

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: 25th 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 24.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 24-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 24th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 25-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)	61718	53465	42380	23253	2979	183795
Peak Shortage (MW)	0	0	0	53	5	58
Energy Met (MU)	1342	1253	1045	498	60	4198
Hydro Gen (MU)	271	111	48	129	31	589
Wind Gen (MU)	16	67	150	-	-	232
Solar Gen (MU)*	124.95	48.26	101.63	1.70	1.20	278
Energy Shortage (MU)	0.73	0.00	0.00	1.01	0.14	1.88
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63076	56746	48799	23448	3049	187208
Time Of Maximum Demand Met	00:00	19:01	11:49	19:56	17:55	19:19

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	0.064	0.00	0.00	3.16	3.16	64.97	31.87

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	8607	0	184.2	111.9	-3.8	152	0.00
	Haryana	9086	0	183.3	124.1	-2.0	158	0.00
	Rajasthan	12225	0	279.6	81.9	-3.4	190	0.00
	Delhi	5383	0	111.6	101.8	-1.8	155	0.00
	UP	23446	0	456.0	208.3	1.7	1236	0.00
	Uttarakhand	1923	0	41.3	20.1	-0.1	149	0.00
	HP	1565	0	31.5	9.4	-0.3	61	0.00
	J&K(UT) & Ladakh(UT)	2388	0	46.1	24.3	3.3	300	0.73
	Chandigarh	240	0	4.8	5.0	-0.2	25	0.00
Railways NR ISTS	157	0	3.2	3.5	-0.3	9	0.00	
WR	Chhattisgarh	4261	0	95.1	45.7	-1.4	157	0.00
	Gujarat	16263	0	368.3	181.0	-0.4	844	0.00
	MP	11408	0	248.2	116.6	-3.0	318	0.00
	Maharashtra	21827	0	469.6	195.0	-0.6	762	0.00
	Goa	605	0	12.1	11.6	-0.2	100	0.00
	DNHDDPDCL	1252	0	29.0	28.9	0.1	61	0.00
	AMNSIL	861	0	18.7	9.5	-0.1	305	0.00
	BALCO	520	0	12.4	12.5	-0.1	9	0.00
SR	Andhra Pradesh	9209	0	204.1	104.7	-2.2	750	0.00
	Telangana	11568	0	217.0	103.6	1.4	625	0.00
	Karnataka	11923	0	222.3	72.7	-3.1	1103	0.00
	Kerala	3557	0	72.5	58.6	1.4	207	0.00
	Tamil Nadu	14640	0	319.4	126.3	-10.2	536	0.00
	Puducherry	432	0	9.8	9.3	-0.2	44	0.00
ER	Bihar	5577	0	102.8	99.4	-0.7	654	1.01
	DVC	3483	0	74.9	-23.8	0.6	401	0.00
	Jharkhand	1676	0	32.0	26.9	-4.1	130	0.00
	Odisha	5428	0	119.7	56.7	-1.8	377	0.00
	West Bengal	7820	0	167.5	49.3	-2.0	379	0.00
	Sikkim	65	0	0.9	1.0	-0.1	8	0.00
	Railways ER ISTS	21	0	0.2	0.2	0.0	9	0.00
NER	Arunachal Pradesh	164	0	2.7	2.8	-0.4	16	0.00
	Assam	1999	0	39.5	31.5	1.4	193	0.00
	Manipur	198	0	2.8	2.9	-0.2	24	0.00
	Meghalaya	294	0	5.6	1.3	-0.2	47	0.14
	Mizoram	104	0	1.6	1.5	-0.5	15	0.00
	Nagaland	160	0	2.7	2.6	-0.3	12	0.00
	Tripura	301	0	5.1	5.4	0.2	118	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	34.7	14.9	-24.4	-27.4
Day Peak (MW)	1692.0	608.0	-1096.0	-1330.7

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	268.0	-206.4	107.8	-165.3	-4.1	0.0
Actual(MU)	257.1	-209.6	121.8	-172.1	-2.0	-4.8
O/D/U/D(MU)	-10.9	-3.3	13.8	-6.8	2.1	-4.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4562	10464	5118	250	505	20898	42
State Sector	4736	13751	6012	4110	219	28828	58
Total	9298	24215	11130	4360	724	49726	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	676	1251	551	601	11	3090	68
Lignite	28	14	38	0	0	80	2
Hydro	271	111	48	129	31	589	13
Nuclear	25	54	76	0	0	154	3
Gas, Naptha & Diesel	13	26	6	0	26	71	2
RES (Wind, Solar, Biomass & Others)	147	116	281	3	1	549	12
Total	1159	1572	1000	734	68	4533	100

Share of RES in total generation (%)	12.53	7.41	28.13	0.45	1.75	12.08
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.09	17.86	40.50	18.06	46.60	28.49

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.042
Based on State Max Demands	1.071

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	180809	11:53	0
Non-Solar hr	187208	19:19	105

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: 25-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	24.0	-24.0
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.7	-3.7
3	765 kV	GAYA-VARANASI	2	302	659	0.0	5.4	-5.4
4	765 kV	SASARAM-FATEHPUR	1	108	376	0.0	4.1	-4.1
5	765 kV	GAYA-BALIA	1	0	577	0.0	6.8	-6.8
6	400 kV	PUSAULI-VARANASI	1	0	107	0.0	1.5	-1.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	132	0.0	2.1	-2.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	1023	0.0	17.1	-17.1
9	400 kV	PATNA-BALIA	2	0	653	0.0	10.7	-10.7
10	400 kV	NAUBATPUR-BALIA	2	0	699	0.0	10.5	-10.5
11	400 kV	BIHARSHARIFF-BALIA	2	35	363	0.0	5.0	-5.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	567	0.0	9.1	-9.1
13	400 kV	BIHARSHARIFF-VARANASI	2	161	340	0.0	2.9	-2.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	126	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.2	0.0	0.2
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						0.2	104.6	-104.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1192	272	5.1	0.0	5.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	917	762	6.2	0.0	6.2
3	765 kV	JHARSUGUDA-DURG	2	83	484	0.0	4.8	-4.8
4	400 kV	JHARSUGUDA-RAIGARH	4	143	312	0.0	1.6	-1.6
5	400 kV	RANCHI-SIPAT	2	213	218	1.1	0.0	1.1
6	220 kV	BUDHIPADAR-RAIGARH	1	24	140	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	102	0	1.3	0.0	1.3
ER-WR						13.6	8.2	5.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	338	0.0	7.5	-7.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1639	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2356	0.0	38.9	-38.9
4	400 kV	TALCHER-I/C	2	0	915	0.0	15.7	-15.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	86.1	-86.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	480	0.0	6.2	-6.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	24	563	0.0	5.0	-5.0
3	220 kV	ALIPURDUAR-SALAKATI	2	0	138	0.0	1.7	-1.7
ER-NER						0.0	12.9	-12.9
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	55.5	-55.5
2	HVDC	VINDHYACHAL B/B	-	272	0	7.2	0.0	7.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	107	1928	0.0	22.4	-22.4
5	765 kV	GWALIOR-PHAGI	2	747	1375	3.1	16.2	-13.2
6	765 kV	JABALPUR-ORAI	2	7	980	0.0	21.8	-21.8
7	765 kV	GWALIOR-ORAI	1	825	0	12.1	0.0	12.1
8	765 kV	SATNA-ORAI	1	0	1006	0.0	17.1	-17.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1494	299	12.6	0.0	12.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	2715	0.0	43.4	-43.4
11	400 kV	ZERDA-KANKROLI	1	275	64	2.4	0.1	2.3
12	400 kV	ZERDA-BHINMAL	1	555	143	3.9	0.0	3.9
13	400 kV	VINDHYACHAL-RIHAND	1	963	0	19.8	0.0	19.8
14	400 kV	RAPP-SHUALPUR	2	424	495	0.0	1.2	-1.2
15	220 kV	BHANPURA-RANPUR	1	0	96	0.0	1.7	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.9	-1.9
17	220 kV	MEHGAON-AURAIYA	1	123	0	1.6	0.0	1.6
18	220 kV	MALANPUR-AURAIYA	1	92	0	1.0	0.0	1.0
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						63.6	205.6	-142.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	506	0.0	11.9	-11.9
2	HVDC	RAIGARH-PUGALUR	2	0	4506	0.0	64.8	-64.8
3	765 kV	SOLAPUR-RAICHUR	2	2055	577	14.0	1.2	12.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2092	0.0	24.9	-24.9
5	400 kV	KOLHAPUR-KUDGI	2	1588	0	25.5	0.0	25.5
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	113	2.1	0.0	2.1
WR-SR						41.6	102.8	-61.2

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)	614	379	506	12.13	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1024	0	972	23.33	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	70	17	47	1.12	
	NER	132kV GELEPHU-SALAKATI	-32	-12	-24	-0.58	
	NER	132kV MOTANGA-RANGIA	-62	-43	-55	-1.31	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.26	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	608	473	568	13.63	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-946	-678	-887	-21.29	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1331	-1012	-1143	-27.43	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-150	0	-132	-3.16	

