

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: 17th 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 16.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-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 16th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 17-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)	64783	56093	46288	26759	3238	197161
Peak Shortage (MW)	0	0	0	469	33	502
Energy Met (MU)	1481	1326	1177	598	71	4654
Hydro Gen (MU)	339	66	52	102	30	589
Wind Gen (MU)	15	159	199	-	-	373
Solar Gen (MU)*	120.35	34.16	110.52	4.75	0.97	271
Energy Shortage (MU)	0.37	0.00	0.00	2.65	1.25	4.27
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	67761	60910	56285	27383	3553	207986
Time Of Maximum Demand Met	00:00	10:00	09:37	21:29	18:25	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	0.045	0.10	0.83	5.68	6.62	75.07	18.31

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	12459	0	268.5	160.3	0.4	223	0.00
	Haryana	10229	0	217.1	167.8	-4.4	51	0.00
	Rajasthan	13173	0	275.9	100.8	-6.7	325	0.00
	Delhi	5943	0	121.1	106.6	-2.6	94	0.00
	UP	23141	0	459.3	210.8	-2.0	370	0.00
	Uttarakhand	2172	0	45.8	22.6	0.2	117	0.00
	HP	1673	0	35.1	6.4	-0.4	47	0.01
	J&K(UT) & Ladakh(UT)	2420	180	49.0	25.1	0.8	290	0.36
	Chandigarh	302	0	6.2	6.6	-0.5	10	0.00
Railways NR ISTS	169	0	3.4	3.5	-0.1	8	0.00	
WR	Chhattisgarh	4437	0	96.5	45.4	-2.4	225	0.00
	Gujarat	21417	0	440.9	210.7	-2.7	912	0.00
	MP	9546	0	193.9	66.1	-2.0	686	0.00
	Maharashtra	24094	0	519.8	192.8	-4.0	515	0.00
	Goa	699	0	14.2	14.1	-0.1	44	0.00
	DNHDDPDCL	1300	0	30.2	30.1	0.1	56	0.00
	AMNSIL	810	0	18.5	8.6	0.1	287	0.00
	BALCO	522	0	12.4	12.5	-0.1	4	0.00
SR	Andhra Pradesh	10969	0	230.3	74.9	-1.6	508	0.00
	Telangana	13255	0	254.2	143.7	0.5	705	0.00
	Karnataka	13695	0	254.4	81.7	-2.0	671	0.00
	Kerala	3810	0	78.9	63.1	0.1	256	0.00
	Tamil Nadu	16483	0	348.7	151.2	-4.5	614	0.00
	Puducherry	444	0	10.1	9.6	-0.1	54	0.00
ER	Bihar	7258	0	152.5	152.7	-0.9	269	1.17
	DVC	3609	0	79.2	-45.7	-0.6	246	0.00
	Jharkhand	1752	0	40.2	28.6	3.3	191	1.48
	Odisha	5182	0	113.4	43.1	-2.5	303	0.00
	West Bengal	9701	0	211.6	85.6	-2.1	238	0.00
	Sikkim	81	0	1.3	1.4	-0.1	7	0.00
	Railways ER ISTS	17	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	179	0	2.9	2.9	-0.3	40	0.00
	Assam	2498	20	49.1	39.1	2.8	217	1.09
	Manipur	194	0	2.7	2.8	-0.1	32	0.00
	Meghalaya	337	13	6.0	1.5	-0.2	41	0.16
	Mizoram	115	0	1.8	1.3	-0.4	16	0.00
	Nagaland	176	0	2.5	2.8	-0.7	31	0.00
	Tripura	346	0	6.4	6.2	0.1	64	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	23.0	10.8	-25.5	-32.6
Day Peak (MW)	1222.3	431.0	-1107.0	-1480.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	305.8	-290.4	117.0	-134.0	1.6	0.0
Actual(MU)	280.7	-285.2	124.0	-131.7	6.7	-5.6
O/D/U/D(MU)	-25.1	5.2	7.0	2.3	5.0	-5.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6697	11516	5208	500	355	24275	47
State Sector	7550	10687	6112	2467	207	27023	53
Total	14247	22203	11320	2967	562	51299	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	731	1380	615	688	14	3428	68
Lignite	32	11	38	0	0	81	2
Hydro	339	66	52	102	30	589	12
Nuclear	24	54	76	0	0	153	3
Gas, Naptha & Diesel	18	32	6	0	28	84	2
RES (Wind, Solar, Biomass & Others)	142	195	341	7	1	685	14
Total	1285	1738	1127	797	73	5019	100

Share of RES in total generation (%)	11.02	11.20	30.24	0.83	1.35	13.64
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	39.29	18.07	41.56	13.63	42.62	28.43

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.038
Based on State Max Demands	1.079

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207986	11:51	0
Non-Solar hr	203054	19:13	652

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: 17-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	24.1	-24.1
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.4	-3.4
3	765 kV	GAYA-VARANASI	2	512	191	1.4	0.0	1.4
4	765 kV	SASARAM-FATEHPUR	1	174	256	0.0	2.5	-2.5
5	765 kV	GAYA-BALIA	1	0	682	0.0	11.8	-11.8
6	400 kV	PUSAULI-VARANASI	1	0	138	0.0	2.2	-2.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	94	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	37	479	0.0	6.4	-6.4
9	400 kV	PATNA-BALIA	2	0	500	0.0	8.6	-8.6
10	400 kV	NAUBATPUR-BALIA	2	0	513	0.0	8.4	-8.4
11	400 kV	BIHARSHARIFF-BALIA	2	236	119	0.0	0.3	-0.3
12	400 kV	MOTIHARI-GORAKHPUR	2	0	350	0.0	4.9	-4.9
13	400 kV	BIHARSHARIFF-VARANASI	2	239	92	0.7	0.0	0.7
14	220 kV	SAHUPURI-KARAMNANA	1	22	113	0.0	1.2	-1.2
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						2.6	75.2	-72.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	297	560	0.0	3.8	-3.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1448	176	20.5	0.0	20.5
3	765 kV	JHARSUGUDA-DURG	2	0	455	0.0	6.0	-6.0
4	400 kV	JHARSUGUDA-RAIGARH	4	31	388	0.0	4.1	-4.1
5	400 kV	RANCHI-SIPAT	2	289	116	3.3	0.0	3.3
6	220 kV	BUDHIPADAR-RAIGARH	1	5	126	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	98	0	1.4	0.0	1.4
ER-WR						25.2	15.3	9.9
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	1985	0.0	34.2	-34.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	2604	0.0	46.0	-46.0
4	400 kV	TALCHER-I/C	2	29	630	0.0	1.0	-1.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	82.9	-82.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	549	0.0	10.1	-10.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	574	0.0	9.0	-9.0
3	220 kV	ALIPURDUAR-SALAKATI	2	0	134	0.0	2.2	-2.2
ER-NER						0.0	21.4	-21.4
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	4028	0.0	61.5	-61.5
2	HVDC	VINDHYACHAL B/B	-	439	0	7.2	0.0	7.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1016	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	0	2125	0.0	29.5	-29.5
5	765 kV	GWALIOR-PHAGI	2	0	1462	0.0	22.4	-22.4
6	765 kV	JABALPUR-ORAI	2	0	1109	0.0	32.7	-32.7
7	765 kV	GWALIOR-ORAI	1	597	0	11.0	0.0	11.0
8	765 kV	SATNA-ORAI	1	0	1024	0.0	18.9	-18.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1860	536	12.1	0.0	12.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3513	0.0	58.7	-58.7
11	400 kV	ZERDA-KANKROLI	1	334	79	3.2	0.1	3.0
12	400 kV	ZERDA -BHINMAL	1	454	141	3.4	0.0	3.4
13	400 kV	VINDHYACHAL -RIHAND	1	948	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUALPUR	2	26	645	0.0	7.5	-7.5
15	220 kV	BHANPURA-RANPUR	1	0	76	0.0	1.3	-1.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.9	-1.9
17	220 kV	MEHGAON-AURAIYA	1	86	0	0.8	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	63	5	0.4	0.0	0.4
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						60.0	258.8	-198.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	299	507	1.6	9.3	-7.7
2	HVDC	RAIGARH-PUGALUR	2	0	4007	0.0	66.2	-66.2
3	765 kV	SOLAPUR-RAICHUR	2	1997	1166	10.9	4.6	6.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2626	0.0	39.0	-39.0
5	400 kV	KOLHAPUR-KUDGI	2	1805	0	28.0	0.0	28.0
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	119	2.3	0.0	2.3
WR-SR						42.8	119.2	-76.3

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)	418	316	359	8.61	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	627	445	514	12.35	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	71	-25	25	0.61	
	NER	132kV GELEPHU-SALAKATI	18	0	11	0.26	
	NER	132kV MOTANGA-RANGIA	68	1	50	1.20	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.96	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	464	316	410	9.84	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-942	-836	-919	-22.07	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1480	-1241	-1358	-32.60	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-165	0	-145	-3.48	

