	21.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.94
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	21.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.97

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	31.06	2.49	0.00	0.00	0.00	0.00	0.00	0.00	33.55
Nepal	0.00	2.63	7.78	0.00	0.00	0.00	0.00	0.00	10.41
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	31.06	5.12	7.78	0.00	0.00	0.00	0.00	0.00	43.96

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	31.06	2.49	0.00	0.00	0.00	0.00	0.00	0.00	33.55
Nepal	-0.03	2.63	7.78	0.00	0.00	0.00	0.00	0.00	10.38
Bangladesh	-21.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.94
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	9.09	5.12	7.78	0.00	0.00	0.00	0.00	0.00	21.99