



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: 29<sup>th</sup> 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 28.09.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 28<sup>th</sup> September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 29-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)	67433	54199	45033	26744	3419	196828
Peak Shortage (MW)	232	0	0	420	223	875
Energy Met (MU)	1493	1287	1131	593	69	4573
Hydro Gen (MU)	237	95	72	115	27	546
Wind Gen (MU)	4	40	147	-	-	191
Solar Gen (MU)*	129.18	54.47	109.25	2.29	1.29	296
Energy Shortage (MU)	4.37	0.00	0.00	5.09	2.09	11.55
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68190	57637	56290	27660	3629	205481
Time Of Maximum Demand Met	22:37	18:53	12:00	22:58	17:51	14:43

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	0.030	0.00	0.30	4.18	4.48	81.30	14.22

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	11625	0	244.2	129.2	0.6	183	0.00
	Haryana	9884	0	210.0	145.5	-1.0	221	0.00
	Rajasthan	12898	0	288.5	74.7	-4.6	342	0.00
	Delhi	5313	0	112.9	102.0	-1.8	162	0.00
	UP	24752	0	499.9	202.8	-0.4	623	0.00
	Uttarakhand	2239	0	47.4	28.1	0.1	134	0.00
	HP	1723	0	35.2	14.8	0.5	269	0.03
	J&K(UT) & Ladakh(UT)	2343	260	46.5	26.5	7.1	494	4.34
	Chandigarh	271	0	5.4	5.6	-0.3	23	0.00
Railways NR ISTS	162	0	3.2	3.5	-0.3	11	0.00	
WR	Chhattisgarh	4672	0	104.3	49.5	-1.2	190	0.00
	Gujarat	17327	0	373.4	154.7	-3.2	473	0.00
	MP	12187	0	263.8	138.2	-3.5	253	0.00
	Maharashtra	21779	0	470.4	174.3	-3.9	465	0.00
	Goa	668	0	13.8	12.8	0.3	64	0.00
	DNHDDPDCL	1306	0	29.6	29.5	0.1	69	0.00
	AMNSIL	856	0	18.9	7.9	-0.6	271	0.00
	BALCO	518	0	12.4	12.5	-0.1	7	0.00
	Andhra Pradesh	10552	0	218.5	100.7	-1.1	734	0.00
SR	Telangana	13753	0	239.5	124.8	1.2	1253	0.00
	Karnataka	12968	0	236.7	80.7	0.7	1062	0.00
	Kerala	3693	0	77.8	63.2	1.0	223	0.00
	Tamil Nadu	16574	0	348.2	130.2	-0.9	705	0.00
	Puducherry	449	0	10.3	9.6	0.0	47	0.00
	Bihar	6966	189	142.5	135.3	1.7	630	3.46
ER	DVC	3360	0	74.3	-43.3	0.0	257	0.00
	Jharkhand	1643	186	32.7	29.3	-1.9	197	1.63
	Odisha	5799	0	124.1	54.0	-0.2	454	0.00
	West Bengal	10260	0	218.4	93.2	-1.4	433	0.00
	Sikkim	86	0	1.4	1.4	0.0	16	0.00
	Railways ER ISTS	28	0	0.2	0.2	0.0	8	0.00
NER	Arunachal Pradesh	162	0	3.0	2.7	0.0	62	0.00
	Assam	2350	228	47.2	38.5	2.4	319	1.85
	Manipur	197	0	2.8	2.9	-0.1	18	0.00
	Meghalaya	323	0	5.7	1.0	-0.3	37	0.24
	Mizoram	121	0	1.8	1.4	-0.4	28	0.00
	Nagaland	179	0	3.0	2.7	-0.1	13	0.00
Tripura	359	0	5.0	6.3	0.1	98	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	26.0	12.6	-24.7	-31.6
Day Peak (MW)	1274.6	539.0	-1081.0	-1403.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	294.8	-265.1	86.7	-120.5	4.2	0.0
Actual(MU)	286.8	-270.0	97.3	-126.1	6.9	-5.1
O/D/U/D(MU)	-8.0	-4.8	10.5	-5.6	2.7	-5.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4219	12674	5928	1320	505	24645	50
State Sector	4031	10882	6282	3600	219	25013	50
Total	8250	23555	12210	4920	724	49659	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	843	1396	630	666	16	3551	72
Lignite	33	14	40	0	0	87	2
Hydro	237	95	72	115	27	546	11
Nuclear	29	54	76	0	0	159	3
Gas, Naptha & Diesel	16	21	6	0	25	68	1
RES (Wind, Solar, Biomass & Others)	140	98	284	4	1	527	11
Total	1299	1677	1109	785	70	4939	100

Share of RES in total generation (%)	10.78	5.82	25.64	0.50	1.85	10.67
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.30	14.67	38.97	15.17	41.38	24.95

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.038
Based on State Max Demands	1.072

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	205481	14:43	235
Non-Solar hr	200783	19:10	1768

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: 29-Sep-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
<b>Import/Export of ER (With NR)</b>								
1	HVDC	ALIPURDUAR-AGRA	2	0	1002	0.0	26.2	-26.2
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.6	-3.6
3	765 kV	GAYA-VARANASI	2	150	421	0.0	3.1	-3.1
4	765 kV	SASARAM-FATEHPUR	1	0	279	0.0	4.5	-4.5
5	765 kV	GAYA-BALIA	1	0	697	0.0	11.7	-11.7
6	400 kV	PUSAULI-VARANASI	1	0	131	0.0	1.9	-1.9
7	400 kV	PUSAULI-ALLAHABAD	1	0	103	0.0	1.5	-1.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	633	0.0	9.6	-9.6
9	400 kV	PATNA-BALIA	2	0	345	0.0	6.0	-6.0
10	400 kV	NAUBATPUR-BALIA	2	0	345	0.0	5.6	-5.6
11	400 kV	BIHARSHARIFF-BALIA	2	90	213	0.0	1.9	-1.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	290	0.0	4.5	-4.5
13	400 kV	BIHARSHARIFF-VARANASI	2	89	178	0.0	1.7	-1.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	131	0.0	2.1	-2.1
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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
<b>ER-NR</b>						<b>0.4</b>	<b>83.9</b>	<b>-83.5</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	732	872	0.0	0.5	-0.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1469	36	20.8	0.0	20.8
3	765 kV	JHARSUGUDA-DURG	2	19	324	0.0	3.3	-3.3
4	400 kV	JHARSUGUDA-RAIGARH	4	145	185	0.0	0.4	-0.4
5	400 kV	RANCHI-SIPAT	2	313	72	3.9	0.0	3.9
6	220 kV	BUDHIPADAR-RAIGARH	1	28	127	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	2	111	0	1.4	0.0	1.4
<b>ER-WR</b>						<b>26.0</b>	<b>5.4</b>	<b>20.6</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	336	0.0	7.4	-7.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1642	0.0	37.0	-37.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2457	0.0	36.7	-36.7
4	400 kV	TALCHER-I/C	2	174	322	0.0	2.8	-2.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>81.1</b>	<b>-81.1</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	0	532	0.0	8.9	-8.9
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	505	0.0	7.4	-7.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	121	0.0	2.0	-2.0
<b>ER-NER</b>						<b>0.0</b>	<b>18.3</b>	<b>-18.3</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	504	0.0	12.1	-12.1
<b>NER-NR</b>						<b>0.0</b>	<b>12.1</b>	<b>-12.1</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3011	0.0	57.0	-57.0
2	HVDC	VINDHYACHAL B/B	-	439	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1446	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	2245	0.0	33.8	-33.8
5	765 kV	GWALIOR-PHAGI	2	191	1325	0.3	18.2	-17.9
6	765 kV	JABALPUR-ORAI	2	0	1154	0.0	36.4	-36.4
7	765 kV	GWALIOR-ORAI	1	621	0	10.9	0.0	10.9
8	765 kV	SATNA-ORAI	1	0	958	0.0	19.3	-19.3
9	765 kV	BANASKANTHA-CHITORGARH	2	1560	799	2.2	0.0	2.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	3151	0.0	54.8	-54.8
11	400 kV	ZERDA-KANKROLI	1	252	169	1.4	1.2	0.2
12	400 kV	ZERDA -BHINMAL	1	495	320	0.4	0.0	0.4
13	400 kV	VINDHYACHAL -RIHAND	1	960	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	265	524	0.0	3.9	-3.9
15	220 kV	BHANPURA-RANPUR	1	0	101	0.0	1.7	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	101	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	70	10	0.7	0.0	0.7
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
<b>WR-NR</b>						<b>51.3</b>	<b>248.0</b>	<b>-196.6</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	504	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	3002	0.0	51.2	-51.2
3	765 kV	SOLAPUR-RAICHUR	2	2003	1610	11.3	5.9	5.4
4	765 kV	WARDHA-NIZAMABAD	2	535	2606	0.0	27.1	-27.1
5	400 kV	KOLHAPUR-KUDGI	2	1516	0	25.1	0.0	25.1
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	122	2.3	0.0	2.3
<b>WR-SR</b>						<b>38.7</b>	<b>91.4</b>	<b>-52.7</b>

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)	401	242	310	7.43	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	779	609	670	16.08	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	66	-4	35	0.85	
	NER	132kV GELEPHU-SALAKATI	22	0	15	0.35	
	NER	132kV MOTANGA-RANGIA	63	0	54	1.29	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-36	0	28	0.66	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	575	370	497	11.92	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-919	-750	-886	-21.26	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1403	-1154	-1315	-31.57	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-162	0	-143	-3.44	

