

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, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 18th September 2023

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- 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
- 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
- कार्यकारी निदेशक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतेह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 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 17.09.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंकें की वेबसाइट पर उपलब्ध 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 17th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-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)	58072	52577	43380	25979	3358	183366
Peak Shortage (MW)	0	0	0	0	10	10
Energy Met (MU)	1273	1236	1111	596	69	4284
Hydro Gen (MU)	284	77	50	102	30	543
Wind Gen (MU)	19	194	151	-	-	365
Solar Gen (MU)*	107.41	33.94	110.01	2.87	0.21	254
Energy Shortage (MU)	0.00	0.00	0.00	1.60	0.53	2.13
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	61073	55975	53240	27733	3351	188165
Time Of Maximum Demand Met	00:00	19:17	13:28	23:35	17:57	00:00

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	0.042	0.00	0.13	5.95	6.08	65.39	28.54

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	10858	0	196.0	111.9	-5.0	241	0.00
	Haryana	8546	0	177.5	136.9	-3.1	167	0.00
	Rajasthan	10600	0	235.3	75.8	-9.0	307	0.00
	Delhi	5162	0	108.2	97.2	-1.5	193	0.00
	UP	22189	0	429.2	200.4	-2.6	389	0.00
	Uttarakhand	1822	0	39.5	16.9	-0.3	170	0.00
	HP	1514	0	30.4	2.0	-0.7	55	0.00
	J&K(UT) & Ladakh(UT)	2280	0	47.7	23.4	1.2	209	0.00
	Chandigarh	302	0	6.0	5.4	0.5	69	0.00
Railways NR ISTS	156	0	3.4	3.6	-0.1	20	0.00	
WR	Chhattisgarh	4184	0	93.7	41.1	-2.6	195	0.00
	Gujarat	17288	0	369.0	155.1	-1.1	979	0.00
	MP	9587	0	191.3	69.5	-4.7	505	0.00
	Maharashtra	23065	0	508.6	195.2	-2.6	966	0.00
	Goa	622	0	13.9	12.5	1.1	43	0.00
	DNHDDPDCL	1245	0	28.0	28.0	0.0	186	0.00
	AMNSIL	883	0	18.7	10.1	0.0	282	0.00
	BALCO	521	0	12.4	12.5	-0.1	0	0.00
SR	Andhra Pradesh	11076	0	226.5	80.6	-0.4	681	0.00
	Telangana	13242	0	259.1	138.9	0.1	742	0.00
	Karnataka	12362	0	231.9	72.0	0.6	714	0.00
	Kerala	3455	0	70.5	57.3	1.2	224	0.00
	Tamil Nadu	14111	0	314.3	144.5	-7.7	600	0.00
	Puducherry	373	0	8.4	8.1	-0.5	59	0.00
ER	Bihar	7143	100	152.9	150.0	-0.4	426	0.39
	DVC	3469	0	75.4	-30.5	0.4	339	0.00
	Jharkhand	1792	0	37.9	31.2	0.7	278	1.21
	Odisha	6070	0	122.4	56.9	-1.6	457	0.00
	West Bengal	9930	0	205.8	81.4	-3.5	88	0.00
	Sikkim	56	0	0.9	0.9	0.0	25	0.00
Railways ER ISTS	19	0	0.2	0.2	0.0	0	0.00	
NER	Arunachal Pradesh	170	0	3.1	3.0	-0.2	46	0.00
	Assam	2375	0	47.1	37.7	2.3	357	0.26
	Manipur	192	0	2.8	2.9	0.0	12	0.00
	Meghalaya	306	10	5.6	2.2	-0.1	37	0.27
	Mizoram	95	0	1.7	1.1	-0.2	54	0.00
	Nagaland	170	0	3.0	2.8	-0.3	14	0.00
Tripura	303	0	5.9	5.8	0.2	32	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	20.4	9.6	-26.4	-33.6
Day Peak (MW)	1060.2	439.0	-1116.0	-1483.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	250.0	-288.1	117.7	-81.9	2.2	0.0
Actual(MU)	218.3	-300.7	135.3	-68.6	7.3	-8.4
O/D/U/D(MU)	-31.7	-12.7	17.6	13.3	5.1	-8.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4499	8996	5208	710	355	19767	38
State Sector	7970	13632	6142	4070	157	31971	62
Total	12469	22628	11350	4780	512	51738	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	637	1255	590	626	13	3121	67
Lignite	31	10	32	0	0	73	2
Hydro	284	77	50	102	30	543	12
Nuclear	28	54	76	0	0	157	3
Gas, Naptha & Diesel	13	25	6	0	28	72	2
RES (Wind, Solar, Biomass & Others)	133	230	290	4	0	658	14
Total	1125	1651	1044	732	72	4624	100

Share of RES in total generation (%)	11.80	13.95	27.79	0.55	0.29	14.22
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.54	21.88	39.80	14.49	42.65	29.38

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.070
Based on State Max Demands	1.102

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	183689	10:54	24.7
Non-Solar hr	188165	0:00	414

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: 18-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	24.3	-24.3
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.6	-3.6
3	765 kV	GAYA-VARANASI	2	1224	208	9.3	0.0	9.3
4	765 kV	SASARAM-FATEHPUR	1	510	192	2.7	0.0	2.7
5	765 kV	GAYA-BALIA	1	0	703	0.0	8.8	-8.8
6	400 kV	PUSAULI-VARANASI	1	0	165	0.0	2.5	-2.5
7	400 kV	PUSAULI-ALLAHABAD	1	10	94	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	421	498	0.0	2.4	-2.4
9	400 kV	PATNA-BALIA	2	71	516	0.0	6.1	-6.1
10	400 kV	NAUBATPUR-BALIA	2	133	532	0.0	6.2	-6.2
11	400 kV	BIHARSHARIFF-BALIA	2	381	129	1.5	0.0	1.5
12	400 kV	MOTIHARI-GORAKHPUR	2	230	356	0.0	2.5	-2.5
13	400 kV	BIHARSHARIFF-VARANASI	2	490	100	3.2	0.0	3.2
14	220 kV	SAHUPURI-KARAMNANA	1	48	101	0.0	0.9	-0.9
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						17.2	58.3	-41.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1121	192	10.8	0.0	10.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1631	0	28.5	0.0	28.5
3	765 kV	JHARSUGUDA-DURG	2	186	348	0.0	3.1	-3.1
4	400 kV	JHARSUGUDA-RAIGARH	4	446	310	0.1	0.0	0.1
5	400 kV	RANCHI-SIPAT	2	465	55	5.7	0.0	5.7
6	220 kV	BUDHIPADAR-RAIGARH	1	59	106	0.0	0.9	-0.9
7	220 kV	BUDHIPADAR-KORBA	2	161	0	2.1	0.0	2.1
ER-WR						47.3	4.0	43.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	133	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1631	0.0	34.0	-34.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2835	0.0	41.2	-41.2
4	400 kV	TALCHER-I/C	2	21	657	0.0	6.6	-6.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	77.8	-77.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	571	0.0	10.1	-10.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	615	0.0	9.8	-9.8
3	220 kV	ALIPURDUAR-SALAKATI	2	0	134	0.0	2.4	-2.4
ER-NER						0.0	22.3	-22.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.9	-16.9
NER-NR						0.0	16.9	-16.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2012	0.0	47.5	-47.5
2	HVDC	VINDHYACHAL B/B	-	442	0	11.3	0.0	11.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	977	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	0	2092	0.0	25.8	-25.8
5	765 kV	GWALIOR-PHAGI	2	1495	1269	7.1	13.6	-6.5
6	765 kV	JABALPUR-ORAI	2	16	1089	0.0	24.0	-24.0
7	765 kV	GWALIOR-ORAI	1	624	215	7.6	0.0	7.6
8	765 kV	SATNA-ORAI	1	0	714	0.0	15.7	-15.7
9	765 kV	BANASKANTHA-CHITORGARH	2	455	468	0.0	0.0	0.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3230	0.0	62.8	-62.8
11	400 kV	ZERDA-KANKROLI	1	167	71	1.5	0.2	1.3
12	400 kV	ZERDA -BHINMAL	1	492	114	3.4	0.0	3.4
13	400 kV	VINDHYACHAL -RIHAND	1	944	0	19.0	0.0	19.0
14	400 kV	RAPP-SHUALPUR	2	491	602	0.0	2.5	-2.5
15	220 kV	BHANPURA-RANPUR	1	0	173	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	92	2	0.8	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	63	19	0.3	0.0	0.3
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						51.0	219.6	-168.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	316	508	0.5	11.0	-10.6
2	HVDC	RAIGARH-PUGALUR	2	0	4515	0.0	69.6	-69.6
3	765 kV	SOLAPUR-RAICHUR	2	1796	1890	10.6	7.6	3.0
4	765 kV	WARDHA-NIZAMABAD	2	0	3091	0.0	38.3	-38.3
5	400 kV	KOLHAPUR-KUDGI	2	1630	0	24.8	0.0	24.8
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	108	2.2	0.0	2.2
WR-SR						37.9	126.5	-88.6

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 MANGDECHHU HEP 4*180MW)	387	278	340	8.16	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	651	475	546	13.11	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	77	4	34	0.82	
	NER	132kV GELEPHU-SALAKATI	-23	0	-15	-0.36	
	NER	132kV MOTANGA-RANGIA	-68	-2	-55	-1.31	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-3	0	35	0.84	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	442	303	366	8.78	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-949	-843	-946	-22.72	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1483	-1294	-1399	-33.57	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-167	0	-152	-3.64	

