

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: 16th 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 15.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेके 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 15th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 16-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)	69841	58116	47429	26297	3340	205023
Peak Shortage (MW)	295	0	0	447	319	1061
Energy Met (MU)	1566	1380	1192	585	72	4795
Hydro Gen (MU)	345	61	59	112	32	609
Wind Gen (MU)	9	89	179	-	-	278
Solar Gen (MU)*	105.48	37.43	111.08	4.95	1.32	260
Energy Shortage (MU)	1.79	0.00	0.00	4.51	1.94	8.24
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	72742	63931	58307	27327	3670	210789
Time Of Maximum Demand Met	00:00	10:00	11:57	20:42	18:22	11:51

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	0.86	4.98	5.83	75.96	18.20

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	13042	0	276.5	173.6	-4.5	272	0.00
	Haryana	11434	155	236.5	183.0	-2.0	245	1.57
	Rajasthan	14371	0	307.7	120.4	-3.6	344	0.00
	Delhi	6404	0	131.3	115.9	-2.3	241	0.00
	UP	24425	0	476.3	202.0	-0.7	550	0.00
	Uttarakhand	2238	0	45.8	23.0	-0.6	144	0.00
	HP	1736	0	35.0	6.8	-0.9	78	0.01
	J&K(UT) & Ladakh(UT)	2486	0	47.2	24.2	-0.5	231	0.21
	Chandigarh	299	0	6.6	7.0	-0.4	20	0.00
Railways NR ISTS	176	0	3.6	3.5	0.1	22	0.00	
WR	Chhattisgarh	4370	0	92.8	39.3	-2.5	226	0.00
	Gujarat	22153	0	461.8	219.5	-4.1	687	0.00
	MP	10844	0	223.1	100.1	-3.6	815	0.00
	Maharashtra	24771	0	527.2	196.2	-1.9	639	0.00
	Goa	689	0	14.5	14.4	-0.1	43	0.00
	DNHDDPDCL	1301	0	29.9	29.9	0.0	62	0.00
	AMNSIL	798	0	18.0	8.1	0.3	374	0.00
	BALCO	522	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	11447	0	230.9	84.6	-2.0	1024	0.00
	Telangana	13025	0	245.0	127.2	-0.6	526	0.00
	Karnataka	14317	0	262.1	94.6	-1.4	642	0.00
	Kerala	3858	0	78.8	64.6	0.7	241	0.00
	Tamil Nadu	16998	0	365.2	157.0	-3.3	437	0.00
	Puducherry	456	0	10.1	9.6	-0.1	42	0.00
ER	Bihar	7264	0	147.9	147.4	-0.1	419	3.29
	DVC	3591	0	77.4	-44.8	-0.5	188	0.00
	Jharkhand	1713	0	39.1	26.6	4.0	226	1.22
	Odisha	5324	0	116.2	41.9	-0.7	304	0.00
	West Bengal	9237	0	203.3	78.9	-3.0	139	0.00
	Sikkim	95	0	1.4	1.4	0.0	8	0.00
Railways ER ISTS	23	0	0.2	0.2	0.0	0	0.00	
NER	Arunachal Pradesh	170	0	3.0	2.9	-0.2	37	0.00
	Assam	2394	0	50.0	39.2	2.7	308	1.37
	Manipur	198	0	2.8	2.7	0.1	29	0.00
	Meghalaya	328	31	5.6	0.5	-0.3	67	0.57
	Mizoram	124	0	1.7	1.2	-0.3	28	0.00
	Nagaland	170	0	2.5	2.7	-0.6	29	0.00
Tripura	335	0	6.1	5.9	0.2	63	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	27.9	9.7	-25.4	-31.5
Day Peak (MW)	1559.0	385.0	-1107.0	-1465.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	335.4	-285.7	96.5	-146.2	0.0	0.0
Actual(MU)	310.6	-259.9	107.4	-154.6	2.6	6.1
O/D/U/D(MU)	-24.8	25.8	10.9	-8.5	2.7	6.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3679	9971	3998	500	355	18502	42
State Sector	6390	10305	6112	2967	157	25931	58
Total	10069	20275	10110	3467	512	44433	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	797	1494	663	689	16	3660	71
Lignite	32	14	40	0	0	86	2
Hydro	345	61	59	112	32	609	12
Nuclear	24	54	76	0	0	153	3
Gas, Naptha & Diesel	22	40	6	0	28	96	2
RES (Wind, Solar, Biomass & Others)	122	130	319	6	1	578	11
Total	1341	1792	1164	807	77	5182	100

Share of RES in total generation (%)	9.06	7.23	27.41	0.77	1.70	11.15
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	36.55	13.61	39.00	14.69	42.64	25.85

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.072
Based on State Max Demands	1.105

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	210789	11:51	0
Non-Solar hr	209147	19:20	1116

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: 16-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	1002	0.0	25.5	-25.5
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.5	-3.5
3	765 kV	GAYA-VARANASI	2	283	271	0.0	1.5	-1.5
4	765 kV	SASARAM-FATEHPUR	1	0	308	0.0	4.4	-4.4
5	765 kV	GAYA-BALIA	1	0	725	0.0	11.9	-11.9
6	400 kV	PUSAULI-VARANASI	1	0	114	0.0	1.0	-1.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	158	0.0	2.5	-2.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	533	0.0	8.4	-8.4
9	400 kV	PATNA-BALIA	2	0	428	0.0	8.5	-8.5
10	400 kV	NAUBATPUR-BALIA	2	0	443	0.0	8.4	-8.4
11	400 kV	BIHARSHARIFF-BALIA	2	107	184	0.0	1.8	-1.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	295	0.0	4.8	-4.8
13	400 kV	BIHARSHARIFF-VARANASI	2	170	118	0.0	0.3	-0.3
14	220 kV	SAHUPURI-KARAMNANA	1	2	89	0.0	0.4	-0.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
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	0.6	82.8	-82.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	441	1301	0.0	5.9	-5.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1200	301	15.0	0.0	15.0
3	765 kV	JHARSUGUDA-DURG	2	0	476	0.0	7.1	-7.1
4	400 kV	JHARSUGUDA-RAIGARH	4	4	339	0.0	3.2	-3.2
5	400 kV	RANCHI-SIPAT	2	235	163	2.0	0.0	2.0
6	220 kV	BUDHIPADAR-RAIGARH	1	13	99	0.0	0.9	-0.9
7	220 kV	BUDHIPADAR-KORBA	2	112	0	1.4	0.0	1.4
					ER-WR	18.4	17.1	1.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	134	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1998	0.0	43.7	-43.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2458	0.0	44.5	-44.5
4	400 kV	TALCHER-I/C	2	184	649	0.0	10.4	-10.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	90.9	-90.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	522	0.0	8.6	-8.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	557	0.0	7.4	-7.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	137	0.0	2.1	-2.1
					ER-NER	0.0	18.2	-18.2
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	5551	0.0	75.9	-75.9
2	HVDC	VINDHYACHAL B/B	-	93	101	2.2	0.3	1.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	32.3	-32.3
4	765 kV	GWALIOR-AGRA	2	226	1744	0.1	24.4	-24.3
5	765 kV	GWALIOR-PHAGI	2	0	1651	0.0	28.9	-28.9
6	765 kV	JABALPUR-ORAI	2	0	978	0.0	29.5	-29.5
7	765 kV	GWALIOR-ORAI	1	705	0	14.2	0.0	14.2
8	765 kV	SATNA-ORAI	1	0	1018	0.0	21.1	-21.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1986	305	18.0	0.0	18.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3369	0.0	60.2	-60.2
11	400 kV	ZERDA-KANKROLI	1	374	30	3.7	0.0	3.7
12	400 kV	ZERDA-BHINMAL	1	517	151	3.9	0.0	3.9
13	400 kV	VINDHYACHAL-RIHAND	1	958	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	14	661	0.0	7.4	-7.4
15	220 kV	BHANPURA-RANPUR	1	0	166	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.6	-0.6
17	220 kV	MEHGAON-AURAIYA	1	116	0	1.4	0.0	1.4
18	220 kV	MALANPUR-AURAIYA	1	84	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	66.5	283.3	-216.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	310	0	7.2	0.0	7.2
2	HVDC	RAIGARH-PUGALUR	2	0	4009	0.0	74.4	-74.4
3	765 kV	SOLAPUR-RAICHUR	2	1386	1144	8.9	2.5	6.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2354	0.0	14.4	-14.4
5	400 kV	KOLHAPUR-KUDGI	2	1654	0	30.3	0.0	30.3
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	2.4	0.0	2.4
					WR-SR	48.8	91.3	-42.6

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)	499	345	410	9.85	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	765	413	638	15.32	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	334	-11	59	1.41	
	NER	132kV GELEPHU-SALAKATI	10	0	4	0.10	
	NER	132kV MOTANGA-RANGIA	67	39	50	1.20	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-42	0	15	0.37	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	427	284	388	9.30	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-941	-818	-909	-21.83	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1465	-1206	-1313	-31.52	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-166	0	-149	-3.58	

