



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: 15<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 14.09.2023.**

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14<sup>th</sup> September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 15-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)	73480	59609	47150	25100	3222	208561
Peak Shortage (MW)	673	0	0	1074	329	2076
Energy Met (MU)	1678	1423	1182	575	71	4929
Hydro Gen (MU)	351	45	69	113	31	609
Wind Gen (MU)	16	80	192	-	-	287
Solar Gen (MU)*	105.91	41.35	105.31	4.38	1.19	258
Energy Shortage (MU)	6.12	0.00	0.00	5.07	1.07	12.26
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	75179	65595	56667	26444	3515	221334
Time Of Maximum Demand Met	22:32	10:01	11:42	20:54	18:22	11:43

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	0.041	0.00	0.61	11.03	11.64	81.69	6.67

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	14671	0	315.7	191.5	-1.0	91	0.00
	Haryana	12257	0	256.2	195.6	-0.5	89	3.19
	Rajasthan	14877	0	323.2	124.3	-1.7	351	1.36
	Delhi	6729	0	137.7	123.6	0.1	151	0.00
	UP	24575	0	496.9	206.6	-3.5	225	0.00
	Uttarakhand	2276	35	49.9	26.4	0.7	225	0.07
	HP	1741	0	37.1	7.7	-0.5	88	0.04
	J&K(UT) & Ladakh(UT)	2647	187	50.5	24.3	2.6	632	1.46
	Chandigarh	388	0	7.6	7.5	0.1	54	0.00
Railways NR ISTS	167	0	3.5	3.3	0.2	41	0.00	
WR	Chhattisgarh	4250	0	93.8	35.2	-0.7	302	0.00
	Gujarat	22614	0	472.7	217.5	0.3	1908	0.00
	MP	11242	0	237.8	136.2	-1.3	498	0.00
	Maharashtra	26020	0	544.0	199.9	-2.7	571	0.00
	Goa	672	0	14.3	14.1	0.0	51	0.00
	DNHDDPDCL	1295	0	30.0	29.9	0.1	96	0.00
	AMNSIL	797	0	17.8	8.1	0.4	283	0.00
	BALCO	521	0	12.4	12.5	-0.1	516	0.00
SR	Andhra Pradesh	10901	0	226.4	70.8	-1.5	542	0.00
	Telangana	12443	0	241.5	123.4	1.1	884	0.00
	Karnataka	14328	0	263.4	99.6	-0.2	1320	0.00
	Kerala	3875	0	79.8	65.9	0.7	212	0.00
	Tamil Nadu	16717	0	361.1	155.0	-2.4	416	0.00
	Puducherry	434	0	10.1	9.4	-0.1	64	0.00
ER	Bihar	7023	354	147.5	147.1	-0.2	293	4.65
	DVC	3489	0	77.2	-45.1	-1.0	220	0.00
	Jharkhand	1682	0	38.9	27.3	2.9	178	0.42
	Odisha	5012	0	108.9	38.1	-4.2	350	0.00
	West Bengal	9221	0	200.4	75.7	-3.5	135	0.00
	Sikkim	89	0	1.4	1.4	0.0	12	0.00
Railways ER ISTS	26	0	0.3	0.2	0.0	0	0.00	
NER	Arunachal Pradesh	169	0	3.0	2.9	-0.2	37	0.00
	Assam	2389	314	48.9	38.2	2.9	268	0.84
	Manipur	198	0	2.7	2.7	0.0	34	0.00
	Meghalaya	317	42	5.6	0.2	-0.2	70	0.23
	Mizoram	116	0	1.8	1.3	-0.3	21	0.00
	Nagaland	173	0	3.0	2.7	-0.1	13	0.00
Tripura	330	0	5.9	5.9	0.3	63	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	27.2	9.4	-25.7	-31.5
Day Peak (MW)	1390.0	393.3	-1119.0	-1471.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	366.7	-276.8	61.6	-150.8	-0.7	0.0
Actual(MU)	357.8	-264.4	56.5	-152.1	1.0	-1.2
O/D/U/D(MU)	-8.9	12.4	-5.1	-1.3	1.7	-1.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3502	9471	3998	1160	355	18485	44
State Sector	5236	9595	5722	3277	157	23987	56
Total	8737	19065	9720	4437	512	42471	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	858	1539	685	681	18	3781	71
Lignite	32	13	41	0	0	86	2
Hydro	351	45	69	113	31	609	11
Nuclear	24	54	76	0	0	153	3
Gas, Naptha & Diesel	19	45	6	0	28	99	2
RES (Wind, Solar, Biomass & Others)	129	125	325	6	1	585	11
Total	1413	1821	1201	800	78	5313	100

Share of RES in total generation (%)	9.10	6.86	27.07	0.71	1.28	11.00
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	35.64	12.25	39.11	14.83	40.88	25.35

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.027
Based on State Max Demands	1.069

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	221334	11:43	0
Non-Solar hr	211563	19:20	2483

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: 15-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	1000	0.0	23.2	-23.2
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.6	-3.6
3	765 kV	GAYA-VARANASI	2	88	404	0.0	3.8	-3.8
4	765 kV	SASARAM-FATEHPUR	1	0	383	0.0	6.0	-6.0
5	765 kV	GAYA-BALIA	1	0	771	0.0	13.8	-13.8
6	400 kV	PUSAULI-VARANASI	1	0	111	0.0	1.8	-1.8
7	400 kV	PUSAULI-ALLAHABAD	1	0	111	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	614	0.0	9.5	-9.5
9	400 kV	PATNA-BALIA	2	0	428	0.0	8.0	-8.0
10	400 kV	NAUBATPUR-BALIA	2	0	430	0.0	8.1	-8.1
11	400 kV	BIHARSHARIF-BALIA	2	0	266	0.0	3.6	-3.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	306	0.0	4.7	-4.7
13	400 kV	BIHARSHARIF-VARANASI	2	52	163	0.0	1.3	-1.3
14	220 kV	SAHUPURI-KARAMNANA	1	2	0	0.0	0.0	0.0
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	40	0.0	0.0	0.0
<b>ER-NR</b>						<b>0.5</b>	<b>89.1</b>	<b>-88.7</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1258	0.0	17.0	-17.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1249	128	16.2	0.0	16.2
3	765 kV	JHARSUGUDA-DURG	2	0	462	0.0	7.7	-7.7
4	400 kV	JHARSUGUDA-RAIGARH	4	30	370	0.0	2.4	-2.4
5	400 kV	RANCHI-SIPAT	2	246	132	2.1	0.0	2.1
6	220 kV	BUDHIPADAR-RAIGARH	1	6	110	0.0	1.0	-1.0
7	220 kV	BUDHIPADAR-KORBA	2	71	0	1.0	0.0	1.0
<b>ER-WR</b>						<b>19.3</b>	<b>28.1</b>	<b>-8.8</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	137	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1988	0.0	33.8	-33.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2478	0.0	38.0	-38.0
4	400 kV	TALCHER-I/C	2	184	635	0.0	0.2	-0.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>74.5</b>	<b>-74.5</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	0	446	0.0	8.2	-8.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	409	0.0	6.1	-6.1
3	220 kV	ALIPURDUAR-SALAKATI	2	0	102	0.0	1.6	-1.6
<b>ER-NER</b>						<b>0.0</b>	<b>16.0</b>	<b>-16.0</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.8	-16.8
<b>NER-NR</b>						<b>0.0</b>	<b>16.8</b>	<b>-16.8</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	5537	0.0	83.4	-83.4
2	HVDC	VINDHYACHAL B/B	-	437	197	5.1	2.2	2.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1450	0.0	33.2	-33.2
4	765 kV	GWALIOR-AGRA	2	109	2150	0.0	31.8	-31.7
5	765 kV	GWALIOR-PHAGI	2	0	2014	0.0	35.5	-35.5
6	765 kV	JABALPUR-ORAI	2	0	1194	0.0	40.9	-40.9
7	765 kV	GWALIOR-ORAI	1	789	0	7.0	15.3	-8.3
8	765 kV	SATNA-ORAI	1	0	1126	0.0	22.9	-22.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1475	465	11.9	0.0	11.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3511	0.0	61.5	-61.5
11	400 kV	ZERDA-KANKROLI	1	274	69	2.8	0.1	2.7
12	400 kV	ZERDA -BHINMAL	1	523	201	3.1	0.0	3.1
13	400 kV	VINDHYACHAL -RIHAND	1	963	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	16	698	0.0	9.0	-9.0
15	220 kV	BHANPURA-RANPUR	1	0	170	0.0	2.1	-2.1
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.9	-0.9
17	220 kV	MEHGAON-AURAIYA	1	115	0	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	82	9	0.6	0.0	0.6
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>53.8</b>	<b>338.7</b>	<b>-284.9</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	310	0	7.2	0.0	7.2
2	HVDC	RAIGARH-PUGALUR	2	0	2550	0.0	50.5	-50.5
3	765 kV	SOLAPUR-RAICHUR	2	1732	1179	18.2	2.1	16.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2736	0.0	29.6	-29.6
5	400 kV	KOLHAPUR-KUDGI	2	1839	0	35.6	0.0	35.6
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	2.3	0.0	2.3
<b>WR-SR</b>						<b>63.3</b>	<b>82.2</b>	<b>-18.9</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)	501	354	396	9.51	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	710	413	638	15.31	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	153	-8	45	1.08	
	NER	132kV GELEPHU-SALAKATI	12	-3	4	0.11	
	NER	132kV MOTANGA-RANGIA	66	32	50	1.20	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-46	0	32	0.77	
	ER	NEPAL IMPORT (FROM BIHAR)	-15	0	-3	-0.08	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	454	-278	362	8.68	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-943	-820	-913	-21.90	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1471	-1185	-1313	-31.50	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	176	0	-158	-3.78	

