

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: 01st October 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 30.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 30-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 30th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 01-Oct-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)	65538	57592	44629	22770	3127	193656
Peak Shortage (MW)	100	0	0	0	115	215
Energy Met (MU)	1508	1320	1093	519	68	4507
Hydro Gen (MU)	234	75	59	100	25	495
Wind Gen (MU)	14	54	154	-	-	223
Solar Gen (MU)*	127.78	59.22	103.04	5.20	1.08	296
Energy Shortage (MU)	1.79	0.00	0.00	1.80	1.09	4.68
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	67260	62055	52320	24902	3206	201554
Time Of Maximum Demand Met	14:26	18:48	11:07	00:10	18:54	11:45

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	0.041	0.00	1.45	5.95	7.39	76.50	16.11

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	12435	0	263.2	136.9	1.2	507	0.00
	Haryana	9946	0	208.9	146.4	-0.7	171	0.00
	Rajasthan	13214	0	291.4	79.1	-2.5	696	0.00
	Delhi	5163	0	111.6	100.3	-1.4	112	0.00
	UP	23684	0	493.2	211.9	-0.7	507	0.00
	Uttarakhand	2270	0	47.7	28.9	0.1	100	0.00
	HP	1693	0	34.3	15.3	-0.9	58	0.00
	J&K(UT) & Ladakh(UT)	2352	100	48.4	30.3	4.4	394	1.79
	Chandigarh	266	0	5.4	5.5	-0.1	13	0.00
Railways NR ISTS	179	0	3.7	3.5	0.2	37	0.00	
WR	Chhattisgarh	4500	0	102.5	45.2	-0.9	209	0.00
	Gujarat	18991	0	403.3	175.7	0.0	737	0.00
	MP	12203	0	258.6	142.3	-3.9	333	0.00
	Maharashtra	22902	0	482.8	184.8	-8.2	500	0.00
	Goa	656	0	13.0	12.6	-0.3	147	0.00
	DNHDDPDCL	1274	0	29.4	29.9	-0.5	70	0.00
	AMNSIL	817	0	17.7	8.5	0.1	309	0.00
	BALCO	520	0	12.4	12.5	-0.1	518	0.00
SR	Andhra Pradesh	9589	0	208.7	81.3	-3.4	586	0.00
	Telangana	12367	0	230.0	104.7	-2.9	418	0.00
	Karnataka	12147	0	225.5	63.2	-0.4	1016	0.00
	Kerala	3668	0	74.2	57.3	0.5	251	0.00
	Tamil Nadu	16130	0	344.0	159.6	-0.3	1007	0.00
	Puducherry	457	0	10.5	9.7	0.0	62	0.00
ER	Bihar	6706	402	114.4	114.6	-5.6	545	1.80
	DVC	3348	0	73.3	-41.7	-0.3	254	0.00
	Jharkhand	1544	0	30.0	23.8	-2.7	129	0.00
	Odisha	5487	0	119.9	55.1	-2.7	301	0.00
	West Bengal	8287	0	179.6	60.5	-3.4	235	0.00
	Sikkim	81	0	1.3	1.3	0.0	28	0.00
	Railways ER ISTS	14	0	0.2	0.2	0.0	0	0.00
NER	Arunachal Pradesh	165	0	3.1	2.5	0.3	64	0.00
	Assam	2114	80	45.6	37.5	2.1	316	0.86
	Manipur	193	0	2.7	2.6	0.1	39	0.00
	Meghalaya	319	0	5.7	1.3	-0.1	59	0.23
	Mizoram	117	0	1.8	1.4	-0.4	15	0.00
	Nagaland	165	0	3.0	2.7	-0.1	11	0.00
	Tripura	328	0	6.0	5.9	0.1	62	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	23.3	12.9	-24.8	-29.0
Day Peak (MW)	1056.0	564.0	-1093.0	-1428.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	321.5	-241.6	55.2	-140.2	5.2	0.0
Actual(MU)	327.8	-250.4	62.4	-150.1	9.2	-1.0
O/D/U/D(MU)	6.3	-8.8	7.3	-9.9	4.0	-1.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3749	12374	4678	1530	505	22835	47
State Sector	5441	10908	6182	3010	240	25780	53
Total	9189	23281	10860	4540	745	48615	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	808	1401	648	629	15	3501	72
Lignite	33	15	36	0	0	84	2
Hydro	234	75	59	100	25	495	10
Nuclear	30	53	71	0	0	155	3
Gas, Naptha & Diesel	15	30	6	0	25	75	2
RES (Wind, Solar, Biomass & Others)	148	117	285	7	1	558	11
Total	1268	1692	1106	737	66	4868	100

Share of RES in total generation (%)	11.70	6.91	25.78	0.93	1.63	11.47
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	32.53	14.52	37.58	14.57	40.16	24.80

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040
Based on State Max Demands	1.073

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	201554	11:45	134
Non-Solar hr	199408	19:00	206

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: 01-Oct-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	1303	0.0	30.6	-30.6
2	HVDC	PUSAULI B/B	-	0	144	0.0	2.6	-2.6
3	765 kV	GAYA-VARANASI	2	555	748	0.0	4.8	-4.8
4	765 kV	SASARAM-FATEHPUR	1	123	530	0.0	4.3	-4.3
5	765 kV	GAYA-BALIA	1	0	731	0.0	11.4	-11.4
6	400 kV	PUSAULI-VARANASI	1	32	147	0.0	1.4	-1.4
7	400 kV	PUSAULI-ALLAHABAD	1	31	99	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	644	0.0	9.1	-9.1
9	400 kV	PATNA-BALIA	2	48	422	0.0	6.1	-6.1
10	400 kV	NAUBATPUR-BALIA	2	99	442	0.0	5.7	-5.7
11	400 kV	BIHARSHARIFF-BALIA	2	149	244	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	47	363	0.0	4.9	-4.9
13	400 kV	BIHARSHARIFF-VARANASI	2	224	268	0.0	2.0	-2.0
14	220 kV	SAHUPURI-KARAMNANA	1	0	112	0.0	1.6	-1.6
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	87.6	-87.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	380	1063	0.0	11.7	-11.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1270	351	11.0	0.0	11.0
3	765 kV	JHARSUGUDA-DURG	2	0	432	0.0	5.5	-5.5
4	400 kV	JHARSUGUDA-RAIGARH	4	343	196	0.7	0.0	0.7
5	400 kV	RANCHI-SIPAT	2	293	152	2.8	0.0	2.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	136	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	116	6	1.2	0.0	1.2
ER-WR						15.7	18.5	-2.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	444	0.0	7.6	-7.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1987	0.0	43.8	-43.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2399	0.0	33.9	-33.9
4	400 kV	TALCHER-I/C	2	353	952	0.0	0.9	-0.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	85.2	-85.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	580	0.0	10.5	-10.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	513	0.0	6.7	-6.7
3	220 kV	ALIPURDUAR-SALAKATI	2	0	123	0.0	1.9	-1.9
ER-NER						0.0	19.1	-19.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
NER-NR						0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	5535	0.0	71.6	-71.6
2	HVDC	VINDHYACHAL B/B	-	438	0	7.0	0.0	7.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	787	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	2198	0.0	25.9	-25.9
5	765 kV	GWALIOR-PHAGI	2	364	1600	0.8	19.7	-18.9
6	765 kV	JABALPUR-ORAI	2	0	1143	0.0	16.7	-16.7
7	765 kV	GWALIOR-ORAI	1	596	0	5.0	0.0	5.0
8	765 kV	SATNA-ORAI	1	0	1107	0.0	21.6	-21.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1281	655	0.0	30.4	-30.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3517	0.0	27.6	-27.6
11	400 kV	ZERDA-KANKROLI	1	242	128	1.9	0.4	1.5
12	400 kV	ZERDA -BHINMAL	1	564	246	10.9	0.0	10.9
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	10.9	0.0	10.9
14	400 kV	RAPP-SHUJALPUR	2	337	497	0.0	32.2	-32.2
15	220 kV	BHANPURA-RANPUR	1	0	92	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	114	0	1.5	0.0	1.5
18	220 kV	MALANPUR-AURAIYA	1	81	2	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						38.8	269.5	-230.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	328	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	1501	0.0	32.6	-32.6
3	765 kV	SOLAPUR-RAICHUR	2	1375	1817	12.5	3.7	8.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2542	0.0	18.6	-18.6
5	400 kV	KOLHAPUR-KUDGI	2	1607	0	25.5	0.0	25.5
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	118	2.2	0.0	2.2
WR-SR						40.2	62.1	-21.9

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)	282	234	268	6.44	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	689	604	615	14.77	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	55	-3	28	0.68	
	NER	132kV GELEPHU-SALAKATI	19	0	15	0.35	
	NER	132kV MOTANGA-RANGIA	61	0	43	1.03	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-64	0	26	0.62	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	628	448	511	12.27	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-928	-785	-894	-21.46	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1428	-1004	-1207	-28.97	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-165	0	-140	-3.36	

