



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: 30th 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 29.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 29-सितम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 29th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 30-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)	68013	56522	44479	25569	3271	197854
Peak Shortage (MW)	217	0	0	236	226	679
Energy Met (MU)	1513	1299	1097	593	70	4573
Hydro Gen (MU)	234	82	62	107	26	510
Wind Gen (MU)	9	46	149	-	-	205
Solar Gen (MU)*	131.61	55.45	106.82	2.49	1.16	298
Energy Shortage (MU)	5.82	2.30	0.00	4.23	1.40	13.75
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68478	60732	53633	26996	3486	206542
Time Of Maximum Demand Met	20:23	18:57	11:56	00:13	18:29	12:41

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	0.036	0.00	0.27	7.06	7.33	77.13	15.54

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	12059	0	256.4	131.5	0.1	259	0.00
	Haryana	9936	0	209.6	141.4	-1.0	149	0.00
	Rajasthan	13157	0	289.7	72.3	-4.0	111	0.00
	Delhi	5413	0	114.7	104.1	-2.4	234	0.00
	UP	24822	0	505.1	207.0	0.7	337	0.00
	Uttarakhand	2288	0	47.0	27.3	0.8	170	0.00
	HP	1758	0	34.7	14.8	0.2	83	0.11
	J&K(UT) & Ladakh(UT)	2263	100	46.4	26.6	6.1	537	5.71
	Chandigarh	285	0	5.7	5.8	-0.1	18	0.00
Railways NR ISTS	173	0	3.4	3.5	-0.1	20	0.00	
WR	Chhattisgarh	4729	0	106.2	49.9	-1.6	123	0.00
	Gujarat	19017	0	382.2	156.2	-1.4	645	0.00
	MP	12053	0	260.2	137.6	-3.7	281	0.00
	Maharashtra	21900	0	478.8	179.3	-5.5	671	0.00
	Goa	661	0	13.5	12.8	0.0	42	0.00
	DNHDDPDCL	1251	0	27.4	27.9	-0.5	42	2.30
	AMNSIL	880	0	18.6	9.8	-0.7	285	0.00
	BALCO	519	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	9842	0	210.5	86.1	-2.1	576	0.00
	Telangana	13314	0	235.2	122.4	-0.7	809	0.00
	Karnataka	11955	0	221.0	62.4	-5.3	728	0.00
	Kerala	3722	0	75.9	58.7	1.2	249	0.00
	Tamil Nadu	16097	0	344.6	148.5	-1.5	661	0.00
	Puducherry	448	0	10.2	9.8	-0.3	33	0.00
ER	Bihar	6956	0	147.3	141.5	0.2	482	3.20
	DVC	3276	0	74.7	-44.6	-0.2	295	0.00
	Jharkhand	1667	197	34.4	27.4	-1.4	194	1.03
	Odisha	5897	0	126.3	58.9	-2.1	319	0.00
	West Bengal	10080	0	208.6	86.5	-3.8	245	0.00
	Sikkim	90	0	1.4	1.3	0.1	27	0.00
	Railways ER ISTS	26	0	0.2	0.2	0.0	14	0.00
NER	Arunachal Pradesh	166	0	3.0	2.6	0.1	64	0.00
	Assam	2347	0	48.5	40.4	2.1	296	1.30
	Manipur	190	0	2.5	2.7	-0.2	33	0.00
	Meghalaya	303	0	5.6	1.1	-0.1	112	0.10
	Mizoram	112	0	1.8	1.3	-0.3	10	0.00
	Nagaland	173	0	2.9	2.7	-0.2	18	0.00
	Tripura	311	0	6.1	5.8	0.1	48	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	24.5	13.0	-24.9	-31.5
Day Peak (MW)	1312.2	462.0	-1085.0	-1446.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	294.4	-272.2	79.8	-108.3	6.3	0.0
Actual(MU)	300.7	-280.5	78.6	-110.4	8.6	-3.1
O/D/U/D(MU)	6.2	-8.4	-1.2	-2.1	2.3	-3.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4009	12174	5928	1530	505	24145	50
State Sector	4321	10150	6152	3260	219	24101	50
Total	8330	22323	12080	4790	724	48247	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	850	1413	637	661	16	3575	72
Lignite	34	14	41	0	0	89	2
Hydro	234	82	62	107	26	510	10
Nuclear	30	54	66	0	0	150	3
Gas, Naptha & Diesel	15	32	6	0	26	79	2
RES (Wind, Solar, Biomass & Others)	148	105	284	4	1	542	11
Total	1309	1700	1096	772	69	4946	100

Share of RES in total generation (%)	11.27	6.18	25.92	0.55	1.68	10.96
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.41	14.16	37.59	14.37	39.32	24.30

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.032
Based on State Max Demands	1.065

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206542	12:41	562
Non-Solar hr	203418	19:15	1231

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: 30-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	1302	0.0	29.1	-29.1
2	HVDC	PUSAULI B/B	-	0	146	0.0	3.6	-3.6
3	765 kV	GAYA-VARANASI	2	507	416	0.0	1.3	-1.3
4	765 kV	SASARAM-FATEHPUR	1	146	221	0.0	2.2	-2.2
5	765 kV	GAYA-BALIA	1	0	731	0.0	12.5	-12.5
6	400 kV	PUSAULI-VARANASI	1	0	127	0.0	2.1	-2.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	101	0.0	1.5	-1.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	23	633	0.0	9.0	-9.0
9	400 kV	PATNA-BALIA	2	0	360	0.0	5.7	-5.7
10	400 kV	NAUBATPUR-BALIA	2	39	364	0.0	4.8	-4.8
11	400 kV	BIHARSHARIFF-BALIA	2	258	213	0.0	0.7	-0.7
12	400 kV	MOTIHARI-GORAKHPUR	2	20	301	0.0	4.2	-4.2
13	400 kV	BIHARSHARIFF-VARANASI	2	201	177	0.0	1.1	-1.1
14	220 kV	SAHUPURI-KARAMNANA	1	0	119	0.0	1.8	-1.8
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	79.6	-79.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	905	736	2.8	0.0	2.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1581	13	23.8	0.0	23.8
3	765 kV	JHARSUGUDA-DURG	2	0	333	0.0	3.3	-3.3
4	400 kV	JHARSUGUDA-RAIGARH	4	203	200	0.0	0.9	-0.9
5	400 kV	RANCHI-SIPAT	2	342	77	4.3	0.0	4.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	143	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	2	109	0	1.2	0.0	1.2
					ER-WR	32.0	6.2	25.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	336	0.0	7.4	-7.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1540	0.0	37.3	-37.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2436	0.0	39.4	-39.4
4	400 kV	TALCHER-I/C	2	348	0	6.8	0.0	6.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	84.0	-84.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	513	0.0	10.2	-10.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	534	0.0	7.1	-7.1
3	220 kV	ALIPURDUAR-SALAKATI	2	0	123	0.0	2.0	-2.0
					ER-NER	0.0	19.2	-19.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
					NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	4017	0.0	55.0	-55.0
2	HVDC	VINDHYACHAL B/B	-	439	0	11.4	0.0	11.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	788	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	2162	0.0	37.2	-37.2
5	765 kV	GWALIOR-PHAGI	2	242	1453	0.5	19.5	-19.0
6	765 kV	JABALPUR-ORAI	2	0	1132	0.0	38.8	-38.8
7	765 kV	GWALIOR-ORAI	1	647	0	10.7	0.0	10.7
8	765 kV	SATNA-ORAI	1	0	989	0.0	20.7	-20.7
9	765 kV	BANASKANTHA-CHITORGARH	2	1137	699	1.3	0.0	1.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	3372	0.0	63.7	-63.7
11	400 kV	ZERDA-KANKROLI	1	201	147	1.3	0.9	0.3
12	400 kV	ZERDA-BHINMAL	1	463	249	0.9	0.0	0.9
13	400 kV	VINDHYACHAL-RIHAND	1	953	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUALPUR	2	259	480	0.0	4.1	-4.1
15	220 kV	BHANPURA-RANPUR	1	0	98	0.0	1.7	-1.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
17	220 kV	MEHGAON-AURAIYA	1	97	0	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	68	7	0.4	0.0	0.4
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	49.5	263.2	-213.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	12.7	-12.7
2	HVDC	RAIGARH-PUGALUR	2	0	3002	0.0	32.7	-32.7
3	765 kV	SOLAPUR-RAICHUR	2	955	1507	8.3	3.8	4.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2494	0.0	27.8	-27.8
5	400 kV	KOLHAPUR-KUDGI	2	1418	0	25.9	0.0	25.9
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
					WR-SR	36.5	76.9	-40.4

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)	376	225	278	6.68	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	690	0	624	14.98	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	116	2	53	1.26	
	NER	132kV GELEPHU-SALAKATI	24	0	14	0.34	
	NER	132kV MOTANGA-RANGIA	65	0	50	1.20	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-38	0	29	0.70	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	500	361	500	12.28	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-928	-804	-903	-21.66	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1446	-1004	-1314	-31.52	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-157	0	-134	-3.22	

