

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: 24th 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 23.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-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 23rd September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 24-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)	66290	54068	45342	22854	2898	191452
Peak Shortage (MW)	0	0	0	0	331	331
Energy Met (MU)	1442	1271	1124	505	60	4403
Hydro Gen (MU)	285	112	59	136	30	624
Wind Gen (MU)	17	73	99	-	-	189
Solar Gen (MU)*	129.56	46.85	113.96	4.33	1.01	296
Energy Shortage (MU)	0.46	0.00	0.00	0.59	1.17	2.22
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68440	59173	53994	23979	3182	198935
Time Of Maximum Demand Met	00:00	18:55	10:54	18:50	18:22	19:15

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	0.035	0.00	0.00	4.61	4.61	80.40	15.00

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	10384	0	207.7	117.1	-3.2	379	0.00
	Haryana	9850	0	212.0	152.2	-3.4	159	0.00
	Rajasthan	12758	0	290.9	88.3	-3.4	186	0.00
	Delhi	6338	0	124.9	114.1	-1.2	160	0.00
	UP	23470	0	470.5	212.9	-1.5	669	0.00
	Uttarakhand	2155	0	46.5	24.6	0.0	101	0.00
	HP	1683	0	34.4	11.4	0.1	69	0.00
	J&K(UT) & Ladakh(UT)	2339	62	46.8	23.9	3.5	340	0.46
	Chandigarh	262	0	5.4	5.9	-0.5	13	0.00
Railways NR ISTS	160	0	3.3	3.5	-0.2	9	0.00	
WR	Chhattisgarh	4279	0	94.0	44.1	-2.0	125	0.00
	Gujarat	17982	0	374.6	172.3	0.0	863	0.00
	MP	11720	0	245.7	118.8	-5.5	221	0.00
	Maharashtra	23012	0	482.1	206.5	-6.9	908	0.00
	Goa	617	0	12.6	12.5	-0.5	55	0.00
	DNHDDPDCL	1302	0	30.2	29.9	0.3	127	0.00
	AMNSIL	885	0	19.6	10.4	-0.2	238	0.00
	BALCO	520	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	10037	0	213.8	117.7	-1.6	660	0.00
	Telangana	11512	0	221.5	103.4	1.5	832	0.00
	Karnataka	13462	0	247.1	91.6	0.5	717	0.00
	Kerala	3915	0	79.3	64.1	1.1	257	0.00
	Tamil Nadu	16388	0	351.6	157.1	-3.6	842	0.00
	Puducherry	462	0	10.7	9.8	0.2	59	0.00
ER	Bihar	5054	0	96.1	93.6	-1.8	334	0.37
	DVC	3480	0	75.5	-29.3	0.9	295	0.00
	Jharkhand	1480	0	30.4	27.2	-2.5	242	0.22
	Odisha	5277	0	119.6	55.5	-0.9	463	0.00
	West Bengal	8392	0	182.4	52.9	-2.6	124	0.00
	Sikkim	82	0	1.2	1.3	-0.1	12	0.00
Railways ER ISTS	16	0	0.2	0.2	0.0	0	0.00	
NER	Arunachal Pradesh	163	0	2.8	2.4	0.1	37	0.00
	Assam	2006	0	39.5	31.5	1.8	346	0.91
	Manipur	202	0	2.7	2.6	0.1	38	0.00
	Meghalaya	330	7	5.6	0.6	-0.2	63	0.26
	Mizoram	116	0	1.9	1.6	-0.3	17	0.00
	Nagaland	166	0	2.9	2.6	-0.1	10	0.00
Tripura	278	0	4.8	5.3	-0.1	66	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	37.2	15.0	-24.7	-24.7
Day Peak (MW)	1697.0	608.0	-1081.0	-1669.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	294.8	-246.1	152.4	-196.2	-4.9	0.0
Actual(MU)	274.8	-253.4	184.8	-203.2	-2.7	0.3
O/D/U/D(MU)	-20.0	-7.3	32.4	-7.0	2.2	0.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4562	11264	5968	460	505	22758	44
State Sector	5586	13541	5652	3860	219	28858	56
Total	10148	24805	11620	4320	724	51616	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	743	1321	608	634	13	3319	69
Lignite	28	14	33	0	0	74	2
Hydro	285	112	59	136	30	624	13
Nuclear	29	53	76	0	0	158	3
Gas, Naptha & Diesel	13	37	6	0	25	81	2
RES (Wind, Solar, Biomass & Others)	153	122	240	6	1	522	11
Total	1251	1659	1022	776	70	4778	100

Share of RES in total generation (%)	12.27	7.32	23.47	0.76	1.44	10.92
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	37.38	17.31	36.72	18.34	44.73	27.29

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.049
Based on State Max Demands	1.068

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	193610	11:00	0
Non-Solar hr	198935	19:15	386

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: 24-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	23.6	-23.6
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.4	-3.4
3	765 kV	GAYA-VARANASI	2	407	822	0.0	9.4	-9.4
4	765 kV	SASARAM-FATEHPUR	1	36	458	0.0	5.8	-5.8
5	765 kV	GAYA-BALIA	1	73	686	0.0	6.7	-6.7
6	400 kV	PUSAULI-VARANASI	1	0	136	0.0	1.6	-1.6
7	400 kV	PUSAULI-ALLAHABAD	1	0	138	0.0	1.8	-1.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	1131	0.0	18.4	-18.4
9	400 kV	PATNA-BALIA	2	0	731	0.0	12.5	-12.5
10	400 kV	NAUBATPUR-BALIA	2	0	772	0.0	12.8	-12.8
11	400 kV	BIHARSHARIF-BALIA	2	2	432	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	629	0.0	10.8	-10.8
13	400 kV	BIHARSHARIF-VARANASI	2	176	391	0.0	2.2	-2.2
14	220 kV	SAHUPURI-KARAMNANA	1	17	127	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	0.3	0.0	0.3
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						0.3	116.6	-116.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	750	564	3.0	0.0	3.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	521	914	0.0	0.1	-0.1
3	765 kV	JHARSUGUDA-DURG	2	0	557	0.0	8.0	-8.0
4	400 kV	JHARSUGUDA-RAIGARH	4	195	375	0.0	2.6	-2.6
5	400 kV	RANCHI-SIPAT	2	170	277	0.0	0.0	0.0
6	220 kV	BUDHIPADAR-RAIGARH	1	1	142	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	112	0	1.4	0.0	1.4
ER-WR						4.3	12.5	-8.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	339	0.0	7.5	-7.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1992	0.0	44.5	-44.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2645	0.0	45.0	-45.0
4	400 kV	TALCHER-I/C	2	0	1271	0.0	15.6	-15.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	97.0	-97.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	412	0.0	6.2	-6.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	414	0.0	4.4	-4.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	118	0.0	1.6	-1.6
ER-NER						0.0	12.1	-12.1
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	2508	0.0	58.9	-58.9
2	HVDC	VINDHYACHAL B/B	-	271	0	6.6	0.0	6.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	445	2064	0.7	21.6	-20.9
5	765 kV	GWALIOR-PHAGI	2	614	1546	3.0	18.8	-15.8
6	765 kV	JABALPUR-ORAI	2	221	1166	0.0	23.5	-23.5
7	765 kV	GWALIOR-ORAI	1	699	0	10.8	0.0	10.8
8	765 kV	SATNA-ORAI	1	0	1068	0.0	19.1	-19.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1745	564	11.1	0.0	11.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	2434	0.0	37.5	-37.5
11	400 kV	ZERDA-KANKROLI	1	306	97	2.3	0.3	1.9
12	400 kV	ZERDA-BHINMAL	1	633	176	3.7	0.0	3.7
13	400 kV	VINDHYACHAL-RIHAND	1	958	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	503	562	0.0	1.5	-1.5
15	220 kV	BHANPURA-RANPUR	1	0	103	0.0	1.8	-1.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	124	0	1.5	0.0	1.5
18	220 kV	MALANPUR-AURAIYA	1	92	0	0.9	0.0	0.9
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						62.8	209.5	-146.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1005	0.0	18.7	-18.7
2	HVDC	RAIGARH-PUGALUR	2	0	6022	0.0	94.1	-94.1
3	765 kV	SOLAPUR-RAICHUR	2	903	1228	6.1	3.8	2.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2464	0.0	30.5	-30.5
5	400 kV	KOLHAPUR-KUDGI	2	1378	0	23.8	0.0	23.8
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	1	113	2.2	0.0	2.2
WR-SR						32.2	147.1	-114.9

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)	543	412	459	11.01	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1019	0	966	23.18	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	66	27	49	1.19	
	NER	132kV GELEPHU-SALAKATI	27	1	21	0.51	
	NER	132kV MOTANGA-RANGIA	67	40	54	1.30	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-12	0	55	1.32	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	620	526	570	13.67	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-927	-791	-894	-21.45	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1669	-505	-1029	-24.69	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-154	0	-135	-3.23	

