



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रीड 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: 21st 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 20.09.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 20th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 21-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)	68228	56726	47900	24520	2880	200254
Peak Shortage (MW)	563	0	0	305	276	1144
Energy Met (MU)	1461	1317	1219	556	58	4611
Hydro Gen (MU)	312	101	76	97	25	611
Wind Gen (MU)	10	114	117	-	-	241
Solar Gen (MU)*	113.83	47.32	113.68	1.65	0.68	277
Energy Shortage (MU)	5.18	0.00	0.00	3.36	1.14	9.68
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69214	60459	58665	25246	3097	206441
Time Of Maximum Demand Met	22:23	19:01	11:54	18:33	18:13	11:53

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	0.027	0.00	0.00	3.45	3.45	79.41	17.14

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	10376	0	208.5	121.0	0.4	220	0.00
	Haryana	10136	0	210.5	146.5	1.9	410	4.36
	Rajasthan	12202	0	267.6	91.2	-0.4	414	0.00
	Delhi	6320	0	130.9	117.0	-1.0	262	0.00
	UP	25739	0	502.9	217.1	-1.9	124	0.00
	Uttarakhand	2294	0	48.7	25.2	0.3	93	0.00
	HP	1674	0	34.0	5.8	-0.1	80	0.00
	J&K(UT) & Ladakh(UT)	2363	162	48.5	22.9	2.5	250	0.82
	Chandigarh	326	0	6.6	6.4	0.1	31	0.00
Railways NR ISTS	162	0	3.2	3.5	-0.3	28	0.00	
WR	Chhattisgarh	4919	0	106.4	52.9	-2.7	240	0.00
	Gujarat	16377	0	350.0	161.1	-1.4	573	0.00
	MP	11690	0	247.7	124.5	-2.1	710	0.00
	Maharashtra	25786	0	541.1	211.3	-4.1	759	0.00
	Goa	546	0	11.1	10.6	-0.1	55	0.00
	DNHDDPDCL	1220	0	28.0	28.0	0.0	70	0.00
	AMNSIL	894	0	20.1	9.3	0.2	71	0.00
	BALCO	521	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	11651	0	235.4	98.7	-1.9	766	0.00
	Telangana	15370	0	295.4	178.8	0.5	758	0.00
	Karnataka	13923	0	255.8	70.8	2.3	987	0.00
	Kerala	4090	0	80.5	65.4	1.4	907	0.00
	Tamil Nadu	16558	0	342.3	165.4	0.9	1055	0.00
	Puducherry	448	0	9.7	9.2	-0.3	57	0.00
ER	Bihar	7061	248	145.8	141.3	-0.8	459	1.53
	DVC	3488	0	77.8	-18.0	1.9	350	0.00
	Jharkhand	1576	0	32.6	29.1	-1.7	209	1.83
	Odisha	5071	0	112.2	38.7	-1.4	269	0.00
	West Bengal	8486	0	186.1	59.5	-3.3	68	0.00
	Sikkim	89	0	1.3	1.4	-0.2	7	0.00
Railways ER ISTS	24	0	0.2	0.2	0.0	18	0.00	
NER	Arunachal Pradesh	172	0	3.0	2.5	0.1	42	0.00
	Assam	1972	0	37.3	31.0	0.5	214	0.96
	Manipur	161	0	2.5	2.6	-0.1	45	0.00
	Meghalaya	336	0	5.9	2.0	-0.2	40	0.18
	Mizoram	119	0	1.9	1.4	-0.4	29	0.00
	Nagaland	153	0	2.6	2.3	-0.1	15	0.00
Tripura	270	0	5.1	5.4	-0.1	31	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	19.4	11.0	-23.4	-29.7
Day Peak (MW)	1090.0	405.0	-1095.0	-1376.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	281.5	-327.6	183.3	-134.1	-3.1	0.0
Actual(MU)	276.0	-350.0	205.5	-138.3	-0.3	-7.1
O/D/U/D(MU)	-5.5	-22.4	22.3	-4.2	2.8	-7.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3258	8142	4968	660	505	17532	36
State Sector	6100	15770	5742	3810	219	31641	64
Total	9358	23912	10710	4470	724	49173	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	746	1424	636	661	15	3482	70
Lignite	31	9	34	0	0	74	1
Hydro	312	101	76	97	25	611	12
Nuclear	29	53	76	0	0	159	3
Gas, Naptha & Diesel	22	31	6	0	26	86	2
RES (Wind, Solar, Biomass & Others)	130	163	259	3	1	556	11
Total	1270	1781	1087	762	67	4967	100

Share of RES in total generation (%)	10.25	9.15	23.81	0.42	1.01	11.19
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	37.09	17.83	37.73	13.16	38.69	26.67

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.049
Based on State Max Demands	1.087

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206441	11:53	0
Non-Solar hr	204911	19:15	1920

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: 21-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	144	0.0	3.5	-3.5
3	765 kV	GAYA-VARANASI	2	540	291	1.0	0.0	1.0
4	765 kV	SASARAM-FATEHPUR	1	147	209	0.0	2.1	-2.1
5	765 kV	GAYA-BALIA	1	0	669	0.0	9.8	-9.8
6	400 kV	PUSAULI-VARANASI	1	0	142	0.0	2.3	-2.3
7	400 kV	PUSAULI-ALLAHABAD	1	0	112	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	725	0.0	8.5	-8.5
9	400 kV	PATNA-BALIA	2	17	455	0.0	6.0	-6.0
10	400 kV	NAUBATPUR-BALIA	2	67	460	0.0	5.7	-5.7
11	400 kV	BIHARSHARIFF-BALIA	2	197	227	0.0	0.5	-0.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	367	0.0	5.0	-5.0
13	400 kV	BIHARSHARIFF-VARANASI	2	296	141	1.5	0.0	1.5
14	220 kV	SAHUPURI-KARAMNANA	1	22	101	0.0	1.1	-1.1
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						3.1	70.4	-67.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	771	357	4.2	0.0	4.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1418	207	15.1	0.0	15.1
3	765 kV	JHARSUGUDA-DURG	2	0	795	0.0	8.8	-8.8
4	400 kV	JHARSUGUDA-RAIGARH	4	69	444	0.0	4.2	-4.2
5	400 kV	RANCHI-SIPAT	2	270	92	3.2	0.0	3.2
6	220 kV	BUDHIPADAR-RAIGARH	1	0	130	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	99	0	1.3	0.0	1.3
ER-WR						23.7	14.6	9.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	555	0.0	12.6	-12.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1981	0.0	40.9	-40.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2662	0.0	47.0	-47.0
4	400 kV	TALCHER-I/C	2	0	637	0.0	7.5	-7.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	100.4	-100.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	492	0.0	8.0	-8.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	465	0.0	5.6	-5.6
3	220 kV	ALIPURDUAR-SALAKATI	2	0	103	0.0	1.5	-1.5
ER-NER						0.0	15.2	-15.2
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-KIRUKSHETRA	2	0	2507	0.0	56.3	-56.3
2	HVDC	VINDHYACHAL B/B	-	225	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	978	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	108	2107	0.0	27.6	-27.5
5	765 kV	GWALIOR-PHAGI	2	500	1532	1.4	17.7	-16.3
6	765 kV	JABALPUR-ORAI	2	0	1170	0.0	30.0	-30.0
7	765 kV	GWALIOR-ORAI	1	628	0	10.4	0.0	10.4
8	765 kV	SATNA-ORAI	1	0	969	0.0	19.3	-19.3
9	765 kV	BANASKANTHA-CHITORGARH	2	579	683	0.0	3.1	-3.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3184	0.0	57.8	-57.8
11	400 kV	ZERDA-KANKROLI	1	141	118	0.9	0.7	0.1
12	400 kV	ZERDA -BHINMAL	1	396	212	1.2	0.0	1.2
13	400 kV	VINDHYACHAL -RIHAND	1	950	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	312	553	0.0	2.7	-2.7
15	220 kV	BHANPURA-RANPUR	1	0	91	0.0	1.6	-1.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	122	0	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	104	1	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						43.6	243.1	-199.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1008	0.0	15.5	-15.5
2	HVDC	RAIGARH-PUGALUR	2	0	6040	0.0	95.5	-95.5
3	765 kV	SOLAPUR-RAICHUR	2	906	1657	4.6	8.6	-4.0
4	765 kV	WARDHA-NIZAMABAD	2	0	3509	0.0	50.8	-50.8
5	400 kV	KOLHAPUR-KUDGI	2	1430	0	22.8	0.0	22.8
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	107	2.1	0.0	2.1
WR-SR						29.4	170.3	-140.9

INTERNATIONAL EXCHANGES					Import(+ve)/Export(-ve) Energy Exchange (MU)		
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)		
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	406	224	280	6.73	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	590	415	466	11.18	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	44	-30	2	0.06	
	NER	132kV GELEPHU-SALAKATI	20	-6	9	0.22	
	NER	132kV MOTANGA-RANGIA	52	0	51	1.22	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-61	0	3	0.08	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	466	318	455	10.92	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-926	-641	-819	-19.65	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1376	-1140	-1236	-29.66	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-169	0	-157	-3.76	

