



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: 19<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, लापालंग, 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 18.09.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-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 18<sup>th</sup> September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 19-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)	64843	55671	42310	25805	3076	191705
Peak Shortage (MW)	0	0	0	350	13	363
Energy Met (MU)	1329	1264	1122	588	64	4366
Hydro Gen (MU)	328	92	51	97	29	598
Wind Gen (MU)	32	150	138	-	-	319
Solar Gen (MU)*	72.71	35.16	116.78	2.60	0.72	228
Energy Shortage (MU)	0.00	0.00	0.00	2.10	0.11	2.21
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65961	58592	55168	27544	3097	195709
Time Of Maximum Demand Met	19:26	19:09	11:04	00:01	19:23	19:26

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	0.039	0.00	0.08	2.22	2.30	73.89	23.81

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	9594	0	190.5	112.6	-0.7	205	0.00
	Haryana	9366	0	190.9	149.3	-0.5	251	0.00
	Rajasthan	10799	0	239.1	78.1	-3.5	236	0.00
	Delhi	5495	0	114.8	103.9	-1.3	116	0.00
	UP	24420	0	460.9	208.3	0.4	1043	0.00
	Uttarakhand	2209	0	45.2	21.3	0.5	113	0.00
	HP	1488	0	30.3	-0.3	-0.5	64	0.00
	J&K(UT) & Ladakh(UT)	2399	0	48.0	23.8	1.0	170	0.00
	Chandigarh	301	0	6.0	6.4	-0.4	35	0.00
Railways NR ISTS	176	0	3.4	3.5	-0.1	16	0.00	
WR	Chhattisgarh	4526	0	101.2	48.8	-1.3	357	0.00
	Gujarat	15839	0	339.6	151.2	-0.4	1028	0.00
	MP	10869	0	219.8	91.9	-2.4	334	0.00
	Maharashtra	24975	0	530.2	208.1	-3.2	653	0.00
	Goa	625	0	13.0	13.2	-0.7	29	0.00
	DNHDDPDCL	1268	0	28.8	29.0	-0.2	43	0.00
	AMNSIL	820	0	18.5	9.1	0.1	71	0.00
	BALCO	520	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	11309	0	226.9	84.4	0.0	651	0.00
	Telangana	14118	0	276.7	143.6	2.1	721	0.00
	Karnataka	12940	0	226.6	69.5	-3.8	656	0.00
	Kerala	3857	0	76.9	64.2	1.4	253	0.00
	Tamil Nadu	14384	0	306.5	145.9	0.1	1171	0.00
	Puducherry	382	0	8.4	8.0	-0.3	53	0.00
ER	Bihar	7144	0	152.2	145.2	1.1	391	0.19
	DVC	3491	0	76.0	-26.3	1.8	685	0.00
	Jharkhand	1681	165	36.4	30.9	0.4	225	1.91
	Odisha	5919	0	129.1	56.4	-1.1	478	0.00
	West Bengal	9768	0	192.7	75.0	-3.3	61	0.00
	Sikkim	84	0	1.2	1.3	-0.2	12	0.00
	Railways ER ISTS	22	0	0.2	0.2	-0.1	3	0.00
NER	Arunachal Pradesh	156	0	3.0	3.1	-0.4	35	0.00
	Assam	2127	0	42.8	33.6	1.8	222	0.00
	Manipur	190	0	2.5	2.8	-0.3	27	0.00
	Meghalaya	338	8	5.8	1.9	-0.1	31	0.11
	Mizoram	105	0	1.7	1.5	-0.4	5	0.00
	Nagaland	169	0	2.7	2.5	-0.2	18	0.00
	Tripura	290	0	5.1	5.2	0.0	62	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	21.0	5.4	-25.5	-32.2
Day Peak (MW)	1204.5	358.0	-1121.0	-1471.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	265.9	-310.9	136.8	-90.5	-1.2	0.0
Actual(MU)	245.8	-327.3	152.6	-83.4	1.9	-10.4
O/D/U/D(MU)	-20.1	-16.4	15.9	7.1	3.1	-10.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4389	8080	5508	1370	355	19701	36
State Sector	9340	14432	6322	4470	157	34721	64
Total	13729	22512	11830	5840	512	54422	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	638	1331	593	635	12	3209	68
Lignite	31	11	34	0	0	76	2
Hydro	328	92	51	97	29	598	13
Nuclear	30	54	76	0	0	159	3
Gas, Naptha & Diesel	16	28	6	0	28	78	2
RES (Wind, Solar, Biomass & Others)	110	187	283	4	1	584	12
Total	1153	1703	1043	736	69	4704	100

Share of RES in total generation (%)	9.55	10.96	27.10	0.54	1.04	12.42
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.61	19.53	39.29	13.74	42.77	28.51

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.074
Based on State Max Demands	1.094

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	195357	11:15	165
Non-Solar hr	195709	19:26	275

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: 19-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	1001	0.0	25.0	-25.0
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.7	-3.7
3	765 kV	GAYA-VARANASI	2	945	4	7.7	0.0	7.7
4	765 kV	SASARAM-FATEHPUR	1	323	137	0.5	0.0	0.5
5	765 kV	GAYA-BALIA	1	0	645	0.0	9.4	-9.4
6	400 kV	PUSAULI-VARANASI	1	0	146	0.0	2.8	-2.8
7	400 kV	PUSAULI-ALLAHABAD	1	0	92	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	237	506	0.0	2.9	-2.9
9	400 kV	PATNA-BALIA	2	0	410	0.0	5.7	-5.7
10	400 kV	NAUBATPUR-BALIA	2	41	421	0.0	5.8	-5.8
11	400 kV	BIHARSHARIFF-BALIA	2	266	135	1.3	0.0	1.3
12	400 kV	MOTIHARI-GORAKHPUR	2	136	280	0.0	2.7	-2.7
13	400 kV	BIHARSHARIFF-VARANASI	2	395	19	3.4	0.0	3.4
14	220 kV	SAHUPURI-KARAMNANA	1	42	102	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	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAUJI	1	0	0	0.0	0.0	0.0
<b>ER-NR</b>						<b>13.2</b>	<b>60.1</b>	<b>-46.9</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1008	562	8.8	0.0	8.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1520	35	26.4	0.0	26.4
3	765 kV	JHARSUGUDA-DURG	2	0	301	0.0	3.8	-3.8
4	400 kV	JHARSUGUDA-RAIGARH	4	245	266	0.0	0.3	-0.3
5	400 kV	RANCHI-SIPAT	2	390	36	5.2	0.0	5.2
6	220 kV	BUDHIPADAR-RAIGARH	1	0	104	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	115	0	1.9	0.0	1.9
<b>ER-WR</b>						<b>42.3</b>	<b>5.3</b>	<b>37.0</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	550	0.0	10.6	-10.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	37.5	-37.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2650	0.0	42.3	-42.3
4	400 kV	TALCHER-I/C	2	87	764	0.0	4.9	-4.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>90.3</b>	<b>-90.3</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	0	506	0.0	8.5	-8.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	509	0.0	7.5	-7.5
3	220 kV	ALIPURDUAR-SALAKATI	2	0	121	0.0	1.9	-1.9
<b>ER-NER</b>						<b>0.0</b>	<b>17.9</b>	<b>-17.9</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	17.0	-17.0
<b>NER-NR</b>						<b>0.0</b>	<b>17.0</b>	<b>-17.0</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	5034	0.0	62.2	-62.2
2	HVDC	VINDHYACHAL B/B	-	441	0	5.8	0.0	5.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1446	0.0	25.4	-25.4
4	765 kV	GWALIOR-AGRA	2	0	2195	0.0	29.4	-29.4
5	765 kV	GWALIOR-PHAGI	2	478	1234	0.8	13.5	-12.6
6	765 kV	JABALPUR-ORAI	2	0	914	0.0	23.7	-23.7
7	765 kV	GWALIOR-ORAI	1	760	0	12.0	0.0	12.0
8	765 kV	SATNA-ORAI	1	0	829	0.0	15.6	-15.6
9	765 kV	BANASKANTHA-CHITORGARH	2	359	821	0.0	1.5	-1.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3465	0.0	60.7	-60.7
11	400 kV	ZERDA-KANKROLI	1	177	105	1.3	0.3	1.0
12	400 kV	ZERDA -BHINMAL	1	429	159	3.1	0.0	3.1
13	400 kV	VINDHYACHAL -RIHAND	1	944	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	216	488	0.0	2.8	-2.8
15	220 kV	BHANPURA-RANPUR	1	0	81	0.0	1.3	-1.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.6	-1.6
17	220 kV	MEHGAON-AURAIYA	1	107	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	76	5	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>46.5</b>	<b>238.0</b>	<b>-191.5</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	299	1008	1.9	10.4	-8.6
2	HVDC	RAIGARH-PUGALUR	2	0	5512	0.0	74.6	-74.6
3	765 kV	SOLAPUR-RAICHUR	2	1214	1661	9.1	9.0	0.1
4	765 kV	WARDHA-NIZAMABAD	2	0	3137	0.0	41.5	-41.5
5	400 kV	KOLHAPUR-KUDGI	2	1471	0	24.2	0.0	24.2
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	111	2.2	0.0	2.2
<b>WR-SR</b>						<b>37.3</b>	<b>135.6</b>	<b>-98.3</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)	509	0	249	5.98	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	594	482	504	12.10	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	64	-19	59	1.42	
	NER	132kV GELEPHU-SALAKATI	19	5	6	0.15	
	NER	132kV MOTANGA-RANGIA	57	9	55	1.32	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	1.34	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	358	32	167	4.01	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-946	-800	-913	-21.91	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1472	-1238	-1341	-32.19	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-175	0	-150	-3.60	

