

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: 14th 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 13.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-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 13th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 14-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)	71811	60646	46688	25471	3244	207860
Peak Shortage (MW)	1048	0	0	579	311	1938
Energy Met (MU)	1629	1456	1178	595	67	4925
Hydro Gen (MU)	341	42	76	115	33	607
Wind Gen (MU)	32	134	184	-	-	350
Solar Gen (MU)*	125.61	47.96	115.42	1.97	0.93	292
Energy Shortage (MU)	7.77	0.00	0.00	6.76	1.05	15.58
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	73456	64453	56232	26953	3439	219070
Time Of Maximum Demand Met	14:30	09:49	09:53	21:22	18:18	14:46

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	0.028	0.00	0.19	5.52	5.71	85.86	8.44

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	14399	0	314.0	189.7	-0.4	167	0.00
	Haryana	11849	0	244.1	194.1	0.7	201	4.17
	Rajasthan	15135	0	331.4	114.7	-0.3	535	0.57
	Delhi	6206	0	126.9	114.6	-0.7	135	0.00
	UP	23485	232	465.4	214.6	-1.8	392	1.79
	Uttarakhand	2317	0	48.8	25.4	0.7	176	0.07
	HP	1738	0	36.6	10.3	-0.2	150	0.05
	J&K(UT) & Ladakh(UT)	2364	115	50.4	24.9	1.9	243	1.12
	Chandigarh	377	0	7.6	7.4	0.2	45	0.00
Railways NR ISTS	173	0	3.4	3.4	0.0	31	0.00	
WR	Chhattisgarh	4766	0	101.8	48.3	-3.6	115	0.00
	Gujarat	22278	0	480.4	207.8	0.7	591	0.00
	MP	11434	0	241.1	134.5	-2.0	449	0.00
	Maharashtra	24803	0	558.1	195.1	-1.6	857	0.00
	Goa	668	0	14.1	14.2	-0.1	65	0.00
	DNHDDPDCL	1281	0	29.9	29.9	0.0	38	0.00
	AMNSIL	814	0	17.7	8.4	0.2	279	0.00
	BALCO	524	0	12.4	12.5	-0.1	11	0.00
SR	Andhra Pradesh	10697	0	223.3	73.0	-2.3	518	0.00
	Telangana	12693	0	244.0	112.4	0.3	588	0.00
	Karnataka	13744	0	258.3	92.6	0.1	743	0.00
	Kerala	4013	0	81.2	65.8	0.6	234	0.00
	Tamil Nadu	17035	0	361.5	159.3	-2.2	597	0.00
	Puducherry	451	0	9.9	9.4	-0.2	29	0.00
ER	Bihar	7181	231	149.9	148.0	-0.5	363	5.39
	DVC	3636	0	80.9	-44.6	-0.4	298	0.00
	Jharkhand	1742	0	41.6	28.9	3.6	179	1.37
	Odisha	4875	0	113.3	39.0	-0.7	289	0.00
	West Bengal	9480	0	207.6	87.0	-2.4	232	0.00
	Sikkim	97	0	1.5	1.4	0.1	17	0.00
Railways ER ISTS	26	0	0.2	0.1	0.0	22	0.00	
NER	Arunachal Pradesh	167	0	3.2	3.0	-0.2	30	0.00
	Assam	2342	0	45.2	36.6	0.9	313	0.86
	Manipur	197	0	2.8	2.6	0.2	24	0.00
	Meghalaya	325	0	5.4	0.3	-0.3	26	0.19
	Mizoram	111	0	2.0	1.5	0.0	9	0.00
	Nagaland	173	0	2.9	2.5	0.1	13	0.00
Tripura	320	0	5.9	5.7	0.3	51	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	31.4	9.7	-25.7	-31.3
Day Peak (MW)	1576.3	409.0	-1122.0	-1421.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	362.8	-285.0	68.8	-144.3	-2.3	0.0
Actual(MU)	352.0	-279.0	70.9	-146.9	-1.0	-4.0
O/D/U/D(MU)	-10.8	6.1	2.0	-2.7	1.4	-4.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3679	10071	4598	1820	355	20522	45
State Sector	4896	10687	6282	2937	157	24959	55
Total	8575	20758	10880	4757	512	45481	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	792	1536	640	689	16	3674	69
Lignite	30	12	40	0	0	82	2
Hydro	341	42	76	115	33	607	11
Nuclear	24	54	76	0	0	153	3
Gas, Naptha & Diesel	19	37	6	0	27	89	2
RES (Wind, Solar, Biomass & Others)	165	184	339	3	1	691	13
Total	1370	1865	1177	808	77	5297	100

Share of RES in total generation (%)	12.04	9.85	28.76	0.40	1.40	13.04
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.67	14.99	41.65	14.68	42.84	27.39

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.024
Based on State Max Demands	1.067

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	219070	14:46	147
Non-Solar hr	211132	19:15	2795

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: 14-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	1000	0.0	24.6	-24.6
2	HVDC	PUSAULI B/B	-	0	296	0.0	5.7	-5.7
3	765 kV	GAYA-VARANASI	2	218	443	0.0	1.9	-1.9
4	765 kV	SASARAM-FATEHPUR	1	0	343	0.0	4.6	-4.6
5	765 kV	GAYA-BALIA	1	0	659	0.0	12.5	-12.5
6	400 kV	PUSAULI-VARANASI	1	0	178	0.0	2.7	-2.7
7	400 kV	PUSAULI-ALLAHABAD	1	0	162	0.0	2.6	-2.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	633	0.0	9.9	-9.9
9	400 kV	PATNA-BALIA	2	0	495	0.0	8.3	-8.3
10	400 kV	NAUBATPUR-BALIA	2	0	511	0.0	8.2	-8.2
11	400 kV	BIHARSHARIF-BALIA	2	0	256	0.0	3.6	-3.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	336	0.0	5.4	-5.4
13	400 kV	BIHARSHARIF-VARANASI	2	93	164	0.0	0.6	-0.6
14	220 kV	SAHUPURI-KARAMNANA	1	2	0	0.0	0.0	0.0
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-CHANDAULI	1	0	40	0.0	0.3	-0.3
ER-NR						0.4	90.7	-90.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	236	958	0.0	9.3	-9.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1323	209	18.6	0.0	18.6
3	765 kV	JHARSUGUDA-DURG	2	0	491	0.0	7.4	-7.4
4	400 kV	JHARSUGUDA-RAIGARH	4	15	545	0.0	4.9	-4.9
5	400 kV	RANCHI-SIPAT	2	243	172	1.9	0.0	1.9
6	220 kV	BUDHIPADAR-RAIGARH	1	16	133	0.0	1.3	-1.3
7	220 kV	BUDHIPADAR-KORBA	2	59	14	0.9	0.0	0.9
ER-WR						21.4	22.8	-1.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	139	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1250	0.0	30.1	-30.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2514	0.0	46.3	-46.3
4	400 kV	TALCHER-I/C	2	185	0	3.3	0.0	3.3
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	79.1	-79.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	434	0.0	7.2	-7.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	404	0.0	5.8	-5.8
3	220 kV	ALIPURDUAR-SALAKATI	2	0	102	0.0	1.7	-1.7
ER-NER						0.0	14.7	-14.7
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	4530	0.0	86.1	-86.1
2	HVDC	VINDHYACHAL B/B	-	181	197	2.5	1.5	1.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	0	1750	0.0	28.0	-28.0
5	765 kV	GWALIOR-PHAGI	2	0	1750	0.0	28.2	-28.2
6	765 kV	JABALPUR-ORAI	2	0	1018	0.0	34.3	-34.3
7	765 kV	GWALIOR-ORAI	1	740	0	13.4	0.0	13.4
8	765 kV	SATNA-ORAI	1	0	1034	0.0	21.9	-21.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1197	221	10.2	0.0	10.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	3448	0.0	63.3	-63.3
11	400 kV	ZERDA-KANKROLI	1	255	21	2.9	0.0	2.9
12	400 kV	ZERDA -BHINMAL	1	471	128	3.9	0.0	3.9
13	400 kV	VINDHYACHAL -RIHAND	1	0	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	155	585	0.0	6.3	-6.3
15	220 kV	BHANPURA-RANPUR	1	0	90	0.0	1.5	-1.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.9	-1.9
17	220 kV	MEHGAON-AURAIYA	1	96	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	67	0	0.8	0.0	0.8
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						56.8	309.1	-252.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	300	0	7.2	0.0	7.2
2	HVDC	RAIGARH-PUGALUR	2	0	2502	0.0	31.9	-31.9
3	765 kV	SOLAPUR-RAICHUR	2	1046	1379	6.2	3.7	2.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2747	0.0	38.1	-38.1
5	400 kV	KOLHAPUR-KUDGI	2	1609	0	30.3	0.0	30.3
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	2.2	0.0	2.2
WR-SR						45.9	73.6	-27.8

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)	621	405	496	11.91	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	781	681	724	17.37	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	87	37	66	1.60	
	NER	132kV GELEPHU-SALAKATI	12	0	7	0.17	
	NER	132kV MOTANGA-RANGIA	50	0	13	0.31	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-26	0	35	0.84	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	435	240	367	8.81	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-946	-820	-914	-21.94	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1421	-1193	-1305	-31.33	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-176	0	-157	-3.76	

