



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: 22nd 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 21.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-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 21st September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 22-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)	70499	55380	47163	23348	2865	199255
Peak Shortage (MW)	230	0	0	196	201	627
Energy Met (MU)	1545	1316	1194	524	58	4636
Hydro Gen (MU)	302	98	77	117	29	623
Wind Gen (MU)	11	81	92	-	-	184
Solar Gen (MU)*	128.29	49.02	92.75	1.40	0.70	272
Energy Shortage (MU)	2.64	0.00	0.00	1.35	0.50	4.49
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	70847	60412	56869	24766	3048	207060
Time Of Maximum Demand Met	22:21	10:39	10:54	18:59	18:01	11:54

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	0.034	0.00	0.00	2.33	2.33	72.62	25.05

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	11691	0	242.3	140.3	0.7	229	0.00
	Haryana	10648	0	229.0	163.6	-0.7	205	0.52
	Rajasthan	12492	0	282.0	94.7	-4.8	77	0.00
	Delhi	6543	0	135.9	122.4	-1.6	137	0.00
	UP	25353	0	513.1	213.7	0.2	784	0.00
	Uttarakhand	2315	0	48.3	26.1	0.6	132	0.00
	HP	1692	0	34.5	6.6	0.6	100	0.36
	J&K(UT) & Ladakh(UT)	2418	220	49.9	24.1	2.5	243	1.76
	Chandigarh	332	0	6.8	6.7	0.1	25	0.00
Railways NR ISTS	157	0	3.2	3.4	-0.3	27	0.00	
WR	Chhattisgarh	4277	0	103.3	43.0	-3.5	256	0.00
	Gujarat	17222	0	350.6	169.4	-3.3	799	0.00
	MP	11697	0	249.3	133.6	-0.8	680	0.00
	Maharashtra	26044	0	539.2	218.6	-5.5	948	0.00
	Goa	601	0	12.4	11.7	0.0	46	0.00
	DNHDDPDCL	1297	0	29.9	29.9	0.0	100	0.00
	AMNSIL	869	0	18.6	8.2	0.0	259	0.00
	BALCO	524	0	12.5	12.5	0.0	520	0.00
SR	Andhra Pradesh	11111	0	227.1	108.5	-0.2	574	0.00
	Telangana	13144	0	264.1	147.9	-2.0	567	0.00
	Karnataka	14484	0	263.1	84.1	3.5	1049	0.00
	Kerala	4008	0	81.4	67.2	1.1	345	0.00
	Tamil Nadu	16402	0	348.2	176.7	0.6	502	0.00
	Puducherry	454	0	10.1	9.5	-0.1	57	0.00
ER	Bihar	6642	254	127.1	125.4	-2.3	335	0.63
	DVC	3532	0	74.8	-31.0	1.2	392	0.00
	Jharkhand	1568	139	30.3	27.4	-2.2	255	0.72
	Odisha	4940	0	110.6	36.2	-1.5	240	0.00
	West Bengal	8276	0	179.6	51.7	-2.7	176	0.00
	Sikkim	87	0	1.2	1.3	-0.1	9	0.00
	Railways ER ISTS	26	0	0.2	0.2	0.0	21	0.00
NER	Arunachal Pradesh	154	0	2.8	2.8	-0.5	21	0.00
	Assam	1939	146	36.7	30.0	0.8	217	0.34
	Manipur	182	0	2.4	2.6	-0.1	31	0.00
	Meghalaya	316	0	5.8	1.5	-0.2	53	0.16
	Mizoram	117	0	2.0	1.6	-0.6	7	0.00
	Nagaland	169	0	2.9	2.4	0.1	10	0.00
	Tripura	279	0	5.1	5.1	-0.2	39	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	31.7	10.3	-24.9	-28.7
Day Peak (MW)	1621.0	464.0	-1082.0	-1347.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	318.2	-302.7	177.6	-187.5	-5.6	0.0
Actual(MU)	305.3	-314.8	203.0	-190.2	-5.8	-2.4
O/D/U/D(MU)	-13.0	-12.1	25.4	-2.7	-0.2	-2.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2968	7810	4168	200	505	15650	36
State Sector	5866	13941	4872	2600	228	27506	64
Total	8834	21750	9040	2800	733	43157	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	796	1404	660	666	15	3541	71
Lignite	30	12	39	0	0	81	2
Hydro	302	98	77	117	29	623	12
Nuclear	29	54	76	0	0	159	3
Gas, Naptha & Diesel	34	58	6	0	26	124	2
RES (Wind, Solar, Biomass & Others)	146	132	211	3	1	493	10
Total	1336	1758	1069	786	71	5020	100

Share of RES in total generation (%)	10.92	7.49	19.75	0.38	0.99	9.81
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	35.69	16.13	34.06	15.26	41.88	25.38

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.042
Based on State Max Demands	1.081

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207060	11:54	71
Non-Solar hr	203322	18:58	573

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: 22-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	24.5	-24.5
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.5	-3.5
3	765 kV	GAYA-VARANASI	2	264	619	0.0	5.9	-5.9
4	765 kV	SASARAM-FATEHPUR	1	0	452	0.0	6.7	-6.7
5	765 kV	GAYA-BALIA	1	0	682	0.0	10.2	-10.2
6	400 kV	PUSAULI-VARANASI	1	0	127	0.0	1.8	-1.8
7	400 kV	PUSAULI-ALLAHABAD	1	0	126	0.0	2.1	-2.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	949	0.0	15.6	-15.6
9	400 kV	PATNA-BALIA	2	0	585	0.0	9.9	-9.9
10	400 kV	NAUBATPUR-BALIA	2	0	609	0.0	10.0	-10.0
11	400 kV	BIHARSHARIFF-BALIA	2	0	363	0.0	5.3	-5.3
12	400 kV	MOTIHARI-GORAKHPUR	2	0	494	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	144	287	0.0	2.5	-2.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	133	0.0	1.9	-1.9
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	0	0.0	0.0	0.0
ER-NR						0.5	107.8	-107.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	688	338	5.3	0.0	5.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1112	424	9.9	0.0	9.9
3	765 kV	JHARSUGUDA-DURG	2	0	844	0.0	13.7	-13.7
4	400 kV	JHARSUGUDA-RAIGARH	4	33	428	0.0	4.3	-4.3
5	400 kV	RANCHI-SIPAT	2	223	158	1.1	0.0	1.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	129	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	100	0	1.2	0.0	1.2
ER-WR						17.5	19.5	-2.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	552	0.0	9.5	-9.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1988	0.0	45.6	-45.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2739	0.0	50.9	-50.9
4	400 kV	TALCHER-I/C	2	0	658	0.0	12.3	-12.3
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	106.0	-106.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	367	0.0	5.5	-5.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	13	322	0.0	3.4	-3.4
3	220 kV	ALIPURDUAR-SALAKATI	2	0	94	0.0	1.2	-1.2
ER-NER						0.0	10.0	-10.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	17.0	-17.0
NER-NR						0.0	17.0	-17.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2520	0.0	58.5	-58.5
2	HVDC	VINDHYACHAL B/B	-	436	0	7.0	0.0	7.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	119	2056	0.0	26.3	-26.2
5	765 kV	GWALIOR-PHAGI	2	357	1644	0.7	21.5	-20.7
6	765 kV	JABALPUR-ORAI	2	0	1135	0.0	30.6	-30.6
7	765 kV	GWALIOR-ORAI	1	637	0	11.4	0.0	11.4
8	765 kV	SATNA-ORAI	1	0	1057	0.0	19.9	-19.9
9	765 kV	BANASKANTHA-CHITORGARH	2	974	808	1.8	0.0	1.8
10	765 kV	VINDHYACHAL-VARANASI	2	0	3053	0.0	46.5	-46.5
11	400 kV	ZERDA-KANKROLI	1	190	138	1.4	0.7	0.7
12	400 kV	ZERDA -BHINMAL	1	477	232	2.0	0.0	2.0
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	372	582	0.0	3.3	-3.3
15	220 kV	BHANPURA-RANPUR	1	0	92	0.0	1.3	-1.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	131	0	1.9	0.0	1.9
18	220 kV	MALANPUR-AURAIYA	1	99	0	1.5	0.0	1.5
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						49.8	234.9	-185.1
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1010	0.0	10.1	-10.1
2	HVDC	RAIGARH-PUGALUR	2	0	5060	0.0	85.3	-85.3
3	765 kV	SOLAPUR-RAICHUR	2	683	1756	1.2	10.4	-9.1
4	765 kV	WARDHA-NIZAMABAD	2	0	3126	0.0	49.9	-49.9
5	400 kV	KOLHAPUR-KUDGI	2	1488	0	20.6	0.0	20.6
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	114	2.1	0.0	2.1
WR-SR						23.9	155.7	-131.8

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)	563	386	448	10.74	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	945	478	786	18.86	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	84	0	21	0.49	
	NER	132kV GELEPHU-SALAKATI	23	0	18	0.42	
	NER	132kV MOTANGA-RANGIA	64	37	50	1.19	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-43	0	-8	-0.19	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	507	385	438	10.52	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-924	-795	-894	-21.46	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1347	-1073	-1194	-28.66	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-158	0	-142	-3.40	

