

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: 23rd 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 22.09.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड 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 22nd September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 23-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)	70888	55353	45890	22997	2905	198033
Peak Shortage (MW)	0	0	0	89	310	399
Energy Met (MU)	1555	1285	1147	510	59	4556
Hydro Gen (MU)	292	93	73	121	33	611
Wind Gen (MU)	15	70	64	-	-	149
Solar Gen (MU)*	130.74	46.83	97.85	4.06	0.89	280
Energy Shortage (MU)	0.83	0.00	0.00	0.21	1.47	2.51
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71545	59310	54545	24290	3177	202024
Time Of Maximum Demand Met	22:16	18:59	11:43	18:56	17:57	19:18

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	0.020	0.00	0.00	1.06	1.06	83.08	15.85

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	12394	0	264.1	153.3	-0.5	268	0.00
	Haryana	10685	0	229.6	161.2	-0.2	154	0.00
	Rajasthan	12906	0	287.3	89.4	-3.5	249	0.00
	Delhi	6475	0	136.0	123.6	-1.2	197	0.00
	UP	25039	0	497.8	220.8	-1.9	605	0.00
	Uttarakhand	2134	0	47.4	24.8	0.2	215	0.00
	HP	1724	0	35.2	8.9	0.4	125	0.36
	J&K(UT) & Ladakh(UT)	2490	0	48.0	24.2	1.9	286	0.47
	Chandigarh	341	0	6.5	6.8	-0.3	26	0.00
Railways NR ISTS	157	0	3.3	3.4	-0.1	39	0.00	
WR	Chhattisgarh	4254	0	93.6	41.1	-1.7	342	0.00
	Gujarat	17743	0	364.9	164.8	0.0	709	0.00
	MP	11593	0	245.5	127.1	-3.4	438	0.00
	Maharashtra	24216	0	507.3	216.6	-1.2	691	0.00
	Goa	621	0	13.3	12.5	0.2	37	0.00
	DNHDDPDCL	1292	0	30.2	30.3	-0.1	45	0.00
	AMNSIL	826	0	17.6	7.2	0.3	335	0.00
	BALCO	524	0	12.5	12.5	0.0	9	0.00
SR	Andhra Pradesh	10207	0	218.3	124.9	-2.0	666	0.00
	Telangana	11326	0	228.5	115.4	-0.6	662	0.00
	Karnataka	14624	0	262.3	96.8	0.8	1063	0.00
	Kerala	3859	0	80.9	66.5	0.6	298	0.00
	Tamil Nadu	16253	0	346.4	180.8	-3.3	424	0.00
	Puducherry	455	0	10.4	9.6	0.1	74	0.00
ER	Bihar	5714	0	108.7	106.4	-2.2	284	0.12
	DVC	3565	0	73.9	-36.7	0.4	340	0.00
	Jharkhand	1533	0	29.4	26.9	-2.9	157	0.09
	Odisha	5033	0	116.3	40.3	-1.9	274	0.00
	West Bengal	8217	0	180.7	50.3	-2.4	164	0.00
	Sikkim	84	0	1.3	1.4	-0.1	7	0.00
	Railways ER ISTS	18	0	0.2	0.1	0.0	0	0.00
NER	Arunachal Pradesh	163	0	2.8	2.7	-0.3	33	0.00
	Assam	2003	0	38.1	31.0	1.2	238	1.25
	Manipur	185	0	2.5	2.7	-0.2	24	0.00
	Meghalaya	310	0	5.6	0.9	0.0	130	0.22
	Mizoram	120	0	1.7	1.5	-0.4	6	0.00
	Nagaland	175	0	2.7	2.5	-0.2	23	0.00
	Tripura	288	0	5.2	4.9	-0.2	31	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	34.8	12.5	-24.7	-24.4
Day Peak (MW)	1708.0	590.0	-1080.0	-1647.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	343.1	-290.7	172.9	-218.2	-7.1	0.0
Actual(MU)	329.3	-314.8	215.6	-229.8	-6.4	-6.0
O/D/U/D(MU)	-13.8	-24.1	42.8	-11.7	0.7	-6.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3809	9264	4668	0	505	18245	39
State Sector	5646	13569	5652	2990	228	28085	61
Total	9454	22833	10320	2990	733	46330	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	784	1378	637	685	13	3496	71
Lignite	26	13	32	0	0	72	1
Hydro	292	93	73	121	33	611	12
Nuclear	29	53	76	0	0	159	3
Gas, Naptha & Diesel	30	55	6	0	26	117	2
RES (Wind, Solar, Biomass & Others)	153	118	191	6	1	468	10
Total	1314	1710	1015	811	72	4923	100

Share of RES in total generation (%)	11.62	6.90	18.79	0.69	1.24	9.51
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	36.05	15.48	33.48	15.61	46.35	25.16

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.053
Based on State Max Demands	1.086

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	201506	11:38	71
Non-Solar hr	202024	19:18	282

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: 23-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	1004	0.0	24.6	-24.6
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.9	-3.9
3	765 kV	GAYA-VARANASI	2	163	862	0.0	12.9	-12.9
4	765 kV	SASARAM-FATEHPUR	1	0	526	0.0	9.2	-9.2
5	765 kV	GAYA-BALIA	1	0	711	0.0	11.0	-11.0
6	400 kV	PUSAULI-VARANASI	1	0	114	0.0	1.5	-1.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	145	0.0	2.3	-2.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	1130	0.0	18.6	-18.6
9	400 kV	PATNA-BALIA	2	0	731	0.0	13.0	-13.0
10	400 kV	NAUBATPUR-BALIA	2	0	779	0.0	13.4	-13.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	447	0.0	6.9	-6.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	635	0.0	10.7	-10.7
13	400 kV	BIHARSHARIFF-VARANASI	2	70	414	0.0	5.7	-5.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	131	0.0	2.2	-2.2
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	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	135.7	-135.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	758	338	3.9	0.0	3.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	729	806	1.6	0.0	1.6
3	765 kV	JHARSUGUDA-DURG	2	0	878	0.0	14.2	-14.2
4	400 kV	JHARSUGUDA-RAIGARH	4	141	401	0.0	4.3	-4.3
5	400 kV	RANCHI-SIPAT	2	135	234	0.1	0.0	0.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	142	0.0	2.0	-2.0
7	220 kV	BUDHIPADAR-KORBA	2	101	0	0.9	0.0	0.9
ER-WR						6.5	20.5	-14.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	346	0.0	7.5	-7.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1991	0.0	46.7	-46.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2898	0.0	52.7	-52.7
4	400 kV	TALCHER-I/C	2	0	961	0.0	13.9	-13.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	106.9	-106.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	394	0.0	5.1	-5.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	200	395	0.0	2.5	-2.5
3	220 kV	ALIPURDUAR-SALAKATI	2	10	109	0.0	1.2	-1.2
ER-NER						0.0	8.7	-8.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.8	-16.8
NER-NR						0.0	16.8	-16.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2513	0.0	57.8	-57.8
2	HVDC	VINDHYACHAL B/B	-	270	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	36	2121	0.0	27.4	-27.4
5	765 kV	GWALIOR-PHAGI	2	325	1666	0.6	22.9	-22.3
6	765 kV	JABALPUR-ORAI	2	0	1166	0.0	32.0	-32.0
7	765 kV	GWALIOR-ORAI	1	651	0	11.3	0.0	11.3
8	765 kV	SATNA-ORAI	1	0	1104	0.0	21.2	-21.2
9	765 kV	BANASKANTHA-CHITORGARH	2	994	645	3.4	0.0	3.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	2488	0.0	40.9	-40.9
11	400 kV	ZERDA-KANKROLI	1	204	121	1.5	0.8	0.8
12	400 kV	ZERDA -BHINMAL	1	569	244	2.2	0.0	2.2
13	400 kV	VINDHYACHAL -RIHAND	1	955	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	359	609	0.0	4.2	-4.2
15	220 kV	BHANPURA-RANPUR	1	0	112	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	122	0	1.8	0.0	1.8
18	220 kV	MALANPUR-AURAIYA	1	96	0	1.1	0.0	1.1
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						51.2	235.4	-184.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1004	0.0	14.1	-14.1
2	HVDC	RAIGARH-PUGALUR	2	0	6030	0.0	94.6	-94.6
3	765 kV	SOLAPUR-RAICHUR	2	553	1591	0.6	13.3	-12.7
4	765 kV	WARDHA-NIZAMABAD	2	0	3157	0.0	47.0	-47.0
5	400 kV	KOLHAPUR-KUDGI	2	1364	0	22.5	0.0	22.5
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	116	2.2	0.0	2.2
WR-SR						25.2	169.1	-143.9

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)	545	356	424	10.18	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1011	820	899	21.57	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	76	26	60	1.43	
	NER	132kV GELEPHU-SALAKATI	29	1	18	0.44	
	NER	132kV MOTANGA-RANGIA	69	37	50	1.20	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.62	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	590	480	496	11.90	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-927	-794	-899	-21.59	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1647	-941	-1017	-24.40	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	153	0	-131	-3.14	

